

**Ministry of Tourism, Culture & Sport**  
Confirmation Letter

Dated: June 21, 2012

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June 21, 2012

Khlaire Parre, Director of Renewable Energy Approvals  
wpd Canada Corporation  
2233 Argentia Rd., Suite 102  
Mississauga, ON L5N 2X7

**RE: Colloquial Name of Project: White Pines Wind Project**

**Location: South Marysburgh and Athol Townships, Prince Edward County**

**FIT Number: F-000675-WIN-130-601**

**MTC DPR file no.: PLAN-13EA0004**

Dear Ms. Parre:

This letter constitutes the Ministry of Tourism, Culture and Sport's written comments as required by s. 23(3)(a) of O. Reg. 359/09 under the *Environmental Protection Act* regarding heritage assessments undertaken for the above project.

Based on the information contained in the revised reports and addendum report submitted for this project, the Ministry is satisfied with the heritage assessment. Please note that the Ministry makes no representation or warranty as to the completeness, accuracy or quality of the heritage assessment reports.\*

The revised *Final Protected Properties Assessment, White Pines Wind Project, South Marysburgh and Athol Townships, Prince Edward County, ON* report (June, 2012) recommends the following:

## **STUDY RESULTS**

A total of nine (9) protected properties were identified within or adjacent to the Study Area. All nine of the properties are designated by municipal by-law under Part IV, Section 29 of the *OHA*. These properties include:

- The Henry House;
- the Dulmage-Farrington-Marshall Driveshed;
- the Mathewson House;
- the Gibbons' Property;
- the Milford Town Hall;
- the Mount Tabor United Church;
- the Mariner's Museum;
- the Royal Street Cheese Factory; and

- the Moses Hudgins House

No other properties were identified within or adjacent to the Study Area protected by any other means outlined in the Table from Section 19, O.Reg.359/09.

Potential negative impacts were identified for three of the nine protected properties in the Study Area. These properties include:

- The Dulmage-Farrington-Marshall Driveshed;
- The Gibbins' Property; and
- The Royal Street Cheese Factory

A summary of the potential negative impacts and recommended mitigation is presented in Table 12. The following recommendations have been made:

- In the event that a below-grade Collector System is installed in the vicinity of these properties, maximum acceptable peak particle velocity (PPV) should be determined by a qualified engineer prior to any sub-grade activities to ensure the structural integrity of the Dulmage-Farrington-Marshall Driveshed, the residential building on the Gibbins' Property (the Striker House) and the Royal Street Cheese Factory;
- Vibration levels should be monitored during any below-grade construction activities in the vicinity of the Dulmage-Farrington-Marshall Driveshed, the Gibbins' Property and the Royal Street Cheese Factory to ensure that acceptable levels are not exceeded;
- Installation of any above-grade infrastructure related to the Collector System should avoid the west side of Brewers Road in the vicinity of the Dulmage-Farrington-Marshall Driveshed; the south side of Royal Road in the vicinity of the Royal Street Cheese Factory and the Gibbins' Property; and the east side of Dainard Road in the vicinity of the Gibbins' Property.
- Removal of or damage to trees along Brewers Road should be avoided.

The revised *Final Heritage Impact Assessment, White Pines Wind Project, South Marysburgh and Athol Townships, Prince Edward County, ON* report (June , 2012) recommends the following:

## **STUDY RESULTS AND RECOMMENDATIONS**

A total of 29 built heritage resources (BHRs) and two cultural heritage landscapes (CHLs) were identified within or adjacent to the Study Area. Potential negative Project-related impacts were identified for each of the resources and landscapes. Potential negative impacts have been identified for the following resources:

- 104 Brewers Road, BHR 2/CHL 2;
- 940 Royal Road, BHR 6;
- 1038 Royal Road, BHR 7;
- 1210 Royal Road, BHR 8;
- 1247 Royal Road, BHR 9;
- 1327 Royal Road, BHR 10; and
- Tree-line streetscapes throughout the Study Area.

The following recommendations have been made:

- Prior to any below-grade construction within 50 m of: 104 Brewers Road or 940, 1038, 1210, 1247, and 1327 Royal Road (BHRs 2, 6, 7, 8, 9, and 10) a study should be conducted by a qualified engineer to determine the maximum vibration peak particle velocity (PPV) for each structure;
- Vibrations should be monitored during below grade construction to ensure that acceptable vibration levels are not exceeded;
- In the event that an above-grade Collector System is installed, those components should be installed on the side of the road opposite the BHR or CHL in order to best conserve significant views; and
- The removal of trees along roads in the Study Area should be avoided to the greatest extent practicable.

It should furthermore be noted that the study methodology included only those structures visible from the roads. It is possible, in Athol and South Marysburgh Townships, that extant cabins or log residences in wooded areas might be situated along access roads or turbine pads, the locations of which had not been determined at the time of the survey and are situated on private land. Although it is not anticipated, any such structures encountered during the construction of Project infrastructure should not be removed without first undertaking a Heritage Impact Assessment of the structure.

The *Addendum Heritage Assessment, White Pines Wind Project, Prince Edward County, ON* report (June 2012) recommends the following:

## **STUDY RESULTS AND RECOMMENDATIONS**

One built heritage resource (BHR) was identified within or adjacent to the Study Area, the Orser/Cross House (BHR 30) at 840 Ben Gill Road. No potential negative Project-related impacts have been identified and no mitigation has been recommended.

The Ministry is satisfied with these recommendations.

This letter does not waive any requirements which you may have under the Ontario *Heritage Act*. Also, this letter does not constitute approval of the renewable energy project. Approvals of the project may be required under other statutes and regulations. It is your responsibility to obtain any necessary approvals or licences.

Please feel free to contact me if you have questions or require additional information.

Sincerely,

**Paula Kulpa**

Team Lead – Land Use Planning (A)

cc. Christienne Uchiyama, Archaeologist and Heritage Planning Consultant  
Stantec Consulting Ltd.

Mark Knight, Environmental Planner  
Stantec Consulting Ltd.

Chris Schiller, Manager  
Culture Services Unit, Ministry of Tourism, Culture and Sport

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\* 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(s) 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 artifacts or archaeological sites are identified or the Report(s) is otherwise found to be inaccurate, incomplete, misleading or fraudulent.

# **Heritage Assessment**

Dated: June 2012



**Stantec**

**FINAL REPORT**  
**Heritage Assessment, White Pines**  
**Wind Project, South Marysburgh**  
**and Athol Townships, Prince**  
**Edward County, ON**

*Prepared for:*

**wpd Canada Corporation**  
2233 Argentia Rd. Suite 102  
Mississauga, Ontario L5N2X7

*Prepared by:*

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

June 2012

Project No.: 160960594

## EXECUTIVE SUMMARY

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Specific sections of the *Ontario Regulation 359/09, Renewable Energy Approvals Under Part V.0.1 Of The Act* pertain to Heritage Resources, specifically built heritage resources and cultural heritage landscapes. In order to meet the conditions of the regulation, Stantec Consulting Ltd was retained by wpd Canada Corporation to conduct a Heritage Assessment of the location of a proposed wind project in the Townships of Athol and South Marysburgh, Prince Edward County, Ontario.

The assessment included a review of historic period maps, aerial imagery and Census data as well as records and inventories held by the Municipality of Prince Edward County, the Ontario Ministry of Tourism and Culture, the Ontario Heritage Trust, and the Canadian Inventory of Heritage Buildings at Parks Canada.

Visual surveys of the Study Area were completed to determine the existence of any potential built heritage resources within and adjacent to the Study Area. During the site visits the Study Area was also assessed for any groupings of resources that might constitute a cultural heritage landscape.

A total of 59 potential built heritage resources were identified in, or adjacent to, the Study Area. All 59 resources were evaluated using the criteria outlined under *O.Reg 9/06 Criteria for Determining Cultural Heritage Value or Interest*. Of those 59 potential resources recorded, 29 meet the criteria outlined under O.Reg. 9/06 and have been identified and assessed for potential Project-related negative impacts as per *InfoSheet #5 Heritage Impact Assessments and Conservation Plans*. Potential negative impacts assessed included: destruction, alteration, shadows, isolation, direct or indirect obstruction and changes in land-use.

Two significant cultural heritage landscapes were identified within the Study Area, the Dulmage Farmstead (CHL 1) and the South Bay Cemetery (CHL 2).

Potential negative Project-related impacts were identified for six of the built heritage resources and one significant cultural heritage landscape. Potential negative impacts have been identified for the following resources:

- 104 Brewers Road, BHR 2/CHL 2;
- 940 Royal Road, BHR 6;
- 1038 Royal Road, BHR 7;
- 1210 Royal Road, BHR 8;
- 1247 Royal Road, BHR 9;
- 1327 Royal Road, BHR 10.

Mitigation for potential impacts has been outlined for resources where appropriate. It is also recommended that removal of or damage to trees along roads in the Study Area be avoided to the greatest extent practicable.



**Stantec**

**HERITAGE ASSESSMENT, WHITE PINES WIND PROJECT, SOUTH MARYSBURGH AND ATHOL TOWNSHIPS,  
PRINCE EDWARD COUNTY, ON**

Any extant cabins or log houses encountered in wooded portions of the Study Area during the construction of Project infrastructure should not be removed without first undertaking a Heritage Impact Assessment of the structure.

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**PROJECT PERSONNEL**

Project Director	Colin Varley, M.A., R.P.A.
Archival Research	Tavis Maplesden, B.A. (Hons)
Field Reconnaissance	Tavis Maplesden, B.A. (Hons) Christienne Uchiyama, B.A. (Hons)
Report and Graphics	Tavis Maplesden, B.A. (Hons) Sarah Rogers, B.Sc., G.Dip. Christienne Uchiyama, B.A. (Hons) Colin Varley, M.A., R.P.A.

## **1 INTRODUCTION**

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Stantec Consulting Ltd. (Stantec) was retained by wpd Canada Corporation 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 consists of a 29 wind turbines with a 59.45 MW nameplate capacity. The Project will be located entirely within the Townships of South Marysburgh and Athol in Prince Edward County in Ontario. The Study Area is generally bounded by: Brummell Road and Bond Road to the north; Lighthall Road to the west; Gravelly Bay Road to the east and Lake Ontario to the south (Figures 1 and 2).

This Heritage Assessment 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, B.A., Archaeologist and Heritage Planning Consultant and Tavis Maplesden, B.A., Archaeological Technician. Visual surveys were conducted on June 8 and 9, 2010, August 31, 2010 and April 4, 2012. Colin Varley, M.A., R.P.A., Senior Archaeologist and Heritage Planning Consultant acted as Team Leader and Senior Reviewer.

### **1.1 O.Reg. 359/09 Requirements, Heritage Assessment**

This Heritage Assessment Report has been conducted in accordance with *O.Reg. 359/09*, s.23 (1), (2) and (3). *O. Reg.359/09* s.23 (1) states that:

*23. (1) If, as a result of the consideration mentioned in subsection 20 (1), a person concludes that engaging in the renewable energy project may have an impact on a heritage resource described in paragraph 2 of subsection 20 (1), the person shall,*

*(a) conduct a heritage assessment consisting of,*

*(i) an evaluation of whether there are any heritage resources at the project location, applying the criteria set out in Ontario Regulation 9/06 (Criteria for Determining Cultural Heritage Value or Interest) made under the Ontario Heritage Act*

Section 4 of this report satisfies the requirements of *O.Reg.359/09*, s.23(1)(a)(i).

The Regulation further states that:

*(ii) if any heritage resources are identified as a result of the evaluation under subclause (i), an evaluation of any impact of the renewable energy project on the heritage*

*resources and proposed measures to avoid, eliminate or mitigate the impact, which may include a heritage conservation plan.*

In order to satisfy O.Reg.359/09, s.23(1)(a)(ii), an assessment of potential Project-related negative impacts was carried out for each significant built heritage resource and cultural heritage landscape within the Study Area. This assessment, conducted as per InfoSheet #5 in *Heritage Resources in the Land Use Planning Process, Cultural Heritage and Archaeology Policies of the Ontario Provincial Policy Statement, 2005* (MTCS, 2006a), is presented in Section 6.

## **1.2 Project Description**

The Project, known as the White Pines Wind Project, consists of 29 wind turbines with a 59.45 MW nameplate capacity. The Project will be located entirely within the Townships of South Marysburgh and Athol in Prince Edward County, Ontario. The Study Area is generally bounded by: Brummell Road and Bond Road to the north; Lighthall Road to the west; Gravelly Bay Road to the east and Lake Ontario to the south (Figures 1 and 2). According to subsection 6.(3) of Ontario Regulation 359/09, the proposed White Pines Wind Project is a Class 4 facility.

Existing provincial and municipal roads will be used to transport project-related components, equipment and personnel to the Study Area. The Project, excluding transmission infrastructure, will be installed on private lands and municipal Right of Ways. Access to these lands will be required for installation and operation of the wind turbines (Figure 2).

Locations of Project components are shown in Figure 2.

## **1.3 Project Methodology**

The Heritage Assessment study was composed of a program of archival research and visual assessment of potentially significant built heritage resources and potential components of cultural heritage landscapes within the vicinity of the Study Area. To familiarise the study team with the Study Area, local historical societies were consulted, archival documents were reviewed and a summary historical background of the local area was prepared. Listings of provincially and locally designated built heritage sites, districts and easements and buildings of architectural or historical interest for each municipality were reviewed in order to compile a catalogue of existing identified heritage resources. The staff contact for the Prince Edward County Heritage Advisory Committee (PEHAC) was contacted to determine designated properties and properties of cultural heritage interest as part of the 2010 background research (Leary, 2010 pers. comm.). The PEHAC staff contact was contacted again in April, 2012 to identify new properties of interest and recent designations (Schaefer, 2012 pers. comm.).

Visual surveys of the Study Area were conducted on June 8 and 9, 2010, August 31, 2010 and April 4, 2012. The Study Area was surveyed for extant buildings, outbuildings or other built heritage

**HERITAGE ASSESSMENT, WHITE PINES WIND PROJECT, SOUTH MARYSBURGH AND ATHOL TOWNSHIPS,  
PRINCE EDWARD COUNTY, ON**

remains that might satisfy the criteria outline under *O.Reg.9/06 Criteria for Determining Cultural Heritage Value or Interest, Under the Ontario Heritage Act, 2006*. During the site visit built heritage resources and components of potential cultural heritage landscapes were photographed and their locations recorded. Where municipal addresses were not available locations were recorded using a handheld Global Positioning System (GPS).

In general, buildings and structures of more than forty years of age were evaluated during the survey for their potential to satisfy O.Reg. 9/06 criteria. The use of the forty year threshold is generally accepted by both the federal and provincial authorities as a preliminary screening measure for heritage interest or values. This practice does not imply that all buildings and structures more than forty years of age are inherently of cultural heritage value, nor does it exclude exceptional examples constructed within the past forty years of being of cultural heritage value.

The Study Area was assessed for groupings of resources and environs that might potentially constitute cultural heritage landscapes (CHLs) as defined by the Ministry of Culture's *InfoSheet #2 Cultural Heritage Landscapes in Heritage Resources in the Land Use Planning Process: Cultural Heritage and Archaeology Policies of the Ontario Provincial Policy Statement, 2005* (MTCS, 2006b).

Identification of potential impacts on significant cultural heritage resources and landscapes considered the proposed site plan for the layout of turbines and other Project infrastructure (Figure 2). Layout of Project components was undertaken separately from this study and took into consideration technical requirements and the natural environment as well as cultural heritage resources.






Revised: 2012-05-28 By: SaRogers  
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May, 2012  
 Project No. 160960594

**Legend**

 Study Area



**Notes**

1. Coordinate System: NAD 1983 UTM Zone 18N
2. Data Source: Ontario Ministry of Natural Resources © Queens Printer Ontario, 2012.
3. Image Source: © First Base Solutions, 2011

Client/Project  
 WPD CANADA CORPORATION  
 WHITE PINES WIND PROJECT


Figure No.  
**1**

Title  
 Study Area












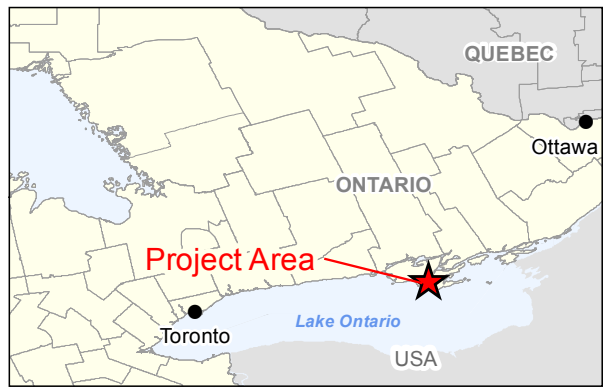
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May, 2012  
 Project No. 160960594



**Legend**

-  Turbine Location & Number
-  Collector System
-  Access Road
-  Crane Laydown Area
-  Crane Pad
-  General Laydown Area
-  Storage Area
-  Substation
-  Study Area



- Notes**
1. Coordinate System: NAD 1983 UTM Zone 18N
  2. Data Source: Ontario Ministry of Natural Resources © Queens Printer Ontario, 2012.
  3. Image Source: © First Base Solutions, 2011

Client/Project  
 WPD CANADA CORPORATION  
 WHITE PINES WIND PROJECT

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Figure No.  
 2

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Title  
 Project Components

## **2 STUDY AREA**

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The Study Area is composed of approximately 7800 ha (19,274 acres) of primarily agricultural and undeveloped land in the historic Townships of South Marysburgh and Athol in Prince Edward County, Ontario (Figure 1).

The Study Area is located within the Prince Edward Peninsula Physiographic Region, a low plateau of flat limestone that projects into the eastern part of Lake Ontario, almost separated from the mainland by the Bay of Quinte (Chapman and Putnam, 1984). Much of the area has been cleared for agriculture (mainly pasture) but some small stands of trees remain intact (Figure 2). The Village of Milford is located in the northeast corner of the Study Area.

Major topographic features include: Lake Ontario to the south and east of the Study Area; South Bay, a small harbor of Lake Ontario northeast, and Black River which intersects the Study Area south of Bond Road (Figure 1). A large Provincially Significant wetland is located at the south-east part of the Study Area. Numerous smaller watercourses are found throughout the Study Area (Figures 1 and 2).

### **3 HISTORICAL BACKGROUND**

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Although identifiable human occupation of Ontario began just after the end of the Wisconsin Glacial period, archaeological research has been limited in Prince Edward County, particularly in the vicinity of the Study Area, and as a result we have only a limited understanding of the pre-contact cultural processes that occurred in this part of the province.

Recorded history in the area begins in 1615 when Samuel de Champlain travelled with Huron Warriors through Prince Edward County in an attack on an Iroquois village on the south shore of Lake Ontario, beginning at the False Duck Islands east of the current Study Area.

The Carrying Place, located approximately 40 km northwest of the Study Area, was used by pre-contact populations and fur traders as a portage between Lake Ontario and the River Trent, linking Lake Ontario to Lake Huron. It was at the Carrying Place, in 1787, that the Gunshot Treaty was signed, transferring all of the land from Lake Ontario to Lake Simcoe between the Bay of Quinte and Etobicoke River from the Mississauga to the British Government.

Survey of Prince Edward County was initiated by Surveyor General Samuel Holland in 1783, as part of the land granting program for settling United Empire Loyalists after the American War of Independence. The first township in the peninsula surveyed was Marysburgh in 1784 followed by Sophiasburgh in 1785 (Cruikshank and Stokes, 1984). Settlement started in 1784 in Marysburgh. More settlers arrived in the adjoining townships, Sophiasburgh and Ameliasburgh, in the 1780s and early 1790s. Athol Township was first settled in 1788 as a part of the original 'Fifth Town' of Upper Canada along with parts of Hallowell and South and North Marysburgh townships. It was given separate township status in 1848 owing to the displeasure of the townspeople over the inaccessibility of proper local government due to the large size of the jurisdiction (Belden, 1878).

The first settlers generally drew lots in their preferred areas resulting in families locating close together. A combination of geography, time constraints, squatters and limitations of the tools being used meant that the survey of Prince Edward County was incomplete and inaccurate in the autumn of 1784 when settlers drew their lots (Lunn, 1967). By 1842, Prince Edward County was settled, with less than 1,500 acres left unoccupied. Since a large portion of Prince Edward County was relatively poor agriculturally, the early settlers engaged in pursuits other than or in addition to farming in order to supplement farm income (Cruikshank and Stokes, 1984). The shoreline provided easy access to water transportation which favoured fishing and shipbuilding (Figure 3).

At the time of Belden's 1878 Atlas every lot within the Study Area was occupied with at least one structure in each property (Figures 4 and 5). The majority of the structures indicated on Belden's Atlas were farmhouses; however, schoolhouses, meeting houses and churches are also indicated on Belden's Atlas. All of the structures indicated are situated along the various roads that cross the Study Area and along the shore of Lake Ontario (Figures 4 and 5).



Figure 3: Study Area as shown on 1863 Tremaine Map



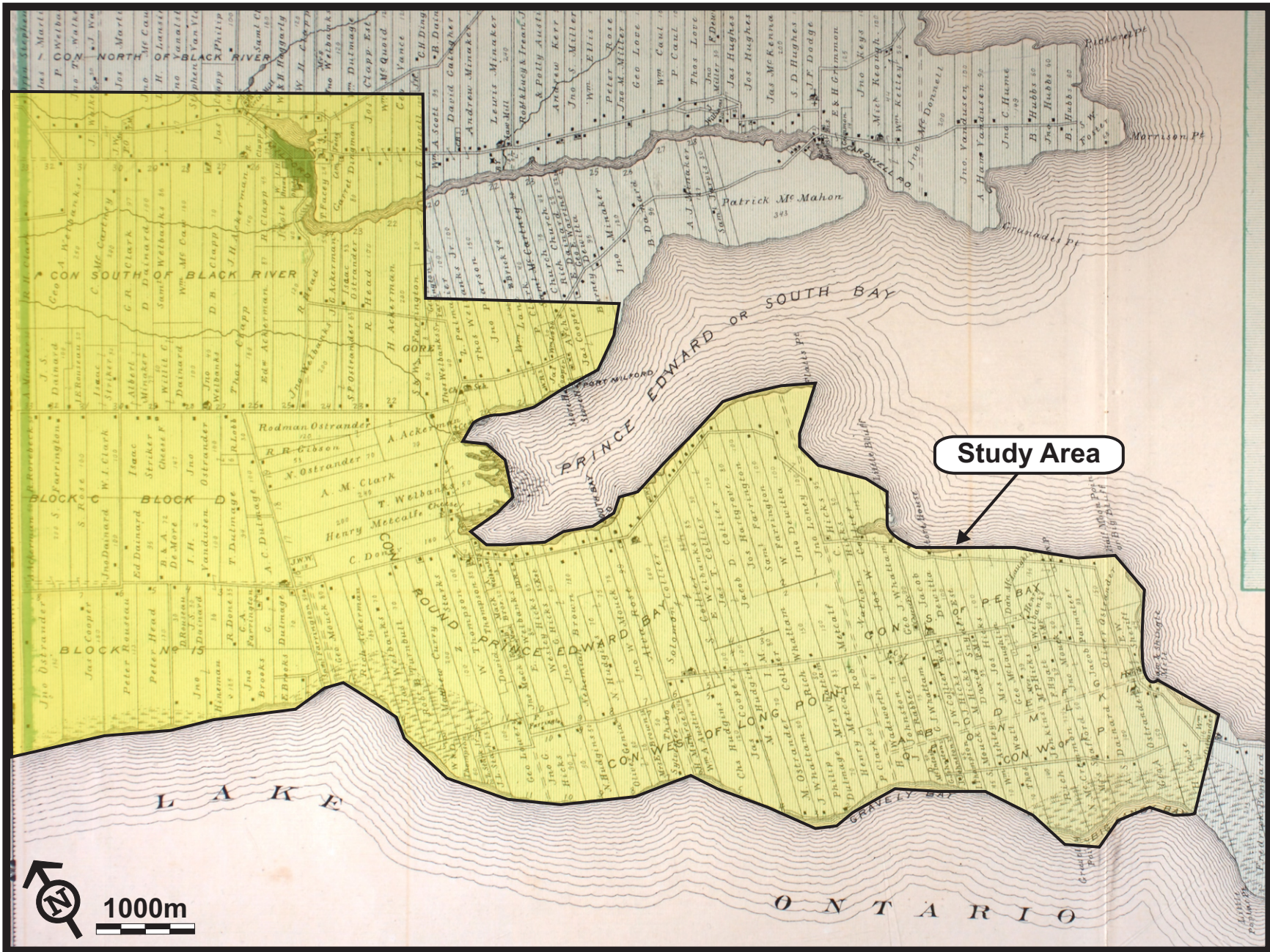


Figure 5: Study Area as shown on Belden's 1878 Map of South Marysburgh Township

## **4 HERITAGE IMPACT ASSESSMENT**

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### **4.1 Methodology**

#### **4.1.1 Resource Evaluation Methodology**

As per O.Reg. 359/09, evaluation of potentially significant built heritage resources in the Study Area was performed using criteria set out under O.Reg 9/06 of the *Ontario Heritage Act (OHA)*. A property or resource meeting one or more of the following criteria is considered significant under the *OHA*.

