SOUTH KENT WIND PROJECT
Natural Heritage
Site Investigation Report

Prepared for:
Hatch Ltd.
4342 Queen Street, Suite 500
Niagara Falls, Ontario Canada L2E 7J7

Project No. 1184

Date: April 2012

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

SOUTH KENT WIND PROJECT
Natural Heritage Site Investigation Report

Project Team:

Staff	Role
David E. Stephenson	Senior Biologist/Project Advisor
Andrew G. Ryckman	Project Manager/Biologist
Barry A. Moss	Terrestrial and Wetland Biologist
Christy L. Humphrey	Terrestrial and Wetland Biologist
Pat Deacon	Terrestrial and Wetland Biologist
Sophie A. Gibbs	Terrestrial and Wetland Biologist
Katherine St.James	Terrestrial and Wetland Biologist
Nathan G. Miller	Terrestrial and Wetland Biologist
Karen Buschert	Terrestrial and Wetland Biologist
Ken Burrell	Terrestrial and Wetland Biologist
Charlotte Moore	Terrestrial and Wetland Biologist
Tara A. Lessard	Terrestrial and Wetland Biologist
Katherine Clapham	Terrestrial and Wetland Biologist
Andrew Dean	Terrestrial and Wetland Biologist
Leslie Nanibush	GIS Technician
Shawn MacDonald	GIS Technician
Gerry Schaus	GIS Technician

Report submitted on April 27, 2012

Andrew G. Ryckman

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1.0 Introduction

Natural Resource Solutions Inc. (NRSI) was retained in September 2010 by Hatch Ltd., on behalf of Samsung Renewable Energy Inc. and Pattern Energy (the "Proponent") to conduct a natural heritage site investigation in accordance with the Renewable Energy Approval (REA) Regulation for a proposed 270MW wind energy generating facility in the Regional Municipality of Chatham-Kent, Ontario. This assessment includes site-specific investigations and roadside surveys to confirm boundaries and characterize natural features.

The proposed South Kent Wind Project ("the Project") is located in the southern half of the Regional Municipality of Chatham-Kent between Highway 401 and the shoreline of Lake Erie, and Towns of Tilbury and Ridgetown from west to east, respectively. This wind energy generating facility is proposed to be 270MW in size, consisting of approximately 124 operational wind turbines, as well as supporting infrastructure, including access roads, buried and/or overhead collection/transmission lines. The collection/transmission system will include approximately 34 km of 230 kV transmission line and two (2) substations to enable step-up of the voltage from 34.5kV to 230 kV to connect to Chatham Switching Station (SS). As identified in the REA Regulation, the proposed layout of all Project components is collectively referred to as the 'Project location'. In accordance with Sections 25 and 26 of the REA Regulation, NRSI has conducted a detailed site investigation to identify any natural features within 120m of proposed development activities. This includes areas within 120m of proposed turbine blade tip as well as any areas proposed for construction or development activities, including access roads, temporary lay-down areas, truck turn-around areas, crane pads, access roads, distribution and transmission lines. Within this report, the 'Project Area' refers to this area of 120 m surrounding the Project location. The proposed areas to be used for development activities, including the 120m Project Area, as identified by REA Regulation, are provided in Figures 1-1, 1-2, and 1-3.

The proposed development activities occur primarily within areas of active agricultural practices, including rotational crops of corn and soy beans. Other land uses, including hayfields and agricultural pasture, were also noted to be present within the Project Area. Fragmented woodlands, hedgerows, and small wetland pockets are characteristic of this

area of Ontario, and have been observed to be occasionally present throughout the Project Area.

Figure 1-1

Figure 1-2

Figure 1-3

Key Map

South Kent Wind Project

Project Components

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

0 1 2 4 km

April 23, 2012. Project No: NRSI-1184.
UTM Zone 17, NAD 83 Scale: 1:150,000 (at 11x17")

Legend

- Project Area (April, 2012)
- Proposed Turbine (L020)
- Substation
- Cabling
- Access Road
- Railway
- Highway
- Primary Road
- Secondary Road
- Watercourse (Permanent)
- Waterbody
- Wetland Area
- Wooded Area

Path: X:\1184_ChathamKentWF\NRSI_1184_Fig1-1to1-3_ProjectComponentsKeyMap_150K_2012_04_23_SWM.mxd

Figure 1-1

South Kent Wind Project

Project Components

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

0 0.5 1 2 km

April 23, 2012. Project No: NRSI-1184.
UTM Zone 17, NAD 83 Scale: 1:65,000 (at 11x17")

Legend

- Project Area (April, 2012)
- Proposed Turbine (L020)
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- Waterbody
- Wetland Area
- Wooded Area

Path: X:\1184_ChathamKentWF\NRSI_1184_Fig1-1_ProjectComponents_65K_2012_04_23_SWM.mxd

Figure 1-2

South Kent Wind Project

Project Components

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

0 0.5 1 2 km

April 23, 2012. Project No: NRSI-1184.
UTM Zone 17, NAD 83 Scale: 1:65,000 (at 11x17")

Legend

- Project Area (April, 2012)
- Proposed Turbine (L020)
- Substation
- Cabling
- Access Road
- Railway
- Highway
- Primary Road
- Secondary Road
- Watercourse (Permanent)
- Waterbody
- Wetland Area
- Wooded Area

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Figure 1-3

South Kent Wind Project

Project Components

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

0 0.5 1 2 km

April 23, 2012. Project No: NRSI-1184.
UTM Zone 17, NAD 83 Scale: 1:65,000 (at 11x17")

Legend

- Project Area (April, 2012)
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- Waterbody
- Wetland Area
- Wooded Area

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2.0 REA Requirements

Ontario Regulation 359/09 – *Renewable Energy Approvals* under *Part V.0.1 of the Act*, (herein referred to as the REA Regulation) made under the *Environmental Protection Act* identifies the requirements for the development of renewable energy Projects in Ontario. In accordance with REA Regulation, the Project is classified as a Class 4 wind facility, and is required to complete a REA.

Section 26 of the REA Regulation requires proponents of Class 4 wind Projects to undertake a natural heritage site investigation for the purpose of determining:

1. whether the results of the analysis summarized in the [Natural Heritage Records Review] report prepared under subsection 25 (3) are correct or require correction, and identifying any required corrections.
2. whether any additional natural features exist, other than those that were identified in the [Natural Heritage Records Review] report prepared under subsection 25 (3).
3. the boundaries, located within 120 m of the Project location, of any natural feature that was identified in the records review or the site investigation.
4. the distance from the Project location to the boundaries of natural features identified within 120 m.

Natural Features are defined in Section 1.1 of the REA Regulation to be all or part of

a) an area of natural and scientific interest (ANSI) (earth science)
b) an ANSI (life science)
c) a coastal wetland
d) a northern wetland
e) a southern wetland
f) a valleyland
g) a wildlife habitat, or
h) a woodland.

Subsection 3 of Section 26 of the REA Regulation requires the proponent to prepare a report setting out the following:

1. A summary of any corrections to the report prepared under subsection 25 (3) and the determinations made as a result of conducting the site investigations under subsection (1).
2. Information relating to each natural feature identified in the records review and in the site investigations, including the type, attributes, composition and function of the feature.
3. A map showing

a) the boundaries of natural features identified within 120 m
b) the location and type of each natural feature identified in relation to the Project location, and
c) the distance from the Project location to the natural features identified.

4. The dates and times of the beginning and completion of the site investigation.
5. The duration of the site investigation.
6. The weather conditions during the site investigation.
7. A summary of methods used to make observations for the purposes of the site investigation.
8. The name and qualifications of any person conducting the site investigation.
9. Field notes kept by the person conducting the site investigation.

This Natural Heritage Site Investigation Report has been prepared to meet these requirements.

Species at Risk (SAR), species that have been designated as Threatened or Endangered within Ontario, are warranted protection under the *Endangered Species Act* (2007). Although NRSI has considered these species during all stages of records review, site investigation, and evaluation of significance, they will be addressed in detail in the *Approval and Permitting Requirements Document*(APRD), which is separate from the Natural Heritage Assessment, and will be submitted at a later date.

3.0 Staff Roles

The requirements of the REA process indicate that the name and qualifications of all staff participating in the site investigation and/or evaluation of significance be identified. As a result, the qualifications and roles of all staff participating in the completion of the Project have been outlined in the following sections.

3.1 David E. Stephenson, M.Sc.

David is a senior biologist with more than 20 years of experience in environmental consulting. He specializes in natural resource inventories and evaluations, Project management, and research and impact studies. David's primary area of expertise is floral inventories, but has lead several multidisciplinary study teams on a wide variety of Project types. David is a certified arborist (1999), and is certified in Ecological Land Classification System for Southern Ontario (2001) and the OMNR Wetland Evaluation System (1993).

David's role in the Project was to act as Project advisor to the team identified below. He provided his experience with several provincial guidelines as this Project moved through the site investigation and evaluation of significance phase.

3.2 Andrew G. Ryckman, B.Sc.

Andrew is a Terrestrial and Wetland Biologist with 7 years of environmental experience. He routinely manages the natural heritage aspects of renewable energy Projects, with specific expertise relating to bats and herpetofauna. Andrew is certified in Ecological Land Classification (2010), and has successfully completed a Bat Conservation International (BCI) Acoustic Monitoring Workshop (2008).

Andrew's role in the Project was to act as the Project manager, overseeing all aspects of the Natural Heritage Assessment, including all associated field work and reporting. He also assisted in vegetation mapping of the Project Area, and was the main contact point for agency staff. Andrew assisted with the preparation of all appropriate reports, worked with other staff to evaluate the significance of several of the natural features within the Project Area.

3.3 Barry A. Moss, B.E.S.

Barry is a Terrestrial and Wetland Biologist with 2 years of experience working on environmental assessments for wind, solar, and hydro developments. His experience on these Projects includes background review, vegetation mapping and rare species assessment, bird and bat surveys, post construction monitoring, and report generation. Barry is trained in the Ecological Land Classification System (2009) and has experience implementing the OMNR Wetland Evaluation Systems.

Barry was heavily involved in the site investigation and vegetation mapping of the natural features within the Project. He used his ELC training to conduct site-specific mapping of woodlands, fencerows, meadows, and other natural and cultural communities within the Project Area.

3.4 Christy L. Humphrey, B.E.S.

Christy has more than 2 years of environmental consulting experience, working on a variety of Project tasks. Her primary areas of expertise are vegetation mapping and floral inventories, but she has experience conducting bird and bat assessments, amphibian studies, and other fauna assessments. Christy is certified in both the Ecological Land Classification (ELC) for Southern Ontario (2010) and Northeastern Ecological Land Classification (2010), and participated in the Ontario MNR Bat Monitoring Workshop for Wind Power Projects (2010).

Christy assisted with some of the site specific field investigations of the natural features surrounding proposed turbine locations and roadside transmission cabling. She also assisted the preparation of all of the Natural Heritage Assessment reports and provided input on the evaluation of significance relating to bat habitats.

3.5 Patrick Deacon, B.E.S.

Patrick is a Terrestrial Biologist with 4 years of environmental experience. He regularly conducts vegetation inventories and community mapping, and specializes in ecological restoration with particular focus on Species At Risk, tallgrass prairie ecosystems, and invasive species management. Patrick is a certified low-complexity prescribed burn worker.

Patrick conducted the vegetation mapping and floral inventories along the proposed transmission line that follows the existing railway line. He was able to rely on his experience working in tallgrass prairie and savannah habitats to look for remnant prairie habitats, indicator species, and rare floral species.

3.6 Sophie Gibbs, B.Sc.

Sophie is a Terrestrial and Wetland Biologist who graduated from Trent University with a joint degree in biology and environmental science. She has over 2 years of practical work experience, both in a field and lab setting. She holds a keen interest in all aspect of natural history, but specializes in avian ecology and plant identification. Past experiences include identifying aquatic invertebrates using OBBN protocol, and conducting dragonfly surveys. With NRSI Sophie has routinely conducted ecological assessments, and collected field data on vegetation, birds, bats, amphibians, and reptiles in Ontario.

Sophie assisted with some of the site specific field investigations of the natural features surrounding proposed turbine locations and roadside transmission cabling.

3.7 Katherine St. James, M.Sc.

Katherine is a Terrestrial and Wetland Biologist with more than 3 years of experience working in the environmental field. She specializes in environmental sciences, ecology, and bio-geographical studies, and completed her master's research on potential barrier effects on salamander populations. During her master's research and consulting experience, Katherine has routinely conducted ecological assessments and collected field information on vegetation, birds, amphibians, and other wildlife species throughout Ontario.

Katherine assisted with some of the site specific field investigations of the natural features surrounding proposed turbine locations and roadside transmission cabling.

3.8 Nathan Miller, M.Sc.

Nathan graduated from the University of Guelph with a B.Sc. in Wildlife Biology and a M.Sc. in Integrative Biology. Research for Nathan's M.Sc. focused on the migration and

conservation of the monarch butterfly throughout Canada and the United States. Nathan also has extensive experience conducting research on a wide range of wildlife species including birds, mammals, herptiles, insects and plants acquired while working as a naturalist for the Ministry of Natural Resources in Algonquin Park and an environmental consultant.

Nathan assisted with some of the site specific field investigations of the natural features surrounding proposed turbine locations and roadside transmission cabling.

3.9 Karen Buschert, M.E.S

Karen has over 10 years of environmental experience, studying all aspects of natural history, and has a special interest in plant identification. In 2008 she completed a Masters of Environmental Science program, specializing in ecological restoration. Karen has participated in field investigations and reporting for several REA wind power Projects in southern Ontario.

Karen assisted with some of the site specific field investigations of the natural features surrounding proposed turbine locations, access roads and roadside transmission cabling.

3.10 Kenneth G Burrell, B.E.S.

Ken is a Terrestrial and Wetland Biologist who has 6 years of experience working on a variety of environmental Projects. He specializes in bird ecology but has over 4 years of experience conducting floral inventories and wildlife studies focused on amphibians, reptiles, bats, and mammals. Ken recently graduated from the University of Waterloo with a Bachelor's degree in Environment and Resource Studies and is pursuing a Master's degree, studying spring bird migration in Pelee Island, Ontario.
Ken assisted with some of the site specific field investigations of the natural features surrounding proposed turbine locations and roadside transmission cabling.

3.11 Charlotte Moore, B.E.S

Charlotte is a Terrestrial and Wetland Biologist with two field seasons of experience in butterfly ecology and various environmental Projects. Charlotte has completed her

Bachelor of Environmental Studies and is a candidate for a Masters of Environmental Studies (2013) at the University of Waterloo. Her Masters research will involve measuring the success of past restoration efforts using butterfly abundance and diversity in the riparian zones of several creeks. Charlotte has worked on a variety of other environmental Projects, including forest health plot assessment, salamander and benthic invertebrate monitoring, and leading environmental education programs and hikes.

Charlotte assisted with some of the site specific field investigations of the natural features surrounding proposed turbine locations and roadside transmission cabling.

3.12 Tara Lessard, B.Sc.

Tara is a Terrestrial and Wetland Biologist with more than 4 years of experience working in the environmental field. During her consulting experience, Tara has conducted bird and bat assessments, amphibian studies, and other fauna assessments throughout Ontario. Tara has participated in field investigations and reporting for wind power Projects in Ontario and New Brunswick.

Tara's role in the Project was overseeing aspects of the Natural Heritage Assessment, including field work and reporting. Tara assisted with the preparation of all appropriate reports, and assisted with some of the site specific field investigations of the natural features surrounding proposed turbine locations and roadside transmission cabling.

3.13 Katherine Clapham, F.W.T.

Katherine is a Terrestrial and Wetland Biologist with more than 2 years of experience working in the environmental field. During her consulting experience, Katherine has conducted aquatic, bat habitat and acoustic bat assessments throughout Ontario. Katherine is also certified in the OMNR Wetland Evaluation System (1993).

Katherine's role in the Project was to collect wetland information and to map wetland boundaries within the Project area.

3.14 Andrew Dean, B.E.S

Andrew is a Terrestrial and Wetland Biologist with 2 years of environmental consulting and not-for-profit work experience, monitoring both for the protection of natural areas within construction Projects and for the rehabilitation of former aggregate extraction sites. He has a keen interest in botany and plant ecology and is a member of the Field Botanists of Ontario and the North American Native Plant Society. Andrew has participated in field investigations inventorying flora and fauna, their respective habitats and sensitive natural heritage features. Andrew is certified in the Ecological Land Classification (ELC) for Southern Ontario (2010).

Andrew's role in the Project was to collect ELC information, and to assist with mapping the wetland boundaries within the Project area.

3.15 Shawn MacDonald, B.A., GIS-AS

Shawn has more than 3 years' experience in renewable energy mapping and asset management systems. As a Geographic Information Systems (GIS) Analyst Shawn specializes in Projects relating to wind, solar and hydroelectric power. Shawn has a variety of Project and field experience using GIS, GPS and AutoCAD technology throughout all stages of a renewable energy Project. This experience is not limited to renewable energy alone as Shawn has been involved in a number of Projects relating to terrestrial and aquatic habitat mapping, environmental restoration and spatial/3D analysis.

Shawn's role in the Project was as GIS technician. He reviewed and collected all available background mapping resources to compile into Project mapping.

3.16 Gerry Schaus, B.A., GIS-AS

Gerry has over 4 years' experience in the renewable energy sector and regularly does mapping for wind, solar and hydroelectric Projects. This work includes mapping of natural features, vegetation communities, and aquatic habitats, terrestrial monitoring, constraints and proposed turbine layouts. Gerry has also completed a number of receptor surveys for proposed wind Projects using Trimble GPS and a laser offset to accurately gather building points without ever needing to step on private property.

Additionally, Gerry has significant experience working with AutoCAD and (AutoCAD) Map3D. This expertise allows for the easy integration of CAD plans with GIS layers or vice versa.

Gerry's role in the Project was as GIS technician. He reviewed and collected all available background mapping resources to compile into Project mapping.

3.17 Leslie A. Nanibush

Leslie has more than 4 years' experience working on GIS/GPS mapping tasks for a variety of environmental Projects since graduating from the Geomatics Technician program from Sir Sandford Fleming College. Leslie routinely provides mapping support for Ecological Land Classification and Species at Risk Projects throughout Ontario.

Leslie's role in the Project was the primary GIS technician. She reviewed and collected all available background mapping resources to compile into Project mapping.

4.0 Summary of Results of Records Review

In accordance with the REA Regulation, an area of at least 120 m beyond the proposed development activities was examined for natural heritage features, including Areas of Natural and Scientific Interest (ANSI), wetlands, woodlands, valleylands, and wildlife habitat. Numerous agencies were contacted to compile a comprehensive records review, including the Aylmer District Ministry of Natural Resources (MNR) and Lower Thames Valley Conservation Authority (LTVCA). NRSI also utilized numerous background review sources, such as the Biodiversity Explorer, Ontario Breeding Bird Atlas (OBBA), Ontario Herpetofauna Atlas, and the Atlas of the Mammals of Ontario.

In addition to agency staff and available wildlife atlases, several existing avian and bat studies that overlap the Project were reviewed as part of the comprehensive records review.

The comprehensive results of the records review are included in the *South Kent Wind Project: Natural Heritage Records Review Report* (NRSI 2012a), and have been summarized in Table 1 below.

Table 1. Summary of Records Review for the South Kent Wind Project Area

Criteria	Result
1. Within 120 m of a Provincial Park or Conservation Reserve	No Project components are within 120 m of a provincial park or conservation reserve.
2. In a Natural Feature	The Project crosses several linear features, some of which have connectivity to a woodland. It is unlikely that these linear features (with connectivity to woodlands) provide the same species associations and habitat of nearby woodlands. However, these linear features have the potential to still provide significant wildlife habitat, for species of conservation concern and/or as animal movement corridors. The proposed Project location is located within 120m of the globally significant Rondeau Bay IBA. This area contains wildlife habitat features including staging and breeding habitat for several waterfowl and waterbird species. The habitats within the IBA also provide breeding habitat for several species of conservation concern. The proposed cabling along New Scotland Line is located adjacent to this IBA.

Criteria	Result
	In addition, the Project area overlaps with several areas that have been identified as candidate wildlife habitat through a review of existing studies, including shorebird staging areas and raptor wintering areas. As such, the Project is located within linear natural features, an IBA, and candidate bird SWH areas. All of these potentially significant habitats should be evaluated in more detail during the site investigation and evaluation of significance phases of this Project.
3. Within 50 m of a ANSI-ES	No Project components are within 50 m of an Earth Science ANSI.
4. Within 120 m of a Natural Feature	
a) ANSI-ES	Not Applicable (see Item 2 above)
b) ANSI-LS	No Project components are within 120 m of a life science ANSI.
c) Coastal Wetland	The Project location is not proposed within 120 m of coastal wetlands.
d) Northern Wetland	The Project Area does not occur in areas of northern wetlands.
e) Southern Wetland	One (1) Provincially Significant Wetland, the Rondeau Bay North Shore PSW complex, and two (2) unevaluated southern wetlands have been identified within 120 m of the proposed Project location.
f) Valleyland	No valleylands have been identified within 120 m of the Project location.
g) Wildlife Habitat	A deer wintering area has been identified within approximately 500 m of the access road/cabling associated with turbine no. P104. This feature extends east of the Project Area. Several linear features, including treed fencerows and naturalized drains, have been identified within 120 m of the Project location. These features have the potential to act as SWH, specifically providing animal movement corridors and/or habitat for species of conservation concern. A review of available wildlife studies that have been conducted throughout the Project Area have identified several potential areas of wildlife habitat, including shorebird staging areas, raptor wintering habitats, species of conservation concern, and other habitats that may be deemed wildlife habitat. The approximate boundaries of the Rondeau Bay IBA are found within 120 m of the Project location (as outlined above). This area contains several types of wildlife habitat features, primarily for birds and species of conservation concern. The boundaries of this IBA extend beyond the natural habitats of Rondeau Bay into agricultural fields. As such, site investigations will be

Criteria	Result
	important to relate the present habitat to identified waterfowl use in order to determine the extent of significant habitat. All of these wildlife habitats should be examined during the site investigation phase and/or the evaluation of significance phase of this Project to identify other habitat features and identify the significance of each natural feature.
h) Woodland	Several woodlands have been identified during the records review process, including the following locations where woodlands are found within 120 m of the Project location. Basemapping obtained from LIO indicates that a total of 53 woodlands, ranging in size from 2ha to 54ha are located within 120 m of the Project location. Municipal files indicate that 34 significant woodlands (as deemed in the Chatham-Kent Official Plan) are found within 120 m of the Project location. Most, if not all, of these 34 woodlands represent the same features as identified by available LIO basemapping.

The detailed results of the records review can be found in the *South Kent Wind Project: Natural Heritage Records Review Report* (NRSI 2012a). The results of this review have been used to guide the locations and types of site investigations required for the Project. All natural features identified during the conduct of the records review have been examined in more detail during the site investigation phase of the Project to confirm boundaries and characterize each feature.

5.0 Site Investigation Methodology

Comprehensive site investigations to document the environmental and biological characteristics of the Project were undertaken in accordance with the REA Regulation and the requirements of the MNR. These site-specific field investigations focused on vegetation community mapping to support and build on extensive wildlife studies that have already been completed within the Project Area. The results of these site investigations will be used to identify and map the boundaries of the natural features within 120 m of the Project location. Information collected at this stage will be used to evaluate the significance of features in subsequent reports.

A summary of the investigation methods employed for this document is discussed below.

5.1 Vegetation Community Mapping

In order to identify the presence and proximity of natural features within the Project Area, NRSI initially reviewed aerial imagery and base mapping as part of the already completed records review. Preliminary site investigations were conducted through roadside observations at proposed development activities to confirm and build upon information collected during the records review.

In instances where development activities are proposed within 120m of a natural feature or wildlife habitat identified through records review, site-specific investigations were completed within these features to confirm their boundaries, and collect more detailed vegetation community information, including habitat composition, species association, and landform and ecological functions. Vegetation community classification was conducted using modified Ecological Land Classification (ELC) system for southern Ontario. ELC and site-specific investigations were conducted for all areas within 120 m of the Project location (excepting cropland and developed areas) in order to identify any natural features or wildlife habitats which were not identified through the records review. Additionally, in order to positively distinguish between wetland and woodland communities, soil classification surveys were conducted at 15 woodlands within the Project area that contained wetland indicator species, and/or were classified as “Fresh-Moist” lowland forest types based on fall 2010 ELC site investigations. These soil surveys and characterization of the soils followed the ELC protocol and included up to 3

soil samples in each habitat, moisture content assessment, soil characterization, and examination of the presence of moisture indicators (soil mottling or gleying). Soil sample information can be found in Appendix VI – Field Notes.

Woodlands and wetlands occurring within 120 m of the Project location were identified, described, and mapped as natural features and wildlife habitats. Landform, habitat composition, water regime, and other ecological functions were noted during these investigations. Drains, hedgerows, other vegetation communities, agricultural crops, and other wildlife habitats were also described and mapped where they occurred within 120 m of the Project location.

Where possible, properties were physically assessed in order to complete the appropriate site investigations. In instances where NRSI could not gain landowner permission to access a property, features were assessed using an alternative site investigation (i.e. roadside). At the time of site investigations (in 2010 and 2011), we could not gain landowner permission to access the following fifteen (15) woodlands/wetlands within the Project area:

- P002-W1
- P004-W1
- P024-W2
- P027-W1
- P030-W2
- P055-W1
- P062-W1
- P064-W1
- P102-W2
- P111-W1
- P117-W1
- P139-W1
- P139-W5
- P139-W8
- P139-W9

Although these woodlands were not physically assessed in the field, their features and attributes were accurately recorded during roadside observations. A description of each woodland, including its attributes and composition, has been included in Section 7.0 – Site Investigation Around Project Components.

5.2 Incidental Wildlife& Habitat Assessment

In conjunction with the vegetation community mapping work, NRSI biologists made note of incidental wildlife and wildlife habitat observations. This includes recording any wildlife species observed, the number of individuals, their behaviour, and location. As well, other observations such as vernal pools, stick nests, snags, rock piles, and piles of debris or organic material which could provide wildlife habitat were noted throughout the Project Area by NRSI biologists. Species composition, character, and function were described for fencerows and drains/watercourses, which are being considered as wildlife habitat for their potential to act as movement corridors or as habitat for species of conservation concern. The results of these observations are provided in the specific habitat descriptions for natural features within 120 m of Project components, found throughout Section 7.0.

5.3 Site Investigation Information

Table 2 below provides the staff names, investigation dates, and weather conditions for each site investigation conducted by NRSI. Refer to Section 3.0 Staff Roles for the qualifications of each NRSI Biologist.

Table 2. Site Investigation Details Summary

Staff	Type of Fieldwork Conducted	Feature ID	Date	Time 24 hrs	Duration hrs	Weather Conditions		
						Temp ℃	Beaufort Wind	Cloud Cover %
Andrew Ryckman & Christy Humphrey	Ecological Land Classification General Wildlife/Habitat Assessment	P011-W1 P013-W1 P017-W1	1-Sep-10	0930 - 1630	7	32	3	60
	Ecological Land Classification General Wildlife/Habitat Assessment	P065-W1	2-Sep-10	0830 - 1800	9.5	28	4	80
	Ecological Land Classification General Wildlife/Habitat Assessment	P029-W1	3-Sep-10	0800 - 1300	5	23	4	100
Barry Moss & Matthew Ross	General Wildlife/Habitat Assessment	N/A	14-Sep-10	0815 - 1800	8	19	3	30
	General Wildlife/Habitat Assessment	N/A	15-Sep-10	0830 - 1315	4	20	3	20
Barry Moss	Ecological Land Classification General Wildlife/Habitat Assessment	P001-W1 P106-W1 P118-W1	6-Oct-10	0815 - 1700	8	19	1	20
	Ecological Land Classification General Wildlife/Habitat Assessment	P022-W1 P022-W2 P024-W1 P026-W1 P030-W1 P047-W1 P049-W1	7-Oct-10	0830 - 1730	9	20	2	0
	Ecological Land Classification General Wildlife/Habitat Assessment	P014-W1 P092-W1 P092-W2	8-Oct-10	0800 - 1400	6	19	2	10
Barry Moss	Ecological Land Classification General Wildlife/Habitat Assessment	P065-W2 P077-W1 P114-W1	20-Oct-10	1030 - 1815	7	16	2	20
	Ecological Land Classification General Wildlife/Habitat Assessment	P033-W1 P042-W1 P091-W1 P108-W1	21-Oct-10	0845 - 1730	8	12	3	80

Staff	Type of Fieldwork Conducted	Feature ID	Date	Time 24 hrs	Duration hrs	Weather Conditions		
						Temp ℃	Beaufort Wind	Cloud Cover %
Barry Moss	Ecological Land Classification General Wildlife/Habitat Assessment	P140-W1 CLA-W1	26-Oct-10	0915 - 1645	7	20	4	100
Patrick Deacon	Ecological Land Classification General Wildlife/Habitat Assessment	RB-A RB-B RB-D RB-E	27-Oct-10	0700 - 1645	9.75	11	4	0
	Ecological Land Classification General Wildlife/Habitat Assessment	RB-C RB-F	28-Oct-10	0700 - 1445	7.75	5	4	100
Christy Humphrey	Ecological Land Classification General Wildlife/Habitat Assessment	P082-W1 P085-W1 P085-W2 P086-W1 P136-W1	04-Nov-10	0930 - 1800	8.5	8	2	70
Barry Moss	General Wildlife/Habitat Assessment	N/A	05-Nov-10	0945 - 1700	7.25	5	3	80
	Ecological Land Classification General Wildlife/Habitat Assessment	P047-W2 P049-W2 P053-W1 P053-W2 P053-W3 P062-W1 P064-W1 P065-W3 P112-W1 P117-W1	06-Nov-10	0930 - 1900	9.5	1	2	40

Staff	Type of Fieldwork Conducted	Feature ID	Date	Time 24 hrs	Duration hrs	Weather Conditions		
						Temp ℃	Beaufort Wind	Cloud Cover %
	Ecological Land Classification General Wildlife/Habitat Assessment	P014-W2 P019-W1 P024-W2 P034-W1 P055-W1 P090-W1 CLA-W2 PSS-W1 PSS-W2 PSS-W3	07-Nov-10	0700 – 1700	10	5	3	50
	Ecological Land Classification General Wildlife/Habitat Assessment	P002-W1 P002-W2 P004-W1 P005-W1 P015-W1 P027-W1 P091-W2 P102-W1 P102-W2 P103-W1 P139-W1 P139-W2 P139-W3	08-Nov-10	0800 - 1545	7.75	6	1	0
Patrick Deacon & Sophie Gibbs	Ecological Land Classification General Wildlife/Habitat Assessment	P111-W1	04-Apr-11	0830– 1630	8	14	6	100
	Ecological Land Classification General Wildlife/Habitat Assessment	P053-W4 P098-W1 P162-W1	05-Apr-11	0800- 1930	11.5	10	4	95
	General Wildlife/Habitat Assessment	N/A	07-Apr-11	0830 – 1700	8.5	8	1	100
	General Wildlife/Habitat Assessment	N/A	08-Apr-11	0830 – 1230	4	4	3	100

Staff	Type of Fieldwork Conducted	Feature ID	Date	Time 24 hrs	Duration hrs	Weather Conditions		
						Temp ℃	Beaufort Wind	Cloud Cover %
	Ecological Land Classification General Wildlife/Habitat Assessment	P064-W1	21-Apr-11	0830 – 1730	9	4	3	70
Katherine St. James & Karen Buschert	General Wildlife/Habitat Assessment	N/A	04-Apr-11	0815-1630	8.25	15	4	100
	Ecological Land Classification General Wildlife/Habitat Assessment	P111-W2	05-Apr-11	0815-1600	7.75	3	4	100
Ken Burrell & Nathan Miller	Ecological Land Classification General Wildlife/Habitat Assessment	P166-W1	05-Apr-11	0830-1600	7.5	4	6	90
	Ecological Land Classification General Wildlife/Habitat Assessment	P007-W1 P140-W2 P171-W1	06-Apr-11	0830-1630	8	4	3	100
	Ecological Land Classification General Wildlife/Habitat Assessment	P156-W1	07-Apr-11	0800-1500	7	1	1	100
Tara Lessard & Patrick Deacon	Soil Classification General Wildlife/Habitat Assessment	P024-W1 P108-W1 CLA-W2	10-May-11	1215-1610	4	19	5	80
	Ecological Land Classification Soil Classification General Wildlife/Habitat Assessment	P024-W1 P001-W1 P002-W2 P014-W2 P118-W1	11-May-11	0909-1604	7	15.5-21	2	5
	Ecological Land Classification General Wildlife/Habitat Assessment	TRANS-W1 TRANS-W2 TRANS-W3	12-May-11	0830-1630	8	15	2	25
Patrick Deacon	Ecological Land Classification General Wildlife/Habitat Assessment	P162-W2	3-Jun-11	0830-1730	9	N/A	N/A	N/A

Staff	Type of Fieldwork Conducted	Feature ID	Date	Time 24 hrs	Duration hrs	Weather Conditions		
						Temp ℃	Beaufort Wind	Cloud Cover %
Andrew Dean & Katherine Clapham	Ecological Land Classification Wetland Assessment Soil Classification General Wildlife/Habitat Assessment	P001-W1 P002-W2 P140-W2 P001-W1 P002-W2 P140-W2 P140-W2	14-Jul-11	1200-2000	8	30	2	70
	Ecological Land Classification Wetland Assessment Soil Classification General Wildlife/Habitat Assessment	P014-W1 P014-W2 P034-W1 P042-W1 P065-W3 P108-W1 P111-W2 CLA-W2 P014-W2 P065-W3 P111-W2 P014-W1 P034-W1 P042-W1 P065-W3	15-Jul-11	0730-1730	10	26	2	20
Andrew Dean & Jessica Walker	Ecological Land Classification General Wildlife/Habitat Assessment	P166-W2 P173-W1	27-Jul-11	N/A	N/A	27-29	2-4	40
Heather Wright &	Ecological Land Classification General Wildlife/Habitat Assessment	P030-W2	18-Oct-11	1100-1700	6	10	1	90

Staff	Type of Fieldwork Conducted	Feature ID	Date			Weather Conditions		
				Time 24 hrs	Duration hrs	Temp ℃	Beaufort Wind	Cloud Cover %
Kim Watson	General Wildlife/Habitat Assessment	N/A	19-Oct-11	0900-1630	7.5	9	2	100
	Ecological Land Classification General Wildlife/Habitat Assessment	P030-W3 P030-M1 P054-W1 P054-W2	20-Oct-11	0900-1500	6	10	3	100
Christy Humphrey & Steve Burgin	Ecological Land Classification Wetland Assessment Soil Classification General Wildlife/Habitat Assessment	P002-M1 P004-M1 P004-W2 P054-W2 P139-W3 P139-W4 P139-W5 P139-W6 P139-W7 P139-W8 P139-W9 P002-WE1 P004-WE1 P054-WE1 P004-W2 P054-W2	10-Nov-11	1000-1800	8	6	3	10

6.0 Natural Features

The landscape throughout the Project Area is largely dominated by agricultural lands used for the production of row crops (e.g., soybean, corn, grains). The detailed records review has confirmed that the landscape is dominated by agricultural fields, but also includes occasional natural features including several woodlands, and a variety of wildlife habitats. As a result of the identification of these natural features, NRSI biologists have reviewed all natural features in more detail for purposes of evaluating the significance of each feature. Brief discussions of each natural feature type have been summarized below with additional detailed descriptions of the natural features in the Project Area provided in Section 7.0 of this report. Detailed mapping of the natural features identified within the Project Area are provided in Figures 2-1 through 2-9.
In addition to the natural features described below, numerous aquatic features were identified in the Project Area. A discussion of these water features will be provided by NRSI in the Water Body Reports, which will be submitted separately from the NHA.

6.1 Areas of Natural and Scientific Interest

No ANSIs were identified within 120 m of the Project location during the records review phase of this Project.

6.2 Woodlands

A total of fifty-seven (57) woodlands, ranging from <1 to 59 hectares in size within the Project area, were identified and delineated to dripline by NRSI biologists. Thirty-four (34) of these woodlands were identified through the records review as locally significant woodlands in municipal mapping. Each of these woodlands was examined by NRSI biologists and can be seen in the general context of the Project Area on Figures 2-1 through 2-9. Specific habitat composition and function of each woodland, as it relates to the proposed development activities, as observed by field biologists, has been provided in more detail in Section 7.0. A comprehensive table of woodland properties, including dominant species, relative location, and woodland size are provided in Appendix I of this report.

6.3 Wetlands

One (1) Provincially Significant Wetland (PSW), the Rondeau Bay North Shore PSW complex, and two (2) unevaluated southern wetlands have been identified within 120 m of the proposed Project location.

Based on a review of LIO mapping, a small portion of the Rondeau Bay North Shore PSW complex is located within approximately 90 m south of the cabling near turbine no. P171, along New Scotland Line. This area was examined during site investigation.

Two (2) unevaluated wetlands were identified within the Project area through LIO mapping, and were examined by NRSI biologists during the site investigation phase of this Project. It was confirmed that one of the areas identified as wetland, located along the transmission line associated with the Chatham Switching Station, is actually dominated by grasses with little to no indication of wetland plant species. This area has already been developed as part of an existing hydro corridor associated with the current substation, with the placement of a large hydro tower where the wetland is mapped. The other unevaluated wetland is located in the northeastern section of the Project Area, near the intersection of Gagner Line and Lagoon Road. NRSI biologists classified this area using ELC, and delineated its boundaries in the field using the Ontario Wetland Evaluation System (OWES) criteria, as per Appendix C of the Natural Heritage Assessment Guide (OMNR 2010c). An OWES certified biologist later reviewed the ELC data sheets, wetland forms, and wetland delineations and confirmed that they were accurate. This wetland community, within woodland P054-W2 (P054-WE1), is described in more detail below. The two (2) unevaluated wetlands, as mapped by LIO, are shown on Figure 2-6.

- P054-WE1 – Swamp Maple Mineral Deciduous Swamp (SWDM3-3 inclusion in woodland P054-W2)
  This mature forest community is dominated by sugar maple (*Acer saccharum*) in the canopy and sub-canopy, with rare snags throughout. The sparse understory is dominated by red elderberry (*Sambucus racemosa*), chokecherry (*Prunus tomentosa)* and red raspberry (*Rubus idaeus*), while the groundcover is dominated by red raspberry and running strawberry-bush (*Euonymus obovata*). A species at risk tree was also identified within this habitat. The swamp habitat is within 120m of the Project location, and its boundaries are depicted in Figure 3-6

Through ELC surveys in 2010, ten (10) woodlands within the Project Area were identified as containing a proportion of wetland indicator species, which indicates that they may in fact be wetlands or include a portion of wetland habitat. In 2011, additional ELC and soil classification surveys were conducted at all ten (10) of these woodlands in order to positively distinguish them as woodland or wetland habitat. As a result of these surveys, seven (7) wetlands were identified as either inclusions within a woodland or as entire parcels of the feature itself. All ten (10) woodlands that were re-examined in 2011 for the presence of wetland habitat are described in more detail below.

- P001-W1 - Fresh-Moist White Elm Lowland Deciduous Forest Type (FODM7-1)& White Elm Mineral Deciduous Swamp Type (SWDM4-2) Inclusion
  This young forest community is dominated by immature white elm (*Ulmus americana*) in the canopy and subcanopy, with occasional snags throughout. The sparse understory is dominated by gray dogwood (*Cornus foemina* ssp. *racemosa*) and the dense groundcover is dominated by poison ivy (*Toxicodendron radicans* ssp. *negundo*) and wild strawberry (*Fragaria virginiana* ssp. *virginiana*). The forest includes a small constructed open water channel that trickles into a narrow white elm-dominated swamp along the northwestern edge of the forest. This swamp area is located more than 120 m from the Project location and therefore does not require further consideration.

- P002-W2 - Fresh-Moist White Elm Lowland Deciduous Forest Type (FODM7-1)
  This young forest community is dominated by immature white elm, green ash, and willow up to 10 m in height. Red osier dogwood and white elm are dominant in the understory, while reed canary grass, Canada goldenrod, and avens are the dominant groundcover species. An additional site investigation in the summer of 2011 confirmed that this habitat is not a wetland, but is instead a riparian habitat along a drainage channel, and therefore does not require further consideration.

- P014-W1 (now wetland P014-WE1) - Fresh-Moist Oak-Maple Deciduous Forest Type (FODM9-2)
  This community is dominated by silver maple in the canopy, and white elm in the sub-canopy, with relatively few snags throughout. The understory is densely vegetated with white elm saplings and common buckthorn, and the groundcover is dense with Virginia creeper and garlic mustard. The high relative abundance of mature silver maple in this mid-aged forest suggests that it is flooded seasonally. This habitat also contains vernal pools which have been considered candidate amphibian breeding habitat. As such, this area has been considered a wetland, and it occurs within 120 m of the Project location.

- P014-W2 - Fresh-Moist White Elm Lowland Deciduous Forest Type (FODM7-1) & Open Water Pond (OAO) Inclusion (Wetland P014-WE2)
  This mid-age community is dominated by white elm, and Freeman's maple in the canopy, and white elm and white oak in the sub-canopy. There is no understory, and the groundcover layer consists of reed canary grass, Canada goldenrod and Kentucky bluegrass. Based on the species composition, a wetland inclusion has been identified within a portion of this forest community (P014-WE2). This

habitat also includes a small open water pond for cattle watering. Portions of the identified wetland habitat occur within 120 m of the Project location.

- P034-W1 – Fresh-Moist Elm Deciduous Woodland Type (FODM5-2)
  This young woodland community is dominated by white elm with some silver maple in the canopy. The sub-canopy is also dominated by white elm and silver maple, along with staghorn sumac. Hawthorns, gray dogwood, and eastern red cedar dominate the understory, while Canada goldenrod, smooth brome, and calico aster are found in the groundcover. While this is predominantly a young woodland, there are a few trees and snags in the 25-50 cm dbh size range. An additional site investigation in the summer of 2011 confirmed that the vegetation composition within this habitat is not indicative of a wetland, and therefore does not require further consideration.

- P042-W1 - Fresh-Moist White Elm Lowland Deciduous Forest Type (FODM7-1)
  This forest community is dominated by white elm, silver maple, and bur oak in the canopy and subcanopy, with many green ash snags. The understory is densely vegetated with regenerating white elm, green ash, and shagbark hickory saplings. The groundcover consists of green ash seedlings, avens sp., and calico aster. The high relative abundance of mature silver maple in this mid-aged forest suggests that it is flooded seasonally, however, the high density and composition of understory and groundcover species (i.e. garlic mustard, violet sp., poison ivy, calico aster) suggests much drier conditions. It is presumed that this area may have been wetter historically, but due to the agricultural tile drainage in the surrounding area, it is now a moist forest. Through an additional site investigation in the summer of 2011, and soil sample information (moisture regime of 4), this habitat was confirmed as woodland, and therefore does not require further consideration.

- P065-W3 - Fresh-Moist Bur Oak Deciduous Forest Type (FODM9-3)
  & Swamp Maple Mineral Deciduous Swamp Type (SWDM3-3) Inclusion
  This forest community is dominated by Bur oak, white elm, and silver maple in the canopy, with white elm, shagbark hickory, and bur oak in the sub-canopy. This is a mid-aged forest, with occasional snags in the 25-50 cm dbh range. This woodland contains a maple swamp inclusion in the middle of the forested habitat. This area is located more than 120 m from the Project location and therefore does not require further consideration.

- P108-W1 - Fresh-Moist White Elm Lowland Deciduous Forest Type (FOD7-1)
  & Swamp Maple Mineral Deciduous Swamp Type (SWDM3-3) Inclusion
  (Wetland P108-WE1)
  This forest community is dominated by white elm and silver maple in the canopy and subcanopy, with many green ash snags. The understory and groundcover is densely vegetated with regenerating white elm and green ash saplings. The high relative abundance of mature silver maple in this mid-aged forest suggests that it is flooded seasonally, however, the high density and composition of understory and groundcover species (i.e. Virginia creeper, wild geranium, fringed loosestrife, nettle species, may apple) suggests much drier conditions in some areas. It is presumed that this area may have been wetter historically, but due to the

agricultural tile drainage in the surrounding area, it is now a moist forest that contains an inclusion of confirmed wetland habitat. This woodland also contains vernal pools which have been considered candidate amphibian breeding habitat. Soil classification surveys conducted at this site determined a moisture regime of 6 for this woodland habitat. The wetland habitat within this woodland occurs within 120 m of the Project location.

- P111-W2 (now wetland P111-WE1) - Silver Maple Mineral Deciduous Swamp (SWDM3-2)
  This confirmed wetland community is dominated by silver maple, black ash and cottonwood in the canopy, and bitternut hickory, American elm, cherry sp., and occasional snags in the subcanopy. The understory and groundcover are sparsely vegetated with regenerating American elm and black ash saplings. Other understory and groundcover species include Virginia creeper, garlic mustard and beggar's ticks. This wetland habitat occurs within 120 m of the Project location.

- CLA-W2 – Fresh-Moist White Elm Lowland Deciduous Forest Type (FODM7-1)
  This young forest is dominated by white elm in the canopy and sub-canopy, with white elm and hawthorns in the understory layer. The groundcover is dominated by avens sp., Canada goldenrod, and red raspberry. An additional site investigation in the summer of 2011 confirmed that the vegetation composition within this habitat is not indicative of a wetland, and therefore does not require further consideration.

Table 3. Summary of Wetlands Identified Within or Near the Project Area

Woodland ID	Wetland Inclusion or Entire Woodland	Wetland ELC Code	Within the Project Area (Yes/No)	Wetland ID
P001-W1	Inclusion	SWDM4-2	No	N/A
P014-W1	Entire Feature	FODM9-2	Yes	P014-WE1
P014-W2	Inclusion	FODM7-1 OAO	Yes	P014-WE2
P054-W2	Inclusion	SWDM3-3	Yes	P054-WE1
P065-W3	Inclusion	SWDM3-3	No	N/A
P108-W1	Inclusion	SWDM3-2	Yes	P108-WE1
P111-W2	Entire Feature	SWDM3-2	Yes	P111-WE1

As depicted in the table above, five (5) wetlands were confirmed within the Project area during site investigations. The boundaries of these wetlands were delineated in the field using the *Ontario Wetland Evaluation System* (*OWES*) criteria, and they were assessed further using the Wetland Characteristics and Ecological Functions Assessment as described in Appendix C of the Natural Heritage assessment Guide (OMNR 2010c).

According to Appendix C, all of the wetlands that are assessed using this tool must be treated as provincially significant (for the purpose of the REA process and this Project). All of this information will be presented as part of the Evaluation of Significance phase of this Project.

6.4 Valleylands

No valleylands were identified within 120 m of the proposed development activities during the records review or site investigation phases of the Project. Watercourses within the Project Area were generally characterized by shallow agricultural drains along the edges of fields or roads. Occasional natural channels were found within the Project Area; however these features remained shallow in structure.

6.5 Wildlife Habitat

The comprehensive records review and site investigation of the Project Area has resulted in the identification of several wildlife habitats within the Project Area. As described in the Significant Wildlife Habitat Technical Guide (SWHTG), there are four (4) broad categories of wildlife habitat, including seasonal concentration areas, rare vegetation communities or specialized wildlife habitat, habitats of species of conservation concern, and animal movement corridors. Candidate significant wildlife habitat within these four (4) categories have been described in more detail in the following sections with specific information on their association with the proposed Project location described throughout Section 7.0 of this report.

6.5.1 Seasonal Concentration Areas

NRSI has reviewed the SWHTG (OMNR 2000) and 2009 DRAFT addendum (OMNR 2009a) as it relates to seasonal concentration areas.

<u>Winter Deer Yards</u>

A deer wintering area has been identified by the comprehensive records review completed for the Project. This area was determined to be within the Project area through basemapping available from LIO. It is located in the southeast corner of the Project Area within approximately 500 m of the access road/cabling associated with turbine no. P104. No coniferous wooded habitats, or otherwise suitable deer wintering

habitat (i.e. dense conifer cover with more than 60% canopy closure, according to Appendix Q of the SWHTG) was found within 120 m of this proposed turbine. As a result, no candidate significant deer wintering areas have been identified within 120 m of the Project location.

Waterfowl Stopover and Staging Areas

The Greater Rondeau Bay Important Bird Area (IBA) extends into the southeast portion of the Project Area. This area contains wildlife habitat features including staging and breeding habitat for several waterfowl and waterbird species. Waterfowl stopover and staging in Ecoregion 7E are described in the 2009 Ecoregion Criteria Schedules Addendum to the Significant Wildlife Habitat Technical Guide (OMNR 2009) as including fields with sheet water during mid-March to May, as flooded fields provide important foraging habitat for migrating waterfowl. The majority of the Project area consists of agricultural land, which has the potential to be flooded in some years. As such, agricultural fields along the southeast portion of the Project Area, within the IBA itself and within 2 km of the IBA boundary, were considered candidate SWH for stopover and staging waterfowl. This candidate significant wildlife habitat will be examined in more detail in the evaluation of significance phase of this Project. It is depicted in Figure 3-9.

Other candidate SWH areas, including areas in close proximity to Lake Erie and several local sewage lagoon habitats have the potential to concentrate waterfowl activity. All of these locations are beyond 120 m from the proposed Project and are therefore not discussed in detail in this report.

Waterfowl Nesting Habitat

No areas of waterfowl nesting were identified through the records review or site investigation within the Project Area. According to Appendix Q of the SWHTG, waterfowl nesting sites are considered relatively large, undisturbed upland areas with abundant ponds and wetlands. Upland areas should be at least 100 m wide in order to prevent predation of waterfowl nests. No such habitat was identified within the Project area. As a result, this type of specialized wildlife habitat is not expected to be present within 120 m from the Project location.

Shorebird Migratory Stopover Areas

Field studies within the Project area have identified several areas where shorebird activity was documented within the Project Area. These field surveys are described in more detail below.

Shorebird migratory stopover areas in Ecoregion 7E are described in the 2009 Ecoregion Criteria Schedules Addendum to the Significant Wildlife Habitat Technical Guide (OMNR 2009) as shorelines of lakes, rivers, or wetlands, including beach/bar, sand dune, or meadow marsh habitats. These high-quality habitats typically have a long history of use, and are usually found along the shorelines of the Great Lakes.

An area located in the northwest corner of the Project Area, overlapping with proposed turbine nos. P073, P074, P124, and P132, was surveyed in 2007 as part of the pre-construction surveys for the proposed Quinn Wind Farm (Jacques Whitford Ltd. 2007). This area consists of agricultural lands with sparse fencerows and occasional drainage ditches. A total of seven thousand, seven hundred and twenty-nine (7,729) individual shorebirds, representing thirteen (13) species, were observed within the entire Quinn Project Area during 2007 spring surveys. Although specific shorebird numbers for this concentration area are not provided in the text of the report *Spring Migration Monitoring, 2007: Quinn, Ontario* (Jacques Whitford Ltd. 2007), this area has been identified as an area of shorebird concentration. Although large numbers of shorebirds were observed during pre-construction surveys, this agricultural habitat does not meet the above provincial criteria for being considered candidate significant wildlife habitat. As such, no candidate shorebird migratory stopover areas have been identified within the Project area.

Other areas of shorebird concentration have been identified in the general vicinity of the Project through previous pre-construction investigations. However, all of these areas are well beyond 120 m from proposed Project components and have not been addressed in this report.

Landbird Migratory Stopover Areas

Landbird migratory stopover areas are described in Appendix Q of the SWHTG as consisting of sites with a variety of habitats (i.e. forest, grasslands) and the most significant sites are within 5 km of Lake Ontario and Lake Erie. If woodlands account for less than 5% of the total land use, woodlands 2 ha in size or greater are considered significant based on size. There are woodlands within 5 km of Lake Erie, and within the Project area that meet the size criteria for being considered significant. These include the following five (5) woodland communities: P001-W1, P004-W1, P118-W1, P139-W1, P139-W8. Although there are significant woodlands within 5 km of the Lake Erie shoreline, through ELC surveys it was confirmed that there is mainly homogeneous habitat (i.e. agricultural fields) with sparse woodland, hedgerow and vegetated drain habitat within 120 m of the Project location. This does not suggest a variety of habitats as described in the SWHTG criteria. As such, no candidate landbird migratory stopover areas have been identified within the Project area.

Raptor Winter Feeding and Roosting Areas

A single habitat that may be suitable for raptor winter feeding and roosting has been identified within the Project Area. This area was identified through the use of winter raptor studies for the Merlin Wind Farm (M.K. Ince & Associates, Ltd. 2008) that overlapped with several areas of the Project. This habitat is discussed in more detail below.

Winter avian studies at the Merlin Wind Farm identified the presence of several winter raptor species that may be indicative of raptor winter feeding and roosting areas. Individuals of northern harrier (*Circus cyaneus*), red-tailed hawk (*Buteo jamaicensis*), and short-eared owl (*Asio flammeus*) were all observed on a visit on December 27, 2006 (M.K. Ince 2008). The general location of these surveys was bound by Merlin Road to the east and Haskell Road and Irwin Road to the west. This area is immediately adjacent to an area proposed for roadside transmission lines, east of proposed turbine no. P087 and is shown in Figure 3-3. This general area is characterized by agricultural fields, and contains few hedgerows and a single woodlot. These hedgerows and the woodlot are not located within 120m of the Project location; however agricultural fields surrounding these features extend within 120 m of the Project location. The Ecoregion

Criteria Schedules Addendum to the Significant Wildlife Habitat Technical Guide (OMNR 2009) indicates that raptor wintering areas include forests adjacent to meadow, thicket, savannah, or woodland (<60% canopy cover) habitats, and the Significant Wildlife Habitat Technical Guide indicates that sites with many perches are also considered more significant (OMNR 2000). The areas found within 120 m of the Project location consist of agricultural fields, and as such do not meet the provincial criteria for candidate significant wildlife habitat. As such, no candidate raptor winter feeding and roosting areas have been identified within the Project area.

Reptile Hibernacula

A number of candidate reptile hibernacula SWH were identified within the Project area. These features include rock piles, old building foundations, and organic/debris piles, all of which may provide ample habitat for snakes to hibernate below the frost line and in association with water to prevent desiccation, as specified in the SWHTG. Appendix Q of the SWHTG also indicates that sites located in areas with good movement corridors are more significant. These candidate locations are listed below, and can be seen in the general context of Figures 3-2 to 3-9:

- Rock Piles
    - North side of Ed's Line near P002
    - Intersection of Cooper Road and Gleeson Line
    - Within hedgerow P072-H1
    - Associated with vegetated drain P065-D1
    - Within woodland P111-W1
    - Within woodland P162-W1
- Old foundations
    - East of turbine no. P028
- Debris/Organics Piles
    - Associated with vegetated drain P074-D1
    - Associated with vegetated drain P127-D2
    - Within woodland P111-W1
    - Within woodland P162-W1

Exact GPS locations of the candidate reptile hibernacula were recorded during the site investigation phase of this Project, and were carefully placed on the air photo mapping in locations they were observed. These areas of candidate significant wildlife habitat will be examined in more detail in the evaluation of significance phase of this Project.

Bat Maternity Roosts/Hibernacula

No bat hibernacula were identified within the Project Area, through a comprehensive records review, including MNR correspondence, or extensive site investigations of bat activity.

NRSI has identified several areas of candidate bat maternity colonies. NRSI has used an acoustic monitoring passage rate of at least 3.0 passes/hr to represent a baseline value for candidate SWH. This value roughly corresponds to a maximum of thirty (30) individual bats per night (3.0 passes/hr through 10 hours of flight time). This value of thirty (30) individual bats will assist with the identification of the two (2) most common bat species in Ontario, little brown bat (*Myotis lucifugus*) and big brown bat (*Eptesicus fuscus*). NRSI has also reviewed species associations, where available, to identify any other monitoring stations where less common species, such as the tricolored bat (*Perimyotis subflavus*), formerly known as the eastern pipistrelle, (*Pipistrellus subflavus*) and northern long-eared bat (*Myotis septentrionalis*), may represent larger proportions of bat activity. Finally, where suitable habitats may be present without site-specific bat monitoring conducted in the immediate vicinity, NRSI has reviewed areas where site-specific bat monitoring can be related to areas of similar habitat and/or geographic location. Each of these locations has been described in more detail below.

Acoustic bat monitoring located east of proposed turbine no. P039 had an average bat passage rate of 4.45 bat passes/hr. The species associations across the four (4) stations monitored under this monitoring effort identified silver-haired bat/big brown bat as being the most abundant species group (73%). This activity level suggests a candidate significant wildlife habitat for bat maternity roosts within a portion of the railbed community (i.e. RB-A2).

Acoustic bat monitoring conducted by EchoTrack within the Flat Creek Wind Farm Project Area was identified as having an average passage rate of 4.8 passes/hr through

the use of nocturnal RADAR studies (Wind Prospect Inc. 2009a). The general area covered by the RADAR studies overlaps with approximately seven (7) proposed turbine locations (P002, P003, P004, P006, P007, P008, P009) within the Project. Available basemapping and vegetation mapping conducted by NRSI biologists have identified at least two (2) woodland features within this general survey area, with up to three (3) more woodland features along the perimeter of this survey area. Site investigations have confirmed that these natural features are all located well beyond 120 m of proposed development activities.

The Harwich Wind Farm Project Area was surveyed for bat activity by EchoTrack through the use of nocturnal RADAR studies (Wind Prospect Inc. 2009b). The results of this survey indicated a bat activity rate of approximately 5.4 bat passes/hr. The general area covered by this RADAR study overlaps with three (3) proposed turbines, nos. P035, P036, and P042, within the Project Area. Also present within this general area surveyed by EchoTrack are a woodland feature (P108-W1 with wetland inclusion, P108-WE1) and occasional hedgerow and watercourse features. Based on the 5.4 passes/hr bat activity rate, it is possible that a maternity roost could be present within the vicinity of this monitoring station. As such, NRSI recommends that the wooded feature within the RADAR study area (P108-W1 with wetland inclusion, P108-WE1) be considered candidate significant wildlife habitat for bat maternity roosts.

NRSI biologists have noted that several acoustic bat monitoring studies within 6 km of Rondeau Bay and the immediately adjacent shorelines of Lake Erie have shown consistently higher bat activity than those found further inland or in close proximity to the shoreline in locations away from Rondeau Bay. These results have been noted at several of the monitoring stations for the Front Line Wind Farm, Flat Creek Wind Farm, and Erieau-Blenheim Wind Farm, all originally proposed (at least in part) within 6 km of Rondeau Bay. As such, NRSI recommends that all woodlands, of at least 0.5 ha in size, within 6 km of Rondeau Bay be considered candidate significant habitat for bat maternity colonies.

These areas of candidate significant wildlife habitat will be examined in more detail in the evaluation of significance phase of this Project. No other acoustic bat monitoring results,

species associations, or habitat comparisons have warranted consideration for candidate significant wildlife habitat for bat maternity colonies within the Project.

Other Seasonal Concentration Areas

Several other seasonal concentration areas, including bald eagle winter feeding and roosting areas, wild turkey (*Meleagris gallopavo*) winter range, turkey vulture (*Cathartes aura*) summer roosting areas, and migratory butterfly stopover areas were considered as part of the records review and site investigation phases of the Project; however, criteria from the SWHTG (OMNR 2000) have not been met in order to consider these areas candidate habitat.

According to Appendix Q of the SWHTG (OMNR 2000), bald eagle winter feeding and roosting areas consist of large sites with good habitat, including abundant open water and fish, extensive large trees and snags, and are adjacent to prime hunting areas. Such sites are likely near Rondeau Bay, which is entirely outside of the Project area. Therefore, no candidate bald eagle winter feeding and roosting areas have been identified during the Site Investigation phase of this Project.

According to the SWHTG (OMNR 2000), wild turkey winter range includes dense coniferous woodland habitat. Most of the woodlands within the Project Area are deciduous, and do not provide adequate protection for wild turkeys from the cold or from predators. Two coniferous woodlands, a pine plantation (P002-W1), and a white spruce plantation (inclusion within P139-W6) are located within 120 m of the Project location. However, the pine plantation is small (1.39 hectares) and young (trees are less than 10 m in height), and the white spruce plantation is small (approximately 1.2 ha) and is surrounded by deciduous forest. Therefore, no candidate wild turkey winter range habitat was considered during the Site Investigation phase of this Project.

Turkey vulture summer roosting areas consist of rocky cliff edges and large, dead or partially dead trees, preferable in undisturbed areas, and often near water (OMNR 2000). No cliffs were identified within the Project Area, and most of the habitat is agricultural and is therefore disturbed. As such, no candidate turkey vulture summer roosting areas were identified during the Site Investigation phase of this Project.

