

**Natural Heritage Assessment Evaluation of
Significance
SunEdison Oro 4 Line Solar Farm
Township of Oro-Medonte, Simcoe County
November 2012**

Prepared for:
SunEdison
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Toronto, Ontario, M5A 1N8

Prepared by:
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Project No. 101-17803-00

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Project No. 101-17803-00

November 7, 2012

Mr. Simon Gill
SunEdison
595 Adelaide Street, Suite 400
Toronto, Ontario
M5A 1N8

**Re: Natural Heritage Assessment Evaluation of Significance
SunEdison Oro 4 Line Solar Farm
Part of Lot 12, Concession 5, Edgar,
Township of Oro-Medonte, Simcoe County, Ontario**

Dear Mr. Gill:

GENIVAR Inc. is pleased to provide you with a our Natural Heritage Assessment Evaluation of Significance for the proposed SunEdison Oro 4 Line Solar Farm described as Part of Lot 12, Concession 5, Edgar, Township of Oro-Medonte, Simcoe County, Ontario. Please find the document attached for your records.

Thank you for the opportunity to complete this assignment. Please contact the undersigned if you have any questions.

Yours truly,
GENIVAR Inc.

A handwritten signature in blue ink, appearing to read "Dan J. Reeves".

Dan J. Reeves, B.Sc., M.Sc.
Project Biologist
Environment

EAC:nah

Table of Contents

Transmittal Letter

1.	INTRODUCTION	1
1.1	Project Description.....	1
1.2	Environmental Policy Context.....	1
1.2.1	Green Energy Act.....	1
1.2.2	Ontario Regulation 359/09 under the Environmental Protection Act	1
2.	METHODOLOGY	2
2.1	Qualifications of the Investigators.....	2
2.2	Site Investigation Summary	3
3.	EVALUATION OF SIGNIFICANCE.....	4
3.1	Candidate Wetlands.....	4
3.2	Candidate Significant Wildlife Habitat.....	4
3.2.1	Generalized Candidate Significant Wildlife Habitat.....	4
3.2.2	Amphibian Breeding Habitat - Woodlands	5
3.2.3	Deer Yards	5
3.2.4	Deer Movement Corridors	5
3.3	Candidate Woodlands.....	5
3.3.1	Woodland Size	6
3.3.2	Ecological Functions	6
3.3.2.1	Woodland Interior	6
3.3.2.2	Proximity to other woodlands or other habitats	6
3.3.2.3	Linkages	6
3.3.2.4	Water Protection	6
3.3.2.5	Woodland Diversity	7
3.3.3	Uncommon Characteristic.....	7
3.3.4	Woodland Evaluation of Significance Conclusions	7
3.3.4.1	Woodland WO1	7
3.3.4.2	Woodland WO3	8
3.3.4.3	Woodland WO4	8
3.3.4.4	Central Hedgerow	9
4.	CONCLUSIONS	10
5.	CLOSURE	11
6.	LITERATURE CITED.....	12

List of Tables

Table 1	Results of the Site Investigation
Table 2	Woodland Significance Criteria – Woodland WO1
Table 3	Woodland Significance Criteria – Woodland WO3
Table 4	Woodland Significance Criteria – Woodland WO4
Table 5	Woodland Significance Criteria – Central Hedgerow
Table 6	Significant Natural Feature Summary

List of Figures

Figure 1	Location Map
Figure 2	Significant Wetlands
Figure 3	Significant Wildlife Habitat
Figure 4	Generalized Candidate Significant Wildlife Habitat
Figure 5	Significant Woodlands

1. Introduction

GENIVAR Inc. (GENIVAR) has been retained by SunEdison Canada to conduct a Natural Heritage Assessment Evaluation of Significance as part of the Renewable Energy Approvals (REA) process for the proposed SunEdison Oro 4 Line Solar Farm; herein referred to as the “Project Location”. The Project Location is described as Part of Lot 12, Concession 5, Edgar, Township of Oro-Medonte, Simcoe County, Ontario (refer to Figure 1). This review has been prepared in accordance with Ontario Regulation (O.Reg.) 359/09 Renewable Energy Approvals made under Part V.0.1 of the Environmental Protection Act (Government of Ontario (Ontario), 2009); herein referred to as the “REA Regulation”.

1.1 Project Description

The owner of the subject property is investigating the feasibility of developing the SunEdison Oro 4 Line Solar Farm. The proposed solar project has been issued an Ontario Power Authority FIT Contract Number FIT-FQ91Z3W.

The Project Location is approximately 52 acres (21 ha) in size and is located southeast of the community of Edgar. It is bounded by 4th Line Road North to the west, and the Hawkestone Swamp Provincially Significant Wetland (PSW) to the north and east. Property uses within the surrounding areas are largely agricultural and rural residential. The Project Location boundaries and the associated 120 m area of influence are outlined in Figure 2.

1.2 Environmental Policy Context

1.2.1 Green Energy Act

The Green Energy Act, 2009 provides a government mandate with respect to the development of green technologies in Ontario including solar, geothermal, wind, and biofuels. The Act also revises key legislation pertaining to the roles of provincial and municipal governments and other agencies as they relate to renewable energy undertakings and approvals. The proposed development of the above referenced Project Location is consistent with renewable growth targets defined under the Green Energy Act.

1.2.2 Ontario Regulation 359/09 under the Environmental Protection Act

The REA Regulation made under the Environmental Protection Act identifies the Renewable Energy Approval (REA) requirements for renewable energy projects in Ontario.

Section 24 of O. Reg. 359/09 requires that proponents of renewable energy projects conduct a natural heritage assessment consisting of a records review and site investigation to determine whether the project is in a natural feature, within 50 m of an area of natural and scientific interest (earth science) (ANSI-ES) or within 120 m of a natural feature that is not an ANSI-ES. For the purposes of the Natural Heritage Assessment, as defined by the regulation, a ‘natural feature’ includes all or part of:

- a) *Area of natural and scientific interest (ANSI) (earth science)*
- b) *ANSI (life science)*
- c) *Coastal wetland*
- d) *Northern wetland*
- e) *Southern wetland*
- f) *Valleyland*
- g) *Wildlife habitat*
- h) *Woodland*

For natural heritage features identified in the course of the records review and site investigation, which are in or within 120 m of the project boundaries, an evaluation of significance must be conducted in accordance with Section 27 of the REA.

