

 I

 439000

 Path: X:\1230\_AdelaideWindFarm\NRSI\_1230\_AddendumIII\_Fig2-4\_ComparativeLayout\_16K\_2013\_08\_22\_KEB.mxd

# Figure 2

# Adelaide Wind Energy Centre **Comparative Layout** Kerwood T-Line - North

#### Legend

- New Project Area (120m Buffer)
- Old Project Area (120m Buffer)
- Amendment Layout
- Previous Layout
- New Footprint
- Substation
- Operations and Maintenance Buildings
- ---- Transmission Line
- Existing Transmission Line
- ---- Railroad

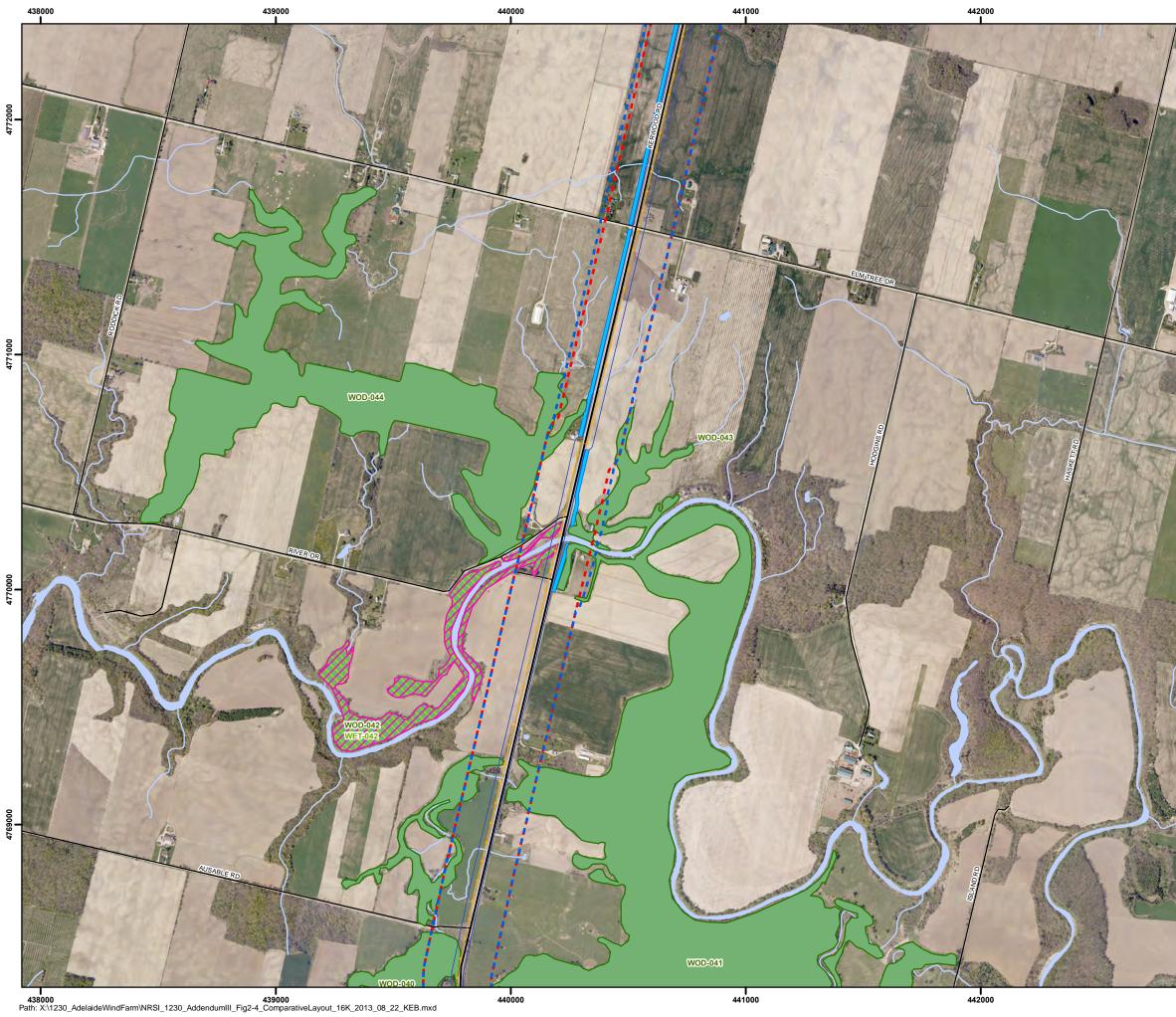
1 4775000

1774000

4773000

- Highway
- Primary Road
- Secondary Road
- ✓ Permanent Watercourse
- Intermittent Watercourse
- S Waterbody
- 🔀 ANSI, Life Science
- 🔀 ANSI, Earth Science
- Wetland (WET)
- Woodlot (WOD)
- Generalized Habitat

Aquatic, Terrestrial and Wetland Biologists					
Map Produced by Natural Resource Solutions Inc. This map is proprietary and confidential and must not be duplicated or distributed by any means without express written permission of NRSI. Source: Data provided by MNR. Copyright: Queen's Printer Ontario					
Project: 1230 Date: August 22, 2013	NAD83 - UTM Zone 17 Scale: 1:16,000 (11x17'')	N			
0 200 400 60	00 800 1,000 Metres				



### Figure 3

# Adelaide Wind Energy Centre **Comparative Layout** Kerwood T-Line - Central

Legend

4772000

- New Project Area (120m Buffer)
- Old Project Area (120m Buffer)
- Amendment Layout
- Previous Layout
- New Footprint
- Substation
- Operations and Maintenance Buildings
- Transmission Line
- Existing Transmission Line
- ---- Railroad
- Highway
- Primary Road
- ---- Secondary Road
- ─ Permanent Watercourse
- Intermittent Watercourse
- S Waterbody
- 🔀 ANSI, Life Science
- 🔀 ANSI, Earth Science
- Wetland (WET)
- Woodlot (WOD)
- Generalized Habitat



8

Aquatic, Terrestrial and Wetland Biologists					
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	ect: 1230 gust 22, 2013	NAD83 - UTM Zone 17 Scale: 1:16.000 (11x17'')			

