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## **Appendix A**

### Natural Heritage Addendum

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**Ministry of Natural  
Resources and Forestry**

Regional Resources Section  
Southern Region  
Regional Operations Division  
300 Water Street  
Peterborough, ON K9J 3C7  
Tel: 705-755-xxxx  
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August 26, 2014

East Durham Wind Inc.  
390 Bay Street, Suite 1720  
Toronto, ON  
M5H 2Y2

**RE: East Durham Wind Energy Centre Project NHA Second Addendum**

Dear East Durham Wind Inc

The Ministry of Natural Resources and Forestry (MNRF) has received the document dated January 2014 that describes modifications to the East Durham Wind Energy Centre Project made subsequent to MNRF letter confirming the Natural Heritage Assessment in respect of the project.

Upon review of the modifications, MNRF is satisfied that the Natural Heritage Assessment requirements of Ontario Regulation 359/09 have been met. Please add this letter as an addendum to the confirmation letter issued December 10, 2012, and the reconfirmation letter issued on January 8<sup>th</sup>, 2013 for the East Durham Wind Energy Center Project.

If you wish to discuss, please contact Ruth Lindenburger at [ruth.lindenburger@ontario.ca](mailto:ruth.lindenburger@ontario.ca)

Sincerely,

A handwritten signature in blue ink that reads "K. Milian".

Kazia Milian  
A/Regional Land Use Planning Supervisor  
Regional Resources Section, Southern Region

Cc Ruth Lindenburger, Southern Region, MNRF  
Clairissa Myschowoda, Southern Region, MNRF  
Nick Colella, Environmental Approvals Branch, MOECC  
Narren Santos, Environmental Approvals Branch, MOECC  
Andrew Ryckman, Natural Resource Solutions Inc.

# **EAST DURHAM WIND ENERGY CENTRE**

## **NATURAL HERITAGE ASSESSMENT – ADDENDUM NO. 2 ONTARIO REGULATION 359/09**

*prepared for*

**GENIVAR INC.**

*on behalf of*

**EAST DURHAM WIND, INC.**

*by*




**JANUARY 2014  
LGL PROJECT TA8119-09**

# EAST DURHAM WIND ENERGY CENTRE

## NATURAL HERITAGE ASSESSMENT – ADDENDUM NO. 2 ONTARIO REGULATION 359/099

*prepared by:*

  
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**JANUARY 2014**  
**LGL PROJECT TA8119-09**

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## **ABBREVIATIONS AND DEFINITIONS**

**ANSI** – Area of Natural and Scientific Interest

**EIS** – Environmental Impact Study

**NHA** – Natural Heritage Assessment

**O. Reg. 359/09** – Ontario Regulation 359/09

**Project** – East Durham Wind Energy Centre

**Project Area** – areas within 120m of project components (see Figure 1 of this report for a mapped image of the project components and project area).

**Project Location** – part of a land and all or part of any building or structure in, or, over which a person is engaging in or proposed to engage in the project and includes air space. The location includes all components of the renewable energy facility such as wind turbines, lay down areas, access roads, crane assembly areas, walking paths, hydro lines/corridors, transformer stations, fencing, lighting, and construction yards.

**PSW** – Provincially Significant Wetland (MNR)

**REA** – Renewable Energy Approval

**SWH – significant wildlife habitat** – wildlife habitat that meets the MNR criteria outlined in the Significant Wildlife Habitat Draft Ecoregion 6E Criterion Schedule (OMNR, 2012a).

**Study Area** – general location of the wind energy project, is bounded by Concession Road 6 to the north; Sideroad 50 and Artemesia-Glenelg Townline to the east; the West Grey-Southgate municipal boundary to the south (Stone Hill Road); and, Baseline to the west.

