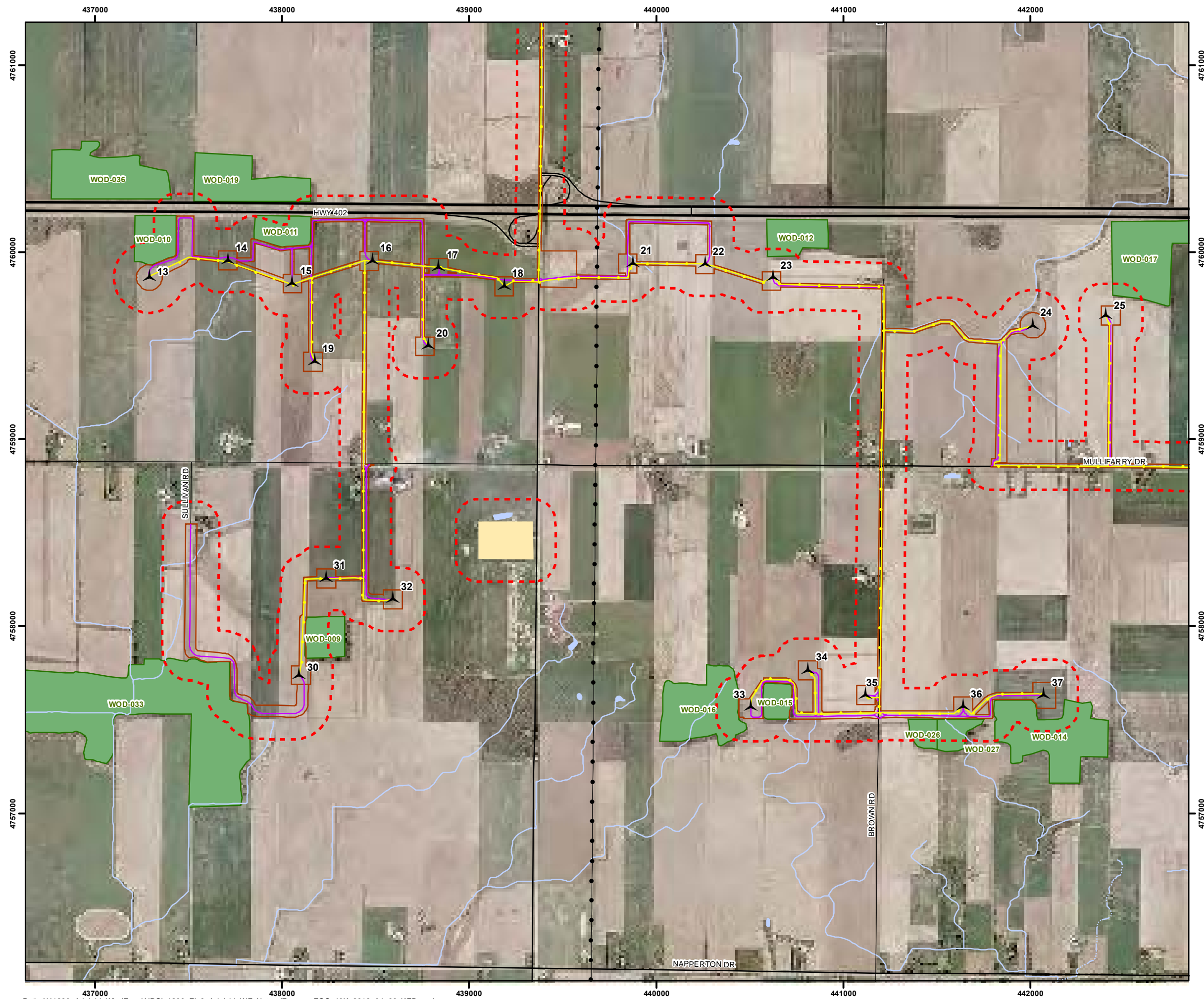


Figure 6

Adelaide Wind Energy Centre Significant Features - Southwest



- Legend**
- Project Area (120m Buffer)
 - Project Location
 - Turbine
 - Point of Common Coupling (PCC)
 - Access Road
 - Collector System
 - Transmission Line
 - Staging Area
 - Interconnection Facilities
 - Substation
 - Existing Transmission Line
 - Railroad
 - Highway
 - Primary Road
 - Secondary Road
 - Permanent Watercourse
 - Intermittent Watercourse
 - Waterbody
 - Woodlot (WOD)
 - Wetland (WET)
 - Valleyland (VAL)

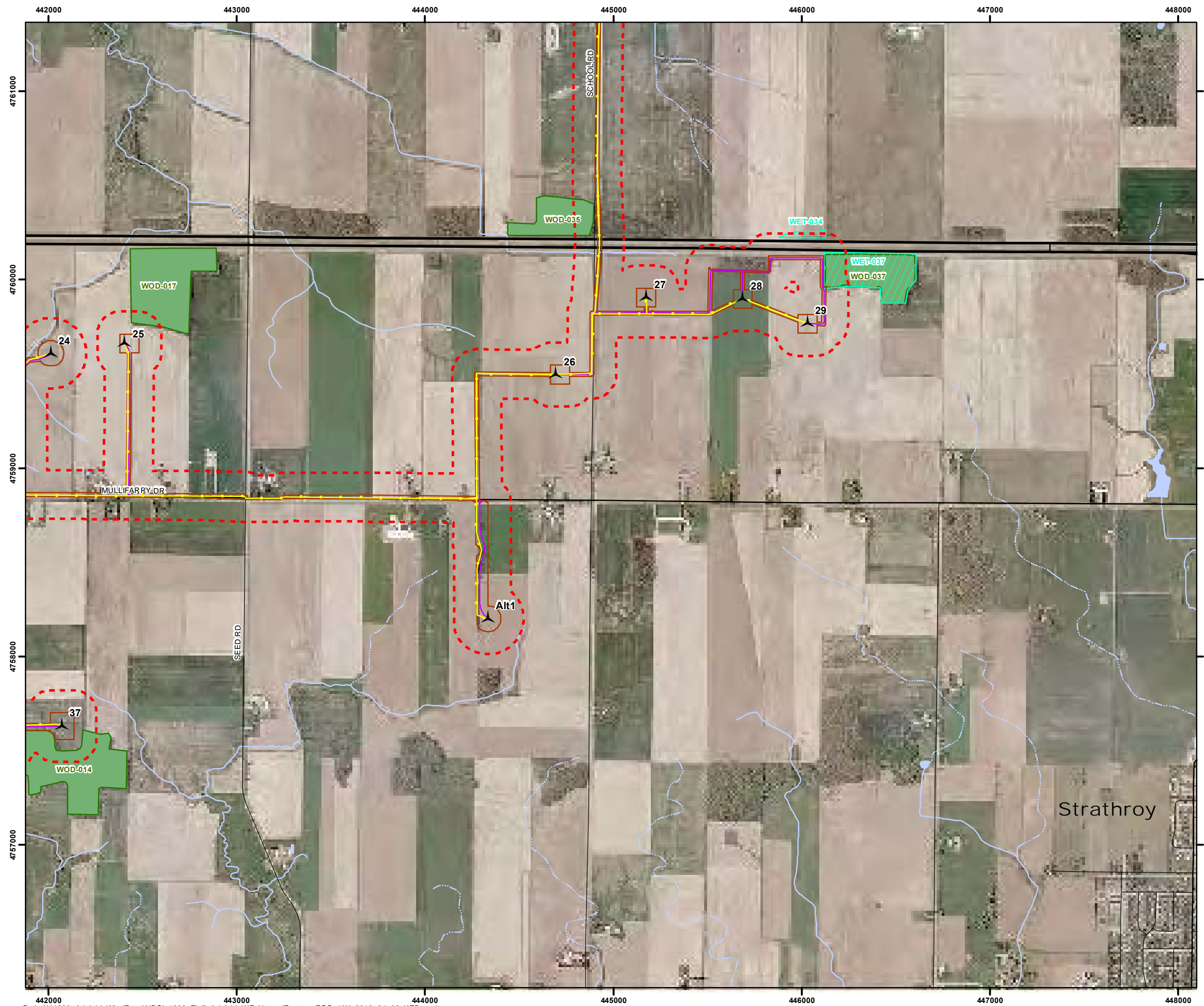
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Project: 1230 Date: April 9, 2012	NAD83 - UTM Zone 17 Scale: 1:20,000 (11x17")
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Figure 7