1. *The property has design value or physical value because it,*
  - i. *is a rare, unique, representative or early example of a style, type, expression, material or construction method,*
  - ii. *displays a high degree of craftsmanship or artistic merit, or*
  - iii. *demonstrates a high degree of technical or scientific achievement.*
  
2. *The property has historical value or associative value because it,*
  - i. *has direct associations with a theme, event, belief, person, activity, organization or institution that is significant to a community,*
  - ii. *yields, or has the potential to yield, information that contributes to an understanding of a community or culture, or*
  - iii. *demonstrates or reflects the work or ideas of an architect, artist, builder, designer or theorist who is significant to a community.*
  
3. *The property has contextual value because it,*
  - i. *is important in defining, maintaining or supporting the character of an area,*
  - ii. *is physically, functionally, visually or historically linked to its surroundings, or*
  - iii. *is a landmark. O. Reg. 9/06, s. 1 (2).*



#### 4.1.2 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 cultural heritage resources.

In order to evaluate the 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.

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 (Ellis, 1987; Crispino and D'Apuzzo, 2001; Rainer,

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1982; Wiss, 1981). The proximity of Project components to resources of cultural heritage value was considered in this assessment, particularly those within 50 m.



**Visual Aid 1: Wind Turbine Scale Schematic**



**Visual Aid 2: Wind Turbine Scale Schematic, with trees**

**4.2 Existing Heritage Designations, Easements and Conservation Districts**

There are nine (9) protected properties located in the Study Area (Table 1). All nine of the properties are designated by municipal by-law under Part IV, Section 29 of the *Ontario Heritage Act (OHA)*. No properties designated under any other means outlined in the table in Section 19, O.Reg. 359/09 were identified within or adjacent to the Study Area (Fraser, 2010 pers. comm.; Leary, 2010 pers. comm.; Schaefer, 2012 pers. comm.). Potential negative impacts of the Project on protected properties have been assessed in a separate Protected Properties report.

**Table 1: Protected Properties in and around the Study Area**

<b>Name/Address</b>	<b>Municipal Address</b>	<b>Type of Protection</b>
Henry House	41 Lighthall Road	Designated in 1985 under Part IV of the Ontario Heritage Act (OHA), municipal by-law #1628
Dulmage-Farrington Marshall Driveshed	104 Brewers Road	Designated in 1990 under Part IV of the OHA, municipal by-law #1967
Mathewson House	1902 County Road 13	Designated in 1985 under Part IV of the OHA, municipal by-law #1628
Gibbons' Property	1078 Royal Road	Designated in 2008 under Part IV of the OHA, municipal by-law #2321-2008
Milford Town Hall	3076-3080 County Road 10	Designated in 2006 under Part IV of the OHA, municipal by-law #1758-2006
Mount Tabor United Church	2179 County Road 17	Designated in 1985 under Part IV of the OHA, municipal by-law #1677
Mariner's Museum	2065 County Road 13	Designated in 2011 under Part IV of the OHA, municipal by-law #2870-2011
Royal Street Cheese Factory	1112 Royal Road	Designated in 2011 under Part IV of the OHA, municipal by-law #2794-2011
Moses Hudgins House	191 Ostrander Point Road	Designated in 2011 under Part IV of the OHA, municipal by-law #2793-2011

### **4.3 Built Heritage Resources**

Built heritage resources are defined as "one or more significant buildings, structures, monuments, installations or remains associated with architectural, cultural, social, political, economic or military history and identified as being important to a community. These resources may be identified through designation or heritage conservation easement under the *Ontario Heritage Act (OHA)*, or listed by local, provincial or federal jurisdictions" (MTCS, 2006c).

During the June and August, 2010 and April, 2012 site visits, 59 built resources that might potentially satisfy the criteria outlined under O.Reg. 9/06 were documented and recorded during the windshield survey. All 59 of the built resources recorded during the visual survey were evaluated against O.Reg.9/06 criteria (Table 2). A total of 29 of the evaluated resources meet the criteria for determining cultural heritage value or interest as outlined under O.Reg. 9/06. The 29 resources meeting criteria are, as follows:

- Barn at 3196 Long Point Road, BHR 1;
- 104 Brewers Road, BHR 2;
- 3705 County Road 10, BHR 3;
- 3750 County Road 10, BHR 4;
- 2446 County Road 13, BHR 5;
- 940 Royal Road, BHR 6;
- 1038 Royal Road, BHR 7;
- 1210 Royal Road, BHR 8;
- 1247 Royal Road, BHR 9;
- 1327 Royal Road, BHR 10;
- 191 Walmsley Road, BHR 11;
- 477 Walmsley Road, BHR 12;
- 2814 Long Point Road, BHR 13;
- 3419 Long Point Road, BHR 14;
- 3753 Long Point Road, BHR 15;
- 4572 Long Point Road, BHR 16;

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- 1676 County Road 13, BHR 17;
- 1972 County Road 13, BHR 18;
- 2029 County Road 13, BHR 19;
- 2733 County Road 13, BHR 20;
- 3046 County Road 10, BHR 21;
- 3054 County Road 10, BHR 22;
- 3058 County Road 10, BHR 23;
- 3104 County Road 10, BHR 24;
- 89 Colliers Road, BHR 25;
- 96 Colliers Road, BHR 26;
- 91 Elmbrook Road, BHR 27;
- 1590 County Road 5, BHR 28; and
- 2265 County Road 13, BHR 29

Table 2: Evaluation of Cultural Heritage Resources and Landscapes




Built Heritage Resource Number	Property	O.Reg. 9/06 Criteria	Justification	Rating	Thumbnail (full-size photos in Appendix A)
BHR 1	Barn - 3196 Long Point	Design or Physical	Wood clad barn with substantial stone foundations. Excellent example of local barn construction.	meets criteria	 <p>Plate 1</p>
		Historical or Associative	No known associations.		
		Contextual	Supports the rural character of the surrounding landscape.		
442 Bond Road		Design or Physical	One and a half storey vinyl-clad vernacular farmhouse with covered front and side porches. Not an especially rare, unique, early or representative example of the style, use of materials or method of construction. Does not demonstrate an unusually high degree of craftsmanship, artistic merit or scientific achievement.	does not meet criteria	 <p>Plate 2</p>
		Historical or Associative	No known associations.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		
471 Bond Road		Design or Physical	One and a half storey plaster-clad vernacular farmhouse with garage. Not an especially rare, unique, early or representative example of the style, use of materials or method of construction. Does not demonstrate an unusually high degree of craftsmanship, artistic merit or scientific achievement.	does not meet criteria	 <p>Plate 3</p>
		Historical or Associative	No known associations.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		

Table 2: Evaluation of Cultural Heritage Resources and Landscapes



Built Heritage Resource Number	Property	O.Reg. 9/06 Criteria	Justification	Rating	Thumbnail (full-size photos in Appendix A)
	506 Bond Road	Design or Physical	One and a half storey vinyl-clad Gothic Revival Cottage style farmhouse with decorative bargeboard trim along the front porch and off-centre front gable and front entrance. Not a rare, unique, early or representative example of the style, use of materials or method of construction. Does not demonstrate an unusually high degree of craftsmanship, artistic merit or scientific achievement.	does not meet criteria	 <p data-bbox="1688 760 1766 784">Plate 4</p>
Historical or Associative		No known associations.			
Contextual		Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.			
	540 Bond Road	Design or Physical	Two storey vinyl-clad vernacular farmhouse with balcony above front porch. Not a rare, unique, early or representative example of the style, use of materials or method of construction. Does not demonstrate an unusually high degree of craftsmanship, artistic merit or scientific achievement.	does not meet criteria	 <p data-bbox="1688 1214 1766 1239">Plate 5</p>
Historical or Associative		No known associations.			
Contextual		Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.			

Table 2: Evaluation of Cultural Heritage Resources and Landscapes



Built Heritage Resource Number	Property	O.Reg. 9/06 Criteria	Justification	Rating	Thumbnail (full-size photos in Appendix A)
BHR 2 / CHL 1	104 Brewers Road	Design or Physical	One and a half storey vernacular Cottage-style farmhouse built c. 1840s. Associated with the Dulmage-Farrington property which includes the designated driveshed immediately south of the farmhouse. The yellow plaster-clad building is an excellent example of local plaster-clad cottage-style architecture.	meets criteria	 <p>Plate 6</p>
		Historical or Associative	No known associations.		
		Contextual	Visually and historically linked to the other structures and agricultural fields on the property and Brewers Road which is characterised by the mature trees lining either side and the canopy above the road in the vicinity of the present-day Long Dog Winery.		
BHR 3	3705 County Road 10	Design or Physical	Vernacular wood clad farmhouse. Front portion of building is two storey, three-over-three Georgian architecture with ornate wood trim along wrap-around porch. Character-defining features include ornate cornice moulding along the eaves, wide front door frame and asymmetrical early Gothic Revival Cottage style building at rear. Rare example of ornate, large-scale rural architecture in the Georgian style in the area.	meets criteria	 <p>Plate 7</p>
		Historical or Associative	No known associations.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		



Table 2: Evaluation of Cultural Heritage Resources and Landscapes




Built Heritage Resource Number	Property	O.Reg. 9/06 Criteria	Justification	Rating	Thumbnail (full-size photos in Appendix A)
BHR 4	3750 County Road 10	Design or Physical	Two storey farmhouse, County style architecture. Character-defining elements include protruding vestibule with doors leading to covered porches on either side, ornate woodwork along posts and porch eaves, cornice moulding along the eaves, and ornate window frames. Good example of local architectural style.	meets criteria	 <p>Plate 8</p>
		Historical or Associative	No known associations.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		
	3835 County Road 10	Design or Physical	Two storey vinyl-clad vernacular farmhouse with covered porch along front. Not a rare, unique, early or representative example of the style, use of materials or method of construction. Does not demonstrate an unusually high degree of craftsmanship, artistic merit or scientific achievement.	does not meet criteria	 <p>Plate 9</p>
		Historical or Associative	No known associations.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		
BHR 5	2446 County Road 13	Design or Physical	One and a half storey vinyl-clad Gothic Revival Cottage style farmhouse with covered porch across front of both portions of the residence. Good example of asymmetrical local variation on the style - central gable and door of rear building are off-centred.	meets criteria	 <p>Plate 10</p>
		Historical or Associative	No known associations.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		

Table 2: Evaluation of Cultural Heritage Resources and Landscapes




Built Heritage Resource Number	Property	O.Reg. 9/06 Criteria	Justification	Rating	Thumbnail (full-size photos in Appendix A)
	193 Murphy Road	Design or Physical	One and a half storey vernacular farmhouse with enclosed front porch. Views from road partially obscured by large coniferous trees. Not a rare, unique, early or representative example of the style, use of materials or method of construction. Does not demonstrate an unusually high degree of craftsmanship, artistic merit or scientific achievement.	does not meet criteria	 Plate 11
		Historical or Associative	No known associations.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		
	757 Royal Road	Design or Physical	One and a half storey vernacular farmhouse with covered front porch. Not a rare, unique, early or representative example of the style, use of materials or method of construction. Does not demonstrate an unusually high degree of craftsmanship, artistic merit or scientific achievement.	does not meet criteria	 Plate 12
		Historical or Associative	No known associations.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		
	843 Royal Road	Design or Physical	One and a half storey vinyl-clad vernacular residence. Not a rare, unique, early or representative example of the style, use of materials or method of construction. Does not demonstrate an unusually high degree of craftsmanship, artistic merit or scientific achievement.	does not meet criteria	 Plate 13
		Historical or Associative	No known associations.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		

Table 2: Evaluation of Cultural Heritage Resources and Landscapes




Built Heritage Resource Number	Property	O.Reg. 9/06 Criteria	Justification	Rating	Thumbnail (full-size photos in Appendix A)
	896 Royal Road	Design or Physical	One and a half storey vernacular residence built on a rectangular plan. Not a rare, unique, early or representative example of the style, use of materials or method of construction. Does not demonstrate an unusually high degree of craftsmanship, artistic merit or scientific achievement.	does not meet criteria	 <p>Plate 14</p>
		Historical or Associative	No known associations.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		
BHR 6	940 Royal Road	Design or Physical	One and a half storey red brick farmhouse built circa 1860 for Jane Rose. Character-defining features include protruding vestibule, chimneys at either end, wide front door frame with transom and sidelights, moulded soffit along eaves, and lancet arch window below central gable. Fine example of local architectural variant ( <i>i.e.</i> , protruding vestibule). Included in the County's Inventory of Heritage Buildings.	meets criteria	 <p>Plate 15</p>
		Historical or Associative	No known associations.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		
BHR 7	1038 Royal Road	Design or Physical	One and a half storey plaster-clad Georgian style farmhouse built circa 1835. Characterised by simple, rectangular, symmetrical plan (central door with two windows on either side). Associated with several outbuildings. Included in the County's Inventory of Heritage Buildings, Welbank's House.	meets criteria	 <p>Plate 16</p>
		Historical or Associative	Associated with early settler, Thomas Welbanks		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		

Table 2: Evaluation of Cultural Heritage Resources and Landscapes



Built Heritage Resource Number	Property	O.Reg. 9/06 Criteria	Justification	Rating	Thumbnail (full-size photos in Appendix A)
BHR 8	1210 Royal Road	Design or Physical	One and a half storey plaster-clad Ontario Cottage style farmhouse built circa 1840. Characterised by simple, rectangular, symmetrical plan (central door with windows on either side - originally two on each side). Other character-defining features include the wide, pilastered door frame and wide chimney. Associated with several outbuildings. Included in the County's Inventory of Heritage Buildings, Ostrander House.	meets criteria	
		Historical or Associative	Associated with early settlers, Ostrander family		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		
					Plate 17
BHR 9	1247 Royal Road	Design or Physical	One and a half red brick former schoolhouse building with protruding front entrance. School No. 11. Built in 1875. Character-defining features include the rectangular, one-room design with windows flanking front entrance and along either side, rounded arch window above front entrance, modest date plaque below gable.	meets criteria	
		Historical or Associative	One room schoolhouse associated with late 19th century education in the County.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		
					Plate 18

Table 2: Evaluation of Cultural Heritage Resources and Landscapes




Built Heritage Resource Number	Property	O.Reg. 9/06 Criteria	Justification	Rating	Thumbnail (full-size photos in Appendix A)
BHR 10	1327 Royal Road	Design or Physical	One and a half storey vinyl-clad vernacular farmhouse built circa 1840. Characterised by simple rectangular plan, two attic dormers, chimneys at either side of the farmhouse, protruding front entrance. Included in the County's Inventory of Heritage Buildings, Joseph Clapp House.	meets criteria	 <p>Plate 19</p>
		Historical or Associative	Associated with early settler, Joseph Clapp		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		
	1375 Royal Road	Design or Physical	One and a half storey vinyl-clad vernacular farmhouse. Characterised by simple rectangular plan, off-centred wide front door, and peaked window frames. Not a rare, unique, early or representative example of the style, use of materials or method of construction. Does not demonstrate an unusually high degree of craftsmanship, artistic merit or scientific achievement.	does not meet criteria	 <p>Plate 20</p>
		Historical or Associative	No known associations.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		
	12 Walmsley Road	Design or Physical	Two storey red brick vernacular residence with covered porch with balcony on second storey. Not a rare, unique, early or representative example of the style, use of materials or method of construction. Does not demonstrate an unusually high degree of craftsmanship, artistic merit or scientific achievement.	does not meet criteria	 <p>Plate 21</p>
		Historical or Associative	No known associations.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		

Table 2: Evaluation of Cultural Heritage Resources and Landscapes




Built Heritage Resource Number	Property	O.Reg. 9/06 Criteria	Justification	Rating	Thumbnail (full-size photos in Appendix A)
	71 Walmsley Road	Design or Physical	Two storey vinyl-clad vernacular residence. Not a rare, unique, early or representative example of the style, use of materials or method of construction. Does not demonstrate an unusually high degree of craftsmanship, artistic merit or scientific achievement.	does not meet criteria	 <p>Plate 22</p>
		Historical or Associative	No known associations.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		
	94 Walmsley Road	Design or Physical	One and a half storey vinyl-clad vernacular residence associated with agricultural fields, outbuildings and mature tree-lined laneway. Not a rare, unique, early or representative example of the style, use of materials or method of construction. Does not demonstrate an unusually high degree of craftsmanship, artistic merit or scientific achievement.	does not meet criteria	 <p>Plate 23</p>
		Historical or Associative	No known associations.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		
	130 Walmsley Road	Design or Physical	Two storey vinyl-clad vernacular residence associated with agricultural fields, outbuildings and mature tree-lined laneway. Not a rare, unique, early or representative example of the style, use of materials or method of construction. Does not demonstrate an unusually high degree of craftsmanship, artistic merit or scientific achievement.	does not meet criteria	 <p>Plate 24</p>
		Historical or Associative	No known associations.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		

Table 2: Evaluation of Cultural Heritage Resources and Landscapes




Built Heritage Resource Number	Property	O.Reg. 9/06 Criteria	Justification	Rating	Thumbnail (full-size photos in Appendix A)
BHR 11	191 Walmsley Road	Design or Physical	One and a half storey log Gothic Revival Cottage style farmhouse with wrap around porch and returning gables. Although log construction was quite common in and around the Study Area in the first half of the 19th century, this farmhouse is one of the few remaining examples.	meets criteria	 <p>Plate 25</p>
		Historical or Associative	No known associations.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		
	379 Walmsley Road	Design or Physical	Two storey vinyl-clad vernacular residence with roughly square plan, three-over-three openings. Associated with agricultural outbuildings and mature trees. Not a rare, unique, early or representative example of the style, use of materials or method of construction. Does not demonstrate an unusually high degree of craftsmanship, artistic merit or scientific achievement.	does not meet criteria	 <p>Plate 26</p>
		Historical or Associative	No known associations.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		
	409 Walmsley Road	Design or Physical	One and a half storey red brick vernacular farmhouse. Partially obscured from road by trees. Not a rare, unique, early or representative example of the style, use of materials or method of construction. Does not demonstrate an unusually high degree of craftsmanship, artistic merit or scientific achievement.	does not meet criteria	 <p>Plate 27</p>
		Historical or Associative	No known associations.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		

Table 2: Evaluation of Cultural Heritage Resources and Landscapes



Built Heritage Resource Number	Property	O.Reg. 9/06 Criteria	Justification	Rating	Thumbnail (full-size photos in Appendix A)
BHR 12	477 Walmsley Road	Design or Physical	One and a half storey plaster-clad Georgian Cottage style farmhouse. Likely built circa 1840 based on similar local examples. Character-defining features include the symmetrical form with central door flanked by two windows on either side, central attic dormer, metal roof with chimneys at either end (although one chimney has been removed, scarring on the roof indicates its former location), recessed windows with lug sills, and elegant moulded soffit below the eaves.	meets criteria	
		Historical or Associative	No known associations.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		
					Plate 28
	761 Babylon Road	Design or Physical	One and a half storey vernacular farmhouse with associated outbuilding. Enclosed front porch across front. Not a rare, unique, early or representative example of the style, use of materials or method of construction. Does not demonstrate an unusually high degree of craftsmanship, artistic merit or scientific achievement.	does not meet criteria	
		Historical or Associative	No known associations.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		
					Plate 29



Table 2: Evaluation of Cultural Heritage Resources and Landscapes



Built Heritage Resource Number	Property	O.Reg. 9/06 Criteria	Justification	Rating	Thumbnail (full-size photos in Appendix A)
	817 Babylon Road	Design or Physical	One and a half storey vernacular farmhouse with one storey addition along the south and front elevations. Not a rare, unique, early or representative example of the style, use of materials or method of construction. Does not demonstrate an unusually high degree of craftsmanship, artistic merit or scientific achievement.	does not meet criteria	
		Historical or Associative	No known associations.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		
Plate 30					
BHR 13	2814 Long Point Road	Design or Physical	One and a half storey vernacular structure built on a rectangular plan with a gabled roof. Although no signage was visible from the road, the building form and location suggest that this is the one room schoolhouse for Section No. 15. The school is shown on both the 1863 Tremaine Map and the 1878 Belden Atlas. Character-defining elements of the schoolhouse include the wood frame construction, protruding entrance, moulded soffit along eaves and two windows on either long side. The schoolhouse is one of the few remaining examples of one room school construction in the County and the only wooden example in the vicinity.	meets criteria	
		Historical or Associative	Associated with the development of the education system in the County.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		
Plate 31					

Table 2: Evaluation of Cultural Heritage Resources and Landscapes




Built Heritage Resource Number	Property	O.Reg. 9/06 Criteria	Justification	Rating	Thumbnail (full-size photos in Appendix A)
	3127 Long Point Road	Design or Physical	One and a half storey Gothic Revival Cottage style farmhouse. Not a rare, unique, early or representative example of the style, use of materials or method of construction. Does not demonstrate an unusually high degree of craftsmanship, artistic merit or scientific achievement.	does not meet criteria	 <p>Plate 32</p>
		Historical or Associative	No known associations.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		
	3135 Long Point Road	Design or Physical	One and a half storey Gothic Revival Cottage style farmhouse with additions to side and rear. Not a rare, unique, early or representative example of the style, use of materials or method of construction. Does not demonstrate an unusually high degree of craftsmanship, artistic merit or scientific achievement.	does not meet criteria	 <p>Plate 33</p>
		Historical or Associative	No known associations.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		
	3253 Long Point Road	Design or Physical	One and a half storey Gothic Revival Cottage style farmhouse with vinyl cladding and covered porch along the front. Not a rare, unique, early or representative example of the style, use of materials or method of construction. Does not demonstrate an unusually high degree of craftsmanship, artistic merit or scientific achievement.	does not meet criteria	 <p>Plate 34</p>
		Historical or Associative	No known associations.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		