## 1.0 INTRODUCTION

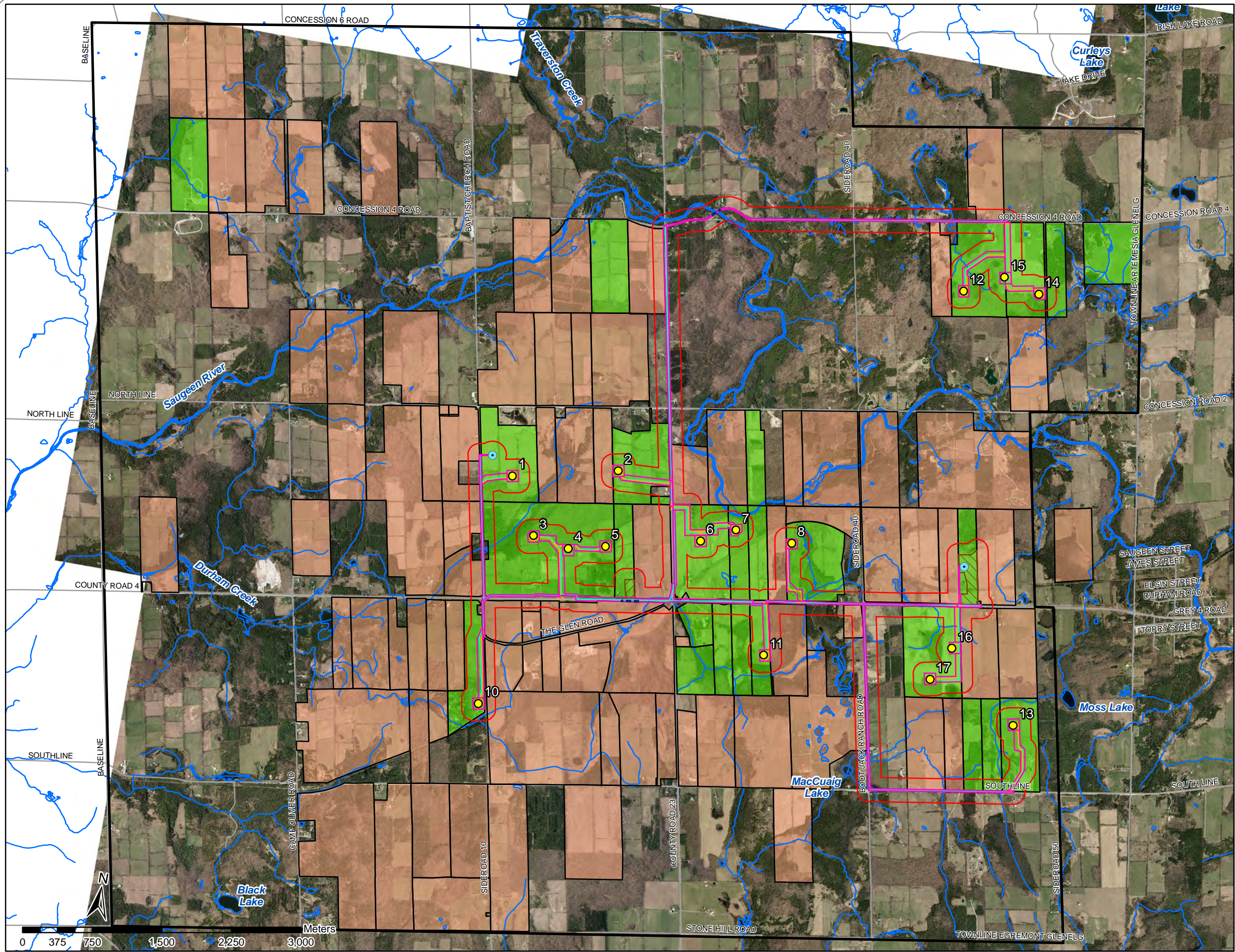
East Durham Wind, Inc. is proposing to construct a wind energy project in the Municipality of West Grey, Grey County, Ontario. The proposed project will be referred to as the East Durham Wind Energy Centre (Project). This facility will convert wind energy into electricity to be fed into the Hydro One grid. The wind turbine technology proposed for this Project is the GE 1.6-100 model wind turbine. With a total maximum nameplate capacity of up to 23 MW, the Project is categorized as a Class 4 facility.