Adelaide Wind Energy Centre Significant Features - Southeast



Legend

- Project Area (120m Buffer)
- Project Location
- Turbine
- Point of Common Coupling (PCC)
- Access Road
- Collector System
- Transmission Line
- Staging Area
- Interconnection Facilities
- Substation
- Existing Transmission Line
- Railroad
- Highway
- Primary Road
- Secondary Road
- Permanent Watercourse
- Intermittent Watercourse
- Waterbody
- Woodlot (WOD)
- Wetland (WET)
- Valleyland (VAL)

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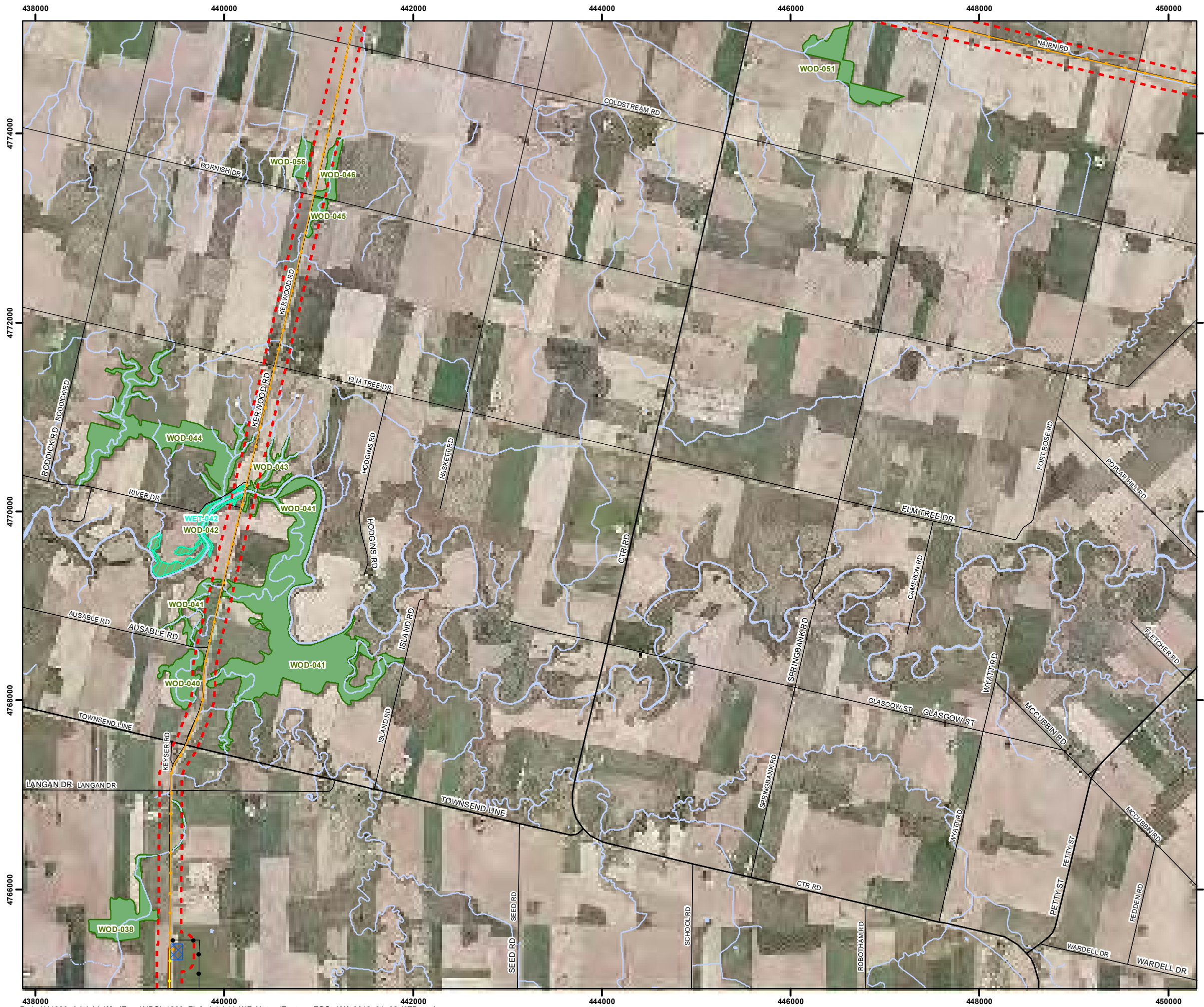
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Project: 1230 Date: April 2, 2012	NAD83 - UTM Zone 17 Scale: 1:20,000 (11x17")
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0 200 400 600 800 1,000 Metres

