Appendix B: Ontario Wetland Evaluation System

1 Introduction and Background

A Site Investigation at 419 Penetanguishene Road, Barrie, Ontario was completed on August 15, 2012. The weather at the time of the visit was sunny, and the temperature ranged from 15 to 20 °C. The Site Investigation was conducted over the course of one and a half (1.5) hours, between 3:00 pm and 4:30 pm.

The purpose of the site visit was to identify and evaluate any wetland communities located at or within 120 metres of the proposed ground-mounted solar facility on plot LP8 (herein referred to as the "project location"). Wetland evaluations were completed according to guidelines outlined in the Modified Southern Ontario Wetland Evaluation System (OMNR, 2011).

Wetlands are those areas that are seasonally or permanently covered by shallow water, as well as lands where the water table is close to or at the surface (Lee *et al.*, 1998). A significant wetland is an area identified as provincially significant by the OMNR using evaluation procedures established by the province, as amended from time to time (Lee *et al.*, 1998).

2 Methodology

The following approach was used to conduct the wetland evaluations:

Review of background records and information on wetland-related natural features in the vicinity of the project location. This included review of records obtained from the Natural Heritage Information Center (NHIC) database, Ontario Ministry of Natural Resources (OMNR) and Nottawasaga Valley Conservation Authority (NVCA).

Conduct Site Investigation to survey wetlands present at or within 120 metres of the project location. This included identification of wetland types; delineation of wetland community boundaries; plant species identification; and, incidental observations of nearby wildlife. Identification of wetland communities were completed based on guidelines outlined in the Ecological Land Classification for Southern Ontario (Lee *et al.*, 1998) and the Modified Southern Ontario Wetland Evaluation System (OMNR, 2011).

3 Results

3.1 Record Review Results

Both the NHIC database and OMNR record reviews indicated that there are no wetlands located at or within 120 metres of the project location. However, mapping provided by the NVCA indicated that an unevaluated wetland exists within the woodland located east of the project location; within the 120 metre buffer zone.

3.2 Site Investigation Results

The wetland mapped by NVCA included the entire woodland area located east of the project location, which included the dugout pond just west of the residential dwelling.

The Site Investigation confirmed that an artificial dugout pond is located adjacent (west) to the property owner's residential dwelling, within 120 metres east of the project location. However, dugout ponds are not naturally occurring and are not considered water bodies under Ontario Regulation 359/09, Renewable Energy Approvals under Part V.0.1 of the *Environmental Protection Act*.



During the site visit a small, narrow swamp within the woodland located east of the project location was observed. This swamp is located outside the 120 metre buffer from the project location.

As for the remainder of the woodland, the percentage of wetland species in comparison to upland species was less than 50 percent in all areas assessed with the exception of the swamp vegetation community noted above.

No significant species of flora or fauna were observed during the field survey. The following is a summary of the wetland vegetation community identified just outside the 120 metre buffer, in addition to dominant species observed.

<u>Code</u>	<u>Forms</u>	Dominant Species
S1	ls, gc, ne	ls, Cornus sericea; gc, Onoclea sensibilis, Thelypteris palustris; ne, Carex intumescens

[ELC: Red Osier Mineral Thicket Swamp Type (SWT2-5)]

Given the location of the wetland community (outside the 120 metre buffer), and the confirmation that the woodland east of the project location is dominated by upland species (> 50 percent), this natural feature will not require an evaluation of significance.

I trust this information is adequate. I would be pleased to provide additional information, to clarify any questions that arise following the review of this report.

Sincerely,

exp Services Inc.

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References:

- Lee, H., Bakowsky, W., Riley, J., Bowles, J., Puddister, M., Uhlig, P., and McMurray, S. 1998. Ecological Land Classification for Southern Ontario: First Approximation and its Application. Ontario Ministry of Natural Resources. SCSS, Science Development and Transfer Branch, Field Guide FG-02
- Ontario Ministry of Natural Resources (OMNR). 2011. Natural Heritage Assessment Guide for Renewable Energy Projects: Appendix C – Wetland Characteristics and Ecological Functions Assessment for Renewable Energy Projects. First Edition, July 2011. MNR Number 52694. Queens Printer for Ontario.