2. Methodology

Under O.Reg. 359/09, Section 27, the natural features identified during the records review, site investigation, or consultation with regulating agencies will be determined to be significant or otherwise if it is a woodland, a valleyland, or a wildlife habitat. Natural features will be determined to be provincially significant or otherwise if it is a southern wetland, a northern wetland, a coastal wetland, or an ANSI.

O.Reg. 359/09, Section 27(5) states that “This section does not apply if the project location is:

- A. At least 50 metres outside of all areas of natural and scientific interest (earth science); and
- B. At least 120 metres outside of all natural features that are not areas of natural and scientific interest (earth science).”

2.1 Qualifications of the Investigators

Dan Reeves, M.Sc., Project Biologist. Dan has a diverse background in environmental sciences, ecology, and biology gained through experience in academia, and work in both the private and public sectors. He has conducted multi-scale vegetation assessments and worked on a variety of long-term abundance and diversity indices. Dan has extensive experience collecting, analyzing, and reporting publication quality scientific data through experiences at several institutions. Work history paired with educational background has given him a well rounded knowledge of scientific methods, an understanding of the scientific process from concept to publication, and solid scientific communication skills. Dan received his Southern Ontario Ecosystem Landscape Classification certification in 2011.

Erin Corstorphine, M.Sc., Biologist. With a strong foundation in biological and ecological sciences, Erin has experience planning terrestrial and marine field programs, collecting and analyzing data, and preparing detailed scientific reports. Through various roles in the public and private sectors, she has gained experience with project design and implementation through involvement with class environmental assessments, renewable energy projects, species at risk surveys, vegetation surveys, stream rehabilitation and flood risk analysis. Erin was certified in the Southern Ontario Ecosystem Land Classification (ELC) in 2012.

2.2 Site Investigation Summary

To meet the requirements of Section 25 of the Ontario Regulation 359/09, a search of relevant government and non-government information sources was conducted to determine if the Project Location is located in or within 120 m of a natural feature, within 50 m of an ANSI-ES, within 120 m of a natural feature that is not an ANSI-ES, or is located in or within 120 m of a provincial park or conservation reserve (GENIVAR, 2012a). The presence and extent of natural heritage features identified within the records review were ground-truthed during the site investigation (GENIVAR, 2012b).

The site investigation confirmed that the Project Location was not located within a proposed or designated provincial park; was not located within a proposed or designated conservation reserve; and was not located within 50 m of an ANSI-ES. However, the Project Location is located within 120 m of a natural feature that is not an ANSI-ES. Refer to Table 1 for a summary of these findings.

Table 1 Results of the Site Investigation

Determination to be Made	Yes/No	Notes / Description
Located in or within 120 m of a provincial park or conservation reserve	No	The Project Location is not located within a provincial park or conservation reserve, or within 120 m of a provincial park or conservation reserve.
Located within the Protected Countryside	No	The Project Location is not located within the designated Greenbelt area Protected Countryside.
Located within the Oak Ridges Moraine Conservation Plan Area	No	The Project Location is not located within the Oak Ridges Moraine Conservation Plan Area.
Located in a natural feature as described by Section 25 of O. Reg. 359/09	No	The Project Location is not located within a natural feature as described in Section 25 of the O.Reg. 359/09.
Located within 50 m of an Earth Science ANSI	No	The Project Location is not located within 50 metres of an Earth Science ANSI.
Located within 120 m of a natural feature other than an Earth Science ANSI	Yes	<p>The Project Location is located within 120 metres of the Hawkestone Swamp, a Provincially Significant Wetland complex, and significant woodlands associated with the Hawkestone Swamp. Wetland units east of the Project Location directly linked to the Hawkestone Swamp PSW were observed and will be carried forward.</p> <p>An unmapped hedgerow was discovered within the approximate centre right of the Project Location. Candidate significant woodlands WO1, WO3 and WO4 and the central hedgerow will be carried forward to the evaluation of significance. The northern and southern hedgerows will be evaluated as part of WO1 and WO4, respectively.</p> <p>An unnamed watercourse (WC1) and associated water body (WB1) identified as warm water fish habitat exists within 120 m of the Project Location.</p> <p>Generalized candidate significant wildlife habitat exists within 120 m of the Project Location, as well as deer yards, candidate amphibian breeding habitat and candidate animal movement corridors.</p>

An evaluation of significance is required for the candidate wetlands, woodlands and significant wildlife habitat features within 120 m of the Project Location.

3. Evaluation of Significance

3.1 Candidate Wetlands

Wetlands are defined in the REA Regulation as lands that are seasonally or permanently covered by shallow water, or lands where the water table is close to or at the surface, which have hydric soils and the vegetation is dominated by hydrophytic or water-tolerant plants (Ontario, 2009). There are four major wetland types; which are classified as swamps, marshes, bogs, and fens. A significant wetland is defined as an area identified as provincially significant by the OMNR using evaluation procedures established by the Province, as amended from time to time (OMMAH, 2005). Accordingly, it is the responsibility of the OMNR to both identify and classify wetlands as significant in Ontario.

The Hawkestone Swamp has been evaluated by the OMNR and designated a Provincially Significant Wetland. Additional wetland areas (refer to 'wetland' layer depicted in Figure 2) were observed within the study area and were subsequently assessed, characterized and delineated by a certified wetland evaluator with Natural Resource Solutions Inc. (2011). These wetland areas were found to be contiguous with the Hawkestone Swamp PSW and were therefore considered to be provincially significant. Following a review of the NRSI wetland evaluation (2011), Midhurst District staff confirmed that the newly identified wetland units would be considered significant by the OMNR (pers. comm. G. Findlay October 5, 2012) given their direct link to the existing Hawkestone Swamp PSW. An Environmental Impact Study needs to be completed to address any potential negative impacts the proposed development will have on this feature.

3.2 Candidate Significant Wildlife Habitat

Candidate significant wildlife habitat was identified within 120 m of the Project Location (refer to Figures 3 and 4). For each candidate significant wildlife habitat identified within 120 m of a project component, the habitat must either be evaluated for significance, or assumed to be significant pending pre-construction studies. The following candidate significant wildlife habitat has been identified within 120 m of solar panels:

- Generalized candidate significant wildlife habitat;
- Amphibian breeding habitat (woodlands)
- Deer yards
- Deer movement corridors

3.2.1 Generalized Candidate Significant Wildlife Habitat

Generalized candidate significant wildlife habitat exists within the Hawkestone Swamp PSW, and the woodlands and newly mapped wetland units associated with this feature east of the Project Location (refer to Figure 4). Additional General Candidate Significant Wildlife Habitat exists within the riparian corridor west of the Project Location associated with watercourse WC1. General Candidate Significant Wildlife Habitat must be considered significant and will be carried forward to the environmental impact study (EIS).