Figure 8

Adelaide Wind Energy Centre Significant Features - Kerwood T-Line



Legend

- Project Area (120m Buffer)
- Project Location
- Turbine
- Point of Common Coupling (PCC)
- Access Road
- Collector System
- Transmission Line
- Staging Area
- Interconnection Facilities
- Substation
- Existing Transmission Line
- Railroad
- Highway
- Primary Road
- Secondary Road
- Permanent Watercourse
- Intermittent Watercourse
- Waterbody
- Woodlot (WOD)
- Wetland (WET)
- Valleyland (VAL)

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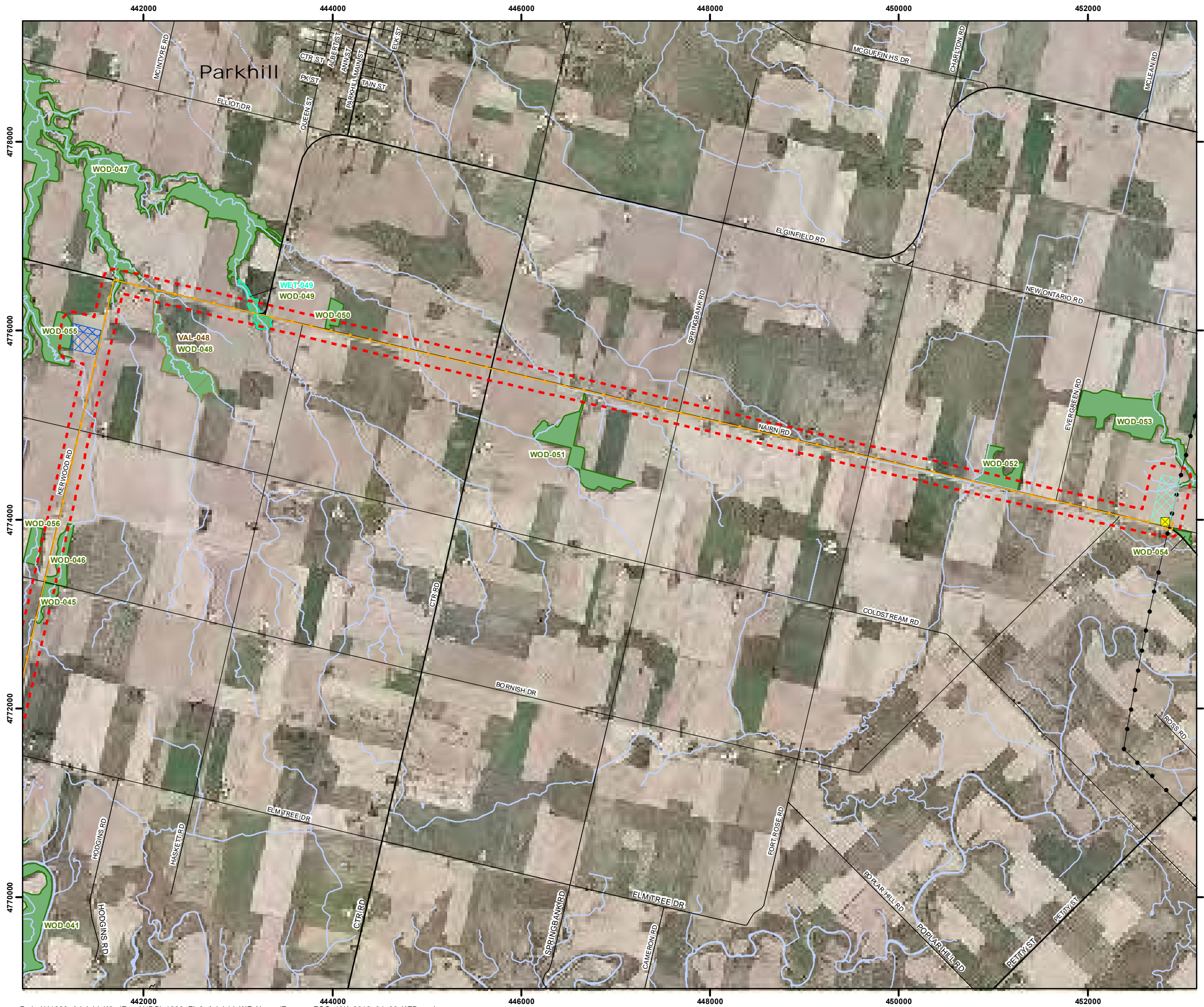
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Project: 1230 Date: April 2, 2012	NAD83 - UTM Zone 17 Scale: 1:40,000 (11x17")
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0 500 1,000 1,500 2,000 Metres


Figure 9

Adelaide Wind Energy Centre Significant Features - Nairn T-Line



Legend

- Project Area (120m Buffer)
- Project Location
- Turbine
- Point of Common Coupling (PCC)
- Access Road
- Collector System
- Transmission Line
- Staging Area
- Interconnection Facilities
- Substation
- Existing Transmission Line
- Railroad
- Highway
- Primary Road
- Secondary Road
- Permanent Watercourse
- Intermittent Watercourse
- Waterbody
- Woodlot (WOD)
- Wetland (WET)
- Valleyland (VAL)



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Project: 1230 Date: April 9, 2012	NAD83 - UTM Zone 17 Scale: 1:40,000 (11x17")
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0 500 1,000 1,500 2,000 Metres

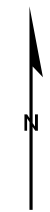


Table 9. Evaluation of Significance for Woodland within 120m of the Adelaide Wind Energy Centre

Feature ID	Size (ha)	Composition	Distance to Project Location	Woodland Size	EOS Criteria Satisfied	Uncommon Characteristics	Significance	Figure	EIS Required (Y/N)
WOD-001 Woodland	6.9	FODM9-3	WT – 16 AR – 4 OL – >120 UL – 4	Yes	<ul style="list-style-type: none"> • Interior habitat • Proximity to other significant woodlands (WOD-002) • Linkage • Water protection • Woodland diversity 	None	Yes	5	Yes
WOD-002 Woodland	1.4	FODM4-9	WT – >120 AR – >120 OL – >120 UL – Overlapping (horizontal directional drilling under woodland)	No	<ul style="list-style-type: none"> • Proximity to other significant woodlands (WOD-001, WOD-005) • Linkage • Water protection • Woodland diversity 	None	Yes	5	Yes
WOD-003 Woodland	1.0	FODM4-9	WT – 21 AR – 4 OL – 16 UL – 4	No	<ul style="list-style-type: none"> • Proximity to other significant woodlands • Linkage • Woodland diversity 	None	Yes	5	Yes
WOD-004 Woodland	1.6	FODM4-2	WT – 100 AR – 4 OL – >120 UL – 4	No	<ul style="list-style-type: none"> • Proximity to other significant woodlands (WOD-005) • Linkage 	None	Yes	5	Yes
WOD-005 Woodland	8.7	FODM4-2	WT – 19 AR – 4 OL – >120 UL – 4	Yes	<ul style="list-style-type: none"> • Interior habitat • Proximity to other significant woodlands (WOD-004) • Linkage • Water protection • Woodland diversity 	None	Yes	5	Yes
WOD-006 Woodland	1.0	FODM4-2	WT – >120 AR – 4 OL – >120 UL – 4	No	<ul style="list-style-type: none"> • Proximity to other significant woodlands (WOD-004, WOD-005) 	None	Yes	5	Yes