Table 2: Evaluation of Cultural Heritage Resources and Landscapes




Built Heritage Resource Number	Property	O.Reg. 9/06 Criteria	Justification	Rating	Thumbnail (full-size photos in Appendix A)
	3265 Long Point Road	Design or Physical	One and a half storey vernacular farmhouse. Not a rare, unique, early or representative example of the style, use of materials or method of construction. Does not demonstrate an unusually high degree of craftsmanship, artistic merit or scientific achievement.	does not meet criteria	 <p>Plate 35</p>
		Historical or Associative	No known associations.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		
	3271 Long Point Road	Design or Physical	One and a half storey Gothic Revival Cottage style farmhouse. Not a rare, unique, early or representative example of the style, use of materials or method of construction. Does not demonstrate an unusually high degree of craftsmanship, artistic merit or scientific achievement.	does not meet criteria	 <p>Plate 36</p>
		Historical or Associative	No known associations.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		
BHR 14	3419 Long Point Road	Design or Physical	Two storey red brick farmhouse with frame addition. Modest, but good example of County architectural style built in 1876. Character-defining elements include the protruding vestibule, wide front door frame, rounded arch headers above openings, moulded soffit below eaves, spindle at the peak of the front gable, and date plaque. Also known as the Hicks House.	meets criteria	 <p>Plate 37</p>
		Historical or Associative	No known associations that satisfy criteria under O.Reg. 9/06.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		

Table 2: Evaluation of Cultural Heritage Resources and Landscapes




Built Heritage Resource Number	Property	O.Reg. 9/06 Criteria	Justification	Rating	Thumbnail (full-size photos in Appendix A)
	3716 Long Point Road	Design or Physical	Two storey vernacular farmhouse. Not a rare, unique, early or representative example of the style, use of materials or method of construction. Does not demonstrate an unusually high degree of craftsmanship, artistic merit or scientific achievement.	does not meet criteria	 <p>Plate 38</p>
		Historical or Associative	No known associations.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		
BHR 15	3753 Long Point Road	Design or Physical	Two storey red brick farmhouse with board and batten Gothic Revival Cottage wing. Good example of County architectural style - particularly the asymmetry of the Gothic Revival Cottage style portion and the protruding vestibule of the larger red brick portion. Character-defining elements include the protruding vestibule with decorated porches on either side, wide front door frame with transom and sidelights, rounded arch headers above openings, moulded soffit below eaves, recessed decoration below the front gable.	meets criteria	 <p>Plate 39</p>
		Historical or Associative	No known associations.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		
	4477 Long Point Road	Design or Physical	One and a half storey Gothic Revival Cottage style farmhouse. Not a rare, unique, early or representative example of the style, use of materials or method of construction. Does not demonstrate an unusually high degree of craftsmanship, artistic merit or scientific achievement.	does not meet criteria	 <p>Plate 40</p>
		Historical or Associative	No known associations.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		

Table 2: Evaluation of Cultural Heritage Resources and Landscapes




Built Heritage Resource Number	Property	O.Reg. 9/06 Criteria	Justification	Rating	Thumbnail (full-size photos in Appendix A)
BHR 16	4572 Long Point Road	Design or Physical	One storey red brick rural church. Union G.M. Church. Character-defining features include rectangular plan, gabled roof, wide front door with lancet arch window above, lancet arch windows on either side of the door, moulded soffit along eaves, long windows along either side of the building, and plaque below the gable.	meets criteria	
		Historical or Associative	Associated with the development of the area and the Methodist church.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		
					Plate 41
	4611 Long Point Road	Design or Physical	Two storey vernacular cottage. Not a rare, unique, early or representative example of the style, use of materials or method of construction. Does not demonstrate an unusually high degree of craftsmanship, artistic merit or scientific achievement.	does not meet criteria	
		Historical or Associative	No known associations.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		
					Plate 42
BHR 17	1676 County Road 13	Design or Physical	One and a half storey Georgian Cottage style farmhouse. Built circa 1838 the Church House is an early example of the style found throughout the County. Character-defining features of the residence include the wide doorframe with sidelights, rectangular plan, and symmetrical form.	meets criteria	
		Historical or Associative	No known associations that satisfy criteria under O.Reg. 9/06.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		
					Plate 43

Table 2: Evaluation of Cultural Heritage Resources and Landscapes


Built Heritage Resource Number	Property	O.Reg. 9/06 Criteria	Justification	Rating	Thumbnail (full-size photos in Appendix A)
BHR 18	1972 County Road 13	Design or Physical	<p>The main two storey, clapboard portion of the farmhouse was constructed circa 1880; however, the rear kitchen is earlier. The original one storey log cabin constructed shortly after Thomas Welbanks purchased the property in 1824 may still exist at the rear of the board and batten Gothic Revival Cottage kitchen. The farmhouse is an excellent example of County architecture. Character-defining features of the house include the protruding vestibule with doors and ornate covered porches on either side, cornice mouldings and moulded soffit below the eaves, pediments at the tops of window and door frames, and a wide double front door with transom. The central gable of the board and batten kitchen is characteristically off-centred.</p>	meets criteria	
		Historical or Associative	<p>Associated with the Welbanks family, specifically Thomas Welbanks; however, this association does not necessarily satisfy this criterion.</p>		
		Contextual	<p>Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.</p>		

Plate 44

Table 2: Evaluation of Cultural Heritage Resources and Landscapes



Built Heritage Resource Number	Property	O.Reg. 9/06 Criteria	Justification	Rating	Thumbnail (full-size photos in Appendix A)
BHR 19	2029 County Road 13	Design or Physical	South Bay United Church and one room schoolhouse (School Section No. 13). Both a church and schoolhouse are shown on the 1863 Tremaine map, although the church is identified as a Wesleyan Methodist church. The extant red brick United Church was dedicated in 1872. The church is a good example of rural church architecture and is characterised by its rectangular plan, rounded arch windows, small wheel window below the gable, and steeple. The one room Port Milford schoolhouse was constructed circa 1860 from locally quarried stone (Mika, 1980). The building is a rare example of the use of stone in rural, public architecture in the area. The use of locally quarried stone adds to the architectural value of the school.	meets criteria	
		Historical or Associative	The church and schoolhouse are both linked to the development of the local community. Their location along South Bay both visually and historically links the two buildings to the marine history of the area.		
		Contextual	Both buildings are landmarks. The two buildings are integrally linked.		
CHL 2	2109 County Road 13 (South Bay Cemetery)	Design or Physical	Cemetery landscape characterised by the rolling grassy topography, stone gravemarkers, tree/shrubbery line around the border of the cemetery. The cemetery overlooks South Bay, which is directly to the east.	meets criteria	
		Historical or Associative	Yields information about the history of the community.		
		Contextual	a landmark		

Plate 45

Plate 46

Table 2: Evaluation of Cultural Heritage Resources and Landscapes



Built Heritage Resource Number	Property	O.Reg. 9/06 Criteria	Justification	Rating	Thumbnail (full-size photos in Appendix A)
BHR 20	2733 County Road 13	Design or Physical	One and a half storey vernacular farmhouse. Built in 1836, the western portion may be the earliest brick residence in the Township of South Marysburgh. The building is characterised by its rectangular plan with two, nearly identical, halves. The eastern portion of the building is wood frame construction with wood-cladding and the western portion is brick with plaster cladding. Each half features a central doorway with almost square windows on either side. The returning gables no longer exist on the western elevation, but portions of the moulded cornice below the eaves remain intact.	meets criteria	 <p>Plate 47</p>
		Historical or Associative	Associated with the Mouck family. The house was built by William Mouck, a German mercenary who fought for the British during the American Revolution. This farmhouse is one of the few remaining structures constructed by German settlers who were among the first to arrive in Prince Edward County.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		
	2839 County Road 13	Design or Physical	One and a half storey Gothic Revival Cottage style farmhouse with enclosed front porch. Associated with a large former orchard west of the farmhouse. Not a rare, unique, early or representative example of the style, use of materials or method of construction. Does not demonstrate an unusually high degree of craftsmanship, artistic merit or scientific achievement.	does not meet criteria	 <p>Plate 48</p>
		Historical or Associative	No known associations.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		



Table 2: Evaluation of Cultural Heritage Resources and Landscapes



Built Heritage Resource Number	Property	O.Reg. 9/06 Criteria	Justification	Rating	Thumbnail (full-size photos in Appendix A)
	422 Murphy Road	Design or Physical	Two storey plaster-clad farmhouse built on a rectangular plan with three-over-three openings. The building has a covered porch across the front with decorative woodwork. Other decorative details include cornice brackets and scalloped cornice along the eaves. Not a rare, unique, early or representative example of the style, use of materials or method of construction. Does not demonstrate an unusually high degree of craftsmanship, artistic merit or scientific achievement.	does not meet criteria	
		Historical or Associative	No known associations.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		
BHR 21	3046 County Road 10	Design or Physical	One and a half storey commercial building constructed circa 1886. Originally Knox's General Store, it has also been Clark's General Store and is now Milford Bistro and Gallery. The building is one of the few examples of the use of a 'boomtown front' faux façade in rural Prince Edward County.	meets criteria	
		Historical or Associative	Associated with the development of Milford and the surrounding rural area it serviced.		
		Contextual	Contributes to the rural 'Main Street' character of King Street (County Road 10) as it passes through Milford.		

Plate 49

Plate 50

Table 2: Evaluation of Cultural Heritage Resources and Landscapes


Built Heritage Resource Number	Property	O.Reg. 9/06 Criteria	Justification	Rating	Thumbnail (full-size photos in Appendix A)
BHR 22	3054 County Road 10	Design or Physical	This two storey red brick residence was constructed in the 1870s or 1880s for the McKibbon family (proprietors of the adjacent store). The building is a good example of County architecture. Character-defining features of the building include the protruding vestibule with large front doorframe and double doors. Extending from either side of the vestibule are covered porches with decorated posts and decorative trim along the eaves. Above the ornate front entrance is a second storey balcony with decorative fencing and a carved frieze along the base. The residence also has a protruding bay window on the eastern elevation. Along the eaves are ornate cornice brackets and a moulded soffit. The house is highly decorated compared to the surrounding homes and commercial buildings. The ornate decoration and large scale of the residence suggest that the house was a status symbol.	meets criteria	
		Historical or Associative	Associated with the commercial building to the east (5058 County Road 10).		
		Contextual	Historically linked to the 'Main Street' landscape of Milford.		

Plate 51

Table 2: Evaluation of Cultural Heritage Resources and Landscapes



Built Heritage Resource Number	Property	O.Reg. 9/06 Criteria	Justification	Rating	Thumbnail (full-size photos in Appendix A)
BHR 23	3058 County Road 10	Design or Physical	One and a half storey rural commercial building. The former McKibbon General Store is typical of rural general store design in the 19th century and early 20th century. The store was constructed in the 19th century, although turn of the century photos indicate that the store once had a 'boomtown front'. The faux façade was removed sometime after the partnership of McKibbon and Knox was dissolved and the Knox's General Store was constructed two doors down. The rectangular plan, gabled roof, wide entrance and large front windows are typical of this style of architecture which is relatively rare in the area.	meets criteria	 <p data-bbox="1677 808 1768 833">Plate 52</p>
		Historical or Associative	Associated with the development of Milford and the surrounding rural area it serviced.		
		Contextual	Contributes to the rural 'Main Street' character of King Street (County Road 10) as it passes through Milford.		
BHR 24	3104 County Road 10	Design or Physical	Two storey red brick Georgian residential building. The building is a rare example of large scale Georgian architecture in the general area. Character-defining elements include the symmetrical five-over-five opening plan of the front elevation, wide front doorframe with large transom window, large rectangular windows, rounded window above the front entrance, hip roof, ornate chimney, double cornice brackets along the moulded soffit, and heavy stone headers above the first storey windows.	meets criteria	 <p data-bbox="1677 1295 1768 1320">Plate 53</p>
		Historical or Associative	No known associations.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		

Table 2: Evaluation of Cultural Heritage Resources and Landscapes



Built Heritage Resource Number	Property	O.Reg. 9/06 Criteria	Justification	Rating	Thumbnail (full-size photos in Appendix A)
	3942 County Road 10	Design or Physical	One and a half storey vernacular farmhouse. Built on a rectangular plan. Central front door with two windows above and one window on each of the long sides. Chimney is located near the front of the building. Not a rare, unique, early or representative example of the style, use of materials or method of construction. Does not demonstrate an unusually high degree of craftsmanship, artistic merit or scientific achievement.	does not meet criteria	
		Historical or Associative	No known associations.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		
BHR 25	89 Colliers Road	Design or Physical	Two storey red brick residential building constructed circa 1860. The front elevation of the building faces the bay and the upper floor opens onto the top of the bluff at the rear. The construction of the building, on the edge of the bluff, works with the natural topography to access the waterfront as well as the height of the bluff. Character-defining features of the building include: the symmetry of the plan; wide central front entrance with transom and sidelights; balcony overlooking the bay, accessed through a second storey door above the front entrance; triangular dormer windows above the kitchen; and covered wrap around porch.	meets criteria	
		Historical or Associative	Associated with James Cooper and trade/shipping industry he and his brother William founded at Port Milford on South Bay.		
		Contextual	Historically and visually linked with South Bay and the area's marine history. Linked with the Port Milford General Store and surrounding outbuildings/former storehouses.		

Plate 54

Plate 55

Table 2: Evaluation of Cultural Heritage Resources and Landscapes



Built Heritage Resource Number	Property	O.Reg. 9/06 Criteria	Justification	Rating	Thumbnail (full-size photos in Appendix A)
BHR 26	96 Colliers Road	Design or Physical	Rural commercial building constructed on a simple rectangular plan with a gabled roof. The board and batten store is characterised by a central entrance on the front elevation, flanked by large store windows. The store was constructed circa 1865.	meets criteria	 <p>Plate 56</p>
		Historical or Associative	Associated with James Cooper and trade/shipping industry he and his brother William founded at Port Milford on South Bay.		
		Contextual	Historically and visually linked with South Bay and the area's marine history. Linked with the Port Milford General Store and surrounding outbuildings/former storehouses.		
BHR 27	91 Elmbrook Road	Design or Physical	Former Fairmount Methodist Church, built in 1899. Red brick rural church constructed on a simple rectangular plan. Character-defining elements include the wide double front entrance with rounded arch transom window, long rounded arch windows on either side of the door, windows along either side, moulded soffit and plain frieze below the eaves, and date plaque below the gable. The arched windows are bordered by multi-coloured blocks of stained glass.	meets criteria	 <p>Plate 57</p>
		Historical or Associative	Associated with the Methodist Church and the development of the local rural community.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		

Table 2: Evaluation of Cultural Heritage Resources and Landscapes



Built Heritage Resource Number	Property	O.Reg. 9/06 Criteria	Justification	Rating	Thumbnail (full-size photos in Appendix A)
BHR 28	1590 County Road 5	Design or Physical	One and a half storey red brick Gothic Revival Cottage style farmhouse. Decorative details include wave-motif bargeboard along the eaves, spindles at the peaks of gables and ends of eaves, ornate rounded arch windows and lancet arch window below the front gable. The front entrance is characteristic of County architecture and is a rare example of a one storey protruding vestibule.	meets criteria	
		Historical or Associative	No known associations.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		
BHR 29	2256 County Road 13	Design or Physical	Two storey vernacular barn-type structure. Originally constructed as the Metcalfe Cheese Factory circa 1875. Wood frame construction with wooden cladding. Aluminum roofing and aluminum cladding along first storey. Fieldstone foundations and gable roof.	meets criteria	
		Historical or Associative	Associated with the development of the cheesemaking industry in Prince Edward County.		
		Contextual	Does not contribute or maintain character of surrounding area in an integral way. Not physically, functionally, visually or historically linked to its surroundings in a demonstrable way. Not a landmark.		

Plate 58

Plate 59

#### **4.4 Cultural Heritage Landscapes**

Cultural Heritage Landscapes (CHL) for the purposes of this study are: “a defined geographical area of heritage significance which has been modified by human activities and is valued by a community. A landscape involves a grouping(s) of individual heritage features such as structures, spaces, archaeological sites and natural elements, which together form a significant type of heritage form, distinctive from that of its constituent elements or parts” (MTCS, 2006b).

There are three widely accepted types of cultural heritage landscapes (better known internationally as cultural landscapes). This typology was adopted by the United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Committee in the 1992 revisions to their Operational Guidelines which defines cultural landscapes as the “combined works of nature and of man” (UNESCO, 2008). The Operation Guidelines identify the three types as:

- **Designed Landscapes:** those which have been intentionally designed and created by man. (e.g., historic gardens and parks);
- **Evolved Landscapes:** this type includes both *relict* and *continuing* landscapes resulting from social, economic, administrative, and/or religious imperative and has developed into its present form as a result of its natural environmental context; and
- **Associative Landscapes:** those with powerful religious, artistic or cultural associations of the natural element rather than material or built cultural evidence.

During the site visits in June and August, 2010 and April, 2012 the Study Area was assessed for groupings of resources and environs that might potentially constitute cultural heritage landscapes as defined by the Ministry of Tourism and Culture. Two cultural heritage landscapes were identified.

##### **4.4.1 The Dulmage Farmscape**

The Dulmage Farmscape located at 104 Brewers Road comprises CHL 1. The CHL includes the circa 1840s farmhouse, the designated driveshed, several outbuildings (including a stone smokehouse), several barns currently used for vineyard and winery activities, surrounding agricultural fields currently cultivating grapes and the mature tree-lines along Brewers Road. The Dulmage Farmscape is an evolved and continuing landscape.

##### **4.4.2 The South Bay Cemetery**

The South Bay Cemetery at 2109 County Road 13 was identified during the site visits as a landscape of cultural heritage value. The landscape is characterized by the rolling grassy topography, stone gravemarkers dating back to the early 19<sup>th</sup> century, trees and shrubbery around

the border of the cemetery. The cemetery overlooks South Bay, directly to the east, and is associated with the marine history of the area. The grave markers yield information about the history of the local community. The South Bay Cemetery, CHL 2, is an evolved landscape.

#### **4.4.3 Streetscapes**

Streetscapes were recorded at various locations throughout the Study Area where mature trees on both shoulders form a dense canopy (Photograph 1). These tree-lined roads are characteristic of Prince Edward County as a whole rather than being significant in and of themselves. They are considered, by this study, to be a value-defining characteristic of the County as a whole.



**Photograph 1: Walmsley Road Streetscape**



## **4.5 Impact Assessment**

A total 59 resources were recorded as a result of desktop research and visual surveys. Of those, 29 were determined to be of cultural heritage value or interest as per criterion outlined under O.Reg. 9/06. Two cultural heritage landscapes were identified. Potential Project-related negative impacts have been assessed for each of the resources that have been evaluated as meeting the criteria for cultural value or interest. Tables 3 through 31 provide impact assessment for individual resources and Table 32 provides a summary of the impact assessment and recommended mitigative measures.

### **4.5.1 BHR 1 – Barn (3196 Long Point Road)**

BHR 1 is situated on the south side of Long Point Road, in the east end of the Study Area. The nearest turbine, Turbine 25, is situated approximately 2500 m southeast of the Barn. As a result of the distance of the turbine to the barn and the topography of the property, which slopes up from the road (Plate 1), no visual impacts are expected as a result of the Project. No other Project components are located within the vicinity of the barn and no further potential impacts have been identified (Table 3).

**Table 3: Summary of Impact Assessment, BHR 1 - Barn**

<b>Potential Negative Impact</b>	<b>Results of Analysis</b>
<b>Destruction</b>	The subject property will not be destroyed by the Project.
<b>Alteration</b>	The subject property will not be altered by the Project.
<b>Shadows</b>	No shadows will be cast on the subject property as a result of the Project.
<b>Isolation</b>	The subject property will not be isolated by the Project.
<b>Direct or indirect obstruction</b>	Views of the subject property are not expected to be directly or indirectly obstructed by the Project.
<b>Change in land use</b>	No change in land-use will occur as a result of the Project.

**4.5.2 BHR 2 - 104 Brewers Road / CHL 1 – Dulmage Farmscape**

BHR 2 is located at 104 Brewers Road on the west side of the road, near the centre of the Study Area. The nearest turbine is Turbine 7, approximately 575 m southwest of the driveshed (Figure 6). Other turbines in the general vicinity of the driveshed include: Turbines 5 and 6, approximately 1200 m to the northeast and northwest, respectively; Turbine 11, approximately 1800 m to the west; Turbines 19 and 20, approximately 1900 and 2000 m, respectively, to the southeast. All other turbines are located more than 2000 m from the farmhouse and driveshed (Figure 6). The Collector System is proposed to be installed along Brewers Road. The driveshed is located along Brewers Road, with a setback of less than a metre (Plate 6). A summary of the impact analysis for the Dulmage Farmscape and its buildings is presented in Table 4.

**Table 4: Summary of Impact Assessment, BHR 2 - 104 Brewers Road / CHL 1 - Dulmage Farmscape**

Potential Negative Impact	Results of Analysis
<b>Destruction</b>	<p>The subject property will not be destroyed by the Project; however, there is the potential for damage to occur to the buildings as a result of vibrations caused by installation of a sub-grade Collector System. Although the effect of vibrations from traffic and in-road construction 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 (Ellis, 1987; Crispino and D’Apuzzo, 2001; Rainer, 1982; Wiss, 1981).</p> <p>In the event that the Collector System is installed underground, a study should be conducted by a qualified engineer to determine the maximum vibration peak particle velocity (PPV) for the resources along the road (<i>e.g.</i>, the farmhouse, driveshed, outbuildings) prior to the installation of any below-grade Project infrastructure. Vibrations should be monitored during any necessary below grade construction to ensure that acceptable vibration levels are not exceeded.</p>
<b>Alteration</b>	The subject property will not be altered by the Project.
<b>Shadows</b>	No shadows will be cast on the subject property as a result of the Project.
<b>Isolation</b>	The subject property will not be isolated by the Project.
<b>Direct or indirect obstruction</b>	<p>The nearest wind turbine (Turbine 7) will be installed approximately 575 m southwest of the farmhouse and driveshed and will not directly obstruct any significant views. Turbine 7 will likely be visible from certain vantage points when viewing the property from public property (<i>i.e.</i>, Brewers Road). However, based on the thick tree cover surrounding the residence and driveshed and the relative scale of the turbine as compared to the driveshed and farmhouse at a distance of 575 m, the turbine will not detract greatly from</p>

views of the buildings. All identified potential visual impacts are reversible and temporary based on the limited lifespan of the Project.

The property is contextually linked to the adjacent roadway, both functionally and historically. The trees along both sides of the road and resultant canopy are a key character-defining component of the surrounding landscape. There is a possibility for the installation of the Collector System to have an impact on views of the property. Any below-grade installation might damage or destroy trees lining Brewers Road which would alter the character of the property. It is recommended that removal of trees be avoided and damage to the roots of the trees be minimized.

In the event that an aboveground Collector System is installed, poles and wires might directly obstruct views of the driveway and farmhouse. It is recommended that any aboveground infrastructure installed along Brewers Road avoid the west side of Brewers Road and that no trees be removed for the installation of such infrastructure, particularly along the west side of the road. Above-ground infrastructure (*i.e.*, poles and wires) should be installed on the east side of Brewers Road to avoid obstructing views of the structures on the property.