3.2.2 Amphibian Breeding Habitat - Woodlands

Candidate amphibian breeding habitat (woodlands) (AWBH) will be assumed to be significant pending pre-construction studies and will therefore be carried forward to the EIS.

3.2.3 Deer Yards

Deer yards are identified by the OMNR and as such are considered significant. Deer yards within 120 m of the Project Location will be carried forward to the EIS.

3.2.4 Deer Movement Corridors

Candidate deer movement corridors are forested areas that provide linkages between deer yards and other forested areas within the landscape. The southern hedgerow and woodland WO4 provide a linkage between the deer yard and forested lands southwest of the Project Location. To be significant, deer movement corridors should be at least 200 m in width with gaps less than 20 m wide (OMNR, 2012). The southern hedgerow and woodland WO4 are 20 m and 120 m wide, respectively and therefore do not meet the size criteria to be considered a significant deer movement corridor. As such, this feature will not be carried forward to the EIS.

Other forested areas adjacent to the deer yard and outside the 120 m area of influence of the Project Location may serve as deer movement corridors. The woodland southeast of the Project Location may provide access to the deer yards from lands to the south (DMCO2), while the Hawkestone Swamp PSW provides protection for deer moving between the deer yard and forested lands to the east. As neither area is within 120 m of the Project Location, these candidate movement corridors will not be formally evaluated for significance and will not be carried forward to the EIS.

3.3 Candidate Woodlands

As discussed above, the Project Location is within 120 m of four (4) candidate significant woodlands. The woodland location and boundaries were confirmed during the site investigation, and are shown on Figure 5. The records review (GENIVAR, 2012a) indicates that woodland WO2 has been classified as significant (Schedule B, Township of Oro-Medonte Official Plan, 2007) therefore it will be treated as significant and carried forward to the EIS.

According to the OMNR Natural Heritage Assessment Guide for Renewable Energy Projects (2011), common determinants of woodland significance include the following general characteristics:

- Woodland Size Criteria
- Ecological Functions Criteria
 - Woodland interior
 - Proximity to other woodlands or other habitats
 - Linkages
 - Water protection
 - Woodland diversity
- Uncommon Characteristic Criteria

Area thresholds are dependent on the percentage of cover within the lower-tier municipality, which is 45% for the Township of Oro-Medonte (pers. comm. County of Simcoe, August 14, 2012). Specific criteria used to determine woodland significance are outlined below.

3.3.1 Woodland Size

Woodland size refers to the spatial extent of the woodland, continuous even if intersected by narrow gaps 20 m or less in width between crown edges (OMNR, 2011). Size value is related to the scarcity of woodland in the landscape derived on a municipal basis. A woodland should be considered significant if:

- The woodland is 50 ha in size or greater where woodland cover is 31-60% of the land cover.

3.3.2 Ecological Functions

3.3.2.1 Woodland Interior

Woodland interior habitat is defined as being more than 100 m from the woodland edge and is important to the continued well-being of some species (OMNR, 2011). Woodlands should be considered significant if they have:

- 8 ha or more of interior habitat where woodland cover is 31-60% of land cover; or,

3.3.2.2 Proximity to other woodlands or other habitats

Woodlands should be considered significant if a portion of the woodland is located within 30 m of a significant natural feature or fish habitat and the entire woodland meets the following minimum area thresholds (OMNR, 2011):

- 10 ha in size or greater where woodland cover is 31-60% of the land cover; or,

3.3.2.3 Linkages

Woodlands should be considered significant if they provide a connecting link between two other significant features, each of which is within 120 m and the woodland meets the following minimum area thresholds (OMNR, 2011):

- 10 ha in size or greater where woodland cover is 31-60% of the land cover; or,

3.3.2.4 Water Protection

Woodlands should be considered significant if they are located within 50 m of a sensitive groundwater discharge, sensitive recharge, sensitive headwater area, watercourse or fish habitat and the woodland within this distance meets the following minimum area thresholds (OMNR, 2011):

- 4 ha in size or greater where woodland cover is 31-60% of the land cover; or,

3.3.2.5 Woodland Diversity

Woodlands should be considered significant if they have an area dominated, singly or in combination, by native, naturally-occurring sugar maple, black maple, silver maple, red maple, yellow birch, hickory, beech, black ash, walnut, tamarack, spruce, pine, oak, basswood or hemlock and the woodland meets the following minimum area thresholds (OMNR, 2011):

- 10 ha in size or greater where woodland cover is 31-60% of the land cover; or,

3.3.3 Uncommon Characteristic

Woodlands should be considered significant if they have a vegetation community with a provincial ranking of S1, S2, or S3 as ranked by the NHIC and are 0.5 ha or more in size, or habitat of a rare, uncommon or restricted woodland plant species and are 0.5 ha or more in size, or characteristics of older woodlands or woodlands with larger tree size structure in native species and meets the following minimum area thresholds:

- 4 ha in size or greater where woodland cover is 31-60% of the land cover; or,

3.3.4 Woodland Evaluation of Significance Conclusions

In conducting the evaluation of significance, each significance criteria was examined and if the forested area met the predetermined level of significance for any criteria, it was considered significant.

3.3.4.1 Woodland WO1

Woodland WO1, which is north of Project Location is physically connected to the Hawkestone Swamp Provincially Significant Wetland (PSW) by two narrow wooded hedgerows approximately 20 m in width and 85 m in length, and is therefore considered part of the ecological unit. The background review of the site and site reconnaissance did not reveal any uncommon woodland characteristics associated with the woodland in question. Please refer to Table 2 below for an overview of significance findings.