According to the SWHTG, butterfly migratory route/stopover areas are rare habitats located within 5 km of Lake Erie. These habitats consist of a combination of fields (meadow, thicket, or savannah) and forest (forest or plantation), at least 10 ha in size. Two (2) meadow and two (2) fallow field communities have been identified within the Project Area. One (1) fallow field is located north of the rail bed at the 7th Line, west of North Buxton. This field is 2.6 ha in size. It is located greater than 11 km from the shore of Lake Erie and does not meet the size criterion of 10 ha or larger. As such, this field does not represent a candidate butterfly migratory stopover area. One (1) meadow community is located in the northeast portion of the Project Area along Harwich Road. It is an isolated community of approximately 8 ha in size, and is more than 8 km from the Lake Erie shoreline. As such, this community does not represent a candidate butterfly migratory stopover area. There are two fields within the Project area that have the potential to provide suitable habitat and are greater than 10 ha in size. One of these fields is a fallow agricultural field dominated by grasses and goldenrods, located adjacent to Campbell Line on the north side (42.8 ha). However, this field is located greater than 9 km from the shoreline of Lake Erie. The second is a meadow community identified south of the rail bed, west of Fargo (P053-W2), and is 14.3 ha in size. This field is over 10 km from the shoreline of Lake Erie. As a result, no meadow or fallow field communities identified within the Project Area are considered candidate butterfly migratory stopover areas. Several savannah and thicket communities have been identified in the Project Area. Three savannah communities have been identified along the Rail Bed (RB-B, RB-E, and RB-F). However, the rail bed is situated greater than 9 km from the shoreline of Lake Erie, and as a result these areas are not considered candidate butterfly migratory stopover areas. Two thicket communities have also been identified within the Project Area. One thicket community is located approximately 1.96 km from the shore of Rondeau Bay just south of Sinclair Line (P139-W3). This is a Sumac Deciduous Shrub Thicket, with sparse bur oak, eastern cottonwood, and white elm in the canopy with a thick sub-canopy dominated by staghorn sumac. Although this community is located close to the shore of Lake Erie, it is isolated from forest habitat and is only 1.89 ha in size. As a result, it is not considered a candidate migratory butterfly stopover area. A second thicket community is located just north of the rail bed, west of the community on Fargo Road (P053-W1). This community is classified as a Gray Dogwood Deciduous Shrub Thicket. It is not contiguous to any forest communities, and

is located greater than 10 km from the shore of Lake Erie. As a result, it is not considered a candidate migratory butterfly stopover area. No suitable meadow, savannah, or thicket communities have been identified within the Project Area to indicate the presence of a candidate significant migratory butterfly stopover area.

So, despite their consideration, no background information or field work identified any candidate SWH for these seasonal concentration areas.

6.5.2 Rare Vegetation Communities and Specialized Wildlife Habitat

NRSI has reviewed the SWHTG (OMNR 2000) and 2009 DRAFT addendum (OMNR 2009a) as they relate to rare vegetation communities and specialized wildlife habitat.

Tallgrass Prairie

During ELC surveys, inclusions of tallgrass prairie (Dry Mixed Graminoid Tallgrass Prairie Type, MEGM1-4) were identified by NRSI biologists along the rail bed in two (2) locations within the Fresh-Moist Mixed Savanna Ecosite (SVMM3) (within RB-B3 and RB-B4 communities). As such, these areas have been considered candidate significant wildlife habitat and are depicted in Figure 3-7.

Savannahs

Through ELC surveys, three (3) savannah communities have been identified within the Project Area, specifically along the existing railbed within the RB-B, RB-E and RB-F communities. RB-B is classified as a Fresh-Moist Mixed Savanna Ecosite (SVMM3), and RB-E and RB-F have been classified as White Birch / Poplar Deciduous Savanna Types (SVDM3-5). As such, these areas have been considered candidate significant wildlife habitat.

Rare Forest Types

Appendix J of the SWHTG includes a list of provincially rare forest community types. This list was reviewed, and no rare forest types were identified within the Project Area through the records review or in the site investigation. As a result, this type of rare vegetation community is not expected to be present within 120 m from the Project location.

Woodland Raptor Nesting Habitat

According to the SWHTG Criteria Schedules for Ecoregion 7E, woodland raptor nesting habitat includes all natural or plantation coniferous forest stands that are greater than 5 ha in size. Indicator species can include several owl, hawk, and falcon species (OMNR 2000). Pre-construction avian studies throughout the Project Area have identified areas of habitat that may be suitable for woodland raptor nesting. These areas have been addressed in more detail below.

Avian studies within the Erieau-Blenheim Wind Farm Project Area, conducted in 2007, identified the presence of one (1) Cooper's hawk (*Accipiter cooperii*) that was identified as being on territory within the Project Area (Helimax Energy Inc. 2008). Although details of nest location were not identified during these studies, or subsequent report, NRSI has compared all woodlands of at least 5 ha that overlap with the areas examined for the Erieau-Blenheim Project and those within 120 m of the proposed development activities at the Project. A single woodland, Sinclair's Bush, located north of proposed turbine no. P140, and outside of the Project Area, is found overlapping with both Projects. This woodland is large in size and provides ample habitat for nesting raptors. The known presence of a Cooper's hawk on territory and two (2) owl species, great horned owl (*Bubo virginianus*) and eastern screech owl (*Otus asio*) that have previously been identified breeding in this habitat (Allen 1988) have resulted in NRSI recommending that Sinclair's Bush be considered candidate significant habitat for woodland raptor nesting. However, site investigations have confirmed that these natural features are all located beyond 120 m of proposed development activities.

Several studies within the Project have identified numerous raptor nests, including those of American kestrel (*Falco sparverius*), red-tailed hawk (*Buteo jamaicensis*), and great horned owl, however none of these species have been identified as indicator species in the Ecoregion Criteria Schedules addendum to the SWHTG (OMNR 2009a).

Two additional coniferous stands, a pine plantation (P002-W1), and a white spruce plantation (inclusion within P139-W6) are located within 120 m of the Project location. However, the pine plantation is small (1.39 hectares) and young (trees are less than 10

m in height), and the white spruce plantation is small (approximately 1.2 ha) and is surrounded by deciduous forest. As such, these areas do not meet the size criteria, and have not been considered candidate woodland raptor nesting habitat.

No other raptor nests, or potentially raptor nesting locations, have been identified through extensive avian site investigations. As such, there is no candidate woodland raptor nesting habitat within 120 m of the Project location.

Amphibian Breeding Habitat

During site investigations, three (3) candidate amphibian breeding SWH were identified within the Project area. According to Appendix Q of the SWHTG (OMNR 2000), woodlands supporting amphibian breeding ponds contain permanent ponds or water until mid-July. Undisturbed woodlands with shrubs and logs, large and/or several ponds are considered more significant. The following woodlands/wetlands contain areas of seasonal flooding and woody debris, which may provide significant wildlife habitat for amphibian breeding:

- P014-WE1
- P108-W1 (with wetland inclusion, P108-WE1)
- P162-W1

Exact GPS locations of these candidate amphibian breeding habitats were recorded during the site investigation phase of this Project, and were carefully marked on the air photo mapping. These areas of candidate significant wildlife habitat will be examined in more detail in the evaluation of significance phase of this Project.

Turtle Nesting and Over-wintering Habitat

Turtle nesting and over-wintering habitats have been examined within the limits of the Project Area and were compared to the evaluation criteria found in the Ecoregion 7E Criteria Schedules for the Significant Wildlife Habitat Technical Guide (OMNR 2000). Turtle nesting areas have been identified as including sand and/or gravel beaches adjacent to undisturbed shallow weedy areas of marshes, lakes and rivers. These sites are often south to southwest facing, and have maximum exposure to sunlight. No

sand/gravel beaches were identified within the Project area. The focus of these habitats is in the vicinity of Rondeau Bay, which is known to contain several turtle species of conservation concern and SAR, including the snapping turtle (*Chelydra sepentina*) and northern map turtle (*Graptemys geographica*). Based on LIO mapping, a small portion of the Rondeau Bay North Shore PSW complex is located within the Project Area along New Scotland Line. This area was examined during the site investigation, and it consists of a well-vegetated drain which may provide habitat for nesting turtles. According to Appendix D of the updated version of the Natural Heritage Assessment Guide, only turtle nesting habitats that are overlapping with, or are within 120m of access roads need to be identified within the Project area (OMNR 2011). In this case, the portion of the Rondeau Bay North Shore PSW that exists within 120m of the Project location is within 120m of cabling. As such, candidate turtle nesting habitat has been assumed to be existing within 120m of the Project location, and it will be treated as generalized candidate significant wildlife habitat in the Environmental Impact Study (EIS). No other areas of candidate turtle nesting habitat have been identified within 120 m of the Project location.

According to the Ecoregion 7E Criteria Schedules for the Significant Wildlife Habitat Technical Guide (OMNR 2000), over-wintering habitat for turtles consists of permanent waterbodies, large wetlands, and bogs or fens with adequate dissolved oxygen. NRSI biologists identified ten (10) drain systems within the Project area which may act as habitat for over-wintering turtles. These areas all have direct connectivity to the aquatic and wetland habitats associated with Rondeau Bay or Lake Erie in close proximity to Rondeau Bay. The sections of these drains that have been considered candidate SWH for over-wintering turtles are located within 1 km of the shoreline of Rondeau Bay/Lake Erie. According to the MNR (Ron Gould 2011, pers. Comm.), turtles are likely to be encountered within 1 km of the Rondeau Bay/Lake Erie shoreline. Two (2) sections of the ten (10) drain systems (P002-D2 and P139-D1) are within the Project area and are within 1 km of Rondeau Bay. P002-D2 contained water at the time of site investigation in 2011; the channel was approximately 0.5 m in width, and 0.25 m in average depth. P139-D1 also contained water at the time of site investigation; it was approximately 5 m wide and 0.9 m deep. According to the 2012 Ecoregion Criteria Schedule addendum to the SWHTG, turtle overwintering areas are permanent waterbodies, large wetlands and

bogs or fens with adequate dissolved oxygen; the water in turtle overwintering sites has to be deep enough not to freeze (OMNR 2012). Both P002-D2 and P139-D1 are shallow in nature, and have therefore not been considered candidate overwintering turtle habitat. No candidate turtle over-wintering habitat has been identified within the Project area.

Seeps and Springs

No seeps or springs were identified within the Project Area through records review or site investigation. In addition, there is inadequate forest cover (i.e., there is greater than 25% cover of meadows, fields, or pasture) in a headwater area to support significant specialized habitat associated with seeps and springs, as identified by the Ecoregion Criteria Schedules addendum to the SWHTG (OMNR 2009a). As a result, this type of specialized wildlife habitat is not found within the Project Area.

Other Rare Vegetation Communities and Specialized Wildlife Habitat

NRSI has reviewed the list of known rare vegetation communities within Appendix M of the SWHTG, and through ELC surveys, can confirm that no alvars, cliff or talus slopes, and sand barrens, or other rare vegetation communities, are present within the Project Area

Several other specialized wildlife habitats, including sites supporting area-sensitive species, forest stands providing a diversity of habitats, old growth and mature forest stands, foraging areas producing fruit, hard mast (acorns, beechnuts), osprey/bald eagle nesting habitat and areas of high diversity were considered as part of the records review and site investigation phases of the Project; however, criteria from the SWHTG have not been met in order to consider these areas candidate habitat. These habitats are described in more detail below.

Sites supporting area-sensitive species have been addressed above under Woodland Raptor Nesting Habitat, and in Section 6.5.3 below (Area-Sensitive Bird Breeding Habitat, and Open Country Bird Breeding Habitat).

Forest stands providing a diversity of habitats are identified in Appendix Q of the SWHTG as sites with a diversity of age classes and species of trees and shrubs, high

proportion of old or mature trees and/or diseased or damaged trees, un-even aged forest stands, and a diversity of tree cavity sizes. Through ELC surveys, it has been determined that the woodlands within the Project area are mainly deciduous and have a high proportion of young or mid-age trees of similar age classes. Therefore, no forest stands providing a diversity of habitats have been identified within the Project area.

According to Appendix Q of the SWHTG, old growth or mature forest stands consist of a large proportion of trees in older age classes, many of them over 120 to 140 years old. Other features include a broad spectrum of tree sizes with some very tall trees. These older, relatively undisturbed forests usually support a high diversity of wildlife species and are extremely rare throughout the province, particularly in southern Ontario. Although some of the woodlands within the Project area were classified as mature during site investigations, the trees are not likely more than 120 years old, the woodlands are relatively disturbed, and they do not contain a high diversity of wildlife species. As such, no old growth or mature forest stands have been identified within the Project area.

Foraging areas producing fruit and hard mast (acorns, beechnuts) are identified in Appendix Q of the SWHTG as woodlands providing several significant wildlife habitats (i.e. forest interior habitat, raptor nesting, abundant tree cavities and down woody debris). Large areas of fruit-producing shrubs (i.e. blueberries, wild blackberries, serviceberries) and mast-producing trees (i.e. oaks, hickories, beech) are more significant because they support more wildlife. Large sites with numerous oak trees with 40-65 cm diameter at breast height are considered significant. It has been confirmed through ELC surveys, that some mast-producing trees are present within the Project area; however, they are not abundant or large enough to meet provincial criteria for significance. As such, no foraging areas producing fruit and hard mast were identified within the Project area.

According to Appendix Q of the SWHTG, areas of high diversity consist of sites containing several different wetland types and/or forested uplands, and grasslands. Larger sites supporting rare or uncommon species are considered more significant than those that support only common species. It has been confirmed through ELC surveys that there is mainly homogeneous habitat (i.e. agricultural fields) with sparse (mainly

deciduous) woodland, hedgerow and vegetated drain habitat within the Project area. As such, there are no areas of high diversity within the Project area.

So, despite their consideration, no background information or field work identified any candidate SWH for these rare vegetation communities or specialized wildlife habitats.

6.5.3 Habitats of Species of Conservation Concern

Habitat for species of conservation concern are generally focused on breeding habitats for sensitive species, and can include marsh bird breeding habitat, area sensitive breeding habitat, and open country or grassland breeding habitats.

Marsh Bird Breeding Habitat

Marsh bird breeding habitat is described in the DRAFT Addendum to the SWHTG as marsh wetland habitat (shallow water with emergent aquatic vegetation present). Through ELC surveys, it was confirmed that there is no marsh habitat within the Project area. And as such, there is no candidate marsh bird breeding habitat within the Project area.

Area Sensitive Bird Breeding Habitat

The DRAFT Addendum to the SWHTG indicates that suitable habitats for area-sensitive bird breeding species include mature (>60 years old) natural forest stands that are 10 hectares in size or greater. Eleven (11) woodlands within the Project Area are larger than 10 ha in size. Of those woodlands, seven (7) have been identified as mid-age or mature. As a result, these woodlands have been identified as candidate area sensitive bird breeding habitats, and include the following communities:

- P014-W2 (with wetland inclusion, P014-WE2)
- P022-W1
- P042-W1
- P108-W1 (with wetland inclusion, P108-WE1)
- P139-W8
- P156-W1
- P162-W2

Open Country Bird Breeding Habitat

The DRAFT Addendum to the SWHTG indicates that open country (grassland) bird breeding habitat is characterized by areas of 10 ha or larger consisting of meadows, fallow fields, or hay. These areas are typically not Class 1 or 2 agricultural lands and do not include areas planted with row crops in the last 5 years (OMNR 2009a). A number of hayfields have been identified within the Project Area; however, these are not considered candidate SWH for open country bird breeding habitat as landowners have indicated they are used in rotation with a variety of row crops (K. Knudsen 2010, *pers. comm.*), and are often Class 1 or Class 2 agricultural land. NRSI has identified three (3) candidate SWH for open country bird breeding habitat. These include two (2) fallow fields and one (1) identified meadow (P053-W2), which are described in more detail below.

One (1) fallow field is located north of the rail bed at the 7th Line, west of North Buxton. This field is Class 3 agricultural land and is 2.6 ha in size. There are two fields within the Project Area which are greater than 10 ha in size and represent Class 3 agricultural land. One of these fields is a fallow agricultural field dominated by grasses and goldenrods, located adjacent to Campbell Line on the north side (42.8 ha). The entire field consists of both Class 2 and Class 3 agricultural land, with the Class 3 land closest to Campbell Line. The second is a meadow community identified south of the rail bed, west of Fargo (P053-W2), which is 14.3 ha in size. These three (3) areas are considered candidate significant open country bird breeding habitat, and can be seen in the general context of Figure 3.

Habitat for Species of Special Concern

Species which are listed as Species of Special Concern by SARO are discussed in this section regardless of their provincial S-rank. Species that are listed as S1-S3 and have no SARO ranking are discussed in the section below on Habitat for Species Ranked S1-S3. There are two (2) bird species, one (1) species of lepidoptera, and one (1) plant species which have been observed near or within the Project Area which are listed by SARO as Species of Special Concern.

Birds

There were two (2) general locations within the Project Area in which short-eared owl was observed in studies for other wind Projects within the Project Area. One (1) area is located in southeastern edge of the Project Area (identified within the Front Line Wind Farm Project Area) and the other is in the southern portion of the western end of the Project Area (identified within the Merlin Wind Farm Project Area). Based on the breeding habitat requirements for the short-eared owl of 75 to 100 ha of contiguous open grassland habitat, there is not believed to be any breeding habitat within the Project Area. Short-eared owl was observed in the Project Area only during winter surveys and in each instance only on a single date. As the studies for the Front Line Wind Farm and the Merlin Wind Farm identified only that this species was observed within their respective Project Areas, and did not provide specific locations, any areas of old field, hay or other grassland communities within 120 m of proposed turbine locations within the Front Line and Merlin Wind Farm Project Areas were reviewed as potential habitat. Two proposed turbines are proposed for the area encompassed by the Front Line Wind Farm (P001 and P138). Within 120 m of proposed turbine P001 and its associated infrastructure there are only active agricultural fields which do not provide candidate significant wintering habitat for short-eared owl. There is no candidate significant habitat for short-eared owl within 120 m of proposed turbine P138 and its associated infrastructure as active agricultural field comprises most of the area, along with a small portion of deciduous hedgerow. As a result, there is no suitable habitat for the short-eared owl within the Project Area.

The red-headed woodpecker (*Melanerpes erythrocephalus*) breeds in open woodlands and woodland edges. It has two essential habitat components of large, dead, weathered trees or live trees with large dead branches, and only 4 ha required for territory (Cadman et al. 2007). Red-headed woodpecker was observed in the western half of the Project Area (observed in studies for the Port Alma Wind Farm, the former Merlin-Buxton Wind Farm, and Raleigh Wind Farm) and in a small area in the southeast end of the Project Area (Front Line Wind Farm). Based on the habitat requirements of this species, woodlands with abundant snags and any fencerows with abundant snags, which were also associated with woodlands within 120 m of proposed Project components, were considered to be significant. Areas studied by previously proposed wind Projects were reviewed using this criteria to identify red-headed woodpecker habitat within the Project.

No candidate habitat for red-headed woodpecker was identified in the areas where studies had previously observed them.

Lepidoptera

The monarch (*Danaus plexippus*) is a butterfly species which requires both wildflowers and milkweed (*Asclepias sp.*) in its habitat, as wildflowers act as a nectar source and common milkweed (*Asclepias syriaca*) is the required larval foodplant on which they lay their eggs. Monarch butterfly was observed by NRSI biologists in the northwest corner of the Project Area near proposed turbine no. P013. The monarch was observed near hedgerow P013-H2 which was a shrub dominated (sandbank willow, *Salix exigua;* willow sp., gray dogwood, white elm) fencerow associated with a watercourse. As the surrounding area comprises largely of agricultural crop fields, the watercourse provides some edge habitat where wildflowers are able to establish between it and the agricultural field. Based on the habitat requirements of the monarch it is presumed that the fencerow community located within 120 m of proposed turbine P013 provides candidate habitat for this Species of Special Concern, however this hedgerow is located more than 120 m from the Project location. As such, no candidate significant wildlife habitat for the monarch butterfly exists within 120m of the Project location.

Plants

Climbing prairie rose (*Rosa setigera*) is a species that colonizes open habitats and areas with well drained soils. Climbing prairie rose was confirmed by NRSI biologists to be present in a fencerow running northeast to southwest in the southwestern portion of the general Project Area. The climbing prairie rose was found near Haskell Road, south of Glenwood Line and north of Badder Line. It was observed in a sparsely treed fencerow dominated by white elm and hawthorns. Based on the habitat requirements of climbing prairie rose, the fencerow community in which it was found is assumed to provide candidate significant habitat for this Species of Special Concern. However, site investigations confirmed that this habitat is now located more than 120 m from the Project location.

Table 4. Species of Special Concern Observed Near or Within the Project Area

This table summarizes the criteria used to identify habitat for species of special concern near or within the Project Area. It identifies the species of special concern observed near or within the

Project Area, describes their habitat requirements, and whether breeding habitat is present within the Project Area. In addition, the season and general location of observations are identified.

Species	Habitat Requirements	Breeding Habitat near or within the Project Area	Season of Observation	Source of Observation
Birds				
Red-headed Woodpecker *Melanerpes erythrocephalus*	Open, deciduous forest with little understory; fields or pasture lands with scattered large trees; wooded swamps; orchards, small woodlots or forest edges; groves of dead or dying trees; feeds on insects and stores nuts or acorns for winter; loss of habitat is limiting factor; requires cavity trees with at least 40 cm dbh; require about 4 ha for a territory (OMNR 2000)	Yes	Migration	Merlin-Buxton, Front-Line, Raleigh, Port Alma
Short-Eared Owl *Asio flammeus*	Grasslands, open areas or meadows that are grassy or bushy; marshes, bogs or tundra; both diurnal and nocturnal habits; ground nester; destruction of wetlands by drainage for agriculture is an important factor in the decline of this species; home range 25 - 125 ha; requires 75-100 ha of contiguous open habitat (OMNR 2000)	Yes	Winter	Merlin, Front Line
Lepidoptera				
Monarch *Danaus plexippus*	Monarch habitat includes wherever milkweed (Asclepius) and wildflowers (such as Goldenrod, asters, and Purple Loosestrife) exist. This includes abandoned farmland, along roadsides, and other open spaces where these plants grow	Yes	Migration	Site Investigation
Plants				
Climbing Prairie Rose *Rosa setigera*	Early successional species. It colonizes open habitats such as abandoned agricultural fields or unoccupied urban land. The species shows a preference for sites with heavy soils but is occasionally found on sandy or shallow soils that dry out during part of the growing season	Yes	n/a	Site Investigation

Species	Habitat Requirements	Breeding Habitat near or within the Project Area	Season of Observation	Source of Observation
	(Gov. of Can. 2010)			

Habitat for Species Ranked S1-S3

Flora and fauna discussed in this section are those which have designated provincial S-ranks of S1-S3 and which have not been given any status in the SARO list. Species which are listed as S1-S3 and are listed as "Threatened" or "Endangered" by COSEWIC or SARO have been excluded from discussion in this report.

Based on studies which have been conducted in the Project Area there have been twenty (20) bird species, two (2) species of plants and three (3) species of bats which have been observed and have S-ranks of S1-S3. A complete list of these species which have been observed in the Project Area and their breeding habitat requirements are shown in Table 5. Species Ranked S1-S3 Observed in the Project Area.

Birds

Ten (10) of the bird species identified in Table 5. Species Ranked S1-S3 Observed in the Project Area are species which are known to only breed in the Hudson Bay Lowlands in the far north of Ontario. These include: tundra swan (*Cygnus columbianus*), rough-legged hawk (*Buteo lagopus*), American golden-plover (*Pluvialis dominica*), semipalmated plover (*Charadruis semipalmatus*), dunlin (*Calidris alpina*), stilt sandpiper (*Calidris himantopus*), Hudsonian godwit (*Limosa haemastica*), gray-cheeked thrush (*Catharus minimus*), whimbrel (*Numenius phaeopus*), and northern shrike (*Lanius excubitor*). Similarly, there are three (3) bird species, bufflehead (*Bucephala albeola*), short-billed dowitcher (*Limnodromus griseus*), and rusty blackbird (*Euphagus cyanocephalus*), which are known to only breed in the Canadian Shield, far from the Project Area. All thirteen (13) of the species listed above were observed either during migration surveys or winter surveys conducted in the Project Area. Where appropriate, the significance of concentration or staging areas of some of the species or species

groups identified are discussed elsewhere in this report. There is no candidate significant breeding habitat for these thirteen (13) bird species within the Project Area.

There were seven (7) waterbird species observed within the Project Area which species are known to breed in southern Ontario. These include: redhead (*Aythya americana*), ruddy duck (*Oxyura jamaicensis*), great egret (*Ardea alba*), greater black-backed gull (*Larus marinus*), little gull (*Larus minutus*), caspian tern (*Hydroprogne caspia*), and Forster's tern (*Sterna forsteri*). All seven waterbird species require ponds, large wetlands (often marshes) or islands along the Great Lakes for breeding (OMNR 2000, Sandilands 2005). Five (5) of these species, great egret, black-backed gull, little gull, Caspian tern, and Forster's tern are all species known to nest only in specific locations in southern Ontario. This is partially due to the colonial nesting habit of these species, where the same colony nesting sites are used for successive years. As no proposed Project components are located within 120 m of any ponds or large wetlands, and most of the seven waterbird species were observed only during spring or fall migration, no candidate significant breeding habitat for these species is found within the Project Area.

Plants

Two (2) plant species, pawpaw and compass-plant, with S-ranks of S3 and S1 respectively, were observed by NRSI biologists in the eastern half of the general Project Area.

As Table 5. Species Ranked S1-S3 Observed in the Project Area indicates, pawpaw is found in moist woods and along stream banks. The only population of pawpaw found during site investigations was found within Sinclair's Bush Life ANSI, which is completely outside of the Project Area.

There were three (3) locations along the railbed (within the RB-B2 community) where compass-plant was confirmed by NRSI biologists. As Table 5 indicates, the compass-plant can be found in prairie habitats as well as along railways, which is consistent with where this species was observed. All of the compass-plants were found along the railway north of Cofell Line, and just east of Base Road in a Fresh-Moist Mixed Savanna Ecosite (SVMM3) along the railway bed. It is presumed that this community provides

candidate significant habitat for this species; however, the RB-B2 portion of the railbed is completely outside of the proposed Project area.

Mammals

Three (3) species of bats were identified within some portions of the Project Area including northern long-eared bat, tricolored bat, and eastern small-footed bat (*Myotis leibii*). All three species were identified during autumn migration, and are known to typically hibernate in caves or mines, none of which are known to exist within the Project Area. All three bats will roost in human structures or small crevices, but the tricolored bat in particular will often roost in foliage of trees. Determining candidate SWH for all three bat species was based on a review of areas where bat monitoring from previously conducted studies had identified them. Within these areas, the natural features within 120 m of Project components were then evaluated based on a concentration of suitable habitat. As private human structures (e.g. old barns, houses etc.) are unlikely to be designated as significant wildlife habitat, all woodlands that contained snags are considered to provide habitat for all three bat species. As such, all woodlands/wetlands which contain snags and are located within 120 m of proposed Project components are considered candidate significant habitat. This includes the following fifty-three (53) woodland/wetland habitats:

- P001-W1
- P002-W2
- P004-W1
- P011-W1
- P014-WE1
- P014-W2 (P014-WE2)
- P017-W1
- P022-W1
- P024-W1
- P024-W2
- P027-W1
- P029-W1
- P033-W1

- P034-W1
- P042-W1
- P053-W3
- P053-W4
- P054-W2 (P054-WE1)
- P055-W1
- P064-W1
- P065-W1
- P065-W2
- P065-W3
- P077-W1
- P082-W1
- P091-W1
- P091-W2
- P091-W3
- P092-W1
- P092-W2
- P102-W2
- P108-W1 (P108-WE1)
- P111-W1
- P111-WE1
- P114-W1
- P117-W1
- P118-W1
- P139-W1
- P139-W5
- P139-W6
- P139-W7
- P139-W9
- P156-W1
- P162-W1
- P162-W2

- P166-W1
- P166-W2
- P173-W1
- CLA-W2
- Sections of the railbed community, including:
    - RB-A
    - RB-B
    - RB-E
    - RB-F

The woodlands that are being considered candidate significant habitat for northern long-eared bat, tricolored bat, and eastern small-footed bat are shown in Figures 3-6, 3-7, 3-8, and 3-9.

Table 5. Species Ranked S1-S3 Observed in the Project Area

This table summarizes the criteria used to identify habitat for species ranked S1-S3 within the Project Area. It identifies the S1-S3 species observed in the Project Area, describes their habitat requirements, and whether breeding habitat is present within the Project Area. In addition, the season and general location of observations are identified.

Species	Habitat Requirements	Breeding Habitat Within the Project Area	Season of Observation	Source of Observation
Birds				
Tundra Swan *Cygnus columbianus*	Nests often on islands or peninsulas in shallow lakes or ponds or near rivers. Generally breeds north of the tree line near Hudson's Bay, and typically within 200 m of water (Sandilands 2005).	No	Migration	Merlin, Quinn, Flat Creek, Front Line, Raleigh, Bisnett, Erieau-Blenheim
Redhead *Aythya americana*	Shallow cattail/bulrush marshes, lakes and ponds and fens; preferred nesting usually close to shallow water (most within 2 m), but can be found as far as 266 m from water's edge (OMNR 2000)	No	Migration	Merlin
Bufflehead *Bucephala albeola*	Forested lakes, ponds; sheltered bays of rivers and lakes during migration; nests in tree cavities and will use nest boxes (OMNR 2000)	No	Migration	Merlin, Quinn, Erieau-Blenheim

Species	Habitat Requirements	Breeding Habitat Within the Project Area	Season of Observation	Source of Observation
Ruddy duck *Oxyura jamaicensis*	Nest only in marsh habitats among emergent plants in marshes, near emergent bordered islands and in sewage lagoons. Nests almost exclusively in marshes with bulrushes, cattails, sedges or grasses (Sandilands 2005).	No	Migration	Merlin, Quinn, Erieau-Blenheim
American Golden-plover *Pluvialis dominica*	Nesting habitat in Ontario is located in the Hudson Bay coast in the dry tundra. During migration can be found on grasslands, coastal mud flats and lakeshores (Paulson 2005)	No	Migration	Merlin, Quinn, Merlin-Buxton, Merlin, Front Line, Kent-Center, Raleigh, Erieau-Blenheim
Semipalmated Plover *Charadrius semipalmatus*	Requires tundra, gravel bars, and sandy beaches for nesting. Found along freshwater shores during migration (Paulson 2005)	No	Migration, Breeding	Merlin, Quinn, Erieau-Blenheim, Port Alma
Dunlin *Calidris alpina*	Breeding habitat is in moist tundra. Non-breeding habitat includes sandy beaches, mudflats, lake shores and flooded fields (Paulson 2005)	No	Migration	Merlin, Quinn, Merlin-Buxton, Merlin, Raleigh, Bisnett, Port Alma
Short-billed dowitcher *Limnodromus griseus*	Breeds in muskegs in boreal forest. During migration found on mudflats, freshwater lakeshores and sandy beaches (Paulson 2005)	No	Migration	Merlin, Quinn, Merlin, Erieau-Blenheim, Port Alma
Stilt Sandpiper *Calidris himantopus*	Breeding habitat in Ontario is found along the coast of Hudson Bay and northern James Bay in wet graminoid tundra with scattered low shrubs (Cadman et al. 2007)	No	Migration	Erieau-Blenheim
Hudsonian Godwit *Limosa haemastica*	Breeding habitat in Ontario is in wet-sedge tundra meadow or in graminoid fens inland in taiga almost exclusively in the Hudson Bay Lowlands (Cadman et al. 2007)	No	Migration	Erieau-Blenheim

Species	Habitat Requirements	Breeding Habitat Within the Project Area	Season of Observation	Source of Observation
Greater black-backed gull *Larus marinus*	Flat rocky coastal islands, moorlands, rocky beaches, cliffs; nest is solitary or in small (rarely large) colonies (OMNR 2000)	No	Migration	Merlin, Quinn, Erieau-Blenheim
Caspian Tern *Hydroprogne caspia*	Open habitat near large lakes or rivers, beaches, shorelines, rocky or sandy beaches, offshore islands; negatively affected by elevated water levels during nesting season (OMNR 2000)	No	Migration	Merlin, Raleigh
Grey-Cheeked Thrush *Catharus minimus*	Breeding habitat is in the Hudson Bay Lowlands in dense, low spruce-alder-aspen-willow riparian thickets and woodlands, regenerating burns and taiga (Cadman et al. 2007)	No	Migration	Merlin
Rusty Blackbird *Euphagus carolinus*	Openings in coniferous woodlands bordering bodies of water; tree- bordered marshes, beaver ponds, muskegs, bogs, fens or wooded swamps; stream borders with alder, willow; wooded islands on lakes (OMNR 2000)	No	Migration	Merlin, Quinn, Merlin-Buxton, Front Line
Forster's Tern *Sterna forsteri*	Large open and fresh or saltwater marshes, deep cattail marshes; must be near open water; marsh nesting restricts breeding distribution; eats insects as well as fish; seldom uses marshes <300 ha (OMNR 2000)	No	Migration, Breeding	Merlin, Quinn, Raleigh
Great Egret Ardea alba	Nest typically in colonies in close proximity to water or over water, with areas on large bodies of water being preferred to reduce disturbance. Deciduous swamps preferred but will also nest in upland hardwoods, shrubs, and emergent vegetation (Sandilands 2005)	No	Breeding	Quinn, Kent-center, Erieau-Blenheim, Port Alma
Whimbrel *Numenius phaeopus*	Breeding habitat is dry tundra. Migrants will use grasslands, ploughed and flooded fields, and rocky shores (Paulson 2005)	No	Migration	Front Line, Raleigh

Species	Habitat Requirements	Breeding Habitat Within the Project Area	Season of Observation	Source of Observation
Northern Shrike *Lanius excubitor*	Ontario breeding habitat is found in Hudson Bay Lowlands. Habitat includes sparsely treed open muskeg and spruce lichen woodland patches in open peatlands, regenerating burns and riparian thickets of willow and alder (Cadman et al. 2007)	No	Winter	Front Line, Bisnett, Erieau-Blenheim
Northern Rough-legged Hawk *Buteo lagopus*	Nest primarily in tundra habitat, and is restricted to Hudson Bay coast in Ontario. In forested areas it prefers sparsely treed areas like bogs and other openings (Sandilands 2005)	No	Winter	Kent-Centre, Raleigh, Erieau-Blenheim
Little Gull *Larus minutus*	Predominantly marshes, occasionally on islands; inland marshes and marshy border lakes; nests on floating to semi-floating mats (OMNR 2000)	No	Migration	Erieau-Blenheim
Plants				
Pawpaw *Asimina triloba*	Moist woods and stream banks (OMNR 2000)	No	Autumn	Site Investigation
Compass-Plant *Silphium laciniatum*	Prairies, probably one native site, rarely introduced elsewhere, along railways (OMNR 2000)	No	Autumn	Site Investigation
Mammals				
Northern Long-eared Bat *Myotis septentrionalis*	Hibernates during winter in mines or caves; during summer males roost alone and females form maternity colonies of up to 60 adults; roosts in houses, manmade structures but prefers hollow trees or under loose bark; hunts within forests, below canopy.	Yes	Migration	Harwich, Merlin-Buxton, Flat Creek, Kent Center
Tricolored bat *Perimyotis subflavus*	Forage along slow moving rivers, forest edge, or above open meadows. Rarely found in heavily wooded areas or open areas unless large trees are present. This species hibernates in caves and abandoned mines from mid-October through May	Yes	Migration	Harwich, Merlin-Buxton, Flat Creek, Kent Centre, Erieau-Blenheim, Port Alma

Species	Habitat Requirements	Breeding Habitat Within the Project Area	Season of Observation	Source of Observation
Eastern Small-footed bat *Myotis leibii*	Roosts in caves, mine shafts, crevices or buildings that are in or near woodland; hibernates in cold dry caves or mines; maternity colonies in caves or buildings; hunts in forests	Yes	Migration	Port Alma

6.5.4 Animal Movement Corridors

Animal movement corridors can represent a variety of compositions, species associations, and can provide corridors for a variety of different species. NRSI biologists have identified all linear features, including fencerows, drainage corridors, and the vegetation associated with the railway corridor, as candidate significant animal movement corridors. Each of these linear features has been examined in more detail during this site investigation to assess the species composition, form, and function to assess the potential for each natural feature to provide significant wildlife habitat. As such, all fencerows and drainage corridors within 120 m of the Project location have been identified during the site investigation phase of this Project, and have been considered candidate significant wildlife habitat.

All of these fencerows and drainage corridors have been mapped, and can be seen in the general context of Figure 3-2 to 3-9 and in the specific proposed turbine location maps and distribution corridor maps, in Appendices IV and V, respectively. These natural features, as they relate to the Project location, are discussed in more detail throughout Section 7.0. Detailed information on these natural features can also be seen in Appendices II and III, including dominant species and other notes pertaining to the presence of snags, standing or flowing water, or other notable species types or associations.

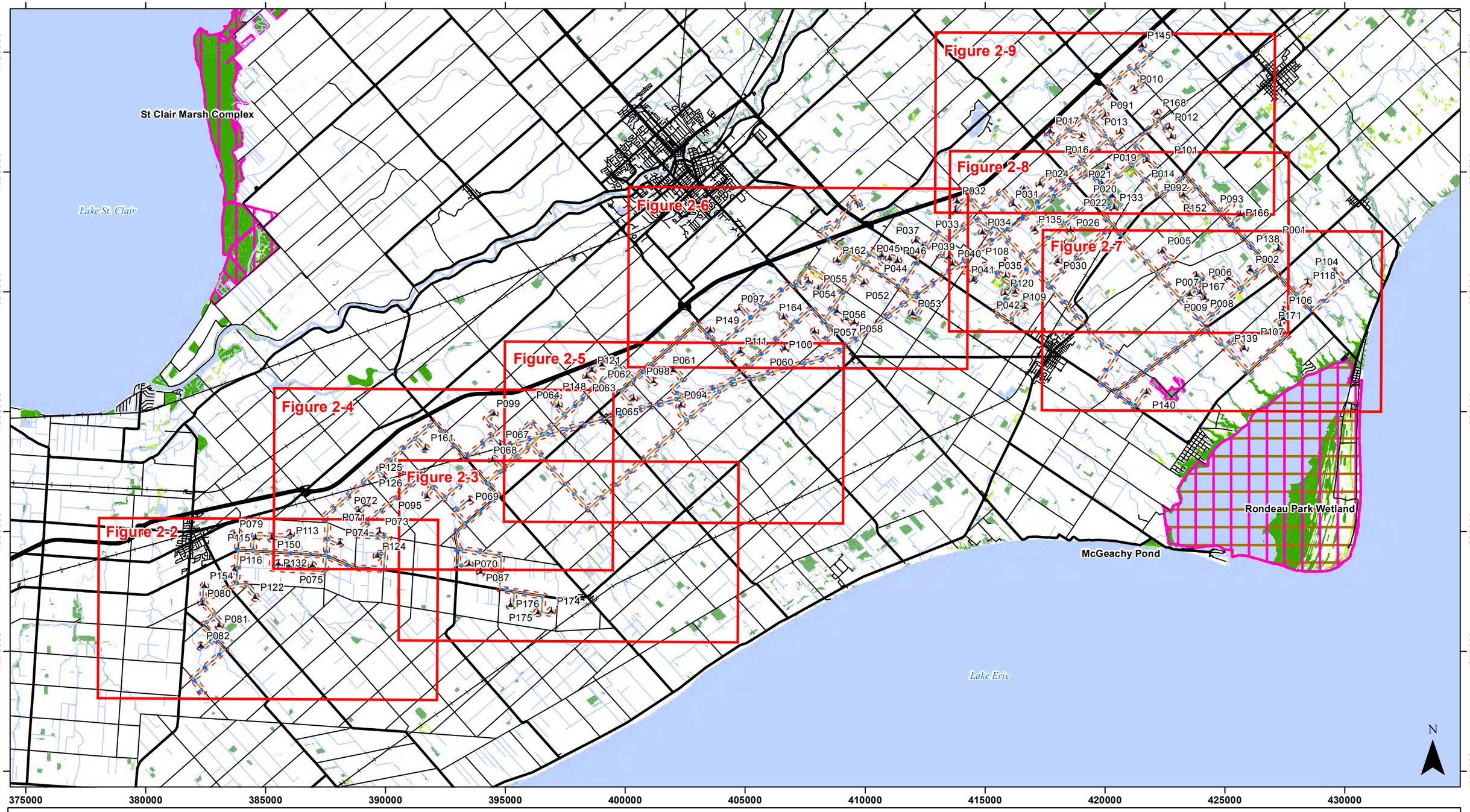

Figure 2-1 - Key Map

South Kent Wind Project

Project Area and Natural Features

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

0 0.5 1 2 3 4 km

April 23, 2012
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:150,000 (at 11x17")

Legend

- Project Area (April, 2012)
- Constructible Area
- Proposed Turbine (L020)
- Substation
- Cabling
- Access Road
- Railway
- Highway
- Primary Road
- Secondary Road
- Watercourse (Permanent)
- ANSI, Life Science
- ANSI, Earth Science
- Provincially Significant Wetland
- Waterbody
- Wetland Area
- Wooded Area

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380000 382000 384000 386000 388000 390000 392000

4680000 4678000 4676000 4674000

HWY 401
COUNTY RD 42
MILL ST W
MILL ST E
QUEENS LINE
POLLARD LINE
LYON ST N
CANAL ST E
LAWSON ST
ELLA ST S
ROSE AVE
MIDDLE LINE
MORRIS LINE
FINN LINE
SHARP RD
VALEITA RD
SLOAN RD
DEPOT RD
GRAY LINE
KEMP LINE
DAVIDSON RD
OAK RD
RICHARDSON SIDERD
COUNTY RD 46
WHEATLEY RD
ROSEDALE LINE
HORNICK LINE
GORE RD
CON RD 5
CON RD 7
CON RD 8
CON RD 9
KING & WHITTLE RD
QUINN LINE
COATSWORTH RD
HERMAN LINE
CARLESS RD
VANEDIE RD
COX LINE
GROVE RD
BOWERSVILLE

P079 P113 P115 P150 P073 P074 P124 P078 P077 P075 P132 P116 P154 P122 P080 P081 P082

N

Figure 2-2

South Kent Wind Project

Project Area and Natural Features

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

0 0.225 0.45 0.9 km

April 23, 2012
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:35,000 (at 11x17")

Legend

- Project Area (April, 2012)
- Constructible Area
- Proposed Turbine (L020)
- Substation
- Cabling
- Access Road
- Railway
- Highway
- Primary Road
- Secondary Road
- Watercourse (Permanent)
- ANSI, Life Science
- ANSI, Earth Science
- Provincially Significant Wetland
- Waterbody
- Wetland Area
- Wooded Area

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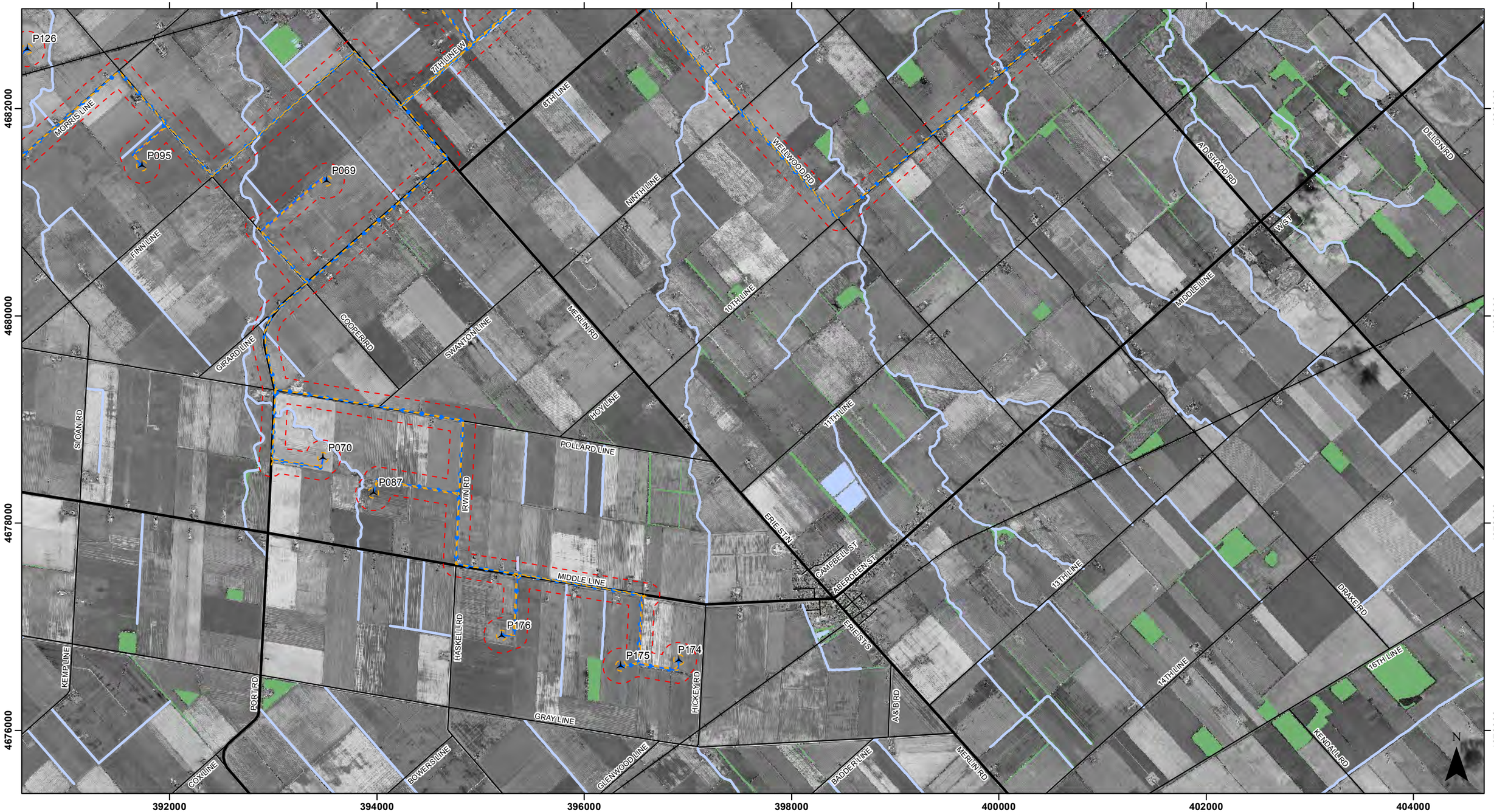

Figure 2-3

South Kent Wind Project

Project Area and Natural Features

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

0 0.225 0.45 0.9 km

April 23, 2012
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:35,000 (at 11x17")

Legend

- Project Area (April, 2012)
- Constructible Area
- Proposed Turbine (L020)
- Substation
- Cabling
- Access Road
- Railway
- Highway
- Primary Road
- Secondary Road
- Watercourse (Permanent)
- ANSI, Life Science
- ANSI, Earth Science
- Provincially Significant Wetland
- Waterbody
- Wetland Area
- Wooded Area

Path: X:\1184_ChathamKentWF\NRSI_1184_Fig2-2to2-9_ProjAreaNaturalFeature_35k_2012_04_23_SWM.mxd

386000 388000 390000 392000 394000 396000 398000

4684000 4682000 4680000

MINT LINE
COUTTS LINE
BAERT RD
MCDOUGALL LINE
SINCLAIR RD
HWY 401
QUEENS LINE
JEANNETTES CK RD
GLEESON LINE
MORRIS LINE
MERLIN RD
5TH LINE W
6TH LINE W
7TH LINE W
8TH LINE
DRAKE RD
WELLWOOD RD
AD SHADD RD
CLINTON ST
NINTH LINE
BONNEAU LINE
MCKINLAY RD
SLOAN RD
FINN LINE
PORT RD
COOPER RD
GIRARD LINE
SWANTON LINE
10TH LINE
HOY LINE
11TH LINE
POLLARD LINE
IRWIN RD
OAK RD
SHARP RD
VALETTA RD
MIDDLE LINE

P148
P064
P099
P066
P067
P161
P068
P126
P125
P095
P069
P071
P072
P073
P113
P074
P124
P078
P077
P075
P132
P070

N

Figure 2-4

South Kent Wind Project

Project Area and Natural Features

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

0 0.225 0.45 0.9 km

April 23, 2012
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:35,000 (at 11x17")

Legend

- Project Area (April, 2012)
- Constructible Area
- Proposed Turbine (L020)
- Substation
- Cabling
- Access Road
- Railway
- Highway
- Primary Road
- Secondary Road
- Watercourse (Permanent)
- ANSI, Life Science
- ANSI, Earth Science
- Provincially Significant Wetland
- Waterbody
- Wetland Area
- Wooded Area

Path: X:\1184_ChathamKentWF\NRSI_1184_Fig2-2to2-9_ProjAreaNaturalFeature_35k_2012_04_23_SWM.mxd

396000 398000 400000 402000 404000 406000 408000

4686000

4684000

4682000

P062 P121 P063 P061 P098 P065 P094 P148 P064 P066 P111 P060

5TH LINE E
CTY RD
6TH LINE E
HWY 401
AD SHADD RD
DILLON RD
BLOOMFIELD RD
6TH LINE W
DRAKE RD
7TH LINE W
CLINTON ST
11TH LINE
WELLWOOD RD
10TH LINE
MIDDLE LINE
8TH LINE
NINTH LINE
MERLIN RD
W ST
4 ROD RD
13TH LINE
14TH LINE
15TH LINE

N

396000 398000 400000 402000 404000 406000 408000

Figure 2-5

South Kent Wind Project

Project Area and Natural Features

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

0 0.225 0.45 0.9 km

April 23, 2012
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:35,000 (at 11x17")

Legend

- Project Area (April, 2012)
- Constructible Area
- Proposed Turbine (L020)
- Substation
- Cabling
- Access Road
- Railway
- Highway
- Primary Road
- Secondary Road
- Watercourse (Permanent)
- ANSI, Life Science
- ANSI, Earth Science
- Provincially Significant Wetland
- Waterbody
- Wetland Area
- Wooded Area

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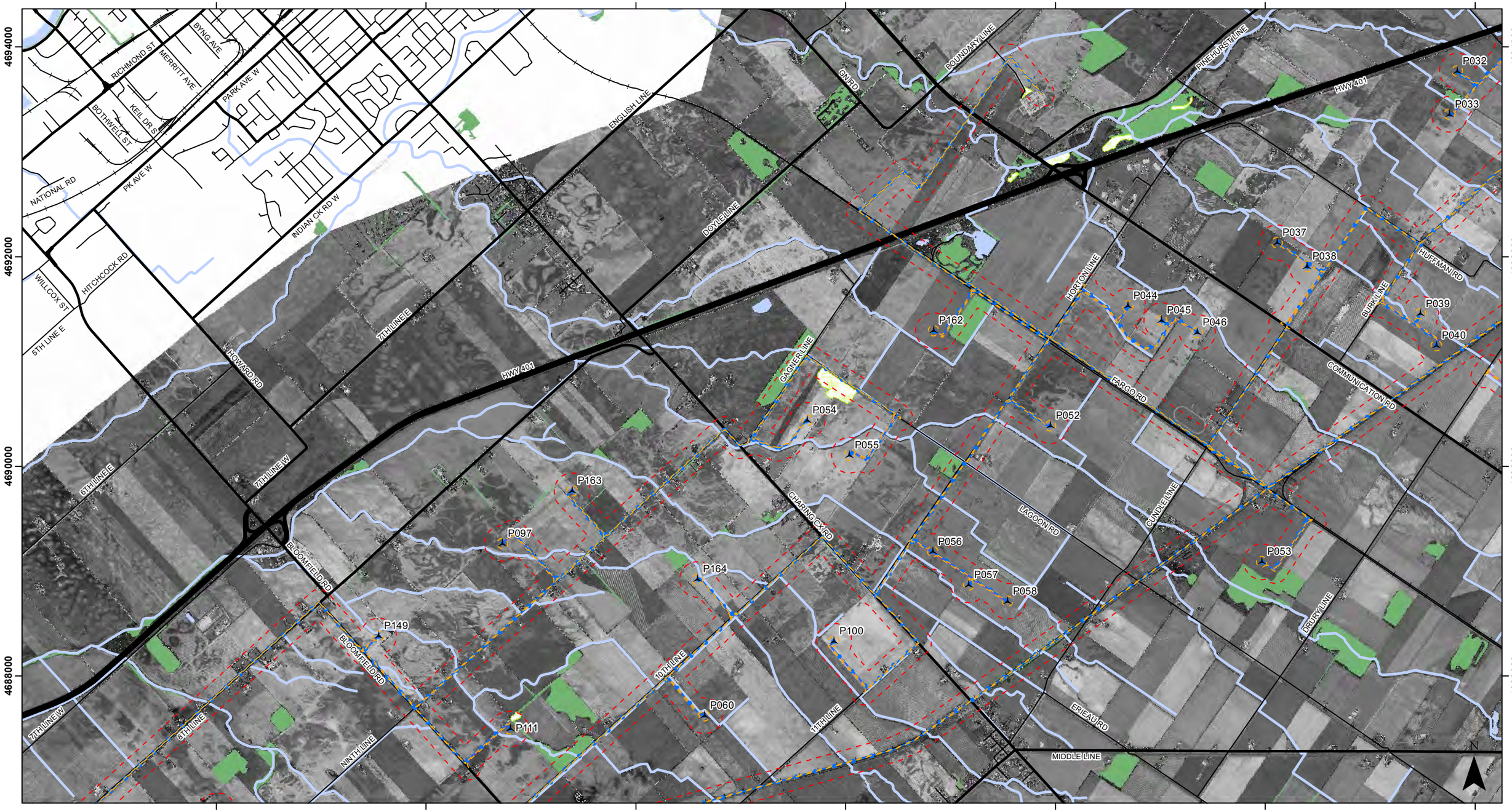

Figure 2-6

South Kent Wind Project

Project Area and Natural Features

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

0 0.225 0.45 0.9 km

April 23, 2012
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:35,000 (at 11x17")

Legend

- Project Area (April, 2012)
- Constructible Area
- Proposed Turbine (L020)
- Substation
- Cabling
- Access Road
- Railway
- Highway
- Primary Road
- Secondary Road
- Watercourse (Permanent)
- ANSI, Life Science
- ANSI, Earth Science
- Provincially Significant Wetland
- Waterbody
- Wetland Area
- Wooded Area

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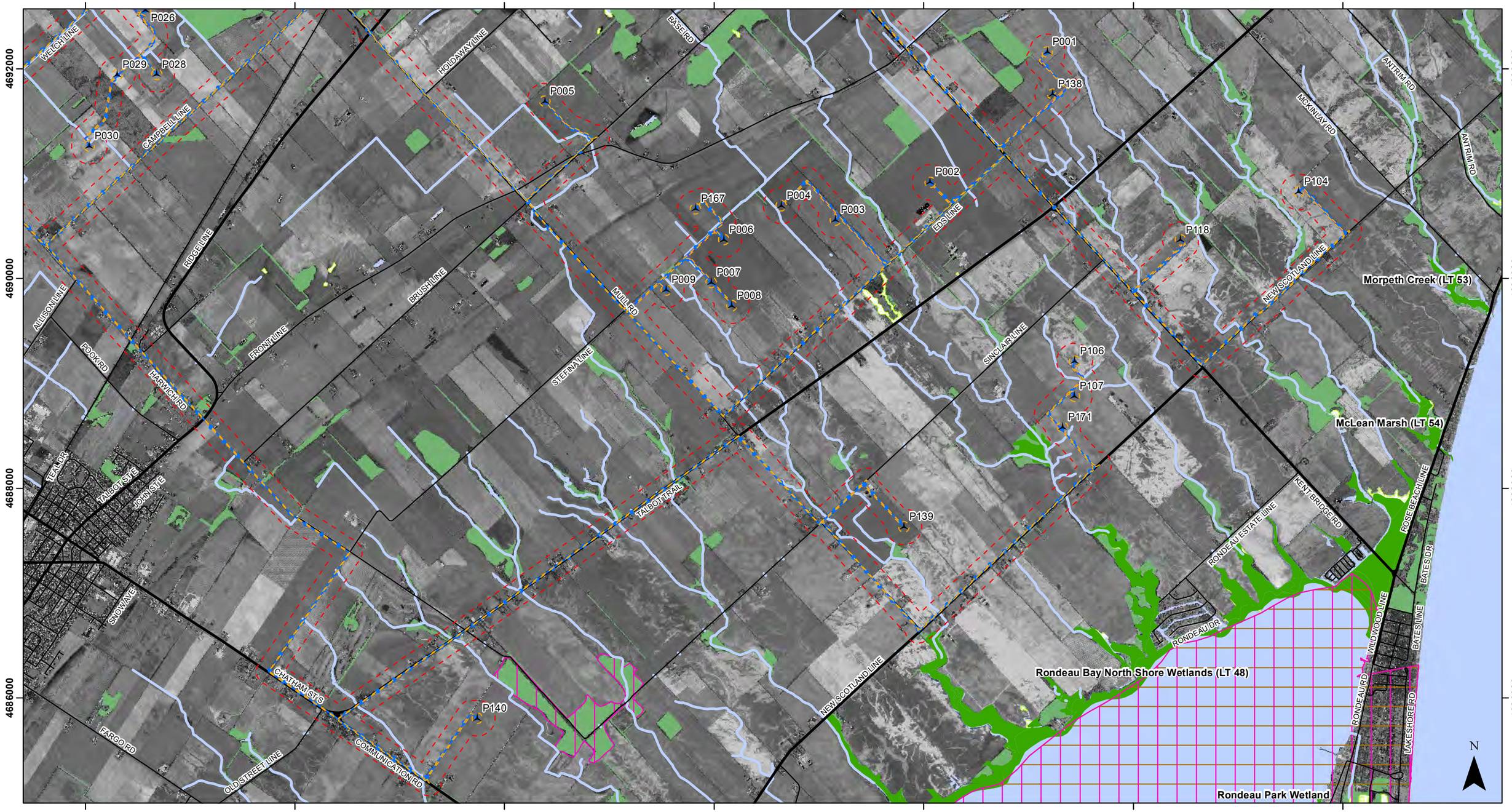

Figure 2-7

South Kent Wind Project

Project Area and Natural Features

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

0 0.225 0.45 0.9 km

April 23, 2012
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:35,000 (at 11x17")

Legend

- Project Area (April, 2012)
- Constructible Area
- Proposed Turbine (L020)
- Substation
- Cabling
- Access Road
- Railway
- Highway
- Primary Road
- Secondary Road
- Watercourse (Permanent)
- ANSI, Life Science
- ANSI, Earth Science
- Provincially Significant Wetland
- Waterbody
- Wetland Area
- Wooded Area