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

**4.5.3    BHR 3 - 3705 County Road 10**

BHR 3 is located at 3705 County Road 10 on the north side of County Road 10 (Figure 6). The closest Project component that might potentially have an impact on the heritage values of the two storey house are Turbines 4, 5, 6 and 7 situated approximately 1800 m northwest, 1700 m west, 750 m northwest, and 1750 m southwest of the house, respectively (Figure 6). The topography is fairly level around the house and there are several large trees on the property between the road and building (Plate 7).

**Table 5: Summary of Impact Assessment, BHR 3 – 3705 County Road 10**

Potential Negative Impact	Results of Analysis
<b>Destruction</b>	The subject property will not be destroyed by the Project.
<b>Alteration</b>	The subject property will not be altered by the Project.
<b>Shadows</b>	No shadows will be cast on the subject property as a result of the Project.
<b>Isolation</b>	The subject property will not be isolated by the Project.
<b>Direct or indirect obstruction</b>	The Project will not directly obstruct views of 3705 County Road 10. Views of BHR 3 from public property are generally northward from County Road 10. It is, therefore, possible

that Turbines 4, 5, and 6 will be visible when viewing the farmhouse from the road. However, at distances of between 750 m and 1800 m from the two storey house, none of the turbines are likely to detract greatly from character-defining features of the house (Visual Aid 1). Furthermore, these visual impacts are considered temporary and reversible following the lifespan of the Project.

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

**4.5.4 BHR 4 - 3750 County Road 10**

BHR 4 is located at 3750 County Road 10 on the south side of County Road 10 (Figure 6). The closest Project component that might potentially have an impact on the heritage values of the two storey house are Turbines 4, 5, 6 and 7 situated approximately 1800 m northwest, 1900 m west, 800 m northwest, and 1850 m southwest of the house, respectively (Figure 6).

**Table 6: Summary of Impact Assessment, BHR 4 – 3750 County Road 10**

Potential Negative Impact	Results of Analysis
<b>Destruction</b>	The subject property will not be destroyed by the Project.
<b>Alteration</b>	The subject property will not be altered by the Project.
<b>Shadows</b>	No shadows will be cast on the subject property as a result of the Project.
<b>Isolation</b>	The subject property will not be isolated by the Project.
<b>Direct or indirect obstruction</b>	The Project will not directly obstruct views of 3750 County Road 10. Views of BHR 4 from public property are generally southward from County Road 10. It is, therefore, possible that Turbine 7 will be visible when viewing the farmhouse from the road. However, at a distance of approximately 1850 m from the two storey house, the turbine is not likely to detract greatly from character-defining features of the house (Visual Aid 1). Furthermore, this visual impact is considered temporary and reversible following the lifespan of the Project.

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

**4.5.5 BHR 5 - 2446 County Road 13**

BHR 5 is located at 2446 County Road 13 on the south side of the road (Figure 6). Two turbines are located in the vicinity of BHR 5; Turbine 21 approximately 750 m south of the house and Turbine 22 approximately 1000 m south of the house (Figure 6). The rear of the property is forested (Figure 6).

**Table 7: Summary of Impact Assessment, BHR 5 – 2446 County Road 13**

Potential Negative Impact	Results of Analysis
<b>Destruction</b>	The subject property will not be destroyed by the Project.
<b>Alteration</b>	The subject property will not be altered by the Project.
<b>Shadows</b>	No shadows will be cast on the subject property as a result of the Project.
<b>Isolation</b>	The subject property will not be isolated by the Project.
<b>Direct or indirect obstruction</b>	The Project will not directly obstruct views of 2446 County Road 13. With flat topography, Turbines 21 and 22 would be visible from the road when viewing BHR 5 from certain angles, although the scale of the turbines would not dominate views of the building or detract from character-defining features of the property (Visual Aid 1). However, south of the house and outbuildings, the property is forested. This tree cover should be sufficient to minimize visual impacts of the turbines on BHR 5 (Visual Aid 2).
<b>Change in land use</b>	No change in land-use will occur as a result of the Project.

**4.5.6 BHR 6 - 940 Royal Road**

BHR 6, the Rose/Frost House is located at 940 Royal Road on the south side of Royal Road (Figure 6). The building is elevated slightly above the road and trees of various types and ages are located around the house (Plate 15). Turbine 11 is located approximately 575 m southeast of the house (Figure 6). The collector system runs along Royal Road in the vicinity of 940 Royal Road (Figure 6).

**Table 8: Summary of Impact Assessment, BHR 6 – 940 Royal Road**

Potential Negative Impact	Results of Analysis
<b>Destruction</b>	<p>The subject property will not be destroyed by the Project; however, there is the potential for damage to occur to the building as a result of vibrations caused by installation of a sub-grade Collector System. Although the effect of vibrations from traffic and in-road construction 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.</p> <p>In the event that the Collector System is installed underground, a study should be conducted by a qualified engineer to determine the maximum vibration peak particle velocity (PPV) for the house prior to the installation of any below-grade Project infrastructure. Vibrations should be monitored during any necessary below grade construction to ensure that acceptable vibration levels are not exceeded.</p>

<b>Alteration</b>	The subject property will not be altered by the Project.
<b>Shadows</b>	No shadows will be cast on the subject property as a result of the Project.
<b>Isolation</b>	The subject property will not be isolated by the Project.
<b>Direct or indirect obstruction</b>	<p>The nearest wind turbine (Turbine 11) will be installed approximately 575 m southeast of the house and will not directly obstruct any significant views. Turbine 11 will be visible from certain vantage points when viewing the property from public property (<i>i.e.</i>, Royal Road). However, based on the relative scale of the turbine as compared to the house at a distance of 575 m, the turbine will not detract greatly from views of the building. All identified potential visual impacts are reversible and temporary based on the limited lifespan of the Project.</p> <p>In the event that an aboveground Collector System is installed, poles and wires might directly obstruct views of the Rose/Frost House. It is recommended that any aboveground infrastructure installed along Royal Road avoid the south side of Royal Road in the vicinity of BHR 6.</p>
<b>Change in land use</b>	No change in land-use will occur as a result of the Project.

**4.5.7 BHR 7 - 1038 Royal Road**

BHR 7 is located at 1038 Royal Road on the south side of the road (Figure 6). Project components in the vicinity of the building include the collector system, which runs along Royal Road and Dainard Road near BHR 7 and Turbine 11, approximately 600 m to the south (Figure 6).

**Table 9: Summary of Impact Assessment, BHR 7 – 1038 Royal Road**

<b>Potential Negative Impact</b>	<b>Results of Analysis</b>
<b>Destruction</b>	<p>The subject building will not be destroyed by the Project; however, there is the potential for damage to occur to the building as a result of vibrations caused by installation of a sub-grade Collector System. Although the effect of vibrations from traffic and in-road construction 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.</p> <p>In the event that the Collector System is installed underground, a study should be conducted by a qualified engineer to determine the maximum vibration peak particle velocity (PPV) for the farmhouse prior to the installation of any below-grade Project infrastructure. Vibrations should be monitored during any necessary below grade construction to ensure that acceptable vibration levels are not exceeded.</p>

<b>Alteration</b>	The subject property will not be altered by the Project.
<b>Shadows</b>	No shadows will be cast on the subject property as a result of the Project.
<b>Isolation</b>	The subject property will not be isolated by the Project.
<b>Direct or indirect obstruction</b>	<p>The nearest wind turbine (Turbine 11) will be installed approximately 600 m south of the house and will not directly obstruct any significant views. Turbine 11 will be visible from certain vantage points when viewing the property from public property (<i>i.e.</i>, Royal Road). However, based on the relative scale of the turbine as compared to the house at a distance of 600 m, the turbine will not detract greatly from views of the buildings. All identified potential visual impacts are reversible and temporary based on the limited lifespan of the Project.</p> <p>In the event that an aboveground Collector System is installed, poles and wires might directly obstruct views of the house. It is recommended that any aboveground infrastructure installed along Royal Road avoid the south side of Royal Road in the vicinity of BHR 7. Aboveground wires are already located along the west side of Dainard Road (Plate 16).</p>
<b>Change in land use</b>	No change in land-use will occur as a result of the Project.

**4.5.8 BHR 8 - 1210 Royal Road**

BHR 8 is located at 1210 Royal Road on the south side of the road (Figure 6). Project components located in the vicinity of BHR 8 include: Turbine 7, approximately 750 m to the southeast; Turbine 11, approximately 1250 m to the southwest; Turbine 5, approximately 750 m to the north; and the collector system which runs along Royal Road in the vicinity of 1210 Royal Road (Figure 6).

**Table 10: Summary of Impact Assessment, BHR 8 – 1210 Royal Road**

<b>Potential Negative Impact</b>	<b>Results of Analysis</b>
<b>Destruction</b>	<p>The subject property will not be destroyed by the Project; however, there is the potential for damage to occur to the building as a result of vibrations caused by installation of a sub-grade Collector System. Although the effect of vibrations from traffic and in-road construction 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.</p> <p>In the event that the Collector System is installed underground, a study should be conducted by a qualified engineer to determine the maximum vibration peak particle velocity (PPV) for the farmhouse prior to the installation of any below-grade Project infrastructure. Vibrations should be monitored during any necessary below grade</p>

	construction to ensure that acceptable vibration levels are not exceeded.
<b>Alteration</b>	The subject property will not be altered by the Project.
<b>Shadows</b>	No shadows will be cast on the subject property as a result of the Project.
<b>Isolation</b>	The subject property will not be isolated by the Project.
<b>Direct or indirect obstruction</b>	<p>The nearest wind turbine (Turbine 7) will be installed approximately 750 m southeast of the house and will not directly obstruct any significant views. Turbine 7 (and likely Turbine 11) will be visible from certain vantage points when viewing the property from public property (<i>i.e.</i>, Royal Road). However, based on the relative scale of the turbine as compared to the house at a distance of 750 m, the turbine will not detract greatly from views of the building. Turbine 5 is located to the north of the road and would therefore be at the viewer’s back when viewing BHR 8. All identified potential visual impacts are reversible and temporary based on the limited lifespan of the Project.</p> <p>In the event that an aboveground Collector System is installed, poles and wires might directly obstruct views of the house. It is recommended that any aboveground infrastructure installed along Royal Road avoid the south side of Royal Road in the vicinity of BHR 8.</p>
<b>Change in land use</b>	No change in land-use will occur as a result of the Project.

**4.5.9 BHR 9 - 1247 Royal Road**

BHR 9 is located at 1247 Royal Road on the north side of Royal Road. Project components in the vicinity of BHR 9 include Turbine 5, approximately 700 m to the north; Turbine 7, approximately 800 m to the south; and the Collector System, which runs along Royal Road (Figure 6).

**Table 11: Summary of Impact Assessment, BHR 9 – 1247 Royal Road**

<b>Potential Negative Impact</b>	<b>Results of Analysis</b>
<b>Destruction</b>	<p>The subject property will not be destroyed by the Project; however, there is the potential for damage to occur to the building as a result of vibrations caused by installation of a sub-grade Collector System. Although the effect of vibrations from traffic and in-road construction 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.</p> <p>In the event that the Collector System is installed underground, a study should be conducted by a qualified engineer to determine the maximum vibration peak particle velocity (PPV) for the farmhouse prior to the installation of any below-grade Project infrastructure. Vibrations should be monitored during any necessary below grade</p>



	construction to ensure that acceptable vibration levels are not exceeded.
<b>Alteration</b>	The subject property will not be altered by the Project.
<b>Shadows</b>	No shadows will be cast on the subject property as a result of the Project.
<b>Isolation</b>	The subject property will not be isolated by the Project.
<b>Direct or indirect obstruction</b>	<p>The nearest wind turbine (Turbine 5) will be installed approximately 800 m north of the former schoolhouse and will not directly obstruct any significant views. Turbine 7, south of Royal Road, will be at the viewer’s back when viewing BHR 9 and no negative impacts are anticipated.</p> <p>At a distance of 800 m, Turbine 5 will be visible from certain vantage points when viewing BHR 9 from public property (<i>i.e.</i>, Royal Road); however, at a distance of 800 m, the turbine will not detract greatly from views of the buildings. All identified potential visual impacts are reversible and temporary based on the limited lifespan of the Project.</p> <p>In the event that an aboveground Collector System is installed, poles and wires might directly obstruct views of the house. It is recommended that any aboveground infrastructure installed along Royal Road avoid the north side of Royal Road in the vicinity of BHR 9.</p>
<b>Change in land use</b>	No change in land-use will occur as a result of the Project.

**4.5.10 BHR 10 - 1327 Royal Road**

BHR 10 is located at 1327 Royal Road on the north side of the road (Figure 6). Project components located in the vicinity of BHR 10 include: Turbine 5, approximately 750 m to the northwest; Turbine 6, approximately 1000 m to the northeast; Turbine 7, approximately 1000 m to the south; and the Collector System, which runs along Royal Road (Figure 6).

**Table 12: Summary of Impact Assessment, BHR 10 – 1375 Royal Road**

<b>Potential Negative Impact</b>	<b>Results of Analysis</b>
<b>Destruction</b>	<p>The subject property will not be destroyed by the Project; however, there is the potential for damage to occur to the buildings as a result of vibrations caused by installation of a sub-grade Collector System. Although the effect of vibrations from traffic and in-road construction 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.</p> <p>In the event that the Collector System is installed underground, a study should be conducted by a qualified engineer to determine the maximum vibration peak particle</p>

	velocity (PPV) for the farmhouse prior to the installation of any below-grade Project infrastructure. Vibrations should be monitored during any necessary below grade construction to ensure that acceptable vibration levels are not exceeded.
<b>Alteration</b>	The subject property will not be altered by the Project.
<b>Shadows</b>	No shadows will be cast on the subject property as a result of the Project.
<b>Isolation</b>	The subject property will not be isolated by the Project.
<b>Direct or indirect obstruction</b>	<p>The nearest wind turbine (Turbine 5) will be installed approximately 750 m southwest of the house and will not directly obstruct any significant views. Turbine 5 and 6 will be visible from certain vantage points when viewing the property from public property (<i>i.e.</i>, Royal Road). However, based on the relative scale of the turbines as compared to the house at a distance of 750 m and 1000 m, the turbines will not detract greatly from views of the buildings. Turbine 7 is located to the south of the road and would therefore be at the viewer’s back when viewing BHR 10. All identified potential visual impacts are reversible and temporary based on the limited lifespan of the Project.</p> <p>In the event that an aboveground Collector System is installed, poles and wires might directly obstruct views of the house. It is recommended that any aboveground infrastructure installed along Royal Road avoid the north side of Royal Road in the vicinity of BHR 10.</p>
<b>Change in land use</b>	No change in land-use will occur as a result of the Project.

**4.5.11 BHR 11 - 191 Walmsley Road**

BHR 11 is located at 191 Walmsley Road on the west side of the road (Figure 6). Views of the building from the road are presently obscured by trees (Plate 25). Three turbines, Turbines 8, 9 and 10, are located in the vicinity of BHR 11, approximately 1300 m, 1250 m, and 1000 m southeast, respectively (Figure 6).

**Table 13: Summary of Impact Assessment, BHR 11 –191 Walmsley Road**

<b>Potential Negative Impact</b>	<b>Results of Analysis</b>
<b>Destruction</b>	The subject property will not be destroyed by the Project.
<b>Alteration</b>	The subject property will not be altered by the Project.
<b>Shadows</b>	No shadows will be cast on the subject property as a result of the Project.

<b>Isolation</b>	The subject property will not be isolated by the Project.
<b>Direct or indirect obstruction</b>	The Project will not directly obscure the log house at 191 Walmsley Road. Turbines 8, 9 and 10 are located between 1000 m and 1300 m southeast of the structure. Given that views of the log house are from Walmsley road towards the west, away from the nearest turbines, there will be no negative visual impacts on the cultural heritage values of the structure.
<b>Change in land use</b>	No change in land-use will occur as a result of the Project.

**4.5.12 BHR 12 - 477 Walmsley Road**

BHR 12 is located at 477 Walmsley Road on the west side of the road (Figure 6). Turbines in the vicinity of BHR 12 include: Turbines 1, 2, and 3, approximately 1700-1775 m to the east; and Turbines 8, 9, and 10, approximately 2100 m, 1700 m, and 1100 m to the south (Figure 6).

**Table 14: Summary of Impact Assessment, BHR 12 – 477 Walmsley Road**

<b>Potential Negative Impact</b>	<b>Results of Analysis</b>
<b>Destruction</b>	The subject property will not be destroyed by the Project.
<b>Alteration</b>	The subject property will not be altered by the Project.
<b>Shadows</b>	No shadows will be cast on the subject property as a result of the Project.
<b>Isolation</b>	The subject property will not be isolated by the Project.
<b>Direct or indirect obstruction</b>	Views of 477 Walmsley Road from public property ( <i>i.e.</i> , Walmsley Road) are generally towards the west, away from Project components. The Project will not directly or indirectly obscure significant views of BHR 12.
<b>Change in land use</b>	No change in land-use will occur as a result of the Project.

**4.5.13 BHR 13 – 2814 Long Point Road**

BHR 13 is located at 2814 Long Point Road on the south side of the road (Figure 6). The nearest Project component is the Collector System along Babylon Road, approximately 1550 m south the BHR 13, at its closest point. No other infrastructure is located within a 2 km radius of the former schoolhouse. As a result, no negative impacts are anticipated.

**Table 15: Summary of Impact Assessment, BHR 13 - 2814 Long Point Road**

Potential Negative Impact	Results of Analysis
<b>Destruction</b>	The subject property will not be destroyed by the Project.
<b>Alteration</b>	The subject property will not be altered by the Project.
<b>Shadows</b>	No shadows will be cast on the subject property as a result of the Project.
<b>Isolation</b>	The subject property will not be isolated by the Project.
<b>Direct or indirect obstruction</b>	Views of the subject property are not expected to be directly or indirectly obstructed by the Project.
<b>Change in land use</b>	No change in land-use will occur as a result of the Project.

**4.5.14 BHR 14 – 3419 Long Point Road**

BHR 14 is located at 3419 Long Point Road on the north side of the road (Figure 6). Views of the building are partially obscured by trees along the road (Plate 37). The nearest Project component is Turbine 25, located approximately 1500 m southeast of the house (Figure 6). Views of BHR 14 from public property (*i.e.*, Long Point Road) are generally towards the north, away from the Project. As a result the Project will not have a negative impact on views of the structure.

**Table 16: Summary of Impact Assessment, BHR 14 - 3419 Long Point Road**

Potential Negative Impact	Results of Analysis
<b>Destruction</b>	The subject property will not be destroyed by the Project.
<b>Alteration</b>	The subject property will not be altered by the Project.
<b>Shadows</b>	No shadows will be cast on the subject property as a result of the Project.
<b>Isolation</b>	The subject property will not be isolated by the Project.
<b>Direct or indirect obstruction</b>	Significant views will not be directly or indirectly obstructed by the Project.
<b>Change in land use</b>	No change in land-use will occur as a result of the Project.

**4.5.15 BHR 15 – 3753 Long Point Road**

BHR 15 is located at 3753 Long Point Road on the north side of the road (Figure 6). Views of the building are partially obscured by trees along the road (Plate 39). Project components in the vicinity of BHR 15 include Turbines 25 and 26, approximately 500 m to the south and 1250 m to the east, respectively (Figure 6). Views of BHR 15 from public property (*i.e.*, Long Point Road) are generally towards the north away from the Project. No negative impacts are anticipated.

**Table 17: Summary of Impact Assessment, BHR 15 - 3753 Long Point Road**

Potential Negative Impact	Results of Analysis
<b>Destruction</b>	The subject property will not be destroyed by the Project.
<b>Alteration</b>	The subject property will not be altered by the Project.
<b>Shadows</b>	No shadows will be cast on the subject property as a result of the Project.
<b>Isolation</b>	The subject property will not be isolated by the Project.
<b>Direct or indirect obstruction</b>	Views of BHR 15 will not be directly or indirectly obstructed by the Project.
<b>Change in land use</b>	No change in land-use will occur as a result of the Project.

**4.5.16 BHR 16 – Union GM Church**

BHR 16 is located on the south side of Long Point Road, north of Gravelly Bay Road at 4572 Long Point Road (Figure 6). Project components in the vicinity of BHR 16 include Turbines 27, 28 and 29, located approximately 1750 m, 1250 m and 700 m to the west (Figure 6).

**Table 18: Summary of Impact Assessment, BHR 16 – Union GM Church**

Potential Negative Impact	Results of Analysis
<b>Destruction</b>	The subject property will not be destroyed by the Project.
<b>Alteration</b>	The subject property will not be altered by the Project.
<b>Shadows</b>	No shadows will be cast on the subject property as a result of the Project.
<b>Isolation</b>	The subject property will not be isolated by the Project.
<b>Direct or indirect obstruction</b>	Three turbines are located between 700 m and 1750 m west of the church. It is likely that Turbines 27, 28 and 29 will be visible from certain vantage points when viewing the

church, although the scale of the turbines will not dominate views of the building (Visual Aid 1). The treed nature of the property should minimize the impact of the turbines on views of the building from directly in front of the church (Figure 6) (Visual Aid 2). All identified potential visual impacts are reversible and temporary based on the limited lifespan of the Project.

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

**4.5.17 BHR 17 – 1676 County Road 13**

BHR 17 is located on the west side of County Road 13 (Figure 6). No Project components are located within a 2 km radius of BHR 17 and the cultural heritage values of the small residential building will not be negatively affected by the Project.

**Table 19: Summary of Impact Assessment, BHR 17 – 1676 County Road 13**

Potential Negative Impact	Results of Analysis
<b>Destruction</b>	The subject property will not be destroyed by the Project.
<b>Alteration</b>	The subject property will not be altered by the Project.
<b>Shadows</b>	No shadows will be cast on the subject property as a result of the Project.
<b>Isolation</b>	The subject property will not be isolated by the Project.
<b>Direct or indirect obstruction</b>	The Project will not directly or indirectly obstruct views of BHR 17.
<b>Change in land use</b>	No change in land-use will occur as a result of the Project.

**4.5.18 BHR 18 – 1972 County Road 13**

BHR 18 is located on the west side of County Road 13. Turbines 4 and 6 are located approximately 1750 m to the west and northwest, respectively (Figure 6).

**Table 20: Summary of Impact Assessment, BHR 18 – 1972 County Road 13**

Potential Negative Impact	Results of Analysis
<b>Destruction</b>	The subject property will not be destroyed by the Project.
<b>Alteration</b>	The subject property will not be altered by the Project.
<b>Shadows</b>	No shadows will be cast on the subject property as a result of the Project.

<b>Isolation</b>	The subject property will not be isolated by the Project.
<b>Direct or indirect obstruction</b>	The Project will not directly obstruct views of the residence. Turbines 4 and 6 are located approximately 1750 m to the west and northwest, respectively (Figure 6). Although it is possible that the turbines may be visible from certain vantage points, at a distance of 1750 m, the turbines will not negatively impact significant views of BHR 18. All identified potential visual impacts are reversible and temporary based on the limited lifespan of the Project.
<b>Change in land use</b>	No change in land-use will occur as a result of the Project.

**4.5.19 BHR 19 – 2029 County Road 13**

BHR 19 is located on the east side of County Road 13. No Project components are located in the immediate vicinity of BHR 19. The nearest Project components are Turbines 4 and 6, approximately 2000 m to the northwest and 1600 m to the west, respectively (Figure 6).