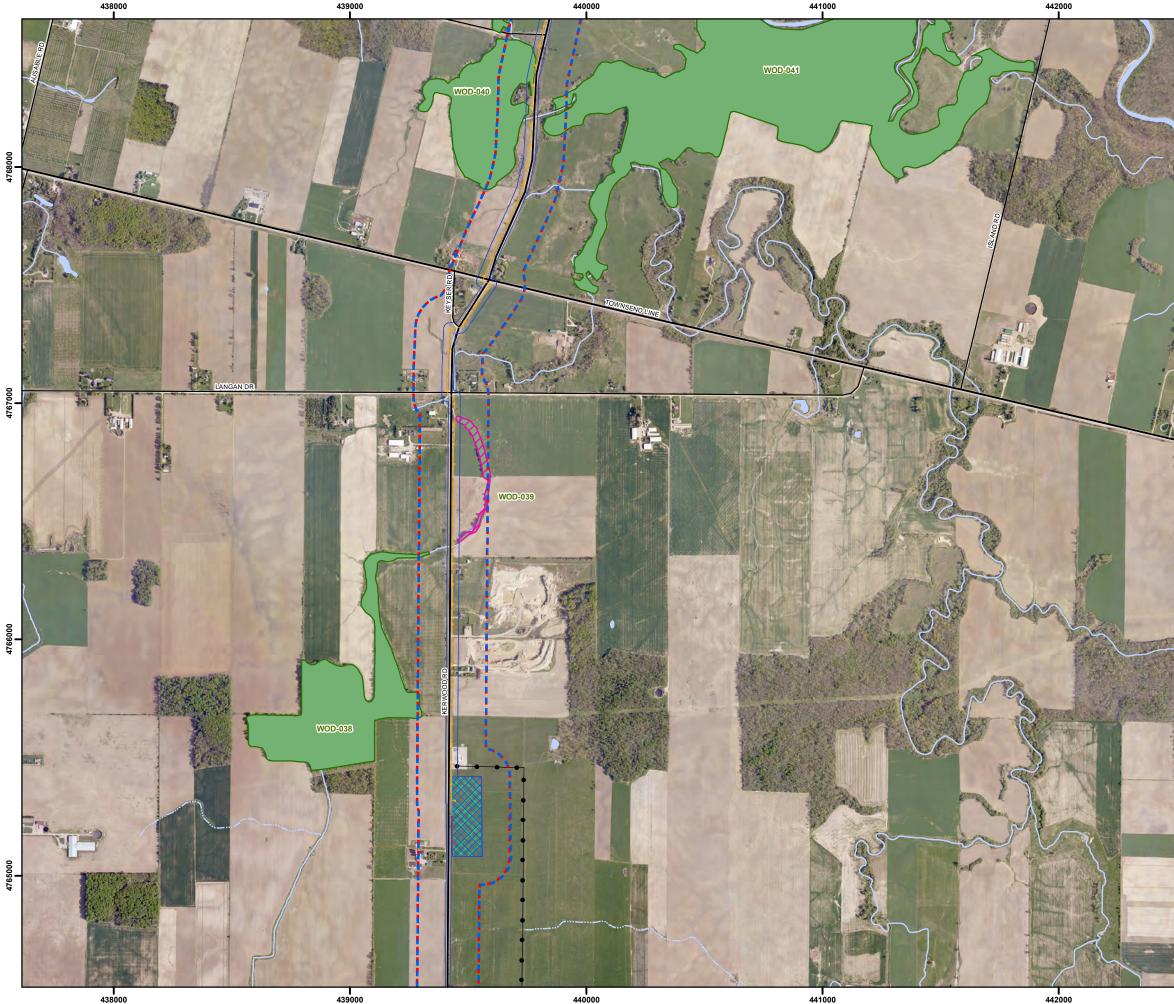
800

1,000 Metres

600

400

200



## Figure 4

# Adelaide Wind Energy Centre **Comparative Layout** Kerwood T-Line - South

Legend

- New Project Area (120m Buffer)
- Old Project Area (120m Buffer)
- Amendment Layout
- Previous Layout
- New Footprint
- Substation
- Operations and Maintenance Buildings
- Transmission Line
- Existing Transmission Line
- ---- Railroad
- Highway
- Primary Road
- ---- Secondary Road
- ─ Permanent Watercourse
- Intermittent Watercourse
- S Waterbody
- 🔀 ANSI, Life Science
- 🔀 ANSI, Earth Science
- Wetland (WET)
- Woodlot (WOD)
- Generalized Habitat



4765000

**1** 4766000

Aquatic, Terrestrial and Wetland Biologists

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Project: 1230		NAD83 - UTM Zone 17			
Date: August 22, 2013		Scale: 1:16,000 (11x1)			
0	200	400	600	800	1,000 Metres

#### 4.0 Amendments to the Records Review

The project area initially examined for the Adelaide Wind Energy Centre Records Review Report extended beyond the previously proposed project area to help compensate for any later changes in the project's layout. Upon review of the changes to the project's layout, all project areas of this proposed layout were previously studied and included with the Records Review submission to the MNR. Thus, there are no records of new habitats of seasonal concentrations of animals, rare vegetation communities or specialized habitats for wildlife, species of conservation concern, or other natural features that need to be amended in the NHA.