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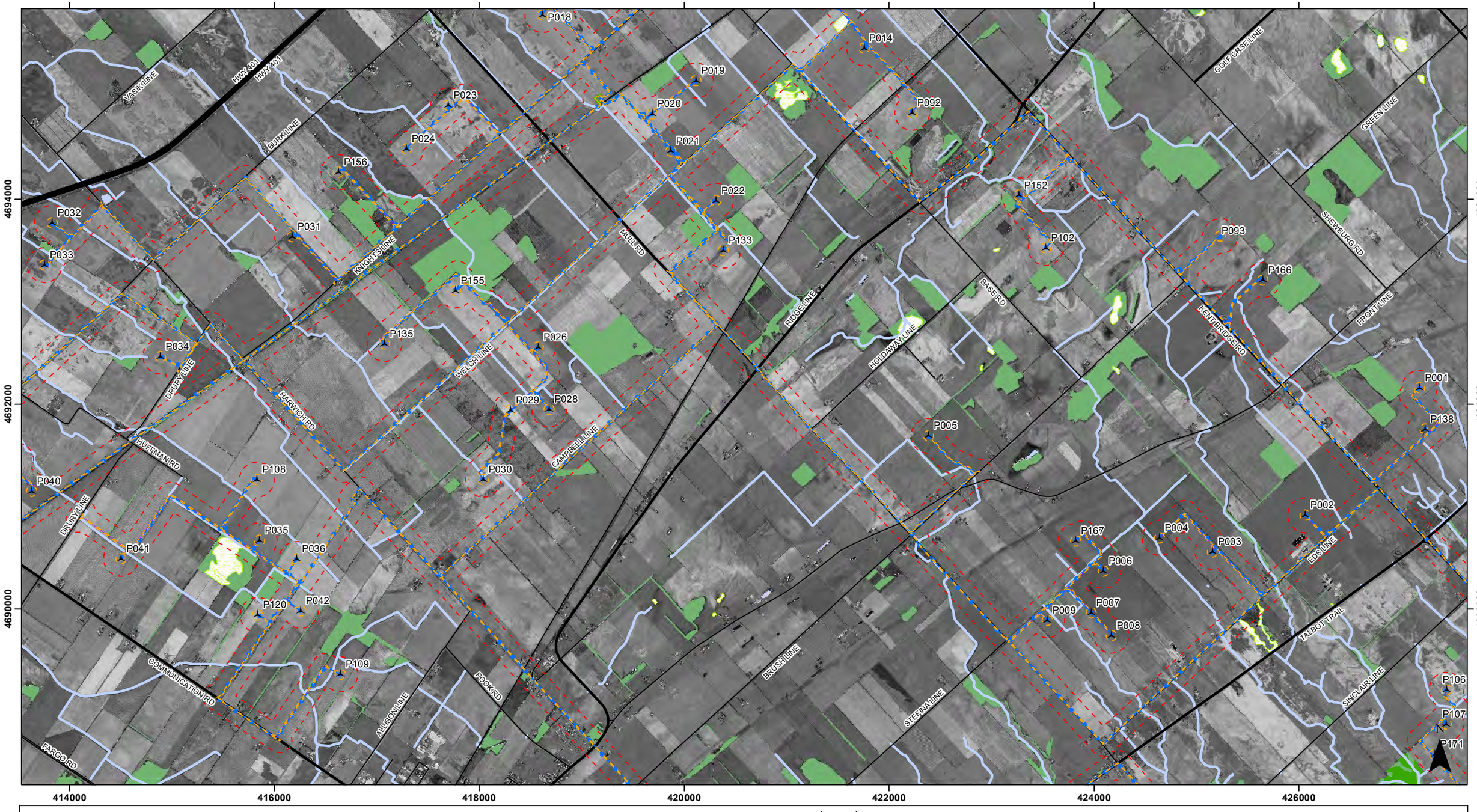

Figure 2-8

South Kent Wind Project

Project Area and Natural Features

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

0 0.225 0.45 0.9 km

April 23, 2012
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:35,000 (at 11x17")

Legend

- Project Area (April, 2012)
- Constructible Area
- Proposed Turbine (L020)
- Substation
- Cabling
- Access Road
- Railway
- Highway
- Primary Road
- Secondary Road
- Watercourse (Permanent)
- ANSI, Life Science
- ANSI, Earth Science
- Provincially Significant Wetland
- Waterbody
- Wetland Area
- Wooded Area

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414000 416000 418000 420000 422000 424000 426000

4700000 4698000 4696000 4694000

MAYNARD LINE
MCKAYS LINE
MCLARTY LINE
HOWARD RD
BEECHWOOD LINE
COLBY RD
GOSNELL LINE
VICTORIA AVE
ERIE ST N
W ST
MAIN ST W
ONEILL LINE
SCANE RD
MITTON LINE
SHEWBURG RD
RIDGE LINE
COFELL LINE
KENTBRIDGE RD
GOLF CRSE LINE
GREEN LINE
BASE RD
WEIGHLINE
KNIGHTS LINE
BURK LINE
HARWICH RD
HWY 401
VASIK LINE
PINEHURST LINE
LAKEVIEW DR
MUIL RD
TOMEK RD
BOUNDARY LINE

P145
P010
P168
P091
P173
P017
P016
P013
P012
P101
P018
P014
P019
P020
P092
P021
P023
P024
P156
P022
P152
P032
P031
P133
P102
P093
P033

N

Figure 2-9

South Kent Wind Project

Project Area and Natural Features

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

0 0.225 0.45 0.9 km

April 23, 2012
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:35,000 (at 11x17")

Legend

- Project Area (April, 2012)
- Constructible Area
- Proposed Turbine (L020)
- Substation
- Cabling
- Access Road
- Railway
- Highway
- Primary Road
- Secondary Road
- Watercourse (Permanent)
- ANSI, Life Science
- ANSI, Earth Science
- Provincially Significant Wetland
- Waterbody
- Wetland Area
- Wooded Area

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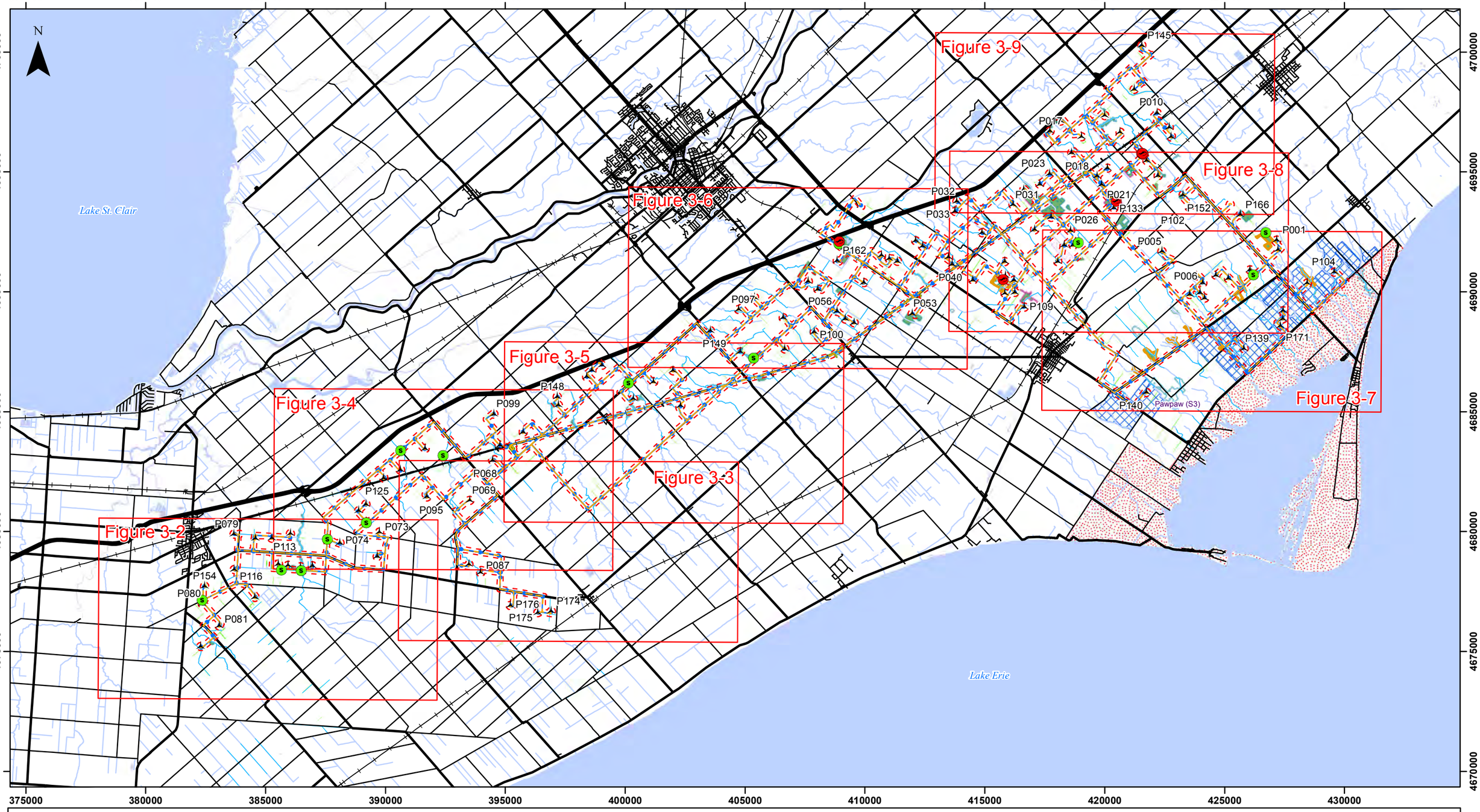

Figure 3-1 - Key Map

South Kent Wind Project

Candidate Wildlife Habitat

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

0 1 2 4 km

April 27, 2012
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:150,000 (at 11x17")

Legend

- Project Area (April, 2012)
- Constructible Area
- Proposed Turbine (L020)
- Substation
- Cabling
- Access Road
- Railway
- Highway
- Primary Road
- Secondary Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Wetland Area (NRSI)
- Hedgerow
- Wooded Area
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

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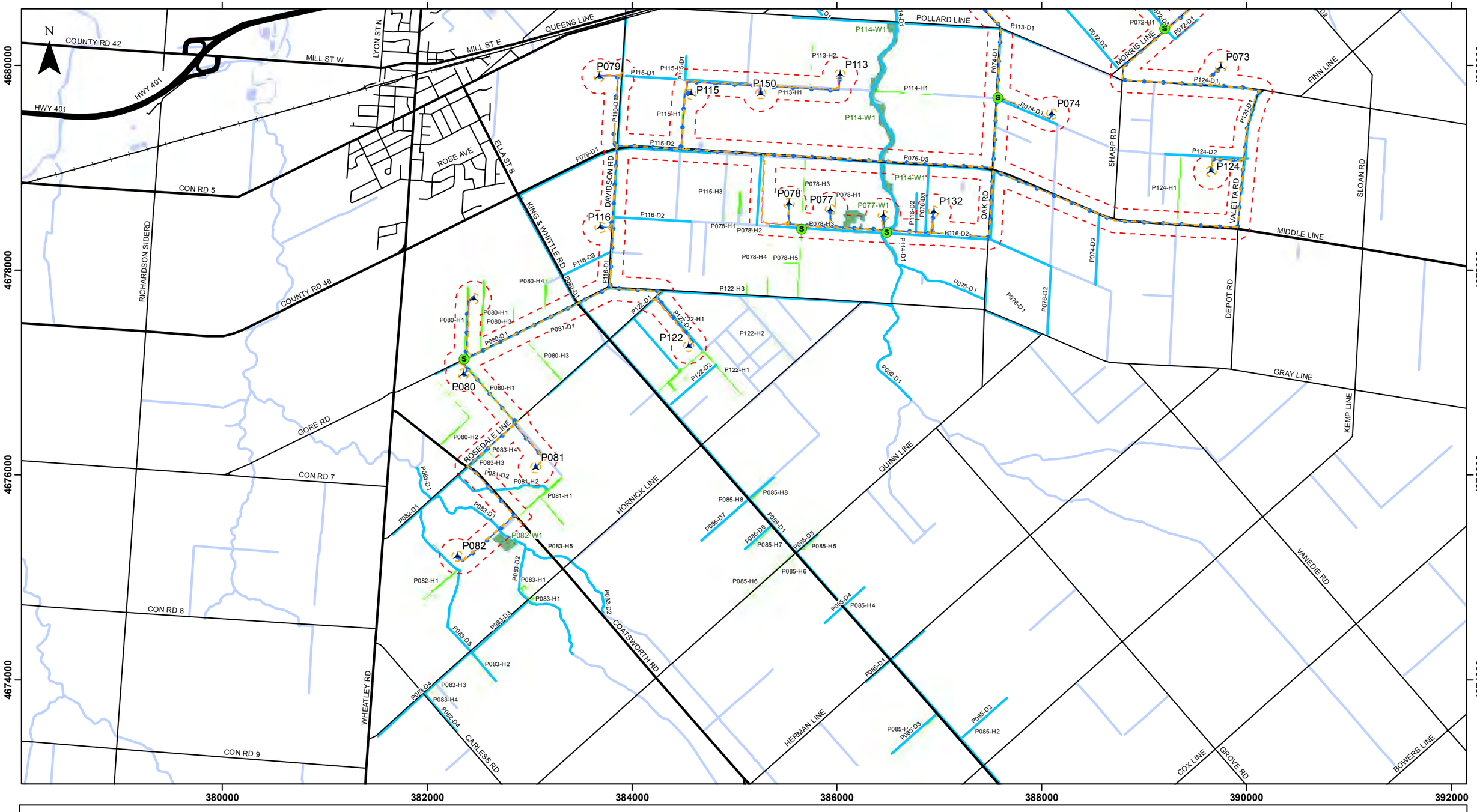

Figure 3-2

South Kent Wind Project

Candidate Wildlife Habitat

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

0 0.225 0.45 0.9 km

April 27, 2012
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:35,000 (at 11x17")

Legend

- Project Area (April, 2012)
- Constructible Area
- Proposed Turbine (L020)
- Substation
- Cabling
- Access Road
- Railway
- Highway
- Primary Road
- Secondary Road
- Waterbody
- Watercourse (Permanent)
- Watercourse (NRSI)
- Wetland Area (NRSI)
- Hedgerow
- Wooded Areas (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_Fig3-2to3-9_CandidateFeatures_35k_2012_04_27_ELF.mxd

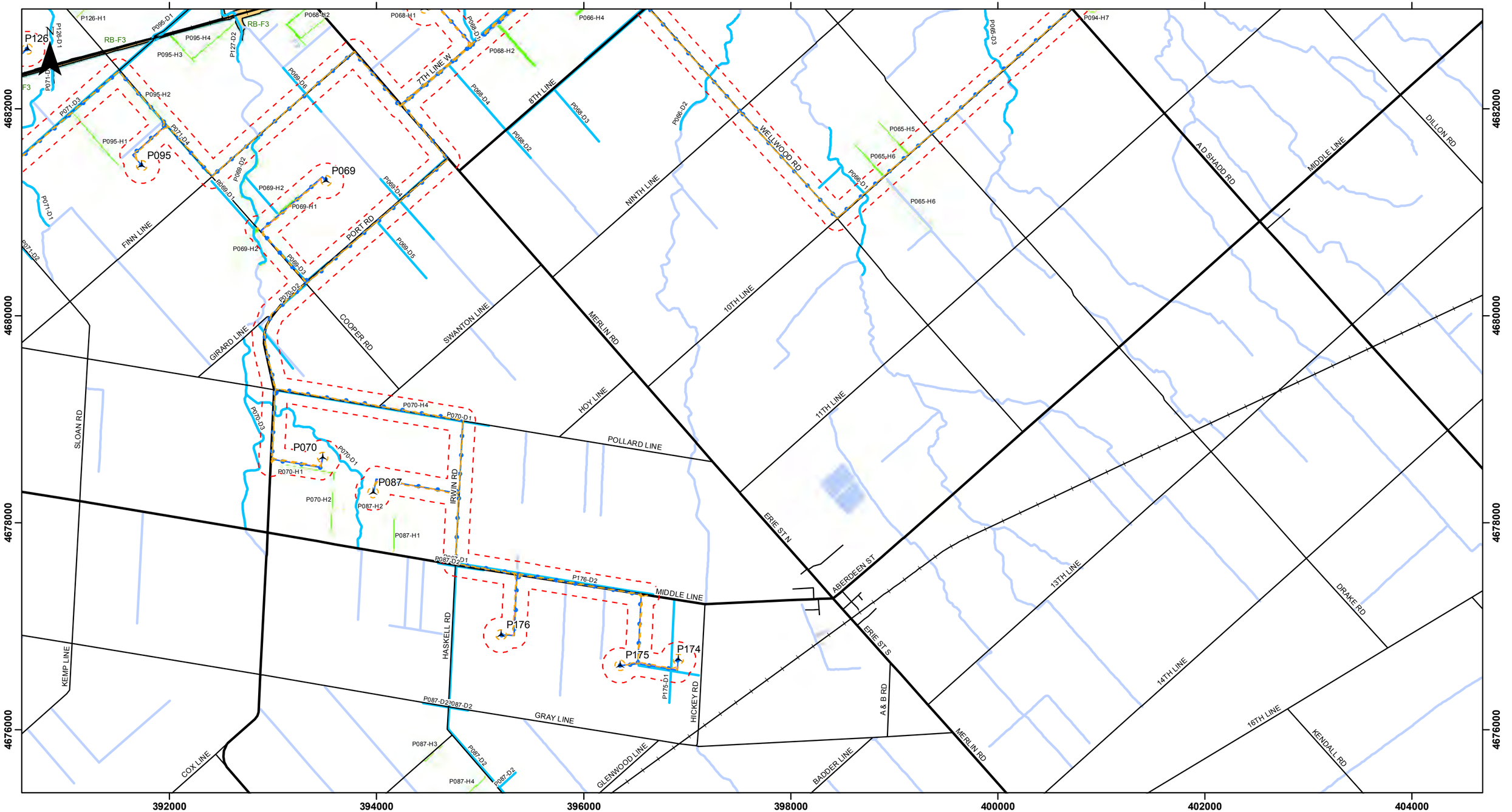

Figure 3-3

South Kent Wind Project

Candidate Wildlife Habitat

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

0 0.225 0.45 0.9 km

April 27, 2012
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:35,000 (at 11x17")

Legend

- Project Area (April, 2012)
- Constructible Area
- Proposed Turbine (L020)
- Substation
- Cabling
- Access Road
- Railway
- Highway
- Primary Road
- Secondary Road
- Waterbody
- Watercourse (Permanent)
- Watercourse (NRSI)
- Wetland Area (NRSI)
- Hedgerow
- Wooded Areas (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_Fig3-2to3-9_CandidateFeatures_35k_2012_04_27_ELF.mxd

386000 388000 390000 392000 394000 396000 398000

4684000 4682000 4680000

N

HWY 401 MINT LINE BAERT RD MCDOUGALL LINE 5TH LINE W SINCLAIR RD COUTTS LINE JEANNETTES CK RD QUEENS LINE MCKINLAY RD POLLARD LINE MORRIS LINE SLOAN RD FINN LINE PORT RD GLEESON LINE 6TH LINE W MERLIN RD 7TH LINE W 8TH LINE DRAKE RD A.D.SHADD RD RB-F3 RSS-H1 Railbed Substation P148 P064 P064-W1 P064-H1 P064-H2 P064-H3 P064-H5 P064-D1 P064-D2 P064-D3 RB-A5 P066 P066-H1 P066-H2 P066-H3 P066-H4 P067-D1 P067-D2 P067-H1 P067-H2 P067-H3 P099 P099-H1 P119-H1 P068 P068-H1 P068-H2 P068-D1 P068-D2 P068-D3 P068-D4 P068-D6 P069 P069-H1 P069-H2 P069-D1 P069-D2 P069-D3 P069-D4 P069-D5 P095 P095-H1 P095-H2 P095-H3 P095-H4 P095-D1 P071 P072 P071-D1 P071-D2 P071-D3 P071-D4 P072-H1 P072-D1 P072-D2 P073 P124 P124-H1 P124-D1 P124-D2 P125 P125-H1 P125-H2 P125-D1 P126 P126-H1 P126-D1 P126-D2 P127-D1 P127-D2 P127-H1 P127-H2 P161 P161-D1 P132 P074 P074-D1 P074-D2 P113 P113-H1 P113-H2 P113-D1 P114-W1 P114-H1 P114-D1 P114-D2 P076-D2 P076-D3 P077 P077-W1 P078 P078-H1 P078-H3 P116-D2-H3 P116-D2 P070 P070-H1 P070-H2 P070-H4 P070-D1 P070-D2 P070-D3 IRWIN RD WELLWOOD RD P065-H5 P065-H6 P065-D1 10TH LINE 11TH LINE HOY LINE SWANTON LINE COOPER RD GIRARD LINE VALETTA RD SHARP RD OAK RD MIDDLE LINE NINTH LINE

Figure 3-4

South Kent Wind Project

Candidate Wildlife Habitat

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

0 0.225 0.45 0.9 km

April 27, 2012
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:35,000 (at 11x17")

Legend

- Project Area (April, 2012)
- Constructible Area
- Proposed Turbine (L020)
- Substation
- Cabling
- Access Road
- Railway
- Highway
- Primary Road
- Secondary Road
- Waterbody
- Watercourse (Permanent)
- Watercourse (NRSI)
- Wetland Area (NRSI)
- Hedgerow
- Wooded Areas (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas
- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat
- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat

Candidate Habitat of Species of Conservation Concern
- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

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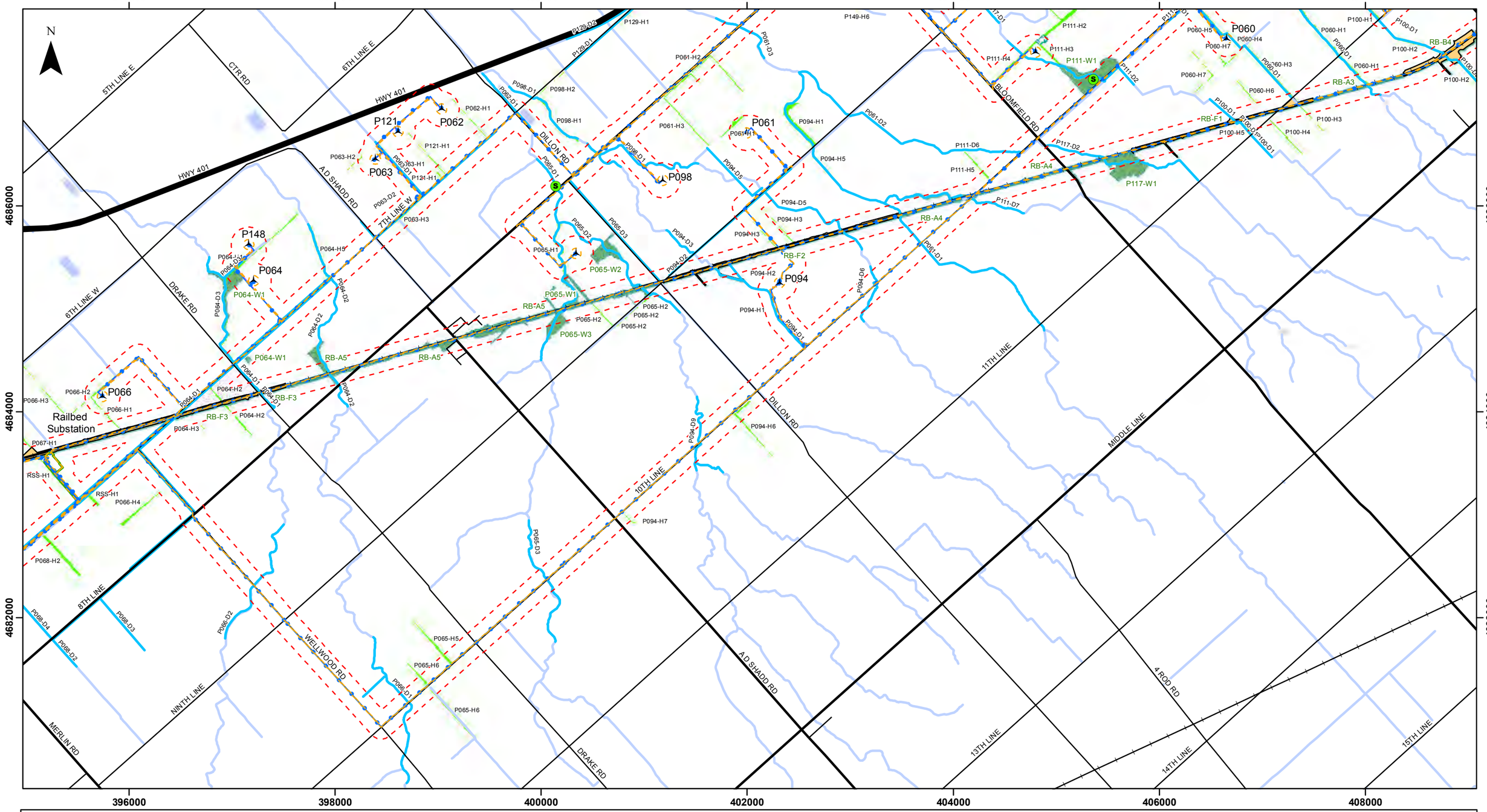

Figure 3-5

South Kent Wind Project

Candidate Wildlife Habitat

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

0 0.225 0.45 0.9 km

April 27, 2012
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:35,000 (at 11x17")

Legend

- Project Area (April, 2012)
- Constructible Area
- Proposed Turbine (L020)
- Substation
- Cabling
- Access Road
- Railway
- Highway
- Primary Road
- Secondary Road
- Waterbody
- Watercourse (Permanent)
- Watercourse (NRSI)
- Wetland Area (NRSI)
- Hedgerow
- Wooded Areas (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas
- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat
- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat

Candidate Habitat of Species of Conservation Concern
- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_Fig3-2to3-9_CandidateFeatures_35k_2012_04_27_ELF.mxd

Figure 3-6

South Kent Wind Project

Candidate Wildlife Habitat

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

0 0.225 0.45 0.9 km

April 27, 2012
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:35,000 (at 11x17")

Legend

- Project Area (April, 2012)
- Constructible Area
- Proposed Turbine (L020)
- Substation
- Cabling
- Access Road
- Railway
- Highway
- Primary Road
- Secondary Road
- Waterbody
- Watercourse (Permanent)
- Watercourse (NRSI)
- Wetland Area (NRSI)
- Hedgerow
- Wooded Areas (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_Fig3-2to3-9_CandidateFeatures_35k_2012_04_27_ELF.mxd

Figure 3-7

South Kent Wind Project

Candidate Wildlife Habitat

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

0 0.225 0.45 0.9 km

April 27, 2012
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:35,000 (at 11x17")

Legend

- Project Area (April, 2012)
- Constructible Area
- Proposed Turbine (L020)
- Substation
- Cabling
- Access Road
- Railway
- Highway
- Primary Road
- Secondary Road
- Waterbody
- Watercourse (Permanent)
- Watercourse (NRSI)
- Wetland Area (NRSI)
- Hedgerow
- Wooded Areas (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas
- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat
- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat

Candidate Habitat of Species of Conservation Concern
- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_Fig3-2to3-9_CandidateFeatures_35k_2012_04_27_ELF.mxd

414000 416000 418000 420000 422000 424000 426000

4694000 4692000 4690000

N

HWY 401 VASIK LINE BURK LINE GOLF CRSE LINE GREEN LINE SHEWBURG RD KENT BRIDGE RD BASE RD RIDGE LINE HOLDAWAY LINE BRUSH LINE FRONT LINE KNIGHTS LINE DRURY LINE HARWICH RD HUFFMAN RD CAMPBELLI LINE WELCH LINE MULL RD ROOK RD ALLISON LINE COMMUNICATION RD EDS LINE SINCLAIR LINE

Sattern Substation

Compass Plant (S1)

P018 P019 P020 P021 P022 P133 P014 P092 P102 P093 P166 P001 P138 P002 P167 P004 P003 P006 P007 P008 P106 P107 P171 P023 P024 P156 P155 P026 P029 P028 P030 P027 P005 P031 P032 P033 P034 P135 P108 P035 P036 P041 P120 P042 P109 P050

RB-B2 RB-E2 RB-D1 RB-A1 RB-E3 RB-A2 RB-E4

P014-W2 P092-W1 P092-W2 P102-W2 P024-W1 P024-W2 P156-W1 P022-W1 P027-W1 P034-W1 P029-W1 P030-W1 P030-W2 P042-W1 P108-W1 P139-W5 P166-W1 P166-W2 P001-W1 P002-W1 P002-W2 P004-W1

P140-H5 P140-H14

Figure 3-8

South Kent Wind Project

Candidate Wildlife Habitat

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

0 0.225 0.45 0.9 km

April 27, 2012
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:35,000 (at 11x17")

Legend

- Project Area (April, 2012)
- Constructible Area
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- Wooded Areas (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas
- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat
- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat

Candidate Habitat of Species of Conservation Concern
- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

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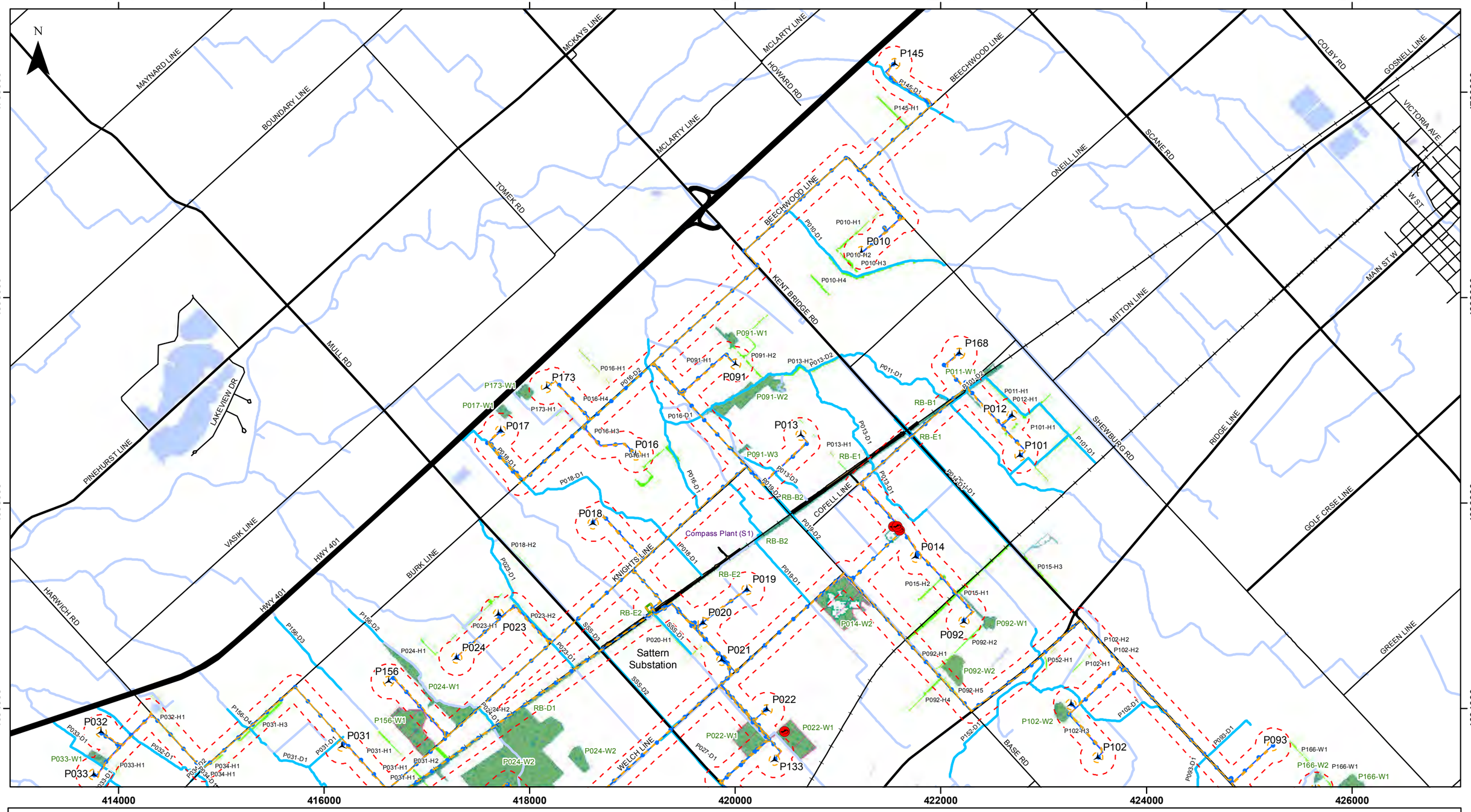

Figure 3-9

South Kent Wind Project

Candidate Wildlife Habitat

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

0 0.225 0.45 0.9 km

April 27, 2012
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:35,000 (at 11x17")

Legend

- Project Area (April, 2012)
- Constructible Area
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- Access Road
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- Secondary Road
- Waterbody
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- Watercourse (NRSI)
- Wetland Area (NRSI)
- Hedgerow
- Wooded Areas (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_Fig3-2to3-9_CandidateFeatures_35k_2012_04_27_ELF.mxd

7.0 Site Investigation Around Project Components

This section of the report provides a more detailed description of how the natural features identified during the site investigation are related to the Project location. Specific information relating to natural features within 120 m of the Project location (i.e., proposed turbine locations, access roads and cabling, substations, transmission corridor, etc.) have been described in more detail in the following sections. More detail can be found in the Site Investigation Summary Tables (6a and 6b) in Section 8.0 below. Specific maps of all proposed turbine locations and locations along the transmission corridor are provided in Appendices IV and V, respectively.

Further, each Project component may require an Evaluation of Significance based on the results of the Site Investigation. This requirement is noted in the Site Investigation Summary for Project components, and discussions of the Evaluation of Significance will be presented in subsequent reports.

7.1 Site Investigation Results by Proposed Turbine and Associated Infrastructure

The following section provides a detailed description of the natural features, vegetation communities, and species associations within 120 m of each proposed turbine location and associated infrastructure.

P001

At the time of 2010 field investigations, P001 was located within a corn field, with wheat and soybean fields located nearby. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. Two fencerows (P001-H2 and P138-H1) and one woodland (P001-W1) are located within 120 m of the proposed turbine and associated access road and cabling. No drains or other natural features are located within 120 m of the proposed turbine location. The fencerow P001-H2 is located south and southwest of the proposed turbine location, and consists of sparse Norway spruce (*Picea abies*), white cedar (*Thuja occidentalis*), and green ash (*Fraxinus pennsylvanica*). This fencerow will be crossed by the access road and cabling as it travels to proposed turbine no.P001.The fencerow P138-H1 is located

southwest of the proposed turbine, and consists of sparse white elm and hawthorns, and contains snags. This fencerow will also be crossed by the access road and cabling as it travels to proposed turbine no. P001. The characteristics of woodland P001-W1 are provided below:

> P001-W1 - Fresh-Moist White Elm Lowland Deciduous Forest Type (FODM7-1)& White Elm Mineral Deciduous Swamp Type (SWDM4-2) Inclusion
> This young forest community is dominated by immature white elm (*Ulmus americana*) in the canopy and subcanopy, with occasional snags throughout. The sparse understory is dominated by gray dogwood (*Cornus foemina* ssp. *racemosa*) and the dense groundcover is dominated by poison ivy (*Toxicodendron radicans* ssp. *negundo*) and wild strawberry (*Fragaria virginiana* ssp. *virginiana*). The forest includes a small constructed open water channel that trickles into a narrow white elm-dominated swamp along the northwestern edge of the forest, which is completely outside of the Project area (located beyond 120 m from the Project location and therefore does not require further consideration).

Based on a review of previous studies at this Project, several acoustic bat monitoring studies within 6 km of Rondeau Bay and the immediately adjacent shorelines of Lake Erie have shown consistently higher bat activity than those found further inland or in close proximity to the shoreline in locations away from Rondeau Bay. Therefore, all woodlands, of at least 0.5 ha in size, within 6 km of Rondeau Bay (including P001-W1) have been considered candidate significant habitat for bat maternity colonies.

This proposed development activity is found within 120 m of several candidate significant natural features, including a woodland and wildlife habitat (animal movement corridors, bat maternity roost and S-ranked bat habitat), and will be examined in more detail during the evaluation of significance phase of this Project.

P002

At the time of 2010 field investigations, P002 was located in, and surrounded by, soybean fields. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One fencerow (P002-H1) is located within 120 m of the proposed access road and cabling. No drains, woodlands, or other natural features are located within 120 m of this proposed turbine. The fencerow P002-H1 is located south of the proposed access road, where it meets Ed's Line. The fencerow is

dominated by Norway spruce and white cedar. A rock pile, which could provide overwintering habitat for snakes, is located on the north side of Ed's Line.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (reptile hibernacula and animal movement corridor) and will be examined in more detail during the evaluation of significance phase of this Project.

P003

At the time of 2010 field investigations, P003 was located in a corn field, with soybean fields located nearby. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One fencerow (P003-H1) is located within 120 m of the proposed access road and cabling associated with this proposed turbine. No drains, woodlands or other natural vegetation communities are located within 120 m of this proposed turbine. The fencerow P003-H1 is located east of the proposed turbine. It consists of shagbark hickory (*Carya ovata* var. *ovata*), white elm, and eastern cottonwood (*Populus deltoides*), and contains occasional snag habitat.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridor) and will be examined in more detail during the evaluation of significance phase of this Project.

P004

At the time of 2010 field investigations, P004 was located in a corn field, with soybean fields located nearby. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P009-D1) and three fencerows (P004-H1, P003-H1 and P003-H2) are located within 120 m of the proposed turbine, its access road, and cabling. No woodlands or other natural vegetation communities are located within 120 m of this proposed turbine. The drain P009-D1 is a linear ditch located west of the proposed turbine location. The channel contains cattails, and was noted to be moist without noticeable water present. The corridor of this drain contains goldenrods (*Solidago* sp.) and asters (*Symphyotrichum* sp.). The fencerow

P004-H1 is immediately adjacent to the proposed turbine, and it consists of shagbark hickory and eastern cottonwood, and occasional snag habitat. The fencerow P003-H1 is located adjacent to the proposed access road and cabling associated with this turbine. It consists of shagbark hickory (*Carya ovata* var. *ovata*), white elm, and eastern cottonwood (*Populus deltoides*), and contains occasional snag habitat. P003-H2 is located within 75 m of proposed turbine no. P004 and it contains white elm and eastern cottonwood.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridor) and will be examined in more detail during the evaluation of significance phase of this Project.

P005

At the time of 2010 field investigations, P005 was located in a soybean field, with corn fields located nearby. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. Two fencerows (P005-H1 and P005-H2) and one drain (P005-D2) are located within 120 m of the proposed turbine, its access road, and cabling. No woodlands or other natural vegetation communities are located within 120 m of this proposed turbine and associated infrastructure. The fencerow P005-H1 is located west and southwest of the proposed turbine, and consists of sparse white elm, black walnut (*Juglans nigra*), and staghorn sumac (*Rhus hirta*). The access road is proposed to be located adjacent to this fencerow. Fencerow P005-H2 is located north of the proposed turbine, and consists of white elm, bur oak (*Quercus macrocarpa*), and shagbark hickory with some snags. The shallow drain P005-D2 is located along the fencerow P005-H1, and contains cattails, common reed, and gray dogwood within the channel. This drain is provided cover by the fencerow P005-H1 within 120 m of the Project location. This drain was noted to contain no water at the time of site investigation, although observations made by NRSI aquatic biologists for the Water Body Report (conducted on September 14, 2010) indicate that there were some scattered pools of standing water at the intersection of this drain with Brush Line, and species composition was noted to be similar within the channel.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P006

At the time of 2010 field investigations, P006 was located in, and surrounded by, soybean fields. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P009-D1) and one fencerow (P003-H2) are located within 120 m of the access road, and cabling associated with turbine no. P006. No woodlands or other natural vegetation communities are located within 120 m of this proposed turbine location. The drain P009-D1 is a linear ditch located along the fencerow to the north. The channel contains cattails, and was noted to be moist without noticeable water present. The corridor of this drain contains goldenrods (*Solidago* sp.) and asters (*Symphyotrichum* sp.). P003-H2is located north of the proposed turbine, and adjacent to the access road and cabling associated with this turbine. It contains white elm and eastern cottonwood.

This proposed development activity is found in and within 120 m of candidate significant wildlife habitat (animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P007

At the time of 2010 field investigations, P007 was located in, and surrounded by, soybean fields. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P009-D1) and one fencerow (P009-H1) are located within 120 m of the proposed turbine, its access road, and cabling. No woodlands or other natural vegetation communities are located within 120 m of this proposed turbine location. The drain P009-D1 is a linear ditch located north of the proposed turbine location. The channel contains cattails, and was noted as moist without noticeable water present. The corridor edges are dominated by goldenrods and asters, and portions are provided cover by the fencerow to the north. The access road and cabling are proposed to cross this ditch in three locations northwest of the proposed turbine. The fencerow P009-H1 is located north of the proposed turbine, and consists of

hawthorns, shagbark hickory, and eastern cottonwood, and contains some snag habitat. The access road is proposed to be located adjacent to this fencerow.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P008

P008 is located in, and surrounded by, soybean fields. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. No drains, fencerows, woodlands, or other natural features are located within 120 m of the proposed turbine, its access road, or cabling.

As a result of no candidate significant natural features within 120 m of this proposed development activity, no evaluation of significance is specifically required for natural features around this proposed turbine.

P009

At the time of 2010 field investigations, P009 was located in a soybean field, with corn fields located nearby. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. Two drains (P009-D1, P009-D2) and four fencerows (P009-H1, P009-H3, P009-H4, and P009-H5) are located within 120 m of the proposed turnaround area and cabling. No woodlands or other natural vegetation communities are located within the vicinity of the proposed turbine location and associated infrastructure. The drain P009-D2 is a roadside ditch located on the east side of Mull Road. The channel consists of cattails and common reed (*Phragmites australis*), and will be crossed by the cabling. The drain P009-D1 is a ditch located southeast of the proposed turbine, within 120 m of the proposed turnaround area. P009-D1 contains cattails, and was noted as moist, with goldenrods and asters found along the vegetated corridor. The fencerow P009-H4 is located immediately north of this ditch, to the east of the proposed turbine location. It consists of sparsely treed bur oak and

white elm. Portions of this fencerow will be crossed by the cabling and access road associated with this turbine. The fencerow P009-H1 is located north of the proposed turbine, and consists of hawthorns, shagbark hickory, and eastern cottonwood, and contains snags. The access road for this turbine is proposed to be located within this fencerow. P009-H3 is located north and west of the proposed turbine, and consists of white elm, shagbark hickory, and gray dogwood. The access road and cabling is proposed to be located adjacent to this fencerow north of the proposed turbine, and the cabling will cross this fencerow to the northwest. The fencerow P009-H5 is located on the west side of Mull Road, along the south side of Stefina Line. It is located within 120m of the cabling and consists of Norway spruce.

This proposed development activity is found in and within 120 m of candidate significant wildlife habitat (animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P010

At the time of 2010 field investigations, P010 was located in, and surrounded by, soybean fields. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One fencerow (P010-H2) is located within 120 m of the proposed turbine, access road, and cabling. No drains, woodlands or other natural features are located within 120 m of this proposed turbine location. The fencerow P010-H2 is located southwest of the proposed turbine P010, and it consists of silver maple, staghorn sumac, and red oak.

This proposed development activity is found within 120 m of candidate significant natural features (animal movement corridor) and will be examined in more detail during the evaluation of significance phase of this Project.

P012

At the time of 2010 field investigations, P012 was located in, and surrounded by, soybean fields. The agricultural crop types associated with this proposed turbine were

unknown during 2011 field investigations. One drain (P101-D1) and two fencerows (P011-H1, P012-H1) are located within 120 m of the proposed turbine, access road, and cabling. P101-D1 is a natural creek channel which runs through soybean fields, and consists of reed canary grass within the channel and mixed grasses and forbs along the upper edges. The fencerow P011-H1 is sparsely treed with trembling aspen, white elm, and white ash. P012-H1 is sparsely treed as well, containing red oak (*Quercus rubra*), white spruce (*Picea glauca*), and common hackberry (*Celtis occidentalis*). The rail bed (RB-B1) is within 120 m of the stretch of cabling associated with P012, including an inclusion community of Dry Mixed Graminoid Tallgrass Prairie Type (MEGM1-4) along the south side of the rail bed, east of Kent Bridge Road. This particular inclusion is dominated by big bluestem (*Andropogon gerardii*) and switchgrass, and provides candidate significant wildlife habitat. Woodland P011-W1is also within 120m of the infrastructure associated with this turbine. These candidate significant natural features are described in more detail below.

RB-B – Fresh-Moist Mixed Savannah Ecosite (SVMM3)
This portion of the rail bed consists of a few trembling aspen and white elm in the canopy, with some eastern red cedar, trembling aspen, hawthorns, and Manitoba maple in the sub-canopy. The thick understory consists of red raspberry, gray dogwood, staghorn sumac, and common reed, while the sparse groundcover consists of field horsetail, red fescue, common mullein, and riverbank grape. Included in this area is an inclusion of Dry Mixed Graminoid Tallgrass Prairie Type (MEGM1-4).

P011-W1 – Naturalized Deciduous Hedgerow (FODM11)
This regenerating community is dominated by young white ash in the sub-canopy, with balsam poplar, staghorn sumac, and hawthorn. The thick understory is dominated by gray dogwood, with late goldenrod (*Solidago gigantea*), red raspberry (*Rubusidaeus ssp. melanolasius*), and crack willow (*Salix fragilis*) saplings. The groundcover is also thick, dominated by riverbank grape (*Vitisriparia*), Virginia creeper (*Parthenocissusinserta*), poverty oat grass (*Danthoniaspicata*), and butter-and-eggs (*Linaria vulgaris*). Only snags of <10cm dbh (diameter at breast height) occur in this naturalized hedgerow. This community has arisen beside and between the railbed and an adjacent ditch.

This proposed development activity is found within 120 m of two woodlands and several candidate significant natural features (tallgrass prairie, savannah, habitat for s-ranked bat species, and animal movement corridors), which will be examined in more detail during the evaluation of significance phase of this Project.

P013

At the time of 2010 field investigations, P013 was located in, and surrounded by, soybean fields. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P019-D2) and one fencerow (P013-H1) are located within 120 m of the proposed turbine, access road, and cabling. P019-D2 consists of roadside ditches on either side of Base Road, which are characterized by herbaceous species and did not contain water at the time of site investigation. P013-H1 is located west of the proposed cabling, and consists of sparse white elm with snags.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridors) which will be examined in more detail during the evaluation of significance phase of this Project.

P014

At the time of 2010 field investigations, P014 was located in, and surrounded by corn fields. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P013-D1) and one wetland (P014-WE1) are within 120 m of the proposed access road for this proposed turbine. No fencerows or other natural vegetation features are present within 120 m of this proposed turbine. The drain P013-D1 is located north and east of the proposed turbine, its access road and cabling. It consists of deciduous tree cover, and is described as moist. P014-WE1 is located adjacent to the proposed access road and cabling for P014. The form and function of this wetland habitat is described in more detail below:

> P014-WE1 - Fresh-Moist Oak-Maple Deciduous Forest Type (FODM9-2)
> This community is dominated by silver maple in the canopy, and white elm in the sub-canopy, with relatively few snags throughout. The understory is densely vegetated with white elm saplings and common buckthorn, and the groundcover is dense with Virginia creeper and garlic mustard. The high relative abundance of mature silver maple in this mid-aged forest suggests that it is flooded seasonally. This habitat also contains vernal pools which have been considered candidate amphibian breeding habitat. As such, this area has been considered a wetland, and it occurs within 120 m of the Project location.

This proposed development activity is found within 120 m of several candidate significant natural features, including a wetland and wildlife habitat (amphibian breeding

habitat, habitat for S-ranked bat species and animal movement corridor), which will be examined in more detail during the evaluation of significance phase of this Project.

P016

At the time of 2010 field investigations, P016 was located in, and surrounded by tilled fields. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P016-D2) and two fencerows (P016-H1, P016-H3) are located within 120m of the proposed turbine and its associated cabling and access road. No woodlands or other natural vegetation communities are present within 120 m of the proposed turbine location. P016-D2 is a drain which runs parallel to the cabling associated with P016. It did not contain water at the time of investigation and it contains reed canary grass, cattail and common reed grass.P016-H1 is a fencerow located to the southeast of the proposed turbine location. It consists predominantly of common buckthorn and silver maple, as well as white elm, bur oak, eastern red cedar, gray dogwood, and hawthorns. P016-H3 consists of planted Norway spruce, and is located west of the access road for this proposed turbine.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridors) which will be examined in more detail during the evaluation of significance phase of this Project.

P017

At the time of 2010 field investigations, P017was located in a wheat field, with soybean and corn fields in the vicinity. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P018-D1) is located within 120 m of the proposed access road and cabling associated with this proposed turbine. One woodland (P017-W1) is also located within 120 m of the proposed turbine. No fencerows or other natural vegetation communities are present within 120 m of this proposed turbine location. P018-D1 is a linear ditch, although portions not within 120 m of the Project location represent the natural creek channel. It is located immediately adjacent to the access road and cabling, and contains cattails in the channel, with upper edges of smooth brome (*Bromusinermiss* sp. *inermis*) and goldenrods. P017-W1 is

located approximately 92 m north of the proposed turbine, and is described in further detail below:

> P017-W1 - Fresh-Moist Cottonwood Deciduous Forest Type (FODM8-3)
> This forest community is highly disturbed due to its high density of invasives and human disturbance (i.e. soil mounding and disturbance) although it does contain several trees and a few snags measuring >50 cm dbh. The forest canopy is dominated by eastern cottonwood, white ash, American basswood (*Tilia americana*), and red maple (*Acer rubrum*). The subcanopy and dense understory are both dominated by staghorn sumac and common buckthorn. The sparse groundcover consists of thimble-berry (*Rubus occidentalis*) and red raspberry.

This proposed development activity is found within 120 m of several candidate significant natural features, including a woodland and wildlife habitat (habitat for S-ranked bat species and animal movement corridor), which will be examined in more detail during the evaluation of significance phase of this Project.

P018

At the time of 2010 field investigations, P018 was located in a wheat field, with soybean and corn fields in the vicinity. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P018-D1) is located within 120 m of the proposed turbine. No fencerows, woodlands or other natural vegetation communities are present within 120 m of this proposed turbine location. P018-D1 is a small natural creek corridor with channelized sections. It is located north of the proposed turbine location, and contains cattails in the channel, with upper edges of smooth brome and goldenrods.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridor) and will be examined in more detail during the evaluation of significance phase of this Project.

P019

At the time of 2010 field investigations, P019 was located in a soybean field, with corn fields located nearby. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One woodland (P019-W1) is located just

beyond 120 m north of the proposed turbine construction area. No drains, fencerows, woodlands, or other natural vegetation communities are present within 120 m of this proposed turbine.

As a result of no candidate significant natural features within 120 m of this proposed development activity, no evaluation of significance is specifically required for natural features around this proposed turbine.

P020

At the time of 2010 field investigations, P020was located in a soybean field, with corn fields in the vicinity as well. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (SSS-D1) and one fencerow (P020-H1) are located within 120 m of the proposed cabling for P020. No woodlands or other natural vegetation communities are present within 120 m of this proposed turbine. The drain SSS-D1 contained water at the time of investigation, and consists of sparse white elm saplings and mixed forb species. P020-H1 is a short fencerow located southwest of the proposed turbine. It is consists of shagbark hickory, white elm, and green ash.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P021

At the time of 2010 field investigations, P021 was located in a soybean field, with both tilled fields and corn fields located nearby. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One fencerow (P020-H1) is located within 120 m of the proposed turbine location. No drains, woodlands or other natural vegetation communities are present within 120 m of this proposed turbine location.P020-H1 is a fencerow located northwest of the proposed turbine. It is consists of shagbark hickory, white elm, and green ash.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridor) and will be examined in more detail during the evaluation of significance phase of this Project.

P022

At the time of 2010 field investigations, P022 was located in, and surrounded by, soybean fields. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (SSS-D1) and one woodland (P022-W1) are located within 120 m of the cabling associated with this turbine. No fencerows or other natural vegetation communities are present within 120 m of this proposed turbine location. The drain SSS-D1 contained water at the time of investigation, and consists of sparse white elm saplings and mixed forb species. The candidate significant woodland and wildlife habitat (P022-W1, s-ranked bat species habitat) is located adjacent to the proposed cabling for proposed turbine P133. This candidate significant natural feature is described in more detail below.

> P022-W1 - Fresh-Moist Shagbark Hickory Deciduous Forest (FODM9-4)
> This woodland consists of two of three woodland units that are located in close proximity to one another. The western two units discussed here are connected by a short, wide corridor which appears to be a result of the location of clearing, rather than regeneration, due to its similarity in composition and age class to the east and west woodland units. The community is dominated by shagbark hickory, bur oak, and silver maple in the canopy, with shagbark hickory, white elm, and American basswood in the sub-canopy, with occasional snags up to 50 cm dbh. The understory is densely vegetated with white elm and shagbark hickory saplings and chokecherry, and the groundcover is relatively sparse with avens sp., wild strawberry and poison ivy. Due to the presence of silver maple, it is presumed that this area may have been wetter historically, but due to the agricultural tile drainage in the surrounding area, it is now a moist forest.

This proposed development activity is found within 120 m of candidate significant natural features, including a woodland and wildlife habitat (area sensitive breeding bird habitat, and S-ranked bat habitat), and will be examined in more detail during the evaluation of significance phase of this Project.

P023

At the time of 2010 field investigations, P023 was located in, and surrounded by, soybean fields. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P023-D1) and two fencerows (P023-H1 and P023-H2) are located within 120 m of the proposed turbine location and its associated cabling and access road. No woodlands or other natural vegetation communities are present within 120 m of this proposed turbine. Drain P023-D1 is located immediately adjacent to the proposed access road and cabling associated with this turbine. It is characterized by black walnut, cattail and goldenrod sp.; no water was present in this drain at the time of site investigation. The fencerow P023-H1 is located north of the proposed turbine, and consists of sparse white cedar and white elm, and contains occasional snag habitat. Fencerow P023-H2 is located adjacent to the drain P023-D1, and consists of immature black walnut, bur oak and white mulberry.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P024

At the time of 2010 field investigations, P024 was located in a soybean field, with both tilled fields and corn fields in the vicinity as well. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P156-D2) is located within 120 m of the proposed access road and cabling for P024. The drain P156-D2 is a ditch which will be crossed by the access road and cabling location for P024. It consists of white spruce, red cedar, gray dogwood, and hawthorn species.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridor) and will be examined in more detail during the evaluation of significance phase of this Project.

P026

At the time of 2010 field investigations, P026 was located in a soybean field, with corn fields in the vicinity as well. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P026-D1) and one fencerow (P155-H1) are located within 120 m of the proposed access road and cabling associated with P026. The drain P026-D1 is a ditch which runs to the northwest of the proposed turbine, and will be crossed by the proposed cabling route. The channel (which contained no water at the time of site investigation) consists of reed canary grass and gray dogwood, with vegetative cover also provided by sparse white elm. The fencerow P155-H1 will abut the access road at Welch Line, and it consists of white cedar and trembling aspen, with groundcover provided by horsetail and common mullein.

This proposed development activity is found in and within 120 m of candidate significant wildlife habitat (animal movement corridors), and will be examined in more detail during the evaluation of significance phase of this Project.

P028

At the time of 2010 field investigations, P028 was located in a soybean field, with both fallow fields and hayfields located nearby. One fencerow (P029-H1) is located within 120 m of the proposed cabling. No drains, woodlands or other natural vegetation communities are present within 120 m of this proposed turbine location. The fencerow P029-H1 is located east of the proposed turbine location, and consists of sparse eastern cottonwood and gray dogwood. East of the proposed turbine location there is a small portion of old building foundation as well as discarded equipment which may provide overwintering habitat for snakes.

This proposed development activity is found in and within 120 m of candidate significant wildlife habitat (reptile hibernacula and animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P029

At the time of 2010 field investigations, P029 was located in a fallow field, with soybean and hay fields in the vicinity as well. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. The large fallow field to the southwest of the proposed turbine no. P029 has been considered candidate open country bird breeding habitat. The proposed cabling and access road associated within P029 crosses the candidate open country bird breeding habitat. No woodlands, drains, fencerows, or other natural vegetation communities are present within 120 m of this proposed turbine location.

This proposed development activity is found within in and 120 m of candidate significant wildlife habitat (open country bird breeding habitat) which will be examined in more detail during the evaluation of significance phase of this Project.

P030

At the time of 2010 field investigations, P030 was located in, and surrounded by corn fields. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P030-D1) is crossed by the proposed access road and cabling associated with this turbine. The drain P030-D1 is a ditch located north and east of the proposed turbine; it contains cattails and common water-plantain (*Alisma plantago-aquatica*), and was described as moist at the time of the site investigation. The large fallow field to the northeast of the proposed turbine no. P030 has also been considered candidate open country bird breeding habitat. No woodlands or fencerows are present within 120 m of this proposed turbine or its associated infrastructure.

This proposed development activity is found within in and within 120 m of candidate significant wildlife habitat (open country bird breeding habitat and animal movement corridor) and will be examined in more detail during the evaluation of significance phase of this Project.

P031

At the time of 2010 field investigations, P031 was located in a tilled field, with corn fields in the vicinity as well. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P031-D1) is associated with the proposed cabling associated with this turbine. No fencerows are located within the Project Area of this proposed turbine. The drain P031-D1 is a ditch located west of the proposed turbine location. The channel (which did not contain water at the time of site investigation) consists of gray dogwood, dominated in the corridor by mixed grasses and goldenrod species.

This proposed development activity is found within 120 m of an animal movement corridor, and will be examined in more detail during the evaluation of significance phase of this Project.

P032

At the time of 2010 field investigations, P032 was located in, and surrounded by, soybean fields. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P032-D1) is located within the Project Area associated with the proposed turbine and its access road and cabling. An open water agricultural pond is located across Harwich Road from where the access road and cabling will join the cabling. No fencerows or woodlands are located within 120 m of the proposed turbine. The drain P032-D1 is a ditch located east of the proposed turbine location, which will be crossed by the access road and cabling. The channel (which contained water at the time of site investigation) consists of reed canary grass, while the edges are characterized by mixed forbs.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridor) and will be examined in more detail during the evaluation of significance phase of this Project.

P033

At the time of 2010 field investigations, P033 was located in, and surrounded by soybean fields. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P033-D1) and one fencerow (P033-H1) are located within the Project Area associated with the proposed turbine and its access road and cabling. One woodland (P033-W1) is also located within 120 m of the proposed turbine. The drain P033-D1 is a ditch located north and east of the proposed turbine location, which will be crossed by the access road and cabling traveling from P032. The channel contains cattails, while the edges are characterized by mixed grasses and goldenrod species. This ditch did not contain water at the time of site investigation. The small fencerow P033-H1 is located northeast of the proposed turbine location, within 120 m of the location of the access road and cabling. It consists of bur oak and white elm, and contains snags. The woodland P033-W1 is located approximately 80 m north of the proposed turbine location, and adjacent to the proposed access road and cabling associated with this proposed turbine. This woodland is described in further detail below:

> P033-W1 - Dry-Fresh Sugar Maple-Ironwood Deciduous Forest Type (FODM5-4)
> This dry forest community is dominated by sugar maple in the canopy and subcanopy, with associates of shagbark hickory and American beech (*Fagus grandifolia).* The understory is dominated by ironwood and sugar maple saplings, and the groundcover is dominated by sparse garlic mustard. This a mature forest fragment that contains a few sugar maples >50 cm dbh and several large snags.

This proposed development activity is found within 120 m of several candidate significant natural features, including a woodland and wildlife habitat (bat maternity roost, s-ranked bat habitat and animal movement corridors), and will be examined in more detail during the evaluation of significance phase of this Project.

P034

At the time of 2010 field investigations, P034 was located in, and surrounded by soybean fields. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. No fencerows or drains are located within 120 m of this proposed turbine or its associated infrastructure. The vegetation corridor along the railway (RB-E3) is proposed within 120 m of the cabling associated with this

proposed turbine location. The small fencerow P034-H1 is located immediately southeast of the proposed cabling, and consists of young Norway spruce. RB-E3 characterizes the vegetation along the rail bed, which has been classified as deciduous savannah, and is described in further detail below:

> RB-E – White Birch/Poplar Deciduous Savannah Type (SVDM3-5)
> This portion of the rail bed consists primarily of sparse mature trembling aspen and white elm in the canopy, with some Manitoba maple, common buckthorn, hawthorns, and eastern red cedar in the sub-canopy. The understory is characterized by red raspberry, Canada goldenrod, gray dogwood, and staghorn sumac, with a thinner groundcover of field horsetail, riverbank grape, green foxtail (*Setaria viridis*), and quack grass (*Elymus repens*).

This proposed development activity is found within 120 m of candidate significant wildlife habitat (rare vegetation community (savannah), habitat for s-ranked bat species, and an animal movement corridor) and will be examined in more detail during the evaluation of significance phase of this Project.

P035

At the time of 2010 field investigations, P035 was located in a corn field, with soybean fields in the vicinity as well. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One fencerow (P035-H1) and one woodland (P108-W1) with a wetland inclusion (P108-WE1) are located within 120 m of the proposed turbine and associated access road and cabling. P035-H1 is characterised by silver maple, white ash, American elm, shagbark hickory, bur oak, American basswood, and hawthorn sp. It also includes many snags.The candidate significant woodland and wildlife habitat, P108-W1 is located within the Project Area, and is described in more detail below. Based on acoustic studies nearby, and the presence of snags, this feature contains a candidate significant bat maternity roost. No drains or other natural vegetation communities are present within 120 m of this proposed turbine location.