**Table 21: Summary of Impact Assessment, BHR 19 – 2029 County Road 13**

<b>Potential Negative Impact</b>	<b>Results of Analysis</b>
<b>Destruction</b>	The subject property will not be destroyed by the Project.
<b>Alteration</b>	The subject property will not be altered by the Project.
<b>Shadows</b>	No shadows will be cast on the subject property as a result of the Project.
<b>Isolation</b>	The subject property will not be isolated by the Project.
<b>Direct or indirect obstruction</b>	Views of BHR 19 are towards the east, away from the Project and will not be obstructed by the Project. Significant views of the property identified during this study are generally eastward, towards the bay rather than westward towards the Project. Furthermore, while it is possible that Turbines 4 and 6 will be visible from certain vantage points from the church and former schoolhouse, at distances of 2000 m and 1600 m, neither turbine will greatly detract from public experience of the property, from a cultural heritage perspective given that the cultural heritage values of the property are derived from the architectural features and historical associations of the structures. Moreover, any visual impacts are temporary and reversible after the 25 to 30 year lifespan of the Project.
<b>Change in land use</b>	No change in land-use will occur as a result of the Project.

**4.5.20 BHR 20 – 2733 County Road 13**

BHR 20 is located at 2733 County Road 13 on the north side of the road. The nearest Project component is the Collector System along Babylon Road, approximately 1700 m south the BHR 20, at its closest point. No other infrastructure is located within a 2 km radius of the Mouck House (BHR 20). As a result, no negative impacts are anticipated.

**Table 22: Summary of Impact Assessment, BHR 20 – 2733 County Road 13**

Potential Negative Impact	Results of Analysis
<b>Destruction</b>	The subject property will not be destroyed by the Project.
<b>Alteration</b>	The subject property will not be altered by the Project.
<b>Shadows</b>	No shadows will be cast on the subject property as a result of the Project.
<b>Isolation</b>	The subject property will not be isolated by the Project.
<b>Direct or indirect obstruction</b>	Significant views of BHR 20 will not be directly or indirectly obstructed by the Project.
<b>Change in land use</b>	No change in land-use will occur as a result of the Project.

**4.5.21 BHR 21 – 3046 County Road 10**

BHR 21 is located on the west side of County Road 10 in the Village of Milford. The nearest Project components are Turbines 1, 2, and 3, approximately 1250 m, 1500 m, and 1750 m to the south-southwest (Figure 6). 3046 County Road 10 is narrowly setback from the road (Plate 50).

**Table 23: Summary of Impact Assessment, BHR 21 – 3046 County Road 10**

Potential Negative Impact	Results of Analysis
<b>Destruction</b>	The subject property will not be destroyed by the Project.
<b>Alteration</b>	The subject property will not be altered by the Project.
<b>Shadows</b>	No shadows will be cast on the subject property as a result of the Project.
<b>Isolation</b>	The subject property will not be isolated by the Project.
<b>Direct or indirect obstruction</b>	The Project will not directly obstruct views of BHR 21. Although it is possible that Turbines 1, 2, and 3 may be visible from certain vantage points when viewing the Knox’s General Store (BHR 21), at distances of between 1250 m and 1750 m significant views will



not be obstructed. All identified potential visual impacts are reversible and temporary based on the limited lifespan of the Project.

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

**4.5.22 BHR 22 – 3054 County Road 10**

BHR 22 is located on the west side of County Road 10 in the Village of Milford. The nearest Project components are Turbines 1, 2, and 3, approximately 1250 m, 1500 m, and 1750 m to the south-southwest (Figure 6). 3054 County Road 10 is narrowly setback from the road (Plate 51).

**Table 24: Summary of Impact Assessment, BHR 22 – 3054 County Road 10**

Potential Negative Impact	Results of Analysis
<b>Destruction</b>	The subject property will not be destroyed by the Project.
<b>Alteration</b>	The subject property will not be altered by the Project.
<b>Shadows</b>	No shadows will be cast on the subject property as a result of the Project.
<b>Isolation</b>	The subject property will not be isolated by the Project.
<b>Direct or indirect obstruction</b>	The Project will not directly obstruct views of BHR 22. Although it is possible that Turbines 1, 2, and 3 may be visible from certain vantage points when viewing the McKibbon House (BHR 22), at distances of between 1250 m and 1750 m significant views will not be obstructed. All identified potential visual impacts are reversible and temporary based on the limited lifespan of the Project.
<b>Change in land use</b>	No change in land-use will occur as a result of the Project.

**4.5.23 BHR 23 – 3058 County Road 10**

BHR 23 is located on the west side of County Road 10 in the Village of Milford. The nearest Project components are Turbines 1, 2, and 3, approximately 1250 m, 1500 m, and 1750 m to the south-southwest (Figure 6). 3058 County Road 10 is narrowly setback from the road (Plate 52).

**Table 25: Summary of Impact Assessment, BHR 23 – 3058 County Road 10**

Potential Negative Impact	Results of Analysis
<b>Destruction</b>	The subject property will not be destroyed by the Project.
<b>Alteration</b>	The subject property will not be altered by the Project.
<b>Shadows</b>	No shadows will be cast on the subject property as a result of the Project.

<b>Isolation</b>	The subject property will not be isolated by the Project.
<b>Direct or indirect obstruction</b>	The Project will not directly obstruct views of BHR 23. Although it is possible that Turbines 1, 2, and 3 may be visible from certain vantage points when viewing the former McKibbon’s General Store (BHR 23), at distances of between 1250 m and 1750 m significant views will not be obstructed. All identified potential visual impacts are reversible and temporary based on the limited lifespan of the Project.
<b>Change in land use</b>	No change in land-use will occur as a result of the Project.

**4.5.24 BHR 24 – 3104 County Road 10**

BHR 24 is located on the west side of County Road 10 in the Village of Milford. The nearest Project components are Turbines 1, 2, and 3, approximately 1250 m, 1500 m, and 1750 m to the south-southwest (Figure 6). 3104 County Road 10 is narrowly setback from the road (Plate 53).

**Table 26: Summary of Impact Assessment, BHR 24 – 3104 County Road 10**

<b>Potential Negative Impact</b>	<b>Results of Analysis</b>
<b>Destruction</b>	The subject property will not be destroyed by the Project.
<b>Alteration</b>	The subject property will not be altered by the Project.
<b>Shadows</b>	No shadows will be cast on the subject property as a result of the Project.
<b>Isolation</b>	The subject property will not be isolated by the Project.
<b>Direct or indirect obstruction</b>	The Project will not directly obstruct views of BHR 24. Although it is possible that Turbines 1, 2, and 3 may be visible from certain vantage points when viewing the former McKibbon’s General Store (BHR 24), at distances of between 1250 m and 1750 m significant views will not be obstructed. All identified potential visual impacts are reversible and temporary based on the limited lifespan of the Project.
<b>Change in land use</b>	No change in land-use will occur as a result of the Project.

**4.5.25 BHR 25 – 89 Colliers Road**

BHR 25, the Cooper House, is located on the east side of Colliers Road (Figure 6). No Project components are located within a 2 km radius of BHR 25.

**Table 27: Summary of Impact Assessment, BHR 25 – 89 Colliers Road**

Potential Negative Impact	Results of Analysis
<b>Destruction</b>	The subject property will not be destroyed by the Project.
<b>Alteration</b>	The subject property will not be altered by the Project.
<b>Shadows</b>	No shadows will be cast on the subject property as a result of the Project.
<b>Isolation</b>	The subject property will not be isolated by the Project.
<b>Direct or indirect obstruction</b>	The Project will not obstruct views of BHR 25.
<b>Change in land use</b>	No change in land-use will occur as a result of the Project.

**4.5.26 BHR 26 – 96 Colliers Road**

BHR 26, the Port Milford General Store, is located on the east side of Colliers Road (Figure 6). No Project components are located within a 2 km radius of BHR 26.

**Table 28: Summary of Impact Assessment, BHR 26 – 96 Colliers Road**

Potential Negative Impact	Results of Analysis
<b>Destruction</b>	The subject property will not be destroyed by the Project.
<b>Alteration</b>	The subject property will not be altered by the Project.
<b>Shadows</b>	No shadows will be cast on the subject property as a result of the Project.
<b>Isolation</b>	The subject property will not be isolated by the Project.
<b>Direct or indirect obstruction</b>	The Project will not obstruct views of BHR 26.
<b>Change in land use</b>	No change in land-use will occur as a result of the Project.

**4.5.27 BHR 27 – 91 Elmbrook Road**

BHR 27, the former Fairmount Methodist Church is located on the west side of Elmbrook Road approximately 750 m east of the proposed substation on County Road 5 (Figure 7).

**Table 29: Summary of Impact Assessment, BHR 27 – 91 Elmbrook Road**

Potential Negative Impact	Results of Analysis
<b>Destruction</b>	The subject property will not be destroyed by the Project.
<b>Alteration</b>	The subject property will not be altered by the Project.
<b>Shadows</b>	No shadows will be cast on the subject property as a result of the Project.
<b>Isolation</b>	The subject property will not be isolated by the Project.
<b>Direct or indirect obstruction</b>	The Project will not directly or indirectly obstruct views of BHR 27.
<b>Change in land use</b>	No change in land-use will occur as a result of the Project.

**4.5.28 BHR 28 – 1590 County Road 5**

BHR 28 is located on the north side of County Road 5, approximately 800 m west of the proposed substation on County Road 5 (Figure 7).

**Table 30: Summary of Impact Assessment, BHR 28 – 1590 County Road 5**

Potential Negative Impact	Results of Analysis
<b>Destruction</b>	The subject property will not be destroyed by the Project.
<b>Alteration</b>	The subject property will not be altered by the Project.
<b>Shadows</b>	No shadows will be cast on the subject property as a result of the Project.
<b>Isolation</b>	The subject property will not be isolated by the Project.
<b>Direct or indirect obstruction</b>	The Project will not directly or indirectly obstruct views of BHR 28.
<b>Change in land use</b>	No change in land-use will occur as a result of the Project.



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May, 2012  
 Project No. 160960594

**Legend**

- Built Heritage Resource
- Cultural Heritage Landscape
- Protected Property
- Turbine Location & Number
- Collector System
- Access Road
- Storage Area
- Substation
- Study Area



**Notes**

1. Coordinate System: NAD 1983 UTM Zone 18N
2. Data Source: Ontario Ministry of Natural Resources © Queens Printer Ontario, 2012.
3. Image Source: © First Base Solutions, 2011

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 WHITE PINES WIND PROJECT

Figure No.  
**6**

Title  
 Location of Built  
 Heritage Resources



Revised: 2012-05-28 By: SaRogers  
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May, 2012  
 Project No. 160960594

**Legend**

- Built Heritage Resource
- Cultural Heritage Landscape
- Protected Property
- ▲ Turbine Location & Number
- Collector System
- Access Road
- Storage Area
- Substation



**Notes**

1. Coordinate System: NAD 1983 UTM Zone 18N
2. Data Source: Ontario Ministry of Natural Resources © Queens Printer Ontario, 2012.
3. Image Source: © First Base Solutions, 2011

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Figure No.

7

Title

Location of Built Heritage Resources - Substation Area

**4.5.29 BHR 29 – 2256 County Road 13**

BHR 28 is located on the west side of County Road 13. The nearest Project components that could reasonably have an impact on the cultural heritage values of the former Metcalfe Cheese Factory are Turbines 21 and 22, approximately 750 m and 1250 m to the south-southeast, respectively (Figure 6).

**Table 31: Summary of Impact Assessment, BHR 28 – 1590 County Road 5**

Potential Negative Impact	Results of Analysis
<b>Destruction</b>	The subject property will not be destroyed by the Project.
<b>Alteration</b>	The subject property will not be altered by the Project.
<b>Shadows</b>	No shadows will be cast on the subject property as a result of the Project.
<b>Isolation</b>	The subject property will not be isolated by the Project.
<b>Direct or indirect obstruction</b>	The Project will not directly obstruct views of BHR 29. Although Turbines 21 and 22, at distances of 750 m and 1250 m, may be visible from certain vantage points when viewing BHR 29, they will not greatly detract from the cultural heritage values of the building which are primarily derived from the building’s association with the 19 <sup>th</sup> century cheese-making industry in Prince Edward County. All identified potential visual impacts are reversible and temporary based on the limited lifespan of the Project.
<b>Change in land use</b>	No change in land-use will occur as a result of the Project.

**4.5.30 CHL 2 – South Bay Cemetery**

CHL 2, the South Bay Cemetery, is located at 2109 County Road 13. The nearest Project components that might reasonably have a negative impact on CHL 2 are Turbines 6, 21, and 22, located approximately 1750 m to the west, 1750 m to the southeast, and 2000 m to the southeast, respectively (Figure 6). Views of the cemetery are generally eastward from County Road 13, towards South Bay and will not be affected by the Project; however, given the public nature of the landscape, views from the cemetery were also considered in the impact assessment.

**Table 32: Summary of Impact Assessment, CHL 2 – South Bay Cemetery**

Potential Negative Impact	Results of Analysis
<b>Destruction</b>	The subject property will not be destroyed by the Project.
<b>Alteration</b>	The subject property will not be altered by the Project.

<b>Shadows</b>	No shadows will be cast on the subject property as a result of the Project.
<b>Isolation</b>	The subject property will not be isolated by the Project.
<b>Direct or indirect obstruction</b>	<p>The Project will not directly obstruct views of the South Bay Cemetery. Although views from the cemetery towards the bay are unobstructed, the cemetery is bordered to the north, west and south by trees which partially shield outward views, even in winter months when foliage is minimal (Plate 46). Significant views related to the contextual value of the cemetery and its historical association with the area’s maritime heritage are towards the bay, away from the Project.</p> <p>It is possible that Turbines 6, 21, and 22 will be visible from certain vantage points within the CHL; however, these visual impacts will be minimized by the tree-cover on the north, west and south borders of the cemetery.</p>
<b>Change in land use</b>	No change in land-use will occur as a result of the Project.

**4.5.31 Streetscapes**

In general, there is the potential for Project activities to negatively impact the tree-line streetscapes scattered throughout the Study Area which are a value-defining characteristic of Prince Edward County as a whole. It is recommended that the removal of mature trees along the sides of roads be avoided wherever possible.

**Table 33: Summary of Impact Assessment**

Resource Number	Potential Negative Impact						Recommended Mitigation
	Destruction	Alteration	Shadows	Isolation	Obstruction of Views	Change in Land Use	
Barn at 3187, BHR 1	NE	NE	NE	NE	NE	NE	No mitigation recommended.
104 Brewers Road, BHR 2/CHL 2	I	NE	NE	NE	R	NE	Prior to the installation of any below-grade Project infrastructure a study should be conducted by a qualified engineer to determine the maximum vibration peak particle velocity (PPV) for structures within 50 m of the road (e.g., driveshed, farmhouse, outbuildings).



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							<p>Vibrations should be monitored during any necessary below grade construction to ensure that acceptable vibration levels are not exceeded.</p> <p>Any aboveground infrastructure installed along Brewers Road should avoid the west side of the road.</p> <p>Avoid damage to or removal of trees along the road.</p>
3705 County Road 10, BHR 3	NE	NE	NE	NE	NE	NE	No mitigation recommended.
3750 County Road 10, BHR 4	NE	NE	NE	NE	NE	NE	No mitigation recommended.
2446 County Road 13, BHR 5	NE	NE	NE	NE	NE	NE	No mitigation recommended.
940 Royal Road, BHR 6	I	NE	NE	NE	R	NE	<p>Prior to the installation of any below-grade Project infrastructure a study should be conducted by a qualified engineer to determine the maximum vibration peak particle velocity (PPV) for structures within 50 m of the house.</p> <p>Vibrations should be monitored during any necessary below grade construction to ensure that acceptable vibration levels are not exceeded.</p> <p>Any aboveground infrastructure installed along Royal Road should avoid the south side of the road in the vicinity of 940 Royal Road.</p>
1038 Royal Road, BHR 7	I	NE	NE	NE	R	NE	<p>Prior to the installation of any below-grade Project infrastructure a study should be conducted by a qualified engineer to determine the maximum vibration peak particle velocity (PPV) for structures within 50 m of the house.</p> <p>Vibrations should be monitored during any necessary below grade construction to ensure that acceptable vibration levels are not exceeded.</p> <p>Any aboveground infrastructure installed along Royal Road should avoid the south side of the road in the vicinity of 1038 Royal Road.</p>
1210 Royal Road, BHR 8	I	NE	NE	NE	R	NE	<p>Prior to the installation of any below-grade Project infrastructure a study should be conducted by a qualified engineer to determine the maximum vibration peak particle velocity (PPV) for structures within 50 m of the house.</p> <p>Vibrations should be monitored during any necessary below grade construction to ensure that acceptable vibration levels are not exceeded.</p>

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							Any aboveground infrastructure installed along Royal Road should avoid the south side of the road in the vicinity of 1210 Royal Road.
1247 Royal Road, BHR 9	I	NE	NE	NE	R	NE	<p>Prior to the installation of any below-grade Project infrastructure a study should be conducted by a qualified engineer to determine the maximum vibration peak particle velocity (PPV) for structures within 50 m of the house.</p> <p>Vibrations should be monitored during any necessary below grade construction to ensure that acceptable vibration levels are not exceeded.</p> <p>Any aboveground infrastructure installed along Royal Road should avoid the north side of the road in the vicinity of 1247 Royal Road.</p>
1327 Royal Road, BHR 10	I	NE	NE	NE	R	NE	<p>Prior to the installation of any below-grade Project infrastructure a study should be conducted by a qualified engineer to determine the maximum vibration peak particle velocity (PPV) for structures within 50 m of the house.</p> <p>Vibrations should be monitored during any necessary below grade construction to ensure that acceptable vibration levels are not exceeded.</p> <p>Any aboveground infrastructure installed along Royal Road should avoid the north side of the road in the vicinity of 1327 Royal Road.</p>
191 Walmsley Road, BHR 11	NE	NE	NE	NE	NE	NE	No mitigation recommended.
477 Walmsley Road, BHR 12	NE	NE	NE	NE	NE	NE	No mitigation recommended.
2814 Long Point Road, BHR 13	NE	NE	NE	NE	NE	NE	No mitigation recommended.
3419 Long Point Road, BHR 14	NE	NE	NE	NE	NE	NE	No mitigation recommended.
3753 Long Point Road, BHR 15	NE	NE	NE	NE	NE	NE	No mitigation recommended.
4572 Long Point Road, Union GM, BHR 16	NE	NE	NE	NE	NE	NE	No mitigation recommended.
1676 County Road 13, BHR 17	NE	NE	NE	NE	NE	NE	No mitigation recommended.
1972 County Road 13, BHR 18	NE	NE	NE	NE	NE	NE	No mitigation recommended.

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2029 County Road 13, BHR 19	NE	NE	NE	NE	NE	NE	No mitigation recommended.
2733 County Road 13, BHR 20	NE	NE	NE	NE	NE	NE	No mitigation recommended.
3046 County Road 10, BHR 21	NE	NE	NE	NE	NE	NE	No mitigation recommended.
3054 County Road 10, BHR 22	NE	NE	NE	NE	NE	NE	No mitigation recommended.
3058 County Road 10, BHR 23	NE	NE	NE	NE	NE	NE	No mitigation recommended.
3104 County Road 10, BHR 24	NE	NE	NE	NE	NE	NE	No mitigation recommended.
89 Colliers Road, BHR 25	NE	NE	NE	NE	NE	NE	No mitigation recommended.
96 Colliers Road, BHR 26	NE	NE	NE	NE	NE	NE	No mitigation recommended.
91 Elmbrook Road, BHR 27	NE	NE	NE	NE	NE	NE	No mitigation recommended.
1590 County Road 5, BHR 28	NE	NE	NE	NE	NE	NE	No mitigation recommended.
2256 County Road 13, BHR 29	NE	NE	NE	NE	NE	NE	No mitigation recommended.
South Bay Cemetery, CHL 2	NE	NE	NE	NE	NE	NE	No mitigation recommended.
Tree-lined streetscapes	I	NE	NE	NE	NE	NE	The removal of trees along roads should be avoided to the greatest extent practicable.

**Potential Impacts: R - Reversible, I - Irreversible, NE - Not Expected**

## **5 STUDY RESULTS AND RECOMMENDATIONS**

A total of 29 built heritage resources (BHRs) and two cultural heritage landscapes (CHLs) were identified within or adjacent to the Study Area. Potential negative Project-related impacts were identified for each of the resources and landscapes. Potential negative impacts have been identified for the following resources:

- 104 Brewers Road, BHR 2/CHL 2;
- 940 Royal Road, BHR 6;
- 1038 Royal Road, BHR 7;
- 1210 Royal Road, BHR 8;

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- 1247 Royal Road, BHR 9;
- 1327 Royal Road, BHR 10; and
- Tree-line streetscapes throughout the Study Area.

The following recommendations have been made:

- Prior to any below-grade construction within 50 m of: 104 Brewers Road or 940, 1038, 1210, 1247, and 1327 Royal Road (BHRs 2, 6, 7, 8, 9, and 10) a study should be conducted by a qualified engineer to determine the maximum vibration peak particle velocity (PPV) for each structure;
- Vibrations should be monitored during below grade construction to ensure that acceptable vibration levels are not exceeded;
- In the event that an above-grade Collector System is installed, those components should be installed on the side of the road opposite the BHR or CHL in order to best conserve significant views; and
- The removal of trees along roads in the Study Area should be avoided to the greatest extent practicable.

It should furthermore be noted that the study methodology included only those structures visible from the roads. It is possible, in Athol and South Marysburgh Townships, that extant cabins or log residences in wooded areas might be situated along access roads or turbine pads, the locations of which had not been determined at the time of the survey and are situated on private land. Although it is not anticipated, any such structures encountered during the construction of Project infrastructure should not be removed without first undertaking a Heritage Impact Assessment of the structure.

## **6 CLOSURE**

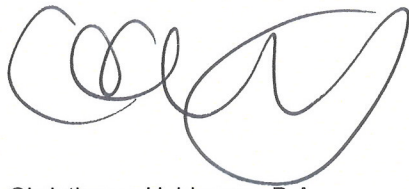
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This report has been prepared for the sole benefit of wpd Canada Corporation (wpd), and may not be used by any third party without the express written consent of Stantec Consulting Ltd. and wpd. Any use which a third party makes of this report is the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

We trust this report meets your current requirements. Please do not hesitate to contact us should you require further information or have additional questions about any facet of this project.