Feature ID	Size (ha)	Composition	Distance to Project Location	Woodland Size	EOS Criteria Satisfied	Uncommon Characteristics	Significance	Figure	EIS Required (Y/N)
WOD-007 Woodland	2.3	FODM4-2	WT – 19 AR – 4 OL – >120 UL – 4	No	None	None	No	N/A	No
WOD-008 Woodland	7.1	FODM5-3	WT – 21 AR – 10 OL – >120 UL – 10	Yes	<ul style="list-style-type: none"> • Interior habitat • Woodland diversity 	None	Yes	4	Yes
WOD-009 Woodland	4.1	FODM2-4	WT – 63 AR – 108 OL – >120 UL – 4	Yes	<ul style="list-style-type: none"> • Interior habitat • Woodland diversity 	None	Yes	6	Yes
WOD-010 Woodland	4.7	FODM2-4	WT – 51 AR – 4 OL – >120 UL – 4	Yes	<ul style="list-style-type: none"> • Interior habitat • Woodland diversity 	None	Yes	6	Yes
WOD-011 Woodland	4.4	WODM4-3	WT – >120 AR – 4 OL – >120 UL – >120	Yes	<ul style="list-style-type: none"> • Woodland diversity 	None	Yes	6	Yes
WOD-012 Woodland	5.1	WODM4-3	WT – 65 AR – 100 OL – >120 UL – 100	Yes	<ul style="list-style-type: none"> • Interior habitat • Woodland diversity 	None	Yes	6	Yes
WOD-013 Woodland	19.9	FODM5-8	WT – 23 AR – 78 OL – >120 UL – 78	Yes	<ul style="list-style-type: none"> • Interior habitat • Woodland diversity 	None	Yes	5	Yes
WOD-014 Woodland	15.1	FODM5-6	WT – 22 AR – 4 OL – >120 UL – 4	Yes	<ul style="list-style-type: none"> • Interior habitat • Proximity to other significant woodlands (WOD-027) • Woodland diversity 	None	Yes	6,7	Yes
WOD-015 Woodland	2.7	FODM5-6	WT – 16 AR – 4 OL – >120 UL – 4	No	<ul style="list-style-type: none"> • Woodland diversity 	None	Yes	6	Yes

Feature ID	Size (ha)	Composition	Distance to Project Location	Woodland Size	EOS Criteria Satisfied	Uncommon Characteristics	Significance	Figure	EIS Required (Y/N)
WOD-016 Woodland	12.9	FODM5-6	WT – 21 AR – 54 OL – >120 UL – 54	Yes	<ul style="list-style-type: none"> • Interior habitat • Woodland diversity 	None	Yes	6	Yes
WOD-017 Woodland	14.1	FODM6-5	WT – 77 AR – 115 OL – >120 UL – 115	Yes	<ul style="list-style-type: none"> • Interior habitat • Woodland diversity 	None	Yes	6,7	Yes
WOD-018 Woodland	2.1	FODM6-1	WT – 105 AR – 4 OL – >120 UL – >120	No	None	None	No	N/A	No
WOD-019 Woodland	9.8	FODM5-8	WT – >120 AR – 105 OL – >120 UL – >120	Yes	<ul style="list-style-type: none"> • Woodland diversity 	None	Yes	6	Yes
WOD-020 Woodland	106.5	FODM5-3	WT – >120 AR – >120 OL – 4 UL – >120	Yes	<ul style="list-style-type: none"> • Interior Habitat • Proximity to other significant woodlands (WOD-031, WOD-021) • Linkage • Water protection 	None	Yes	4	Yes
WOD-021 Woodland	1.8	WODM5	WT – >120 AR – >120 OL – 7 UL – >120	No	None	None	No	N/A	No
WOD-022 Woodland	0.5	FOCM6	WT – >120 AR – >120 OL – 4 UL – >120	No	None	None	No	N/A	No
WOD-023 Woodland	3.3	WODM4-2	WT – >120 AR – >120 OL – 32 UL – >120	No	None	None	No	N/A	No

Feature ID	Size (ha)	Composition	Distance to Project Location	Woodland Size	EOS Criteria Satisfied	Uncommon Characteristics	Significance	Figure	EIS Required (Y/N)
WOD-024 Woodland	3.2	TAGM2	WT – >120 AR – >120 OL – Overlapping (vegetation removal for installation of cable within existing road right of way) UL – >120	No	None	None	No	N/A	No
WOD-025 Woodland	1.4	FODM4-2	WT – 74 AR – 4 OL – >120 UL – 4	No	None	None	No	N/A	No
WOD-026 Woodland	2.2	WODM4	WT – 97 AR – 4 OL – >120 UL – 4	No	<ul style="list-style-type: none"> Proximity to other significant woodlands Woodland diversity 	None	Yes	6	Yes
WOD-027 Woodland	2.6	FODM5-2	WT – 18 AR – 4 OL – >120 UL – 4	No	<ul style="list-style-type: none"> Proximity to other significant woodlands Linkage Water protection Woodland diversity 	None	Yes	6	Yes
WOD-033 Woodland	86.9	FODM7-2	WT – >120 AR – 2 OL – >120 UL – >120	Yes	<ul style="list-style-type: none"> Interior habitat Water protection Woodland diversity 	None	Yes	6	Yes
WOD-034 Woodland	0.5	FODM7-2	WT – >120 AR – 97 OL – >120 UL – >120	No	None	None	No	N/A	No
WOD-035 Woodland	6	FODM4-2	WT – >120 AR – >120 OL – 22 UL – >120	Yes	<ul style="list-style-type: none"> Size 	None	Yes	7	Yes