> P108-W1 - Fresh-Moist White Elm Lowland Deciduous Forest Type (FOD7-1) & Swamp Maple Mineral Deciduous Swamp Type (SWDM3-3) Inclusion (P108-WE1)
> This forest community is dominated by white elm and silver maple in the canopy and subcanopy, with many green ash snags. The understory and groundcover is densely vegetated with regenerating white elm and green ash saplings. The high

relative abundance of mature silver maple in this mid-aged forest suggests that it is flooded seasonally, however, the high density and composition of understory and groundcover species (i.e. Virginia creeper, wild geranium, fringed loosestrife, nettle species, may apple) suggests much drier conditions in some areas. It is presumed that this area may have been wetter historically, but due to the agricultural tile drainage in the surrounding area, it is now a moist forest that contains an inclusion of confirmed wetland habitat. This woodland also contains vernal pools which have been considered candidate amphibian breeding habitat. Soil classification surveys conducted at this site determined a moisture regime of 6 for this woodland habitat. The wetland habitat within this woodland occurs within 120 m of the Project location.

This proposed development activity is found within 120 m of a woodland, a wetland and candidate significant wildlife habitat (amphibian breeding habitat, bat maternity roost, s-ranked bat habitat and animal movement corridor) and will be examined in more detail during the evaluation of significance phase of this Project.

P036

At the time of 2010 field investigations, P036 was located in a corn field, with soybean fields in the vicinity as well. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P035-D1), three fencerows (P035-H1, P120-H1, P120-H2), and one woodland (P108-W1 with wetland inclusion, P108-WE1) are all located within 120 m of the proposed turbine and its access road and cabling. The drain P035-D1 is a ditch located north of the proposed turbine location. The channel contains cattails, while the edges are characterized by smooth brome as well as sparse young white elm and willow shrubs. This ditch was moist at the time of site investigation. The fencerow P035-H1 is overlapping with the access road and cabling associated with P036. It is characterised by silver maple, white ash, American elm, shagbark hickory, bur oak, American basswood, and hawthorn sp. It also includes many snags. The fencerow P120-H1 is located south of the proposed turbine location, and is sparsely treed, consisting of bur oak, white elm, and silver maple. Occasional snags are also present within this fencerow. The fencerow P120-H2 is also located south of the proposed turbine location, and will be crossed by the access road and cabling traveling from P042. It consists of bur oak with occasional snag habitat. The candidate significant woodland and wildlife habitat (P108-W1) with wetland inclusion P108-WE1 are located within the Project Area, and are described in more detail below.

Based on acoustic studies nearby, and the presence of snags, the woodland is also considered a candidate significant bat maternity roost.

P108-W1 - Fresh-Moist White Elm Lowland Deciduous Forest Type (FOD7-1) & Swamp Maple Mineral Deciduous Swamp Type (SWDM3-3) Inclusion (P108-WE1)

This forest community is dominated by white elm and silver maple in the canopy and subcanopy, with many green ash snags. The understory and groundcover is densely vegetated with regenerating white elm and green ash saplings. The high relative abundance of mature silver maple in this mid-aged forest suggests that it is flooded seasonally, however, the high density and composition of understory and groundcover species (i.e. Virginia creeper, wild geranium, fringed loosestrife, nettle species, may apple) suggests much drier conditions in some areas. It is presumed that this area may have been wetter historically, but due to the agricultural tile drainage in the surrounding area, it is now a moist forest that contains an inclusion of confirmed wetland habitat. This woodland also contains vernal pools which have been considered candidate amphibian breeding habitat. Soil classification surveys conducted at this site determined a moisture regime of 6 for this woodland habitat. The wetland habitat within this woodland occurs within 120 m of the Project location.

This proposed development activity is found within 120 m of several candidate significant natural features, including a woodland, a wetland and wildlife habitat (amphibian breeding habitat, bat maternity roost, s-ranked bat habitat, and animal movement corridors), which will be examined in more detail during the evaluation of significance phase of this Project.

P037

At the time of 2010 field investigations, P037 was located in a wheat field with soybean fields in the vicinity as well. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P037-D1) and two fencerows (P037-H1, P038-H1) are located within 120 m of the proposed turbine, its access road, and cabling. No woodlands or other natural vegetation communities are present within 120 m of this proposed turbine. Drain P037-D1 contains herbaceous species cover, and had no water present at the time of site investigation. The fencerow P037-H1 is located west of the proposed turbine location. It consists of dense bur oak and shagbark hickory, and contains occasional snag habitat. P038-H1 is located immediately north of the proposed turbine location. This fencerow is dominated by Norway spruce.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridors) which will be examined in more detail during the evaluation of significance phase of this Project.

P038

At the time of 2010 field investigations, P038 was located in a soybean field with wheat fields in the vicinity as well. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. Two drains (P037-D1 and CLA-D3) and one fencerow (P038-H1) are located within 120 m of the proposed turbine, its access road, and cabling. No woodlands or other natural vegetation communities are present within 120 m of this proposed turbine location. Drain P037-D1 will be crossed by the cabling route for P038. This drain contains herbaceous species cover, and had no water present at the time of site investigation. The drain CLA-D3 is located adjacent to the access road leading to P038. It contains phragmites, cattails and hawthorne sp., and contained no water at the time of investigation. The fencerow P038-H1 is located north of the proposed turbine location, and is a comprised of planted Norway spruce.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridors) which will be examined in more detail during the evaluation of significance phase of this Project.

P039

At the time of 2010 field investigations, P039 was located in a corn field, with tilled fields also located nearby. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. Two drains (P037-D1 and P041-D1) and one fencerow (P040-H2) are located within 120 m of the proposed turbine, its access road, and cabling. No woodlands or other natural vegetation communities are present within 120 m of this proposed turbine location. Drain P037-D1 will be crossed by the cabling route for P039. This drain contains herbaceous species cover, and had no water present at the time of site investigation. The drain P041-D1 is located north of the

proposed turbine location, and contains cattails within the channel, and grasses, including smooth brome, along the edges. P040-H2 is a fencerow located along this channel, consisting of immature white elm with gray dogwood.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridors) which will be examined in more detail during the evaluation of significance phase of this Project.

P040

At the time of 2010 field investigations, P040was located in a tilled field, with corn and soybean fields in the vicinity as well. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P041-D1) and one fencerow (P040-H2) are located within 120 m of the proposed turbine, its access road, and cabling. The vegetation corridor associated with the railway (RB-A) will be crossed by cabling where it connects to cabling associated with the transmission corridor. The drain P041-D1 is located north of the proposed turbine location, and contains cattails within the channel, and grasses such as smooth brome along the edges. P040-H2 is a fencerow located along this channel, and consists of immature white elm with gray dogwood. The RB-A community is described in more detail below:

> RB-A – Fresh-Moist Poplar Deciduous Woodland Type (WODM5-1)
> This portion of the rail bed consists primarily of trembling aspen with white elm, silver maple, and red oak, with along with Manitoba maple in the sub-canopy. The understory is dominated by red raspberry and Canada goldenrod, with staghorn sumac and common reed. Groundcover consists of red fescue, field horsetail, riverbank grape, and wild carrot.

This proposed development activity is found within 120 m of several candidate significant natural features, including a woodland and wildlife habitat (s-ranked bat habitat and animal movement corridors),which will be examined in more detail during the evaluation of significance phase of this Project.

P041

At the time of 2010 field investigations, P041 was located in a corn field, with soybean fields in the vicinity as well. The agricultural crop types associated with this proposed

turbine were unknown during 2011 field investigations. One drain (P041-D1) and two fencerows (P041-H1, P040-H2) are located within 120 m of the proposed turbine, its access road, and cabling. No woodlands or other natural vegetation communities are present within 120 m of this proposed turbine location. The drain P041-D1 is a ditch located south and west of the proposed turbine location, and will be crossed by the proposed location of the access road at Drury Line. The channel consists of cattails, with grasses such as smooth brome along the edges. The fencerow P041-H1 is located west and north of the proposed turbine location, and will abut the access road. It consists of eastern cottonwood, white elm, and bur oak, and contains occasional snag habitat. P040-H2 is located west of the proposed access road where it joins Drury Line. It is characterized by immature white elm with gray dogwood, and follows the ditch P041-D1.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridors) which will be examined in more detail during the evaluation of significance phase of this Project.

P042

At the time of 2010 field investigations, P042 was located in a soybean field, with corn fields in the vicinity as well. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. Three fencerows (P120-H1, P120-H2, and P042-H1) are located within 120 m of the proposed turbine and its access road and cabling. No drains, woodlands or other natural features are within 120 m of this proposed turbine. The fencerow P120-H1 is located west of the proposed turbine location, and will be crossed by the access road and cabling connecting from P120. It is sparsely treed, consisting of bur oak, white elm, and silver maple, and also containing snags. P120-H2 is located north of the proposed turbine location, and will be crossed by the access road and cabling traveling to P036. It is dominated by bur oak with occasional snag habitat. P042-H1 is located east of the proposed turbine, and consists of white elm, bur oak, and hawthorn, with occasional snag habitat. This fencerow will be crossed by the cabling to P109.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridors) which will be examined in more detail during the evaluation of significance phase of this Project.

P044

At the time of 2010 field investigations, P044 was located in, and surrounded by, corn fields. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P045-D1) and one fencerow (P044-H1) are located within 120 m of the proposed access road and cabling. No woodlands or other natural vegetation communities are present within 120 m of this proposed turbine location. P045-D1 is a ditch that will be crossed by the proposed access road and cabling associated with the proposed turbine. This drain is characterized by mixed grasses and forbs, goldenrod sp., smooth brome and cattail.. P044-H1 is located east of the proposed turbine location, and will be located immediately adjacent to the proposed access road and cabling. It is characterized by sparse bur oak and white elm.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P045

At the time of 2010 field investigations, P045 was located in a corn field, with soybean fields located nearby. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P045-D1) and one fencerow (P045-H1) are located within 120 m of the proposed turbine, its access road, and cabling. No woodlands or other natural vegetation communities are present within 120 m of this proposed turbine location. P045-D1 is a ditch located immediately adjacent to the proposed access road and cabling associated with the proposed turbine. This drain is characterized by mixed grasses and forbs, goldenrod sp., smooth brome and cattail. The fencerow P045-H1 is located east of the proposed turbine location, and will be adjacent to the proposed access road and cabling coming from P045. It consists of dense Freeman's maple, bur oak, and American basswood.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridor) and will be examined in more detail during the evaluation of significance phase of this Project.

P046

At the time of 2010 field investigations, P046 was located in, and surrounded by, corn and soybean fields. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One fencerow (CLA-H1) is located within 120 m of the proposed turbine, its access road, and cabling. No vegetated drains, woodlands or other natural vegetation communities are present within 120 m of this proposed turbine location. The fencerow CLA-H1 is located east of the proposed turbine location, and it consists of bur oak, white elm and some snags.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridor) and will be examined in more detail during the evaluation of significance phase of this Project.

P052

At the time of 2010 field investigations, P052was located in, and surrounded by soybean fields. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. Three drains (P052-D1, P051-D1, and P110-D1) and two fencerows (P051-H1, P052-H1) are located within 120 m of the proposed turbine, its access road, and cabling. No woodlands or other natural vegetation communities are present within 120 m of this proposed turbine location. The drain P052-D1 is a ditch located east of the proposed turbine location, and immediately adjacent to the proposed location of the access road and cabling. The channel consists of mixed grasses and forbs. P051-D1 is a roadside ditch which runs parallel to the cabling for P052. This ditch consists of herbaceous cover and contained water at the time of field investigations. P110-D1 is a roadside ditch which crosses Horton Line, and it will be crossed by portions of the proposed cabling route for proposed turbine P052.P110-D1 is characterized by herbaceous species and contained no water at the time of site investigation. The fencerow P051-H1 is adjacent to the cabling route for P052 and drain

P051-D1, and is characterized by planted coniferous trees. The fencerow P052-H1 consists of scattered mature bur oak trees located along the ditch P052-D1, adjacent to the proposed location of the access road and cabling

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P053

At the time of 2010 field investigations, P053 was located in, and surrounded by, soybean fields. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. No drains or fencerows are located within 120 m of the proposed turbine, its access road, or cabling here. Two natural vegetation communities (P053-W3, P053-W4), woodlands, are located within 120 m of the proposed turbine and access road locations and are described in further detail below:

> P053-W3 - Fresh-Moist Deciduous Woodland Type (WODM5)
> This young woodland community is dominated by white elm, with bur oak and eastern cottonwood which are <10 m in height. Gray dogwood and staghorn sumac are occasionally found in the understory, with groundcover of smooth brome and Canada goldenrod.
>
> P053-W4 –Fresh-Moist Shagbark Hickory Deciduous Forest Type (FOD 9-4)
> This mid-age forest community is dominated by red maple, shagbark hickory and white ash. Gray dogwood and red osier dogwood are occasionally found in the understory, with groundcover of clover and wild strawberry.

This proposed development activity is found within 120 m of candidate significant natural features, including two woodlands and candidate significant wildlife habitat (animal movement corridors and S-ranked bat habitat). These will be examined in more detail during the evaluation of significance phase of this Project.

P054

At the time of 2010 field investigations, P054 was located in a corn field, with soybean fields in the vicinity as well. The agricultural crop types associated with this proposed

turbine were unknown during 2011 field investigations. One drain (P055-D1) and one fencerow (P054-H1) are located within 120 m of the proposed turbine, its access road, and cabling. No woodlands or other natural vegetation communities are present within 120 m of this proposed turbine location. The drain P055-D1 is a ditch located south of the proposed turbine location. The channel contains some cattails, with mixed grasses and forbs along the upper edges. This ditch will be crossed by the proposed access road and cabling leading to P054. The fencerow P054-H1 is located immediately east of the proposed turbine location, and is dominated by planted Norway spruce.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P055

At the time of 2010 field investigations, P055 was located in, and surrounded by soybean fields. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P055-D1) is located within 120 m of the proposed access road and cabling associated with this turbine. The drain P055-D1 is a ditch located north of the proposed turbine location. The channel contains some cattails, with mixed grasses and forbs along the upper edges. This ditch will be crossed by the proposed access road for P055.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridor) that will be examined in more detail during the evaluation of significance phase of this Project.

P056

At the time of 2010 field investigations, P056 was located in a soybean field, with wheat and tomato fields in the vicinity as well. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P056-D2) is located within 120 m of the proposed turbine, its access road, and cabling. No fencerows, woodlands or other natural vegetation communities are present within 120 m of this proposed turbine location. The drain P056-D2 is a ditch located to the south of

the proposed turbine location, which contains herbaceous species and had no water present at the time of site investigation.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridor) and will be examined in more detail during the evaluation of significance phase of this Project.

P057

At the time of 2010 field investigations, P057was located in a wheat field, with soybean and corn fields in the vicinity as well. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. Two drains (P056-D2, P057-D1) are located within 120 m of the proposed turbine, its access road, and cabling. No fencerows, woodlands or other natural vegetation communities are present within 120 m of this proposed turbine location. The drain P056-D2 is a ditch located to the south of the proposed turbine location, which contains herbaceous species and had no water present at the time of site investigation. P057-D1 is a ditch located northwest of the proposed turbine location, which will be crossed by the access road and cabling leading to the proposed turbine from P056 in the northwest. It is characterized by mixed grasses and forbs.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P058

At the time of 2010 field investigations, P058 was located in a wheat field, with soybean fields in the vicinity as well. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. Two drains (P058-D1, P058-D2) and two fencerows (P057-H1, P058-H1) are located within 120 m of the proposed turbine, its access road, and cabling. No woodlands or other natural vegetation communities are present within 120 m of this proposed turbine location. The drain P058-D1 is a ditch located northwest of the proposed turbine location, which will be crossed by the access road and cabling leading to the proposed turbine from the northwest. It is characterized by mixed grasses and forbs, and did not contain water at

the time of the site investigation. P058-D2 is a similar ditch located southeast of the proposed turbine location, which is characterized by mixed grasses and forbs and did not contain water at the time of the site investigation. The fencerow P057-H1 abuts the cabling leading to P058, and is characterized by white spruce trees. The fencerow P058-H1 also abuts the cabling leading to P058, and it contains white cedar.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P060

At the time of 2010 field investigations, P060 was located in a soybean field, with hay fields and pasture located nearby as well. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. Two drains (P060-D1, P111-D1) and two fencerows (P060-H4, P060-H5) are located within 120 m of the proposed turbine, its access road, and cabling. No woodlands or other natural vegetation communities are present within 120 m of this proposed turbine location. The drain P060-D1 is a ditch located adjacent to the proposed access road for proposed turbineP060. P060-D1 consists of deciduous tree and shrub cover. P111-D1 is a small ditch, characterized by mixed grasses and forbs and sparse white elm, which runs west of the proposed turbine location. Fencerows P060-H4, and P060-H5 provide the vegetative cover for P060-D1. P060-H4 contains sparse basswood and white elm, while P060-H5 contains dense gray dogwood.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P061

At the time of 2010 field investigations, P061 was located in a tilled field, with soybean fields in the vicinity as well. The agricultural crop types associated with this proposed

turbine were unknown during 2011 field investigations. Two drains (P094-D2 and P094-D5) and one fencerow (P061-H1) are located within 120 m of the proposed turbine and its access road and cabling. No woodlands or other natural vegetation communities are present within 120 m of this proposed turbine location. P094-D2 contains herbaceous and deciduous tree cover, and contained water at the time of site investigation. P094-D5 consists of herbaceous and deciduous tree cover, and contained water at the time of site investigation. The fencerow P061-H1 consists of planted coniferous trees.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P062

At the time of 2010 field investigations, P062 was located in a soy field, with tilled fields and wheat fields in the vicinity as well. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One fencerow (P121-H1) is located within 120 m of the access road and cabling for this proposed turbine. It is a fencerow of planted white cedar. No drains, woodlands or other natural vegetation communities are present within 120 m of this proposed turbine location.

This proposed development activity is found within 120 m of a candidate significant animal movement corridor, and will be examined in more detail during the evaluation of significance phase of this Project.

P063

At the time of 2010 field investigations, P063 was located in a corn field, with tilled fields and wheat fields in the vicinity as well. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. Two drains (P063-D1, P063-D2) and two fencerows (P063-H1, P063-H2) are located within 120 of this proposed turbine and its cabling. No woodlands or other natural vegetation communities are present within 120 m of this proposed turbine location. The drain P063-D1 is a ditch located east of the proposed turbine which is filled with gray dogwood. Shading is also

provided by the fencerow P063-H1. The drain P063-D2 is a roadside ditch located south of the 7th Line East, and is within 120 m of the proposed cabling. This ditch contains mixed grasses and forbs and contained no water at the time of the site visit. P063-H1 is a fencerow of planted white cedar, located adjacent to the ditch P063-D1 to the east of the proposed turbine. P063-H2 is a deciduous fencerow of white elm, red oak, and hawthorns, and contains snags.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P064

At the time of 2010 field investigations, P064 was located in, and surrounded by soybean fields. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P064-D1) and one woodland (P064-W1) are located within 120 m of this proposed turbine. No fencerows or other natural vegetation communities are present within 120 m of this proposed turbine location. The drain P064-D1 is a roadside ditch located on the south side of the 7th Line West, containing water. Vegetative cover within the channel consists of purple loosestrife, with goldenrods along the banks. A small woodland (P064-W1) is located to the west of proposed turbine P064, and is described in more detail below.

P064-W1 – Dry-Fresh Exotic Deciduous Forest Type (FODM4-12)
This mid-age forest community is dominated by silver poplar (*Populus alba*) in the canopy and sub-canopy, with young silver poplar and riverbank grape in the understory. Garlic mustard, avens, and Canada goldenrod are found in the ground layer. At the time of site investigation, we could not gain landowner permission to access this natural feature; therefore, an alternative (i.e. roadside) site investigation was conducted.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridor and S-ranked bat habitat) and a candidate significant woodland, and these features will be examined in more detail during the evaluation of significance phase of this Project.

P065

At the time of 2010 field investigations, P065 was located in a corn field, with soybean fields in the vicinity as well. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. Two drains (P065-D1, P065-D2) and one fencerow (P065-H1) are located within 120 m of this proposed turbine, its access road and cabling. The drain P065-D1 is a natural creek corridor located north of the proposed turbine location. A rock pile, which could provide overwintering habitat for snakes, is located within this drain. The watercourse forks north of the proposed turbine location and continues through P065-W2 to the east, and along P065-H1 and through P065-W1 to the west and south. This creek contains water, and is sparsely treed with eastern cottonwood and willow shrubs, except where it aligns with P065-H1 or continues through woodlands. P065-D2 contained water at the time of investigation, and cover is characterized by immature white elm and willow shrubs. The fencerow P065-H1 follows the creek to the west of the proposed turbine location, and consists of Manitoba maple, common buckthorn, and gray dogwood. The proposed location of the access road for this proposed turbine will cross the creek and fencerow northwest of the proposed turbine location.

Two natural communities representing candidate significant woodlands and wildlife habitat are also present within 120 m of the proposed development activities associated with this proposed turbine location. The Manitoba maple woodland, P065-W1, is located within 120 m of the proposed access road for proposed turbine P065. The bur oak forest, P065-W2, is located approximately 84 m from the proposed turbine (measured from blade tip). These woodlands are described in more detail below:

P065-W1 - Fresh-Moist Manitoba Maple Deciduous Woodland Type (WODM5-3)
This young riverine woodland community is dominated by Manitoba maple and white elm in the canopy and dense subcanopy layers, with occasional snags throughout. The relatively dense understory is dominated by Manitoba maple saplings and gray dogwood, and the dense groundcover is dominated by garlic mustard. This woodland also includes a naturalized hedgerow that is dominated by bur oak.

P065-W2 - Fresh-Moist Bur Oak Deciduous Forest Type (FODM9-3)
This forest community is dominated by relatively equal proportions of bur oak and shagbark hickory in the canopy and subcanopy, and sparse white elm saplings and American prickly-ash in the understory. The groundcover is very sparse,

dominated by garlic mustard and avens sp. This is a mid-aged forest, with numerous trees in the 25-50 cm dbh range and occasional snags.

This proposed development activity is found within 120 m of several candidate significant natural features, including two (2) woodlands and wildlife habitat (reptile hibernacula, S-ranked bat habitat and an animal movement corridor), and will be examined in more detail during the evaluation of significance phase of this Project.

P066

At the time of 2010 field investigations, P066 was located in a soybean field with corn fields in the vicinity as well. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P064-D1) and two fencerows (P066-H1, P066-H2) are located within 120 m of this proposed turbine. The vegetation corridor associated with the railway (RB-F) is also within 120 m of the proposed infrastructure for this proposed turbine. The access road and cabling meet 7th Line West, approximately 75 m from the proposed candidate significant wildlife habitat associated with the RB-F natural feature. The form and function of this community are described in more detail below. The drain P064-D1 is a roadside ditch located on the south side of the 7th Line West, containing water. Vegetative cover within the channel consists of purple loosestrife, with goldenrods along the upper edges. The deciduous fencerow P066-H1 is found southwest of the proposed turbine location. P066-H2 is a sparsely treed deciduous fencerow located north of the proposed turbine location.

RB-F – White Birch/Poplar Deciduous Savannah Type (SVDM3-5)
This portion of the rail bed consists primarily of sparse trembling aspen, white elm, and hawthorns <10 m in height, with a thick understory of red raspberry, viper's bugloss (*Echium vulgare*), common reed, and wild carrot. Groundcover is dominated by red fescue, field horsetail, riverbank grape, and alfalfa (*Medicago sativa* ssp. *sativa*).

This proposed development activity is found within 120 m of candidate significant wildlife habitat (rare vegetation community in RB-F3 {savannah}, S-ranked bat habitat, and animal movement corridors), and a candidate significant woodland and will be examined in more detail during the evaluation of significance phase of this Project.

P067

At the time of 2010 field investigations, P067was located in a tilled field, with soybean and corn fields in the vicinity as well. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. Two fencerows (P067-H2, RSS-H1) are located within 120 m of this proposed turbine, and its associated access road and cabling. The vegetation corridor associated with the railway (RB-F3) is also located approximately 38 m from this proposed turbine, with cabling proposed to cross this candidate significant wildlife habitat (animal movement corridors). The form and function of this natural feature are described in more detail below. The deciduous fencerow P067-H2 is found west of the proposed turbine location, following the field edge and adjacent to the drain P068-D1 within the Project Area. RSS-H1 is proposed to be crossed by the cabling associated with this turbine, and is characterized by immature white elm, bur oak, and eastern cottonwood, with no snags present.

> RB-F – White Birch/Poplar Deciduous Savannah Type (SVDM3-5)
> This portion of the rail bed consists primarily of sparse trembling aspen, white elm, and hawthorns <10 m in height, with a thick understory of red raspberry, viper's bugloss, common reed, and wild carrot. Groundcover is dominated by red fescue, field horsetail, riverbank grape, and alfalfa.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (rare vegetation community, S-ranked bat habitat, and animal movement corridors), and a candidate significant woodland, and will be examined in more detail during the evaluation of significance phase of this Project.

P068

At the time of 2010 field investigations, P068 was located in a soybean field, with wheat and corn fields in the vicinity as well. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P068-D1) and one fencerow (P068-H1) are located within 120 m of this proposed turbine. No woodlands or other natural vegetation communities are present within 120 m of this proposed turbine location. The drain P068-D1 is a small natural creek corridor with no water present. Vegetative cover within the channel consists of reed-canary grass,

cattails, and purple loosestrife. The deciduous fencerow P068-H1 runs northwest of the proposed turbine location.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P069

At the time of 2010 field investigations, P069 was located in a soybean field, with corn fields in the vicinity as well. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. Two fencerows (P069-H1 and P069-H2) and two drains (P069-D1 and P069-D2) are located within 120 m of this access road and cabling associated with turbine no. P069. No woodlands or other natural vegetation communities are present within 120 m of this proposed turbine or its associated infrastructure. The deciduous fencerow P069-H1 is located west of the proposed turbine location, adjacent to the proposed location of cabling.P069-H2 is located along the natural creek channel P069-D2, and is characterized by sparse deciduous trees. P069-D1 is a roadside ditch characterized by herbaceous species, and contained no water at the time of site investigation. P069-D2 is a natural creek channel which crosses Port Road, with cover provided by herbaceous species as well as sparse eastern cottonwood and willows. Water was present within this channel at the time of investigation.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P070

At the time of 2010 field investigations, P070 was located in a soybean field, with tilled fields in the vicinity as well. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P070-D1) and one

fencerow (P070-H1) are located within 120 m of this proposed turbine. No woodlands or other natural vegetation communities are present within 120 m of this proposed turbine location. The drain P070-D1 is a small natural creek corridor with water present. Vegetative cover consists of mixed grasses and forbs. The fencerow, P070-H1, is deciduous, sparsely treed and is located south of the proposed turbine location and adjacent to the proposed access road and cabling.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P071

At the time of 2010 field investigations, P071was located in, and surrounded by, soybean fields. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. No drains, fencerows, woodlands, or other natural features are located within 120 m of the proposed turbine, its access road, or cabling.

As a result of no candidate significant natural features within 120 m of this proposed development activity, no evaluation of significance is specifically required for natural features around this proposed turbine.

P072

At the time of 2010 field investigations, P072 was located in a soybean field, with tilled fields in the vicinity. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P072-D1) and one fencerow (P072-H1) is located within 120 m of this proposed turbine and its associated cabling and access road. P072-D1 is a ditch containing red cedar, staghorn sumac, white elm, reed canary grass, goldenrod sp., and smooth brome, and abuts the access road to proposed turbine P072. Fencerow P072-H1 runs alongside the access road and cabling for proposed turbine P072 and contains bur oak, red cedar, red osier dogwood and reed

canary grass groundcover. P072-H1 also contains a cement pile which could provide overwintering habitat for snakes. No fencerows, drains, woodlands, or other natural features are located within 120 m of this proposed turbine location.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (reptile hibernacula and animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P073

At the time of 2010 field investigations, P073 was located in, and is surrounded by, soybean fields. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. Two drains (P124-D1 and P072-D1) are located within 120 m of this proposed turbine. No fencerows, woodlands, or other natural features are located within 120 m of this proposed turbine location. P124-D1 is a roadside ditch which runs along the south side of Pollard Line, and continues southward on the east side of Valetta Road. It is characterized by asters, giant ragweed (*Ambrosia trifida*), and teasel, with no water present at the time of the site investigation. P072-D1 is a ditch containingred cedar, staghorn sumac, white elm, reed canary grass, goldenrod sp., and smooth brome, and it is crossed by the access road to proposed turbine P073.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridor) and will be examined in more detail during the evaluation of significance phase of this Project.

P074

At the time of 2010 field investigations, P074 was located in, and is surrounded by, tilled fields. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P074-D1) is located within 120 m of this proposed turbine. No fencerows, woodlands, or other natural features are located within 120 m of this proposed turbine location. P074-D1 is a wide ditch (approximately 1.3 m) which runs south of the proposed turbine and its access road at a field edge and extends along the east side of Oak Road. This ditch is filled with narrow-leaved cattail (*Typha*

angustifolia) and common reed. A rock pile, which could provide overwintering habitat for snakes, is also associated with this drain.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (reptile hibernacula and animal movement corridor) and will be examined in more detail during the evaluation of significance phase of this Project.

P075

At the time of 2010 field investigations, P075 was located in a soybean field, with winter wheat fields in the vicinity. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. Two drains (P114-D1 and P116-D2) and one woodland (P114-W1) associated with this drain are located within 120 m of this proposed turbine location and its associated infrastructure. No fencerows or other natural features are located within 120 m of this proposed turbine location. P116-D2 runs between two fields to the east of Davidson Road where it joins P116-D1. This is a steep ditch, with a channel approximately 1 m wide filled with cattails and common reed. The upper edges of the ditch are characterized by scattered eastern red cedar, staghorn sumac, and young bur oak and white elm. P114-D1 is a natural creek corridor with water present. Vegetative cover is provided by the associated woodland, P114-W1. This candidate significant woodland and wildlife habitat is described in more detail below.

> P114-W1 - Fresh-Moist Elm Deciduous Woodland Type (WODM5-2)
> This treed riverine corridor is a woodland community dominated by white elm in the canopy and subcanopy, and staghorn sumac and hawthorn sp. shrubs in the dense understory. The groundcover is relatively sparse, dominated by Canada goldenrod and riverbank grape. This is a relatively young woodland, with very few trees >24cm dbh and occasional snags.

A snake road mortality was observed further north along this corridor on Pollard Line. This proposed development activity is found within 120 m of several candidate significant natural features, including a woodland and wildlife habitat (animal movement corridors and S-ranked bat habitat), and will be examined in more detail during the evaluation of significance phase of this Project.

P077

At the time of 2010 field investigations, P077 was located in a soybean field, with winter wheat fields in the vicinity. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. Two fencerows (P078-H1 and P078-H3) and one drain (P116-D2) are located within 120 m of this proposed turbine. P078-H1 is a deciduous hedgerow, which runs directly north of proposed turbine P077. P078-H3 runs parallel to the access road for P077, and consists of bur oak, dogwood sp., and tall goldenrod. P116-D2 runs between two fields to the east of Davidson Road where it joins P116-D1. It is a steep ditch, with a channel approximately 1 m wide filled with cattails and common reed. The upper edges of the ditch are characterized by scattered eastern red cedar, staghorn sumac, and young bur oak and white elm. One woodland (P077-W1) is located within 120 m, and is described below. The bur oak forest is located approximately 90 m from the closest point of proposed turbine P077, but abuts the access road associated with this proposed turbine. The access road as it continues north towards Middle Line is also found approximately 110 m from the elm woodland. No drains or other natural features are located within 120 m of this proposed turbine location.

> P077-W1 - Fresh-Moist Bur Oak Deciduous Forest Type (FODM9-3)
> This mid-age forest community is dominated by relatively equal proportions of bur oak, white elm, and shagbark hickory in the canopy and subcanopy. The understory is dominated by white elm saplings, and the sparse groundcover consists of green ash seedlings, avens sp., and poison ivy. This forest also contains an inclusion of MEFM1-1 (Goldenrod Forb Meadow Type), a cleared area dominated by Canada goldenrod.

Snags of varying sizes can be found within this woodland, including a few >50 cm dbh ATV trails were observed throughout this woodland, especially in the meadow inclusion.

This proposed development activity is found within 120 m of several candidate significant natural features, including two (2) woodlands and wildlife habitat (animal movement corridors, and S-ranked bat habitat), and will be examined in more detail during the evaluation of significance phase of this Project.

P078

At the time of 2010 field investigations, P078 was located in a soybean field, with winter wheat fields in the vicinity. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. Three fencerows (P078-H2, P078-H3, and P078-H4) are located within 120 m of this proposed turbine and its associated infrastructure. P078-H2 consists of deciduous trees and runs parallel to the access road for P078. P078-H3 runs parallel to the access road for P077, and consists of bur oak, dogwood sp., and tall goldenrod. P078-H4 runs perpendicular to the access road for proposed turbine P078 and contains bur oak, American elm and tall goldenrod. No drains, woodlands, or other natural features are located within 120 m of this proposed turbine location.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridors), which will be examined in more detail during the evaluation of significance phase of this Project.

P079

At the time of 2010 field investigations, P079 was located in a tilled field, with winter wheat and soybean fields in the vicinity. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. Three drains (P079-D1, P115-D1, P116-D1) run within 120 m of this proposed turbine, access road, and cabling. No fencerows, woodlands or other natural vegetation communities are present within 120 m of this proposed turbine location. P079-D1 is a gently sloping ditch with mowed edges ending in a narrow channel of cattails. P115-D1 runs between fields just east of the proposed access road for proposed turbine P079. The channel contains cattails, while the sides are characterized by mixed grasses and forbs. P116-D1 is a wide ditch which runs along the east side of Davidson Road. The channel, which is approximately 1.5m wide and contains standing water, is characterized by cattails and common reed in shallower sections, while the sides are characterized by mixed grasses and forbs.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P080

At the time of 2010 field investigations, P080 was located in a winter wheat field, with soybeans and tilled fields in the vicinity. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P080-D1) runs within 120 m of this proposed turbine location, and one fencerow is located within 120 m to the east of the proposed turbine location (P080-H1). No woodlands or other natural vegetation communities are present within 120 m of this proposed turbine location. P080-D1 is a wide ditch which runs along the south side of Gray Line. The channel, which is approximately 1.3 m wide, contains cattails and common reed, while the sides are characterized by grasses, American prickly ash, teasel, and scouring-rush (*Equisetum hyemale* ssp. *affine*). P080-H1 is a deciduous fencerow dominated by bur oak and white elm, which runs east of this proposed turbine location.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P081

At the time of 2010 field investigations, P081 was located in tilled land, while there is some winter wheat in the vicinity. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P081-D2) and one fencerow (P081-H2) are located within 120 m of the infrastructure associated with this proposed turbine. No woodlands or other natural vegetation communities are present within 120 m of this proposed turbine location.P081-D2 is a small creek which runs southwest of the proposed location of P081 through a winter wheat field. It contains reed canary grass along the channel, with mixed grasses and forbs along the edges. Vegetative cover along part of this creek is gray dogwood associated with P081-H2. A Virginia opossum (*Didelphis virginiana*) was observed as a road mortality along Rosedale Line near this proposed turbine location.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P082

At the time of 2010 field investigations, P082 was located in a soybean field, with tilled fields in the vicinity. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. Four drains (P081-D2, P082-D1, P083-D1, and P083-D5) and one fencerow (P082-H1) are located within 120 m of this proposed turbine location. One woodland (P082-W1) has also been identified within 120 m of the access road and cabling associated with this turbine.

P081-D2 is a small creek which runs northeast of the proposed location of P082 across Coatsworth Road. It contains reed canary grass along the channel, with mixed grasses and forbs along the edges. P082-D1 is a ditch which runs along the south side of Rosedale Line. It contains cattails along the channel portion, with calico aster, Canada goldenrod, burdock (*Arctium minus* ssp. *minus*), and orchard grass (*Dactylis glomerata*) along its sides. P083-D5 is a small creek, with a channel approximately 1.3m wide which contains cattails. The sides of the creek are grassy, with flat-topped bushy goldenrod (*Euthamia graminifolia*), Canada goldenrod, and other common forbs. P083-D1 is another small creek, with some cattails in the channel accompanied by mixed grasses and forbs along the edges. The fencerow, P082-H1, contains white elm with some bur oak. No snags or other habitat features were noted within this fencerow, which is located west of the proposed turbine location, west of the creek P083-D5.

P082-W1 is located at a considerable distance from the proposed turbine location, however the proposed access road for this proposed turbine is found immediately adjacent to the northern limit of this candidate significant woodland and wildlife habitat. This candidate significant woodland and wildlife habitat is described in more detail below:

P082-W1 - Fresh-Moist Oak-Sugar Maple Deciduous Forest Type (FODM9-1)
This forest community is dominated equally by red oak and sugar maple in the canopy, along with white elm, bur oak, and shagbark hickory. The subcanopy likewise consists of white elm, sugar maple, red oak, and bur oak. Canada goldenrod dominates the understory. This is a mid-age forest with many trees <10 cm and 10-24cm dbh, and a few trees in the 25-50 cm dbh range. Medium and large-sized snags are also present in small quantities.

This proposed development activity is found within 120 m of several candidate significant natural features, including a woodland and wildlife habitat (animal movement corridors and S-ranked bat habitat) , and will be examined in more detail during the evaluation of significance phase of this Project.

P087

At the time of 2010 field investigations, P087 was located in, and surrounded by, soybean fields. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P070-D1) is located within 120 m of the proposed turbine. No woodlands or other natural vegetation communities are present within 120 m of this proposed turbine location. The drain P070-D1 is a small natural creek corridor with water present. Vegetative cover consists of mixed grasses and forbs.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridor) and will be examined in more detail during the evaluation of significance phase of this Project.

P091

At the time of 2010 field investigations, P091 was located in a corn field, with soybean fields in the vicinity as well. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. Two fencerows (P091-H1, P091-H2) are located within 120 m of the proposed turbine, access road, and cabling. One woodland is also located within 120 m of the proposed turbine construction area (P091-W1). No drains or other natural vegetation communities are present within 120 m of this proposed turbine location. The fencerow P091-H1 is located adjacent to and north of

the proposed access road, and consists of sparse Scotch pine (*Pinus sylvestris*) with some snags. P091-H2 is located northeast and east of the proposed turbine location. It consists of red oak, white elm, and black walnut with some snags. The candidate significant woodland P091-W1 is located approximately 115 m north of the proposed construction access road. This woodland and wildlife habitat is described below:

> P091-W1 - Fresh-Moist Sugar Maple-White Elm Deciduous Forest Type (FODM6-4)
> This forest community consists of a sugar maple, white elm and bitternut hickory (*Carya cordiformis*) dominated canopy and sub-canopy. The understory is dominated by sugar maple saplings, as well as common buckthorn and American prickly-ash. The ground cover consists predominately of garlic mustard, avens sp., and white ash seedlings. This is a mid-aged forest with many trees in the 10-24 cm dbh range and occasional snags.

This proposed development activity is found within 120 m of several candidate significant natural features, including one woodland and wildlife habitat (S-ranked bat habitat and animal movement corridors), and will be examined in more detail during the evaluation of significance phase of this Project.

P092

At the time of 2010 field investigations, P092 was located in a tilled field, with soybean fields in the vicinity as well. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. Three fencerows (P015-H1, P015-H2, P092-H1) are located within 120 m of the proposed turbine, access road, and cabling. One woodland is also located within 120 m of the access road and proposed turbine (P092-W1). The fencerow P015-H1 is located north of the proposed turbine location, and will be crossed by the access road and cabling for P092. It consists of silver maple, eastern cottonwood, and American prickly-ash, and runs along an abandoned railway line. P015-H2 is located northwest of the proposed turbine location, and will be crossed on the eastern end by the cabling and access road for P092. It consists of white elm, bur oak, and eastern cottonwood, and contains snags. P092-H1 is located southeast of the proposed access road for this proposed turbine, and consists of eastern cottonwood, red oak, and white elm. Candidate significant woodland and wildlife habitat P092-W1 is located approximately 110 m from the proposed turbine

location, and approximately 80 m from the next closest Project infrastructure, the access road. This woodland is described in more detail below:

> P092-W1 - Fresh-Moist Bur Oak Deciduous Forest Type (FODM9-3)
> This forest community is dominated by bur oak in the canopy, and by white elm, silver maple, and bur oak in the sub-canopy. The understory is dominated by American prickly-ash, with equal proportions of white elm and American basswood saplings. The ground cover vegetation is dominated by garlic mustard, Virginia creeper, and poison ivy. This is a mid-aged forest with many trees in the 25-50 cm dbh range and occasional snags.

This proposed development activity is found within 120 m of several candidate significant natural features, including a woodland and wildlife habitat (S-ranked bat habitat and animal movement corridors),and will be examined in more detail during the evaluation of significance phase of this Project.

P093

P093 is located in, and surrounded by soybean fields. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. No drains, fencerows, woodlands, or other natural features are located within 120 m of the proposed turbine, its access road, or cabling.

As a result of no candidate significant natural features within 120 m of this proposed development activity, no evaluation of significance is specifically required for natural features around this proposed turbine.

P094

At the time of 2010 field investigations, P094 was located in a corn field, with soybean and small pasture fields in the vicinity as well. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P094-D1) and three fencerows (P094-H1, P094-H2, and P094-H3) are located within 120 m of this proposed turbine and its access road and cabling. The drain P094-D1 is a ditch containing cattails, with sides of grasses and forbs such as timothy (*Phleum pratense*) and giant ragweed. No water was noted within this ditch at the time of the site investigation. P094-H1 is located to the southwest of the proposed turbine and contains

bur oak, gray dogwood, prickly ash, teasel and reed canary grass. This fencerow also contains snags. P094-H2 is located north of the proposed turbine location, and contains planted white cedars. The fencerow P094-H3 is located along the ditch, and contains immature white elm with hawthorns. The vegetation corridor associated with the railway (RB-F2) is also found within 120 m of the infrastructure for this proposed turbine location. Proposed cabling runs north of the proposed turbine location, and is proposed to cross this candidate significant wildlife habitat (animal movement corridors and rare vegetation community) to connect with the distribution lines. Other development activities associated with this proposed turbine location will be conducted at considerable distances (> 120 m) from this natural feature. The attributes and composition of this candidate significant feature are described in more detail below:

> RB-F – White Birch/Poplar Deciduous Savannah Type (SVDM3-5)
> This portion of the rail bed consists primarily of sparse trembling aspen, white elm, and hawthorns <10 m in height, with a thick understory of red raspberry, viper's bugloss, common reed, and wild carrot. Groundcover is dominated by red fescue, field horsetail, riverbank grape, and alfalfa.

This proposed development activity is found within 120 m of a woodland and candidate significant wildlife habitat (rare vegetation community – savannah, S-ranked bat habitat and animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P095

At the time of 2010 field investigations, P095 was located in a wheat field, with soybean fields in the vicinity as well. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P071-D4) and one fencerow (P095-H2) are located within 120 m of this proposed turbine. No woodlands or other natural vegetation communities are present within 120 m of this proposed turbine location. The drain P071-D4 is a roadside ditch containing reed canary grass and cattails, and did not contain any water at the time of site investigation. P095-H2 is located parallel to Cooper road and consists of planted coniferous trees.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P097

At the time of 2010 field investigations, P097was located in a tilled field, with wheat fields in the vicinity as well. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P097-D1) and two fencerows (P097-H1, P111-H1) are located within 120 m of this proposed turbine. No woodlands or other natural vegetation communities are present within 120 m of this proposed turbine location. P097-D1 is a small, natural creek channel located southwest of the proposed turbine location. The channel contains reed canary grass with some willow shrubs and silver maple saplings. The fencerow P097-H1 is located east of the proposed turbine location, access road, and cabling and consists of planted white cedar. The fencerow P111-H1 is characterized by planted coniferous trees.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P098

At the time of 2010 field investigations, P098 was located in, and surrounded by, soybean fields. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P098-D1) is located within 120 m of this proposed turbine and its associated infrastructure. No hedgerows, woodlands or other natural vegetation communities are present within 120 m of this proposed turbine location. P098-D1 is a small, natural creek channel located west of the proposed turbine location., and it contains reed canary grass.

This proposed development activity is found within 120 m of a candidate significant wildlife habitat (animal movement corridor) and will be examined in more detail during the evaluation of significance phase of this Project.

P099

At the time of 2010 field investigations, P099 was located in a tilled field, with corn and wheat fields in the vicinity as well. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. Two fencerows (P099-H1, P119-H1) are located within 120 m of this proposed turbine, access road, and cabling. No drains, woodlands or other natural vegetation communities are present within 120 m of this proposed turbine location or associated infrastructure. P099-H1 is southwest of the proposed turbine location, with the proposed access road and cabling running adjacent to it on the west side. This fencerow is characterized by bur oak and white elm, and contains snags. The fencerow P119-H1 also consists of bur oak and white elm, and contains snags.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P100

At the time of 2010 field investigations, P100 was located in a corn field, with soybean fields in the vicinity as well. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P100-D1) and one fencerow (P100-H1) are located within 120 m of this proposed turbine. No woodlands or other natural vegetation communities are present within 120 m of this proposed turbine location. P100-D1 is a ditch located west and immediately adjacent to the proposed location of the access road. The channel (which contained water at the time of site investigation) contains cattails, with sparse white elms and mixed forbs along the upper edges. P100-H1 is located along a portion of the above ditch, and is sparsely treed with white elm, red cedar, and hawthorns. This fencerow also contains snags

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P101

At the time of 2010 field investigations, P101 was located in, and surrounded by, soybean fields. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P101-D1) and one fencerow (P012-H1) are located within 120 m of the proposed access road, and cabling associated with this turbine. No woodlands or other natural vegetation features are present within 120 m of this proposed turbine location. P101-D1 is a natural creek channel which runs through soybean fields, and consists of reed canary grass within the channel and mixed grasses and forbs along the upper edges. This channel is within 69 m of the proposed access road and cabling at this location. The fencerow P012-H1 is sparsely treed, containing red oak (*Quercus rubra*), white spruce (*Picea glauca*), and common hackberry (*Celtis occidentalis*). This fencerow will be crossed by the proposed access road for P101.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P102

At the time of 2010 field investigations, P102was located in a soybean field, with corn and hayfields in the vicinity as well. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One fencerow (P102-H3) is located within 120 m of the proposed turbine, access road, and cabling. One woodland (P102-W2), located more than 120 m north of the proposed turbine, will be crossed by the proposed access road and cabling associated with this proposed turbine location. This candidate significant woodland and wildlife habitat is described in detail below. The fencerow P102-H3 is located north of the proposed turbine and contains bur oak, silver maple, and white elm with some snags. This fencerow is located immediately adjacent to the proposed access road and cabling.

> P102-W2 - Fresh-Moist Oak-Maple-Hickory Forest Ecosite (FODM9)
> This forest community consists of a canopy dominated by bur oak, silver maple, and red oak. White elm, bur oak, and shagbark hickory are dominant in the sub-canopy. This mid-aged forest also contains many trees within the 10-24cm dbh

range with some snags up to 50 cm dbh. At the time of site investigation, we could not gain landowner permission to access this natural feature; therefore, an alternative (i.e. roadside) site investigation was conducted.

This proposed development activity is found within 120 m of several candidate significant natural features, including a woodland and wildlife habitat (animal movement corridor and S-ranked Bat habitat), and will be examined in more detail during the evaluation of significance phase of this Project.

P104

At the time of 2010 field investigations, P104 was located in a corn field, with tilled fields in the vicinity as well. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P104-D1) and two fencerows (P104-H1 and P104-H2) are located within 120 m of this proposed turbine and its access road and cabling. No woodlands or other natural vegetation communities are present within 120 m of this proposed turbine location. The drain P104-D1 is a naturalized ditch located south of the proposed turbine location, and will be crossed by the access road. It is characterized by reed canary grass and smooth brome. The fencerow P104-H1 is located immediately east of the proposed turbine location and access road. It consists of Norway spruce and white cedar. The fencerow P104-H2 is located on the south side of New Scotland Line, within 120 m of the proposed access road. It consists of Norway spruce, with some black walnut and American basswood.

The access road and cabling for proposed turbine no. P104 are located within 2 km of the Rondeau Bay Important Bird Area (IBA), as identified through the records review. The wildlife habitat features within the IBA are known to be significant for waterfowl concentrations, including staging areas for several waterfowl species. The majority of the Project area consists of agricultural land, which has the potential to be flooded in some years. As such, agricultural fields along the southeast portion of the Project Area, within the IBA itself and within 2 km of the IBA boundary, were considered candidate SWH for stopover and staging waterfowl. The agricultural fields may be wildlife habitat as staging for waterfowl; however the use of this area by waterfowl will be assessed in the evaluation of significance phase to confirm the significance of this area.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (waterfowl stopover and staging area and animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P106

At the time of 2010 field investigations, P106 was located in a soybean field, with corn fields in the vicinity as well. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P106-D1) and two fencerows (P106-H1, P106-H2) are located within 120 m of the proposed turbine and its access road and cabling. The drain P106-D1 is a ditch located northwest of the proposed turbine location, within 120 m of the access road and cabling coming. The dry ditch consists of timothy, red clover (*Trifulium pratense*), and orchard grass. The fencerow P106-H1 is located west of the proposed turbine location. It consists of white cedar and staghorn sumac, and contains a large ash snag with 60 m of the proposed turbine location. P106-H2 is located south of the proposed access road, and consists of white elm and white ash with some snags.

The access road and cabling for proposed turbine no. P106 are located within 2 km of the Rondeau Bay Important Bird Area (IBA), as identified through the records review. The wildlife habitat features within the IBA are known to be significant for waterfowl concentrations, including staging areas for several waterfowl species. The majority of the Project area consists of agricultural land, which has the potential to be flooded in some years. As such, agricultural fields along the southeast portion of the Project Area, within the IBA itself and within 2 km of the IBA boundary, were considered candidate SWH for stopover and staging waterfowl. The agricultural fields may be wildlife habitat as staging for waterfowl; however the use of this area by waterfowl will be assessed in the evaluation of significance phase to confirm the significance of this area.

This proposed development activity is found within 120 m of several candidate significant natural features, including a woodland and wildlife habitat (animal movement corridors and waterfowl stopover and staging area), and will be examined in more detail during the evaluation of significance phase of this Project.

P107

At the time of 2010 field investigations, P107 was located in a tobacco field, with corn and soybean fields in the vicinity as well. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. Two fencerows (P107-H1 and P107-H2) are located within 120 m of this proposed turbine and its access road and cabling. No drains, woodlands or other natural vegetation communities are present within 120 m of this proposed turbine location. The fencerow P107-H1 is located west of the proposed turbine location and it consists of white cedar, Norway spruce, and black walnut. The fencerow P107-H2 is located northwest of the proposed turbine location and it solely consists of white cedar.

The access road and cabling for proposed turbine no. P107 are located within 2 km of the Rondeau Bay Important Bird Area (IBA), as identified through the records review. The wildlife habitat features within the IBA are known to be significant for waterfowl concentrations, including staging areas for several waterfowl species. The majority of the Project area consists of agricultural land, which has the potential to be flooded in some years. As such, agricultural fields along the southeast portion of the Project Area, within the IBA itself and within 2 km of the IBA boundary, were considered candidate SWH for stopover and staging waterfowl. The agricultural fields may be wildlife habitat as staging for waterfowl; however the use of this area by waterfowl will be assessed in the evaluation of significance phase to confirm the significance of this area.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridors and waterfowl stopover and staging area) and will be examined in more detail during the evaluation of significance phase of this Project.

P108

At the time of 2010 field investigations, P108 was located in a soybean field, with wheat fields in the vicinity as well. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P035-D1), one fencerow (P035-H1) and one woodland (P108-W1) with a wetland inclusion (P108-WE1) are located within 120 m of the proposed turbine and its access road. The drain P035-

D1 is a ditch located south of the proposed turbine location, which will be crossed by the access road and cabling traveling to P108. The channel contains cattails, while the edges are characterized by smooth brome as well as sparse young white elm and willow shrubs. This ditch was moist at the time of site investigation. P035-H1 is characterised by silver maple, white ash, American elm, shagbark hickory, bur oak, American basswood, and hawthorn sp. It also includes many snags.The candidate significant woodland and wildlife habitat P108-W1 (with wetland inclusion P108-WE1) is located within the Project Area, and is described in more detail below. Based on acoustic studies nearby, and the presence of snags, the woodland/wetland habitat is also considered candidate significant bat maternity roost.

> P108-W1 - Fresh-Moist White Elm Lowland Deciduous Forest Type (FOD7-1) & Swamp Maple Mineral Deciduous Swamp Type (SWDM3-3) Inclusion (P108-WE1)
> This forest community is dominated by white elm and silver maple in the canopy and subcanopy, with many green ash snags. The understory and groundcover is densely vegetated with regenerating white elm and green ash saplings. The high relative abundance of mature silver maple in this mid-aged forest suggests that it is flooded seasonally, however, the high density and composition of understory and groundcover species (i.e. Virginia creeper, wild geranium, fringed loosestrife, nettle species, may apple) suggests much drier conditions in some areas. It is presumed that this area may have been wetter historically, but due to the agricultural tile drainage in the surrounding area, it is now a moist forest that contains an inclusion of confirmed wetland habitat. This woodland also contains vernal pools which have been considered candidate amphibian breeding habitat. Soil classification surveys conducted at this site determined a moisture regime of 6 for this woodland habitat. The wetland habitat within this woodland occurs within 120 m of the Project location.

This proposed development activity is found within 120 m of several candidate significant natural features, including a woodland, a wetland, and wildlife habitat (amphibian breeding habitat, area sensitive breeding bird habitat, bat maternity roost, S-ranked bat habitat and animal movement corridors), and will be examined in more detail during the evaluation of significance phase of this Project.

P109

At the time of 2010 field investigations, P109 was located in a soybean field, with corn fields in the vicinity as well. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P109-D1), one

fencerow (P042-H1) and one woodland (P042-W1) are located within 120 m of the proposed turbine and its access road and cabling. The drain P109-D1 is a small natural creek channel located west and southwest of the proposed turbine location, and will be crossed by both the cabling connecting from P042 (west branch) as well as by the access road to P109. It is characterized by mixed forbs and sparse shrubs, and had water present at the time of site investigation. The fencerowP042-H1 is located west of the proposed turbine, and consists of white elm, bur oak, and hawthorn, with occasional snag habitat. P042-W1 is a candidate significant woodland and wildlife habitat feature located approximately 115 m west of the turbine location. The species association, form, and function of this candidate significant natural feature are described in more detail below:

> P042-W1 - Fresh-Moist White Elm Lowland Deciduous Forest Type (FODM7-1)
> This forest community is dominated by white elm, silver maple, and bur oak in the canopy and subcanopy, with many green ash snags. The understory is densely vegetated with regenerating white elm, green ash, and shagbark hickory saplings. The groundcover consists of green ash seedlings, avens sp., and calico aster. The high relative abundance of mature silver maple in this mid-aged forest suggests that it is flooded seasonally, however, the high density and composition of understory and groundcover species (i.e. garlic mustard, violet sp., poison ivy, calico aster) suggests much drier conditions. It is presumed that this area may have been wetter historically, but due to the agricultural tile drainage in the surrounding area, it is now a moist forest

This proposed development activity is found within 120 m of several candidate significant natural features, including a woodland and wildlife habitat (animal movement corridors, area sensitive breeding bird habitat, and S-ranked bat habitat), and will be examined in more detail during the evaluation of significance phase of this Project.

P111

At the time of 2010 field investigations, P111 was located in a wheat field, with corn fields in the vicinity. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P117-D1) and three fencerows (P111-H2, P111-H3, and P111-H4) are located within 120 m of the proposed turbine, access road, and cabling locations. One wetland (P111-WE1) is also located within 120 m of the proposed turbine location. P117-D1 is a natural creek channel which contained no water at the time of site investigation, and is characterized by herbaceous

species. The proposed access road for proposed turbine P111 will cross this ditch. The fencerow P111-H2 is located north of the proposed turbine, and contains silver maple and American beech. Some snags are also present within this fencerow. Fencerow P111-H3 is located to the east of the proposed turbine and is characterized by American elm, red raspberry and tall goldenrod. Fencerow P111-H4 runs parallel to the proposed access road location for P111. This fencerow contains white spruce, white and red cedar. P111-WE1 is a wetland located less than 120 m north of the proposed turbine location. This community is described in more detail below:

> P111-WE1- Silver Maple Mineral Deciduous Swamp (SWDM3-2)
> This wetland community is dominated by silver maple, black ash and cottonwood in the canopy, and bitternut hickory, American elm, cherry sp., and occasional snags in the subcanopy. The understory and groundcover are sparsely vegetated with regenerating American elm and black ash saplings. Other understory and groundcover species include Virginia creeper, garlic mustard and beggar's ticks.

This proposed development activity is found within 120 m of candidate significant natural features, including one wetland and candidate significant wildlife habitat (S-ranked bat habitat, and animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P113

At the time of 2010 field investigations, P113 was located in a wheat field, with winter wheat, soybean, and tilled fields in the vicinity. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. Two fencerows are located within 120 m of the proposed turbine location and its immediate cabling (P113-H1, P113-H2). The deciduous fencerow P113-H1 runs west of the proposed location of P113, adjacent to proposed access road. The fencerow P113-H2 is a sparse fencerow of bur oak, which is located adjacent to the proposed location of the access road to P113 from Pollard Line.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridors), and will be examined in more detail during the evaluation of significance phase of this Project.

P115

At the time of 2010 field investigations, P115 was located in a tilled soybean field, with winter wheat and other tilled fields in the vicinity. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. Two drains run within 120 m of the access road and cabling (P115-D1, P115-D2), and two fencerows are also located within 120 m of the proposed access road and cabling associated with this turbine location (P115-H1, P115-H2). No woodlands or other natural vegetation communities are present. P115-D1 contains cattails, while the sides are characterized by mixed grasses and forbs. No water was observed within this ditch. P115-D2 runs parallel to Middle Line, and is a small ditch characterized by mixed grass and forbs, with some cattails. The fencerow P115-H1 is located along a field edge to the west of the proposed turbine location. It is dominated by bur oak and eastern cottonwood. P115-H2 is found along an extension of the ditch P115-D1 which runs northwest of the proposed turbine location. This fencerow is dominated by white elm, bur oak, and hawthorn species. A northern harrier (*Circus cyaneus*) and a flock of ten American crows (*Corvus brachyrhynchos*) were observed flying in the vicinity of this proposed turbine.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P116

At the time of 2010 field investigations, P116 was located in a soybean field, with winter wheat and tilled fields in the vicinity. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. Three drains (P116-D1, P116-D2, and P116-D3) run within the 120 m proposed turbine location and it's associated cabling. No fencerows, woodlands or other natural vegetation communities are present within 120 m of the proposed turbine location. P116-D1 is a wide ditch which runs along the east side of Davidson Road. The channel, which is approximately 1.5 m wide and contains standing water, is characterized by cattails and common reed in shallower sections, while the sides are characterized by mixed grasses and forbs.

P116-D2 runs between two fields to the east of Davidson Road where it joins P116-D1. This is also a steep ditch, with a channel approximately 1 m wide filled with cattails and common reed. The upper edges of the ditch are characterized by scattered eastern red cedar, staghorn sumac, and young bur oak and white elm. P116-D3 runs between King & Whittle Road and Davison Road. It is characterized by common reed grass, and it contained some water at the time of site investigation.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P118

At the time of 2010 field investigations, P118 was located in a corn field, with soybean fields in the vicinity as well. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One fencerow (P118-H1), one drain (P106-D2), and one woodland (P118-W1) are located within 120 m of the proposed turbine and its access road and cabling. The fencerow (P118-H1) consists of white cedar and is located immediately south of the proposed turbine location. P106-D2 is a natural creek channel which crosses the road. It is characterized by herbaceous species and deciduous shrubs, and did not contain water at the time of site investigation. P118-W1 is a candidate significant woodland and wildlife habitat located 58 m east and northeast of the proposed construction access road associated with this proposed turbine location. Other infrastructure components, including turnaround area and proposed turbine are also present within 120 m of this natural feature. This candidate natural feature is described in further detail below:

> P118-W1 - Fresh-Moist White Elm Lowland Deciduous Forest Type (FODM7-1)
> This forest community is dominated by American basswood, white elm and black walnut in the canopy. The sub-canopy is dominated by white elm, American basswood and green ash, and the understory is dominated by black walnut and white elm saplings, with some climbing riverbank grape. The ground cover is composed predominately of garlic mustard, riverbank grape, and avens sp. This mid-aged forest, located alongside a narrow drainage feature, contains numerous trees within the 25-50 cm dbh range and occasional snags. This woodland also includes a constructed agricultural reservoir.