As the proponent, East Durham Wind, Inc. is required to follow the provincial policies and standards outlined in The Renewable Energy Approvals (REA) process as prescribed in *Ontario Regulation 359/09* (O. Reg. 359/09) under the *Environmental Protection Act* as they pertain to wind energy projects. LGL Limited has been retained as a sub-consultant to Genivar Inc. to conduct a Natural Heritage Assessment (NHA) for the Project in accordance with the requirements of the REA process.

The original version of the NHA for the project was submitted to MNR for review in October 2012 and a Letter of Confirmation was received from MNR dated December 10, 2012. As a result of additional information obtained through further detailed construction and design analysis, some revisions to the project layout were proposed in December 2012 and an addendum to the NHA was completed. The addendum was submitted to MNR on December 2, 2012 and a Letter of Re-confirmation was received on January 8, 2013.

Since that time, the proponent has identified the possibility that changes to the location of a few access road entrances from county roads may be necessary in order to comply with revised Grey County entrance permit policy which has come into effect since the January 2013 Re-confirmation Letter was received from MNR. Three entrances have been identified as in possible need of revision; two along County Road 4 and one on The Glen Road. The proposed changes are displayed in Figures 2 and 3, labelled as A through C. The original project layout (Figure 1) has been included for reference purposes. The project layout remains within the boundary of the study area as presented in the original NHA report and proposed changes are within participating properties where full access was provided. Given that site investigation of these areas had already been completed as part of the effort associated with original NHA, the only additional field survey conducted was targeted screening for plant species at risk (e.g. Butternut) within the revised construction disturbance areas.

This addendum report has been prepared to evaluate the proposed changes from a natural heritage perspective and is to be considered, in combination with the East Durham Wind Energy Centre Natural Heritage Assessment (LGL, 2012a) and the East Durham Wind Energy Centre Natural Heritage Assessment – Addendum (LGL, 2012b) to comprise the complete NHA for the East Durham Wind Energy Centre.



### LEGEND

**Site Plan (2012-11-21)**

- Turbine
- MET Tower
- Access Road
- Construction Disturbance (Dec 2012)
- Underground Collection
- - - Overhead Transmission
- MET Tower 200ft Disturbance Area
- Substation
- Laydown Area
- 120m Buffer from Project Components
- Study Area (Dec 2011)
- Watercourse (LIO, 2012-06-19)
- Waterbody (LIO, 2012-06-19)
- Parcel Boundary