Feature ID	Size (ha)	Composition	Distance to Project Location	Woodland Size	EOS Criteria Satisfied	Uncommon Characteristics	Significance	Figure	EIS Required (Y/N)
WOD-036	16	FODM5-8	WT - >120 AR - 104 OL - >120 UL - >120	Yes	<ul style="list-style-type: none"> Interior habitat 	None	Yes	6	Yes
WOD-037 Woodland	8.1	FODM7	WT - >120 AR - 4 OL - >120 UL - >120	Yes	<ul style="list-style-type: none"> Size 	None	Yes	7	Yes
WOD-038 Woodland	22.9	FODM5-3	WT - >120 AR - >120 OL - 92 UL - >120	Yes	<ul style="list-style-type: none"> Interior habitat Water protection Woodland diversity 	None	Yes	4,8	Yes
WOD-039 Woodland	1.2	FODM7-4	WT - >120 AR - >120 OL - 31 UL - >120	No	Although this riparian buffer provides ecological benefit, it does not provide significant ecological function.	None	No	N/A	No
WOD-040 Woodland	16.8	FODM5-6	WT - >120 AR - >120 OL - 14 UL - >120	Yes	<ul style="list-style-type: none"> Interior habitat Woodland diversity 	Rare Forest Type	Yes	8	Yes
WOD-041 Woodland	137.2	FOM	WT - >120 AR - >120 OL - 21 UL - >120	Yes	<ul style="list-style-type: none"> Interior habitat Proximity to other significant woodlands (WOD-043) Linkage Water protection Woodland diversity 	None	Yes	8	Yes
WOD-042 Woodland	2.5	FODM7	WT - >120 AR - >120 OL - 15 UL - >120	No	<ul style="list-style-type: none"> Proximity to other significant woodlands (WOD-044) Linkage Water protection Woodland diversity 	Rare Forest Type	Yes	8	Yes

Feature ID	Size (ha)	Composition	Distance to Project Location	Woodland Size	EOS Criteria Satisfied	Uncommon Characteristics	Significance	Figure	EIS Required (Y/N)
WOD-043 Woodland	7.7	FODM5	WT - >120 AR - >120 OL - 83 UL - >120	Yes	<ul style="list-style-type: none"> Proximity to other significant woodlands (WOD-041) Linkage Water protection Woodland diversity 	None	Yes	8	Yes
WOD-044 Woodland	68.2	FODM5	WT - >120 AR - >120 OL - 29 UL - >120	Yes	<ul style="list-style-type: none"> Proximity to other significant woodlands (WOD-042) Linkage Water protection Woodland diversity 	None	Yes	8	Yes
WOD-045 Woodland	0.8	WOCM1	WT - >120 AR - >120 OL - 18 UL - >120	No	<ul style="list-style-type: none"> Water protection Woodland diversity 	None	Yes	8	Yes
WOD-046 Woodland	5.2	FOCM6	WT - >120 AR - >120 OL - 21 UL - >120	Yes	<ul style="list-style-type: none"> Water protection Woodland diversity 	None	Yes	8	Yes
WOD-047 Woodland	119.5	WOMM3	WT - >120 AR - >120 OL - 20 UL - >120	Yes	<ul style="list-style-type: none"> Interior habitat Proximity to other significant woodlands (WOD-049) Water protection 	None	Yes	8,9	Yes
WOD-048 Woodland	15.6	WODM4-3	WT - >120 AR - >120 OL - 46 UL - >120	Yes	<ul style="list-style-type: none"> Interior habitat Water protection 	None	Yes	8,9	Yes
WOD-049 Woodland	1.6	WODM5	WT - >120 AR - >120 OL - 20 UL - >120	No	<ul style="list-style-type: none"> Proximity to other significant woodlands (WOD-047) Water protection 	None	Yes	9	Yes

Feature ID	Size (ha)	Composition	Distance to Project Location	Woodland Size	EOS Criteria Satisfied	Uncommon Characteristics	Significance	Figure	EIS Required (Y/N)
WOD-050 Woodland	4.4	FODM5-6	WT - >120 AR - >120 OL - 12 UL - >120	Yes	<ul style="list-style-type: none"> Woodland diversity 	None	Yes	9	Yes
WOD-051 Woodland	21.0	FODM4-2	WT - >120 AR - >120 OL - 7 UL - >120	Yes	<ul style="list-style-type: none"> Interior habitat Water protection Woodland diversity 	None	Yes	9	Yes
WOD-052 Woodland	10.6	FOCM6	WT - >120 AR - >120 OL - 17 UL - >120	Yes	<ul style="list-style-type: none"> Interior habitat 	None	Yes	9	Yes
WOD-053 Woodland	25.0	FODM4-2	WT - >120 AR - >120 OL - >120 UL - >120 SI - >11.5	Yes	<ul style="list-style-type: none"> Interior habitat Woodland diversity 	None	Yes	9	Yes
WOD-054 Woodland	1.0	FOCM6	WT - >120 AR - >120 OL - Overlapping (vegetation removal for installation of cable within existing road right of way) UL - >120	No	None	None	No	N/A	No
WOD-055 Woodland	11.1	FODM5-5	WT - >120 AR - >120 OL - >120 UL - >120 SI - 16	Yes	<ul style="list-style-type: none"> Interior habitat Water protection Woodland diversity 	None	Yes	8,9	Yes
WOD-056 Woodland	3.0	FOCM6-1	WT - >120 AR - >120 OL - 116 UL - >120	No	<ul style="list-style-type: none"> Water protection 	None	Yes	8	Yes

Feature ID	Size (ha)	Composition	Distance to Project Location	Woodland Size	EOS Criteria Satisfied	Uncommon Characteristics	Significance	Figure	EIS Required (Y/N)
WOD-057 Woodland	1.2	FODM5	WT – 78 AR – 4 OL – 4 UL – >120 SI – >120	No	<ul style="list-style-type: none"> Woodland diversity 	None	Yes	4	Yes

Legend

WT: Wind Turbine
AR: Access Road
OL: Overhead Line
SI: Supporting Infrastructure

8.0 Wetlands

During detailed site investigations at the Adelaide Wind Energy Centre, NRSI biologists identified a total of 5 candidate wetland habitats present within 120m of the project location. These wetlands do not overlap the project location, and therefore NRSI has implemented Appendix C from the Natural Heritage Assessment Guide (OMNR 2011b) to treat these wetlands as significant and apply appropriate mitigation measures as part of the Environmental Impact Study.

All five wetlands have been considered significant as the result of the evaluation of significance. These significant wetlands range in size from 0.5ha to 8.1 ha. These wetland features have been further discussed below, with habitat characteristics and functions described in more detail in Table 10. Since these wetlands are being treated as significant, they have been mapped in Figures 4 to 9.