Based on a review of previous studies at this Project, several acoustic bat monitoring studies within 6 km of Rondeau Bay and the immediately adjacent shorelines of Lake Erie have shown consistently higher bat activity than those found further inland or in close proximity to the shoreline in locations away from Rondeau Bay. Therefore, all woodlands, of at least 0.5 ha in size, within 6 km of Rondeau Bay (including P118-W1) have been considered candidate significant habitat for bat maternity colonies.

The access road and cabling for proposed turbine no. P118 are located within 2 km of the Rondeau Bay Important Bird Area (IBA), as identified through the records review. The wildlife habitat features within the IBA are known to be significant for waterfowl concentrations, including staging areas for several waterfowl species. The majority of the Project area consists of agricultural land, which has the potential to be flooded in some years. As such, agricultural fields along the southeast portion of the Project Area, within the IBA itself and within 2 km of the IBA boundary, were considered candidate SWH for stopover and staging waterfowl. The agricultural fields may be wildlife habitat as staging for waterfowl; however the use of this area by waterfowl will be assessed in the evaluation of significance phase to confirm the significance of this area.

This proposed development activity is found within 120 m of several candidate significant natural features, including a woodland and wildlife habitat (waterfowl stopover and staging area, bat maternity roost, S-ranked bat habitat, and animal movement corridors), and will be examined in more detail during the evaluation of significance phase of this Project.

P120

At the time of 2010 field investigations, P120 was located in a soybean field, with wheat fields in the vicinity as well. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P108-D1) and one fencerow (P120-H1) are located within the 120 m area associated with the proposed access road and cabling. One candidate significant wildlife habitat (P108-W1) is also within 120 m of the proposed turbine and is discussed in more detail below. This natural feature is approximately 76 m from the proposed turbine location. The drain P108-D1 is a ditch located north of the proposed turbine location. The cover consists of mixed

forbs, gray dogwood, and sparse white elm. No water was present at the time of site investigation. The fencerow P120-H1 is located east of the proposed turbine location, and will come within 17 m of the access road and cabling for P120. It is sparsely treed, consisting of bur oak, white elm, and silver maple, and also contains snags. The candidate significant woodland and wildlife habitat P108-W1 is located within the Project Area associated with this turbine, and is described in more detail below. Based on acoustic studies nearby, and the presence of snags, the woodland is also considered a candidate significant bat maternity roost.

> P108-W1 - Fresh-Moist White Elm Lowland Deciduous Forest Type (FOD7-1) & Swamp Maple Mineral Deciduous Swamp Type (SWDM3-3) Inclusion (P108-WE1)
> This forest community is dominated by white elm and silver maple in the canopy and subcanopy, with many green ash snags. The understory and groundcover is densely vegetated with regenerating white elm and green ash saplings. The high relative abundance of mature silver maple in this mid-aged forest suggests that it is flooded seasonally, however, the high density and composition of understory and groundcover species (i.e. Virginia creeper, wild geranium, fringed loosestrife, nettle species, may apple) suggests much drier conditions in some areas. It is presumed that this area may have been wetter historically, but due to the agricultural tile drainage in the surrounding area, it is now a moist forest that contains an inclusion of confirmed wetland habitat. This woodland also contains vernal pools which have been considered candidate amphibian breeding habitat. Soil classification surveys conducted at this site determined a moisture regime of 6 for this woodland habitat. The wetland habitat within this woodland occurs within 120 m of the Project location, although it is outside of the Project area surrounding this particular turbine and its associated infrastructure.

This proposed development activity is found within 120 m of several candidate significant natural features, including a woodland and wildlife habitat (amphibian breeding habitat, bat maternity roost, S-ranked bat habitat, and animal movement corridors), and will be examined in more detail during the evaluation of significance phase of this Project.

P121

At the time of 2010 field investigations, P121 was located in a tilled field, with corn and wheat fields in the vicinity as well. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One fencerow (P121-H1) is located within 120 m of this proposed turbine and its access road and cabling. No

drains, woodlands or other natural vegetation communities are present within 120 m of this proposed turbine location. P121-H1 is fencerow of planted white cedar, located immediately east of the proposed turbine location.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridor) and will be examined in more detail during the evaluation of significance phase of this Project.

P122

At the time of 2010 field investigations, P122 was located in a wheat field, with winter wheat and soybean fields in the vicinity. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. Three drains run within the Project Area here (P080-D1, P122-D1, P081-D1), and one fencerow (P122-H1) is located within 120 m to the southeast of the proposed turbine location. No woodlands or other natural vegetation communities are present within the Project Area here. P080-D1 is a wide ditch which runs along the south side of Gray Line. The channel, which is approximately 1.3 m wide, contains cattails and common reed, while the sides are characterized by grasses, American prickly-ash, teasel, and scouring-rush. P122-D1 runs between two fields of wheat, adjoining to a short segment of ditch along the south side of Rosedale Road. It contains reed-canary grass and common reed within the channel, and a mixture of grasses and forbs along the upper edges. At the time of site investigation, this ditch was being further excavated by a landowner. P081-D1 is a ditch located west of the proposed turbine. It consists of reed canary grass and common reed within the channel, and mixed grasses and forbs along the edges. P122-H1 is a deciduous fencerow dominated by bur oak, white elm, and eastern cottonwood, running south of this proposed turbine location. An American kestrel (*Falco sparverius*) was observed flying just north of Rosedale Road within the Project Area. According to the 2009 Ecoregion Criteria Schedules Addendum to the Significant Wildlife Habitat Technical Guide (OMNR 2009), woodland raptor nesting habitat includes all natural or plantation coniferous stands that are greater than 10 ha in size. Raptor wintering areas are considered areas that are greater than 20ha in size, with a combination of forest and upland habitats. Woodland raptor nesting habitat or raptor wintering habitat do not exist in the vicinity of where this kestrel individual was observed within the Project area.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P124

At the time of 2010 field investigations, P124 was located in, and surrounded by, soybean fields. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. Two drains run within the Project Area here (P124-D1 and P124-D2). No fencerows, woodlands or other natural vegetation communities are present within 120 m of the proposed turbine location. P124-D1 is a roadside ditch which runs along Valetta Road and Pollard Line. It is characterized by asters, giant ragweed and teasel, with no water present. P124-D2 is a ditch located north of proposed turbine P124, parallel to its access road. It consists of hickory sp., red cedar and mixed grasses.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P125

At the time of 2010 field investigations, P125 was located in a soybean field, with tilled and winter wheat fields in the vicinity. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P126-D2) and one fencerow (P125-H1) are located within 120 m of the proposed turbine location. The vegetated corridor associated with the railway is also within 120 m of the proposed turbine location (RB-F3). This habitat (RB-F3) is a candidate significant wildlife habitat (rare vegetation community) that is located 18 m south of the closest point of this proposed turbine (measured from blade tip). This candidate significant wildlife habitat is described in more detail below. P126-D2 is a steep roadside ditch which runs along the south side of Gleeson Line. The channel contains cattails, common reed, and reed canary grass, with no water present. P125-H1 is a sparsely treed fencerow located adjacent to the railbed, dominated by white elm, eastern cottonwood, and gray dogwood.

RB-F3 characterizes the vegetation along the railbed, which has been classified as deciduous savannah, and is described in further detail below:

> RB-F – White Birch/Poplar Deciduous Savannah Type (SVDM3-5)
> This portion of the railbed consists primarily of sparse trembling aspen, white elm, and hawthorns <10 m in height, with a thick understory of red raspberry, viper's bugloss, common reed, and wild carrot. Groundcover is dominated by red fescue, field horsetail, riverbank grape, and alfalfa.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridors, rare vegetation community {savannah}, and S-ranked bat habitat) and will be examined in more detail during the evaluation of significance phase of this Project.

P126

At the time of 2010 field investigations, P126 was located in a soybean field, with corn fields in the vicinity. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P126-D2,) is located within 120 m of the proposed turbine location. P126-D2 is a steep roadside ditch which runs along the south side of Gleeson Line. The channel contains cattails, common reed, and reed canary grass, with no water present.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P132

At the time of 2010 field investigations, P132 was located in a wheat field, with soybean and tilled fields in the vicinity. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. Two drains (P076-D3 and P116-D2) are located within 120 m of the access road and cabling associated with this proposed turbine. No fencerows, woodlands, or other natural features are located within 120 m of this proposed turbine location. P076-D3 is a large ditch which runs along the south side of Middle Line, north of the proposed turbine and its access road. The

channel is approximately 1.3 m wide, with standing water in the bottom, and edges consisting of mixed grasses and forbs. P116-D2 runs between two fields to the east of Davidson Road where it joins P116-D1. This is a steep ditch, with a channel approximately 1 m wide filled with cattails and common reed. The upper edges of the ditch are characterized by scattered eastern red cedar, staghorn sumac, and young bur oak and white elm.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P133

At the time of 2010 field investigations, P133 was located in, and surrounded by, soybean fields. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One woodland (P022-W1) and one drain (P027-D1) are located within 120 m of the proposed access road and cabling associated with this turbine. P027-D1 is characterized by herbaceous species. No fencerows or other natural vegetation communities are present within 120 m of this proposed turbine location. The candidate significant woodland and wildlife habitat (P022-W1, s-ranked bat species habitat) is located in the proposed cabling for proposed turbine P133. This candidate significant natural feature is described in more detail below.

> P022-W1 - Fresh-Moist Shagbark Hickory Deciduous Forest (FODM9-4)
> This woodland consists of two of three woodland units that are located in close proximity to one another. The western two units discussed here are connected by a short, wide corridor which appears to be a result of the location of clearing, rather than regeneration, due to its similarity in composition and age class to the east and west woodland units. The community is dominated by shagbark hickory, bur oak, and silver maple in the canopy, with shagbark hickory, white elm, and American basswood in the sub-canopy, with occasional snags up to 50 cm dbh. The understory is densely vegetated with white elm and shagbark hickory saplings and chokecherry, and the groundcover is relatively sparse with avens sp., wild strawberry and poison ivy. Due to the presence of silver maple, it is presumed that this area may have been wetter historically, but due to the agricultural tile drainage in the surrounding area, it is now a moist forest.

This proposed development activity is found within 120 m of several candidate significant natural features, including a woodland and wildlife habitat (animal movement corridor, area sensitive breeding bird habitat, and S-ranked bat habitat), and will be examined in more detail during the evaluation of significance phase of this Project.

P135

At the time of 2010 field investigations, P135 was located in, and surrounded by, tilled fields. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P031-D1) and three fencerows (P031-H1, P135-H1, and P155-H1) are located within the Project Area associated with the proposed turbine and its access road and cabling. The vegetation corridor associated with the abandoned railway (RB-A1) is also located within 120 m of the location of the infrastructure associated with this proposed turbine location. This candidate natural feature is described in more detail below. No woodlands are located within 120 m of the proposed turbine location. The drain P031-D1 is a ditch located north and west of the proposed turbine location, which will be crossed by the proposed turbine construction area. The channel (which did not contain water at the time of site investigation) consists of gray dogwood, while the edges are characterized by mixed grasses and goldenrods. A portion of this ditch is provided vegetative cover by the fencerow P135-H1. It is sparsely treed with white elm, and contains snags. The fencerow P031-H1 consists of deciduous trees, P155-H1 contains white cedar and trembling aspen, with groundcover provided by horsetail and common mullein.

> RB-A – Fresh-Moist Poplar Deciduous Woodland Type (WODM5-1)
> This portion of the rail bed consists primarily of trembling aspen with white elm, silver maple, and red oak, with along with Manitoba maple in the sub-canopy. The understory is dominated by red raspberry and Canada goldenrod, with staghorn sumac and common reed. Groundcover consists of red fescue, field horsetail, riverbank grape, and wild carrot.

This proposed development activity is found within 120 m of several candidate significant natural features, including woodland and wildlife habitat (animal movement corridor, and S-ranked bat habitat), and will be examined in more detail during the evaluation of significance phase of this Project.

P138

At the time of 2010 field investigations, P138 was located in a soybean field, with corn fields in the vicinity as well. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. Two fencerows (P138-H1, P138-H2) are located within 120 m of the proposed turbine, access road, and cabling. No drains, woodlands or other natural vegetation communities are located within 120 m of the proposed turbine location. The fencerow P138-H1 is located southwest of the proposed turbine, and consists of sparse white elm and hawthorns, and contains snags. P138-H2 is located south of the proposed turbine, and consists of white cedar with gray dogwood.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P139

At the time of 2010 field investigations, P139 was located in, and surrounded by, corn fields. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P139-D1) and one fencerow (P139-H1) are located within 120 m of the proposed turbine and its access road and cabling. No woodlands are located within 120 m of the Project at his location. The drain P139-D1 is a ditch located west of the proposed access road and cabling, which had water present at the time of site investigation. Cover is provided by occasional willows, staghorn sumac, and eastern cottonwood saplings. The fencerow P139-H1 is located north of the proposed turbine, and consists of planted white cedar.

The access road and cabling for proposed turbine no. P139 are located within 2 km of the Rondeau Bay Important Bird Area (IBA), as identified through the records review. The wildlife habitat features within the IBA are known to be significant for waterfowl concentrations, including staging areas for several waterfowl species. The majority of the Project area consists of agricultural land, which has the potential to be flooded in some years. As such, agricultural fields along the southeast portion of the Project Area,

within the IBA itself and within 2 km of the IBA boundary, were considered candidate SWH for stopover and staging waterfowl. The agricultural fields may be wildlife habitat as staging for waterfowl; however the use of this area by waterfowl will be assessed in the evaluation of significance phase to confirm the significance of this area.

This proposed development activity is found in and within 120 m of candidate significant wildlife habitat (waterfowl stopover and staging area and animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P140

At the time of 2010 field investigations, P140 was located in, and surrounded by, tilled fields. The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P140-D2) and two fencerows (P140-H1, P140-H3) are located within 120 m of the access road and cabling associated with this proposed turbine. No woodlands or wildlife habitat exist within 120 m of the proposed turbine or its associated infrastructure. P140-D2 is characterized by deciduous trees and herbaceous species, and contained water at the time of site investigation. The fencerow P140-H1 is located adjacent to the proposed turbine location, and will be crossed by the access road and cabling. It consists of Norway spruce. P140-H3 is located to the northwest of proposed turbine P140 and consists of white cedar.

The access road and cabling for proposed turbine no. P140 are located within 2 km of the Rondeau Bay Important Bird Area (IBA), as identified through the records review. The wildlife habitat features within the IBA are known to be significant for waterfowl concentrations, including staging areas for several waterfowl species. The majority of the Project area consists of agricultural land, which has the potential to be flooded in some years. As such, agricultural fields along the southeast portion of the Project Area, within the IBA itself and within 2 km of the IBA boundary, were considered candidate SWH for stopover and staging waterfowl. The agricultural fields may be wildlife habitat as staging for waterfowl; however the use of this area by waterfowl will be assessed in the evaluation of significance phase to confirm the significance of this area.

This development activity associated with P140 is proposed within 120 m of candidate significant wildlife habitat (waterfowl stopover and staging area and animal movement corridors), and will be examined in more detail during the evaluation of significance phase of this Project.

P145

The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P145-D1) and two fencerows (P010-H1 and P145-H1) are located within 120 m of the access road and cabling associated with proposed turbine P145. The drain P145-D1 is located south of the proposed turbine location; it will abut both the cabling and the access road, and will be crossed by the cabling associated with this turbine. The vegetated corridor along this drain is characterized by Manitoba maple, black walnut, and American elm. The fencerow P010-H1 is located approximately 1 km south of the proposed turbine, and adjacent to its cabling route; it consists of white cedar trees. The fencerow P145-H1 is located just to the south of the proposed access road for this turbine and it consists of white spruce.

This development activity associated with P145 is proposed within 120 m of candidate significant wildlife habitat (animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P148

The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P064-D3), one fencerow (P064-H1) and one woodland (P064-W1) are located within 120 m of proposed turbine P148 and its access road. The drain P064-D3 is a small creek corridor located west of the proposed turbine location. The channel, which contains water, is <1 m wide, and contains cattails and purple loosestrife (*Lythrum salicaria*). The deciduous fencerow P064-H1 is found north and west of the proposed turbine location, and contains snags. A small woodland (P064-W1) is located to the west of proposed turbine P064, and is described in more detail below.

P064-W1 – Dry-Fresh Exotic Deciduous Forest Type (FODM4-12)
This mid-age forest community is dominated by silver poplar (*Populus alba*) in the canopy and sub-canopy, with young silver poplar and riverbank grape in the understory. Garlic mustard, avens, and Canada goldenrod are found in the ground layer. At the time of site investigation, we could not gain landowner permission to access this natural feature; therefore, an alternative (i.e. roadside) site investigation was conducted.

This development activity is proposed within 120 m of a woodland and candidate significant wildlife habitat (animal movement corridors, and S-ranked bat habitat) and will be examined in more detail during the evaluation of significance phase of this Project.

P149

The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P117-D1) is located within 33 m of proposed turbine P149. P117-D1 runs just north of the location of this proposed turbine. P117-D1 is a natural creek channel which contained no water at the time of site investigation, and is characterized by herbaceous species.

This development activity is proposed within 120 m of candidate significant wildlife habitat (animal movement corridor) and will be examined in more detail during the evaluation of significance phase of this Project.

P150

The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P115-D1) and one fencerow (P113-H1) are located within 120 m of proposed turbineP150and its access road. P115-D1 runs between fields just north of the location of this proposed turbine. The channel contains cattails, while the sides are characterized by mixed grasses and forbs. No water was observed within this ditch. P113-H1 is a sparse fencerow of deciduous trees, which is located adjacent to the proposed location of the access road to P150.

This development activity is proposed within 120 m of candidate significant wildlife habitat (animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P152

The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P102-D1) and one fencerow (P102-H3) are located within 120 m of the proposed turbine, access road, and cabling. One woodland (P102-W2) is also located in the access road and cabling associated with this proposed turbine location. This candidate significant woodland and wildlife habitat is described in detail below. The drain P102-D1 is a ditch that runs north of the proposed turbine location, and will be crossed by the proposed access road and cabling. The channel contains cattails, while the sides contain goldenrods and gray dogwood. No water was present at the time of site investigation. The fencerow P102-H3 is located south of the proposed turbine and contains bur oak, silver maple, and white elm with some snags. This fencerow will be crossed by the proposed access road and cabling going to P102.

> P102-W2 - Fresh-Moist Oak-Maple-Hickory Forest Ecosite (FODM9)
> This forest community consists of a canopy dominated by bur oak, silver maple, and red oak. White elm, bur oak, and shagbark hickory are dominant in the sub-canopy. This mid-aged forest also contains many trees within the 10-24cm dbh range with some snags up to 50 cm dbh. At the time of site investigation, we could not gain landowner permission to access this natural feature; therefore, an alternative (i.e. roadside) site investigation was conducted.

This development activity is proposed in several candidate significant natural features, including a woodland and wildlife habitat (S-ranked bat habitat and animal movement corridors), and will be examined in more detail during the evaluation of significance phase of this Project.

P154

The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P080-D1) and two fencerows (P080-H1 and P080-H3) are located within 120 m of proposed turbine P154, its access road and associated cabling. P080-D1 is a wide ditch which runs along the south side of Gray Line. The channel, which is approximately 1.3 m wide, contains cattails and common reed, while

the sides are characterized by grasses, American prickly ash, teasel, and scouring-rush (*Equisetum hyemale* ssp. *affine*). Fencerow P080-H1 is located immediately to the east of the proposed access road to P154, and it consists of burr oak, prickly ash and staghorn sumac. Fencerow P080-H3 is located north of Gore Road, and contains pin oak, white ash, and basswood, as well as some snags.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P155

The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P024-D1), one fencerow (P155-H1) and one woodland (P024-W2) are located within the Project Area associated with the proposed turbine and its access road and cabling. The drain P024-D1 is located north and east of the proposed turbine P155. The channel contained water at the time of site investigation, and was dominated by goldenrod species. The fencerow P155-H1 contains white cedar and trembling aspen, with groundcover provided by horsetail and common mullein. The candidate significant woodland, P024-W2, is described in further detail below:

> P024-W2 - Fresh-Moist Oak-Maple-Hickory Deciduous Forest Ecosite (FODM9)
> This young forest community is dominated by bur oak, American basswood, and silver maple in the canopy, and bur oak, American basswood, and white elm in the sub-canopy. This forest contains abundant trees up to 24 cm dbh, with occasional snags. At the time of site investigation, we could not gain landowner permission to access this natural feature; therefore, an alternative (i.e. roadside) site investigation was conducted.

This proposed development activity is found within 120 m of several candidate significant natural features, including a woodland and wildlife habitat (S-ranked bat habitat and animal movement corridors), and will be examined in more detail during the evaluation of significance phase of this Project.

P156

The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P156-D2), one fencerow (P031-H2) and two woodlands (P024-W1, P156-W1) are located within the Project Area associated with the proposed turbine and its access road and cabling. The vegetation corridor along the railway is also within 120 m of the cabling for this proposed turbine (RB-A1). The drain P156-D2 is a ditch located north and east of the proposed turbine location which consists of white spruce, red cedar, gray dogwood, and hawthorne sp.. The fencerow P031-H2 consists of green ash, American basswood and shagbark hickory. The candidate significant natural features, P024-W1, P156-W1 and RB-A1, are described in further detail below:

P024-W1 - Fresh-Moist White Elm Lowland Deciduous Forest Type (FODM7-1)
This young forest community is dominated by white elm and shagbark hickory in the canopy and subcanopy, with occasional snags throughout. The relatively dense understory is dominated by white elm saplings and American prickly-ash, and the dense groundcover is dominated by wild strawberry. Snags are present within this forest up to 50 cm dbh.

P156-W1 – Fresh-Moist Carolinian Deciduous Forest Type (FODM-10)
This forest community is dominated by shagbark hickory, green ash, and tulip tree in the canopy. The sub-canopy is dominated by shagbark hickory, silver maple and tulip tree. The understory is dominated again by shagbark hickory, and contains silver maple and red osier dogwood, while the groundcover layer is dominated by riverbank grape, horsetail and moss species. This is a mid-age forest containing very few snags.

RB-A – Fresh-Moist Poplar Deciduous Woodland Type (WODM5-1)
This portion of the rail bed consists primarily of trembling aspen with white elm, silver maple, and red oak, with along with Manitoba maple in the sub-canopy. The understory is dominated by red raspberry and Canada goldenrod, with staghorn sumac and common reed. Groundcover consists of red fescue (*Festuca rubra* ssp. rubra), field horsetail (*Equisetum arvense*), riverbank grape, and wild carrot (*Daucus carota*).

This development activity is proposed within 120 m of several candidate significant natural features, including two woodlands and wildlife habitat (area sensitive breeding bird habitat, S-ranked bat habitat, and animal movement corridors), and will be examined in more detail during the evaluation of significance phase of this Project.

P161

The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P127-D1) and one fencerow (P127-H2) are located within 120 m of proposed turbine P161 and its access road. P127-D1 is a roadside ditch located on the south side of Gleeson Line. This drain had no water present at the time of site investigation and had cover of herbaceous species. Fencerow P127-H2 consists of white cedar. No woodlands or other natural vegetation communities are present within 120 m of the cabling associated with this turbine.

This development activity is proposed within 120 m of candidate significant wildlife habitat (animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P162

The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. Two woodlands (P162-W1, P162-W2) are located within 120 m of proposed access road and cabling associated with this turbine. These candidate significant natural features are described in more detail below. No fencerows, vegetated drains or other natural vegetation communities are present within 120 m of this proposed turbine or its associated infrastructure.

P162-W1 –Dry Fresh Sugar Maple Beech Deciduous Forest Type (FOD5-2)

This forest community is dominated by sugar maple, American beech, white ash and bur oak in the super-canopy. The dense canopy is dominated by sugar maple, bur oak, American beech and black cherry. The sub-canopy is as dense and includes sugar maple, American beech, ironwood and black cherry. The understory consists of American beech, sugar maple, black cherry and bitternut hickory, while the relatively sparse groundcover includes wild leek, running strawberry and trout lily. This is a mature forest containing abundant snags and deadfall, and vernal pools which have been considered candidate amphibian breeding habitat.A rock pile, which could provide overwintering habitat for snakes, is also found within this woodland.

P162-W2 - Dry-Fresh Sugar Maple-White Ash Deciduous Forest Type (FODM5-8)

This forest community is dominated by sugar maple and white ash in the canopy. The sparse sub-canopy also includes sugar maple and white ash, as well silver maple and basswood. The understory consists of Virginia creeper, clearweed, poison ivy and white ash saplings.

This proposed development activity is found within 120 m of two candidate significant woodlands and candidate significant wildlife habitat (amphibian breeding habitat, reptile hibernacula and, area sensitive breeding bird habitat, and S-ranked bat habitat) and will be examined in more detail during the evaluation of significance phase of this Project.

P163

The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P097-D1) and two fencerows (P096-H1, P096-H3) are located within 120 m of proposed turbine P163, its access road and cabling. Drain P097-D1 is a natural creek channel which contained no water at the time of site investigation, and is characterized by herbaceous species and immature trees and shrubs. The fencerow P096-H1 is located north of the proposed turbine location, and consists of Norway spruce, white elm, and eastern cottonwood, along with some snags. Fencerow P096-H3 is located adjacent to the proposed access road for proposed turbine P163 and consists of mature planted Norway spruce. No woodlands or other natural vegetation communities are present within 120 m of the cabling associated with this turbine.

This development activity is proposed within 120 m of candidate significant wildlife habitat (animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P164

The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. Two drains (P100-D1, P060-D1) and two fencerows (P112-H1, P164-H1) are located within 120 m of proposed turbine P164, its access road and cabling. P100-D1 is a ditch located north and immediately adjacent to the proposed location of the access road. The channel (which contained water at the time of site investigation) contains cattails, with sparse white elms and mixed forbs along the upper edges. The drain P060-D1 is a ditch located adjacent to the proposed access road for proposed turbineP164 and it consists of deciduous tree and shrub cover. Fencerow P112-H1, is located adjacent to the cabling for P164, and contains planted Norway spruce and white cedar. Fencerow P164-H1 contains a mixture of bur oak, white elm,

red cedar and staghorn sumac, and also contains occasional snags between 10-24 cm dbh. No woodlands or other natural vegetation communities are present within 120 m of P164 or its associated infrastructure.

This development activity is proposed within 120 m of candidate significant wildlife habitat (animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P166

The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. Three fencerows (P093-H2, P093-H3 and P166-H1) and two woodlands (P166-W1 and P166-W2) are located in and within 120 m of proposed turbine P166, its access road and cabling. Fencerow P093-H2 runs parallel to the access road for P166 and joins Kent Bridge Road. It consists of deciduous trees and shrubs. P093-H3 is located adjacent to Kent Bridge Road and consists of planted conifers. Fencerow P166-H1 connects P166-W1 and P166-W2. It consists of black walnut, white elm, green ash and exotic/invasive herbaceous species. The candidate significant woodlands are described in more detail below.

P166-W1 – Dry-Fresh Sugar Maple Deciduous Forest (FOD5)
This mid-age forest is dominated by sugar maple, silver maple and American beech in the thick canopy. The sub-canopy also includes sugar maple, silver maple and beech, while the understory is dominated by sparse sugar maple, riverbank grape and horsetail. The sparse groundcover consists of moss species. This woodland contains very few small snags (<10 cm dbh).

P166-W2 – Fresh-Moist White Elm Lowland Deciduous Forest (FODM7-1)
This mid-age community is dominated by white elm and green ash in the canopy, with black cherry in the sub-canopy. The understory is dominated by prickly ash, blackberry sp. and nannyberry. The groundcover is thick, and is dominated by goldenrod sp., avens and Virginia creeper. Snags between 10 and 24 cm dbh occur in this woodland.

This development activity is proposed within 120 m of two candidate significant woodlands and candidate significant wildlife habitat (animal movement corridors, and S-ranked bat habitat) and will be examined in more detail during the evaluation of significance phase of this Project.

P167

The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P009-D1) and one fencerow (P003-H2) are located within 120 m of proposed turbine P167, its access road and cabling. The drain P009-D1 is a ditch located along the fencerow to the north. The channel contains cattails (*Typha* sp.), and was noted to be moist without noticeable water. The edges contain goldenrods and asters, and portions of the drain are provided cover by fencerow P003-H2 to the north. P003-H2 is located east of the proposed turbine, and consists of white elm and eastern cottonwood, with some snags. No woodlands or other natural vegetation communities are present within 120 m of P167 or its associated infrastructure.

This proposed development activity is found within 120 m of candidate significant wildlife habitat (animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P168

The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P011-D1) is located within 120 m of the access road to proposed turbine P168. P011-D1 consists of deciduous tree and shrub cover, and contained water at the time of site investigation. The rail bed (RB-B1) is within 120 m of this stretch of cabling, including an inclusion community of Dry Mixed Graminoid Tallgrass Prairie Type (MEGM1-4) along the south side of the rail bed, east of Kent Bridge Road. This particular inclusion is dominated by big bluestem (*Andropogon gerardii*) and switchgrass, and provides candidate significant wildlife habitat. The woodland P011-W1 is a regenerating community located within the proposed access road, and cabling for turbine no. P168. These features are described in further detail below:

> P011-W1 – Naturalized Deciduous Hedgerow (FODM11)
> This regenerating community is dominated by young white ash in the sub-canopy, with balsam poplar, staghorn sumac, and hawthorn. The thick understory is dominated by gray dogwood, with late goldenrod (*Solidago gigantea*), red raspberry (*Rubusidaeus ssp. melanolasius*), and crack willow (*Salix fragilis*) saplings. The groundcover is also thick, dominated by riverbank grape (*Vitisriparia*), Virginia creeper (*Parthenocissusinserta*), poverty oat grass (*Danthoniaspicata*), and butter-and-eggs (*Linaria vulgaris*). Only snags of <10cm

dbh (diameter at breast height) occur in this naturalized hedgerow. This community has arisen beside and between the railbed and an adjacent ditch.

RB-B – Fresh-Moist Mixed Savannah Ecosite (SVMM3)
This portion of the rail bed consists of a few trembling aspen and white elm in the canopy, with some eastern red cedar, trembling aspen, hawthorns, and Manitoba maple in the sub-canopy. The thick understory consists of red raspberry, gray dogwood, staghorn sumac, and common reed, while the sparse groundcover consists of field horsetail, red fescue, common mullein, and riverbank grape. Included in this area is an inclusion of Dry Mixed Graminoid Tallgrass Prairie Type (MEGM1-4).

This development activity is proposed within 120 m of two candidate significant woodlands and candidate significant wildlife habitat (two rare vegetation communities {tallgrass prairie and savannah}, S-ranked bat habitat and animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P171

The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P002-D2) and one fencerow (P107-H1) are located within 120 m of proposed turbine P171 and its access road. The drain P002-D2 will be crossed by the proposed cabling associated with turbine P171. It consists of herbaceous and deciduous shrub cover, and contained water at the time of investigation. The fencerow P107-H1 is located west of the proposed turbine location and it consists of white cedar, Norway spruce, and black walnut. No woodlands or other natural vegetation communities are present within 120 m of P171, its access road or associated cabling.

The access road and cabling for proposed turbine no. P171 are located within 2 km of the Rondeau Bay Important Bird Area (IBA), as identified through the records review. The wildlife habitat features within the IBA are known to be significant for waterfowl concentrations, including staging areas for several waterfowl species. The majority of the Project area consists of agricultural land, which has the potential to be flooded in some years. As such, agricultural fields along the southeast portion of the Project Area, within the IBA itself and within 2 km of the IBA boundary, were considered candidate

SWH for stopover and staging waterfowl. The agricultural fields may be wildlife habitat as staging for waterfowl; however the use of this area by waterfowl will be assessed in the evaluation of significance phase to confirm the significance of this area.

This development activity is proposed in and within 120 m of candidate significant wildlife habitat (waterfowl stopover and staging area, and animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P173

The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. One drain (P016-D2), two fencerows (P016-H4, P173-H1) and one woodland (P173-W1) are located within 120 m of proposed turbine P173 and its access road. The drain P016-D2 runs parallel to Burk Line. It did not contain water at the time of investigation and it contains reed canary grass, cattail and common reed grass. The fencerow P016-H4 runs adjacent to the access road to P173 and consists of planted white cedar. P173-H1also runs perpendicular to Burk Line. It consists of goldenrod species, riverbank grape and honeysuckle. The candidate significant woodland, P173-W1, is described in more detail below.

> P173-W1 – Dry-Fresh Sugar Maple Deciduous Forest (FODM5-1)
> This mature community consists of a dense canopy of sugar maple, American beech, white ash and black cherry. Sugar maple and American beech are also present in the sub-canopy. Understory species include sugar maple, American beech and white ash. The thick groundcover consists of poison ivy, Virginia creeper, stinging nettle and enchanter's nightshade. Occasional large snags (25-50 cm dbh) occur within this woodland, and as such, it has been considered candidate habitat for s-ranked bats.

This proposed development activity is found within 120 m of a woodland and candidate significant wildlife habitat (s-ranked bat habitat and animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P174

The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. The proposed access road associated with P174 is

surrounded by agricultural fields. On the south side of Middle Line, the access road crosses P175-D1. This drain is surrounded by corn and wheat with a few sparse trees and shrubs. Cover within the channel is provided by graydogwood, red osier dogwood, fescue sp., phragmites, and reed canary grass.

This development activity is proposed within 120 m of candidate significant wildlife habitat (animal movement corridor) and will be examined in more detail during the evaluation of significance phase of this Project.

P175

The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. Two drains (P175-D1, P176-D2) are located within 120 m of the cabling associated with P175. The drain P175-D1 was surrounded by corn and wheat fields in 2010, and contains a few sparse trees and shrubs. Cover within the channel is provided by graydogwood, red osier dogwood, fescue sp., phragmites, and reed canary grass. P176-D2 is a drain which runs parallel to Middle Line and the cabling associated with P174 and P175. It is also very bare, with a few small red cedar trees along the drain edge.

This development activity is proposed within 120 m of candidate significant wildlife habitat (animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

P176

The agricultural crop types associated with this proposed turbine were unknown during 2011 field investigations. Two drains (P087-D1, P087-D2) are located within 120 m of the cabling associated with P176. P087-D1 is located on the north side of Middle Line. It did not contain water at the time of site investigation, and cover is provided by herbaceous species. P087-D2 is located on the east side of Haskell Line as well as the south side of Gray Line and Middle Line. This ditch contained water at the time of site

investigation, and cover within the channel is provided by emergent aquatic species, with herbaceous species along the edges.

This development activity is proposed within 120 m of candidate significant wildlife habitat (animal movement corridors) and will be examined in more detail during the evaluation of significance phase of this Project.

7.2 Site Investigation Results by Cabling Route

Candidate significant natural features within 120 m of the proposed roadside cabling routes are discussed below by road segment, from west to east within the greater Project Area. Some of the features listed are also within 120 m of proposed turbines and their infrastructure, and are also discussed under the respective proposed turbine number in Section 7.1- Site Investigation Results by Proposed turbine. Detailed characteristics of the features associated with roadside cabling are listed and described in Section 6.0 - Site Investigation Results.

Gore Road: Wheatley Road to King & Whittle Road

Two hedgerows are within 120 m of the proposed cabling at this location (P080-H3 and P080-H4). Fencerow P080-H3 is located north and south of Gore Road, and contains pin oak, white ash, and basswood, as well as some snags. P080-H4 is also located north and south of Gore Road, and it consists of pin oak, bur oak, and white elm. No fencerows, woodlands or other natural vegetation communities are present within 120 m of the cabling at this location.

Proposed cabling along this segment is located within 120 m of candidate significant wildlife habitat (animal movement corridors), and will be discussed in more detail in the evaluation of significance phase of this Project.

Davidson Road: Gray Line to Middle Line

Crops along this portion of the road during 2010 site investigation included soybeans and tilled land. Five drains are within 120 m of the proposed cabling at this location (P079-D1, P115-D1, P116-D1, P116-D2, and P116-D3). P079-D1 is a gently sloping ditch with mowed edges ending in a narrow channel of cattails. P115-D1 contains cattails, while the sides are characterized by mixed grasses and forbs. P116-D1 is a wide ditch which runs along the east side of Davidson Road. The channel, which is approximately 1.5m wide and contains standing water, is characterized by cattails and common reed in shallower sections, while the sides are characterized by mixed grasses

and forbs. P116-D2 runs between two fields to the east of Davidson Road where it joins P116-D1. This is a steep ditch, with a channel approximately 1 m wide filled with cattails and common reed. The upper edges of the ditch are characterized by scattered eastern red cedar, staghorn sumac, and young bur oak and white elm. P116-D3 runs between King & Whittle Road and Davison Road. It is characterized by common reed grass, and it contained some water at the time of site investigation. No fencerows, woodlands or other natural vegetation communities are present within 120 m of the cabling at this location.

Proposed cabling along this segment is located within 120 m of candidate significant wildlife habitat (animal movement corridors), and will be discussed in more detail in the evaluation of significance phase of this Project.

Oak Road: Gray Line to Pollard Line

Crops along this portion of the road during 2010 site investigation included soybeans, wheat, corn, and tilled land. Five drains are located within 120 m of the roadside cabling at this location. P080-D1 is located on the east side of Oak Road. Cover for this ditch is also dominated by herbaceous species, and the channel is approximately 1.3m wide. P076-D2 is a roadside ditch further north on the same side of the road, with herbaceous cover in a channel approximately 1 m wide with no water present. P076-D3 intersects this ditch at its end at Middle Line. It is a large roadside ditch containing standing water with herbaceous cover. P074-D1 continues north of Middle Line on the east side of the road, exhibiting similar characteristics of a wide channel with herbaceous cover. P113-D1 intersects P074-D1 at its end at Pollard Line, where it is located on the south side. It is a steep ditch with herbaceous cover.

Proposed cabling along this segment is located within 120 m of several candidate significant wildlife habitat (animal movement corridors), and will be discussed in more detail in the evaluation of significance phase of this Project.

Middle Line & Valetta Road: Davidson Road to Pollard Line

Six drains (P115-D2, P114-D1, P076-D3, P074-D2, P124-D2, and P124-D1), two hedgerows (P078-H3 and P124-H1) and one woodland (P114-W1) are located within 120 m of this section of proposed cabling. P115-D2 runs parallel to Middle Line, and is a small ditch characterized by mixed grass and forbs, with some cattails. P114-D1 is a natural creek corridor with water present. Vegetative cover is provided by the associated woodland, P114-W1. This candidate significant woodland and wildlife habitat is described in more detail below. P076-D3 intersects this ditch at its end at Middle Line. It is a large roadside ditch containing standing water with herbaceous cover. P074-D2 runs north-south and is perpendicular to Middle Line. It consists of foxtail, grass sp., mixed forbs, and no water was present within this ditch at the time of site investigation. P124-D2 is a ditch located north of proposed turbine P124, parallel to its access road. It consists of hickory sp., red cedar and mixed grasses. P124-D1 is a roadside ditch which runs along the south side of Pollard Line, and continues southward on the east side of Valetta Road. It is characterized by asters, giant ragweed (*Ambrosia trifida*), and teasel, with no water present at the time of the site investigation. Hedgerow P078-H3 runs parallel to the access road for P077, and consists of bur oak, dogwood sp., and tall goldenrod. P124-H1 is dominated by bur oak, common apple, and white elm, while P115-H3 is dominated by white ash, bur oak, riverbank grape and deciduous shrubs.

> P114-W1 - Fresh-Moist Elm Deciduous Woodland Type (WODM5-2)
> This treed riverine corridor is a woodland community dominated by white elm in the canopy and subcanopy, and staghorn sumac and hawthorn sp. shrubs in the dense understory. The groundcover is relatively sparse, dominated by Canada goldenrod and riverbank grape. This is a relatively young woodland, with very few trees >24cm dbh and occasional snags.

Proposed cabling along this segment is located within 120 m of a woodland and candidate significant wildlife habitat (animal movement corridors, habitat for S-ranked bat species), and will be discussed in more detail in the evaluation of significance phase of this Project.

Gleeson Line & Merlin Line: Pollard Line to Morris Line

Six drains (P114-D2, P072-D3, P125-D1, P126-D2, P127-D1 and P161-D1) and one hedgerow (P127-H1) are located within 120 m of the cabling in this location. P114-D2 is

a small ditch characterised by mixed grasses, forbs, and cattails. P072-D3 contained water at the time of site investigation in 2011. The vegetated corridor associated with this drain includes Freeman's maple, balsam poplar, and narrow-leaved cattail. P125-D1 is characterised by narrow-leaved cattail, grass sp. and foxtail. Water was present in this ditch at the time of site investigation. P126-D2 is a steep roadside ditch which runs along the south side of Gleeson Line. The channel contains cattails, common reed, and reed canary grass, with no water present. P127-D1 is a roadside ditch located on the south side of Gleeson Line. This drain had no water present at the time of site investigation and had cover of herbaceous species. P161-D1 contains white vervain, grass sp., common reed and mixed forbs. Water was present in this wide channel during site investigations. Hedgerow P127-H1 is comprised of black walnut, bur oak, red oak, and red cedar; it also contains some snags. The vegetated corridor associated with the railway is also within 120 m of the proposed cabling at this location (RB-F3). This candidate significant wildlife habitat is described in more detail below.

> RB-F3 – White Birch/Poplar Deciduous Savanna Type (SVDM3-5)
> This portion of the rail bed consists primarily of sparse trembling aspen, white elm, and hawthorns <10 m in height, with a thick understory of red raspberry, viper's bugloss, common reed, and wild carrot. Groundcover is dominated by red fescue, field horsetail, riverbank grape, and alfalfa.

Cabling along this segment is proposed within 120 m of candidate significant wildlife habitat (savannah, s-ranked bat habitat and animal movement corridors), and will be discussed in more detail in the evaluation of significance phase of this Project.

Morris Line: Pollard Line to Cooper Road

Crops along this portion of the road during 2010 site investigation included soybeans and corn. Six drains are located within 120 m of the roadside cabling. P071-D3, P071-D4, and P095-D1 are all roadside ditches characterized by herbaceous cover which did not contain water at the time of site investigation. P071-D2 is also a roadside ditch characterized by herbaceous species; however, it did contain water. P072-D1 is a ditch located perpendicular to the road, also containing herbaceous cover. P071-D1 is a natural creek channel containing water at the time of site investigation. Vegetative cover along this channel is herbaceous adjacent to Morris Line, with sparse low shrub cover nearer to the rail bed. Two fencerows are located within 120 m of the proposed roadside cabling (P095-H1, P096-H2). P095-H1 runs perpendicular to Morris Line and consists of

mature and immature deciduous trees. P095-H2 is parallel to Cooper Road and consists of planted coniferous trees. No woodlands or other natural vegetation communities are present within 120 m of the cabling at this location.

Proposed cabling along this segment is located within 120 m of candidate significant wildlife habitat (animal movement corridors), and will be discussed in more detail in the evaluation of significance phase of this Project.

Merlin Road/6th Line West: Morris Line to P099

Two (2) drains are located within 120 m of the roadside cabling (P067-D2 and P068-D1) at this location. Drain P067-D2 is characterised by red osier dogwood, green ash, and mixed grass species. The drain P068-D1consists of reed canary grass, purple loosestrife, and cattail; it also did not contain water at the time of investigation. Four fencerows are located within 120 m of the proposed roadside cabling. P095-H3 is a coniferous fencerow consisting of Norway spruce and white cedar. It runs perpendicular to the cabling at this location. P068-H2 is located perpendicular to Merlin Road and consists of burr oak, American elm, goldenrod sp., and wild carrot. P067-H2 is a deciduous fencerow which runs perpendicular to the proposed cabling route. P067-H3 also runs perpendicular to the cabling route. It contains burr oak and red cedar, as well as some snags. In addition to fencerows and drainage corridors, the vegetation corridor associated with the railway (RB-F) is located within 120 m of the cabling route. This woodland and candidate significant wildlife habitat (animal movement corridor) is described in more detail below:

> RB-F – White Birch/Poplar Deciduous Savanna Type (SVDM3-5)
> This portion of the rail bed consists primarily of sparse trembling aspen, white elm, and hawthorns <10 m in height, with a thick understory of red raspberry, viper's bugloss, common reed, and wild carrot. Groundcover is dominated by red fescue, field horsetail, riverbank grape, and alfalfa.

Proposed cabling along this segment is located within 120 m of a woodland and candidate significant wildlife habitat (reptile hibernacula and animal movement corridors), and will be discussed in more detail in the evaluation of significance phase of this Project.

Finn Line/Merlin Road: Cooper Road to 8th Line

Four (4) drains are located within 120 m of the roadside cabling at this location (P071-D4, P069-D1, P069-D2 and P069-D6). The drain P071-D4 is a roadside ditch containing reed canary grass and cattails, and did not contain any water at the time of site investigation. P069-D1 is a roadside ditch characterized by herbaceous species, and contained no water at the time of site investigation. P069-D2 is a natural creek channel with cover provided by herbaceous species, as well as sparse eastern cottonwood and willows. Water was present within this channel at the time of site investigation.

Proposed cabling along this segment is located within 120 m of candidate significant wildlife habitat (animal movement corridors), and will be discussed in more detail in the evaluation of significance phase of this Project.

Port Road/8th Line: Cooper Road to Merlin Road

Four (4) drains are located within 120 m of the roadside cabling at this location (P070-D2, P069-D3, P069-D5 and P069-D4). P070-D2 is characterised by cattails and asters. It did not contain water at the time of site investigation. P069-D3 runs parallel to Port Road. It contains mixed grasses, and did not contain water at the time of investigation. P069-D5 runs perpendicular to 8th Line and it consists of reed canary grass and teasel. P069-D4 will be crossed by the proposed cabling at this site. It contains Norway spruce white elm and mixed grasses as ground cover. No fencerows or woodlands are within 120 m of the proposed cabling route at this location.

Proposed cabling along this segment is located within 120 m of candidate significant wildlife habitat (animal movement corridors), and will be discussed in more detail in the evaluation of significance phase of this Project.

7th Line West: Merlin Road to Hwy 401

Crops along this portion of the road during 2010 site investigation included soybeans, corn, wheat, and fallow land. Eleven (11) drains are located within 120 m of the roadside cabling along the 7th Line W. P063-D2, P129-D1, and P129-D2 are all roadside ditches with no water observed at the time of site investigation. P063-D2 consisted of herbaceous species only, while P129-D1 had cover of herbaceous species

and sparse deciduous trees and P129-D2 had herbaceous and shrub cover. P064-D1 and P062-D1 are roadside ditches that contained water, and have cover of herbaceous species. P062-D1 also has some deciduous shrub cover. P062-D2, P062-D3, and P098-D1 are all natural creek channels which cross the 7th Line West, and all contained water at the time of site investigation. P064-D2 and P098-D1 contain cover of herbaceous species and deciduous trees, while P064-D3 has herbaceous species only. P063-D1 is a ditch which runs perpendicular to the road, and is described as moist. The channel contains cover of herbaceous species as well as shrubs and coniferous trees from the adjacent fencerow. P068-D2 consists of cover in the form of green ash, burr oak, tall goldenrod, and reed canary grass. Nine fencerows are located within 120 m of the proposed roadside cabling. Two of these, P063-H3 and P129-H1, run parallel to the road. The former consists of deciduous trees and shrubs, while the latter is a planted coniferous hedgerow. P064-H1, P064-H5, and P098-H1 are all located along natural creek channels and are characterized by deciduous trees. The remaining four fencerows run perpendicular to the road. P064-H2, P068-H1, and P098-H2 are all characterized by deciduous trees, while P121-H1 is a planted coniferous fencerow. One candidate significant woodland and wildlife habitat (P064-W1) is located adjacent to the 7th Line West on the south side. One small open water agricultural pond is located east of Dillon Road, which was in the process of being at least partially filled during the site investigation. North of the 7th Line West in this location is a Fresh-Moist Graminoid Meadow Ecosite (MEGM4) (P062-W1). This meadow community consists of a sub-canopy and understory of sparse, young white elm and hawthorns in a meadow dominated by smooth brome, barnyard grass, and Canada goldenrod. Small snags <10 cm dbh rarely occur. At the time of site investigation, we could not gain landowner permission to access this natural feature; therefore, an alternative (i.e. roadside) site investigation was conducted. The candidate significant woodland is described in more detail below.

P064-W1 – Dry-Fresh Exotic Deciduous Forest Type (FODM4-12)

This mid-age forest community is dominated by silver poplar (*Populus alba*) in the canopy and sub-canopy, with young silver poplar and riverbank grape in the understory. Garlic mustard, avens, and Canada goldenrod are found in the ground layer. At the time of site investigation, we could not gain landowner permission to access this natural feature; therefore, an alternative (i.e. roadside) site investigation was conducted.

Proposed cabling along this segment is located within 120 m of several candidate significant natural features including a woodland and wildlife habitat (animal movement corridors and s-ranked bat habitat), and will be discussed in more detail in the evaluation of significance phase of this Project.

Wellwood Road/10th Line: 7th Line to Bloomfield Road

Eight (8) drains are located within 120 m of the roadside cabling at this location (P066-D2, P066-D1, P065-D3, P094-D9, P094-D1, P094-D6, P061-D1 and P111-D7). P066-D2 is characterised by white ash, reed canary grass, smooth brome and heath aster; it contained water at the time of site investigation. P066-D1 contains bur oak, Manitoba maple, white ash, and gray dogwood; this drain also contained water at the time of site investigation. Cover for drain P065-D3 consisted of Freeman's maple, Manitoba maple, hawthorne sp., and smooth brome, and it contained water at the time of site investigation. P094-D9 is characterised by staghorn sumac, slender willow, and basswood; water was present within this drain at the time of site investigation. Drain P094-D1 consists of white cedar, timothy, and cattail. This drain did not contain water at the time of site investigation. P094-D6 contains goldenrod species, smooth brome, slender willow and white elm. Water was present in this drain during the site investigation. P061-D1 consisted of goldenrod, immature white elm and silver maple; it is a wide channel that contained some water at the time of site investigation. Drain P111-D7 is characterised by goldenrod sp., teasel and white elm. It is a sparsely treed drain with some water present. Four (4) hedgerows are also present within the Project Area at this location (P065-H6, P065-H5, P094-H6, and P111-H5). P065-H6 is characterised by staghorn sumac, bur oak, white elm, common apple and white ash. P065-H5 consists of mature trees in including bur oak, white ash, riverbank grape, and white elm. P094-H6 consists of white ash, white elm, bur oak and staghorn sumac; it also contains a few, short snags. P111-H5 contains some tree species including white elm, white ash, hawthorne sp., and bur oak. In addition to fencerows and drainage corridors, the vegetation corridor associated with the railway (RB-A4) is located within 120 m of the cabling route. This woodland and candidate significant wildlife habitat (animal movement corridor) is described in more detail below:

RB-A4 – Fresh-Moist Poplar Deciduous Woodland Type (WODM5-1)
This portion of the rail bed consists primarily of trembling aspen with white elm, silver maple, and red oak, with along with Manitoba maple in the sub-canopy. The understory is dominated by red raspberry and Canada goldenrod, with staghorn sumac and common reed. Groundcover consists of red fescue, field horsetail, riverbank grape, and wild carrot.

Proposed cabling along this segment is located within 120 m of a woodland and candidate significant wildlife habitat (animal movement corridors), and will be discussed in more detail in the evaluation of significance phase of this Project.

9th Line: Bloomfield Road to Charing Cross Road

Crops along this portion of the road during 2010 site investigation included soybeans, corn, wheat, and tilled land. Six (6) drains are located within 120 m of the roadside cabling (P097-D2, P117-D1, P097-D1, P117-D1, P096-D1 and P055-D1). P097-D2 is a roadside ditch containing water, with cover of herbaceous species. P117-D1 and P097-D1 are natural creek channels. P117-D1 contained no water at the time of site investigation, and is characterized by herbaceous species. P097-D1 is characterized by herbaceous species and immature trees and shrubs, and contained water. P096-D1 is characterised by gray dogwood, mixed grasses and forbs; it did not contain water at the time of site investigation. P055-D1 is dominated by aster sp., gray dogwood, and cattail; it also did not contain water at the time of site investigation. Eight fencerows are located within 120 m of the proposed roadside cabling (P059-H1, P059-H2, P096-H3, P097-H1, P097-H2, P111-H1, P164-H2, and P164-H3). Six of these fencerows are characterized by planted coniferous trees, while P164-H2 and P164-H3 are characterised by white cedar and white spruce trees. No woodlands or other natural vegetation communities are present within 120 m of the cabling at this location.

Proposed cabling along this segment is located within 120 m of candidate significant wildlife habitat (animal movement corridors), and will be discussed in more detail in the evaluation of significance phase of this Project.

8th Line: Dillon Road to Bloomfield Road

Three drains (P065-D1, P098-D1 and P061-D3) and seven hedgerows (P061-H3, P061-H2, P149-H5, P149-H2, P149-H6, P149-H3 and P149-H4) are located within 120 m of the roadside cabling at this location. P065-D1 is dominated by cottonwood, willow and goldenrod sp. P098-D1 is dominated by ash sp., soft maple, white spruce, and reed canary grass, while P061-D3 includes reed canary grass, smooth brome, and slender willow. All seven hedgerows are dominated in some form by white cedar and/or white spruce. No woodlands or other natural vegetation communities are present within 120 m of the cabling at this location.

Proposed cabling along this segment is located within 120 m of candidate significant wildlife habitat (animal movement corridors), and will be discussed in more detail in the evaluation of significance phase of this Project.

10th Line: Bloomfield Road to Charing Cross Road

Four drains are located within 120 m of the roadside cabling at this location (P117-D2, P100-D1, P060-D1, and P111-D1). P117-D2 is a roadside ditch containing water, with reed canary, common reed grass, and goldenrod sp. ground cover. P100-D1 is a ditch located overlapping with the proposed location of the cabling. The channel (which contained water at the time of site investigation) contains cattails, with sparse white elms and mixed forbs along the upper edges. The drain P060-D1 is a ditch located overlapping with the proposed cabling at this location. It consists of deciduous tree and shrub cover. The drain P111-D1 is a small ditch, characterized by mixed grasses and forbs and sparse white elm, which runs north of the proposed cabling route. Three fencerows are located within 120 m of the proposed roadside cabling (P060-H2, P112-H1, P164-H1). The fencerow P060-H2 consists of only white cedar. Fencerow P112-H1 is located adjacent to the cabling route, and contains planted Norway spruce and white cedar. Fencerow P164-H1 contains a mixture of bur oak, white elm, red cedar and staghorn sumac, and also contains occasional snags between 10-24 cm dbh. North of 10th Line in this location is another candidate significant wildlife habitat (P111-W1). This candidate significant natural feature is described in more detail below:

P111-W1 – Fresh-Dry Sugar Maple Deciduous Forest Type (FOD5-7)
This mid-age forest community is dominated by black cherry, sugar maple, American basswood, and white ash in the super-canopy and sub-canopy. Other trees present within this community in limited numbers include shagbark hickory, bitternut hickory and poplar species. Aster species, red ash, basswood and sugar maple are dominant in the understory, while the groundcover consists of violet species and garlic mustard. This forest contains occasional snags <24 cm dbh and a few snags up to 50 cm dbh. A rock pile and a debris pile are also located within this woodland, and they may provide habitat for snakes. At the time of site investigation, we could not gain landowner permission to access this natural feature; therefore, an alternative (i.e. roadside) site investigation was conducted.

Proposed cabling along this segment is located within 120 m of candidate significant wildlife habitat (reptile hibernacula and animal movement corridors), and will be discussed in more detail in the evaluation of significance phase of this Project.

Gagner Line/Lagoon Road: Charing CX Road to the Rail Bed

Three drains (P054-D1, P056-D2, and P058-D3) and two hedgerows (P051-H1 and P051-H2) are located within 120 m of the roadside cabling proposed at this location. P054-D1 is characterised by smooth brome, reed canary grass, and teasel. Drain P056-D2 is comprised of cattail, Canada goldenrod, and calico aster. P058-D3 consists of narrow-leaved cattail, goldenrod sp., heath aster, and red cedar. Both of the hedgerows, P051-H1 and P051-H2) are characterized by white cedar. Two (2) candidate significant woodlands (P054-W1, P054-W2) and one wetland (P054-WE1) are located along this stretch of cabling. The form and function of these habitats are described in more detail below:

P054-W1–Dry-Fresh Sugar Maple-Beech Deciduous Forest (FODM5-2)
This mature forest community is dominated by sugar maple, American beech, bur oak and Freeman's maple in the canopy and sub-canopy. Sugar maple, choke cherry American basswood and common raspberry are dominant in the understory, while the groundcover consists of garlic mustard, bittersweet nightshade, clearweed and false nettle. This forest has occasional snags up to 50 cm dbh.

P054-W2 – Fresh-Moist Sugar Maple-White Ash Deciduous Forest &
Swamp Maple Mineral Deciduous Swamp (SWDM3-3) inclusion P054-WE1
This mature forest community is dominated by sugar maple, white ash, black cherry and American beech in the canopy. The sub-canopy also contains white elm. Red elderberry, choke cherry, red raspberry and black cherry are dominant in the understory, while the groundcover consists of red raspberry, running

strawberry-bush, red elderberry and wild ginger. This forest contains rare snags up to 50 cm dbh.

Proposed cabling along this segment is located within 120 m of two woodlands, one wetland, and candidate significant wildlife habitat (s-ranked bat habitat, animal movement corridors), and will be discussed in more detail in the evaluation of significance phase of this Project.

Lagoon Road & Horton Line: Charing Cross Road to Fargo Road

Crops along this portion of the road during 2010 site investigation included soybeans, tomatoes, corn, and wheat. Nine drains are located within 120 m of the roadside cabling. There are five roadside ditches (P046-D1, P051-D1, P051-D2, P051-D3, and P055-D2) which are all characterized by herbaceous cover. P046-D1, P051-D3, and P055-D2had no water present at the time of site investigation, while P051-D1 and P051-D2 had water. One natural creek channel (represented by P055-D1 and P110-D1) runs across Lagoon Road and Horton Road. This channel is characterized by herbaceous species and contained no water at the time of site investigation. Two ditches cross Horton Line (P056-D1, P056-D2). These were both characterized by herbaceous species and had no water present at the time of site investigation. Two fencerows are located within 120 m of the proposed roadside cabling (P051-H1, P051-H2). Both of these fencerows are characterized by planted coniferous trees. One (1) candidate significant woodland and wildlife habitat (P055-W1) is located along this stretch of cabling. Current layouts indicate that cabling will travel through this natural feature; however micrositing will result in locating the cabling within the road right-of-way, immediately adjacent to this candidate significant natural feature. The form and function of this habitat is described in more detail below:

P055-W1–Dry-Fresh Sugar Maple-Basswood Deciduous Forest Type (FODM5-6)

This mid-age forest community is dominated by sugar maple, American basswood, and American beech in the canopy and sub-canopy. Other trees present within this community in limited numbers include ironwood, bur oak, red oak, white ash, and black cherry (*Prunus serotina*). Sugar maple and American basswood are dominant in the understory, while the groundcover consists of garlic mustard, calico aster, and red raspberry. This forest has occasional snags <24 cm dbh and a few snags up to 50 cm dbh. At the time of site investigation,

we could not gain landowner permission to access this natural feature; therefore, an alternative (i.e. roadside) site investigation was conducted.

Proposed cabling along this segment is located within 120 m of several candidate significant natural features including a woodland and wildlife habitat (s-ranked bat habitat and animal movement corridors), and will be discussed in more detail in the evaluation of significance phase of this Project.

Fargo Road: Horton Line to the Rail Bed

Crops along this portion of the road during 2010 site investigation included soybeans and corn. Three drains are located within 120 m of the roadside cabling. P046-D1 and P051-D1 are both roadside ditches containing herbaceous cover. P046-D1 had no water present at the time of site investigation, while P051-D1 had water. P052-D1 is a ditch running perpendicular to the road, which consists of herbaceous cover with sparse deciduous trees. Three fencerows are located within 120 m of the proposed roadside cabling (P045-H1, P046-H2, P052-H1). P045-H1 and P052-H1 are both characterized by deciduous trees, while P046-H1 consists of planted deciduous and coniferous trees. The rail bed is within 120 m of this stretch of cabling, including an inclusion community of Dry Mixed Graminoid Tallgrass Prairie Type (MEGM1-4) along the south side of the rail bed, east of Fargo Road. This particular inclusion is dominated by big bluestem (*Andropogon gerardii*) and switchgrass, and provides candidate significant wildlife habitat (rare vegetation community). This candidate significant natural feature is described in more detail below.