Yours truly,

**Stantec Consulting Ltd.**



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**Stantec**

HERITAGE ASSESSMENT, WHITE PINES WIND PROJECT, SOUTH MARYSBURGH AND ATHOL TOWNSHIPS,  
PRINCE EDWARD COUNTY, ON

# APPENDIX A

Photographic Plates



08-31-10

Plate 1: Barn near 3196 Long Point Road



06-08-10

Plate 2: 442 Bond Road





06-08-10

Plate 3: 471 Bond Road



06-08-10

Plate 4: 506 Bond Road





06-08-10

Plate 5: 540 Bond Road



06-08-10

Plate 6: 104 Brewers Road





06-08-10

Plate 7: 3705 County Road 10



06-08-10

Plate 8: 3750 County Road 10





06-08-10

Plate 9: 3835 County Road 10



06-09-10

Plate 10: 2446 County Road 13





06-08-10

Plate 11: 193 Murphy Road



06-09-10

Plate 12: 575 Royal Road





06-08-10

Plate 13: 843 Royal Road



06-08-10

Plate 14: 896 Royal Road







06-08-10

Plate 15: 940 Royal Road



06-08-10

Plate 16: 1038 Royal Road





04-04-12

Plate 17: 1210 Royal Road



04-04-12

Plate 18: 1247 Royal Road





04-04-12

Plate 19: 1327 Royal Road



04-04-12

Plate 20: 1375 Royal Road





06-08-10

Plate 21: 12 Walmsley Road



06-08-10

Plate 22: 71 Walmsley Road





06-08-10

Plate 23: 94 Walmsley Road



06-08-10

Plate 24: 130 Walmsley Road





04-04-12

Plate 25: 191 Walmsley Road



04-04-12

Plate 26: 315 Walmsley Road





06-08-10

Plate 27: 409 Walmsley Road



06-08-10

Plate 28: 477 Walmsley Road





08-31-10

Plate 29: 761 Babylon Road



08-31-10

Plate 30: 817 Babylon Road







04-04-12

Plate 31: 2814 Long Point



08-31-10

Plate 32: 3127 Long Point Road





08-31-10

Plate 33: 3135 Long Point Road



08-31-10

Plate 34: 3253 Long Point Road





08-31-10

Plate 35: 3265 Long Point Road



08-31-10

Plate 36: 3271 Long Point Road





04-04-12

Plate 37: 3419 Long Point Road



08-31-10

Plate 38: 3716 Long Point Road





08-31-10

Plate 39: 3753 Long Point Road



08-31-10

Plate 40: 4477 Long Point Road





08-31-10

Plate 41: 4572 Long Point Road



08-31-10

Plate 42: 4611 Long Point Road





08-31-12

Plate 43: 1676 County Road 13



08-31-12

Plate 44: 1972 County Road 13





04-04-12

Plate 45: 2029 County Road 13



04-04-12

Plate 46: 2109 County Road 13







Plate 47: 2733 County Road 13



Plate 48: 2839 County Road 13





04-04-12

Plate 49: 422 Murphy Road



04-04-12

Plate 50: 3046 County Road 10





04-04-12

Plate 51: 3054 County Road 10



04-04-12

Plate 52: 3058 County Road 10





04-04-12

Plate 53: 3104 County Road 10



02-06-12

Plate 54: 3942 County Road 10





04-04-12

Plate 55: 89 Colliers Road



04-04-12

Plate 56: 96 Colliers Road





04-04-12

Plate 57: 91 Elmbrook Road



04-04-12

Plate 58: 1590 County Road 5





04-18-12

Plate 59: 2256 County Road 13



# **Heritage Assessment Addendum**

June 2012





**Stantec**

**ADDENDUM**  
**Heritage Assessment, White Pines**  
**Wind Project, Prince Edward**  
**County, ON**

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June 2012

Project No.: 160960594

## EXECUTIVE SUMMARY

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Specific sections of the *Ontario Regulation 359/09, Renewable Energy Approvals Under Part V.0.1 Of The Act* pertain to Heritage Resources, specifically built heritage resources and cultural heritage landscapes. In order to meet the conditions of the regulation, Stantec Consulting Ltd was retained by wpd Canada Corporation to conduct a Heritage Assessment of the location of a proposed wind project in the Townships of Athol and South Marysburgh, Prince Edward County, Ontario.

Two sections of the proposed interconnection line are located in locations with no existing infrastructure. These two areas, located along Fry Road and May Road in Hallowell Township, have been assessed for potential negative impacts on cultural heritage resources and landscapes.

One built heritage resource, the Orser/Cross House, was identified along the Fry Road section of the transmission corridor. The Orser/Cross House meets the criteria outlined under O.Reg. 9/06, *Criteria for Determining Cultural Heritage Value or Interest, Under the Ontario Heritage Act, 2006*.

Potential negative impacts on the Orser/Cross House were assessed as per the Ministry of Tourism and Culture's guidance concerning *Heritage Impact Assessments and Conservation Plans*. No negative impacts have been identified.

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**PROJECT PERSONNEL**

Project Director            Colin Varley, M.A., R.P.A.  
Field Reconnaissance    Christienne Uchiyama, M.A.  
Report and Graphics     Sarah Rogers, B.Sc., G.Dip.  
   Christienne Uchiyama, M.A.  
   Colin Varley, M.A., R.P.A.

## **1 INTRODUCTION**

---

Stantec Consulting Ltd. (Stantec) was retained by wpd Canada Corporation 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.

An Addendum to the Heritage Assessment was required in order to assess two sections of the proposed interconnection line which are located in areas with no existing infrastructure.

This addendum has been prepared in accordance with *O.Reg. 359/09*. The study was conducted by Christienne Uchiyama, M.A., Archaeologist and Heritage Planning Consultant and followed the methodology outlined in the Heritage Assessment Report for the White Pines Wind Project. A visual survey was conducted on June 19, 2012. Colin Varley, M.A., R.P.A., Senior Archaeologist and Heritage Planning Consultant acted as Team Leader and Senior Reviewer.

### **1.1 Project Location**

This addendum focuses on two sections of the proposed interconnection line located along Fry Road, north of Ben Gill Road, and May Road, south of Hull Road, in the former Township of Hallowell in the Municipality of Prince Edward County, Ontario (Figure 1).

Locations of Project components are shown in Figures 1 and 2.



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June, 2012  
 Project No. 160960594

**Legend**

- |                               |                           |
|-------------------------------|---------------------------|
| Built Heritage Resource       | Turbine Location & Number |
| Cultural Heritage Landscape   | Collector System          |
| Protected Property            | Access Road               |
| Proposed Interconnection Line | Storage Area              |
| Buildable Area                | Substation                |
| 120m Zone of Investigation    | Study Area                |



**Stantec**



**Notes**

1. Coordinate System: NAD 1983 UTM Zone 18N
2. Data Source: Ontario Ministry of Natural Resources © Queens Printer Ontario, 2012.
3. Image Source: © First Base Solutions, 2011

Client/Project

WPD CANADA CORPORATION  
 WHITE PINES WIND PROJECT

Figure No.

**1**

Title

Detail of Transmission Corridor



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June, 2012  
 Project No. 160960594

**Legend**

- |                               |                           |
|-------------------------------|---------------------------|
| Built Heritage Resource       | Turbine Location & Number |
| Cultural Heritage Landscape   | Collector System          |
| Protected Property            | Access Road               |
| Proposed Interconnection Line | Storage Area              |
| Buildable Area                | Substation                |
| 120m Zone of Investigation    | Study Area                |



**Stantec**



**Notes**

1. Coordinate System: NAD 1983 UTM Zone 18N
2. Data Source: Ontario Ministry of Natural Resources © Queens Printer Ontario, 2012.
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WPD CANADA CORPORATION  
 WHITE PINES WIND PROJECT

Figure No.

2

Title

Project Component Updates

## **2 HERITAGE IMPACT ASSESSMENT**

---

### **2.1 Built Heritage Resources**

Built heritage resources are defined as "one or more significant buildings, structures, monuments, installations or remains associated with architectural, cultural, social, political, economic or military history and identified as being important to a community. These resources may be identified through designation or heritage conservation easement under the *Ontario Heritage Act (OHA)*, or listed by local, provincial or federal jurisdictions" (MTCS, 2006a).

During the June 19, 2012 site visit, one built heritage resource which satisfies the criteria outlined under O.Reg. 9/06 was documented and recorded.

#### **2.1.1 The Orser/Cross House, 840 Ben Gill Road**

The Orser/Cross House located at 840 Ben Gill Road was identified during the June 19, 2012 as a resource of potential cultural heritage value or interest. The location of 840 Ben Gill Road is shown on Figure 2.

The building is a one and half storey Gothic Revival Cottage style building in red brick with a fieldstone and wooden woodshed at the rear (Plates 1 and 2). Although the Orser/Cross House was included in the Historical Architectural Survey of Prince Edward conducted in the early 1980s, it is not currently included in the County of Prince Edward's Heritage Register as a designated or non-designated property (Cruikshank and Stokes, 1984; Schaefer, 2012 pers. comm.). The house was constructed in the mid-1860s for William Orser (Cruikshank and Stokes, 1984). It is an excellent example of mid-19<sup>th</sup> century Gothic Revival Cottage design and is a unique example of the use of fieldstones from the property for the construction of the rear woodshed (Plate 2) (Cruikshank and Stokes, 1984). Character-defining attributes of the house include the large Gothic window below the front gable, Flemish bond brickwork on the front elevation, symmetrical plan, wide front doorframe flanked by large windows, headers above windows and doors, and the wide, undecorated frieze along the eaves (Plate 1).



**Plate 1: 840 Ben Gill Road, front elevation**



**Plate 2: 840 Ben Gill Road, eastern elevation**





Revised: 2012-06-18 By: sarogers  
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June, 2012  
 Project No. 160960594

**Legend**

- |                               |                           |
|-------------------------------|---------------------------|
| Built Heritage Resource       | Turbine Location & Number |
| Cultural Heritage Landscape   | Collector System          |
| Protected Property            | Access Road               |
| Proposed Interconnection Line | Storage Area              |
| Buildable Area                | Substation                |
| 120m Zone of Investigation    | Study Area                |



**Stantec**



**Notes**

1. Coordinate System: NAD 1983 UTM Zone 18N
2. Data Source: Ontario Ministry of Natural Resources  
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3. Image Source: © First Base Solutions, 2011

Client/Project

WPD CANADA CORPORATION  
 WHITE PINES WIND PROJECT

Figure No.

**3**

Title

Location of Built Heritage Resource

## 2.2 Cultural Heritage Landscapes

Cultural Heritage Landscapes (CHL) for the purposes of this study are: “a defined geographical area of heritage significance which has been modified by human activities and is valued by a community. A landscape involves a grouping(s) of individual heritage features such as structures, spaces, archaeological sites and natural elements, which together form a significant type of heritage form, distinctive from that of its constituent elements or parts” (MTCS, 2006b).

There are three widely accepted types of cultural heritage landscapes (better known internationally as cultural landscapes). This typology was adopted by the United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Committee in the 1992 revisions to their Operational Guidelines which defines cultural landscapes as the “combined works of nature and of man” (UNESCO, 2008). The Operation Guidelines identify the three types as:

- **Designed Landscapes:** those which have been intentionally designed and created by man. (e.g., historic gardens and parks);
- **Evolved Landscapes:** this type includes both *relict* and *continuing* landscapes resulting from social, economic, administrative, and/or religious imperative and has developed into its present form as a result of its natural environmental context; and
- **Associative Landscapes:** those with powerful religious, artistic or cultural associations of the natural element rather than material or built cultural evidence.

No cultural heritage landscapes were identified during the site visit on June 19, 2012.

## 2.3 Impact Assessment

### 2.3.1 BHR 31 – 840 Ben Gill Road, the Orser/Cross House

BHR 31, the Orser/Cross House is located at 840 Royal Road on the north side of Ben Gill Road, west of Fry Road and the proposed location of the interconnection line (Figure 2). The brick and fieldstone residential building is located approximately 70 m west of the Project, at its closest point (Figure 2).

**Table 1: Summary of Impact Assessment, BHR 31 – 840 Ben Gill Road**

Potential Negative Impact	Results of Analysis
<b>Destruction</b>	The subject property will not be destroyed by the Project; however, the potential for damage to occur to the building as a result of vibrations caused by installation of the interconnection line. Although the effect of vibrations from traffic and in-road construction on historic period structures is not fully understood, negative effects have

	<p>been demonstrated on buildings with a setback of less than 40 m from the curbside (Crispino and D’Apuzzo, 2001; Ellis, 1987; Wiss, 1981).</p> <p>The Orser/Cross House is located approximately 70 m west of the Study Area and as a result, no negative impacts are expected as a result of construction vibrations.</p>
<b>Alteration</b>	The subject property will not be altered by the Project.
<b>Shadows</b>	No shadows will be cast on the subject property as a result of the Project.
<b>Isolation</b>	The subject property will not be isolated by the Project.
<b>Direct or indirect obstruction</b>	<p>The potential obstruction of views was considered as part of this assessment. Although views of the eastern elevation of the house may be obstructed some certain vantage points as a result of above ground infrastructure (<i>i.e.</i>, poles and wires), existing trees along Fry Road presently partially obstruct these views (Plate 2). Furthermore, obstruction will be localized and limited to very specific vantage points directly in front of poles.</p> <p>No significant views will be obstructed by the Project.</p>
<b>Change in land use</b>	No change in land-use will occur as a result of the Project.

### **3 STUDY RESULTS AND RECOMMENDATIONS**

---

One built heritage resource (BHR) was identified within or adjacent to the Study Area, the Orser/Cross House (BHR 30) at 840 Ben Gill Road. No potential negative Project-related impacts have been identified and no mitigation has been recommended.

### **4 CLOSURE**

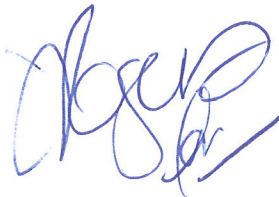
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This report has been prepared for the sole benefit of wpd Canada Corporation (wpd), and may not be used by any third party without the express written consent of Stantec Consulting Ltd. and wpd. Any use which a third party makes of this report is the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

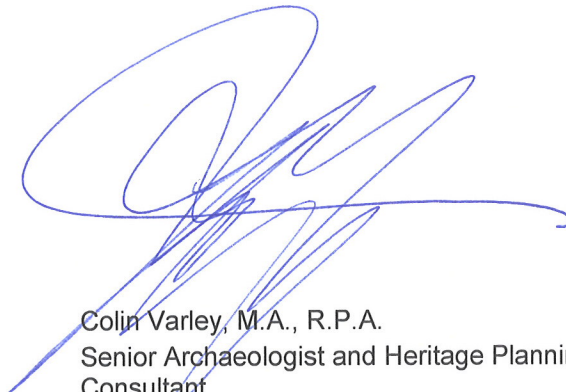
We trust this report meets your current requirements. Please do not hesitate to contact us should you require further information or have additional questions about any facet of this project.

Yours truly,

**Stantec Consulting Ltd.**



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---, 2006a. **InfoSheet #2 Cultural Heritage Landscapes**. Sheet No. 2, Information Sheet Series from Heritage Resources in the Land Use Planning Process: Cultural Heritage and Archaeology Policies of the Ontario Provincial Statement, 2005. Toronto: Queen's Printer for Ontario.

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UNESCO, 2008. **Operational Guidelines for the Implementation of the World Heritage Convention**. Accessed online at <http://whc.unesco.org/archive/opguide08-en.pdf#annex3> last accessed September, 2011.

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### 5.2 Personal Communications

Schaefer, Damien. Planner, Planning and Building Services Department, Corporation of the County of Prince Edward. June, 2012.

# **Protected Properties Assessment**

Dated: June 2012



**FINAL REPORT**  
**Protected Properties Assessment,**  
**White Pines Wind Project, South**  
**Marysburgh and Athol Townships,**  
**Prince Edward County, ON**

*Prepared for:*  
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*Prepared by:*  
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2791 Lancaster Rd., Suite 200  
Ottawa, ON K1B 1A7

September 12, 2012

Project No.: 160960594

## 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 or as described in Section 20. In order to meet the conditions of the regulation, Stantec Consulting Ltd. was retained by wpd Canada Corporation to conduct a Protected Properties Assessment of the location of a proposed wind generating park in the Regional Municipality of Prince Edward.

The assessment included a review of records and inventories held by the Municipality of Prince Edward County, the Ontario Ministry of Tourism and Culture, and the Ontario Heritage Trust. Historic period maps, census data and local histories were also consulted.

The findings of the assessment conclude that:

- No properties that are the subject of an agreement, covenant or easement entered into under clause 10(1)(b) of the *Ontario Heritage Act (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 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 the subject of an agreement, covenant or easement entered into under section 37 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.

Nine (9) properties protected under Part IV, section 29 of the *OHA* were found to exist within the Study Area. These properties include:

- the Henry House;
- the Dulmage-Farrington-Marshall Driveshed;



- the Mathewson House;
- the Gibbons' Property;
- the Milford Town Hall;
- the Mount Tabor United Church;
- the Mariner's Museum;
- the Royal Street Cheese Factory; and
- the Hudgins Log House.

All nine of the properties are designated by municipal by-law made under section 29 of the *OHA*. As such, potential Project-related negative impacts were assessed as per the 2006 Ministry of Tourism and Culture (MTC) InfoSheet 5, *Heritage Impact Assessments and Conservation Plans*.

No potential Project-related impacts were identified with respect to alteration, demolition, isolation, or change in land-use.

Potential negative Project-related impacts were identified in the case of three of the properties and the following recommendations have been made:

- In the event that a below-grade Collector System is installed in the vicinity of the three properties, maximum acceptable peak particle velocity (PPV) should be determined by a qualified engineer prior to any sub-grade activities to ensure the structural integrity of the Dulmage-Farrington-Marshall Driveshed, the residential building on the Gibbins' Property (the Striker House) and the Royal Street Cheese Factory;
- Vibration levels should be monitored during any below-grade construction activities in the vicinity of the Dulmage-Farrington-Marshall Driveshed, the Gibbins' Property and the Royal Street Cheese Factory to ensure that acceptable levels are not exceeded;
- Installation of any above-grade infrastructure related to the Collector System should avoid the west side of Brewers Road in the vicinity of the Dulmage-Farrington-Marshall Driveshed; the south side of Royal Road in the vicinity of the Royal Street Cheese Factory and the Gibbins' Property; and the east side of Dainard Road in the vicinity of the Gibbins' Property.
- Removal of or damage to trees along Brewers Road should be avoided.

The following report details the findings of the Protected Properties Assessment.

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# **1 INTRODUCTION**

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Stantec Consulting Ltd. (Stantec) was retained by wpd Canada Corporation 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.

This Protected Properties Assessment 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, B.A., Archaeologist and Heritage Planning Consultant and Tavis Maplesden, B.A., Archaeological Technician. A visual survey was conducted on June 8 and 9, 2010, August 31, 2010 and April, 2012. Colin Varley, M.A., R.P.A., Senior Archaeologist and Heritage Planning Consultant acted as Team Leader and Senior Reviewer.

## **1.1 Project Description**

The Project, known as the White Pines Wind Project, consists of 29 wind turbines with a 59.45 MW nameplate capacity. The Project will be located entirely within the Townships of South Marysburgh and Athol in Prince Edward County, Ontario. The Study Area is generally bounded by: Brummell Road and Bond Road to the north; Lighthall Road to the west; Gravelly Bay Road to the east and Lake Ontario to the south (Figures 1 and 2). According to subsection 6(3) of Ontario Regulation 359/09, the proposed White Pines Wind Project is a Class 4 facility.

Existing provincial and municipal roads will be used to transport project-related components, equipment and personnel to the Study Area. The Project, excluding transmission infrastructure, will be installed on private lands and municipal Right of Ways. Access to these lands will be required for installation and operation of the wind turbines (Figure 2).

Locations of Project components are shown in Figure 2.

## **1.2 Project Methodology**

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

- the Ontario Heritage Properties Database;
- planning staff from the Municipality of Prince Edward County and the staff contact for the Prince Edward County Heritage Advisory Committee (PEHAC);

- the Ontario Heritage Trust; and
- the Historic Places Initiative register.

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 June 8 and 9, 2010 to identify any heritage structures existing within and around the Study Area in order to cross-reference existing buildings with inventories of designated buildings.

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

<b>Item</b>	<b>Column 1</b>	<b>Column 2</b>	<b>Column 3</b>
	<b>Description of property.</b>	<b>Person or body whose authorization is required.</b>	<b>Type of authorization required to be submitted.</b>
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 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 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	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.

## **2 STUDY AREA**

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The Study Area is composed of approximately 7800 ha (19,274 acres) of primarily agricultural and undeveloped land in the historic Townships of South Marysburgh and Athol in Prince Edward County, Ontario (Figure 2).

The Study Area is located within the Prince Edward Peninsula Physiographic Region, a low plateau of flat limestone that projects into the eastern part of Lake Ontario, almost separated from the mainland by the Bay of Quinte (Chapman and Putnam, 1984). Much of the area has been cleared for agriculture (mainly pasture) but some small stands of trees remain intact (Figure 2). The Village of Milford is located in the northeast corner of the Study Area.

Major topographic features include: Lake Ontario to the south and east of the Study Area; South Bay, a small harbor of Lake Ontario northeast, and Black River which intersects the Study Area south of Bond Road (Figure 1). A large Provincially Significant wetland is located at the south-east part of the Study Area. Numerous smaller watercourses are found throughout the Study Area (Figure 2).






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May, 2012  
 Project No. 160960594

**Legend**

 Study Area



**Notes**

1. Coordinate System: NAD 1983 UTM Zone 18N
2. Data Source: Ontario Ministry of Natural Resources © Queens Printer Ontario, 2012.
3. Image Source: © First Base Solutions, 2011

**Client/Project**

WPD CANADA CORPORATION  
 WHITE PINES WIND PROJECT

**Figure No.**

1

**Title**

Study Area



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May, 2012  
 Project No. 160960594



**Legend**

- Turbine Location & Number
- Collector System
- Access Road
- Crane Laydown Area
- Crane Pad
- General Laydown Area
- Storage Area
- Substation
- Study Area



**Notes**

1. Coordinate System: NAD 1983 UTM Zone 18N
2. Data Source: Ontario Ministry of Natural Resources © Queens Printer Ontario, 2012.
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Figure No.

2

Title

Project Components

### **3 HISTORICAL CONTEXT**

---

Although identifiable human occupation of Ontario began just after the end of the Wisconsin Glacial period, archaeological research has been limited in Prince Edward County, particularly in the vicinity of the Study Area, and as a result we have only a limited understanding of the pre-contact cultural processes that occurred in this part of the province.

Recorded history in the area begins in 1615 when Samuel de Champlain travelled with Huron Warriors through Prince Edward County in an attack on an Iroquois village on the south shore of Lake Ontario, beginning at the False Duck Islands east of the current Study Area.

The Carrying Place, located approximately 40 km northwest of the Study Area, was used by pre-contact populations and fur traders as a portage between Lake Ontario and the Trent River, linking Lake Ontario to Lake Huron. It was at the Carrying Place, in 1787, that the Gunshot Treaty was signed, transferring all of the land from Lake Ontario to Lake Simcoe between the Bay of Quinte and Etobicoke River from the Mississauga to the British Government.

Survey of Prince Edward County was initiated by Surveyor General Samuel Holland in 1783, as part of the land granting program for settling United Empire Loyalists after the American War of Independence. The first township in the peninsula surveyed was Marysburgh in 1784, followed by Sophiasburgh in 1785 (Cruikshank and Stokes, 1984). Settlement started in 1784 in Marysburgh. More settlers arrived in the adjoining townships, Sophiasburgh and Ameliasburgh, in the 1780s and early 1790s. Athol Township was first settled in 1788 as a part of the original 'Fifth Town' of Upper Canada along with parts of Hallowell and South and North Marysburgh townships. It was given separate township status in 1848 owing to the displeasure of the townspeople over the inaccessibility of proper local government due to the large size of the jurisdiction (Belden, 1878).

The first settlers generally drew lots in their preferred areas resulting in families locating close together. A combination of geography, time constraints, squatters and limitations of the tools being used meant that the survey of Prince Edward County was incomplete and inaccurate in the autumn of 1784 when settlers drew their lots (Lunn, 1967). By 1842, Prince Edward County was settled, with less than 1,500 acres left unoccupied. Since a large portion of Prince Edward County was relatively poor agriculturally, the early settlers engaged in pursuits other than, or in addition to, farming in order to supplement farm income (Cruikshank and Stokes, 1984). The shoreline provided easy access to water transportation which favoured fishing and shipbuilding (Figure 3).