WET-001a- Silver Maple Mineral Deciduous Swamp (SWDM3-2)

Dominant species in this wetland are Freeman's maple (*Acer X freemanii*), silver maple and bur oak along with wild black currant (*Ribes americanum*), poison ivy and purple stem aster (*Symphotrichum puniceum*). Wetland type is palustrine.

This wetland functions to provide short-term water quality improvement and has been treated as significant. An (EIS) is required to assess potential negative effects of development on this natural feature.

WET-034 Fresh-Moist Green Ash – Hardwood Lowland Deciduous Forest (FODM7-2)

This 0.5ha mid-age woodland was identified as a fresh-moist green ash – hardwood lowland deciduous forest and is located 97m from a proposed access road. The dominant species in the canopy of this woodland are green ash and shagbark hickory. The sub-canopy is dominated by green ash, Freeman's maple, and shagbark hickory, while the groundcover was not visible from the survey location. This woodland was surveyed roadside on highway 402 due to restricted site access. Wetland functions could not be assessed due to restricted site access. An (EIS) is required to assess potential negative effects of development on this natural feature.

WET-037 Fresh-Moist Lowland Deciduous Forest (FODM7)

This 8.1ha woodland was identified as a fresh-moist lowland deciduous forest with a canopy dominated by Freeman's maple, green ash, and white elm. The sub-canopy and understory are also dominated by Freeman's maple, green ash, and white elm. The dominant groundcover species in this woodland are asters, goldenrods, and common reed grass (*Calamagrostis deschampsoides*). This woodland is located 4m from proposed access roads associated with this

project. This woodland was examined from a roadside location on highway 402 due to restricted site access. Due to lack of right-of-entry, substrate sampling could not be conducted; therefore, this woodland is presumed to also be a wetland. Additionally, wetland functions could not be assessed due to restricted site access. An (EIS) is required to assess potential negative effects of development on this natural feature.

WET-042 Fresh-Moist Lowland Deciduous Forest (FODM7)

This 2.5 ha forest was surveyed from Kerwood Road due to restricted site access. This woodland is located 15m from overhead cabling associated with the project. The canopy is dominated by Manitoba maple (*Acer negundo*), sugar maple, black walnut as well as red pine, oak species, and eastern white pine. The sub-canopy includes Manitoba maple and sugar maple, while the understory consists of eastern red cedar (*Juniperus virginiana*). The groundcover was not discernible from the roadside location. Since right-of-entry was not granted for this property, the substrate could not be sampled; therefore, this woodland is also presumed to be a wetland. Additionally, wetland functions could not be assessed due to restricted site access. An (EIS) is required to assess potential negative effects of development on this natural feature.

WET-049 – Fresh-Moist Deciduous Woodland (WODM5)

No site access was granted for this site, and based on the plant species observed at this location there is the potential for wetland habitat within this polygon. This 1.6 ha wetland was surveyed from Elginfield Road due to restricted site access. The canopy and sub-canopy are dominated by black locust (*Robinia pseudo-acacia*) and contains silver poplar (*Populus alba*) and red pine. The understory consists of red pine, eastern red cedar and common buckthorn, while the groundcover is dominated by cattail species (*Typha sp.*), goldenrods and grasses. This woodland is located 20m from overhead cabling associated with the project.

Table 10. Evaluation of Significance for Wetlands within 120m of the Adelaide Wind Energy Centre

Feature ID	Size (ha)	Composition and Type	Distance to Project Location	Biological Characteristics (Dominant form in bold)	Hydrological Characteristics	Special Features	Significance	Figure	EIS Required (Y/N)
WET-001a	0.9	Swamp SWDM3-2 Palustrine	WT – 40 AR – 65 OL – >120 UL – 65 SI - >120	<ul style="list-style-type: none"> • h, dh, ts, ls, gc, ne • 0m to WET-001b, within same forested cover (WET 001b is located >120m from project location) • No open water 	<ul style="list-style-type: none"> • Water conveyance, attenuation and storage: small channel present • Water quality improvement: fed by tile drainage • Groundwater recharge: palustrine with clay soils 	<ul style="list-style-type: none"> • No rare species observed • Within significant woodland • No fish habitat 	Treat as Significant	5	Yes
WET-034	0.5	Forest FODM7-2	WT – >120 AR – 97 OL – >120 UL – >120 SI - >120	<ul style="list-style-type: none"> • h • None observed due to restricted site access. 	<ul style="list-style-type: none"> • None observed due to restricted site access. 	<ul style="list-style-type: none"> • Within a non-significant woodland • None observed due to restricted site access. 	Treat as Significant	7	Yes
WET-037	8.1	Forest FODM7	WT – >120 AR – 4 OL – >120 UL – >120 SI - >120	<ul style="list-style-type: none"> • h • None observed due to restricted site access. 	<ul style="list-style-type: none"> • None observed due to restricted site access. 	<ul style="list-style-type: none"> • Within significant woodland • None observed due to restricted site access. 	Treat as Significant	7	Yes
WET-042	2.5	Forest FODM7	WT – >120 AR – >120 OL – 15 UL – >120 SI - >120v	<ul style="list-style-type: none"> • h • None observed due to restricted site access. 	<ul style="list-style-type: none"> • None observed due to restricted site access. 	<ul style="list-style-type: none"> • Within significant woodland • None observed due to restricted site access. 	Treat as Significant	8	Yes

WET-049	1.6	Woodland WODM5	WT - >120 AR - >120 OL - 20 UL - >120 SI - >120	• h	<ul style="list-style-type: none"> • Possible short-term water quality improvement – unconfirmed due to site access restrictions • None observed due to restricted site access. 	<ul style="list-style-type: none"> • Within significant woodland • None observed due to restricted site access. 	Treat as Significant	9	Yes
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Legend

WT: Wind Turbine
AR: Access Road
OL: Overhead Line
UL: Underground Line
SI: Supporting Infrastructure

9.0 Valleylands

During detailed site investigations at the Adelaide Wind Energy Centre, NRSI biologists identified a total of 2 candidate valleylands within 120m of the project location. Each of these valleylands has been compared to provincial evaluation criteria to determine significance. These features are discussed below, with habitat characteristics and functions described in more detail in Table 11.

Both of the valleylands have been considered significant as the result of the evaluation of significance. These significant valleylands range in size from 15.6ha to 106.5 ha. Since these valleylands are being treated as significant, they have been mapped in Figures 4 to 9, along with significant woodlands and wetlands.