RB-B – Fresh-Moist Mixed Savannah Ecosite (SVMM3)
This portion of the rail bed consists of a few trembling aspen and white elm in the canopy, with some eastern red cedar, trembling aspen, hawthorns, and Manitoba maple in the sub-canopy. The thick understory consists of red raspberry, gray dogwood, staghorn sumac, and common reed, while the sparse groundcover consists of field horsetail, red fescue, common mullein, and riverbank grape. Included in this area is an inclusion of Dry Mixed Graminoid Tallgrass Prairie Type (MEGM1-4).

Proposed cabling along this segment is located within 120 m of a woodland and candidate significant wildlife habitat (savannah, habitat for s-ranked bat species and

animal movement corridors), and will be discussed in more detail in the evaluation of significance phase of this Project.

Burk Line: Mull Road to Base Road

Crops along this portion of the road during 2010 site investigation included soybeans, corn, wheat, and tilled land. Three drains are located within 120 m of the roadside cabling. P018-D1 and P016-D1 are both natural creek corridors. P018-D1 contains herbaceous cover, while P016-D1 consists of immature deciduous tree and shrub cover, and contained water at the time of site investigation. P016-D2 is a roadside ditch located along the south side of Burk Line, which is characterized by herbaceous cover and did not contain water at the time of site investigation. There are three fencerows within the Project Area (P016-H3, P016-H4, and P016-H2), all of which are perpendicular to Burk Line and consist of planted coniferous trees. No natural communities have been identified within 120 m of the roadside cabling.

Proposed cabling along this segment is located within 120 m of candidate significant wildlife habitat (animal movement corridors), and will be discussed in more detail in the evaluation of significance phase of this Project.

Base Road: Burk Line to Rail Bed

Crops along this portion of the road during 2010 site investigation included soybeans, corn, and tilled land. Two drains are located within 120 m of the roadside cabling. P016-D1 is a natural creek corridor with immature deciduous tree and shrub cover. It contained water at the time of site investigation. P019-D2 consists of roadside ditches on either side of Base Road, which are characterized by herbaceous species and did not contain water at the time of site investigation. One fencerow is located within the Project Area (P091-H1). It consists of sparse planted coniferous trees. Two candidate significant woodlands and wildlife habitats, P091-W2 and P091-W3, are also present along this segment of cabling. Both of these natural features have been described in more detail below:

P091-W2 - Fresh-Moist White Elm Lowland Deciduous Forest Type (FODM7-1)
This forest community consists of a white elm and Manitoba maple dominated canopy, with common buckthorn and white elm in the sub-canopy. The understory is also dominated by common buckthorn, and the ground cover consists predominately of garlic mustard, avens sp., Canada goldenrod. This is a young forest with many trees in the <24 cm dbh and occasional snags. This community also has an inclusion of an open water pond (OAW) as well as a Buckthorn Deciduous Shrub Thicket Type (THDM2-6) which includes red oak, shagbark hickory, hawthorne sp. and buckthorn.

P091-W3– Oak-Hickory Deciduous Forest
This small forest community was not investigated in the field; however, orthophotograpy interpretation, combined with an analysis of topography as well as species within the nearest woodlands, suggests this is likely an upland forest containing oak and hickory species, with an inclusion of a lowland woodland containing elm which is associated with the creek running adjacent to the road. This forest is adjacent to a residence and likely contains little understory or sub-canopy as a result.

Proposed cabling along this segment is located within 120 m of several candidate significant natural features including two woodlands and wildlife habitat (s-ranked bat habitat, animal movement corridors), and will be discussed in more detail in the evaluation of significance phase of this Project.

Base Road/Ridge Line: Welch Line to Kent Bridge Road

Two drains (P102-D1, P152-D1), three hedgerows (P092-H1, P092-H4 and P092-H5) and two woodlands (P092-W2, P014-W2 with wetland inclusion P014-WE2) are located within 120m of this section of cabling. P102-D1 is a natural creek channel which consists of herbaceous and low deciduous shrub cover, and did not contain water at the time of site investigation. P152-D1 contained water at the time of site investigation and included cover in the form of basswood, slender willow, white elm, and willow sp. P092-H1 consists of eastern cottonwood, red oak, and white elm, while P092-H4 consists of black locust, red raspberry and riverbank grape, and P092-H5 includes eastern white cedar, gray dogwood, staghorn sumac and eastern cottonwood. The woodland habitats within 120m of the proposed cabling route at this location are described in more detail below:

P092-W2 - Coniferous Plantation (TAGM1)
This young community is dominated entirely by white pine trees, with some garlic mustard and dandelion within the groundcover layer.

P014-W2 - Fresh-Moist White Elm Lowland Deciduous Forest Type (FODM7-1) & Open Water Pond (OAO) Inclusion (Wetland P014-WE2)

This mid-age community is dominated by white elm, and Freeman's maple in the canopy, and white elm and white oak in the sub-canopy. There is no understory, and the groundcover layer consists of reed canary grass, Canada goldenrod and Kentucky bluegrass. Based on the species composition, a wetland inclusion has been identified within a portion of this forest community (P014-WE2). This habitat also includes a small open water pond for cattle watering. Portions of the identified wetland habitat occur within 120 m of the Project location.

Proposed cabling along this segment is located within 120 m of several candidate significant natural features including two woodlands, one wetland and wildlife habitat (s-ranked bat habitat, animal movement corridors), and will be discussed in more detail in the evaluation of significance phase of this Project.

Welch Line: P155 to Base Road

Five drains (P026-D1, SSS-D2, P027-D1, SSS-D1 and P019-D1) are located within 120 m of the roadside cabling in this section. The drain P026-D1 is a ditch which will overlap with the proposed cabling at this location. The channel (which contained no water at the time of site investigation) consists of reed canary grass and gray dogwood, with vegetative cover also provided by sparse white elm. Drain SSS-D2 is a roadside ditch consisting of reed canary grass, common reed, and smooth brome, and did not contain water at the time of site investigation. The drain SSS-D1 contained water at the time of investigation, and consists of sparse white elm saplings and mixed forb species. Drain P019-D1 also contained water at the time of site investigation, and included smooth brome, New England aster, and Canada goldenrod ground cover. One fencerow (P155-H1) is located within the Project Area here. It consists of white cedar. In addition to fencerows and drain corridors providing candidate significant wildlife habitat, two (2) other natural features, a woodland (P014-W2) containing a wetland inclusion (P014-WE2) are also found within 120 m of the proposed cabling route. These candidate significant natural features are described in more detail below:

P014-W2 - Fresh-Moist White Elm Lowland Deciduous Forest Type (FODM7-1) & Open Water Pond (OAO) Inclusion (Wetland P014-WE2)

This mid-age community is dominated by white elm, and Freeman's maple in the canopy, and white elm and white oak in the sub-canopy. There is no understory, and the groundcover layer consists of reed canary grass, Canada goldenrod and Kentucky bluegrass. Based on the species composition, a wetland inclusion has been identified within a portion of this forest community (P014-WE2). This

habitat also includes a small open water pond for cattle watering. Portions of the identified wetland habitat occur within 120 m of the Project location.

Proposed cabling along this segment is located within 120 m of several candidate significant natural features including a woodland, a wetland, and wildlife habitat (animal movement corridors), and will be discussed in more detail in the evaluation of significance phase of this Project.

Kent Bridge Road: Ridge Line to Front Line

Crops along this portion of the road during 2010 site investigation included soybeans, corn, tilled land, and a hay field. Two drains are located within 120 m of the roadside cabling. P102-D1 is a natural creek channel which consists of herbaceous and low deciduous shrub cover, and did not contain water at the time of site investigation. P093-D1 is a ditch which crosses Kent Bridge Road, and consists of herbaceous and immature deciduous tree cover. It did not contain water at the time of site investigation. Eight fencerows are located within the Project Area. P102-H2 and P093-H3 are located adjacent to Kent Bridge Road. P015-H3 is a mixed deciduous and coniferous fencerow, while P102-H2 and P093-H3 are both planted coniferous fencerows. P001-H2 is a fencerow located adjacent to Front Line on the south side. It consists of planted coniferous trees and natural deciduous trees. Four fencerows (P015-H1, P102-H1, P093-H1, and P093-H2) are located perpendicular to Kent Bridge Road. P015-H1 and P093-H2 both consist of deciduous trees and shrubs, while P102-H1 and P093-H1 are planted coniferous fencerows. P001-H3 is located perpendicular to Front Line, and consists of deciduous trees and shrubs. No woodlands are located within 120 m of cabling in this section.

Proposed cabling along this segment is located within 120 m of candidate significant wildlife habitat (animal movement corridors), and will be discussed in more detail in the evaluation of significance phase of this Project.

Mull Road: Welch Line to Brush Line

Crops along this portion of the road during 2010 site investigation included soybeans, corn, and tilled land. Three drains are located within 120 m of the roadside cabling.

SSS-D2, P027-D1, and P005-D2 are all roadside ditches located along Mull Road (and along Brush Line for P005-D2), and none had water present at the time of site investigation. SSS-D2 and P027-D1 are characterized by herbaceous species, and P005-D2 is characterized by herbaceous and deciduous shrub species. Four fencerows are located within the Project Area. P005-H6 is located adjacent to Mull Road, and consists of deciduous trees. P005-H7 and P005-H5 are both located perpendicular to Mull Road, while P005-H1 is perpendicular to Brush Line. P005-H5 consists of deciduous trees and shrubs, while P005-H7 and P005-H1 both consist of deciduous trees. One candidate significant woodland and wildlife habitat (P027-W1) is located approximately 43 m from the proposed development activities associated with this segment of cabling. The form and function of this candidate significant natural feature are discussed below:

> P027-W1 - Fresh-Moist Lowland Deciduous Forest Type (FODM7)
> This young forest community is dominated by green ash, white elm, and eastern cottonwood in the sparse canopy, with green ash, white elm, and bur oak in the dense sub-canopy. Snags up to 24cm dbh are occasionally found within this community, while snags of a larger size are rare. The understory consists of white elm and green ash saplings with gray dogwood. The thin groundcover consists of Canada goldenrod, avens sp., and smooth brome. This regenerating community contains a complex of Goldenrod Forb Meadow Type (MEFM1-1) immediately adjacent to the road. At the time of site investigation, we could not gain landowner permission to access this natural feature; therefore, an alternative (i.e. roadside) site investigation was conducted.

Proposed cabling along this segment is located within 120 m of several candidate significant natural features including a woodland and wildlife habitat (animal movement corridors), and will be discussed in more detail in the evaluation of significance phase of this Project.

Mull Road: Brush Line to Sinclair Line

Crops along this portion of the road during 2010 site investigation included soybeans and corn. Three drains are located within 120m of the roadside cabling. P005-D1 and P009-D2 are both roadside ditches located along Mull Road. P005-D1 consists of herbaceous and deciduous tree and shrub cover, and contained water at the time of site investigation. P009-D2 consists of herbaceous cover. P139-D2 is a natural creek channel located east of Mull Road. It consists of herbaceous and deciduous tree cover,

and contained water at the time of site investigation. Just east of this creek there are several large brush piles, which may provide habitat for snakes. Six fencerows are located within the Project Area. Two fencerows (P005-H3, P005-H4) are located adjacent to Mull Road. P005-H3 consists of deciduous tree and shrub cover, while P005-H4 is a planted coniferous fencerow. Three fencerows run along roads which intersect Mull Road. P009-H5 consists of planted coniferous trees, and P009-H3 consists of deciduous tree and shrub cover. P008-H2 is a planted coniferous fencerow. One fencerow is located along a natural creek channel (P139-H2). It consists of deciduous trees. In addition to fencerows and drains providing candidate significant wildlife habitat, one candidate significant woodland and wildlife habitat (P139-W1) is located approximately 18 m from the proposed cabling along this segment of road. The form and function of this candidate significant natural feature are discussed below:

> P139-W1–Mixed Plantation (TAGM2)
> This young plantation community is dominated by white spruce, sugar maple, and white cedar up to 10 m in height in the tallest layer. The understory consists of white spruce and white cedar. Groundcover is dominated by Canada goldenrod, smooth brome, and wild carrot. At the time of site investigation, we could not gain landowner permission to access this natural feature; therefore, an alternative (i.e. roadside) site investigation was conducted.

Proposed cabling along this segment is located within 120 m of several candidate significant natural features including a woodland and wildlife habitat (animal movement corridors), and will be discussed in more detail in the evaluation of significance phase of this Project.

Mull Road/New Scotland Line: Sinclair Line to P171

Four drains are located within 120m of the roadside cabling at this location (P139-D2, P139-D1, P002-D2 and P171-D2). P139-D2 is a natural creek channel located east of Mull Road. It consists of herbaceous and deciduous tree cover, and contained water at the time of site investigation. P139-D1 also contained water at the time of site investigation, and consisted of willow, staghorn sumac, and eastern cottonwood cover. P002-D2 consists of herbaceous and deciduous shrub cover, and it contained water at the time of site investigation. P171-D2 also contained water, and cover for this drain was provided by red osier dogwood, smooth brome, and Manitoba maple. No hedgerows or woodlands are present within 120m of the cabling in this location; however

a portion of the Rondeau Bay North Shore PSW was confirmed within 120 m of the cabling route at this location.

The cable corridor in this location is within 2 km of the Rondeau Bay Important Bird Area (IBA), as identified through the records review. The wildlife habitat features within the IBA are known to be significant for waterfowl concentrations, including staging areas for several waterfowl species. The majority of the Project area consists of agricultural land, which has the potential to be flooded in some years. As such, agricultural fields along the southeast portion of the Project Area, within the IBA itself and within 2 km of the IBA boundary, were considered candidate SWH for stopover and staging waterfowl. The agricultural fields may be wildlife habitat as staging for waterfowl; however the use of this area by waterfowl will be assessed in the evaluation of significance phase to confirm the significance of this area.

Proposed cabling along this segment is located within 120 m of a provincially significant wetland and candidate significant wildlife habitat (waterfowl stopover and staging areas, animal movement corridors), and will be discussed in more detail in the evaluation of significance phase of this Project.

Ed's Line: Mull Road to Kent Bridge Road

Crops along this portion of the road during 2010 site investigation included soybeans and corn. Three drains are located within 120m of the roadside cabling. All of these drains are natural creek channels which cross Ed's Line. P009-D1 contains herbaceous cover, and is described as moist. P004-D1 and P002-D2 consist of herbaceous and deciduous shrub cover. P004-D1 contained no water at the time of site investigation, and P002-D2 contained water. Six fencerows are located within 120m of the roadside cabling. Four of these fencerows are located adjacent to Ed's Line. P008-H1 is characterized by planted deciduous and coniferous trees, while P008-H2, P008-H3, and P002-H1 all consist of planted coniferous trees. P009-H2 and P003-H1 are both located perpendicular to Ed's Line, and consist of coniferous trees (planted) and deciduous trees, respectively. In addition to fencerows and drain corridors which are considered candidate significant wildlife habitat, NRSI biologists have identified three (3) candidate

significant woodlands (and wildlife habitat) within 120 m of the proposed cabling route. One (1) of these woodland communities, P002-W1, is located approximately 33 m from the closest location of cabling. The other two (2) communities, P002-W2 and P004-W1, are both currently shown overlapping with cabling routes. The form and function of each of these three (3) candidate significant woodlands and wildlife habitats are described in more detail below:

P002-W1 –Coniferous Plantation (TAGM1)
This young plantation is dominated by white pine and red pine (*Pinus resinosa*) less than 10 m in height. The groundcover is dominated by smooth brome and garlic mustard. At the time of site investigation, we could not gain landowner permission to access this natural feature; therefore, an alternative (i.e. roadside) site investigation was conducted.

P002-W2 - Fresh-Moist White Elm Lowland Deciduous Forest Type (FODM7-1)
This young forest community is dominated by immature white elm, green ash, and willow up to 10 m in height. Red osier dogwood and white elm are dominant in the understory, while reed canary grass, Canada goldenrod, and avens are the dominant groundcover species.

P004-W1 –White Ash Deciduous Woodland Type (WODM4-2)
This young woodland community is dominated by white ash in the canopy, sub-canopy, and understory, with occasional snags. Hawthorns and eastern red cedar are also present in the understory. Smooth brome and Canada goldenrod are dominant in the ground layer. At the time of site investigation, we could not gain landowner permission to access this natural feature; therefore, an alternative (i.e. roadside) site investigation was conducted.

Proposed cabling along this segment is located in and within 120 m of several candidate significant natural features including three (3) woodland and wildlife habitat (animal movement corridors), and will be discussed in more detail in the evaluation of significance phase of this Project.

Kent Bridge Road: Ed's Line to New Scotland Line

Crops along this portion of the road during 2010 site investigation included soybeans, wheat, and corn. Two drains are located within 120m of the roadside cabling. P002-D1 is a roadside ditch located along Kent Bridge Road, and P106-D2 is a natural creek channel which crosses the road. Both of these are characterized by herbaceous species and deciduous shrubs, and neither contained water at the time of site investigation.

Four fencerows are located within 120 m of the roadside cabling. P105-H3 is a roadside fencerow located along Kent Bridge Road. It consists of planted coniferous trees. P105-H4, P118-H1, and P106-H3 are all located perpendicular to Kent Bridge Road. P105-H4 consists of deciduous trees and shrubs, while P106-H3 and P118-H1 are characterized by planted coniferous trees. No woodlands or other natural vegetation communities are present within 120 m of the cabling at this location.

The cabling along this segment is located within 2 km of the Rondeau Bay Important Bird Area (IBA), as identified through the records review. The wildlife habitat features within the IBA are known to be significant for waterfowl concentrations, including staging areas for several waterfowl species. The majority of the Project area consists of agricultural land, which has the potential to be flooded in some years. As such, agricultural fields along the southeast portion of the Project Area, within the IBA itself and within 2 km of the IBA boundary, were considered candidate SWH for stopover and staging waterfowl. The agricultural fields may be wildlife habitat as staging for waterfowl; however the use of this area by waterfowl will be assessed in the evaluation of significance phase to confirm the significance of this area.

Proposed cabling along this segment is located within 120 m of candidate significant wildlife habitat (waterfowl stopover and staging area and animal movement corridor), and will be discussed in more detail in the evaluation of significance phase of this Project.

New Scotland Line: Kent Bridge Road to McKinlay Road

Crops along this portion of the road include soybeans, corn, tilled land, and a hay field. Two drains are located within 120m of the roadside cabling at this location. P105-D1 is characterized by deciduous trees, and contained water at the time of site investigation. P104-D2 consists of deciduous trees and herbaceous species, and contained water. Six fencerows are located within 120m of the roadside cabling. P104-H2 is located adjacent to New Scotland Line, and consists of coniferous and deciduous trees. P105-H1, P104-H3 and P103-H2 are located along natural creek channels. P105-H1 consists of deciduous trees, P104-H3 consists of mixed coniferous and deciduous trees, and P103-

H2 consists of deciduous trees and shrubs. Two fencerows (P105-H2, P104-H1) are located perpendicular to the road. P105-H2 is characterized by planted willow trees, and P104-H1 consists of planted coniferous trees. No woodlands were identified within 120 m of proposed development activities at this location.

Cabling along this section of roadway is located within the Rondeau Bay Important Bird Area (IBA), as identified through the records review. The wildlife habitat features within the IBA are known to be significant for waterfowl concentrations, including staging areas for several waterfowl species. The majority of the Project area consists of agricultural land, which has the potential to be flooded in some years. As such, agricultural fields along the southeast portion of the Project Area, within the IBA itself and within 2 km of the IBA boundary, were considered candidate SWH for stopover and staging waterfowl. The agricultural fields may be wildlife habitat as staging for waterfowl; however the use of this area by waterfowl will be assessed in the evaluation of significance phase to confirm the significance of this area.

Proposed cabling along this segment is located within 120 m of several candidate significant natural features including a woodland and wildlife habitat (waterfowl stopover and staging area, and animal movement corridors), and will be discussed in more detail in the evaluation of significance phase of this Project.

Cundle Line: Fargo Road to P038

Two drains (CLA-D2 and CLA-D3), and one woodland (CLA-W2) are present within 120m of the proposed transmission corridor in this location; no fencerows are present within 120m of the cabling at this location. CLA-D2 is characterized by herbaceous species and deciduous trees, and contained water at the time of site investigation. Drain CLA-D3 contains phragmites, cattails and hawthorne sp., and contained no water at the time of investigation. CLA-W2 represents a candidate significant woodland and wildlife habitat, and is described in more detail below:

> CLA-W2 – Fresh-Moist White Elm Lowland Deciduous Forest Type (FODM7-1)
> This young forest is dominated by white elm in the canopy and sub-canopy, with white elm and hawthorns in the understory layer. The groundcover is dominated by avens sp., Canada goldenrod, and red raspberry. At the time of site

investigation, we could not gain landowner permission to access this natural feature; therefore, an alternative (i.e. roadside) site investigation was conducted.

This segment of proposed distribution corridor is located within 120 m of candidate significant natural features including one (1) woodland and wildlife habitat (s-ranked bat habitat and animal movement corridors), and will be discussed in more detail in the evaluation of significance phase of this Project.

Burk Line: Huffman Road to P034

Three drains (P040-D2, P034-D4 and P033-D1) and one woodland (P034-W1) are located within 120m of the proposed transmission corridor at this location; no fencerows are present within 120m of this corridor. P040-D2 is characterize by goldenrod sp., aster sp., hawthorn sp., and narrow-leaved cattail, and did not contain water at the time of site investigation. Water was present in drain P034-D4, and it contained narrow-leaved cattail, willow sp., white vervain, and teasel. The channel along P033-D1 contains cattails, while the edges are characterized by mixed grasses and goldenrod species. This ditch also did not contain water at the time of site investigation. P034-W1 represents a candidate significant woodland and wildlife habitat, and is described in more detail below:

P034-W1 – Fresh-Moist Elm Deciduous Woodland Type (FODM5-2)
This young woodland community is dominated by white elm with some silver maple in the canopy. The sub-canopy is also dominated by white elm and silver maple, along with staghorn sumac. Hawthorns, gray dogwood, and eastern red cedar dominate the understory, while Canada goldenrod, smooth brome, and calico aster are found in the groundcover. While this is predominantly a young woodland, there are a few trees and snags in the 25-50 cm dbh size range. An additional site investigation in the summer of 2011 confirmed that the vegetation composition within this habitat is not indicative of a wetland, and therefore does not require further consideration.

This segment of proposed distribution corridor is located within 120 m of candidate significant natural features including one (1) woodland and wildlife habitat (s-ranked bat habitat and animal movement corridors), and will be discussed in more detail in the evaluation of significance phase of this Project.

Burk Line: Harwich Road to P031

One drain (P156-D4) and one hedgerow (P031-H3) are located within 120m of the proposed transmission corridor in this section. Cover for P156-D4 is provided by red cedar, white cedar, white ash, white spruce, and sugar maple, while P031-H3 consists of green ash, American basswood, and shagbark hickory. No woodlands or other wildlife habitat are present within the project area along this corridor.

This segment of proposed distribution corridor is located within 120 m of candidate wildlife habitat (animal movement corridors), and will be discussed in more detail in the evaluation of significance phase of this Project.

Harwich Road: Rail Bed to P026

Three drains (P031-D1, P135-D2, and P156-D3) and one hedgerow (P034-H3) are located within 120m of the proposed transmission corridor in this location. The drain P031-D1 (which did not contain water at the time of site investigation) consists of gray dogwood, dominated in the corridor by mixed grasses and goldenrod species. P135-D2 consists of bur oak, white ash and mixed forbs. Water was present in P135-D2 at the time of site investigation. Cover for P156-D3 consists of red cedar, white cedar, white ash, Manitoba maple, and phragmites. Hedgerow P034-H3 contains coniferous trees.

This segment of proposed distribution corridor is located within 120 m of candidate wildlife habitat (animal movement corridors), and will be discussed in more detail in the evaluation of significance phase of this Project.

Campbell Line: Mull Road to Harwich Road

Three drains (P026-D1, P029-D1 and P030-D1) are also located along this section of the corridor. P026-D1 did not contain water at the time of site investigation, and cover is provided by white elm, gray dogwood, and reed canary grass. No water was present within P029-D1, and cover was provided by gray dogwood, cattail, eastern red cedar, and white elm. The drain P030-D1 contains cattails and common water-plantain, and was described as moist at the time of the site investigation. Eight (8) hedgerows are located within 120m of the proposed transmission corridor in this location (P028-H3,

P028-H4, P028-H5, P028-H6, P029-H1, P029-H2, P029-H3 and P030-H1). P028-H3 is characterized by white elm, red osier dogwood, gray dogwood, white ash and red cedar. P028-H4 consists of shagbark hickory, white elm, basswood and gray dogwood, while P028-H5 contains dogwood sp., white ash, white elm and hawthorne sp. P028-H6 includes hawthorne sp. and dogwood sp., while P029-H1 consists of eastern cottonwood, gray dogwood. P029-H2 consists of white elm, gray dogwood, American basswood, and red osier dogwood, while P029-H3 contains bur oak, shagbark hickory, and gray dogwood. P030-H1 is characterized by sparsely treed white elm. One woodland and wildlife habitat (P029-W1), as well as candidate open country bird breeding habitat (fallow agricultural field) are also present within 120m of the transmission corridor in this location.

> P029-W1 – Fresh-Moist Sugar Maple-White Elm Deciduous Forest Type (FODM6-4)
> This mature community is dominated by sugar maple, bur oak, shagbark hickory, and white elm in both the canopy and sub-canopy. White elm, sugar maple and gray dogwood dominate the understorey, while garlic mustard, large-leaved avens, yellow avens and enchanter's nightshade dominate the groundcover. Trees, snags and deadfall >25cm dbh are rare throughout this community.

This segment of proposed distribution corridor is located within 120 m of a woodland and candidate wildlife habitat (s-ranked bat habitat, open country bird breeding habitat, animal movement corridors), and will be discussed in more detail in the evaluation of significance phase of this Project.

Harwich Road: Campbell Line to Stefina Line

Three drains (P030-D2, P140-D7, and P140-D8) and two woodlands (P030-W3 and P030-W2) are located within 120m of the proposed transmission corridor in this section. P030-D2 consists of staghorn sumac, red-osier dogwood and white elm. No water was present within this drain at the time of site investigation. Drain P140-D7 contained phragmites, goldenrod sp., and white elm. It did not contain water at the time of site investigation. Smooth brome, staghorn sumac and golden rod sp. characterize the vegetated corridor associated with drain P140-D8. It contained water at the time of site investigation. The two woodlands within 120m of the transmission corridor in this location are described in more detail below:

P030-W3 – Mixed Plantation (TAGM2)
This mid-age forest community is dominated by silver maple, black walnut, white spruce and Freeman's maple in the canopy, and similar species are present in the sub-canopy. Understory species include highbush cranberry, white ash and honeysuckle sp. This forest contains abundant trees up to 24 cm dbh, with no snags, and few deadfall.

P030-W2 - Fresh Moist Cottonwood Deciduous Forest Type (FODM8-3)
This mature forest community is dominated by eastern cottonwood in the super-canopy, with cottonwood, Freeman's maple and white willow in the canopy, cottonwood, mulberry sp., Freeman's maple and white elm in the sub-canopy. Understory species include silky dogwood, white ash, prickly ash and white elm. This forest contains occasional trees up to 24cm dbh, and no snags.

This segment of proposed distribution corridor is located within 120 m of several candidate significant natural features including two (2) woodlands and wildlife habitat (animal movement corridors), and will be discussed in more detail in the evaluation of significance phase of this Project.

Talbot Trail: Communication Road to Mull Road

Five drains (P002-D14, P002-D15, P002-D16, P002-D17 and P002-D18), five hedgerows (P002-H13, P002-H14, P002-H15, P002-H16 and P002-H17), and five woodlands (P139-W5, P139-W6, P139-W7, P139-W8 and P139-W9) are located within 120m of the proposed transmission corridor in this section. P002-D14, P002-D15 and P002-D16 are treed communities dominated by white elm and white ash. P002-D17 is dominated by Canada goldenrod, crack willow pin cherry and eastern red cedar, while P002-D18 contains reed canary grass, Canada goldenrod and wild carrot. All of the hedgerows within this section of the project area are planted with coniferous trees including eastern white cedar, Norway spruce, and white spruce. The five woodlands within 120m of the transmission corridor in this location are described in more detail below:

P139-W5 - White Ash Deciduous Woodland Type (WODM4-2)
This young community is dominated by white ash, bur oak, black walnut and eastern red cedar in the canopy, and white ash, staghorn sumac and tartarian honeysuckle in the sub-canopy. Understory species include Canada goldenrod, staghorn sumac and tartarian honeysuckle. Based on acoustic studies nearby,

and the presence of snags, this feature contains a candidate significant bat maternity roost.

P139-W6 - Dry-Fresh White Ash-Hardwood Deciduous Forest (FODM4-2)
This mid-age community is dominated by white ash, trembling aspen and white spruce in the canopy, with white ash, trembling aspen and white cedar in the sub-canopy. Understory species include Canada goldenrod, teasel, and tartarian honeysuckle. Based on acoustic studies nearby, and the presence of snags, this feature contains a candidate significant bat maternity roost.

P139-W7 - Dry-Fresh Upland Deciduous Forest Ecosite (FODM4)
This mid-age community is dominated by black walnut, sugar maple, and white ash in the canopy, with sugar maple, white elm and red oak in the sub-canopy. Understory species include Allegheny blackberry, red raspberry and gray dogwood. Based on acoustic studies nearby, and the presence of snags, this feature contains a candidate significant bat maternity roost.

P139-W8 - Dry-Fresh Sugar Maple-Beech Deciduous Forest (FODM5-2)
This mature community is dominated by sugar maple, white ash and American beech in the canopy, with sugar maple, American beech and white pine in the sub-canopy. Understory species include Canada goldenrod, red raspberry and white pine. Based on acoustic studies nearby, and the presence of snags, this feature contains a candidate significant bat maternity roost. This woodland is also considered candidate habitat for area-sensitive breeding birds.

P139-W9 - Fresh-Moist White Elm Lowland Deciduous Forest (FODM7-1)
Inclusion: Deciduous Plantation (TAGM3)
This mid-age community is dominated by white elm, Freeman's maple and weeping willow in the canopy, with white elm, white cedar and white pine in the sub-canopy. Understory species include Canada goldenrod and sugar maple. Based on acoustic studies nearby, and the presence of snags, this feature contains a candidate significant bat maternity roost.

This segment of proposed distribution corridor is located within 120 m of several candidate significant natural features including five (5) woodlands and wildlife habitat (area-sensitive breeding bird habitat ,bat maternity colony habitat, s-ranked bat habitat and animal movement corridors), and will be discussed in more detail in the evaluation of significance phase of this Project.

7.3 Site Investigation Results for Substations

Two (2) substation locations are proposed as part of the development activities of the Project Area. Each of these locations has been reviewed by NRSI biologists for the presence of natural features within 120 m of the Project location. The locations of these two (2) substations are described in more detail below:

Sattern Substation

During 2010 site investigations, the Sattern Substation (SSS) was proposed within a soybean field, while there are some corn, soybean, and tilled fields in the vicinity as well. One drain (SSS-D1), one fencerow (P020-H1), and one natural vegetation community (RB-E2) are located within 120 m of this proposed substation and its associated cabling. Drain SSS-D1 is a roadside ditch located immediately west of the proposed substation along the railbed. It consists of sparse white elm saplings and mixed forb species. It did contain water at the time of site investigation. Fencerow P020-H1, located immediately east of the proposed substation, consists of shagbark hickory, white elm, and green ash. In addition to fencerows and drain corridors that are considered candidate significant wildlife habitat, a vegetated corridor associated with the railway is found within 120 m of associated infrastructure of this proposed substation. The infrastructure associated with this substation is proposed to overlap with this natural feature. This vegetation corridor represents candidate significant wildlife habitat, and has been described in more detail below:

> RB-E2 – White Birch/Poplar Deciduous Savannah Type (SVDM3-5)
> This portion of the rail bed consists primarily of sparse mature trembling aspen and white elm in the canopy, with some Manitoba maple, common buckthorn, hawthorns, and eastern red cedar in the sub-canopy. The understory is characterized by red raspberry, Canada goldenrod, gray dogwood, and staghorn sumac, with a thinner groundcover of field horsetail, riverbank grape, green foxtail, and quack grass.

This proposed substation location, and associated infrastructure, is proposed within 120 m of candidate significant wildlife habitat (savannah, s-ranked bat habitat and animal movement corridor), and will be discussed in more detail in the evaluation of significance phase of this Project.

Railbed Substation

During 2010 site investigations, the Railbed Substation (RSS) was situated in a soybean field, while there are some corn and soybean fields in the vicinity as well. One drain (P064-D1), one fencerow (RSS-H1), and one natural vegetation community (RB-F3) are located within the 120m of this proposed substation. Drain P064-D1 is a roadside ditch located immediately southeast of the proposed substation along 7th Line West. It consists of goldenrod sp. and purple loosestrife, and did contain water (<1 m wide) at the time of site investigation. RSS-H1 is located immediately west of the proposed substation and consists of white elm, bur oak, and eastern cottonwood. In addition to fencerows and drain corridors that are considered candidate significant wildlife habitat, a vegetated corridor associated with the railway (RB-F3) is found within 120 m of associated infrastructure of this proposed substation. Although the substation is more than 120 m from this natural feature, cabling associated with this substation is proposed to cross this natural feature in several locations. This vegetation corridor represents candidate significant wildlife habitat, and has been described in more detail below:

> RB-F3 – White Birch/Poplar Deciduous Savanna Type (SVDM3-5)
> This portion of the rail bed consists primarily of sparse trembling aspen, white elm, and hawthorns <10 m in height, with a thick understory of red raspberry, viper's bugloss, common reed, and wild carrot. Groundcover is dominated by red fescue, field horsetail, riverbank grape, and alfalfa.

This proposed substation location, and associated infrastructure, is proposed within 120 m of candidate significant wildlife habitat (savannah and s-ranked bat habitat and animal movement corridors), and will be discussed in more detail in the evaluation of significance phase of this Project.

7.4 Site Investigation Results for Transmission Corridor

Natural features within 120m of the proposed transmission corridor are discussed below by segment, from west to east within the Project Area. Detailed characteristics of the features associated with the transmission corridor are listed and described in Section 6.0 Site Investigation Results. The transmission line may in some instances be shown on the mapping to occur outside of the road right-of-way or rail bed. In these cases it is assumed that the lines are to be located within the right-of-way or rail bed.

Railbed Substation to Dillon Road

Crops along this portion of the rail bed during 2010 site investigation included soybeans, corn, tilled land, and a fallow field. Four drains are located within 120m of the rail bed transmission corridor. One drain, P064-D1, is a roadside ditch located along the 7th Line West and Drake Road. It consists of herbaceous species cover, and contained water at the time of site investigation. Three drains (P064-D2, P065-D1, and P065-D2) are natural creek channels which cross under the rail bed through culverts. These all contained water at the time of site investigation. P064-D2 and P065-D1 consist of deciduous and herbaceous species cover, while P065-D2 consists of deciduous tree and shrub cover. Eight fencerows are located within 120m of the transmission corridor. All of these are located perpendicular to the rail bed. P067-H1, P064-H3, P066-H1, and P066-H2 all consist of deciduous trees. P064-H2, P065-H2, P065-H3, and P066-H3 all consist of deciduous shrubs and trees. Fencerow P065-H3 was noted to contain several snags during the site investigation. The vegetated railway corridor along this portion of the proposed transmission corridor is characterized by two (2) vegetation communities that have been considered candidate significant natural features, RB-F3 and RB-A5. These two (2) natural features are both currently proposed to overlap with proposed development activities, and will be crossed by cabling as it connects with the ultimate distribution corridor along the railway bed. Two (2) additional candidate significant woodlands and wildlife habitat have also been noted within 120 m of the transmission corridor. These woodlands, P065-W1 and P065-W3 are located 29 m and 7 m, respectively, from the proposed development activities associated with the distribution corridor. These four candidate significant natural features, including attributes and composition have been described in more detail below:

RB-F – White Birch/Poplar Deciduous Savanna Type (SVDM3-5)
This portion of the rail bed consists primarily of sparse trembling aspen, white elm, and hawthorns <10 m in height, with a thick understory of red raspberry, viper's bugloss, common reed, and wild carrot. Groundcover is dominated by red fescue, field horsetail, riverbank grape, and alfalfa.

RB-A – Fresh-Moist Poplar Deciduous Woodland Type (WODM5-1)
This portion of the rail bed consists primarily of trembling aspen with white elm, silver maple, and red oak, with along with Manitoba maple in the sub-canopy. The understory is dominated by red raspberry and Canada goldenrod, with staghorn sumac and common reed. Groundcover consists of red fescue, field horsetail, riverbank grape, and wild carrot.

P065-W1 - Fresh-Moist Manitoba Maple Deciduous Woodland Type (WODM5-3)
This young riverine woodland community is dominated by Manitoba maple and white elm in the canopy and dense subcanopy layers, with occasional snags throughout. The relatively dense understory is dominated by Manitoba maple saplings and gray dogwood, and the dense groundcover is dominated by garlic mustard. This forest also includes a naturalized hedgerow that is dominated by bur oak.

P065-W3 - Fresh-Moist Bur Oak Deciduous Forest Type (FODM9-3)
& Swamp Maple Mineral Deciduous Swamp Type (SWDM3-3) Inclusion
This forest community is dominated by Bur oak, white elm, and silver maple in the canopy, with white elm, shagbark hickory, and bur oak in the sub-canopy. This is a mid-aged forest, with occasional snags in the 25-50 cm dbh range, and a maple swamp inclusion in the middle of the forested habitat, just outside of the Project area.

This segment of proposed distribution corridor is located within 120 m of several candidate significant natural features including three (3) woodlands and wildlife habitat (savannah, s-ranked bat habitat and animal movement corridors), and will be discussed in more detail in the evaluation of significance phase of this Project.

Dillon Road to Charing Cross Road

Crops along this portion of the railbed during 2010 site investigation included soybeans, corn, wheat, tilled land, and hay. Ten drains are located within 120m of the rail bed transmission corridor. Two drains (P094-D2, P094-D3) are roadside ditches, located along Dillon Road and the 9th Line, respectively. P094-D2 contains herbaceous and deciduous tree cover, and contained water at the time of site investigation. P094-D3 consists of herbaceous species cover and contained no water at the time of site

investigation. Four drains are natural creek channels which intersect the rail bed. P094-D1 and P117-D2 both consist of herbaceous species cover. P094-D1 contained no water at the time of site investigation, while P117-D2 contained water. P094-D5 and P061-D1 both consist of herbaceous and deciduous tree cover, and both contained water at the time of site investigation. Four drains are ditches which intersect the rail bed, all of which contained water at the time of site investigation. P100-D1 is dominated by herbaceous and deciduous tree cover. P060-D1 consists of deciduous tree and shrub cover, and P100-D2 consists of deciduous tree cover only. P112-D1 consists of herbaceous species only. Eleven fencerows are located within 120m of the transmission corridor. Two of these fencerows follow natural creek channels. P094-H4 consists of deciduous tree and shrub cover, while P061-H1 consists of planted coniferous trees. Two fencerows are located along ditches. P060-H1 consists of deciduous trees and shrubs, and P100-H2 consists of deciduous trees. The remaining seven fencerows are located perpendicular to the rail bed. P094-H2, P094-H3, and P100-H5 all consist of planted coniferous trees. P100-H3 and P060-H6 both consist of deciduous trees and shrubs, while P100-H4 and P060-H3 consist of deciduous trees.

In addition to the fencerows and drain corridors that are considered candidate significant wildlife habitat, five separate vegetated railway corridors, RB-F2, RB-A4, RB-F1, RB-A3, and RB-B4, and one woodland community, P117-W1, have all been identified within 120 m of the proposed distribution corridor along this segment of railway. All of these natural features are proposed to overlap with development activities associated with the distribution corridor and associated cabling. Each of these candidate significant natural features has been described in more detail below, and can be seen in the maps found within Appendix V of this report.

RB-F – White Birch/Poplar Deciduous Savanna Type (SVDM3-5)
This portion of the rail bed consists primarily of sparse trembling aspen, white elm, and hawthorns <10 m in height, with a thick understory of red raspberry, viper's bugloss, common reed, and wild carrot. Groundcover is dominated by red fescue, field horsetail, riverbank grape, and alfalfa.

RB-A – Fresh-Moist Poplar Deciduous Woodland Type (WODM5-1)
This portion of the rail bed consists primarily of trembling aspen with white elm, silver maple, and red oak, with along with Manitoba maple in the sub-canopy. The understory is dominated by red raspberry and Canada goldenrod, with

staghorn sumac and common reed. Groundcover consists of red fescue, field horsetail, riverbank grape, and wild carrot.

RB-B – Fresh-Moist Mixed Savannah Ecosite (SVMM3)
This portion of the rail bed consists of a few trembling aspen and white elm in the canopy, with some eastern red cedar, trembling aspen, hawthorns, and Manitoba maple in the sub-canopy. The thick understory consists of red raspberry, gray dogwood, staghorn sumac, and common reed, while the sparse groundcover consists of field horsetail, red fescue, common mullein, and riverbank grape. There is an inclusion of Dry Mixed Graminoid Tallgrass Prairie Type (MEGM1-4) west of Charing Cross Road.

P117-W1 –Dry-Fresh Sugar Maple-Beech Deciduous Forest Type (FODM5-2)
This forest community is dominated by sugar maple, American beech, and white elm in the canopy and sub-canopy, as well as sugar maple and white elm in the understory. This mid-aged forest contains abundant trees within the 10-24 cm dbh range and occasional snags. At the time of site investigation, we could not gain landowner permission to access this natural feature; therefore, an alternative (i.e. roadside) site investigation was conducted.

This segment of proposed distribution corridor is located within 120 m of several candidate significant natural features including two (2) woodlands and wildlife habitat (tallgrass prairie, savannah, s-ranked bat habitat and animal movement corridors), and will be discussed in more detail in the evaluation of significance phase of this Project.

Charing Cross Road to Huffman Road

Crops along this portion of the railbed during 2010 site investigation included soybeans, corn, and tilled land. Eight drains are located within 120m of the rail bed transmission corridor. Five of these drains are natural creek channels (P056-D1, P053-D2, P053-D3, P039-D1, and CLA-D2). P056-D1 and P039-D1 are both characterized by herbaceous species cover, and P039-D1 had no water present at the time of site investigation. P053-D2 and P053-D3 were both characterized by herbaceous species and coniferous trees, and contained water at the time of site investigation. CLA-D2 is characterized by herbaceous species and deciduous trees, and contained water at the time of site investigation. Three drains are ditches located within 120m of the rail bed. P053-D1 and P040-D1 are both characterized by herbaceous species cover, and did not contain water at the time of site investigation. P041-D1 consists of herbaceous cover as well, but is described as moist. Two fencerows are located perpendicular to the rail bed.

P058-H2 is a young, planted coniferous fencerow, and P040-H2 is a young deciduous tree and shrub fencerow.

A thicket and a meadow habitat are also located within 120 m of this section of the transmission corridor. The Gray Dogwood Deciduous Shrub Thicket Type (THDM2-4) community (P053-W1) is dominated by gray dogwood, with some staghorn sumac in the understory layer. A few young, planted eastern red cedar, white spruce, and white cedar are located in the subcanopy. Groundcover consists of Canada goldenrod and smooth brome. The Smooth Brome Graminoid Meadow Type (MEGM305) community (P053-W2) is dominated by smooth brome, with reed canary grass in moist depressions. Some gray dogwood and young red cedar are also located in the understory. Other species in this meadow include poverty oat grass, switch grass, tall sunflower, and Canada thistle. This large meadow habitat has been considered candidate open country bird breeding habitat.

In addition to fencerows and drainage corridors that are considered candidate significant wildlife habitat, NRSI biologists have identified a total of six (6) specific vegetation communities along the railway corridor, RB-B4, RB-E5, RB-B3, RB-D2, RB-E4, and RB-A2, and three (3) additional woodland communities. These natural features range in distance from 54 m from the proposed distribution corridor to overlapping with proposed development activities, including being crossed by proposed cabling layouts. Distances of each of these features from development activities can be seen in the accompanying maps of the distribution corridor found in Appendix V of this report. Each of these communities represent candidate significant wildlife habitat, with two (2) of these (RB-A and CLA-W2) representing candidate significant woodlands. All of these candidate significant natural features are described in more detail below:

RB-B – Fresh-Moist Mixed Savannah Ecosite (SVMM3)
This portion of the rail bed consists of a few trembling aspen and white elm in the canopy, with some eastern red cedar, trembling aspen, hawthorns, and Manitoba maple in the sub-canopy. The thick understory consists of red raspberry, gray dogwood, staghorn sumac, and common reed, while the sparse groundcover consists of field horsetail, red fescue, common mullein, and riverbank grape. There is an inclusion of Dry Mixed Graminoid Tallgrass Prairie Type (MEGM1-4) in RB-B3 immediately east of Fargo.

RB-E – White Birch/Poplar Deciduous Savannah Type (SVDM3-5)
This portion of the rail bed consists primarily of sparse mature trembling aspen and white elm in the canopy, with some Manitoba maple, common buckthorn, hawthorns, and eastern red cedar in the sub-canopy. The understory is characterized by red raspberry, Canada goldenrod, gray dogwood, and staghorn sumac, with a thinner groundcover of field horsetail, riverbank grape, green foxtail, and quack grass.

RB-D – Dry-Fresh Forb Meadow Ecosite (MEFM1)
This portion of the rail bed consists of a sparse layer of staghorn sumac, Manitoba maple, eastern red cedar, and trembling aspen up to 10m in height. It is dominated by a dense understory of predominantly spotted knapweed (*Centaurea maculosa*), with some Canada goldenrod, red raspberry, and riverbank grape. The groundcover consists of similar species, as well as viper's bugloss. This community is highly disturbed, consisting of approximately 75% cover of exotic invasive species.

RB-A – Fresh-Moist Poplar Deciduous Woodland Type (WODM5-1)
This portion of the rail bed consists primarily of trembling aspen with white elm, silver maple, and red oak, with along with Manitoba maple in the sub-canopy. The understory is dominated by red raspberry and Canada goldenrod, with staghorn sumac and common reed. Groundcover consists of red fescue, field horsetail, riverbank grape, and wild carrot.

CLA-W2 – Fresh-Moist White Elm Lowland Deciduous Forest Type (FODM7-1)
This young forest is dominated by white elm in the canopy and sub-canopy, with white elm and hawthorns in the understory layer. The groundcover is dominated by avens sp., Canada goldenrod, and red raspberry. At the time of site investigation, we could not gain landowner permission to access this natural feature; therefore, an alternative (i.e. roadside) site investigation was conducted.

This segment of proposed distribution corridor is located within 120 m of several candidate significant natural features including four (4) woodlands and wildlife habitat (tallgrass prairie, savannah, open country bird breeding habitat, s-ranked bat habitat and animal movement corridors), and will be discussed in more detail in the evaluation of significance phase of this Project.

Fargo Road: Highway 401 to the Chatham Switching Station

One drain (TRANS-D2), and one fencerow (TRANS – H4) are located within 120 m of this section of the proposed transmission corridor. TRANS-D2 consists of poplar sp., Manitoba maple, red maple, and reed canary grass, while TRANS-H4 consists of planted white cedar.

The transmission corridor along this segment is proposed within 120 m of candidate significant natural features including a woodland and wildlife habitat (animal movement corridor), and will be discussed in more detail in the evaluation of significance phase of this Project.

Huffman Road to Sattern Substation

Crops along this portion of the proposed transmission corridor during 2010 site investigation included soybeans, corn, and tilled land. Four drains are located within 120m of the proposed transmission corridor in this section. Three of these drains are ditches running perpendicular to the rail bed, which are located in fields. None of these ditches contained water at the time of site investigation. P034-D3 is characterized by herbaceous species, while P031-D1 contains herbaceous species and deciduous shrubs and P023-D1 contains herbaceous species and deciduous trees. SSS-D2 is a roadside ditch located along Mull Road. It is characterized by herbaceous species and contained no water at the time of site investigation. Four fencerows are located within 120m of the transmission line along the rail bed in this section. All of these fencerows are located perpendicular to the rail bed. P034-H3 consists of coniferous trees, while P024-H2, P031-H1, and P031-H2 all consist of deciduous trees. In addition to fencerows and drain corridors that are considered candidate significant wildlife habitat, NRSI biologists have identified a total of five (5) natural features, RB-E3, RB-A1, RB-D1, RB-E2, and P024-W2, that have been considered candidate significant wildlife habitat and/or significant woodlands. Two of these natural features, RB-D1 and EB-E2, are located 65 m and 79 m (respectively) from proposed development activities. The other three (3) natural features are shown to overlap with proposed development activities, including being crossed by proposed cabling associated with the distribution corridor. Each of these candidate significant natural features has been described in more detail below, and can be seen on the mapping of the distribution corridor found in Appendix V of this report.

RB-E – White Birch/Poplar Deciduous Savannah Type (SVDM3-5)

This portion of the rail bed consists primarily of sparse mature trembling aspen and white elm in the canopy, with some Manitoba maple, common buckthorn, hawthorns, and eastern red cedar in the sub-canopy. The understory is characterized by red raspberry, Canada goldenrod, gray dogwood, and staghorn

sumac, with a thinner groundcover of field horsetail, riverbank grape, green foxtail, and quack grass.

RB-A – Fresh-Moist Poplar Deciduous Woodland Type (WODM5-1)
This portion of the rail bed consists primarily of trembling aspen with white elm, silver maple, and red oak, with along with Manitoba maple in the sub-canopy. The understory is dominated by red raspberry and Canada goldenrod, with staghorn sumac and common reed. Groundcover consists of red fescue, field horsetail, riverbank grape, and wild carrot.

RB-D – Dry-Fresh Forb Meadow Ecosite (MEFM1)
This portion of the rail bed consists of a sparse layer of staghorn sumac, Manitoba maple, eastern red cedar, and trembling aspen up to 10m in height. It is dominated by a dense understory of predominantly spotted knapweed, with some Canada goldenrod, red raspberry, and riverbank grape. The groundcover consists of similar species, as well as viper's bugloss. This community is highly disturbed, consisting of approximately 75% cover of exotic invasive species.

P024-W2 - Fresh-Moist Oak-Maple-Hickory Deciduous Forest Ecosite (FODM9)
This young forest community is dominated by bur oak, American basswood, and silver maple in the canopy, and bur oak, American basswood, and white elm in the sub-canopy. This forest contains abundant trees up to 24 cm dbh, with occasional snags. At the time of site investigation, we could not gain landowner permission to access this natural feature; therefore, an alternative (i.e. roadside) site investigation was conducted.

This segment of proposed distribution corridor is located within 120 m of several candidate significant natural features including two (2) woodlands and wildlife habitat (savannah, s-ranked bat habitat and animal movement corridors), and will be discussed in more detail in the evaluation of significance phase of this Project.

8.0 Summary of Site Investigations Results

Comprehensive site investigations for the Project were conducted in the fall of 2010, spring and fall of 2011 by NRSI biologists. These site investigations combined site-specific vegetation mapping and floral inventories with roadside inventories, where site access was not available.

The results of the site investigations confirmed the boundaries and habitat composition of several candidate significant wildlife habitats within the Project Area, including woodlands, areas of seasonal wildlife use, movement corridors, and rare vegetation communities. In addition, the presence of a single wetland within 120 m of the Project location was confirmed by NRSI biologists.

The presence of these natural features in proximity to each of the proposed development activities has been provided in Table 6a and 6b below.

Table 6a. Site Investigation Summary and Evaluation of Significance Requirements for the Proposed Turbines within the Project Area

This table identifies the natural features that have been identified within 120 m of each proposed turbine, and their distances from Project components. These features include: woodlands, wetlands, and other natural features which may provide significant wildlife habitat. An Evaluation of Significance (EOS) is required where any natural feature is located within 120 m of the Project location.

In the following table, the term 'in' has been attributed to proposed Project components that are located within a natural feature. Project components which are immediately adjacent to a natural feature are identified as being located <1 m from the natural feature. Project components adjacent to a natural feature are identified as being 1 m to 10 m from the natural feature. In most cases, the access roads have been attributed to individual proposed turbines.