At the time of Belden's 1878 Atlas every lot within the Study Area was occupied with at least one structure in each property (Figures 4 and 5). The majority of the structures indicated on Belden's Atlas were farmhouses; however, schoolhouses, meeting houses and churches are also indicated on Belden's Atlas. All of the structures indicated are situated along the various roads that cross the Study Area and along the shore of Lake Ontario (Figures 4 and 5).



Figure 3: Study Area as shown on 1863 Tremaine Map

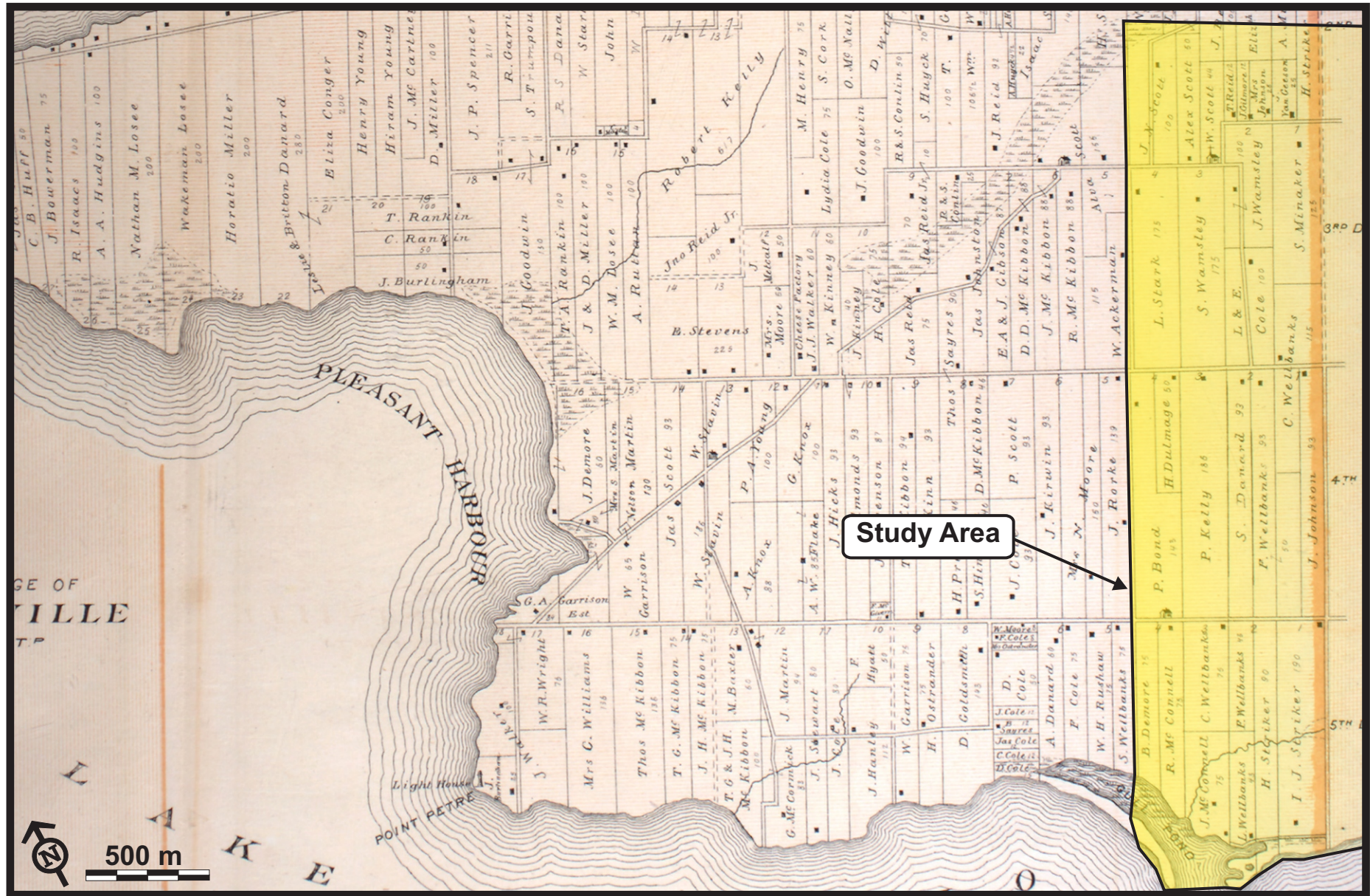


Figure 4: Study Area as shown on Belden’s 1878 Map of Athol Township

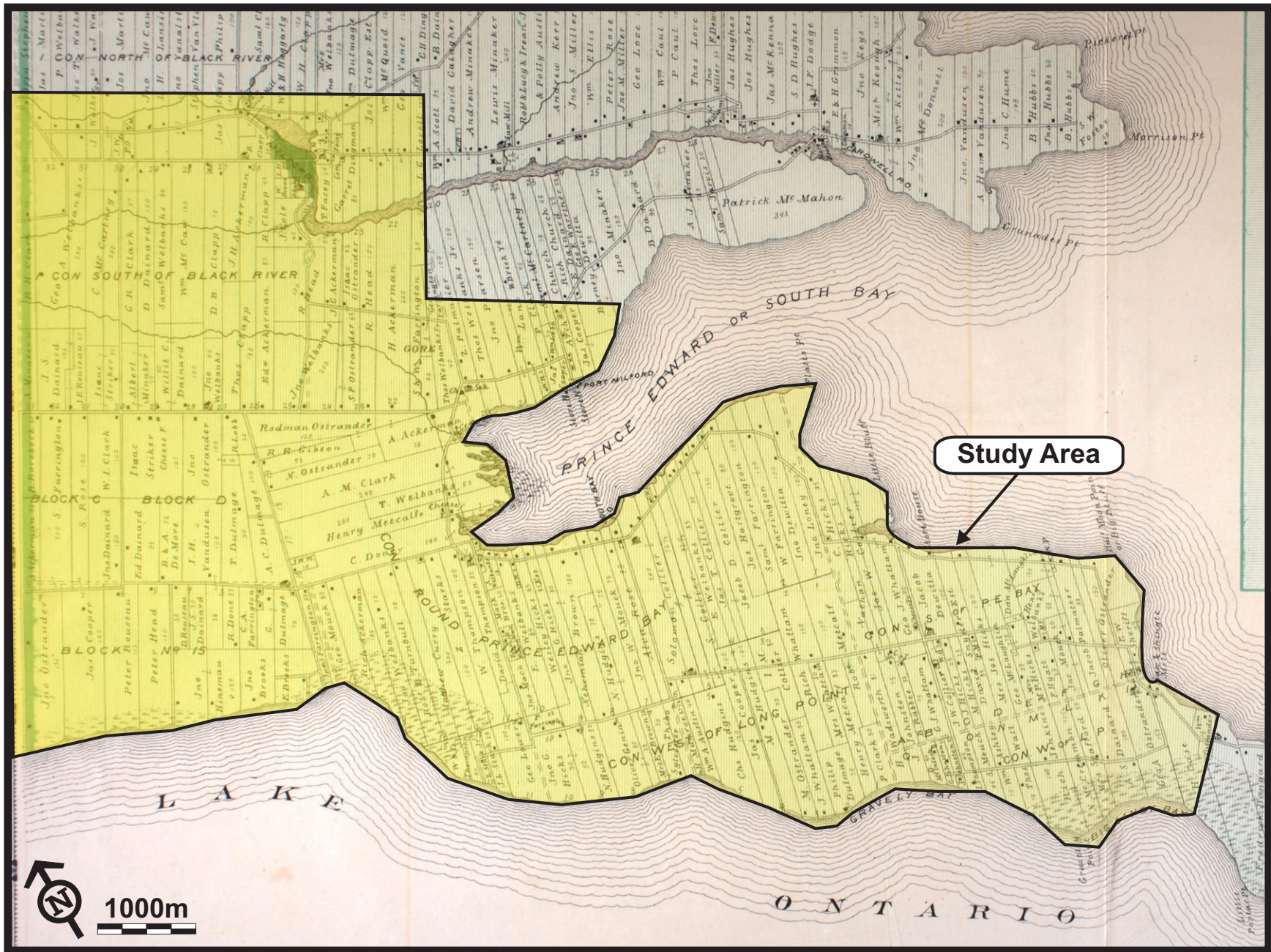


Figure 5: Study Area as shown on Belden's 1878 Map of South Marysburgh Township

## 4 PROTECTED PROPERTIES

### 4.1 Existing Heritage Designations, Easements and Conservation Districts

There are nine (9) protected properties located within or adjacent to the Study Area (Table 2). All nine of the properties are designated by municipal by-law under Section 29 of the *Ontario Heritage Act* (OHA). The locations of all nine properties are indicated on Figure 6.

**Table 2: Protected Properties Within and Adjacent to the Study Area**

Description of Property (as per Section 19, O.Reg 359/09)	Buildings in Study Area	Source
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> (OHA).	none	Fraser, 2010 pers. comm.; Leary, 2010 pers comm.; Schaefer, 2012 pers. comm.
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 OHA.	none	Leary, 2010 pers comm.; Schaefer, 2012 pers. comm.
A property designated by a municipal by-law made under section 29 of the OHA	<ul style="list-style-type: none"> <li>• The Henry House;</li> <li>• The Dulmage-Farrington-Marshall Driveshed;</li> <li>• The Mathewson House;</li> <li>• The Gibbons' Property;</li> <li>• The Milford Town Hall;</li> <li>• The Mount Tabor United;</li> <li>• The Mariner's Museum;</li> <li>• The Royal Street Cheese Factory; and</li> <li>• The Moses Hudgins House.</li> </ul>	Leary, 2010 pers comm.; Schaefer, 2012 pers. comm.
A property designated by order of the Minister of Culture made under section 34.5 of the OHA as a property of cultural heritage value or interest of provincial significance.	none	Leary, 2010 pers comm.; Schaefer, 2012 pers. comm.
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	Leary, 2010 pers comm.; Schaefer, 2012 pers. comm.
A property that is the subject of an easement or a covenant entered into under section 37 of the OHA.	none	Fraser, 2010 pers. comm.; Leary, 2010 pers comm.; Schaefer, 2012 pers. comm.
A property that is part of an area designated by a municipal by-law made under section 41 of the OHA as a heritage conservation district.	none	Leary, 2010 pers comm.; Schaefer, 2012 pers. comm.
A property designated as a historic site under Regulation 880 of the Revised Regulation of Ontario, 1990 (Historic Sites) made under the OHA.	none	MTC, 2011; Leary, 2010 pers comm.; Schaefer, 2012 pers. comm.

#### **4.1.1 The Henry House**

The Henry House (also Starks House) is located at 41 Lighthall Road in Lot 4, Concession 3 South Side of East Lake in Athol Township (Figure 6). The designated building is a stone farmhouse constructed by John Leonard Starks around 1865. The house is similar in construction to a handful of other stone houses built around the same time in the County. The Henry House is a one and a half storey building with a wide front door with a transom and sidelights. A rounded arch window is located on the second storey, below the gable. The gable above the front door is wider and lower than typical Ontario Gothic Revival Cottage style farmhouses (Cruikshank and Stokes, 1984) and the building bears a resemblance to Regency homes in other settlements along Lake Ontario, such as Cobourg. The Henry House was designated under Part IV of the *Ontario Heritage Act (OHA)* by Municipal By-law #1628 on October 30, 1985 (Prince Edward County, 2011).

#### **4.1.2 The Dulmage-Farrington-Marshall Driveshed,**

The Dulmage-Farrington-Marshall Driveshed, constructed circa 1875, is located at 104 Brewers Road in South Marysburgh Township (Figure 6). The building is an ornate, two-storey wooden structure built on a square plan. The steep hip roof has a belvedere at the peak. The Dulmage-Farrington-Marshall Driveshed includes a number of decorative elements such as trim along the windows and doors, unlike typical utilitarian drivesheds constructed in Prince Edward County at the time (Cruikshank and Stokes, 1984). The building is associated with several other structures and features on the property including the house, barns and a small stone smokehouse. The Driveshed was designated under Part IV of the *OHA* by Municipal By-law #1967 on October 25, 1990 (Prince Edward County, 2011).

#### **4.1.3 The Mathewson House**

The Mathewson House (also Isaac Minaker House) is located at 1902 County Road 13 in South Marysburgh Township (Figure 6). The building is a one and a half storey stone building constructed on a relatively square plan with gables across the front and two sides. The building is architecturally unique in that the front gable spans the entirety of the building's front elevation. The building was constructed around 1855 by the Minaker family. The home was built by Isaac Minaker who was the son of John Christian Andrew Minaker, a German mercenary in the American Revolution (Cruikshank and Stokes, 1984). The Mathewson House was designated under Part IV of the *Ontario Heritage Act (OHA)* by Municipal By-law #1628 on October 30, 1985 (Prince Edward County, 2011).

#### **4.1.4 The Gibbins' Property**

The Gibbins' Property is located at 1078 Royal Road in South Marysburgh Township (Figure 6). The property is associated with the Striker family and includes several outbuildings and the Striker House, a stone building constructed by Isaac Striker around 1865 (Cruikshank and Stokes, 1984). The Striker House is similar in construction to the nearby Henry House (see above). Also included in the designated property are several agricultural outbuildings and a modest one and a half storey log cabin. The one and a half storey frame construction Ostrander/Striker House is located west of the property at



the southwest corner of Royal Road and Dainard Road. The Gibbins' property was designated for its architectural and associative value under Part IV of the *OHA* by Municipal By-law #2321-2008 on November 24, 2008 (Prince Edward County, 2011). The Renfrew County Log House, located on the property, was moved to its current location on the property in 2004 from the Ottawa Valley. The log house was constructed around 1840 and is included in the designation of the Gibbin's Property for its architectural value. Another outbuilding explicitly included in the designation of the property is the Trumpour Grain Barn. The barn, constructed around 1810, is included in the designation as a result of its architectural value derived from its post and beam construction and its association with Paul Trumpour, a United Empire Loyalist who died at Chrysler's Farm during the War of 1812. The barn was moved from its original location in Adolphustown to the Gibbin's Property in 2005.

#### **4.1.5 The Milford Town Hall**

The Milford Town Hall is located at 3076-3080 County Road 10 in Milford, South Marysburgh Township (Figure 6). It is the oldest extant rural town hall building in Prince Edward County. The one and a half storey building was constructed in wood frame in 1862 (Cruikshank and Stokes, 1984). The Milford Town Hall was designated under the *OHA* by Municipal By-law #1758-2006 in 2006 for its architectural and associative value (Prince Edward County, 2011).

#### **4.1.6 The Mount Tabor United Church**

The Mount Tabor United Church is located at 2179 County Road 17 in Milford, South Marysburgh Township (Figure 6). The red brick church was constructed in 1865. Although Gothic revival influence can be noted in the windows, the trim and use of brackets as decorative details on the steeple suggest an Italianate influence (Cruikshank and Stokes, 1984). The Mount Tabor United Church was designated under Part IV of the *OHA* by Municipal By-law #1677 on January 28, 1986 (Prince Edward County, 2011).

#### **4.1.7 The Mariner's Museum**

The Mariner's Museum is located at 2065 County Road 13 in South Marysburgh Township (Figure 6). The Museum is designated for two of its structures that were relocated to the property in 1967 and 1982, the False Duck Lighthouse and the Pioneer Store Addition, respectively. The False Duck Lighthouse is associated with early navigation in the Great Lakes. The beacon and part of the cylindrical stone tower that currently reside at the Mariners Museum were originally erected in 1828 at the tip of South Marysburgh. The one and a half storey wood frame store located at the museum was originally constructed around 1870 on Main Street in Milford, Ontario. Originally known as Ostrand's General Store, the building was constructed using white pine milled in the Village of Milford. The Mariner's Museum was designated under Part IV of the *Ontario Heritage Act (OHA)* by Municipal By-law #2870-2011 on May 24, 2011 (Prince Edward County, 2011).

#### **4.1.8 The Royal Street Cheese Factory**

The Royal Street Cheese Factory is located at 1112 Royal Road in South Marysburgh Township (Figure 6). The structure, built around 1875, is located just east of the original cheese factory building constructed by Isaac Striker in the early 1870s. It was constructed only eleven days after the original building was destroyed by fire (Ackerman, 1971). The design of the building has changed very little since its construction, maintaining the same form, steeply pitched roof and overhanging canopy above the entrance to protect milk deliveries. The Royal Street Cheese Factory was designated under Part IV of the *Ontario Heritage Act (OHA)* by Municipal By-law #2794-2011 on February 8, 2011 for its contextual value and association with the Isaac Striker and the early cheese industry in Prince Edward County (Prince Edward County, 2011).

#### **4.1.9 The Moses Hudgins House**

The Moses Hudgins House is located at 191 Ostrander Point Road in South Marysburgh Township (Figure 6). The one and a half storey log house was built around 1865 and is a late example of log architecture in Prince Edward County. The square logs of the building are cedar. The log house is shown in its current position on the 1878 Belden Atlas (Figure 5). The Moses Hudgins House was designated under Part IV of the *Ontario Heritage Act (OHA)* by Municipal By-law #2793-2011 on February 8, 2011 (Prince Edward County, 2011). Character-defining attributes highlighted in the designation include the steep pitch of the roof (a local form) and the building's unusual 5 inch lap joints, compared to the more common 8 inches.



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May, 2012  
 Project No. 160960594

**Legend**

- Protected Property
- ▲ Turbine Location & Number
- Collector System
- Access Road
- Crane Laydown Area
- Crane Pad
- General Laydown Area
- Storage Area
- Substation
- Study Area



**Notes**

1. Coordinate System: NAD 1983 UTM Zone 18N
2. Data Source: Ontario Ministry of Natural Resources © Queens Printer Ontario, 2012.
3. Image Source: © First Base Solutions, 2011

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Figure No.

6

Title

Location of Protected Properties



Revised: 2012-06-18 By: sarogers  
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June, 2012  
 Project No. 160960594

**Legend**

- Protected Property
- ▲ Turbine Location & Number
- Collector System
- Access Road
- Crane Laydown Area
- Crane Pad
- Substation



**Stantec**



**Notes**

1. Coordinate System: NAD 1983 UTM Zone 18N
2. Data Source: Ontario Ministry of Natural Resources © Queens Printer Ontario, 2012.
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Client/Project

WPD CANADA CORPORATION  
 WHITE PINES WIND PROJECT

Figure No.

**7**

Title

Location of Protected Properties  
 - Project Area West

## 5 IMPACT ASSESSMENT AND RECOMMENDED MITIGATION

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### 5.1 Methodology

Assessment of potential direct or indirect impacts of the project on identified protected properties in the Study Area and adjacent lands considered Ministry of Tourism and Culture guidelines concerning *Heritage Impact Assessments and Conservation Plans* (MTC, 2006).

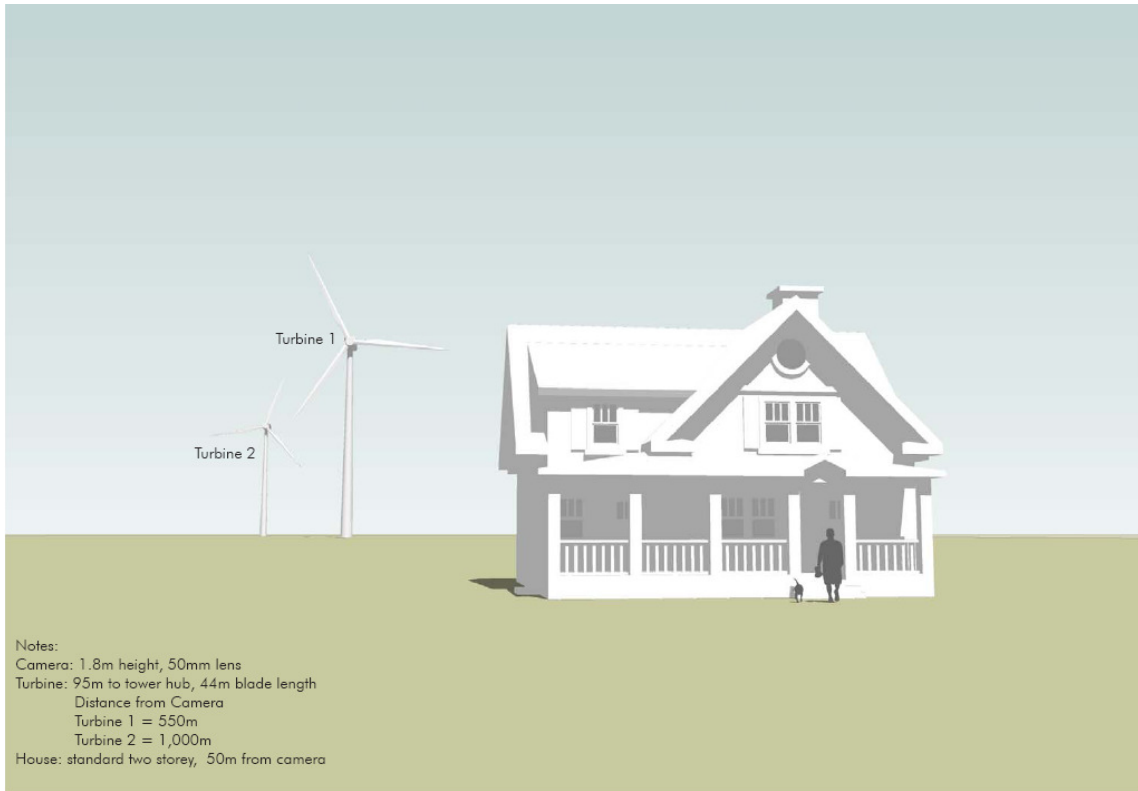
The Ministry of Tourism and Culture outlines seven (7) potential negative impacts on heritage resources:

- **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 and *archaeological resource*.

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

Identification of potential impacts considered the proposed site plan for the layout of turbines and Project infrastructure (Figure 6).

Assessment of visual impacts was conducted using information collected during the June, 2010 and April, 2012 site visits which documented the existing condition of the protected properties in terms of topography, tree-cover, and site lines. Visual modelling of a typical two-storey building with turbines of the same approximate height as those likely to be installed for the current Project at distances of 550 m and 1000 m from the camera was used to assess the scale of the turbines in relation to the existing buildings (Visual Aids 1 and 2).



**Visual Aid 1 Wind Turbine Scale Schematic**



**Visual Aid 2 Wind Turbine Scale Schematic, with trees**

## **5.2 Potential Impacts**

All nine of the protected properties identified within and adjacent to the Study Area were assessed for potential negative Project-related impacts based on the potential negative impacts outlined by the MTC (MTC, 2006).

### **5.2.1 The Henry House**

The Henry House (also Starks House) is located at 41 Lighthall Road in Lot 4, Concession 3 South Side of East Lake in Athol Township. It is designated by municipal by-law under Part IV of the *Ontario Heritage Act (OHA)*. The house is located on a property parcel adjacent to Turbine 8, which is located approximately 1000 m southeast of the house (Figure 6). Turbines 9 and 10 are located approximately 1200 m to the east and 1500 m northeast, respectively. All three turbines will be accessed off Royal Road and no impacts are expected as a result of the access roads. Table 3 summarises the impact analysis.