Table 2 Woodland Significance Criteria – Woodland WO1

Variable	Woodland Characteristics	Findings
Woodland Size Criteria	Approximately 2.14 ha in size (including hedgerows)	Not significant
Ecological Functions Criteria		
Woodland interior	No interior habitat	Not significant
Proximity to other woodlands or other habitats	Woodland is directly linked to the Hawkestone Swamp PSW via two hedgerows	Significant
Linkages	Woodland is located between the Hawkestone PSW and generalized candidate significant wildlife habitat, but does not meet the area threshold for significance.	Not significant
Water protection	No sensitive water sources were identified within woodland	Not significant
Woodland diversity	Native species are dominant, but woodland does not meet the size criteria	Not significant
Uncommon Characteristic Criteria	None identified	Not significant

Based upon the criteria outlined within the Natural Heritage Assessment Guide for Renewable Energy Projects (OMNR, 2011), the woodland to the north of the proposed development site is considered significant, and an Environmental Impact Study needs to be completed to address any potential negative impacts the proposed development will have on the feature.

3.3.4.2 Woodland WO3

Woodland WO3, which is east of Project Location has been identified as a mixed swamp (SWMM1-1), which is contiguous with the Hawkestone Swamp Provincially Significant Wetland (PSW). The woodland is approximately 10.4 ha in size and therefore does not meet the minimum size criteria of 50 ha. The background review of the site and site reconnaissance did not reveal any uncommon woodland characteristics associated with the woodland in question. Please refer to Table 3 below for an overview of significance findings.

Table 3 Woodland Significance Criteria – Woodland WO3

Variable	Woodland Characteristics	Findings
Woodland Size Criteria	10.4 ha	Not significant
Ecological Functions Criteria		
Woodland interior	No interior habitat	Not significant
Proximity to other woodlands or other habitats	Woodland is contiguous with the Hawkestone Swamp PSW.	Significant
Linkages	Woodland is located between two arms of the Hawkestone PSW and generalized candidate significant wildlife habitat.	Significant
Water protection	The woodland is within 30 m of a watercourse that may provide fish habitat.	Significant
Woodland diversity	Native species are dominant within this woodland.	Significant
Uncommon Characteristic Criteria	None identified	Not significant

Based upon the criteria outlined within the Natural Heritage Assessment Guide for Renewable Energy Projects (OMNR, 2011), woodland WO3 is considered significant, and will therefore be carried forward to the Environmental Impact Study (EIS).

3.3.4.3 Woodland WO4

The woodland (WO4) at the southern extreme of the property is bisected by a driveway and other agricultural laneways that service the single-family dwelling within the forest interior. The woodland is contiguous with the southern hedgerow, which runs along the northern border of WO4 between the western property boundary and the southeast corner of the Project Location. Based upon the criteria outlined within the Natural Heritage Assessment Guide for Renewable Energy Projects (OMNR, 2011) WO4 and the associated hedgerow are not considered significant. Please refer to Table 4 below for an overview of significance findings.

Table 4 Woodland Significance Criteria – Woodland WO4

Variable	Woodland Area	Findings
Woodland Size Criteria	Approximately 3.21 ha in size (including hedgerow)	Not significant
Ecological Functions Criteria		
Woodland interior	No interior habitat	Not significant
Proximity to other woodlands or other habitats	Hedgerow is within 30 m of the Hawkestone Swamp PSW, but the woodland/hedgerow does not meet the size criteria.	Not significant
Linkages	Woodland is not located between two significant features, each of which is within 120 m. The woodland to the southwest, which may be significant, is 130 m away, and the woodland/hedgerow does not meet the required size criteria.	Not significant
Water protection	No sensitive water sources were identified within woodland	Not significant
Woodland diversity	Large proportion of trees were planted and woodland does not meet the size criteria	Not significant
Uncommon Characteristic Criteria	None identified	Not significant

3.3.4.4 Central Hedgerow

An additional hedgerow, approximately 140 m in length and 10 – 20 m wide, was identified within the approximate centre of the Project Location during the site investigation. The central hedgerow consists predominantly of Sugar Maple with occasional Basswood, White Ash (*Fraxinus americana*), White Elm and Black Cherry (*Prunus serotina*) and has a relatively well-developed understory composition. Several herbaceous species often associated with mature forest habitats were present within this area, including Broad-leaved Toothwort (*Cardamine diphylla*). The size and location of the hedgerow preclude it from being considered significant based upon the criteria outlined within the Natural Heritage Assessment Guide for Renewable Energy Projects (OMNR, 2011). Please refer to Table 5 below for an overview of significance findings.

Table 5 Woodland Significance Criteria – Central Hedgerow

Variable	Woodland Area	Findings
Woodland Size Criteria	Approximately 0.29 ha in size	Not significant
Ecological Functions Criteria		
Woodland interior	No interior habitat	Not significant
Proximity to other woodlands or other habitats	Woodland is adjacent to a significant wetland but does not meet the size criteria	Not significant
Linkages	Woodland is not located between two significant features	Not significant
Water protection	No sensitive water sources were identified within woodland	Not significant
Woodland diversity	Native species are dominant but woodland does not meet size criteria	Not significant
Uncommon Characteristic Criteria	None identified	Not significant

4. Conclusions

The natural heritage records review and site investigation reports prepared by GENIVAR (2012a, 2012b) identified the presence of natural heritage features in and within 120 m of the Project Location. Four woodland features were evaluated for significance: woodland WO1 to the north, which is linked to the Hawkestone Swamp PSW and significant woodland (WO2) by way of two narrow hedgerows; WO3 to the east; a hedgerow in the approximate centre right of the Project Location; and woodland WO4 to the south. The Hawkestone Swamp PSW and newly mapped provincially significant wetland units are located within 120 m of the Project Location. Candidate significant wildlife habitat was also identified within 120 m of the Project Location. This report evaluated the significance of these natural heritage features, the results of which are summarized below.

Table 6 Significant Natural Feature Summary

Natural Feature	Result of Evaluation	Proximity to Project Location	Carried forward to EIS
Woodlands			
Woodland WO1	Significant	within -15 m	Yes
Woodland WO3	Significant	30 m	Yes
Woodland WO4	Not significant	15 m	No
Central Hedgerow	Not significant	Within Project Location	No
Wetlands			
Hawkestone Swamp (including newly evaluated wetland units)	Provincially significant	30 m	Yes
Wildlife Habitat			
Generalized Candidate Significant Wildlife Habitat (waterfowl stopover and staging habitat (aquatic), bat maternity colonies, woodland area-sensitive breeding bird habitat, terrestrial crayfish habitat, habitat for species of conservation concern)	Treated as significant	15 m	Yes
Amphibian Breeding Habitat (woodlands)	Assumed significant pending pre-construction studies	Within Project Location	Yes
Deer Yard	Significant	30 m	Yes
Deer movement corridors DMC01	Not significant	15 m	No

Based on the results of this evaluation, an Environmental Impact Study must be completed for the significant woodlands (WO1, WO2 and WO3), the Hawkestone Swamp Provincially Significant Wetland, generalized candidate significant wildlife habitat, deer yards and amphibian woodland breeding habitat within 120 m of the Project Location.