**Property Access**

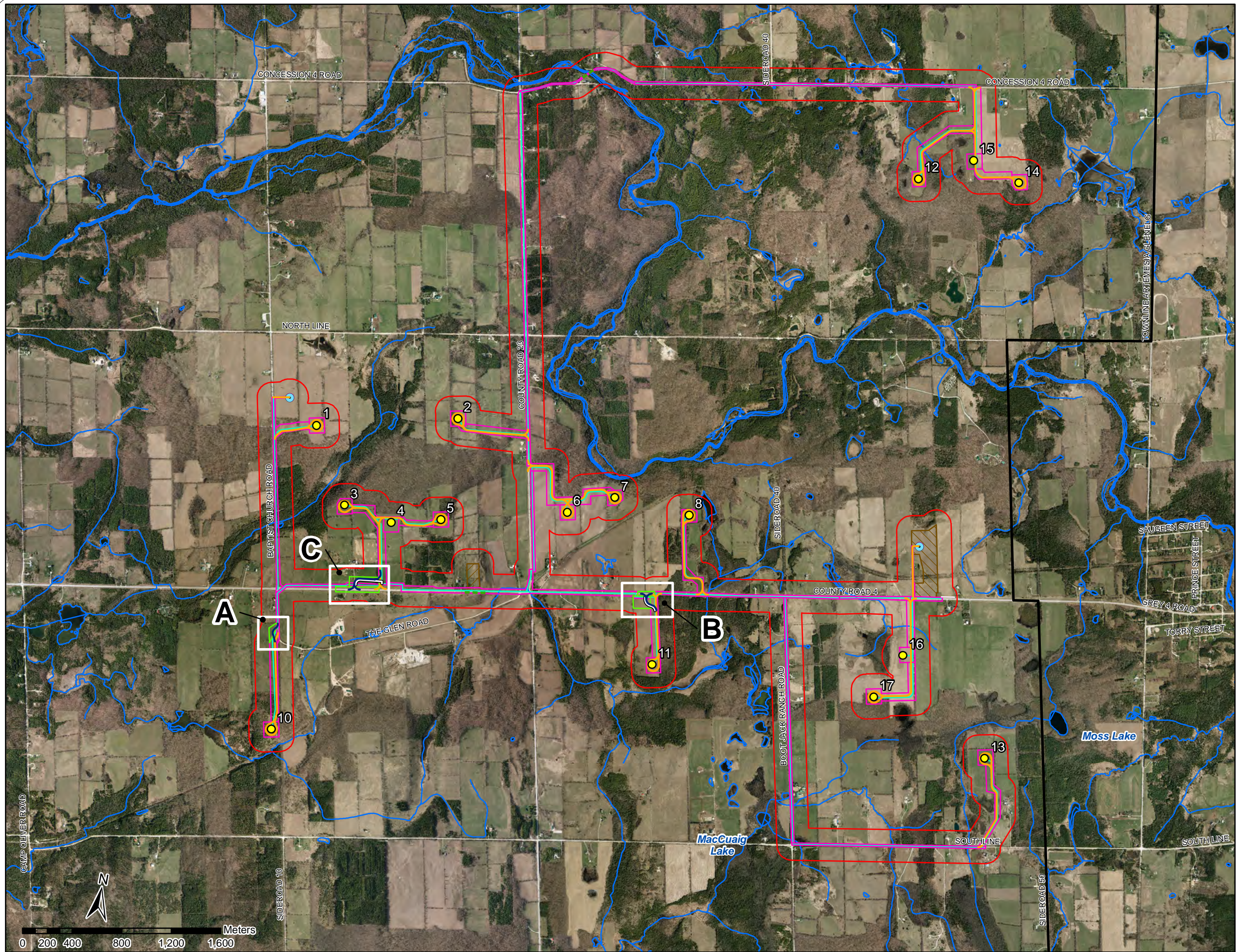
- Access Provided
- Access Denied

## Project Location & Property Access



Project	TA8119	Figure	1
Date	December, 2013	Prepared By:	KC
Scale	1:40,000	Verified By:	LKR





**LEGEND**

- Additional Construction Disturbance Area for Access Roads and Associated Underground Collection to T4, T10 and T11 (Jan 2014)
- Access Road (Jan 2014)
- Collection (Jan 2014)