#### 5.0 Amendments to the Site Investigation

By reviewing the changes made to the Adelaide Wind Energy Centre layout since its latest NHA confirmation, it has been verified that the proposed alteration to the project layout has only led to minor changes in distance between project components and natural features and has not resulted in any new features being included in the project area. Since there are no new features that need to be studied, it has been determined that further site investigation is unnecessary.

Given the changes in project location, described and mapped above, NRSI has identified where the project location is now closer to 3 natural features and farther from 1 natural feature that were previously identified as being within 120m of the project location. These changes in distance have been outlined below (Table 1), and include feature identification number, feature type, and comparison of distances from project location to natural feature between the presented layouts. Four significant natural features, WOD-041, -043, -044, and -056, and one non-significant wildlife habitat, RWA-002, have been documented as having minor changes in distance from the project location. No additional significant natural features or wildlife habitats have had any changes in distances of project location as a result of these minor layout changes.

In addition, NRSI biologists have also reviewed the potential for additional generalized candidate wildlife habitat that may be present within 120m of the amended project location. Due to the small changes in the distances between project components and natural features, no changes to generalized significant wildlife habitats were identified.

Feature ID	Feature Type	Distances from NHA Addendum Report Submission	New Layout Distances	Amendment to the EOS and/or EIS Required? (Y/N)
WOD-041 RWA-002*	Woodland	WT - >120 AR - >120 OL - Overlapping UL - >120 SI - >120	WT - >120 AR - >120 <b>OL - &gt;0.1</b> UL - >120 SI - >120	No - EOS completed with NHA. Distances did not change enough to warrant amendment to the EIS.
WOD-043	Woodland	WT - >120 AR - >120 OL - 8 UL - >120 SI - >120	WT - >120 AR - >120 <b>OL - &gt;0.1</b> UL - >120 SI - >120	No - EOS completed with NHA. Distances did not change enough to warrant amendment to the EIS.

Table 1. Updated Distances between Project Components and Natural Features in the
Adelaide Wind Energy Centre

Feature ID	Feature Type	Distances from NHA Addendum Report Submission	New Layout Distances	Amendment to the EOS and/or EIS Required? (Y/N)
	Woodland	WT – >120 AR – >120	WT – >120 AR – >120	No - EOS completed with
WOD-044		OL – 14	OL - >0.1	NHA. Distances did not change enough to
		UL – >120	UL – >120	warrant amendment to
		SI – >120	SI – >120	the EIS.
WOD-056**	Woodland	WT – >120	WT – >120	No - EOS completed with
		AR – >120	AR – >120	NHA. Distances did not
		OL – >120	OL – 79	change enough to
		UL – >120	UL – >120	warrant amendment to
		SI – >120	SI – >120	the EIS.

\*This habitat was treated as significant in the NHA submission and has since been deemed not significant during pre-construction surveys. This habitat will be addressed in a follow-up pre-construction report. \*\*WOD-056 was identified as being located within 116m of the overhead line in the NHA submission and was located greater than 120m from the project location in NHA Addendum Report (NRSI 2012b.

Legend

WT: Wind Turbine AR: Access Road OL: Overhead Line UL: Underground Line SI: Supporting Infrastructure EOS: Evaluation of Significance EIS: Environmental Impact Study

### 6.0 Amendments to the Evaluation of Significance

As part of this addendum, NRSI biologists have reviewed the potential for changes to the Evaluation of Significance phase of this project. After examining the changes in distances between project components and natural features, it has been determined that there are no natural features or wildlife habitats that potentially exist within 120m of the project location that were not already previously studied and discussed in the MNR approved NHA documents. Therefore, no additional features require evaluation of significance. Additionally, since there are minimal changes in these distances, there are no features that are no longer within 120m of a project location.

No additional Evaluation of Significance is required for the Adelaide Wind Energy Centre as a result of modifications to the project location.

## 7.0 Amendments to the Environmental Impact Study

As part of this NHA Addendum III Report, NRSI has considered all aspects of the previously approved Environmental Impact Study to determine if any changes or additions are required based on the changes to the project location.