5. Closure

This report has been prepared by GENIVAR Inc. The assessment represents the conditions at the subject property only at the time of the assessment, and is based on the information referenced and contained in the report. GENIVAR Inc. attests that to the best of our knowledge, the information presented in this report is accurate. The use of this report for other projects without written permission of SunEdison Canada and GENIVAR Inc. is solely at the user's own risk.

Thank you for the opportunity to complete this report. We trust that this information is adequate. If there are any questions please do not hesitate to contact the undersigned.

Yours truly,
GENIVAR Inc.
Prepared by:



Erin Corstorphine, M.Sc.
Biologist

Reviewed by:

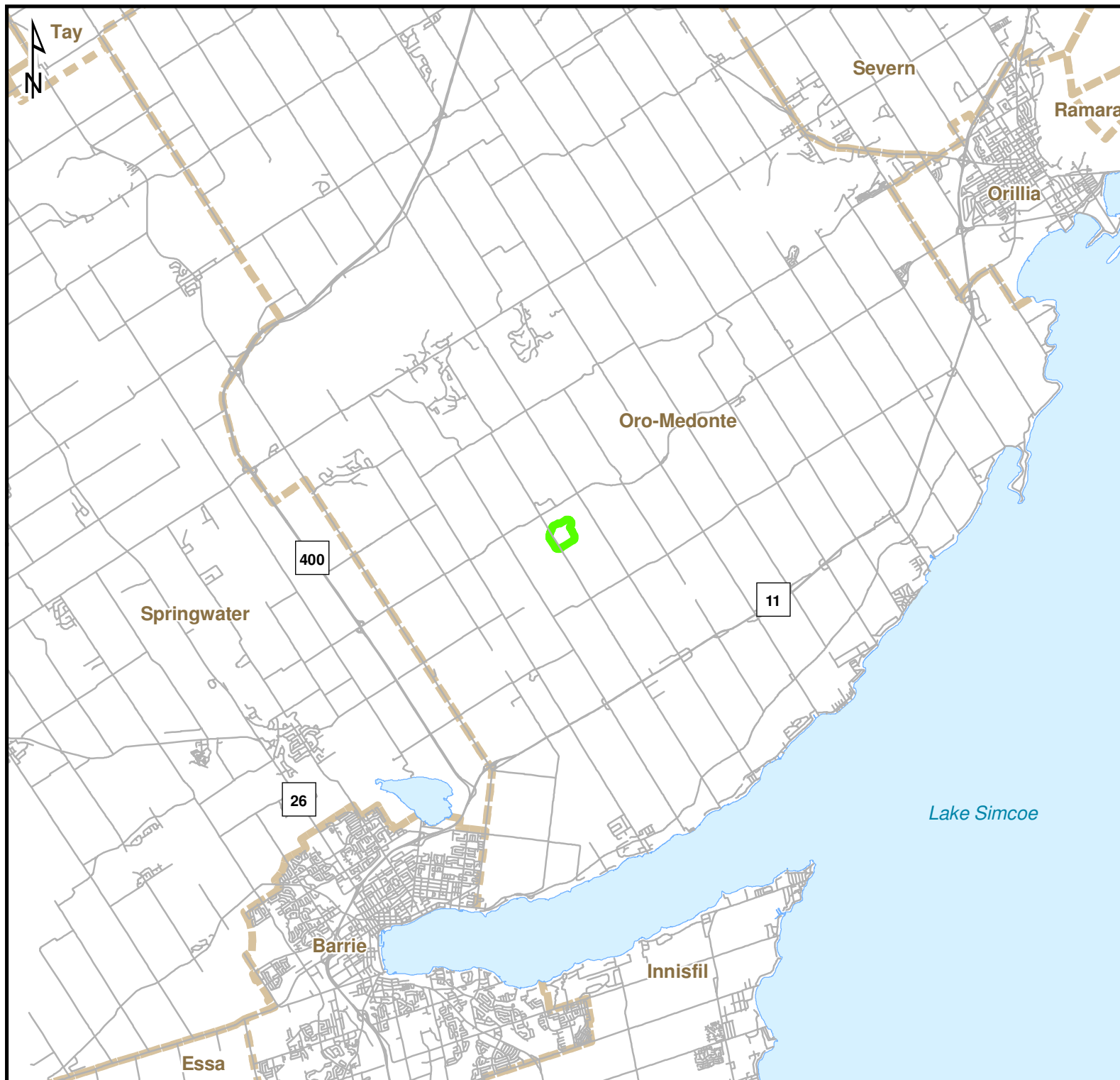


Dan Reeves, M.Sc.
Project Biologist

6. Literature Cited

- GENIVAR Inc. 2012a. Natural Heritage Assessment Records Review: SunEdison Oro 4 Line Solar Farm.
- GENIVAR Inc. 2012b. Natural Heritage Assessment Site Investigation Report: SunEdison Oro 4 Line Solar Farm.
- Government of Ontario. 2009. Green Energy Act.
- Government of Ontario (Ontario). 2009. Ontario Regulation 359/09. Renewable Energy Approvals under Part V.0.1 of the Environmental Protection Act. Available online: http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_090359_e.htm#BK53. Accessed June, 2012.
- Natural Resource Solutions Inc. (NRSI). 2011. Oro 4 Line Solar Farm: Wetland Evaluation and Delineation. 27 pp.
- Ontario Ministry of Municipal Affairs and Housing. 2005. Provincial Policy Statement. Queen's Printer for Ontario.
- Ontario Ministry of Natural Resources. 2011. Natural Heritage Assessment Guide for Renewable Energy Projects. First Edition. Queens Printer for Ontario.
- Ontario Ministry of Natural Resources. 2012. Ecoregion 6E Significant Wildlife Habitat Criterion Schedule.
- Township of Oro-Medonte. 2007. Township of Oro-Medonte Official Plan. Available online: http://calendar.simcoe.ca/partners/oromed/articles/OfficialPlan/OfficialPlan_Mar07.pdf. Accessed June 2012.