VAL-020 – Valleyland

Classified as a fresh-moist Manitoba maple deciduous woodland, this 106.5ha natural feature has valley slope topography with a watercourse extending north-south through the woodland and has patches of forb meadow in upland areas. This woodland was examined from a roadside location on Cuddy Drive due to restricted site access.

From the survey vantage point, the valley bank gradients were variable, ranging from steep to moderate and the valley was approximately 25m wide. The vegetation in this valleyland community is represented by a canopy dominated by Manitoba maple, white ash, and some willow and silver maple. The sub-canopy is also dominated by Manitoba maple and willow species with some crabapple species and silver maple. Dominant understorey plants in this woodland are Canada goldenrod and other goldenrod species as well as New England aster and other aster species. The dominant groundcover in this community is riverbank grape.

This valleyland has significant surfacewater functions and an EIS is required to assess potential negative effects of development on this natural feature.

VAL-048 – Valleyland

This valleyland features a bottomland stream with vegetated slopes. The slope gradient is variable throughout the site, ranging from steep to gentle slopes. Additionally, the valley width is variable, spanning between 4m to > 20m. The vegetation in this 15.6 ha valleyland is composed of a canopy dominated by sugar maple, with white ash, green ash, red oak and willow species. The sub-canopy contains European buckthorn, white ash, green ash, hawthorn species, American beech and white elm. The understorey is made up of European buckthorn, goldenrods, asters and white ash, while the groundcover consists of garlic mustard, aster species, poison ivy and white ash. This natural area contains three complexes, including a buckthorn deciduous shrub thicket (THDM2-6), a dry-fresh

sugar maple-white ash deciduous forest (FODM5-8) and a dry-fresh forb meadow (MEFM1) ecosite.

This valleyland has significant surface water functions and an EIS is required to assess potential negative effects of development on this natural feature.

Table 11. Evaluation of Significance of Valleylands within 120m of the Adelaide Wind Energy Centre

Feature ID	Size (ha)	Composition	Distance to Project Location	Landform Functions	Ecological Features	Restored Ecological Functions	Significance	Figure	EIS Required (Y/N)
VAL-020	106.5	FODM5-3	WT – >120 AR – >120 OL – 4 UL – >120	<ul style="list-style-type: none"> • Water conveyance, attenuation, storage, and release • Obvious evidence of active and/or historic erosion patterns 	<ul style="list-style-type: none"> • High proportion of natural vegetation • Riparian vegetation widths of more than 30m • Provides linkage corridor width of at least 100m 	<ul style="list-style-type: none"> • No known existing or planned restoration projects 	Yes	4	Yes
VAL-048	15.6	WODM4-3	WT – >120 AR – >120 OL – 46 UL – >120	<ul style="list-style-type: none"> • Water conveyance, attenuation, storage, and release • Obvious evidence of active and/or historic erosion patterns 	<ul style="list-style-type: none"> • High proportion of natural vegetation • Riparian vegetation widths of more than 30m 	<ul style="list-style-type: none"> • No known existing or planned restoration projects 	Yes	8	Yes

Legend

WT: Wind Turbine
 AR: Access Road
 OL: Overhead Line
 UL: Underground Line

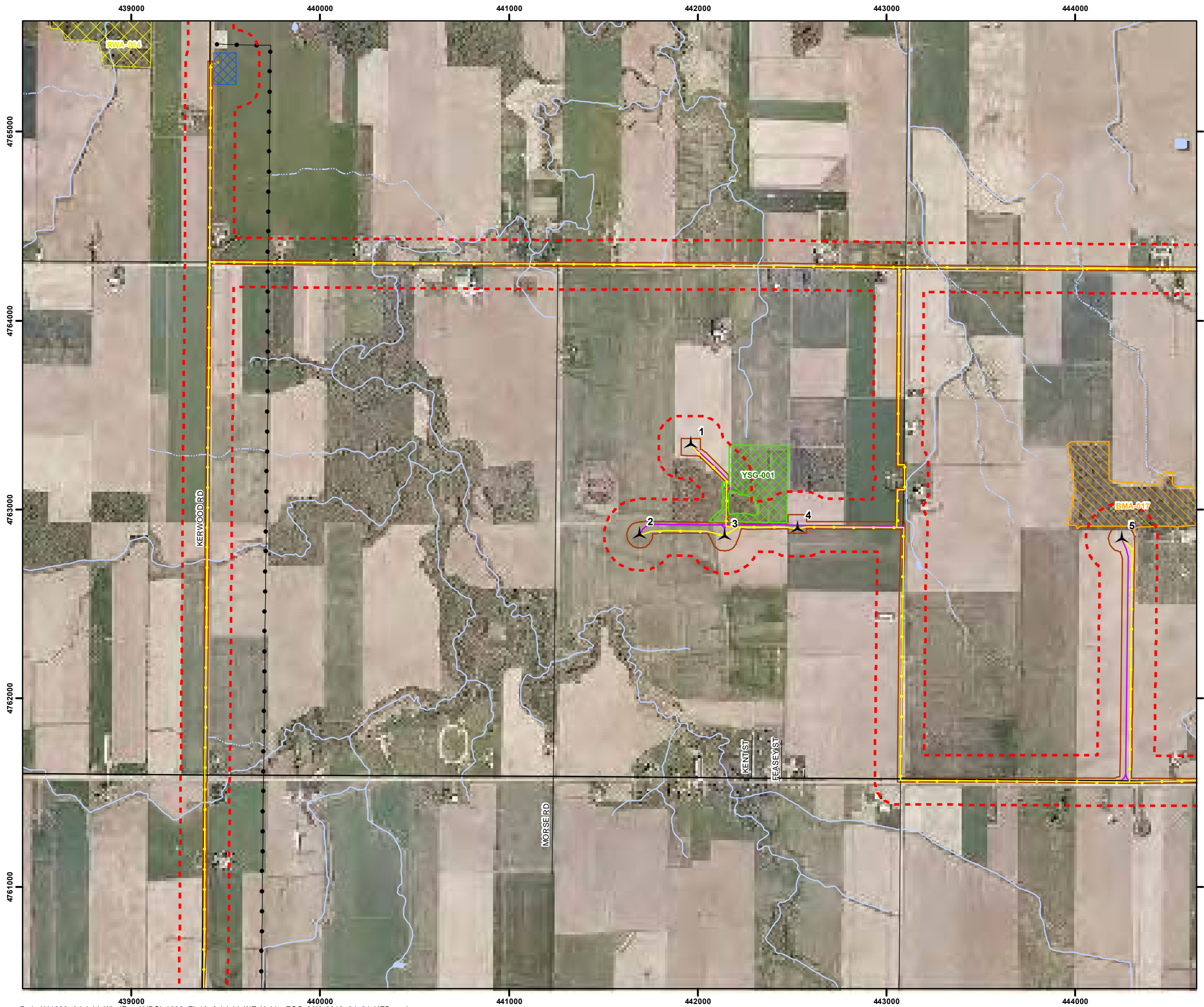
10.0 Wildlife Habitat

During the detailed site investigation of the Adelaide Wind Energy Centre, NRSI biologists have examined natural features within the project area for the presence of wildlife habitats. Several candidate wildlife habitat types have been identified within 120m of the project location. Each of these wildlife habitats has been examined and compared with provincial standards of significance to assist in the preparation of the Environmental Impact Study.