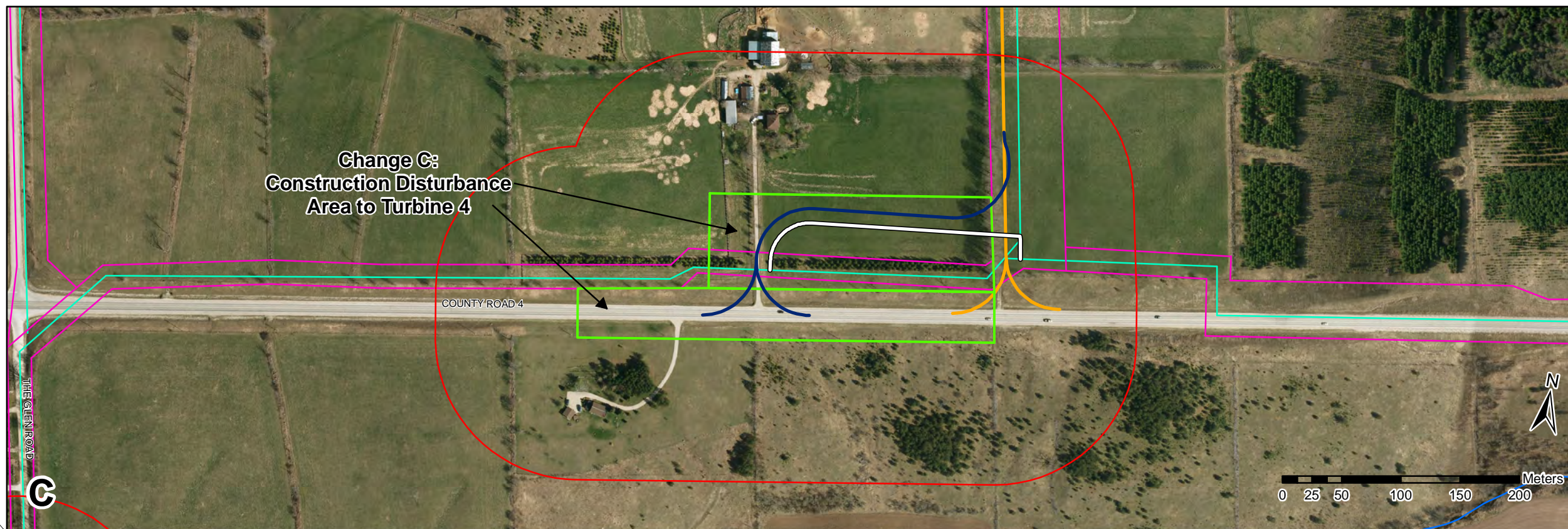
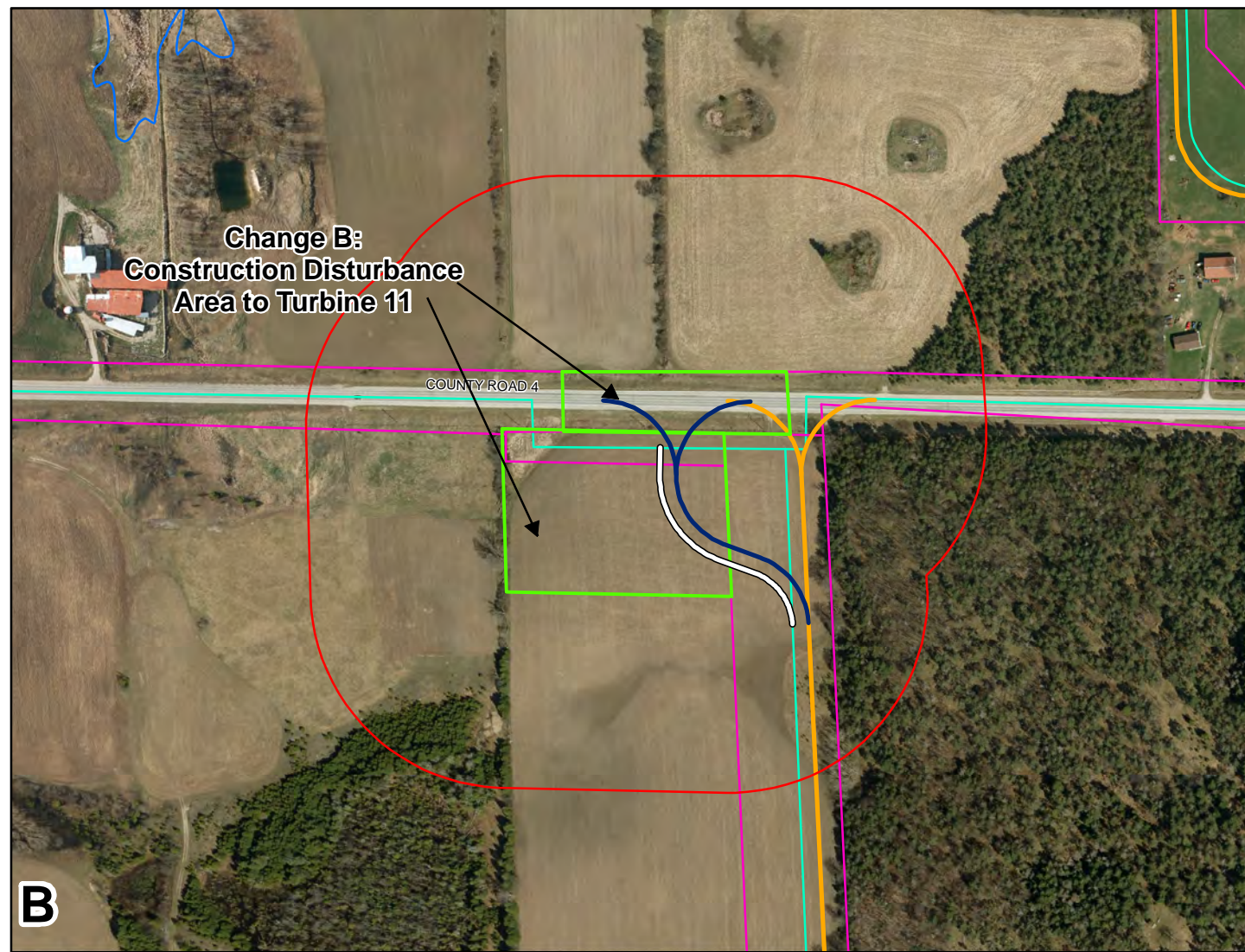