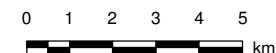
Figures



Legend



Scale:



1:175,000

Project:

SunEdison
Oro 4 Line Solar Farm

Title:

Location Map

Project No.:

101-17803-00

Date:

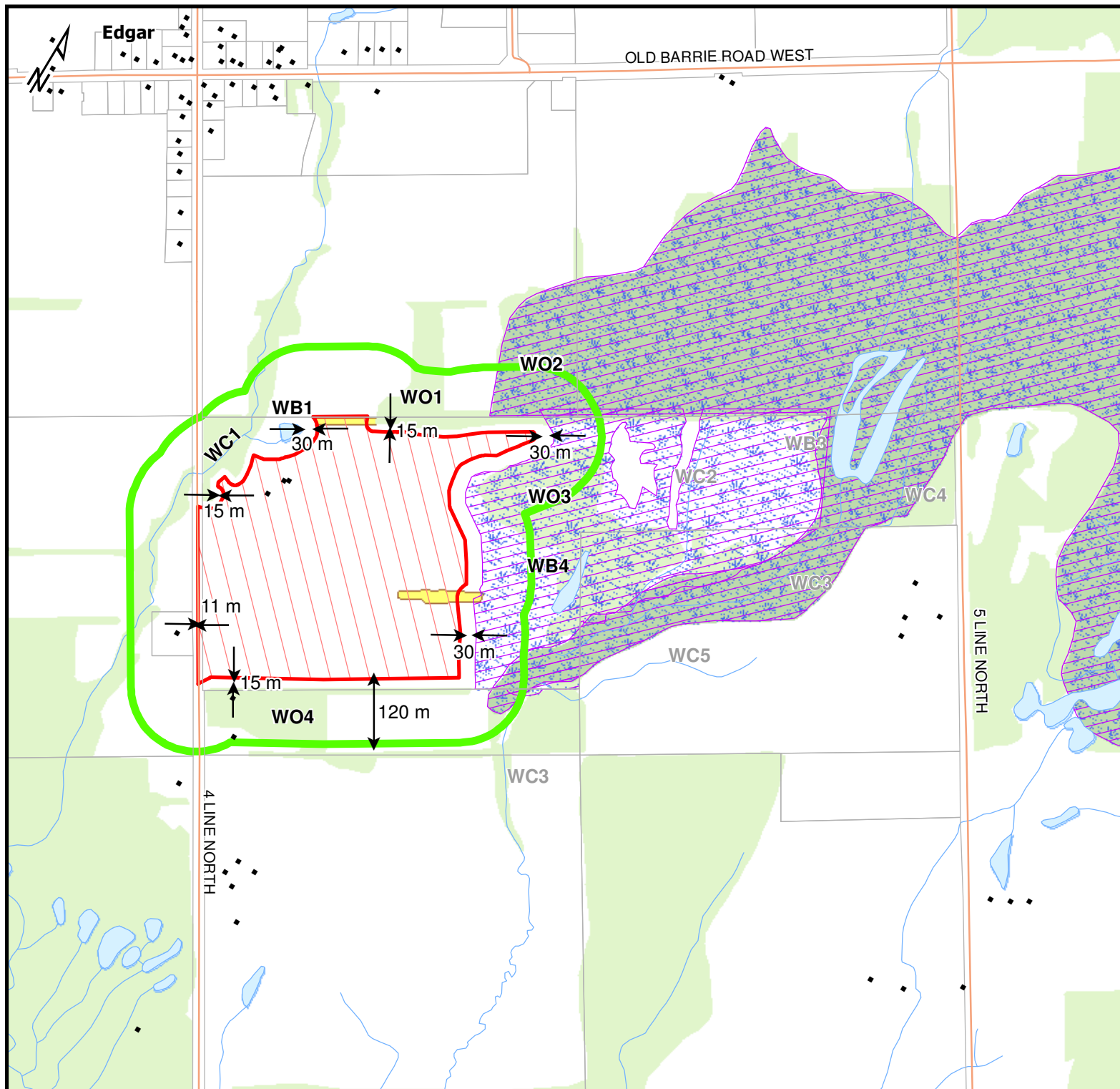
September 18, 2012

Revision No.:

0

Figure No.:

1



Legend

- Building
- Road
- Watercourse (WC)
- Waterbody (WB)
- Wetland
- Provincially Significant Wetland
- Wooded Area (WO)
- Hedgerow
- Lot
- Project Location
- 120 m Area of Influence
- Significant Wetland

ONTARIO

Sudbury, Kincardine, Owen Sound, Toronto, Lake Huron, Lake Ontario, Lake Erie, Windsor, London, Sarnia

Scale:

0 100 200 300 400 500 m

1:10,000

Project:

SunEdison
Oro 4 Line Solar Farm

Title:

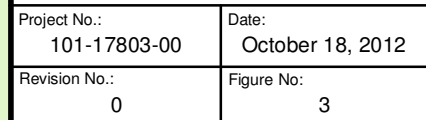
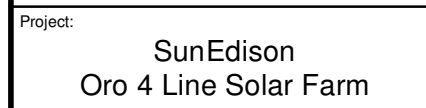
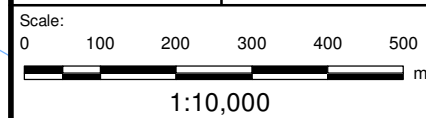
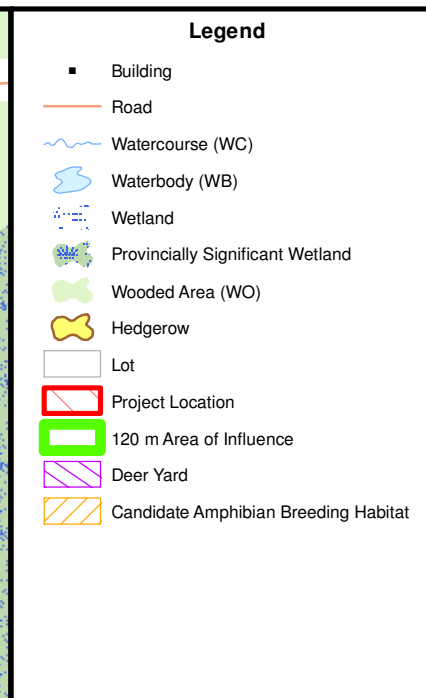
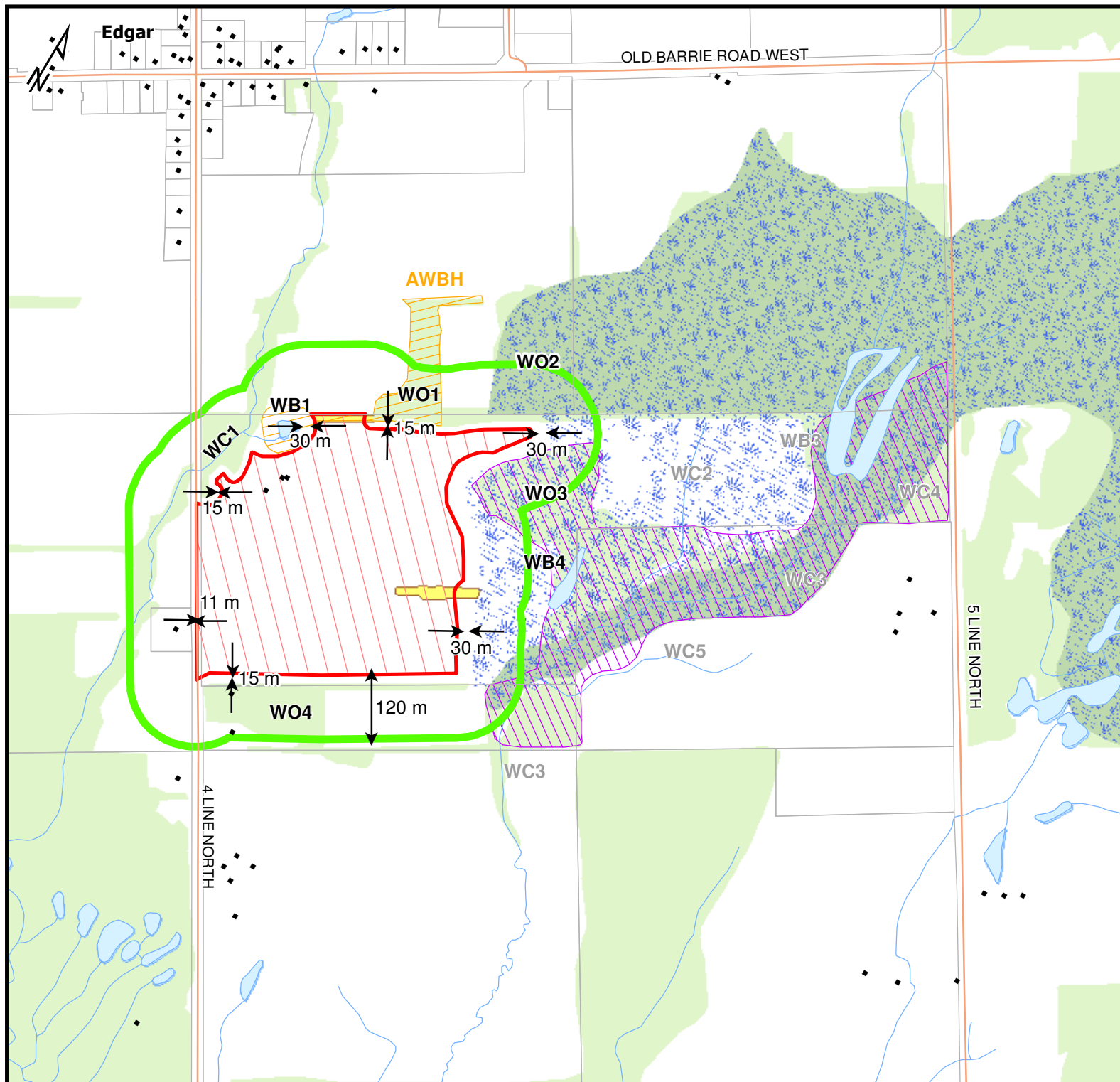
Significant Wetlands