Project Component	Woodlands	Wetlands	Candidate Significant Wildlife Habitat				EOS Required
			Seasonal Concentration Areas	Rare Vegetation Communities and Specialized Wildlife Habitat	Habitats of Species of Conservation Concern	Animal Movement Corridors	
Proposed turbines							
P001	P001-W1 (54 m from turbine)	No	Bat Maternity Roost P001-W1 (54 m from turbine)	No	Habitat for S-Ranked Bat Species P001-W1 (54 m from turbine)	P001-H2 (in access road/ cabling) P138-H1 (in access road/ cabling)	Yes

Project Component	Woodlands	Wetlands	Candidate Significant Wildlife Habitat				EOS Required
			Seasonal Concentration Areas	Rare Vegetation Communities and Specialized Wildlife Habitat	Habitats of Species of Conservation Concern	Animal Movement Corridors	
Proposed turbines							
P002	No	No	Reptile Hibernacula (immediately adjacent to cabling)	No	No	P002-H1 (immediately adjacent to access road/cabling)	Yes
P003	No	No	No	No	No	P003-H1 (adjacent to access road/ cabling)	Yes
P004	No	No	No	No	No	P009-D1 (immediately adjacent to turbine) P004-H1 (immediately adjacent to turbine/access road/cabling) P003-H1 (immediately adjacent to access road/cabling) P003-H2 (75m from turbine)	Yes
P005	No	No	No	No	No	P005-H1 (immediately adjacent to access road/cabling) P005-H2 (60 m from turbine) P005-D2 (immediately adjacent to access road/cabling)	Yes
P006	No	No	No	No	No	P009-D1 (in cabling/access road) P003-H2 (in cabling/access road)	Yes
P007	No	No	No	No	No	P009-D1 (in access road/ cabling) P009-H1 (in access road/ cabling)	Yes
P008	No	No	No	No	No	No	No

Project Component	Woodlands	Wetlands	Candidate Significant Wildlife Habitat				EOS Required
			Seasonal Concentration Areas	Rare Vegetation Communities and Specialized Wildlife Habitat	Habitats of Species of Conservation Concern	Animal Movement Corridors	
Proposed turbines							
P009	No	No	No	No	No	P009-D1 (in access road/ cabling) P009-D2 (in access road cabling) P009-H1 (in access road/ cabling) P009-H3 (in cabling) P009-H4 (in access road/ cabling) P009-H5 (20 m from cabling)	Yes
P010	No	No	No	No	No	P010-H2 (110 m from turbine)	Yes
P012	P011-W1 (in access road/cabling) RB-B1 (22m to cabling and access road)	No	No	Tallgrass Prairie RB-B1 (22m to cabling and access road) Savannah RB-B1 (22m to cabling and access road)	Habitat for S-Ranked Bat Species P011-W1 (in access road/ cabling) Habitat for S-Ranked Bat Species RB-B1 (22m to cabling and access road)	P101-D1 (18 m from turbine) P011-H1 (18 m from turbine) P012-H1 (18 m from turbine) RB-B1 (22m to cabling/access road)	Yes
P013	No	No	No	No	No	P019-D2 (in cabling/ cabling/access road) P013-H1 (36 m from turbine and 33m from access road/ cabling)	Yes
P014	No	P014-WE1 (immediately adjacent to access road/ cabling)	No	Amphibian Breeding Habitat P014-WE1 (immediately adjacent to access road/ cabling)	Habitat for S-Ranked Bat Species P014-WE1 (immediately adjacent to access road/ cabling)	P013-D1 (87 m from access road/ cabling)	Yes

Project Component	Woodlands	Wetlands	Candidate Significant Wildlife Habitat				EOS Required
			Seasonal Concentration Areas	Rare Vegetation Communities and Specialized Wildlife Habitat	Habitats of Species of Conservation Concern	Animal Movement Corridors	
Proposed turbines							
P016	No	No	No	No	No	P016-D2 (immediately adjacent to cabling/access road) P016-H1 (84 m from turbine) P016-H3 (immediately adjacent to cabling/access road)	Yes
P017	P017-W1 (92 m from turbine)	No	No	No	Habitat for S-Ranked Bat Species P017-W1 (92 m from turbine)	P018-D1 (immediately adjacent cabling/access road)	Yes
P018	No	No	No	No	No	P018-D1 (84 m from cabling/access road)	Yes
P019	No	No	No	No	No	No	No
P020	No	No	No	No	No	SSS-D1 (immediately adjacent to cabling) P020-H1 (immediately adjacent to cabling)	Yes
P021	No	No	No	No	No	P020-H1 (70 m to cabling/access road)	Yes
P022	P022-W1 (in cabling)	No	No	No	Habitat for S-Ranked Bat Species P022-W1 (in cabling) Area Sensitive Bird Breeding Habitat P022-W1 (in cabling)	SSS-D1 (in cabling)	Yes
P023	No	No	No	No	No	P023-D1 (immediately adjacent to access road/cabling) P023-H1 (85 m to turbine) P023-H2 (immediately adjacent to access road/cabling)	Yes

Project Component	Woodlands	Wetlands	Candidate Significant Wildlife Habitat				EOS Required
			Seasonal Concentration Areas	Rare Vegetation Communities and Specialized Wildlife Habitat	Habitats of Species of Conservation Concern	Animal Movement Corridors	
Proposed turbines							
P024	No	No	No	No	No	P156-D2 (in access road/ cabling)	Yes
P026	No	No	No	No	No	P026-D1 (in cabling) P155-H1 (immediately adjacent to cabling/access road)	Yes
P028	No	No	Reptile Hibernacula (57 m to cabling/access road)	No	No	P029-H1 (in cabling/access road)	Yes
P029	No	No	No	No	Open Country Bird Breeding Habitat (in cabling/access road) (37 m from turbine)	No	Yes
P030	No	No	No	No	Open Country Bird Breeding Habitat (in cabling/access road)	P030-D1 (in cabling/access road)	Yes
P031	No	No	No	No	No	P031-D1 (in cabling)	Yes
P032	No	No	No	No	No	P032-D1 (in access road/ cabling)	Yes
P033	P033-W1 (adjacent to cabling/access road)	No	No	No	Habitat for S-Ranked Bat Species P033-W1 (adjacent to cabling/access road)	P033-D1 (in cabling/access road) P033-H1 (79 m cabling/access road)	Yes
P034	RB-E3 (immediately adjacent to cabling)	No	No	Savannah RB-E3 (immediately adjacent to cabling)	Habitat for S-Ranked Bat Species RB-E3 (immediately adjacent to cabling)	RB-E3 (immediately adjacent to cabling)	Yes

Project Component	Woodlands	Wetlands	Candidate Significant Wildlife Habitat				EOS Required
			Seasonal Concentration Areas	Rare Vegetation Communities and Specialized Wildlife Habitat	Habitats of Species of Conservation Concern	Animal Movement Corridors	
Proposed turbines							
P035	P108-W1 (16m to access road) (86m to turbine)	P108-WE1 (16m to access road) (86m to turbine)	Bat Maternity Roost P108-W1 P108-WE1 (16m to access road) (86m to turbine)	Amphibian Breeding Habitat P108-W1 P108-WE1 (16m to access road) (86m to turbine)	Habitat for S-Ranked Bat Species P108-W1 P108-WE1 (16m to access road) (86m to turbine) Area Sensitive Bird Breeding Habitat P108-W1 P108-WE1 (16m to access road) (86m to turbine)	P035-H1 (in access road and cabling)	Yes
P036	P108-W1 (16m to access road)	P108-WE1 (16m to access road)	Bat Maternity Roost P108-W1 P108-WE1 (16m to access road)	Amphibian Breeding Habitat P108-W1 P108-WE1 (16m to access road)	Habitat for S-Ranked Bat Species P108-W1 P108-WE1 (16m to access road) Area Sensitive Bird Breeding Habitat P108-W1 P108-WE1 (16m to access road)	P035-D1 (75 m from turbine) P035-H1 (in cabling/access road) P120-H1 (immediately adjacent to cabling/access road) P120-H2 (immediately adjacent to cabling/access road)	Yes
P037	No	No	No	No	No	P037-D1 (85 m from turbine) P037-H1 (30 m from turbine) P038-H1 (30 m from turbine and 27m from cabling/access road)	Yes
P038	No	No	No	No	No	P037-D1 (in cabling) CLA-D3 (immediately adjacent to access road) P038-H1 (30 m from turbine and 27m from access road/ cabling)	Yes

Project Component	Woodlands	Wetlands	Candidate Significant Wildlife Habitat				EOS Required
			Seasonal Concentration Areas	Rare Vegetation Communities and Specialized Wildlife Habitat	Habitats of Species of Conservation Concern	Animal Movement Corridors	
Proposed turbines							
P039	No	No	No	No	No	P037-D1 (in cabling) P041-D1 (in cabling) P040-H2 (84 m from turbine)	Yes
P040	RB-A2 (90 m from turbine) RB-E4 (70 m from turbine and 67m from access road)	No	Bat Maternity Roost RB-A2 (90 m from turbine)	No	Habitat for S-Ranked Bat Species RB-A2 (90 m from turbine) RB-E4 (70 m from turbine and 67m from access road)	P041-D1 (72 m from turbine and 69m from cabling/access road) P040-H2 (72 m from turbine and 69m from cabling/access road) RB-A2 (90 m from turbine) RB-E4 (70 m from turbine)	Yes
P041	No	No	No	No	No	P041-D1 (in cabling/access road) P041-H1 (in cabling/access road) P040-H2 (immediately adjacent to cabling)	Yes
P042	No	No	No	No	No	P120-H1 (in cabling/access road) P120-H2 (in cabling/access road) P042-H1 (110 m from turbine)	Yes
P044	No	No	No	No	No	P045-D1 (in cabling/access road) P044-H1 (immediately adjacent to cabling/access road)	Yes
P045	No	No	No	No	No	P045-D1 (immediately adjacent to access road/cabling) P045-H1 (adjacent to cabling/access road)	Yes

Project Component	Woodlands	Wetlands	Candidate Significant Wildlife Habitat				EOS Required
			Seasonal Concentration Areas	Rare Vegetation Communities and Specialized Wildlife Habitat	Habitats of Species of Conservation Concern	Animal Movement Corridors	
Proposed turbines							
P046	No	No	No	No	No	CLA-H1 (15 m from turbine)	Yes
P052	No	No	No	No	No	P052-D1 (85m from turbine) P051-D1 (immediately adjacent to cabling/access road/) P110-D1 (in cabling) P051-H1 (immediately adjacent to cabling) P052-H1 (84 m from turbine)	Yes
P053	P053-W3 (52 m from turbine) P053-W4 (30 m to access road/ cabling)	No	No	No	Habitat for S-Ranked Bat Species P053-W3 (52 m from turbine) P053-W4 (30 m to access road/cabling)	No	Yes
P054	No	No	No	No	No	P055-D1 (immediately adjacent to access road/cabling) P054-H1 (18 m from turbine)	Yes
P055	No	No	No	No	No	P055-D1 (in access road/ cabling)	Yes
P056	No	No	No	No	No	P056-D2 (immediately adjacent to turbine/ cabling/access road)	Yes
P057	No	No	No	No	No	P056-D2 (110 m from turbine) P057-D1 (in cabling/access road)	Yes

Project Component	Woodlands	Wetlands	Candidate Significant Wildlife Habitat				EOS Required
			Seasonal Concentration Areas	Rare Vegetation Communities and Specialized Wildlife Habitat	Habitats of Species of Conservation Concern	Animal Movement Corridors	
Proposed turbines							
P058	No	No	No	No	No	P058-D1 (in cabling/access road) P058-D2 (immediately adjacent to cabling) P057-H1 (immediately adjacent to cabling) P058-H1 (immediately adjacent to cabling)	Yes
P060	No	No	No	No	No	P060-D1 (in turbine/adjacent to cabling/access road) P111-D1 (in access road/ cabling) P060-H4 (in turbine) P060-H5 (adjacent to cabling/access road)	Yes
P061	No	No	No	No	No	P094-D2 (immediately adjacent to cabling/ cabling/access road) P094-D5 (in) P061-H1 (95 m from turbine)	Yes
P062	No	No	No	No	No	P121-H1 (in access road/cabling)	Yes

Project Component	Woodlands	Wetlands	Candidate Significant Wildlife Habitat				EOS Required
			Seasonal Concentration Areas	Rare Vegetation Communities and Specialized Wildlife Habitat	Habitats of Species of Conservation Concern	Animal Movement Corridors	
Proposed turbines							
P063	No	No	No	No	No	P063-D1 (adjacent to cabling/access road) P063-D2 (immediately adjacent to cabling) P063-H1 (immediately adjacent to cabling/access road) P063-H2 (73 m to cabling)	Yes
P064	P064-W1 (66 m to turbine)	No	No	No	Habitat for S-Ranked Bat Species P064-W1 (66 m to turbine)	P064-D1 (immediately adjacent to cabling/access road)	Yes
P065	P065-W1 (76 m from turbine and 73m from access road) P065-W2 (84 m from turbine and 81m from access road)	No	Reptile Hibernacula (immediately adjacent to cabling)	No	Habitat for S-Ranked Bat Species P065-W1 (76 m from turbine and 73m from access road) P065-W2 (84 m from turbine and 81m from access road)	P065-D1 (in cabling) P065-D2 (84 m from turbine) P065-H1 (in cabling/ access road)	Yes
P066	RB-F3 (immediately adjacent to cabling)	No	No	Savannah RB-F3 (immediately adjacent to cabling)	Habitat for S-Ranked Bat Species RB-F3 (immediately adjacent to cabling)	P064-D1 (immediately adjacent to cabling/access road) P066-H1 (36 m from turbine) P066-H2 (immediately adjacent to access road/cabling) RB-F3 (immediately adjacent to cabling)	Yes

Project Component	Woodlands	Wetlands	Candidate Significant Wildlife Habitat				EOS Required
			Seasonal Concentration Areas	Rare Vegetation Communities and Specialized Wildlife Habitat	Habitats of Species of Conservation Concern	Animal Movement Corridors	
Proposed turbines							
P067	RB-F3 (in cabling/38 m from turbine)	No	No	Savannah RB-F3 (in cabling/38 m from turbine)	Habitat for S-Ranked Bat Species RB-F3 (in cabling/38 m from turbine)	P067-H2 (immediately adjacent to cabling) RSS-H1 (in cabling) RB-F3 (in cabling/38 m from turbine)	Yes
P068	No	No	No	No	No	P068-D1 (37 m from cabling/access road) P068-H1 (72 m from turbine)	Yes
P069	No	No	No	No	No	P069-H1 (immediately adjacent to cabling/access road) P069-H2 (72 m to access road/ cabling) P069-D1 (72 m to access road/ cabling) P069-D2 (72 m to access road/ cabling)	Yes
P070	No	No	No	No	No	P070-H1 (immediately adjacent to cabling/access road) P070-D1 (70 m from turbine)	Yes
P071	No	No	No	No	No	No	No
P072	No	No	Reptile Hibernacula (immediately adjacent to access road and cabling)	No	No	P072-D1 (immediately adjacent to cabling/access road) P072-H1 (immediately adjacent to cabling/access road)	Yes
P073	No	No	No	No	No	P124-D1 (in cabling) P072-D1 (in access road/ cabling)	Yes

Project Component	Woodlands	Wetlands	Candidate Significant Wildlife Habitat				EOS Required
			Seasonal Concentration Areas	Rare Vegetation Communities and Specialized Wildlife Habitat	Habitats of Species of Conservation Concern	Animal Movement Corridors	
Proposed turbines							
P074	No	No	Reptile Hibernacula (in cabling/immediately adjacent to access road)	No	No	P074-D1 (immediately adjacent to access road/cabling)	Yes
P075	P114-W1 (in access road/ cabling) (58m to turbine)	No	No	No	Habitat for S-Ranked Bat Species P114-W1 (in access road/ cabling) (58m to turbine)	P114-D1 (in access road/ cabling) P116-D2 (immediately adjacent to access road/cabling)	Yes
P077	P077-W1 (90m from turbine/in access road/ cabling)	No	No	No	Habitat for S-Ranked Bat Species P077-W1 (90m from turbine/in access road/ cabling)	P116-D2 (immediately adjacent access road/cabling) P078-H1 (immediately adjacent to access road/cabling) P078-H3 (immediately adjacent to access road/cabling)	Yes
P078	No	No	No	No	No	P078-H2 (immediately adjacent to access road/cabling) P078-H3 (immediately adjacent to access road/cabling) P078-H4 (immediately adjacent to access road/cabling)	Yes
P079	No	No	No	No	No	P079-D1 (in cabling) P115-D1 (immediately adjacent to access road/cabling) P116-D1 (adjacent to cabling)	Yes

Project Component	Woodlands	Wetlands	Candidate Significant Wildlife Habitat				EOS Required
			Seasonal Concentration Areas	Rare Vegetation Communities and Specialized Wildlife Habitat	Habitats of Species of Conservation Concern	Animal Movement Corridors	
Proposed turbines							
P080	No	No	No	No	No	P080-D1 (62 m from access road/ cabling) P080-H1 (immediately adjacent to access road/ cabling)	Yes
P081	No	No	No	No	No	P081-D2 (106 m from access road/ cabling) P081-H2 (106 m from access road/ cabling)	Yes
P082	P082-W1 (adjacent to access road/ cabling)	No	No	No	Habitat for S-Ranked Bat Species P082-W1 (adjacent to access road/ cabling)	P081-D2 (in cabling) P082-D1 (in cabling) P083-D1 (in access road/ cabling) P083-D5 (51 m to turbine) P082-H1 (87 m to access road)	Yes
P087	No	No	No	No	No	P070-D1 (84 m to access road/cabling)	Yes
P091	P091-W1 (112 m to turbine and 109m to access road)	No	No	No	Habitat for S-Ranked Bat Species P091-W1 (112 m to turbine and 109m to access road)	P091-H1 (immediately adjacent to access road/ cabling) P091-H2 (54 m to access road/cabling)	Yes
P092	P092-W1 (77 m to turbine and 74m to access road)	No	No	No	Habitat for S-Ranked Bat Species P092-W1 (77 m to turbine and 74m to access road)	P015-H1 (in access road/ cabling) P015-H2 (immediately adjacent to access road/cabling) P092-H1 (104 m to access road/cabling)	Yes
P093	No	No	No	No	No	No	No

Project Component	Woodlands	Wetlands	Candidate Significant Wildlife Habitat				EOS Required
			Seasonal Concentration Areas	Rare Vegetation Communities and Specialized Wildlife Habitat	Habitats of Species of Conservation Concern	Animal Movement Corridors	
Proposed turbines							
P094	RB-F2 (in cabling)	No	No	Savannah RB-F2 (in cabling)	Habitat for S-Ranked Bat Species RB-F2 (in cabling)	P094-D1 (immediately adjacent to access road) P094-H1 (immediately adjacent to access road) P094-H2 (immediately adjacent to access road/cabling) P094-H3 (immediately adjacent to cabling) RB-F2 (in cabling)	Yes
P095	No	No	No	No	No	P071-D4 (immediately adjacent to access road/cabling) P095-H2 (immediately adjacent to access road/cabling)	Yes
P097	No	No	No	No	No	P097-D1 (in access road/ cabling) P097-H1 (immediately adjacent to access road/cabling) P111-H1 (in cabling/ immediately adjacent to access road)	Yes
P098	No	No	No	No	No	P098-D1 (in access road/ cabling)	Yes
P099	No	No	No	No	No	P099-H1 (immediately adjacent to access road/cabling) P119-H1 (immediately adjacent to access road/ cabling)	Yes
P100	No	No	No	No	No	P100-D1 (immediately adjacent to cabling) P100-H1 (immediately adjacent to access road/cabling)	Yes

Project Component	Woodlands	Wetlands	Candidate Significant Wildlife Habitat				EOS Required
			Seasonal Concentration Areas	Rare Vegetation Communities and Specialized Wildlife Habitat	Habitats of Species of Conservation Concern	Animal Movement Corridors	
Proposed turbines							
P101	No	No	No	No	No	P101-D1 (66 m to access road/ cabling P012-H1 (in access road/ cabling)	Yes
P102	P102-W2 (in access road/ cabling)	No	No	No	Habitat for S-Ranked Bat Species P102-W2 (in access road/ cabling)	P102-H3 (immediately adjacent to access road/cabling)	Yes
P104	No	No	Waterfowl Stopover and Staging Area (in turbine/ access road/ cabling)	No	No	P104-D1 (in access road) P104-H1 (adjacent to access road/cabling) P104-H2 (in cabling/immediately adjacent to access road)	Yes
P106	No	No	Waterfowl Stopover and Staging Area (in turbine/ access road/ cabling)	No	No	P106-D1 (in access road/ cabling) P106-H1 (59 m to access road/ cabling) P106-H2 (in access road/immediately adjacent to cabling)	Yes
P107	No	No	Waterfowl Stopover and Staging Area (in turbine/ access road/ cabling)	No	No	P107-H1 (immediately adjacent to access road/ cabling) P107-H2 (immediately adjacent to access road/ cabling)	Yes

Project Component	Woodlands	Wetlands	Candidate Significant Wildlife Habitat				EOS Required
			Seasonal Concentration Areas	Rare Vegetation Communities and Specialized Wildlife Habitat	Habitats of Species of Conservation Concern	Animal Movement Corridors	
Proposed turbines							
P108	P108-W1 (adjacent to cabling/access road)	P108-WE1 (adjacent to cabling/access road)	Bat Maternity Roost P108-W1 P108-WE1 (adjacent to cabling/access road)	Amphibian Breeding Habitat P108-W1 P108-WE1 (adjacent to cabling/access road)	Habitat for S-Ranked Bat Species P108-W1 P108-WE1 (adjacent to cabling/access road) Area Sensitive Bird Breeding Habitat P108-W1 P108-WE1 (adjacent to cabling/access road)	P035-D1 (in access road/ cabling) P035-H1 (immediately adjacent to access road/cabling)	Yes
P109	P042-W1 (112 m to turbine and 109m to access road)	No	No	No	Habitat for S-Ranked Bat Species P042-W1 (112 m to turbine and 109m to access road) Area Sensitive Bird Breeding Habitat P042-W1 (112 m to turbine and 109m to access road)	P109-D1 (in access road/ cabling) P042-H1 (immediately adjacent to access road/ cabling)	Yes
P111	No	P111-WE1 (33 m to turbine)	No	No	Habitat for S-Ranked Bat Species P111-WE1 (33 m to turbine)	P111-H2 (30 m to access road/ cabling) P111-H3 (30 m to access road/ cabling) P111-H4 (in cabling/immediately adjacent to access road)	Yes
P113	No	No	No	No	No	P113-H1 (immediately adjacent to access road/cabling) P113-H2 (immediately adjacent to access road/cabling)	Yes

Project Component	Woodlands	Wetlands	Candidate Significant Wildlife Habitat				EOS Required
			Seasonal Concentration Areas	Rare Vegetation Communities and Specialized Wildlife Habitat	Habitats of Species of Conservation Concern	Animal Movement Corridors	
Proposed turbines							
P115	No	No	No	No	No	P115-D1 (adjacent to access road/cabling) P115-D2 (immediately adjacent to access road/cabling) P115-H1 (immediately adjacent to access road/cabling) P115-H2 (16 m to access road/cabling)	Yes
P116	No	No	No	No	No	P116-D1 (immediately adjacent to access road/cabling) P116-D2 (immediately adjacent to cabling) P116-D3 (immediately adjacent to cabling)	Yes
P118	P118-W1 (55 m to turbine and 52m to access road)	No	Waterfowl Stopover and Staging Area (in turbine/ access road/ cabling) Bat Maternity Roost P118-W1 (55 m to turbine and 52m to access road)	No	Habitat for S-Ranked Bat Species P118-W1 (55 m to turbine and 52m to access road)	P118-H1 (adjacent to access road/ cabling) P106-D2 (in access road/cabling)	Yes
P120	P108-W1 (76 m to turbine)	No	Bat Maternity Roost P108-W1 (76 m to turbine)	Amphibian Breeding Habitat P108-W1 (76 m to turbine)	Habitat for S-Ranked Bat Species P108-W1 (76 m to turbine) Area Sensitive Bird Breeding Habitat P108-W1 (76 m to turbine)	P108-D1 (112 m to cabling) P120-H1 (14 m to access road/cabling)	Yes
P121	No	No	No	No	No	P121-H1 (in access road/ cabling)	Yes

Project Component	Woodlands	Wetlands	Candidate Significant Wildlife Habitat				EOS Required
			Seasonal Concentration Areas	Rare Vegetation Communities and Specialized Wildlife Habitat	Habitats of Species of Conservation Concern	Animal Movement Corridors	
Proposed turbines							
P122	No	No	No	No	No	P081-D1 (immediately adjacent to access road/cabling) P122-D1 (in access road/ cabling) P122-H1 (immediately adjacent to access road/cabling)	Yes
P124	No	No	No	No	No	P124-D1 (immediately adjacent to cabling/access road) P124-D2 (in cabling/immediately adjacent to access road)	Yes
P125	RB-F3 (18 m to turbine)	No	No	Savannah RB-F3 (18 m to turbine)	Habitat for S-Ranked Bat Species RB-F3 (18 m to turbine)	P126-D2 (in cabling) P125-H1 (21 m to turbine) RB-F3 (18 m to turbine) P125-H2 (adjacent to cabling)	Yes
P126	No	No	No	No	No	P126-D1 (in cabling) P126-D2 (in access road/ cabling)	Yes
P132	No	No	No	No	No	P076-D3 (immediately adjacent to cabling) P116-D2 (immediately adjacent to cabling)	Yes
P133	P022-W1 (in cabling)	No	No	No	Habitat for S-Ranked Bat Species P022-W1 (in cabling) Area Sensitive Bird Breeding Habitat P022-W1 (in cabling)	P027-D1 (adjacent to cabling/access road)	Yes

Project Component	Woodlands	Wetlands	Candidate Significant Wildlife Habitat				EOS Required
			Seasonal Concentration Areas	Rare Vegetation Communities and Specialized Wildlife Habitat	Habitats of Species of Conservation Concern	Animal Movement Corridors	
Proposed turbines							
P135	RB-A1 (immediately adjacent to cabling)	No	No	No	Habitat for S-Ranked Bat Species RB-A1 (immediately adjacent to cabling)	P031-D1 (immediately adjacent to access road/cabling) P031-H1 (27 m from cabling) P135-H1 (immediately adjacent to access road/cabling) P155-H1 (27 m to cabling) RB-A1 (immediately adjacent to cabling)	Yes
P138	No	No	No	No	No	P138-H1 (in access road/ cabling) P138-H2 (in access road/ cabling)	Yes
P139	No	No	Waterfowl Stopover and Staging Area (in turbine/ access road/ cabling)	No	No	P139-D1 (in cabling) P139-H1 (25 m to turbine)	Yes
P140	No	No	Waterfowl Stopover and Staging Area (in turbine/ access road/ cabling)	No	No	P140-D2 (in access road/ cabling) P140-H1 (adjacent to access road/ cabling) P140-H3 (immediately adjacent to access road/cabling)	Yes
P145	No	No	No	No	No	P010-H1 (immediately adjacent to cabling) P145-H1 (immediately adjacent to access road/cabling) P145-D1 (in cabling/immediatel y adjacent to access road)	Yes

Project Component	Woodlands	Wetlands	Candidate Significant Wildlife Habitat				EOS Required
			Seasonal Concentration Areas	Rare Vegetation Communities and Specialized Wildlife Habitat	Habitats of Species of Conservation Concern	Animal Movement Corridors	
Proposed turbines							
P148	P064-W1 (immediately adjacent to access road/ cabling)	No	No	No	Habitat for S-Ranked Bat Species P064-W1 (immediately adjacent to access road/ cabling)	P064-D3 (in access road/ cabling) P064-H1 (in access road/ cabling)	Yes
P149	No	No	No	No	No	P117-D1 (in turbine/30 m to access road/ cabling)	Yes
P150	No	No	No	No	No	P115-D1 (immediately adjacent to access road/cabling) P113-H1 (immediately adjacent to access road/cabling)	Yes
P152	P102-W2 (in access road/ cabling)	No	No	No	Habitat for S-Ranked Bat Species P102-W2 (in access road/ cabling)	P102-D1 (in access road/ cabling) P102-H3 (immediately adjacent to access road/cabling)	Yes
P154	No	No	No	No	No	P080-D1 (immediately adjacent to cabling) P080-H1 (in access road/ cabling) P080-H3 (adjacent to cabling)	Yes
P155	P024-W2 (78 m to turbine)	No	No	No	Habitat for S-Ranked Bat Species P024-W2 (78 m to turbine)	P031-D1 (in access road/ cabling) P155-H1 (immediately adjacent to access road/cabling)	Yes

Project Component	Woodlands	Wetlands	Candidate Significant Wildlife Habitat				EOS Required
			Seasonal Concentration Areas	Rare Vegetation Communities and Specialized Wildlife Habitat	Habitats of Species of Conservation Concern	Animal Movement Corridors	
Proposed turbines							
P156	P024-W1 (27 m to cabling/access road) P156-W1 (immediately adjacent to access road/ cabling) RB-A (107 m to access road/ cabling)	No	No	No	Habitat for S-Ranked Bat Species P024-W1 (27 m to cabling/access road) P156-W1 (immediately adjacent to access road/ cabling) RB-A (107 m to access road/ cabling) Area Sensitive Bird Breeding Habitat P156-W1 (immediately adjacent to access road/ cabling)	P156-D2 (immediately adjacent to access road/ cabling) P031-H1 (immediately adjacent to access road/ cabling) RB-A (107 m to access road/cabling)	Yes
P161	No	No	No	No	No	P127-D1 (in access road/ cabling/immediatel y adjacent to cabling) P127-H2 (60 m to turbine)	Yes
P162	P162-W1 (17m to cabling) P162-W2 (14m to access road/cabling)	No	Reptile Hibernacula P162-W1 (17m to cabling)	Amphibian Breeding Habitat P162-W1 (17m to cabling)	Habitat for S-Ranked Bat Species P162-W1 (17m to cabling) P162-W2 (14m to access road/cabling) Area Sensitive Bird Breeding Habitat P162-W2 (14m to access road/cabling)	No	Yes
P163	No	No	No	No	No	P097-D1 (immediately adjacent to cabling) P096-H1 (in access road/ cabling) P096-H3 (in access road/cabling)	Yes

Project Component	Woodlands	Wetlands	Candidate Significant Wildlife Habitat				EOS Required
			Seasonal Concentration Areas	Rare Vegetation Communities and Specialized Wildlife Habitat	Habitats of Species of Conservation Concern	Animal Movement Corridors	
Proposed turbines							
P164	No	No	No	No	No	P112-D1 (immediately adjacent to access road/ cabling) P060-D1 (in cabling/immediately adjacent to cabling/access road) P112-H1 (immediately adjacent to access road/ cabling) P164-H1 (immediately adjacent to access road/ cabling)	Yes
P166	P166-W1 (74 m to turbine) P166-W2 (26 m to turbine)	No	No	No	Habitat for S-Ranked Bat Species P166-W1 (74 m to turbine) P166-W2 (26 m to turbine)	P093-H2 (adjacent to cabling) P093-H3 (adjacent to cabling) P166-H1 (79 m to turbine)	Yes
P167	No	No	No	No	No	P009-D1 (in access road/ cabling) P003-H2 (in access road/ cabling)	Yes
P168	RB-B (in cabling/immediately adjacent to access road/ cabling)	No	No	Tallgrass Prairie RB-B (in cabling/immediately adjacent to access road/ cabling) Savannah RB-B (in cabling/immediately adjacent to access road/ cabling)	RB-B (in cabling/immediately adjacent to access road/ cabling)	P011-D1 (in cabling/immediately adjacent to access road/ cabling) P101-D1 (in access road/ cabling/immediately adjacent to cabling) RB-B1 (in cabling/immediately adjacent to access road/ cabling)	Yes
P171	No	No	Waterfowl Stopover and Staging Area (in turbine/ access road/ cabling)	No	No	P002-D2 (in cabling) P107-H1 (immediately adjacent to access road/ cabling)	Yes

Project Component	Woodlands	Wetlands	Candidate Significant Wildlife Habitat				EOS Required
			Seasonal Concentration Areas	Rare Vegetation Communities and Specialized Wildlife Habitat	Habitats of Species of Conservation Concern	Animal Movement Corridors	
Proposed turbines							
P173	P173-W1 (78 m to turbine)	No	No	No	Habitat for S-Ranked Bat Species P173-W1 (78 m to turbine)	P016-D2 (in access road/ cabling/immediately adjacent to cabling) P016-H4 (42 m to access road/ cabling) P173-H1 (immediately adjacent to access road/ cabling)	Yes
P174	No	No	No	No	No	P175-D1 (in access road/ cabling)	Yes
P175	No	No	No	No	No	P175-D1 (in access road/ cabling) P176-D2 (immediately adjacent to cabling)	Yes
P176	No	No	No	No	No	P087-D1 (immediately adjacent to cabling) P087-D2 (adjacent to cabling)	Yes

Table 6b. Site Investigation Summary and Evaluation of Significance Requirements for the Other Project Components

This table identifies the natural features that have been identified within 120 m of the other Project components, and their distances from Project components. These features include: woodlands, wetlands, and other natural features which may provide significant wildlife habitat. An Evaluation of Significance (EOS) is required where any natural feature is located within 120 m of the Project location.

In the following table, the term 'in' has been attributed to proposed Project components that are located within a natural feature. Project components which are immediately adjacent to a natural feature are identified as being located <1 m from the natural feature. Project components adjacent to a natural feature are identified as being 1 m to 10 m from the natural feature. In most cases, the access roads have been attributed to individual proposed turbines.

Project Component	Woodlands	Wetlands	Candidate Significant Wildlife Habitat				EOS Required
			Seasonal Concentration Areas	Rare Vegetation Communities and Specialized Wildlife Habitat	Habitats of Species of Conservation Concern	Animal Movement Corridors	
Cabling Route							
Gore Rd: Wheatley Rd to King & Whittle Rd	No	No	No	No	No	P080-H3 (adjacent) P080-H4 (adjacent)	Yes
Davidson Rd: Gray Ln to Middle Ln	No	No	No	No	No	P079-D1 (immediately adjacent) P115-D1 (immediately adjacent) P116-D1 (immediately adjacent) P116-D2 (immediately adjacent) P116-D3 (immediately adjacent)	Yes
Oak Rd: Gray Ln to Pollard Ln	No	No	No	No	No	P080-D1 (immediately adjacent) P076-D2 (immediately adjacent) P076-D3 (immediately adjacent) P074-D1 (immediately adjacent) P113-D1 (immediately adjacent)	Yes

Project Component	Woodlands	Wetlands	Candidate Significant Wildlife Habitat				EOS Required
			Seasonal Concentration Areas	Rare Vegetation Communities and Specialized Wildlife Habitat	Habitats of Species of Conservation Concern	Animal Movement Corridors	
Middle Line & Valetta Road: Davidson Road to Pollard Line	P114-W1 (immediately adjacent)	No	No	No	Habitat for S-Ranked Bat Species P114-W1 (in)	P115-D2 (immediately adjacent) P114-D1 (in) P076-D3 (immediately adjacent) P074-D2 (immediately adjacent) P124-D2 (immediately adjacent) P124-D1 (immediately adjacent) P078-H3 (adjacent) P124-H1 (adjacent) P115-H3 (adjacent)	Yes
Gleeson Line & Merlin Line: Pollard Line to Morris Line	RB-F3 (in)	No	No	Savannah RB-F3 (in)	Habitat for S-Ranked Bat Species RB-F3 (in)	P114-D2 (immediately adjacent) P072-D3 (immediately adjacent) P125-D1 (immediately adjacent) P126-D2 (immediately adjacent) P127-D1 (immediately adjacent) P161-D1 (in) P127-H1 (immediately adjacent) RB-F3 (in)	
Morris Ln: Pollard Ln to Cooper Rd	No	No	No	No	No	P071-D3 (immediately adjacent) P071-D4 (immediately adjacent) P095-D1 (immediately adjacent) P071-D2 (in) P072-D1 (immediately adjacent) P071-D1 (in) P096-H2 (immediately adjacent) P095-H1 (immediately adjacent)	Yes

Project Component	Woodlands	Wetlands	Candidate Significant Wildlife Habitat				EOS Required
			Seasonal Concentration Areas	Rare Vegetation Communities and Specialized Wildlife Habitat	Habitats of Species of Conservation Concern	Animal Movement Corridors	
Merlin Rd/6th Line West: Morris Ln to P099	RB-F (adjacent)	No	No	Savannah RB-F (adjacent)	Habitat for S-Ranked Bat Species RB-F (adjacent)	P067-D2 (in) P068-D1 (in) P095-H3 (immediately adjacent) P068-H2 (110 m) P067-H2 (immediately adjacent) P067-H3 (immediately adjacent) RB-F (adjacent)	Yes
Finn Line/Merlin Road: Cooper Road to 8th Line	No	No	No	No	No	P071-D4 (immediately adjacent) P069-D1 (adjacent) P069-D2 (in) P069-D6 (in)	Yes
Port Road/8th Line: Cooper Rd to Merlin Rd	No	No	No	No	No	P070-D2 (immediately adjacent) P069-D3 (immediately adjacent) P069-D5 (immediately adjacent) P069-D4 (in)	Yes

Project Component	Woodlands	Wetlands	Candidate Significant Wildlife Habitat				EOS Required
			Seasonal Concentration Areas	Rare Vegetation Communities and Specialized Wildlife Habitat	Habitats of Species of Conservation Concern	Animal Movement Corridors	
7th Ln W: Merlin Road to Hwy 401	P064-W1 (immediately adjacent)	No	No	No	Habitat for S-Ranked Bat Species P064-W1 (immediately adjacent)	P063-D2 (immediately adjacent) P129-D1 (immediately adjacent) P129-D2 (immediately adjacent) P064-D1 (in) P062-D1 (immediately adjacent) P062-D2 (immediately adjacent) P062-D3 (immediately adjacent) P098-D1 (immediately adjacent) P064-D3 (in) P063-D1 (immediately adjacent) P068-D2 (immediately adjacent) P063-H3 (immediately adjacent) P129-H1 (immediately adjacent) P064-H1 (immediately adjacent) P064-H5 (115 m) P098-H1 (115 m) P064-H2 (immediately adjacent) P068-H1 (immediately adjacent) P098-H2 (immediately adjacent) P121-H1 (immediately adjacent)	Yes
Wellwood Rd/10th Ln: 7th Ln to Bloomfield Rd	RB-A4 (adjacent)	No	No	No	No	P066-D2 (in) P066-D1 (in) P065-D3 (in) P094-D9 (in) P094-D1 (immediately adjacent) P094-D6 (in) P061-D1 (in) P111-D7 (in) P065-H6 (immediately adjacent) P065-H5 (immediately adjacent) P094-H6 (immediately adjacent) P111-H5 (immediately adjacent) RB-A4 (adjacent)	Yes

Project Component	Woodlands	Wetlands	Candidate Significant Wildlife Habitat				EOS Required
			Seasonal Concentration Areas	Rare Vegetation Communities and Specialized Wildlife Habitat	Habitats of Species of Conservation Concern	Animal Movement Corridors	
9th Ln: Bloomfield Rd to Charing Cross Rd	No	No	No	No	No	P097-D2 (immediately adjacent) P117-D1 (in) P097-D1 (in) P096-D1 (in) P055-D1 (in) P059-H1 (80 m) P059-H2 (immediately adjacent) P096-H3 (immediately adjacent) P097-H1 (immediately adjacent) P097-H2 (adjacent) P111-H1 (immediately adjacent) P164-H2 (immediately adjacent) P164-H3 (adjacent)	Yes
8th Ln: Dillon Rd to Bloomfield Rd	No	No	No	No	No	P065-D1 (in) P098-D1 (in) P061-D3 (in) P061-H3 (adjacent) P061-H2 (adjacent) P149-H5 (adjacent) P149-H2 (adjacent) P149-H6 (adjacent) P149-H3 (adjacent) P149-H4 (adjacent)	
10th Ln: Bloomfield Rd to Charing Cross Rd	P111-W1 (immediately adjacent)	No	Reptile Hibernacula (immediately adjacent)	No	Habitat for S-Ranked Bat Species P111-W1 (immediately adjacent)	P117-D2 (110 m) P100-D1 (in) P060-D1 (in) P111-D1 (immediately adjacent) P060-H2 (immediately adjacent) P112-H1 (immediately adjacent) P164-H1 (immediately adjacent)	Yes

Project Component	Woodlands	Wetlands	Candidate Significant Wildlife Habitat				EOS Required
			Seasonal Concentration Areas	Rare Vegetation Communities and Specialized Wildlife Habitat	Habitats of Species of Conservation Concern	Animal Movement Corridors	
Gagner Ln/Lagoon Rd: Charing CX Rd to Rail Bed	P054-W1 (adjacent) P054-W2 (adjacent)	P054-WE1 (55m)	No	No	Habitat for S-Ranked Bat Species P054-W2 (adjacent) P054-WE1 (55m)	P054-D1 (immediately adjacent) P056-D2 (in) P058-D3 (immediately adjacent) P051-H1 (adjacent) P051-H2 (adjacent)	Yes
Lagoon Rd & Horton Ln: Charing Cross Rd to Fargo Rd	P055-W1 (immediately adjacent)	No	No	No	Habitat for S-Ranked Bat Species P055-W1 (immediately adjacent)	P046-D1 (immediately adjacent) P051-D1 (immediately adjacent) P051-D2 (immediately adjacent) P051-D3 (immediately adjacent) P055-D2 (immediately adjacent) P046-D1 (immediately adjacent) P055-D1 (immediately adjacent) P110-D1 (in) P056-D1 (in) P056-D2 (in) P051-H1 (immediately adjacent) P051-H2 (immediately adjacent)	Yes
Fargo Rd: Horton Rd to the Rail Bed	RB-B (adjacent)	No	No	Savannah RB-B (adjacent)	Habitat for S-Ranked Bat Species RB-B (adjacent)	P046-D1 (immediately adjacent) P051-D1 (immediately adjacent) P052-D1 (immediately adjacent) P045-H1 (immediately adjacent) P046-H2 (immediately adjacent) P052-H1 (immediately adjacent) RB-B (adjacent)	Yes
Burk Ln: Mull Rd to Base Rd	No	No	No	No	No	P018-D1 (in) P016-D1 (in) P016-D2 (immediately adjacent) P016-H3 (immediately adjacent) P016-H4 (immediately adjacent) P016-H2 (immediately adjacent)	Yes

Project Component	Woodlands	Wetlands	Candidate Significant Wildlife Habitat				EOS Required
			Seasonal Concentration Areas	Rare Vegetation Communities and Specialized Wildlife Habitat	Habitats of Species of Conservation Concern	Animal Movement Corridors	
Base Rd: Burk Ln to Rail Bed	P091-W2 (110 m) P091-W3 (35 m)	No	No	No	Habitat for S-Ranked Bat Species P091-W2 (110 m) P091-W3 (35 m)	P016-D1 (in) P019-D2 (immediately adjacent) P091-H1 (immediately adjacent)	Yes
Base Rd/Ridge Ln: Welch Ln to Kent Bridge Rd	P092-W2 (110m) P014-W2 (34m)	P014-WE2 (86m)	No	No	Habitat for S-Ranked Bat Species P092-W2 (110m) Area Sensitive Bird Breeding Habitat P014-W2 (immediately adjacent) P014-WE2 (adjacent)	P102-D1 (in) P152-D1 (60m) P092-H1 (adjacent) P092-H4 (adjacent) P092-H5 (immediately adjacent)	Yes
Welch Ln: P155 to Base Rd	P014-W2 (immediately adjacent)	P014-WE2 (adjacent)	No	No	Habitat for S-Ranked Bat Species P014-W2 (immediately adjacent) P014-WE2 (adjacent) Area Sensitive Bird Breeding Habitat P014-W2 (immediately adjacent) P014-WE2 (adjacent)	P026-D1 (in) SSS-D2 (in) P027-D1 (in) SSS-D1 (in) P019-D1 (in) P155-H1 (immediately adjacent)	Yes
Kent Bridge Rd: Ridge Ln to Front Ln	No	No	No	No	No	P102-D1 (in) P093-D1 (in) P015-H1 (immediately adjacent) P093-H1 (immediately adjacent) P093-H2 (immediately adjacent) P093-H3 (immediately adjacent) P102-H1 (immediately adjacent) P102-H2 (immediately adjacent) P001-H2 (immediately adjacent) P001-H3 (immediately adjacent)	Yes

Project Component	Woodlands	Wetlands	Candidate Significant Wildlife Habitat				EOS Required
			Seasonal Concentration Areas	Rare Vegetation Communities and Specialized Wildlife Habitat	Habitats of Species of Conservation Concern	Animal Movement Corridors	
Mull Rd: Welch Ln to Brush Ln	P027-W1 (immediately adjacent)	No	No	No	Habitat for S-Ranked Bat Species P027-W1 (immediately adjacent)	SSS-D2 (immediately adjacent) P027-D1 (immediately adjacent) P005-D2 (in) P005-H6 (immediately adjacent) P005-H7 (immediately adjacent) P005-H5 (immediately adjacent) P005-H1 (immediately adjacent)	Yes
Mull Rd: Brush Ln to Sinclair Ln	P139-W1 (immediately adjacent)	No	Bat Maternity Roost P139-W1 (immediately adjacent)	No	Habitat for S-Ranked Bat Species P139-W1 (immediately adjacent)	P005-D1 (immediately adjacent) P009-D2 (immediately adjacent) P139-D2 (immediately adjacent) P005-H3 (immediately adjacent) P005-H4 (immediately adjacent) P009-H5 (immediately adjacent) P009-H3 (immediately adjacent) P008-H2 (immediately adjacent) P139-H2 (immediately adjacent)	Yes
Mull Road/New Scotland Line: Sinclair Line to P171	No	Rondeau Bay North Shore PSW (90m)	Waterfowl Stopover and Staging Area (in)	No	No	P139-D2 (35m) P139-D1 (in) P002-D2 (in) P171-D2 (30m)	Yes
Ed's Ln: Mull Rd to Kent Bridge Rd	P002-W1 (immediately adjacent) P002-W2 (immediately adjacent) P004-W1 (immediately adjacent)	No	Bat Maternity Roost P002-W1 (immediately adjacent) P002-W2 (immediately adjacent) P004-W1 (immediately adjacent)	No	Habitat for S-Ranked Bat Species P002-W2 (immediately adjacent) P004-W1 (immediately adjacent)	P009-D1 (in) P004-D1 (in) P002-D2 (in) P008-H1 (immediately adjacent) P008-H2 (immediately adjacent) P008-H3 (immediately adjacent) P002-H1 (immediately adjacent) P009-H2 (immediately adjacent) P003-H1 (immediately adjacent)	Yes

Project Component	Woodlands	Wetlands	Candidate Significant Wildlife Habitat				EOS Required
			Seasonal Concentration Areas	Rare Vegetation Communities and Specialized Wildlife Habitat	Habitats of Species of Conservation Concern	Animal Movement Corridors	
Kent Bridge Rd: Ed's Ln to New Scotland Ln	No	No	Waterfowl Stopover and Staging Area (in)	No	No	P002-D1 (immediately adjacent) P106-D2 (in) P105-H3 (immediately adjacent) P105-H4 (immediately adjacent) P118-H1 (immediately adjacent) P106-H3 (immediately adjacent)	Yes
New Scotland Line: Kent Bridge Rd to McKinlay Rd	No	No	Waterfowl Stopover and Staging Area (in)	No	No	P105-D1 (in) P104-D2 (in) P104-H2 (immediately adjacent) P105-H1 (immediately adjacent) P104-H3 (immediately adjacent) P103-H2 (immediately adjacent) P105-H2 (immediately adjacent) P104-H1 (immediately adjacent)	Yes
Cundle Ln: Fargo Rd to P038	CLA-W2 (in)	No	No	No	Habitat for S-Ranked Bat Species CLA-W2 (adjacent)	CLA-D2 (in) CLA-D3 (immediately adjacent)	Yes
Burk Ln: Huffman Rd to P034	P034-W1 (immediately adjacent)	No	No	No	Habitat for S-Ranked Bat Species P034-W1 (immediately adjacent)	P040-D2 (in) P034-D4 (in) P033-D1 (in)	Yes
Burk Ln: Harwich Rd to P031	No	No	No	No	No	P156-D4 (in) P031-H3 (adjacent)	Yes
Harwich Rd: Rail Bed to P026	No	No	No	No	No	P031-D1 (immediately adjacent) P135-D2 (immediately adjacent) P156-D3 (immediately adjacent) P034-H3 (adjacent)	Yes

Project Component	Woodlands	Wetlands	Candidate Significant Wildlife Habitat				EOS Required
			Seasonal Concentration Areas	Rare Vegetation Communities and Specialized Wildlife Habitat	Habitats of Species of Conservation Concern	Animal Movement Corridors	
Campbell Ln: Mull Rd to Harwich Rd	P029-W1 (immediately adjacent)	No	No	No	Habitat for S-Ranked Bat Species P029-W1 (immediately adjacent) Open Country Bird Breeding Habitat (adjacent)	P026-D1 (adjacent) P029-D1 (adjacent) P030-D1 (adjacent) P028-H3 (adjacent) P028-H4 (adjacent) P028-H5 (adjacent) P028-H6 (adjacent) P029-H1 (adjacent) P029-H2 (adjacent) P029-H3 (adjacent) P030-H1 (adjacent)	Yes
Harwich Rd: Campbell Ln to Stefina Ln	P030-W3 (adjacent) P030-W2 (adjacent)	No	No	No	No	P030-D2 (in) P140-D7 (in) P140-D8 (adjacent)	Yes
Talbot Trail: Communication Rd to Mull Rd	P139-W5 (adjacent) P139-W6 (adjacent) P139-W7 (adjacent) P139-W8 (adjacent) P139-W9 (adjacent)	No	Bat Maternity Roost P139-W5 (adjacent) P139-W6 (adjacent) P139-W6 (adjacent) P139-W7 (adjacent) P139-W8 (adjacent) P139-W9 (adjacent)	No	Habitat for S-Ranked Bat Species P139-W5 (adjacent) P139-W6 (adjacent) P139-W7 (adjacent) P139-W9 (adjacent) Area Sensitive Bird Breeding Habitat P139-W8	P002-D14 (adjacent) P002-D15 (in) P002-D16 (in) P002-D17 (in) P002-D18 (in) P002-H13 (adjacent) P002-H14 (adjacent) P002-H15 (adjacent) P002-H16 (adjacent) P002-H17 (60m)	Yes
Substations							
Railbed Substation	RB-F3 (adjacent)	No	No	Savannah RB-F3 (adjacent)	Habitat for S-Ranked Bat Species RB-F3 (adjacent)	P064-D1 (immediately adjacent) RSS-H1 (36 m) RB-F3 (adjacent)	Yes
Sattern Substation	RB-E2 (immediately adjacent)	No	No	Savannah RB-E2 (immediately adjacent)	Habitat for S-Ranked Bat Species RB-E2 (immediately adjacent)	SSS-D1 (35 m) P020-H1 (35 m) RB-E2 (immediately adjacent)	Yes
Transmission Corridor							

Project Component	Woodlands	Wetlands	Candidate Significant Wildlife Habitat				EOS Required
			Seasonal Concentration Areas	Rare Vegetation Communities and Specialized Wildlife Habitat	Habitats of Species of Conservation Concern	Animal Movement Corridors	
RSS to Dillon Rd	RB-F3 (adjacent) RB-A5 (adjacent) P065-W1 (14m) P065-W3 (12m)	No	No	Savannah RB-F3 (adjacent)	Habitat for S-Ranked Bat Species RB-F3 (adjacent) RB-A5 (adjacent) P065-W1 (immediately adjacent) P065-W3 (immediately adjacent)	P064-D1 (immediately adjacent) P064-D2 (in) P065-D1 (in) P065-D2 (in) P067-H1 (immediately adjacent) P064-H3 (adjacent) P066-H1 (immediately adjacent) P066-H2 (immediately adjacent) P064-H2 (immediately adjacent) P065-H2 (immediately adjacent) P065-H3 (immediately adjacent) P066-H3 (immediately adjacent) RB-F3 (adjacent) RB-A5 (adjacent)	Yes

Project Component	Woodlands	Wetlands	Candidate Significant Wildlife Habitat				EOS Required
			Seasonal Concentration Areas	Rare Vegetation Communities and Specialized Wildlife Habitat	Habitats of Species of Conservation Concern	Animal Movement Corridors	
Dillon Rd to Charing Cross Rd	RB-F2 (adjacent) RB-A4 (adjacent) RB-F1 (adjacent) RB-A3 (adjacent) RB-B4 (adjacent) P117-W1 (adjacent)	No	No	Tallgrass Prairie RB-B4 (adjacent) Savannah RB-B4 (adjacent) RB-F1 (adjacent) RB-F2 (adjacent)	Habitat for S-Ranked Bat Species RB-F2 (adjacent) RB-A4 (adjacent) RB-F1 (adjacent) RB-A3 (adjacent) RB-B4 (adjacent) P117-W1 (immediately adjacent)	P094-D2 (immediately adjacent) P094-D3 (in) P094-D1 (in) P117-D2 (in) P094-D5 (in) P061-D1 (in) P100-D1 (in) P060-D1 (in) P100-D2 (immediately adjacent) P112-D1 (immediately adjacent) P094-H4 (immediately adjacent) P061-H1 (in) P060-H1 (in) P100-H2 (in) P094-H2 (115 m) P094-H3 (immediately adjacent) P100-H5 (in) P100-H3 (adjacent) P060-H6 (15 m) P100-H4 (15 m) P060-H3 (in) RB-F2 (adjacent) RB-A4 (adjacent) RB-F1 (adjacent) RB-A3 (adjacent) RB-B4 (adjacent)	Yes

Project Component	Woodlands	Wetlands	Candidate Significant Wildlife Habitat				EOS Required
			Seasonal Concentration Areas	Rare Vegetation Communities and Specialized Wildlife Habitat	Habitats of Species of Conservation Concern	Animal Movement Corridors	
Charing Cross Rd to Huffman Rd	RB-B4 (adjacent) RB-E5 (adjacent) RB-B3 (adjacent) RB-D2 (adjacent) RB-E4 (adjacent) RB-A2 (adjacent) CLA-W2 (14m)	No	Bat Maternity Roost RB-A2 (adjacent)	Tallgrass Prairie RB-B3 (adjacent) RB-B4 (adjacent) Savannah RB-B3 (adjacent) RB-B4 (adjacent) RB-E4 (adjacent)	Habitat for S-Ranked Bat Species RB-B4 (adjacent) RB-E5 (adjacent) RB-B3 (adjacent) RB-D2 (adjacent) RB-E4 (adjacent) RB-A2 (adjacent) CLA-W2 (in) Open Country Bird Breeding Habitat P053-W2 (immediately adjacent)	P056-D1 (in) P053-D2 (in) P053-D3 (in) P039-D1 (110 m) CLA-D2 (in) P053-D1 (in) P040-D1 (in) P041-D1 (in) P058-H2 (in) P040-H2 (in) RB-B4 (adjacent) RB-E5 (adjacent) RB-B3 (adjacent) RB-D2 (adjacent) RB-E4 (adjacent) RB-A2 (adjacent)	Yes
Fargo Rd: Hwy 401 to the Chatham Switching Station	No	No	No	No	No	TRANS-D2 (in) TRANS-H4 (20 m)	Yes
Huffman Rd to SSS	RB-E3 (adjacent) RB-A1 (adjacent) RB-D1 (adjacent) RB-E2 (adjacent) P024-W2 (adjacent)	No	No	Savannah RB-E2 (adjacent) RB-E3 (adjacent)	Habitat for S-Ranked Bat Species RB-E3 (adjacent) RB-A1 (adjacent) RB-D1 (adjacent) RB-E2 (adjacent) P024-W2 (adjacent)	P034-D3 (in) P031-D1 (in) P023-D1 (in) SSS-D2 (in) P034-H3 (immediately adjacent) P024-H2 (in) P031-H1 (immediately adjacent) P031-H2 (immediately adjacent) RB-E3 (adjacent) RB-A1 (adjacent) RB-D1 (adjacent) RB-E2 (adjacent)	Yes

Using the table above, NRSI biologists have determined which proposed turbine locations, or other Project components, require the completion of the Evaluation of Significance as per Section 27 of the REA Regulation. This information will be provided under separate cover *South Kent Wind Project: Evaluation of Significance Report* (NRSI 2012b).

9.0 References

Publications

Allen, G.M. 1988. A Life Science Inventory and Evaluation of Sinclair's Bush, Kent County, Ontario: An Area of Natural and Scientific Interest (ANSI). Chatham District, Southwestern Region, Ontario Ministry of Natural Resources. Part II. 64 pp.

Cadman, M.D., D.A. Sutherland, G.G. Beck, D. Lepage, and A.R. Couturier (eds.). 2007. Atlas of the Breeding Birds of Ontario, 2001-2005. Bird Studies Canada, Environment Canada, Ontario Field Ornithologists, Ontario Ministry of Natural Resources, and Ontario Nature, Toronto, xxii + 706 pp.

Dobbyn, J.S. 1994. Atlas of the Mammals of Ontario. Federation of Ontario Naturalists.

Lee, H.T., W.D. Bakowsky, J. Riley, J. Bowles, M. Puddister, P. Uhlig and S. McMurray. 1998. Ecological Land Classification for Southern Ontario: First Approximation and its Application. Ontario Ministry of Natural Resources, Southcentral Science Section, Science Development and Transfer Branch. SCSS Field Guide FG-02.

Natural Resource Solutions Inc. 2012a. South Kent Wind Project: Records Review Report. Prepared for Hatch Ltd. February 2012 71pp.

Natural Resource Solutions Inc. 2012b. South Kent Wind Project: Evaluation of Significance Report. Prepared for Hatch Ltd. February 2012.

Ontario Ministry of Natural Resources. 2010a. Natural Heritage Reference Manual: for Natural Heritage Policies of the Provincial Policy Statement, 2005. Working Draft. 2nd Edition.

Ontario Ministry of Natural Resources. 2000. Significant Wildlife Habitat Technical Guide. 151p

Ontario Ministry of Natural Resources. 2009. DRAFT Significant Wildlife Habitat Ecoregion Criteria Schedules: Addendum to Significant Wildlife Habitat Technical Guide. January 2009.

Ontario Ministry of Natural Resources. 2002. Ontario Wetland Evaluation System: Southern Manual. 3rd Edition. Including OMNR Interpretations of Current Ontario Wetland Evaluation Systems Manuals (dated June 14, 2007).

Ontario Ministry of Natural Resources. 2010c. Natural Heritage Assessment Guide for Renewable Energy Projects. December 2010

Ontario Ministry of Natural Resources (OMNR). 2000. Significant Wildlife Habitat: Technical Guide. MNR, October 2000.

Ontario Ministry of Natural Resources. 2011. Natural Heritage Assessment Guide for Renewable Energy Projects. July 2011

Ontario Ministry of Natural Resources. 2012. DRAFT Significant Wildlife Habitat Ecoregion Criteria Schedules: Addendum to Significant Wildlife Habitat Technical Guide. February 2012.

Internet Sources

Natural Heritage Information Centre. 2010. Ontario Ministry of Natural Resources. Available at: http://nhic.mnr.gov.on.ca/nhic_.cfm

Oldham, M.J. and W.F. Weller. 2000. Ontario Herpetofaunal Atlas. Natural Heritage Information Centre, Ontario Ministry of Natural Resources. Available at: http://www.mnr.gov.on.ca/MNR/nhic/herps/ohs.html.

Ontario Ministry of Natural Resources. 2010b. Biodiversity Explorer. Available at: http://www.biodiversityexplorer.mnr.gov.on.ca/nhicWEB/main.jsp

Personal Communication

Gould, R. Species at Risk Biologist, Ministry of Natural Resources (Aylmer District Office). April 13, 2011.

Jong, C. Natural Heritage Project Assistant, Ministry of Natural Resources (Aylmer District Office). November 1, 2010.

Simpson, H. Area Biologist, Ministry of Natural Resources (Chatham Office). November 9, 2010.

Appendix I
Woodland Site Investigation Table

Woodland Map Code	ELC Code	Relative Location	Woodland Size (ha)
P001-W1	Fresh-Moist White Elm Lowland Deciduous Forest Type (F0DM7-1)	Intersected by P001 access road	15.83
P002-W1	Coniferous Plantation (TAGM1)	Immediately north of Ed's Line	1.39
P002-W2	Fresh-Moist White Elm Lowland Deciduous Forest Type (FODM7-1)	Immediately south of Ed's Line	1.03
P004-W1	White Ash Deciduous Woodland Type (WODM4-2)	Immediately south of Ed's Line	7.8
P004-W2	Poplar Mineral Deciduous Swamp (SWDM4-5)		
P005-W1	Deciduous Plantation (TAGM3)	Immediately west of Mull Road	0.28
P007-W1	Fresh-Moist Carolinian Deciduous Forest (FODM10)	<120m southeast of P140 access road	5.53
P011-W1	Naturalized Deciduous Hedgerow (FODM11)	<120m north of P011; railbed	2.06
P013-W1	Fresh-Moist White Elm Lowland Deciduous Forest Type (F0DM7-1)	Intersected by P013 access road	2.59
P014-W1	Fresh-Moist Oak-Maple Deciduous Forest Type (FODM9-2)	Immediately north of P014 access road	1.51
P014-W2	Fresh-Moist White Elm Lowland Deciduous Forest Type (FODM7-1)	<120m west of P014 access road	13.74
P015-W1	Fresh-Moist Bur Oak Deciduous Forest Type (FODM9-3)	Immediately east of Kent Bridge Road	1.15
P017-W1	Fresh-Moist Cottonwood Deciduous Forest Type (FODM8-3)	<120m east of P017	0.94
P019-W1	Fresh-Moist Poplar Deciduous Woodland Type (WODM5-1)	<120m north of P019	8.36
P022-W1	Fresh-Moist Shagbark Hickory Deciduous Forest Type (FODM9-4)	<120m south of P022	13.57
P022-W2	Fresh-Moist Shagbark Hickory Deciduous Forest Type (FODM9-4)	Immediately east of P022 access road	5.60
P024-W1	Fresh-Moist White Elm Lowland Deciduous Forest Type (FODM7-1)	Immediately west of P024 access road	8.08
P024-W2	Fresh-Moist Oak-Maple-Hickory Deciduous Forest Ecosite (FODM9)	Immediately south of rail bed	55.37
P026-W1	Fresh-Moist White Elm Lowland Deciduous Forest Type (FODM7-1)	Immediately east of P026 access road	28.7
P027-W1	Fresh-Moist Lowland Deciduous Woodland Type (FODM7)	Immediately east of Mull Road	16.35
P029-W1	Fresh-Moist Sugar Maple-White Elm Deciduous Forest Type (FODM6-4)	<120m south of Campbell Road	2.74
P030-W1	Fresh-Moist Elm Deciduous Woodland Type (WODM5-2)	<120m west of P030	1.16
P030-W2	Fresh Moist Cottonwood Deciduous Forest Type (FODM8-3		
P030-W3	Mixed Plantation (TAGM2)		
P030-M1	Forb Meadow (MEF)		
P033-W1	Dry-Fresh Sugar Maple-Ironwood Deciduous Forest Type (FODM5-4)	<120m north of P033	1.36
P034-W1	Fresh-Moist Elm Deciduous Woodland Type (WODM5-2)	Immediately west of Harwich Road	4.01

Woodland Map Code	ELC Code	Relative Location	Woodland Size (ha)
P042-W1	Fresh-Moist White Elm Lowland Deciduous Forest Type (F0DM7-1)	<120m northwest of P109	13.70
P047-W1	Fresh-Moist Bur Oak Deciduous Forest Type (FODM9-3)	<120m north of P047	1.64
P047-W2	Fresh-Moist White Elm Lowland Deciduous Forest Type (FODM7-1)	<120m south of Fargo Road by P047	5.06
P049-W1	Fresh-Moist White Elm Lowland Deciduous Forest Type (F0DM7-1)	<120m east of P049	12.63
P049-W2	Fresh-Moist Cottonwood Deciduous Forest Type (FODM8-3)	<120m southwest of P049	8.31
P053-W3	Fresh-Moist Deciduous Woodland Ecosite (WODM5)	<120m south of P053 access road	11.07
P053-W4	Fresh-Moist Shagbark Hickory Deciduous Forest Type (FOD9-4)	<120m south of P053	4.95
P054-W1	Dry-Fresh Sugar Maple Deciduous Forest Type (FODM5-2)	<120m north-west of P054 access road	
P054-W2	Fresh-Moist Sugar Maple-White Ash Deciduous Forest (FODM5-8) Inclusion: Swamp Maple Mineral Deciduous Swamp (SWDM3-3)		
P055-W1	Dry-Fresh Sugar Maple-Basswood Deciduous Forest Type (FODM5-6)	Immediately north of Horton Road	5.10
P064-W1	Dry-Fresh Exotic Deciduous Forest Type (FODM4-12)	<120m south of 7th Line West	0.19
P065-W1	Fresh-Moist Manitoba Maple Deciduous Woodland Type (WODM5-3)	<120m south of P065 access road	2.04
P065-W2	Fresh-Moist Bur Oak Deciduous Forest Type (FODM9-3)	<120m east of P065	3.33
P065-W3	Fresh-Moist Bur Oak Deciduous Forest Type (FODM9-3)	Immediately south of rail bed	2.48
P077-W1	Fresh-Moist Bur Oak Deciduous Forest Type (FODM9-3)	Immediately south of P077 access road	2.53
P082-W1	Fresh-Moist Oak-Sugar Maple Deciduous Forest Type (FODM9-1)	<120m west of Coatsworth Road, immediately south of P082 access road	2.14
P082-W2	Fresh-Moist Oak-Sugar Maple Deciduous Forest Type (FODM9-1)	<120m west of P082	0.22
P085-W1	Fresh-Moist White Elm Lowland Deciduous Forest Type (FODM7-1)	<120m east of King & Whittle Road	0.15
P085-W2	Fresh-Moist Oak-Maple Deciduous Forest Type (FODM9-2)	Immediately east of King & Whittle Road	0.40
P086-W1	Fresh-Moist Bur Oak Deciduous Forest Type (FODM9-3)	>120m south of 5th Concession Line	3.22
P091-W1	Fresh-Moist Sugar Maple-White Elm Deciduous Forest Type (FODM6-4)	<120m northeast of P091 access road	1.10

Woodland Map Code	ELC Code	Relative Location	Woodland Size (ha)
P091-W2	Fresh-Moist White Elm Lowland Deciduous Forest Type (FODM7-1)	<120m southeast of P091 turnaround	8.69
P091-W3	Oak-Hickory Deciduous Forest	Immediately east of Base Road	0.59
P092-W1	Fresh-Moist Bur Oak Deciduous Forest Type (FODM9-3)	<120m east of P092	1.60
P092-W2	Coniferous Plantation (TAGM1)	Immediately east of P092	4.26
P098-W1	Fresh-Moist White Elm Lowland Deciduous Forest Type (FOD7-1)	Immediately southwest of P098	2.74
P102-W1	Fresh-Moist Oak-Maple-Hickory Forest Ecosite (FODM9)	>120m east of Kent Bridge Road	23.56
P102-W2	Fresh-Moist Oak-Maple-Hickory Forest Ecosite (FODM9)	<120m west of P102 access road	1.86
P103-W1	Dry-Fresh Deciduous Woodland Ecosite (WODM4)	Immediately Adjacent to McKinlay Road	12.20
P106-W1	Fresh-Moist Bitternut Hickory Deciduous Forest Type (FODM9-5)	Immediately east of P106 access road	1.00
P108-W1	Fresh-Moist White Elm Lowland Deciduous Forest Type (F0DM7-1)	<120m south of P035	2.76
P111-W1	Fresh-Dry Sugar Maple Deciduous Forest Type (FOD5-7)	Immediately northwest of 10th Line	7.83
P112-W1	Dry-Fresh Sugar Maple-Beech Deciduous Forest Type (FODM5-2)	>120m northwest of P112	2.52
P114-W1	Fresh-Moist Elm Deciduous Woodland Type (WODM5-2)	<120m west of P114 access road	12.44
P117-W1	Dry-Fresh Sugar Maple-Beech Deciduous Forest Type (FODM5-2)	Immediately south of rail bed	6.77
P118-W1	Fresh-Moist White Elm Lowland Deciduous Forest Type (F0DM7-1)	<120m east of turbine	6.69
P136-W1	Fresh-Moist Oak-Maple Deciduous Forest Type (FODM9-2)	Immediately north of 5th Concession Line	2.45
P139-W1	Mixed Plantation (TAGM2)	Immediately west of Mull Road	2.31
P139-W2	Dry-Fresh Sugar Maple Deciduous Forest Type (FODM5-1)	Immediately north of Sinclair Line	5.83
P139-W3	Deciduous Plantation (TAGM3)		
P139-W4	Fresh-Moist Deciduous Savanna Ecosite (SVDM3)		
P139-W5	White Ash Deciduous Woodland Type (WODM4-2)		
P139-W6	Dry-Fresh White Ash-Hardwood Deciduous Forest (FODM4-2)		
P139-W7	Dry-Fresh Upland Deciduous Forest Ecosite (FODM4)		
P139-W8	Dry-Fresh Sugar Maple-Beech Deciduous Forest (FODM5-2)		
P139-W9	Fresh-Moist White Elm Lowland Deciduous Forest (FODM7-1) Inclusion: Deciduous Plantation (TAGM3)		
P140-W1	Dry-Fresh Sugar Maple-Beech Deciduous Forest Type (FODM5-2)	Immediately east of P140 access road	46.33