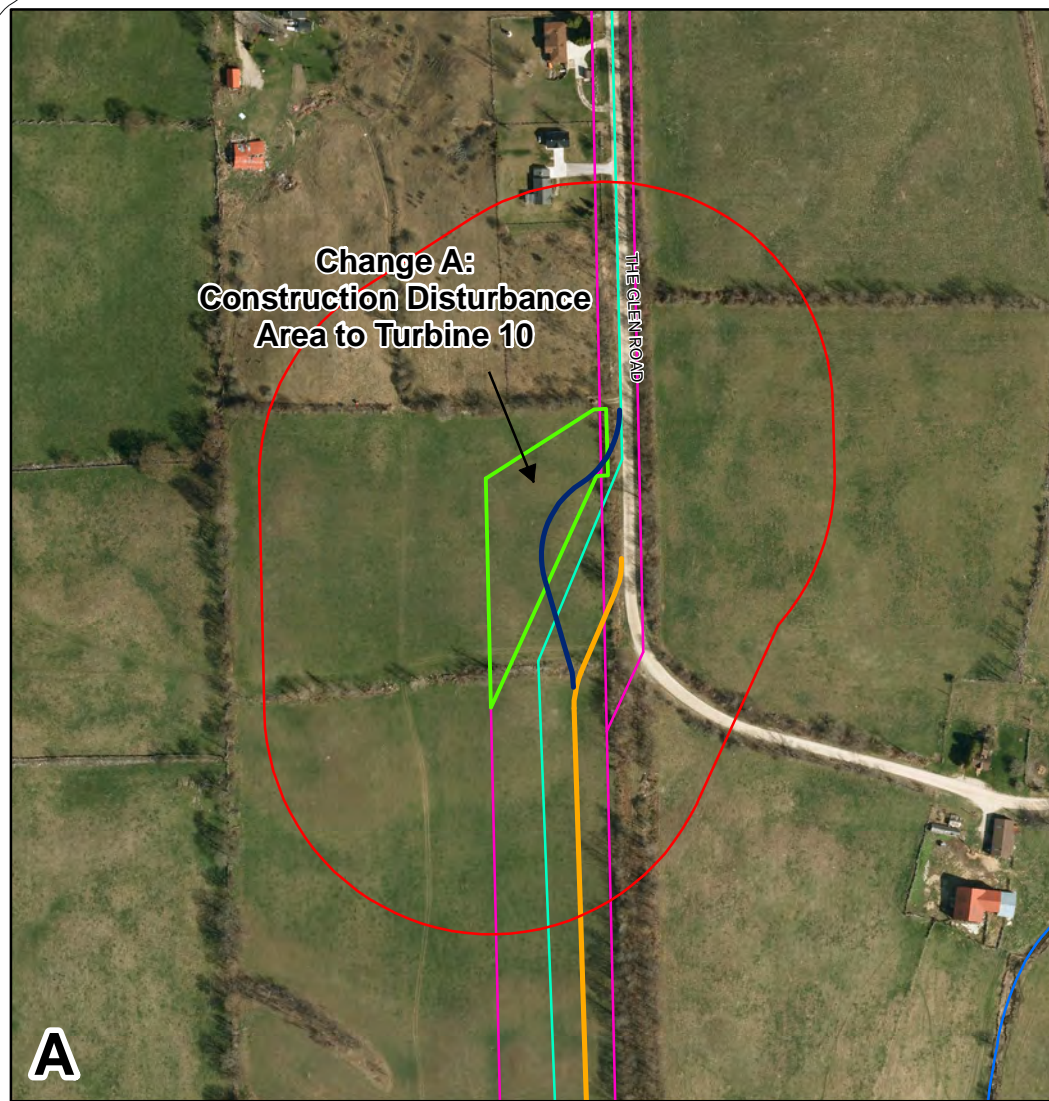
**Site Plan (2012-11-21)**