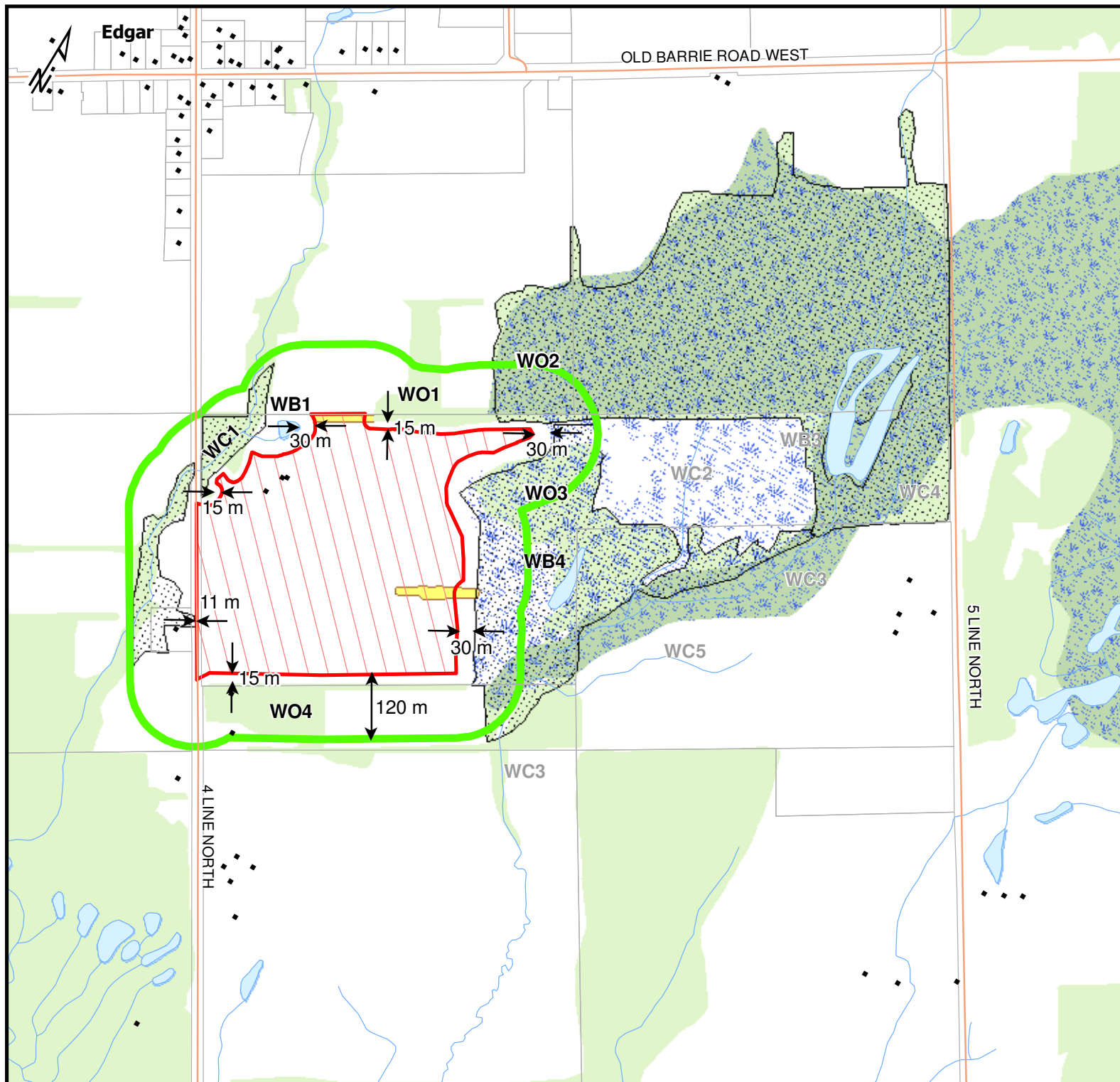
Project No.: 101-17803-00

Revision No.: 0

Date: October 18, 2012

Figure No.: 2





Legend

- Building
- Road
- Watercourse (WC)
- Waterbody (WB)
- Wetland
- Provincially Significant Wetland
- Wooded Area (WO)
- Hedgerow
- Lot
- Project Location
- 120 m Area of Influence
- Generalized Candidate Significant Wildlife Habitat

Map of Ontario showing the project location near Sudbury.

Scale:

0 100 200 300 400 500 m

1:10,000

Project:

SunEdison
Oro 4 Line Solar Farm

Title:

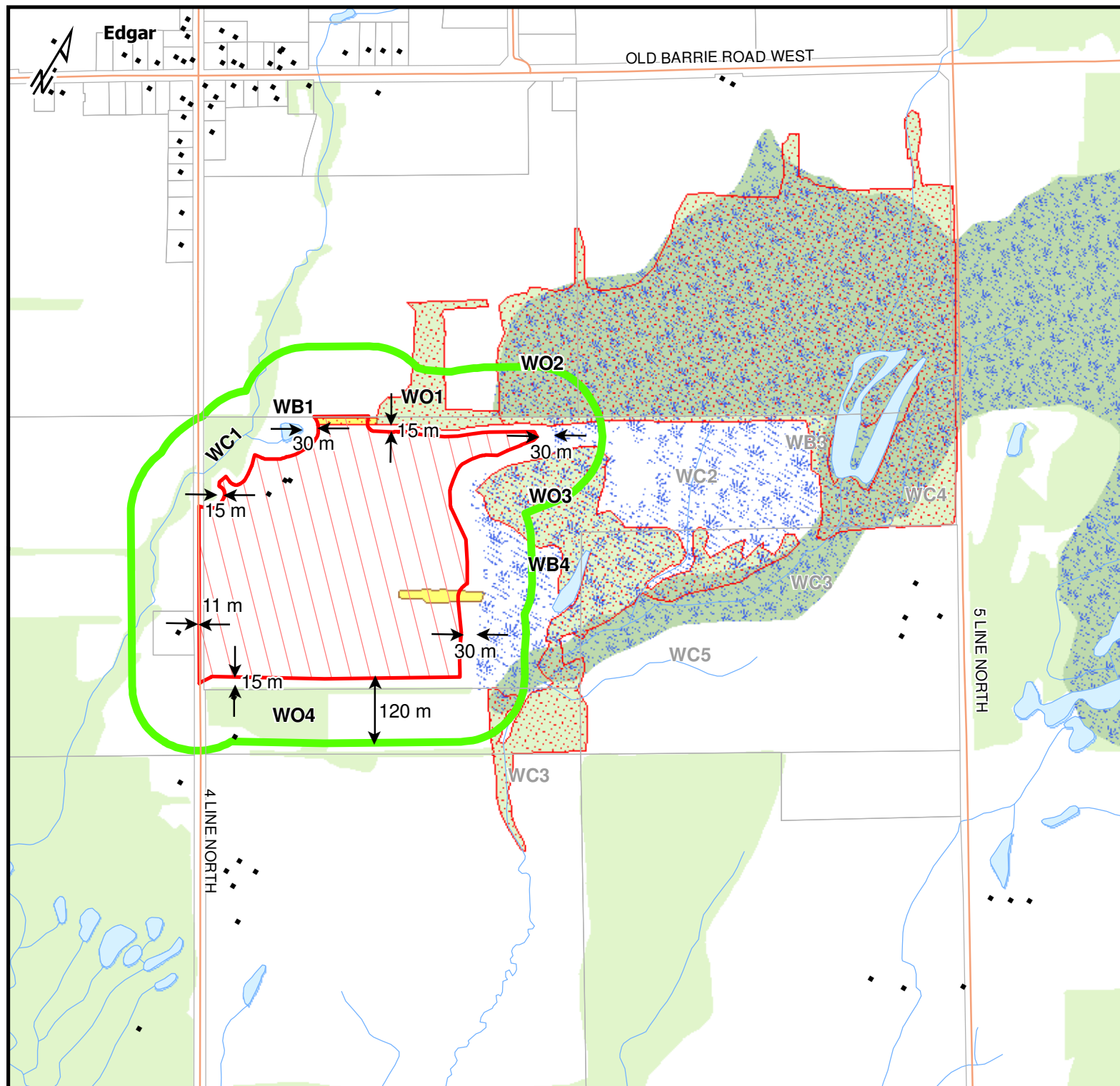
Generalized Significant
Wildlife Habitat

Project No.:
101-17803-00

Date:
September 18, 2012

Revision No.:
0

Figure No.:
4



Legend	
	Building
	Road
	Watercourse (WC)
	Waterbody (WB)
	Wetland
	Provincially Significant Wetland
	Wooded Area (WO)
	Hedgerow
	Lot
	Project Location
	120 m Area of Influence
	Significant Woodland

SunEdison simplifying solar	GENIVAR
Scale: 0 100 200 300 400 500 1:10,000	
Project: SunEdison Oro 4 Line Solar Farm	
Title: Significant Woodlands	
Project No.: 101-17803-00	Date: September 18, 2012
Revision No.: 0	Figure No.: 5