For the purposes of this addendum, NRSI has reviewed three separate aspects relating to the potential for change to the EIS, as follows:

- Changes to Mitigation Measures (i.e. project location now closer to natural features)
- New Mitigation Measures (i.e. project location within 120m of a new feature)
- Changes to Monitoring Requirements

#### 7.1 Changes to Mitigation Measures

NRSI biologists have reviewed the changes in project location, including the distances of the project location to natural features and wildlife habitats, and have determined that the mitigation measures presented in the Natural Heritage Environmental Impact Study (NRSI 2012a) and subsequent NHA Addendums (NRSI 2012b, NRSI 2013), are still suitable for the protection of significant natural features from permanent and adverse impacts that may result from the development of the Adelaide Wind Energy Centre.

#### 7.2 New Mitigation Measures

It was concluded that there are no additional significant natural features within the project area, nor are there considerable changes in distances from the project location to already identified natural features or wildlife habitats. As a result, no new mitigation measures need to be implemented for this project.

#### 7.3 Changes to Monitoring Requirements

Based on the minor changes in project location, NRSI has determined that the monitoring requirements identified in the Natural Heritage Environmental Impact Study are suitable for the monitoring of potential environmental effects of the proposed Adelaide Wind Energy Centre.

### 8.0 Summary of Natural Heritage Amendments

In accordance with the REA Regulation, NRSI biologists have completed a comprehensive records review, site investigation, evaluation of significance, and EIS of the Adelaide Wind Energy Centre project area. Following the review of proposed adjustments to the project location (as discussed above), NRSI has re-considered all aspects of the Natural Heritage Assessment within this report to determine if there are new natural features, changes in distance to project location, or new mitigation measures or monitoring commitments required to ensure that potential permanent or adverse environmental impacts are mitigated or studied appropriately. The summary of the result of this review of changes to the project location is summarized in Table 2 below.

Addendum Changes	Addendum Result			
Significant Features	One feature, WOD-056, was addressed in the original NHA as being within 120m of the project location, but in the NHA Addendum Report (NRSI 2012b) was >120m from the project location. This natural feature is now within 120m of the project location once again, and the original mitigation measures for this feature, as presented in the NHA will apply. No other new features or wildlife habitats have been identified within 120m of the project location, and no features or wildlife habitats have been identified as no longer within 120m of the project location.			
Changes in Distances to Project Location	The distances from the project location to candidate and significant natural features and wildlife habitats have changed due to minor adjustments to the project layout. These changes in distances to project location are associated with 4 significant natural features (woodlands) and one non-significant wildlife habitat. Changes in distances from the project location to the significant natural features (WOD-041, WOD-043, WOD-044 and WOD-056) and the non-			
Mitigation Measures	<ul> <li>significant wildlife habitat (RWA-002) are shown in Table 1 of this report.</li> <li>Based on the minor adjustment of the project location, NRSI biologists have identified no additional significant features within 120m of the project location that require mitigation measures to be applied.</li> <li>All other mitigation measures, as seen in the Natural Heritage Environmental Impact Study (NRSI 2012a) and NHA Addendum Reports (NRSI 2012b, NRSI 2013) will provide the appropriate protection to ensure any permanent and adverse impacts are mitigated.</li> <li>Original mitigation measures presented in the NHA for WOD-056 will be applied as this feature is within 120m of the project location again.</li> </ul>			
Monitoring Commitments	NRSI has identified that, based on the minor shifts in project location, the monitoring commitments outlined in the Natural Heritage Environmental Impact Study (NRSI 2012a) and NHA Addendum Reports (NRSI 2012b, NRSI 2013) are still appropriate to monitor any potentially adverse impacts of this project. No additional monitoring requirements are proposed as a result of the changes			

Table 2.	Summary of Natural	Heritage Addendur	n III for the Adelaid	e Wind Energy Centre
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