- Turbine
- MET Tower
- Access Road
- Construction Disturbance (Dec 2012)
- Underground Collection
- Overhead Transmission
- Substation
- Laydown Area
- 120m Buffer from Project Components
- Study Area (Dec 2011)
- Watercourse (LIO, 2012-06-19)
- Waterbody (LIO, 2012-06-19)

**Proposed Changes to Project Location:  
Overview**



<b>Project</b>	TA8119	<b>Figure</b>	2
<b>Date</b>	January, 2014	<b>Prepared By:</b>	KC
<b>Scale</b>	1:30,000	<b>Verified By:</b>	LKR



**LEGEND**

- Additional Construction Disturbance Area for Access Roads and Associated Underground Collection to T4, T10 and T11 (Jan 2014)
- 120m Buffer around Additional Construction Disturbance Area
- Access Road (Jan 2014)
- Collection (Jan 2014)
- Site Plan (2012-11-21)**
- Access Road
- Construction Disturbance (Dec 2012)
- Underground Collection
- Watercourse (LIO, 2012-06-19)
- Waterbody (LIO, 2012-06-19)

**Proposed Changes to  
Project Location:  
Detailed**






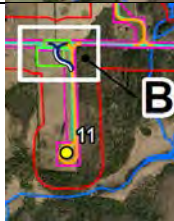
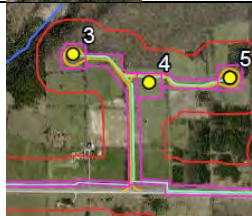
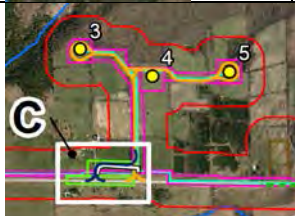
<b>Project</b>	TA8119	<b>Figure</b>	3
<b>Date</b>	January, 2014	<b>Prepared By:</b>	KC
<b>Scale</b>	1:4,000	<b>Verified By:</b>	LKR



## 1.1 DESCRIPTION OF CHANGES TO PROJECT LAYOUT

The East Durham Wind Energy Centre is a Class 4 Wind Facility, with a total nameplate capacity of up to 23 MW. A total of up to 14 turbines are proposed for construction. The defined study area for the Project has not changed; it covers approximately 10,050 ha east of the Community of Durham and west of the Village of Priceville (Figure 1). Project components will be located within privately owned agricultural land with lease arrangements, or within municipal road right of ways. No changes have been made to the original description of the project components or project activities as presented in the East Durham Wind Energy Centre Project Description and Construction Reports (Genivar 2013a, 2013b); however, the construction disturbance areas around 3 entrances to turbine access roads are proposed for expansion in order to accommodate Grey County and Municipality of West Grey entrance permit requirements. Figure 1 displays the project layout as presented in the original NHA report for reference purposes (LGL, 2012a). In all cases the proposed expansion of the project layout is associated with the installation of access roads and associated underground electrical collection. Table 1 describes where changes are proposed.