**Plate 1 The Henry House**

**Table 3: Summary of Impact Assessment, the Henry House**

Potential Negative Impact	Results of Analysis
<b>Destruction</b>	The subject property will not be destroyed by the Project.
<b>Alteration</b>	The subject property will not be altered by the Project.
<b>Shadows</b>	No shadows will be cast on the subject property as a result of the Project.
<b>Isolation</b>	The subject property will not be isolated by the Project.
<b>Direct or indirect obstruction</b>	Three turbines are proposed to be erected within the general vicinity of the subject property: Turbine 8, approximately 1000 m southeast; Turbine 9, approximately 1200 m east; and Turbine 10, approximately 1500 m northeast (Figure 6). Evaluation of potential visual impacts considered the relative scale of each turbine at distances of more than 1000 m (Visual Aid 1). All three turbines will likely be visible from certain vantage points when viewing the Henry House from public property ( <i>i.e.</i> , Lighthall Road). However, at distances of more than 1000 m, none of the turbines will detract from views of the residence. Surrounding tree cover (Plate 1) will further reduce potential indirect visual impacts on the property’s viewscape (Visual Aid 2). No significant views of the property have been identified in the municipal by-law protecting the property or during desktop research and the site visit conducted for this study. Furthermore, all identified potential visual impacts are reversible and temporary based on the limited lifespan of the Project.
<b>Change in land use</b>	No change in land-use will occur as a result of the Project.

**5.2.2 The Dulmage-Farrington-Marshall Driveshed,**

The Dulmage-Farrington-Marshall Driveshed is located at 104 Brewers Road in South Marysburgh Township (Figure 6). The driveshed is designated by municipal by-law under Part IV, Section 29 of the *OHA*.

No turbines or access roads will be installed on or adjacent to the subject property. The closest turbine is Turbine 7, approximately 575 m southwest of the driveshed (Figures 6 and 7). Other turbines in the general vicinity of the driveshed include: Turbines 5 and 6, approximately 1200 m to the northeast and northwest, respectively; Turbine 11, approximately 1800 m to the west; Turbines 19 and 20, approximately 1900 and 2000 m, respectively, to the southeast. All other turbines are located more than 2000 m from the driveshed (Figure 6). The Collector System is proposed to be installed along Brewers Road. The driveshed is located along Brewers Road, with a setback of less than a metre (Plate 2). A summary of the impact analysis for the driveshed is presented in Table 4.





**Plate 2 The Dulmage-Farrington-Marshall Driveshed**

**Table 4: Summary of Impact Assessment, the Dulmage-Farrington-Marshall Driveshed**

Potential Negative Impact	Results of Analysis
<b>Destruction</b>	<p>The subject property will not be destroyed by the Project; however, there is the potential for damage to occur to the building as a result of vibrations caused by installation of a sub-grade Collector System. Although the effect of vibrations from traffic and in-road construction 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 (Ellis, 1987; Crispino and D’Apuzzo, 2001; Rainer, 1982; Wiss, 1981).</p> <p>In the event that the Collector System is installed underground, a study should be conducted by a qualified engineer to determine the maximum vibration peak particle velocity (PPV) for the building prior to the installation of any below-grade Project infrastructure. Vibrations should be monitored during any necessary below grade construction to ensure that acceptable vibration levels are not exceeded.</p>
<b>Alteration</b>	The subject property will not be altered by the Project.
<b>Shadows</b>	No shadows will be cast on the subject property as a result of the Project.

<b>Isolation</b>	The subject property will not be isolated by the Project.
<b>Direct or indirect obstruction</b>	<p>The nearest wind turbine (Turbine 7) will be installed approximately 575 m southwest of the driveway and will not directly obstruct any significant views. Turbine 7 will likely be visible from certain vantage points when viewing the driveway from public property (<i>i.e.</i>, Brewers Road). However, based on the thick tree cover surrounding the driveway (Plate 2) and the relative scale of the turbine as compared to the driveway at a distance of 575 m, the turbine will not detract greatly from views of the driveway. The narrow setback of the driveway, furthermore, ensures that the turbine will not be visible when viewing the driveway from a number of vantage points. All identified potential visual impacts are reversible and temporary based on the limited lifespan of the Project.</p> <p>The driveway is contextually linked to the surrounding property and adjacent roadway, both functionally and historically. The trees along both sides of the road and resultant canopy are a key character-defining component of the surrounding landscape. There is a possibility for the installation of the Collector System to have an impact on views of the driveway. Any below-grade installation might damage or destroy trees lining Brewers Road which would alter the character of the property. It is recommended that removal of trees be avoided and damage to the roots of the trees be minimized.</p> <p>In the event that an aboveground Collector System is installed, poles and wires might directly obstruct views of the driveway. It is recommended that any aboveground infrastructure installed along Brewers Road avoid the west side of Brewers Road and that no trees be removed for the installation of such infrastructure, particularly along the west side of the road. Above-ground infrastructure (<i>i.e.</i>, poles and wires) should be installed on the east side of Brewers Road to avoid obstructing views of the driveway.</p>
<b>Change in land use</b>	No change in land-use will occur as a result of the Project.

**5.2.3 The Mathewson House**

The Mathewson House is located at 1902 County Road 13 in South Marysburgh Township (Figure 6). It is designated by municipal by-law under Part IV of the *OHA*. No Project components are located in the immediate vicinity of the Mathewson House. The nearest turbines, Turbines 4 and 6, are located approximately 2000 m and 2250 m to the west and southwest, respectively (Figure 6). No other Project components are located in the vicinity of the Mathewson House.



**Plate 3 The Mathewson House (winter 2009)**

**Table 5: Summary of Impact Assessment, the Mathewson House**

Potential Negative Impact	Results of Analysis
<b>Destruction</b>	The subject property will not be destroyed by the Project.
<b>Alteration</b>	The subject property will not be altered by the Project.
<b>Shadows</b>	No shadows will be cast on the subject property as a result of the Project.
<b>Isolation</b>	The subject property will not be isolated by the Project.
<b>Direct or indirect obstruction</b>	Views of the subject property are not expected to be directly or indirectly obstructed by the Project.
<b>Change in land use</b>	No change in land-use will occur as a result of the Project.

**5.2.4 The Gibbins' Property**

The Gibbins' Property is located at 1078 Royal Road in South Marysburgh Township (Figure 6). The property is designated by municipal by-law under Part IV, Section 29 of the *OHA*. Project components located in the vicinity of the Gibbins' Property include: Turbine 11, approximately 825 m to the south; Turbine 15, approximately 1600 m to the south; Turbine 7, approximately 1000m to the east; and Turbine 5, approximately 1100 m to the north (Figures 6 and 7). In addition to turbines, the proposed Collector System runs along Royal Road and Dainard Road in the vicinity of the Gibbins' Property (Figure 7). A summary of the impact analysis is presented in Table 6.



**Plate 4 The Striker House (Gibbins' Property)**



**Plate 5 The Gibbins' Property, view from Dainard Road facing northeast**

**Table 6: Summary of Impact Assessment, the Gibbins' Property**

Potential Negative Impact	Results of Analysis
<b>Destruction</b>	<p>The subject property will not be destroyed by the Project; however, there is the potential for damage to occur to the building as a result of vibrations caused by installation of a sub-grade Collector System. Although the effect of vibrations from traffic and in-road construction 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 (Ellis, 1987; Crispino and D'Apuzzo, 2001; Rainer, 1982; Wiss, 1981).</p> <p>In the event that the Collector System is installed underground, a study should be conducted by a qualified engineer to determine the maximum vibration peak particle velocity (PPV) for the building prior to the installation of any below-grade Project infrastructure. Vibrations should be monitored during any necessary below grade construction to ensure that acceptable vibration levels are not exceeded.</p>
<b>Alteration</b>	<p>The subject property will not be altered by the Project.</p>
<b>Shadows</b>	<p>No shadows will be cast on the subject property as a result of the Project.</p>
<b>Isolation</b>	<p>The subject property will not be isolated by the Project.</p>
<b>Direct or indirect obstruction</b>	<p>The Gibbins' Property can be viewed from public property along Dainard Road towards the east and from Royal Road towards the south. No turbines will directly obstruct views of the property; however, Turbines 7, 11 and 15 will likely be visible when viewing the Gibbins' Property from certain vantage points. At distances of 825 m and beyond, none of the turbines will detract from views of the residence (Visual Aid 1). No significant views of the property have been identified in the municipal by-law protecting the property or during desktop research and the site visit conducted for this study. Cultural heritage value of the Gibbins' Property is derived from the historical and architectural value of the individual structures on the property. Furthermore, all identified potential visual impacts are reversible and temporary based on the limited lifespan of the Project.</p> <p>In the event that an aboveground Collector System is installed, poles and wires might directly obstruct views of the Gibbins' Property. It is recommended that any above-ground infrastructure installed avoid the south side of Royal Road and the East side of Dainard Road in the vicinity of the Gibbins' Property.</p>
<b>Change in land use</b>	<p>No change in land-use will occur as a result of the Project.</p>

**5.2.5 The Milford Town Hall**

The Milford Town Hall is located at 3076-3080 County Road 10 in Milford, South Marysburgh Township (Figure 6). The Town Hall was designated under the *OHA* by Municipal By-law #1758-2006 in 2006. No Project components are located in the immediate vicinity of the Town Hall. The nearest Project components include: Turbine 1, approximately 1250 m to the southwest; Turbine 2, approximately 1400 m to the southwest; Turbine 3, approximately 1700 m to the south; and Turbine 4, approximately 1400 m to the southeast (Figure 6).

**Table 7: Summary of Impact Assessment, the Milford Town Hall**

Potential Negative Impact	Results of Analysis
<b>Destruction</b>	The subject property will not be destroyed by the Project.
<b>Alteration</b>	The subject property will not be altered by the Project.
<b>Shadows</b>	No shadows will be cast on the subject property as a result of the Project.
<b>Isolation</b>	The subject property will not be isolated by the Project.
<b>Direct or indirect obstruction</b>	Views of the subject property will not be directly obstructed by the Project. The Milford Town Hall building is narrowly setback from the road (Plate 6) and views of the building from public property are generally from County Road 10 facing south towards the Project. At distances between 1250 m and 1700 m, it is possible that Turbines 1, 2, 3 and 4 may be visible from certain vantage points when viewing the Town Hall building. However, at distances of 1250 m and beyond, none of the turbines will detract from views of the building (Visual Aid 1). No significant views of the Town Hall have been identified in the municipal by-law protecting the property or during the desktop research and site visit conducted for this study. Cultural heritage value of the Milford Town Hall is derived from the historical and architectural value of the building and its relationship with the surrounding buildings in Milford. Furthermore, all identified potential visual impacts are reversible and temporary based on the limited lifespan of the Project.
<b>Change in land use</b>	No change in land-use will occur as a result of the Project.



**Plate 6 Milford Town Hall**

### **5.2.6 The Mount Tabor United Church**

The Mount Tabor United Church is located at 2179 County Road 17 in Milford, South Marysburgh Township (Figure 6). The Church was designated by municipal by-law under Part IV of the *OHA*. No Project components are located in the immediate vicinity of the Church. The nearest Project components include: Turbine 1, approximately 1500 m to the southwest; Turbine 2, approximately 1700 m to the southwest; Turbine 3, approximately 2000 m to the south; and Turbine 4, approximately 1400 m to the southeast (Figure 6).



**Plate 7 Mount Tabor United Church**

**Table 8: Summary of Impact Assessment, the Mount Tabor United Church**

Potential Negative Impact	Results of Analysis
<b>Destruction</b>	The subject property will not be destroyed by the Project.
<b>Alteration</b>	The subject property will not be altered by the Project.
<b>Shadows</b>	No shadows will be cast on the subject property as a result of the Project.
<b>Isolation</b>	The subject property will not be isolated by the Project.
<b>Direct or indirect obstruction</b>	Views of the subject property will not be directly obstructed by the Project. The Mount Tabor United Church is located on an elevated area overlooking the Village of Milford. At distances between 1400 m and 2000 m, it is possible that Turbines 1, 2, 3 and 4 may be visible from certain vantage points when viewing the Town Hall building. However, at distances of 1400 m and beyond, none of the turbines will detract from views of the building



(Visual Aid 1). This is particularly true given that the church is elevated above the turbines. The cultural heritage value of the church is derived from the historical and architectural value of the building. Furthermore, all identified potential visual impacts are reversible and temporary based on the limited lifespan of the Project.

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

**5.2.7 The Mariner’s Museum**

The Mariner’s Museum is located at 2065 County Road 13 in South Marysburgh Township (Figure 6). The museum is designated by municipal by-law under Part IV of the *OHA*. No Project components are located in the immediate vicinity of the museum. The nearest Project components include Turbines 4 and 6, approximately 2000 m to the northwest and 1600 m to the west, respectively (Figure 6).

**Table 9: Summary of Impact Assessment, the Mariner’s Museum**

Potential Negative Impact	Results of Analysis
<b>Destruction</b>	The subject property will not be destroyed by the Project.
<b>Alteration</b>	The subject property will not be altered by the Project.
<b>Shadows</b>	No shadows will be cast on the subject property as a result of the Project.
<b>Isolation</b>	The subject property will not be isolated by the Project.
<b>Direct or indirect obstruction</b>	Views of the museum are towards the east, away from the Project and will not be obstructed by the Project. Given the public nature of the museum property, views from the museum grounds were considered as part of this assessment. However, significant views from the museum grounds identified during this study are generally eastward, towards the bay rather than westward towards the Project. Furthermore, while it is possible that Turbines 4 and 6 will be visible from certain vantage points on the museum grounds, at distances of 2000 m and 1600 m, neither turbine will greatly detract from public experience of the museum, from a cultural heritage perspective given that the cultural heritage values of the property are derived from the architectural features and historical associations of individual structures on the property. Moreover, any visual impacts are temporary and reversible after the lifespan of the Project.
<b>Change in land use</b>	No change in land-use will occur as a result of the Project.



**Plate 8 Mariner's Museum, Museum building (Pioneer Store on the right)**



**Plate 9 Mariner's Museum Grounds (False Duck Lighthouse on right), facing east**

**5.2.8 The Royal Street Cheese Factory**

The Royal Street Cheese Factory is located at 1112 Royal Road in South Marysburgh Township (Figures 6 and 7). The Cheese Factory was designated by municipal by-law under Part IV of the *OHA*. Project components located in the vicinity of the Royal Street Cheese Factory include: Turbine 11, approximately 850 m to the south; Turbine 15, approximately 1600 m to the south; Turbine 7, approximately 1000 m to the east; and Turbine 5, approximately 1100 m to the north (Figure 6). In addition to turbines, the proposed Collector System runs along Royal Road in the vicinity of the factory building (Figure 7). A summary of the impact analysis is presented in Table 10.

**Table 10: Summary of Impact Assessment, the Royal Street Cheese Factory**

Potential Negative Impact	Results of Analysis
<b>Destruction</b>	<p>The subject property will not be destroyed by the Project; however, there is the potential for damage to occur to the building as a result of vibrations caused by installation of a sub-grade Collector System. Although the effect of vibrations from traffic and in-road construction 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 (Ellis, 1987; Crispino and D’Apuzzo, 2001; Rainer, 1982; Wiss, 1981).</p> <p>In the event that the Collector System is installed underground, a study should be conducted by a qualified engineer to determine the maximum vibration peak particle velocity (PPV) for the building prior to the installation of any below-grade Project infrastructure. Vibrations should be monitored during any necessary below grade construction to ensure that acceptable vibration levels are not exceeded.</p>
<b>Alteration</b>	The subject property will not be altered by the Project.
<b>Shadows</b>	No shadows will be cast on the subject property as a result of the Project.
<b>Isolation</b>	The subject property will not be isolated by the Project.
<b>Direct or indirect obstruction</b>	<p>No turbines will directly obstruct views of the Royal Street Cheese Factory; however, Turbines 7, 11 and 15 will likely be visible when viewing the building from certain vantage points. At distances of 850 m and beyond, none of the turbines will greatly detract from views of the factory building (Visual Aid 1). No significant views of the property have been identified in the municipal by-law protecting the property or during desktop research and the site visit conducted for this study. Furthermore, all identified potential visual impacts are reversible and temporary based on the limited lifespan of the Project.</p> <p>In the event that an aboveground Collector System is installed, poles and wires might directly obstruct views of the factory. It is recommended that any above-ground infrastructure installed avoid the south side of Royal Road in the vicinity of the Royal Street Cheese Factory.</p>

**Change in land use**

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



**Plate 10 Royal Street Cheese Factory**

**5.2.9 The Moses Hudgins House**

The Moses Hudgins House is located at 191 Ostrander Point Road in South Marysburgh Township (Figure 6). The log house is designated by municipal by-law under Part IV of the *OHA*. No Project components are located in the immediate vicinity of the residence. The nearest Project component is the Collector System, which runs along County Road 13 approximately 1000 m north of the log house at its closest point. No turbines are located within 2000 m of the Moses Hudgins House (Figure 6). The nearest turbines include: Turbine 23, approximately 3000 m to the west; Turbine 24, approximately 2500 m to the west; Turbine 25, approximately 2100 m to the north; and Turbine 27, approximately 2500 m to the east (Figure 6).

**Table 11: Summary of Impact Assessment, the Moses Hudgins House**

Potential Negative Impact	Results of Analysis
<b>Destruction</b>	The subject property will not be destroyed by the Project.

<b>Alteration</b>	The subject property will not be altered by the Project.
<b>Shadows</b>	No shadows will be cast on the subject property as a result of the Project.
<b>Isolation</b>	The subject property will not be isolated by the Project.
<b>Direct or indirect obstruction</b>	Views of the subject property are not expected to be directly or indirectly obstructed by the Project.
<b>Change in land use</b>	No change in land-use will occur as a result of the Project.

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**Plate 11 The Moses Hudgins House**

## **6 STUDY RESULTS**

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A total of nine (9) protected properties were identified within or adjacent to the Study Area. All nine of the properties are designated by municipal by-law under Part IV, Section 29 of the *OHA*. These properties include:

- The Henry House;
- the Dulmage-Farrington-Marshall Driveshed;
- the Mathewson House;
- the Gibbons' Property;
- the Milford Town Hall;
- the Mount Tabor United Church;
- the Mariner's Museum;
- the Royal Street Cheese Factory; and
- the Moses Hudgins House

No other properties were identified within or adjacent to the Study Area protected by any other means outlined in the Table from Section 19, O.Reg.359/09.

Potential negative impacts were identified for three of the nine protected properties in the Study Area. These properties include:

- The Dulmage-Farrington-Marshall Driveshed;
- The Gibbins' Property; and
- The Royal Street Cheese Factory

A summary of the potential negative impacts and recommended mitigation is presented in Table 12.

The following recommendations have been made:

- In the event that a below-grade Collector System is installed in the vicinity of these properties, maximum acceptable peak particle velocity (PPV) should be determined by a qualified engineer prior to any sub-grade activities to ensure the structural integrity of the Dulmage-Farrington-Marshall Driveshed, the residential building on the Gibbins' Property (the Striker House) and the Royal Street Cheese Factory;

- Vibration levels should be monitored during any below-grade construction activities in the vicinity of the Dulmage-Farrington-Marshall Driveshed, the Gibbins' Property and the Royal Street Cheese Factory to ensure that acceptable levels are not exceeded;
- Installation of any above-grade infrastructure related to the Collector System should avoid the west side of Brewers Road in the vicinity of the Dulmage-Farrington-Marshall Driveshed; the south side of Royal Road in the vicinity of the Royal Street Cheese Factory and the Gibbins' Property; and the east side of Dainard Road in the vicinity of the Gibbins' Property.
- Removal of or damage to trees along Brewers Road should be avoided.

**Table 12: Summary of Potential Negative Impacts and Recommended Mitigation**

Property	Potential Negative Impact						Recommended Mitigation
	Destruction	Alteration	Shadows	Isolation	Obstruction of Views	Change in Land Use	
Henry House	NE	NE	NE	NE	NE	NE	No mitigation recommended
Dulmage-Farrington Marshall Driveshed	I	NE	NE	NE	R	NE	In the event that the Collector System is installed below-grade , a study should be conducted by a qualified engineer to determine the maximum vibration peak particle velocity (PPV) for the building prior to the installation of any below-grade Project infrastructure. Vibrations should be monitored during any necessary below grade construction to ensure that acceptable vibration levels are not exceeded. In the event that the Collector System is installed above-ground, components ( <i>i.e.</i> , poles and wires) should be installed on the east side of the road. Removal or damage to trees along Brewers Road should be avoided.
Mathewson House	NE	NE	NE	NE	NE	NE	No mitigation recommended
Gibbins' Property	I	NE	NE	NE	R	NE	In the event that the Collector System is installed below-grade , a study should be conducted by a qualified engineer to determine the maximum vibration peak particle velocity (PPV) for the residential building prior to the installation of any below-grade Project infrastructure and vibrations should be monitored during any necessary below grade construction to ensure that acceptable vibration levels are not exceeded. In the event that the Collector System is installed above-ground, components ( <i>i.e.</i> , poles and wires) should be installed on the north side of Royal Road and the west side of Dainard Road to avoid obstructing views of the property.
Milford Town Hall	NE	NE	NE	NE	NE	NE	No mitigation recommended
Mount Tabor United Church	NE	NE	NE	NE	NE	NE	No mitigation recommended
Mariner's Museum	NE	NE	NE	NE	NE	NE	No mitigation recommended
Royal Street Cheese Factory	I	NE	NE	NE	R	NE	In the event that the Collector System is installed below-grade , a study should be conducted by a qualified engineer to determine the maximum vibration peak particle velocity (PPV) for the building prior to the installation of any below-grade Project infrastructure and vibrations should be monitored during any necessary below grade construction to ensure that acceptable vibration levels are not exceeded. In the event that the Collector System is installed above-ground, components ( <i>i.e.</i> , poles and wires) should be installed on the north side of Royal Road avoid obstructing views of the property.
Moses Hudgins House	NE	NE	NE	NE	NE	NE	No mitigation recommended

**Potential Impacts: R - Reversible, I - Irreversible, NE - Not Expected**



## 7 CLOSURE

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

We trust this report meets your current requirements. Please do not hesitate to contact us should you require further information or have additional questions about any facet of this project.

Yours truly,

### STANTEC CONSULTING LTD



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## 8 REFERENCES

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## **8.2 Personal Communications**

Fraser, Sean. Manager, Acquisitions and Conservation Services, Ontario Heritage Trust. Letter dated March 17, 2011 (Appendix A).

Leary, Ryan. Senior Planner and Heritage Staff Liaison, Corporation of the County of Prince Edward. July, 2010.

Schaefer, Damian. Planner, Planning and Building Services Department, Corporation of the County of Prince Edward. April, 2012.

**Stantec**

**Protected Properties Assessment, White Pines Wind Project, South Marysburgh and Athol Townships, Prince Edward County, ON**

# **APPENDIX A**

**Correspondence**



An agency of the Government of Ontario

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## VIA MAIL AND EMAIL

March 17, 2011

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

Attention: Shawna Peddle, Sr. Project Manager

Dear Ms. Peddle:

### **Re: White Pines Wind Project, Prince Edward County**

We are in receipt of your letter of March 15, 2011, providing Notice of Renewable Energy Approval Application for the above-noted Class 4 wind facility to be located within the 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 or visually affected by this renewal energy undertaking. However, 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,

A handwritten signature in blue ink, appearing to read 'Sean Fraser'.

Sean Fraser  
Manager, Acquisitions and Conservation Services  
416-325-5019

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