The following discussion has been divided into 4 categories of wildlife habitat, seasonal concentration areas, rare vegetation communities and specialized wildlife habitat, habitat for species of conservation concern, and animal movement corridors. Each wildlife habitat identified in the site investigation has been summarized, with more detailed information on survey methods and results provided in Table 12 below. All confirmed (or presumed) significant wildlife habitats have been mapped in Figures 10 to 15. Additionally, several generalized significant wildlife habitat locations were identified during the site investigation and have been carried forward the evaluation of significance. These habitat locations have been mapped in Figures 16-21.

Figure 10

Adelaide Wind Energy Centre Significant Habitat - Northwest



- Legend**
- Project Area (120m)
 - Project Location
 - Turbine
 - Point of Common Coupling (PCC)
 - Access Road
 - Collector System
 - Transmission Line
 - Staging Area
 - Interconnection Facilities
 - Substation
 - Existing Transmission Line
 - Railroad
 - Highway
 - Primary Road
 - Secondary Road
 - Permanent Watercourse
 - Intermittent Watercourse
 - Waterbody
 - Raptor Wintering Area (RWA)
 - Yellow Stargrass (YSG)



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0 200 400 600 800 1,000 Metres

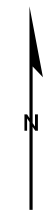
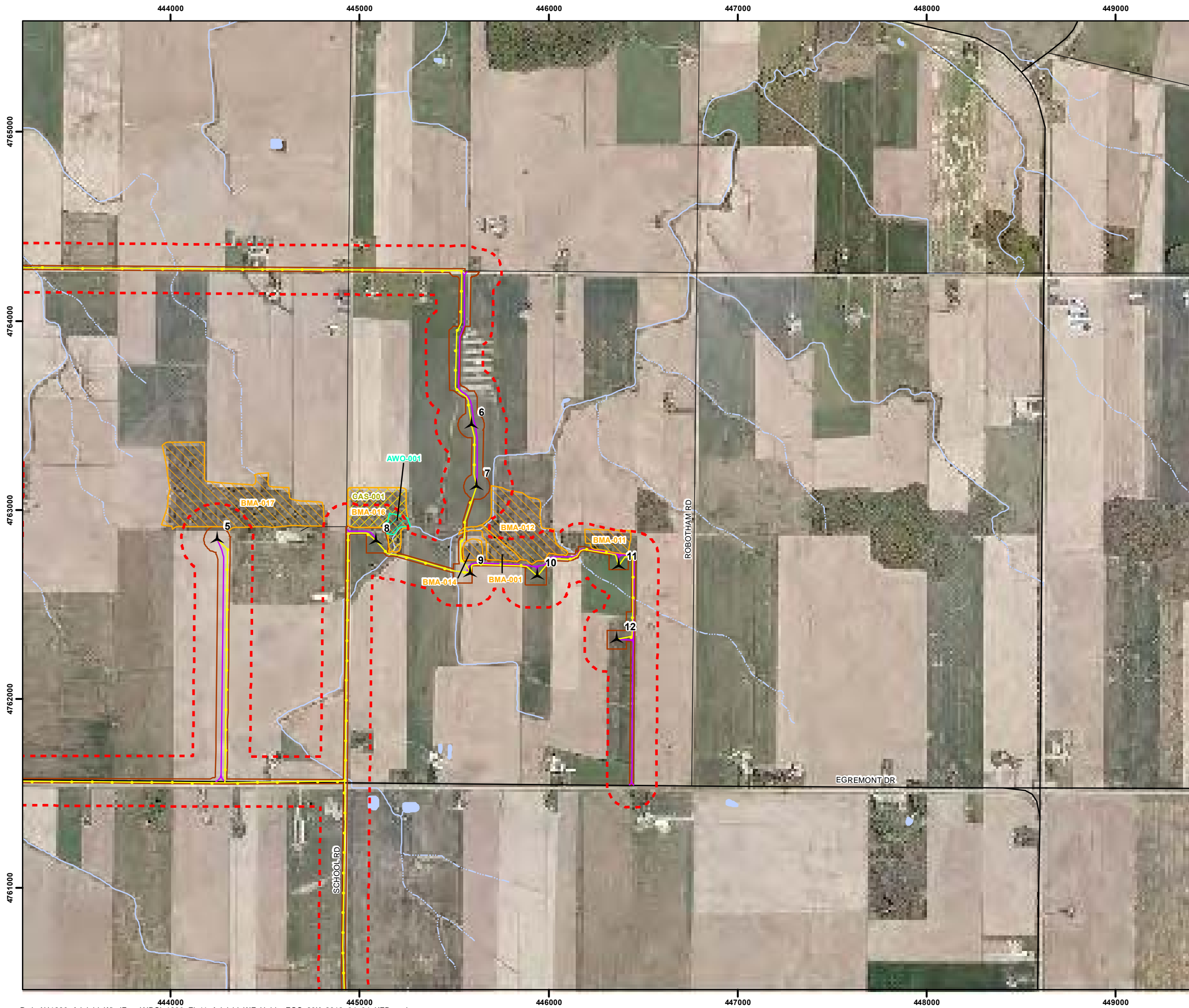



Figure 11

Adelaide Wind Energy Centre Significant Habitat - Northeast



Legend

- Project Area (120m)
- Project Location
- Turbine
- Point of Common Coupling (PCC)
- Access Road
- Collector System
- Transmission Line
- Staging Area
- Interconnection Facilities
- Substation
- Existing Transmission Line
- Railroad
- Highway
- Primary Road
- Secondary Road
- Permanent Watercourse
- Intermittent Watercourse
- Waterbody
- Amphibian Breeding Habitat - Woodland (AWO)
- Bat Maternity Colony (BMA)
- Carey's Sedge (CAS)



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