**Table 1: Proposed changes to the Project Location of the East Durham Wind Energy Centre**

Proposed Change	Project Component	Project Component as described in the East Durham Wind Energy Centre NHA (LGL, 2012a)	Description of Proposed Change to Project Layout (as shown on Figures 2 and 3)
A	Entrance to a access road from The Glen Road to Turbine 10		 This represents an increase in the existing construction disturbance area to accommodate a possible shift in location of where the access road to the turbine intersects with The Glen Road.
B	Entrance to a access road from County Rd. 4 to Turbine 11		 This represents an increase in the existing construction disturbance area to accommodate a possible shift in location of where the access road and a associated underground collection line to the turbine intersects with County Road 4.
C	Entrance to a access road from County Rd. 4 to Turbine 4		 This represents an increase in the existing construction disturbance area to accommodate a possible shift in location of where the access road and a associated underground collection line to the turbine intersects with County Road 4.

## **2.0 RECORDS REVIEW**

A complete Records Review, including a search and analysis of records as they relate to natural heritage features, was completed in the East Durham Wind Energy Centre NHA (LGL, 2012a). Given that the study area remains unchanged, the Records Review was not repeated or expanded upon for the purpose of this addendum.

## **3.0 SITE INVESTIGATION**

From 2009 to 2013 site investigations were completed for natural features identified within 120m of the project location and reported on in the East Durham Wind Energy Centre Natural Heritage Assessment (LGL, 2012a), the East Durham Wind Energy Centre Natural Heritage Assessment – Addendum (LGL, 2012b), and the East Durham Wind Energy Centre 2013 Pre-Construction Surveys (LGL, 2013). Given that the areas associated with the expanded construction disturbance for entrances at three turbine locations (Figure 3) were included within the areas where natural heritage surveys were conducted previously, no additional site investigation was conducted specific to the proposed layout changes described herein. The details of the field investigations conducted between 2009 and 2013 for the project area were used to characterize natural features within 120m of the proposed layout changes described here.

## **4.0 EVALUATION OF SIGNIFICANCE**

The REA process requires the applicant to determine if any natural features identified in or within 120 metres of the project location are significant, or provincially significant, to further determine whether development prohibitions and setbacks apply (O. Reg. 359/09, Section 38). Under Part IV, Section 27 of O. Reg. 359/09, an evaluation of significance, using procedures established or accepted by MNR, is required when the project location is proposed within 120 metres of a natural feature (or, 50 metres of an earth science ANSI).

The land, air and water within 120m of the area associated with the proposed changes to the project layout were previously surveyed and evaluated for significance in existing NHA documentation for the Project (LGL 2012a, 2012b and 2013). The evaluations conducted for the East Durham Wind Energy Centre Natural Heritage Assessment (LGL, 2012a), the East Durham Wind Energy Centre Natural Heritage Assessment – Addendum (LGL, 2012b), and the East Durham Wind Energy Centre 2013 Pre-Construction Surveys (LGL, 2013) were used to identify where significant features (woodlands, wetlands or valleylands) and/or significant wildlife habitat (SWH) for the project area are located within 120m of Changes A to C.

ELC data collected for the areas where changes are proposed is displayed in Figure 4. This data was previously represented in Figures 7 and 8 of the East Durham Wind Energy Centre Natural Heritage Assessment (LGL, 2012a) and is included here to provide quick reference. A description of significant features and wildlife habitat found within 120m of the areas where project layout changes are proposed is included below and summarized in Table 2 and Figure 8.