Woodland Map Code	ELC Code	Relative Location	Woodland Size (ha)
P140-W2	Fresh-Moist Carolinian Deciduous Forest Type (FODM-10)	Immediately adjacent to (north) Stefina Line	10.51
P156-W1	Fresh-Moist Carolinian Deciduous Forest Type (FODM-10)	<120m southwest of P156 access road	10.29
P162-W1	Dry-Fresh Sugar Maple-Beech Deciduous Forest Type (FOD5-2)	Immediately north of P162 and Fargo Road	30.08
P162-W2	Dry-Fresh Sugar Maple-White Ash Deciduous Forest Type (FODM5-8)	<120m south of Distribution Line	9.31
P166-W1	Dry-Fresh Sugar Maple Deciduous Forest (FOD5)	<120m of turbine P166	11.84
P166-W2	Fresh-Moist White Elm Lowland Deciduous Forest (FODM7-1)	Overlapping with blade of turbine P166	0.47
P173-W1	Dry-Fresh Sugar Maple Deciduous Forest (FODM5-1)	<120m of turbine P173	1.5
CLA-W1	Deciduous Plantation (TAGM3)	>120m northwest of Fargo Road	2.08
CLA-W2	Fresh-Moist White Elm Lowland Deciduous Forest Type (FODM7-1)	Immediately north of Rail bed	4.07
RB-A	Fresh-Moist Poplar Deciduous Woodland Type (WODM5-1)	Rail bed	46.79
RB-B	Fresh-Moist Mixed Savanna Ecosite (SVMM3)	Rail bed	25.82
RB-E	White Birch / Poplar Deciduous Savanna Type (SVDM3-5)	Rail bed	20.05
RB-F	White Birch / Poplar Deciduous Savanna Type (SVDM3-5)	Rail bed	51.30
PSS-W1	Coniferous Plantation (TAGM1)	Immediately west of Snobelen Road	37.87
PSS-W2	Dry-Fresh Sugar Maple-Beech Deciduous Forest Type (FODM5-2)	<120m west and south of Distribution Line	11.68

Appendix II
Fencerow Site Investigation Table

Fencerow Map Code	Dominant Vegetation Species	Notes
P001-H1	Norway Spruce, White Cedar, Black Walnut	
P001-H2	Norway Spruce, White Cedar, Green Ash	Sparsely Treed
P001-H3	Black Walnut, Staghorn Sumac	Mature Trees
P001-H4	White Cedar, Norway Spruce, Eastern Cottonwood	
P002-H1	Norway Spruce, White Cedar	
P002-H2	White Cedar	Planted
P002-H3	Norway Spruce, White Cedar	Planted
P002-H4	Eastern White Pine, Red Cedar	Planted, Scattered Red Cedar
P002-H5	Norway Spruce	Planted
P002-H6	Norway Spruce	Planted
P002-H7	Norway Spruce, White Elm, Eastern Cottonwood	Planted, Occasional White Elm and Eastern Cottonwood
P002-H8	Staghorn Sumac, Canada Goldenrod	Rare Young
P002-H9	White Cedar	Planted
P002-H10	White Cedar	Planted
P002-H11	White Cedar	Planted
P002-H12	White Cedar	Planted
P002-H13	White Cedar	Planted
P002-H14	White Cedar, Norway Spruce	Planted
P002-H15	White Cedar	Planted
P002-H16	White Cedar	Planted
P002-H17	Silver Maple, White Spruce	Planted
P002-H18	White Cedar	Planted
P003-H1	Shagbark Hickory, White Elm, Eastern Cottonwood	Snags Present
P003-H2	White Elm, Eastern Cottonwood	Snags Present
P004-H1	Shagbark Hickory, Eastern Cottonwood	Snags Present
P005-H1	White Elm, Black Walnut, Staghorn Sumac	Sparsely Treed
P005-H2	White Elm, Bur Oak, Shagbark Hickory	Snags Present
P005-H3	Burr oak, White Elm, Staghorn Sumac	
P005-H4	White Cedar, White Spruce	
P005-H5	Silver Maple, Gray Dogwood, Staghorn Sumac	
P005-H6	Silver Maple, American Basswood (immature)	
P005-H7	Red Oak, White Elm	Mature Trees
P008-H1	Silver Maple, Eastern Red Cedar	Planted
P008-H2	White Cedar	Immature Trees
P008-H3	Norway Spruce	
P009-H1	Hawthorn sp., Shagbark Hickory, Eastern Cottonwood	Snags Present
P009-H2	White Cedar	
P009-H3	White Elm, Shagbark Hickory, Gray Dogwood	
P009-H4	Bur Oak, White Elm	Sparsely Treed
P009-H5	Norway Spruce	
P010-H1	White Cedar	
P010-H2	Silver Maple, Staghorn Sumac, Red Oak	
P010-H3	White Elm, Staghorn Sumac, Gray Dogwood	Snags Present
P010-H4	White Elm	Snags Present
P010-H5	White Cedar	
P011-H1	Trembling Aspen, White Elm, White Ash	Sparsely Treed
P012-H1	Red Oak, White Spruce, Common Hackberry	Sparsely Treed
P012-H2	Red Cedar, Burr oak, Red Osier Dogwood	
P013-H1	White Elm, Shrubs	Snags Present, Sparsely Treed
P013-H2	Sandbank Willow, Willow sp., Gray Dogwood, White Elm	Shrub Dominated,

Fencerow Map Code	Dominant Vegetation Species	Notes
		Immature Trees
P013-H3	Norway Spruce, White Cedar	
P014-H1	White Spruce	
P015-H1	Silver Maple, Eastern Cottonwood, Prickly Ash	
P015-H2	White Elm, Bur Oak, Eastern Cottonwood	Snags Present
P015-H3	White Cedar, Black Walnut	Immature Trees
P016-H1	Common Buckthorn, Silver Maple, White Elm, Gray Dogwood	
P016-H2	White Pine, White Cedar, Norway Spruce	Immature Trees
P016-H3	Norway Spruce	
P016-H4	White Cedar	Immature Trees
P018-H1	Bur Oak, White Elm, Eastern Red Cedar	Immature Coniferous Trees
P020-H1	Shagbark Hickory, White Elm, Green Ash	
P022-H1	White Elm, Gray Dogwood	Sparsely Treed
P023-H1	White Cedar, White Elm	Snags Present, Sparsely Treed
P023-H2	Black Walnut, Bur Oak, White Mulberry	Immature
P024-H1	White Elm, American Basswood	Snags Present
P024-H2	Bur Oak, Staghorn Sumac, Eastern Cottonwood	Sparsely Treed
P026-H1	Gray Dogwood, White Elm	Sparsely Treed
P027-H1	Bur Oak, Black Walnut, Gray Dogwood	
P028-H1	Gray Dogwood, White Elm, White Willow, Red-osier Dogwood	
P028-H2	Dogwood sp., White Elm, White Cedar	
P028-H3	White Elm, Red-osier Dogwood, Gray Dogwood, Red Cedar	
P028-H4	White Elm, Red-osier Dogwood, Gray Dogwood, White Ash	
P028-H5	Shagbark Hickory, White Elm, Basswood, Hawthorn sp.	
P028-H6	Hawthorn sp., Dogwood sp.	
P029-H1	Eastern Cottonwood, Gray Dogwood	Sparsely Treed
P029-H2	White Elm, Gray Dogwood, American Basswood, Red-osier Dogwood	Red-osier Dogwood – Mainly Shrubs
P029-H3	Bur Oak, Shagbark Hickory, Gray Dogwood	
P029-H4	Eastern Cottonwood, Eastern Red Cedar	Sparsely Treed, Immature Trees
P030-H1	White Elm	Sparsely Treed
P030-H2	Bur Oak, White Elm, Red-osier Dogwood, Common Apple, White Pine	
H030-H3	Bur Oak, White Elm, White Ash, Red-osier Dogwood	
H030-H4	Red-osier Dogwood, White Elm, Bur Oak	
P031-H1	White Spruce, Red Cedar, Bur Oak, American Basswood, White Elm	
P031-H2	Green Ash, American Basswood, Shagbark Hickory	
P032-H1	Eastern Red Cedar, Eastern Cottonwood, Black Locust	
P033-H1	Bur Oak, White Elm	Snags Present
P034-H1	Norway Spruce	Immature Trees
P034-H2	Norway Spruce, Eastern Red Cedar, White Cedar	
P034-H3	Eastern Red Cedar	
P035-H1	Silver Maple, White Ash, American Elm, Shagbark Hickory, Bur Oak, American Basswood, Hawthorn sp.	Many Snags Present
P035-H2	White Elm, Gray Dogwood	Small Snags Present
P037-H1	Bur Oak, Shagbark Hickory	Dense, Snags Present
P037-H2	White Cedar	
P038-H1	Norway Spruce	Planted

Fencerow Map Code	Dominant Vegetation Species	Notes
P038-H2	White Cedar	
P039-H1	White Cedar	
P039-H2	Red Cedar, White Ash, Burr Oak, Red Oak	
P040-H2	White Elm, Gray Dogwood	Immature Trees
P041-H1	Eastern Cottonwood, White Elm, Bur Oak	Snags Present
P042-H1	White Elm, Bur Oak, Hawthorn sp.	Snags Present
P044-H1	Bur Oak, White Elm	Snags Present, Sparsely Treed
P045-H1	Freeman's Maple, Bur Oak, American Basswood	Densely Treed
P046-H1	Red Oak, Norway Spruce	Dense, Planted
P047-H1	Burr Oak, Red Cedar	
P050-H1	Bur Oak, White Elm, Gray Dogwood	Snags Present
P051-H1	White Cedar	
P051-H2	White Cedar	
P052-H1	Bur Oak	Sparsely Treed, Mature Trees
P054-H1	Norway Spruce	
P054-H2	Eastern White Cedar	Densely Treed
P055-H1	White Elm, Bur Oak, Eastern Cottonwood	Immature
P057-H1	White Spruce	
P058-H1	White Cedar	
P058-H2	White Cedar	Immature Trees
P059-H1	White Cedar Shrubs	
P059-H2	Norway Spruce, White Cedar	
P060-H1	White Elm, Shrubs	
P060-H2	White Cedar	
P060-H3	Basswood, White Elm, Eastern Cottonwood, Shagbark Hickory	
P060-H4	Basswood, White Elm	Sparsely Treed
P060-H5	Gray Dogwood	
P060-H6	Rock Elm, Bur Oak, Shagbark Hickory, Gray Dogwood	Snags Present
P060-H7	White Elm, Shagbark Hickory, Bur Oak, Basswood	Large Dying Hawthorns
P061-H1	Spruce sp.	
P061-H2	Eastern White Cedar, Black Walnut, White Spruce	
P061-H3	Eastern White Cedar, White Spruce	
P062-H1	Eastern White Cedar	
P063-H1	Eastern White Cedar	
P063-H2	White Elm, Hawthorn sp., Red Oak	Snags Present
P063-H3	Silver Maple, Gray Dogwood, American Prickly-ash	
P064-H1	Deciduous Trees, American Elm, Willow Sp.	Snags Present
P064-H2	Bur Oak, Staghorn Sumac	
P064-H3	White Elm	
P064-H5	White Elm, Eastern Cottonwood, White Ash	
P065-H1	Manitoba Maple, Common Buckthorn, Gray Dogwood	Snags Present
P065-H2	Staghorn Sumac, Gray Dogwood, Eastern Cottonwood	Sparsely Treed
P065-H3	Burr Oak, Gray Dogwood, Hawthorn sp.	Snags Present
P065-H4		
P065-H5	Bur Oak, White Ash, White Elm	Trees Mature
P065-H6	Staghorn Sumac, Bur Oak, White Elm, Apple	
P066-H1	Deciduous Trees	
P066-H2	Deciduous Trees	Sparsely Treed
P066-H3	Staghorn Sumac, White Elm, Hawthorn sp.	
P066-H4	Honey Locust, Shagbark Hickory	
P066-H5	American Elm, Burrdock	

Fencerow Map Code	Dominant Vegetation Species	Notes
P067-H1	Deciduous Trees	
P067-H2	Deciduous Trees	
P067-H3	Burr Oak, Red Cedar	Snags Present
P068-H1	Deciduous Trees – Burr Oak, Shagbark Hickory, Soft Maple, Eastern White Cedar	
P068-H2	Burr Oak, American Elm, Goldenrod Sp., Wild Carrot	
P069-H1	Deciduous Trees	
P069-H2	Eastern Cottonwood, Willow species	Sparsely Treed, Riverine
P070-H1	Deciduous Trees	Sparsely Treed
P070-H2	Deciduous Trees	
P070-H3	White Cedar	Immature Trees
P070-H4	Silver Maple	Sparsely Treed, Mature Trees
P072-H1	Burr Oak, Red Cedar, Red Osier Dogwood, Reed Canary Grass	Cement Pile
P074-H1	White Elm, Norway Spruce	
P077-H1	Deciduous Shrubs	
P078-H1	Deciduous Shrubs	
P078-H2	Deciduous Trees	Sparsely Treed
P078-H3	Bur Oak, Dogwood Sp., Tall Goldenrod	Debris Pile
P078-H4	Bur Oak, American Elm, Tall Goldenrod	
P078-H5	White Cedar	
P080-H1	Bur Oak, White Elm	
P080-H2	Bur Oak, White Elm, Hawthorn sp.	
P080-H3	Pin Oak, White Ash, Basswood	Snags Present, Debris Pile
P080-H4	Pin Oak, Bur Oak, White Elm	
P080-H5	Burr Oak, Prickly Ash, Staghorn Sumac,	Debris Pile
P080-H6	Burr Oak, Wild carrot, Milkweed	Squirrel Den
P081-H1	Bur Oak, Pin Oak, Hawthorn sp.	Snags Present
P081-H2	Gray Dogwood	
P081-H3	Red Cedar, White Ash, Hackberry, Bur Oak, White Cedar	
P081-H4	Silver Maple	
P082-H1	White Elm, Bur Oak	
P083-H1	White Cedar, Norway Spruce, White Pine, Scots Pine	
P083-H2	Bur Oak	
P083-H3	Bur Oak, White Elm, Gray Dogwood	
P083-H4	White Cedar	Brush Pile
P083-H5	Hawthorn sp.	
P085-H1	White Elm, White Ash	
P085-H2	Staghorn Sumac, White Elm	Very young White Elm, Brush Pile
P085-H3	White Elm	
P085-H4	Bur Oak, White Elm	
P085-H5	Freeman's Maple, White Cedar, Gray Dogwood, White Elm	
P085-H6	White Cedar	
P085-H7	Bur Oak, Red-osier Dogwood	
P085-H8	Bur Oak, White Elm, Red Oak	
P086-H1	Deciduous Trees	Snags Present
P087-H1	Deciduous Trees	
P087-H2	Deciduous Shrubs	
P087-H3	Bur Oak, American Basswood, Common Apple	Immature Trees
P087-H4	Bur Oak, Silver Maple	Immature Trees
P087-H5	White Elm, Hawthorn sp., Climbing Prairie Rose	Sparsely Treed,

Fencerow Map Code	Dominant Vegetation Species	Notes
		Immature Trees
P087-H6	White Elm, Red Oak, Staghorn Sumac	Sparsely Treed, Immature Trees
P087-H7	Silver Maple	Mature Trees
P088-H1	White Elm, Bur Oak, Red Cedar	Snags Present
P088-H2	Bur Oak, White Elm	Sparsely Treed, Immature Trees
P088-H3	Norway Spruce, White Cedar	Immature Trees
P088-H4	Bur Oak, White Elm	Immature Trees
P091-H1	Scotch Pine	Snags Present, Sparsely Treed
P091-H2	Red Oak, White Elm, Black Walnut	Snags Present
P092-H1	Eastern Cottonwood, Red Oak, White Elm	
P092-H2	Staghorn Sumac, Gray Dogwood, Hawthorn sp.	
P092-H3	White Elm, Red Cedar, Gray Dogwood, Basswood, White Ash	
P092-H4	Black Locust, Red Raspberry, Riverbank Grape, Black Walnut	
P092-H5	Eastern White Cedar, Gray Dogwood, Staghorn Sumac, Eastern Cottonwood	
P093-H1	Norway Spruce	
P093-H2	Staghorn Sumac, White Elm, Hawthorn sp., White Cedar	
P093-H3	Norway Spruce, White Cedar	
P094-H1	Bur Oak, Gray Dogwood, Prickly Ash, Teasel, Reed Canary Grass	Snags Present
P094-H2	White Cedar Shrub	
P094-H3	White Cedar	
P094-H4	White Elm, Hawthorn sp.	Immature
P094-H5	Eastern White Cedar	
P094-H6	White Ash, White Elm, Bur Oak, Staghorn Sumac, Balsam Poplar, Freeman's Maple	Large snags present (>50m)
P094-H7	Eastern White Cedar	
P095-H1	Bur Oak	Mature and Immature Trees
P095-H2	Norway Spruce, White Cedar	
P095-H3	Norway Spruce, White Cedar	
P095-H4	Bur Oak, White Elm, Staghorn Sumac	Immature Trees
P096-H1	Norway Spruce, White Elm, Eastern Cottonwood	Snags Present
P096-H2	Norway Spruce	
P096-H3	Norway Spruce	Mature
P097-H1	White Cedar	
P097-H2	Norway Spruce	
P098-H1	White Elm, Bur Oak, Staghorn Sumac	Immature, Snags Present
P098-H2	White Elm, Bur oak, American Basswood	Snags Present
P099-H1	Bur Oak, White Elm	Snags Present
P100-H1	White Elm, Hawthorn sp., Red Cedar	Snags Present, Sparsely Treed
P100-H2	White Elm, American Basswood, Bur Oak	Immature Trees
P100-H3	Eastern Cottonwood, Bur Oak, Hawthorn sp.	
P100-H4	Bur Oak, White Ash	
P100-H5	Norway Spruce	
P101-H1	Bur Oak, White Elm, White Cedar	Immature
P101-H2	Deciduous Trees	Snags Present
P102-H1	Norway Spruce, White Cedar	
P102-H2	White Cedar	Immature Trees
P102-H3	Bur Oak, Silver Maple, White Elm	Snags Present

Fencerow Map Code	Dominant Vegetation Species	Notes
P102-H4	Deciduous Trees	Immature Trees
P103-H1	White Ash, Staghorn Sumac	
P103-H2	Cottonwood, Willow sp., Staghorn Sumac	
P104-H1	Norway Spruce, White Cedar	
P104-H2	Norway Spruce, Black Walnut, American Basswood	
P104-H3	Manitoba Maple, White Elm, White Pine	
P105-H1	White Elm, American Basswood, Black Walnut	
P105-H2	Willow sp. trees	Planted
P105-H3	Norway Spruce, White Spruce, White Cedar	
P105-H4	Silver Poplar, Staghorn Sumac	
P106-H1	White Cedar, Staghorn Sumac	Snags Present
P106-H2	White Elm, White Ash	Snags Present
P106-H3	Norway Spruce	
P107-H1	White Cedar, Norway Spruce, Black Walnut	
P107-H2	White Cedar	
P108-H1	White Elm, Hawthorn sp., Gray Dogwood	Snags Present, Sparsely Treed
P108-H2	Green Ash, Bur Oak	Snags Present
P109-H1	Eastern Cottonwood, Gray Dogwood	
P111-H1	Norway Spruce	
P111-H2	Silver Maple, American Beech	Snags Present
P111-H3	American Elm, Red Raspberry, Tall Goldenrod	
P111-H4	White Spruce, White Cedar, Red Cedar	
P111-H5	White Elm, White Ash, Hawthorn, Bur Oak, Goldenrod sp.	
P112-H1	Norway Spruce, White Cedar	
P113-H1	Deciduous Trees	
P113-H2	Bur Oak	Sparsely Treed
P114-H1	Bur Oak, Hawthorn sp.	Snags Present
P114-H2	Bur Oak, Shagbark Hickory, Pin Oak	
P114-H3	White Elm, Hawthorn sp.	
P115-H1	Bur Oak, Eastern Cottonwood	
P115-H2	White Elm, Bur Oak, Hawthorn sp.	
P115-H3	White Ash, Bur Oak	
P118-H1	White Cedar, Norway Spruce	
P119-H1	Bur Oak, White Elm	Snags Present
P120-H1	Bur Oak, White Elm, Silver Maple	Snags Present, Sparsely Treed
P120-H2	Bur Oak	Snags Present
P121-H1	White Cedar	
P121-H2	Soft maple, Burr Oak, Hard Maple	
P122-H1	Bur Oak, White Elm, Eastern Cottonwood	Snags Present
P122-H2	Bur Oak, Balsam Poplar, Gray Dogwood, White Elm	
P122-H3	White Cedar	
P124-H1	Bur Oak, Apple, White Elm	
P125-H1	White Elm, Eastern Cottonwood, Gray Dogwood	Sparsely Treed
P125-H2	White Cedar	Immature Trees
P126-H1	Bur Oak, Hawthorn sp.	Immature Trees
P127-H1	Black Walnut, Bur Oak, Red Oak, Red Cedar	Snags Present
P127-H2	White Cedar	
P129-H1	White Elm, White Ash, Staghorn Sumac	Sparsely Treed
P135-H1	White Elm	Snags Present, Sparsely Treed
P136-H1	White Cedar	
P138-H1	White Elm, Hawthorn sp., Bitternut Hickory, Norway Spruce	Snags Present, Sparsely Treed

Fencerow Map Code	Dominant Vegetation Species	Notes
P138-H2	White Cedar, Gray Dogwood	
P138-H3	Norway Spruce	
P139-H1	White Cedar	
P139-H2	Green Ash, White Elm	
P139-H3	Black Walnut, Staghorn Sumac	
P139-H4	White Cedar	
P139-H5	White Cedar	
P139-H6	White Cedar, Black Walnut, Green Ash	
P139-H7	White Cedar	
P139-H8	Riverbank Grape, White Ash, Eastern Cottonwood, White Elm, White Willow	
P139-H9	Eastern White Cedar	
P139-H10	Black Walnut, Grey Dogwood, Staghorn Sumac, Eastern White Cedar	Large Hedgerow (~10m Wide)
P139-H11	Eastern White Cedar	
P140-H1	Norway Spruce, White Cedar	
P140-H2	Willow sp., White Elm, Eastern Cottonwood	
P140-H3	White Cedar	
P140-H4	White Cedar, Apple Sp., Blue Spruce, Scot's Pine	
P140-H5	White Cedar, Norway Spruce	
P140-H6	Eastern White Cedar	
P140-H7	Eastern White Cedar	
P140-H8	Eastern White Cedar	
P140-H9	Eastern White Cedar	
P140-H10	Eastern White Cedar	
P145-H1	White Spruce	
P146-H1	Black Walnut, White Cedar, White Spruce	
P149-H1	White Spruce, White Ash, White Elm	
P149-H2	Eastern White Cedar, Black Locust, Apple, White Ash	Cedars and Locust Mid-Aged
P149-H3	Eastern White Cedar, White Ash, White Spruce	
P149-H4	White Spruce, Black Walnut, Eastern White Cedar, White Ash	
P149-H5	White Spruce Eastern White Cedar	
P149-H6	Eastern White Cedar	
P152-H1	Norway Spruce, Eastern White Cedar	
P155-H1	White Cedar, Trembling Aspen, Horsetail, Common Mullein	
P163-H1	White Spruce, White Cedar	
P163-H2	White Spruce, White Cedar	
P163-H3	White Spruce, White Cedar	
P164-H1	Bur Oak, White Elm, Red Cedar, Staghorn Sumac	Deadfall Present Snags Present
P164-H2	Eastern White Cedar, White Spruce	
P164-H3	Eastern White Cedar, White Spruce	
P166-H1	Black Walnut, White Elm, Green Ash, exotic/invasive herbaceous species	
P167-H1	White Cedar	
P171-H1	White Pine, Black Walnut, White Ash, White Elm, White Spruce	Large Hedgerow (~15m Wide)
P171-H2	Norway Spruce, Eastern White Cedar	
P171-H3	Eastern White Cedar	
P171-H4	Eastern White Cedar	
P171-H5	Scots Pine, Whote Ash, Norway Spruce, White Ash, Eastern White Cedar	
P173-H1	Goldenrod Sp., Riverbank Grape, Honeysuckle	Deadfall Present
CLA-H1	Bur Oak, White Elm	Snags Present,

Fencerow Map Code	Dominant Vegetation Species	Notes
		Sparsely Treed
CLA-H2	Norway Spruce	
CLA-H3	White Elm	Snags Present, Sparsely Treed
CLA-H4	Staghorn Sumac, Hawthorn sp., Gray Dogwood	
RL-H1	White Cedar, Eastern Cottonwood	Planted Coniferous, Sparse Deciduous
RL-H2	White Elm, Hawthorn sp.	Sparse Trees
RSS-H1	White Elm, Bur Oak, Eastern Cottonwood	No Snags, Immature Trees
RSS-H2	Bur Oak, White Elm	
PSS-H1	Norway Spruce, White Cedar	
PSS-H2	Norway Spruce	
PSS-H3	White Pine, White Cedar, Norway Spruce	Immature Trees
TRANS-H1	White Spruce, Locust Species, Phragmites	
TRANS-H2	Norway Maple	Planted
TRANS-H3	White Cedar, White Spruce, White Pine	Planted
TRANS-H4	White Cedar	Planted
TRANS-H5	Silver Maple, Malus Sp., Staghorn Sumac	Planted
TRANS-H6	White Cedar, White Pine, Willow Sp.	
TRANS-H7	Willow Sp., Black Walnut, Red Cedar	
TRANS-H8	White Spruce, White Cedar	Planted
TRANS-H9	White Cedar, White Oak, Sugar Maple	
TRANS-H10	Poplar Sp., White Spruce, Manitoba Maple, Red Cedar	
TRANS-H11	Norway Maple	Planted

Appendix III
Drain Corridor Site Investigation Table

Naturalized Drain Map Code	Dominant Vegetation Species	Notes
P002-D1	Reed Canary, Common Reed, Red Osier Dogwood	No Water Present
P002-D2	Reed Canary, Red Osier Dogwood	Water Present
P002-D3	Phragmites, Reed Canary, Canada Thistle, Burdock	Roadside Ditch, Small Pool of Standing Water 40 cm Deep
P002-D4	Grassy Swath in a Corn Field	Grass is Mown. Photo: 100-1017. No Standing Water, No Channel
P002-D5	Grassy Swath in a Corn Field	Grass is Roughly Mown. 100-1020
P002-D6	Orchard Grass, Canada Thistle, Burdock	Grassy Mown Swath. Photo 100-1021, 1022
P002-D7	Three-squares Grasses	Photo 100-1023, 1024
P002-D8	Pasture Grasses	Photo 100-1027
P002-D9	Canada Goldenrod, Teasel, Orchard Grass, Ash, Willow sp.	Steep Ditch, No Vegetation in Channel. Photo 100-1031
P002-D10	Canada Goldenrod, Blue Vervain	Narrow, Runs Through Pasture. Photo 100-1033
P002-D11	White Elm, Basswood, Sugar Maple, Typha sp., Goldenrod, Smooth Brome	Small Creek. Photo 100-1034, 1035
P002-D12	Freeman's Maple, Green Ash, Crack Willow, Black Walnut	Manicured Ditch. 100-1038,1039
P002-D13	White Cedar, Green Ash, Norway Spruce, Tamarack, Freeman's Maple, Reed Canary	Photo 100-1042
P002-D14	Treed (E and F Communities)	
P002-D15	Cattails, Canada Goldenrod (South of Talbot Trail), Treed (G) North of Talbot Trail	Photo 100-1050
P002-D16	White Elm, White Ash, Goldenrod (South of Talbot), Treed (H) North of Talbot Trail	Photo 100-1057
P002-D17	Canada Goldenrod, Crack Willow, Pin Cherry, Eastern Red Cedar	Photo 100-1061
P002-D18	Reed Canary, Canada Goldenrod, Wild Carrot, Black Locust, Eastern Red Cedar (North of Talbot), Canada Goldenrod, Red Raspberry, White Cedar, Apple (South of Talbot)	Mown Grass on Sides. Photo 100-1062, 1063
P004-D1	Reed Canary, Goldenrod sp., Willow sp. shrub	No Water Present
P005-D1	Canada Goldenrod, Staghorn Sumac, White Elm	Water Present
P005-D2	Cattail, Common Reed, Gray Dogwood	No Water Present
P009-D1	Goldenrod sp., Cattail, Aster sp.	Moist
P009-D2	Cattail, Common Reed	
P010-D1	Forbs, White Elm, Gray Dogwood	Water Present
P011-D1	Red-osier Dogwood, White Elm, Trembling Aspen	Water Present
P011-D2	Red-osier Dogwood	P011-H1, P012-H1, No Water Present
P013-D1	White Elm	Moist
P013-D2	Cattail, Willow sp.	Shrubs
P014-D1	Cattail, Common Reed, Goldenrod sp.	No Water Present

Naturalized Drain Map Code	Dominant Vegetation Species	Notes
P016-D1	Manitoba Maple, Willow sp. shrub	Water Present, Immature trees
P016-D2	Reed Canary, Cattail, Common Reed	No Water Present
P018-D1	Goldenrod sp., Smooth Brome, Cattail	
P019-D1	Smooth Brome, New England Aster, Canada Goldenrod	Water Present
P019-D2	Cattail, Common Reed	No Water Present
P022-D1	Red-osier Dogwood, White Ash, Goldenrod sp., Watercress	
P023-D1	Black Walnut, Cattail, Goldenrod sp.	No Water Present
P024-D1	Goldenrod sp., Staghorn Sumac, Willow sp.	Water Present
P026-D1	White Elm, Gray Dogwod, Reed Canary Grass	No Water Present, Sparsely Treed
P027-D1	Common Reed, Goldenrod sp., Cattail	No Water Present
P029-D1	Gray Dogwood, Cattail, Eastern Red Cedar, White Elm	No Water Present, Immature Trees
P030-D1	Cattail, Wild Carrot, Water Plantain	Moist
P030-D2	Staghorn Sumac, Red-osier Dogwood, White Elm	No Water Present, Drainage Not Indicated on Mapping
P031-D1	Goldenrod sp., Gray Dogwood, Mixed Grasses	No Water Present
P032-D1	Reed Canary Grass, Mixed Forbs, Eastern Cottonwood	Water Present
P033-D1	Cattail, Goldenrod sp., Mixed Grasses	No Water Present
P034-D1	White Elm, Gray Dogwood	No Water Present
P034-D2	Cattail, Reed Canary	No Water Present
P034-D3	Reed Canary, Goldenrod sp., Common Reed	No Water Present
P034-D4	Narrow-leaved Cattail, Willow sp., White Vervain, Teasel	Water Present
P035-D1	White Elm, Willow sp., Cattail, Smooth Brome	Sparse Shrub, Moist
P035-D2	Reed Canary Grass, Cattail	Water Present
P037-D1	Cattail, Goldenrod sp., Reed Canary	No Water Present
P039-D1	Catttail, Common Reed, Goldenrod sp.	No Water Present
P040-D1	Cattail, Common Reed, Goldenrod sp.	No Water Present
P040-D2	Goldenrod sp., Aster sp., Hawthorn sp., Narrow-leaved Cattail	No Water Present
P041-D1	Cattail, Smooth Brome	Moist
P045-D1	Mixed Grasses and Forbs, Goldenrod sp., Smooth Brome, Cattail	
P046-D1	Common Reed, Reed Canary Grass	No Water Present
P047-D1	Red Cedar, Black Walnut, Soft Maple, Willow Sp.	
P049-D1	Mixed Grasses, Cattail, Common Reed	No Water Present
P049-D2	Smooth Brome, Goldenrods	No Water Present
P051-D1	Cattail, Reed Canary, Common Reed	Water Present
P051-D2	Reed Canary, Common Reed	Water Present
P051-D3	Shagbark Hickory, Red Oak, Burr Oak, Avens sp., Garlic Mustard, Stinging Nettle	No Water Present
P052-D1	Mixed Grasses and Forbs	
P053-D1	Goldenrod sp., Common Reed, Aster sp.	No Water Present
P053-D2	Goldenrod sp., Smooth Brome, Eastern Red Cedar	Water Present
P053-D3	Goldenrod sp., Smooth Brome, Eastern Red Cedar	Water Present
P054-D1	Smooth Brome, Reed Canary, Teasel	Water Present
P054-D2	Narrow-leaved Cattail, Phragmites, Kentucky Bluegrass	No Water Present
P055-D1	Aster sp., Gray Dogwood, Cattail, Reed Canary Grass, Queen Anne's Lace	No Water Present
P055-D2	Cattail, Reed Canary, Common Reed	No Water Present
P056-D1	Cattail, Mixed Grasses and Forbs	

Naturalized Drain Map Code	Dominant Vegetation Species	Notes
P056-D2	Cattail, Canada Goldenrod, Calico Aster	No Water Present
P057-D1	Mixed Grasses and Forbs	
P058-D1	Mixed Grasses and Forbs	No Water Present
P058-D2	Mixed Grasses and Forbs	No Water Present
P058-D3	Narrow-leaved Cattail, Goldenrod sp., Heath Aster, Red Cedar	No Water Present
P060-D1	Gray Dogwood, White Elm, Eastern Cottonwood	Water Present
P061-D1	Goldenrod sp., Immature White Elm, Silver Maple	Water Present, Wide Channel (2m)
P061-D2	Reed Canary, Smooth Brome, White Elm	No Water Present, Immature Trees
P061-D3	Reed Canary Grass, Smooth Brome, Slender Willow	Water Present
P062-D1	Willow sp., Mixed Grasses and Forbs	Water Present, Wide Channel (4m)
P062-D2	Reed Canary, Smooth Brome, White Elm	No Water Present, Immature Trees
P063-D1	Gray Dogwood, White Cedar, Red Osier Dogwood, Buckthorn, Young Elm, Teasel, Cattail	Moist
P063-D2	Mixed Grasses and Forbs	No Water Present
P064-D1	Goldenrods, Purple Loosestrife	Water Present
P064-D2	White Elm, Eastern Cottonwood, Goldenrods	Water Present
P064-D3	Cattails, Purple Loosestrife	Water Present
P065-D1	Eastern Cottonwood, Willow sp., Goldenrod sp.	Water Present, Sparsely Treed Cement Block Pile
P065-D2	White Elm, Willow sp. Shrub	Water Present, Immature Trees
P065-D3	Freeman's Maple, Manitoba Maple, Hawthorn sp., Smooth Brome, Heath Aster	Water Present, Sparsely Treed
P066-D1	Burdock, Manitoba Maple, White Ash, Grey Dogwood	Water Present, Treed
P066-D2	White Ash, Reed Canary Grass, Smooth Brome, Heath Aster	Water Present
P067-D1	Goldenrod sp., Gray Dogwood, Cattail	Water Present
P067-D2	Red Osier Dogwood, Green Ash, Mixed Grasses	
P068-D1	Reed Canary Grass, Purple Loosestrife, Cattail	No Water Present
P068-D2	Green Ash, Burr Oak, Tall Goldenrod, Reed Canary Grass	
P068-D3	White Elm, Tall Goldenrod	
P068-D4	Smooth Brome, Sedge sp., Goldenrod sp.	Water Present
P069-D1	Mixed Grasses	No Water Present
P069-D2	Eastern Cottonwood, Willow sp. Shrubs, Goldenrod sp.	Water Present, Sparsely Treed
P069-D3	Mixed Grasses	No Water Present
P069-D4	Norway Spruce, White Elm, Mixed Grasses	
P069-D5	Reed Canary Grass, Teasel	
P069-D6	White Ash, Common Apple, White Elm, Goldenrod sp.	Water Present, Treed
P070-D1	Mixed Grasses and Forbs, Goldenrod sp., Smooth Brome	
P070-D2	Cattail, Asters	No Water Present
P070-D3	Cattail, Reed Canary, Goldenrod sp., Bur Oak	Sparsely Treed, Water Present
P070-D4	Goldenrod sp., Aster sp., Smooth Brome	No Water Present
P071-D1	Mixed Grasses and Forbs, Goldenrod sp., Smooth Brome	Water Present
P071-D2	Reed Canary Grass, Smooth Brome	Some Water Present
P071-D3	Reed Canary Grass, Cattail, Common Reed	No Water Present

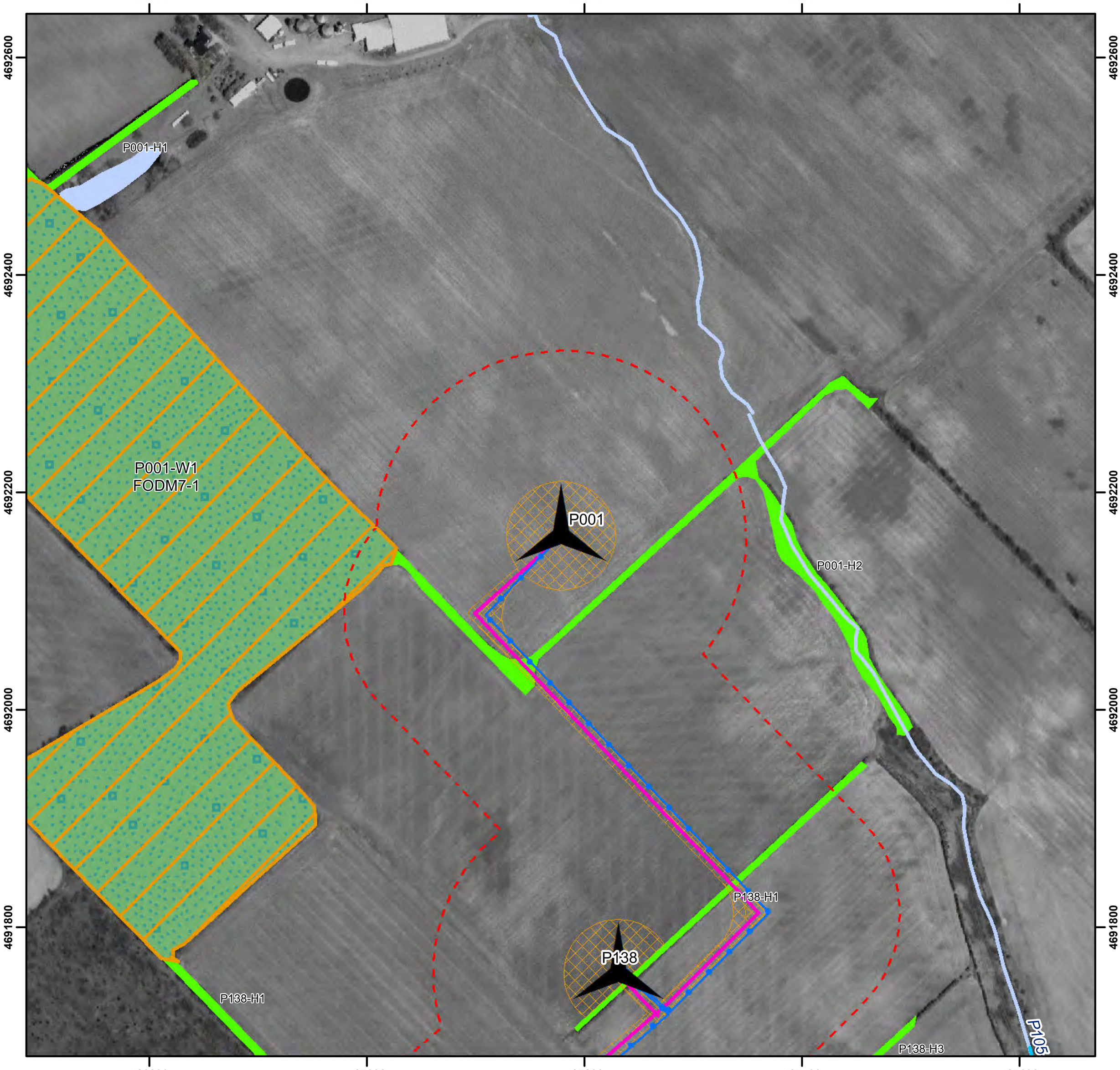
Naturalized Drain Map Code	Dominant Vegetation Species	Notes
P071-D4	Reed Canary Grass, Cattail	No Water Present
P072-D1	Red Cedar, Staghorn Sumac, White Elm, Reed Canary Grass, Goldenrod sp., Smooth Brome	
P072-D2	Common Reed, Bur Oak, Freeman's Maple, Narrow-leaved Cattail	Some Water Present
P072-D3	Freeman's Maple, Balsam Poplar, Narrow-leaved Cattail	Water Present, Treed
P074-D1	Narrow-leaved Cattail, Common Reed	Wide Channel (4ft)
P074-D2	Fox-tail Grass, Grasses sp., Mixed Forbs	No Water Present
P075-D2	Manitoba Maple, White Ash, Red Maple, White Spruce	
P075-D3	White Elm, White Ash, Freeman's Maple, Red-osier Dogwood	Water Present
P076-D1	Mixed Grasses and Forbs	Edges Mown, Narrow Channel
P076-D2	Timothy, Mixed Grasses and Forbs	No Water Present, Wide Channel (3ft)
P076-D3	Mixed Grasses and Forbs (edges)	Standing Water Present (0.5 ft)
P078-D1	Red Cedar, Norway Spruce	
P079-D1	Cattail	Edges Mown
P080-D1	Cattail, Common Reed	Wide Channel (4ft)
P081-D1	Reed Canary Grass, Mixed Grasses and Forbs, Common Reed	
P081-D2	Reed Canary Grass, Mixed Grasses and Forbs	Parts associated with P081-H2
P082-D1	Cattail, Mixed Grasses and Forbs	
P082-D2	Teasel, Sedge Sp., Narrow-leaved Cattail	Some Water Present
P083-D1	Mixed Grasses and Forbs	
P083-D2	Floating and Emergent Aquatics, Cattail	Small Creek, Standing Water
P083-D3	Mixed Grasses	Steep Ditch, Rock Piles along sides
P083-D4	Mixed Grasses and Forbs	Rock Piles along sides
P083-D5	Cattail	Wide Channel (4ft)
P085-D1	Cattail	Wide Channel (4ft)
P085-D2	Grasses	Small Ditch
P085-D3	Mixed Forbs, Common Reed	Narrow Channel
P085-D4	Mixed Grasses and Forbs	Narrow Channel
P085-D5	Mixed Grasses	Narrow Channel
P085-D6	Bur Oak, Red-osier Dogwood	Small Ditch, P085-H7
P085-D7	Mixed Grasses	
P086-D1	Cattail, Common Reed	Narrow Channel
P086-D2	Mixed Grasses and Forbs	Narrow Channel
P086-D3	Cattail, Common Reed	
P086-D4	Cattail, Mixed Grasses and Forbs	Sparse Shrubs
P086-D5	Mixed Grasses and Forbs, Cattail	
P087-D1	Cattail, Aster sp., Goldenrod sp.	No Water Present
P087-D2	Water-plantain, Aster sp., Cattail	Water Present
P087-D3	Mixed grasses	No Water Present
P088-D1	Mixed Grasses and Forbs, Staghorn Sumac, White Elm	Water Present, Sparse & Immature Shrubs/Trees

Naturalized Drain Map Code	Dominant Vegetation Species	Notes
P088-D2	Water-Plantain, Mixed Grasses and Forbs	Water Present
P088-D3	Reed Canary Grass, Mixed Forbs	Water Present
P093-D1	Calico Aster, Goldenrod sp., White Elm	No Water Present, Immature Trees
P094-D1	White Cedar, Timothy, Cattail, Giant Ragweed	No Water Present
P094-D2	Goldenrods, Mixed Grasses, Bur Oak	Water Present, Channel 1m Wide
P094-D3	Cattails, Common Reed	No Water Present
P094-D4	Mixed Grasses and Forbs	No Water Present
P094-D5	Reed Canary Grass, Goldenrods, White Elm	Water Present
P094-D6	Golden sp., Teasel, White Elm	Water Present, Sparsely Treed
P094-D7	Common Reed, Goldenrod sp., Teasel, White Elm	Water Present, Sparsely Treed
P094-D8	Narrow-leaved Cattail, Phragmites, Smooth Brome, Teasel	Water Present
P094-D9	Staghorn Sumac, Slender Willow, Basswood	Water Present, Sparsely Treed
P095-D1	Reed Canary, Aster sp., Cattail	No Water Present
P096-D1	Gray Dogwood, Mixed Grasses and Forbs	No Water Present, Sparse Shrubs
P097-D1	Willow sp., Silver Maple (saplings), Reed Canary Grass	Water Present, Sparse Shrubs
P097-D2	Reed Canary, Smooth Brome, Aster sp.	Water Present
P098-D1	Ash, Soft Maple, White Spruce, Reed Canary Grass, Kentucky Blue Grass	Moist
P098-D2	Reed Canary Grass, Canada Goldenrod, Gray Dogwood, Teasel	
P100-D1	Cattail, Forbs, White Elm	Water Present, Sparsely Treed
P100-D2	White Elm, American Basswood, Bur Oak	Water Present, Immature Trees
P100-D3	Narrow-leaved Cattail, Ash sp., Smooth Brome, Multiflora Rose	Water Present
P101-D1	Reed Canary Grass, Mixed Grasses and Forbs	No Water Present
P102-D1	Cattail, Goldenrods, Gray Dogwood	No Water Present
P103-D1	Cottonwood, Willow sp., Goldenrod sp.	No Water Present
P104-D1	Reed Canary Grass, Smooth Brome	No Water Present
P104-D2	Manitoba Maple, White Elm, Smooth Brome	Water Present
P105-D1	White Elm, American Basswood, Black Walnut	Water Present
P106-D1	Timothy, Red Clover, Orchard Grass	No Water Present
P106-D2	Goldenrod sp., Willow sp., Smooth Brome	No Water Present
P106-D3	Reed Canary, Goldenrod sp., Common Ragweed	Water Present
P107-D1	Manitoba Maple, Common Burrdock, Goldenrod Sp.	
P108-D1	Mixed Forbs, Gray Dogwood, White Elm	No Water Present, Sparsely Treed
P109-D1	Goldenrod sp., Ragweed, Deciduous Shrubs	Water Present, Sparse Shrubs
P110-D1	Mixed Grasses and Forbs	
P111-D1	Mixed Grasses and Forbs, White Elm	Sparse Trees
P111-D2	Green Ash, Reed Canary Grass	Water Present
P111-D5	Willow Sp., Red Cedar, Black Walnut, White Elm	
P111-D6	Smooth Brome, Barnyard Grass, Goldenrod sp., teasel	Water Present
P111-D7	Goldenrod sp., Teasel, White Elm, Multiflora Rose, White Ash	Water Present, sparsely treed

Naturalized Drain Map Code	Dominant Vegetation Species	Notes
P112-D1	Reed Canary Grass, Smooth Brome, Mixed Forbs	Water Present (1m wide)
P113-D1	Common Reed, Cattail	Steep Ditch
P114-D1	White Elm, Hawthorn sp., Staghorn Sumac	Water Present
P114-D2	Mixed Grasses, Cattail	No Water Present
P114-D3	Mixed Grasses, Goldenrod sp.	Water Present
P115-D1	Cattail, Goldenrod sp., Timothy	No Water Present
P115-D2	Mixed Grasses and Forbs, Cattail	Small Ditch
P116-D1	Emergent Aquatics, Cattail, Common Reed	Wide Channel (1.5m), Water Present
P116-D2	Common Reed, Cattails, young trees and shrubs	Sparse trees and shrubs
P116-D3	Common Reed	Some Water Present
P117-D1	Reed Canary, Goldenrods	No Water Present
P117-D2	Reed Canary, Common Reed, Goldenrod sp.	Water Present
P120-D1	Mixed Grasses and Forbs, Staghorn Sumac	No Water Present, Sparse Shrubs
P122-D1	Reed Canary, Common Reed, Orchard Grass, Timothy, Giant Ragweed	No Water Present, Currently being excavated
P122-D2	Common Reed	Steep Ditch
P124-D1	Mixed forbs	No Water Present
P124-D2	Hickory sp., Mixed Grasses, Eastern Cottonwood	Water Present
P125-D1	Narrow-leaved Cattail, Grass sp., Red Cedar, Bur Oak	Water Present
P126-D1	Mixed Grasses and Forbs, Red cedar, Staghorn Sumac	Creek Containing Water; Sparse Shrubs
P126-D2	Common Reed, Cattail, Reed Canary	Steep Ditch, No Water Present
P127-D1	Common Reed, Mixed Grasses and Forbs	No Water Present
P127-D2	American Elm, Burr Oak, Reed Canary Grass, Goldenrod sp., Purple Loosestrife	Water Present, Wide Channel (3m) Debris Pile
P129-D1	Cattail, White Elm, White Ash	No Water Present, Sparsely Treed
P129-D2	Common Reed, Staghorn Sumac, Goldenrods	
P132-D1	Grass Sp.	
P136-D1	Mixed Grasses and Forbs	No Water Present, Sparse Shrubs and Saplings, Narrow Channel
P139-D1	Willow sp., Staghorn Sumac, Eastern Cottonwood (Saplings)	Water Present
P139-D2	Reed Canary, Green Ash, White Elm, Willow Sp.	Water Present
P139-D3	Green Ash, Black Walnut, Canada Goldenrod	Water Present
P139-D4	White Willow, White Ash, Eastern Cottonwood, Smooth Brome	Water Present
P139-D5	Rice-grass sp., Duckweed, Scirpus sp., Willow sp., Staghorn Sumac	Water Present
P140-D1	Willow sp., White Elm, Eastern Cottonwood	Water Present
P140-D2	American Basswood, Sugar Maple, Canada Goldenrod	Water Present
P140-D3	Smooth Brome, Reed Canary Grass, Broad Leaved Cattail	Water Present
P140-D4	Common Reed, Narrow-leaved Cattail, Canada Goldenrod	Water Present
P140-D5	Common Reed, Red-osier Dogwood, Scirpus sp.	Water Present
P140-D7	Phragmites, Goldenrod sp., White Elm	No Water Present

Naturalized Drain Map Code	Dominant Vegetation Species	Notes
P145-D1	Manitoba Maple, Black Walnut, American Elm	
P152-D1	Basswood, Slender Willow, White Elm, Willow sp.	Water Present
P156-D2	White Spruce, Red Cedar, Gray Dogwood, Hawthorne Sp.	
P156-D3	Red Cedar, White Cedar, White Ash, Manitoba Maple, Phragmites	
P156-D4	Red Cedar, White Cedar, White Ash, White Spruce, Sugar Maple	
P161-D1	White Vervain, Grass, sp., Common Reed	Water Present, Wide Channel (~3m)
P164-D1	Smooth Brome, Sedge sp., Goldenrod sp., White Elm	Water Present
P171-D1	Phragmites, Smooth Brome, Reed Canary Grass, Velvetleaf	Water Present
P171-D2	Red-osier Dogwood, Smooth Brome, Manitoba Maple	Water Present
P175-D1	Black Walnut, Red Cedar, Poplar Sp., Gray Dogwood, Phragmites, reed canary grass	
P176-D1	Red Cedar, Poplar Sp.	Water Present
P176-D2	Red Cedar	
RB-D1	Cattail, Common Reed, Willow sp. Trembling Aspen	Water Present Ditch ~2m Wide
PSS-D1	Reed Canary, Goldenrod sp.	Water Present
PSS-D2	Red Cedar, Willow Sp., Manitoba Maple, Reed Canary, Goldenrod sp., Garlic Mustard	Water Present, Wide Channel (5m)
SSS-D1	White Elm, Mixed Forbs	Water Present, Sparse Saplings
SSS-D2	Shagbark Hickory, Reed Canary Grass, Common Reed Grass, Smooth Brome	No Water Present
SSS-D3	Canada Goldenrod, Gray Dogwood, Smooth Brome	Water Present
CLA-D1	Goldenrod sp., Willow sp., White Elm	Water Present
CLA-D2	White Elm, Goldenrod sp.	Water Present
CLA-D3	Phragmites, Cattails, Hawthorne Sp.	No Water Present
TRANS-D1	White Pine, Silver Maple, Staghorn Sumac, Black Walnut, Locust Sp., White Ash, Cottonwood, White Cedar	
TRANS-D2	Poplar Sp., Manitoba Maple, Red Maple, Canada Elderberry, White Elm, Black Walnut, Reed Canary Grass	

Appendix IV
Site Investigation Proposed turbine Maps



South Kent Wind Project

Turbine No. 1

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula (S)
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

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4691200 4691000 4690800 4690600

P002

P002-H1

EDS LINE

P002-W1
TAGM1

P002-D2

P002-H1

425600 425800 426000 426200 426400

South Kent Wind Project

Turbine No. 2

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

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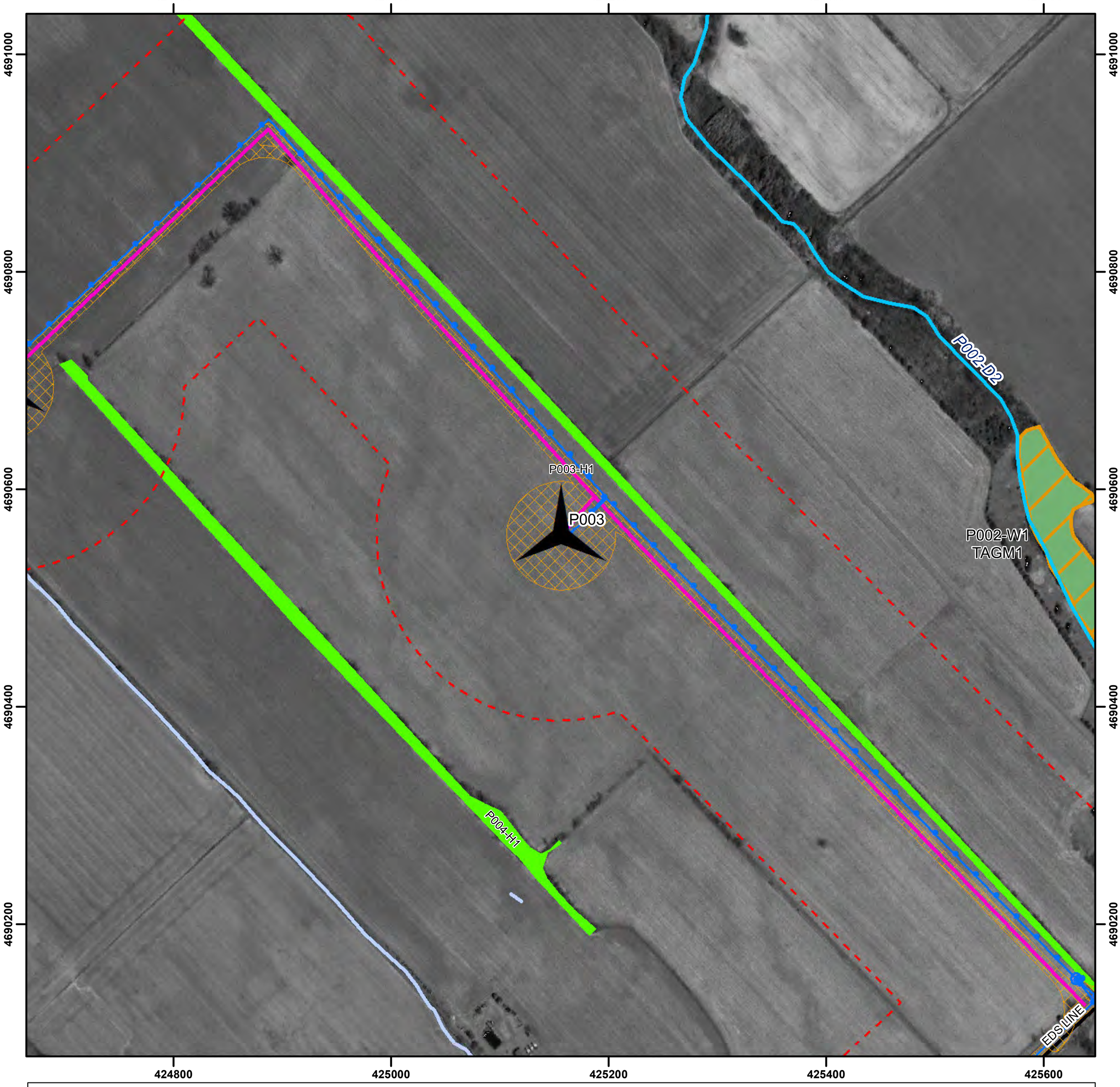


South Kent Wind Project

Turbine No. 3

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

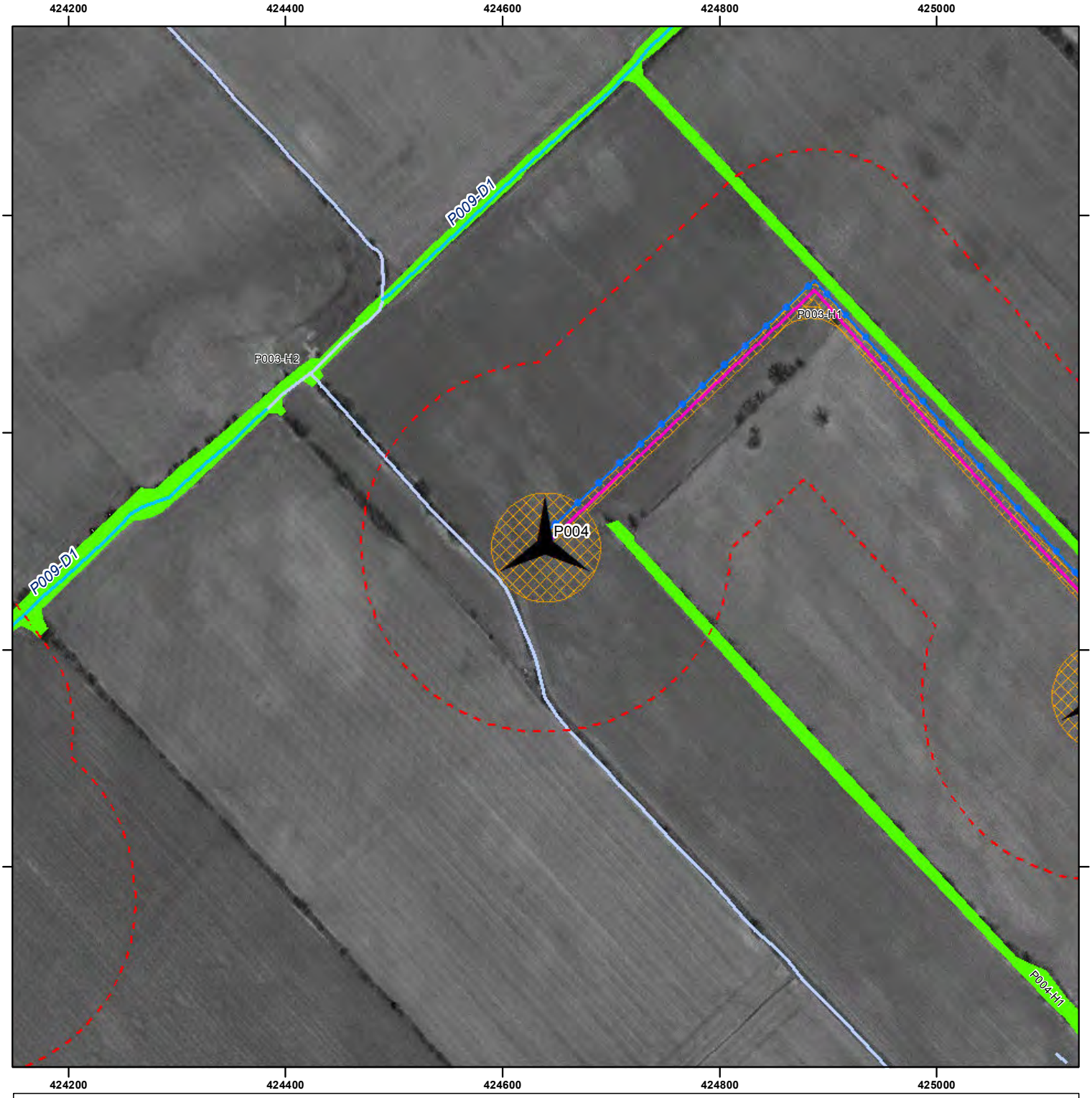
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 4

Natural Resource Solutions Inc.
Aquatic, Terrestrial and Wetland Biologists

Date: April-30-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

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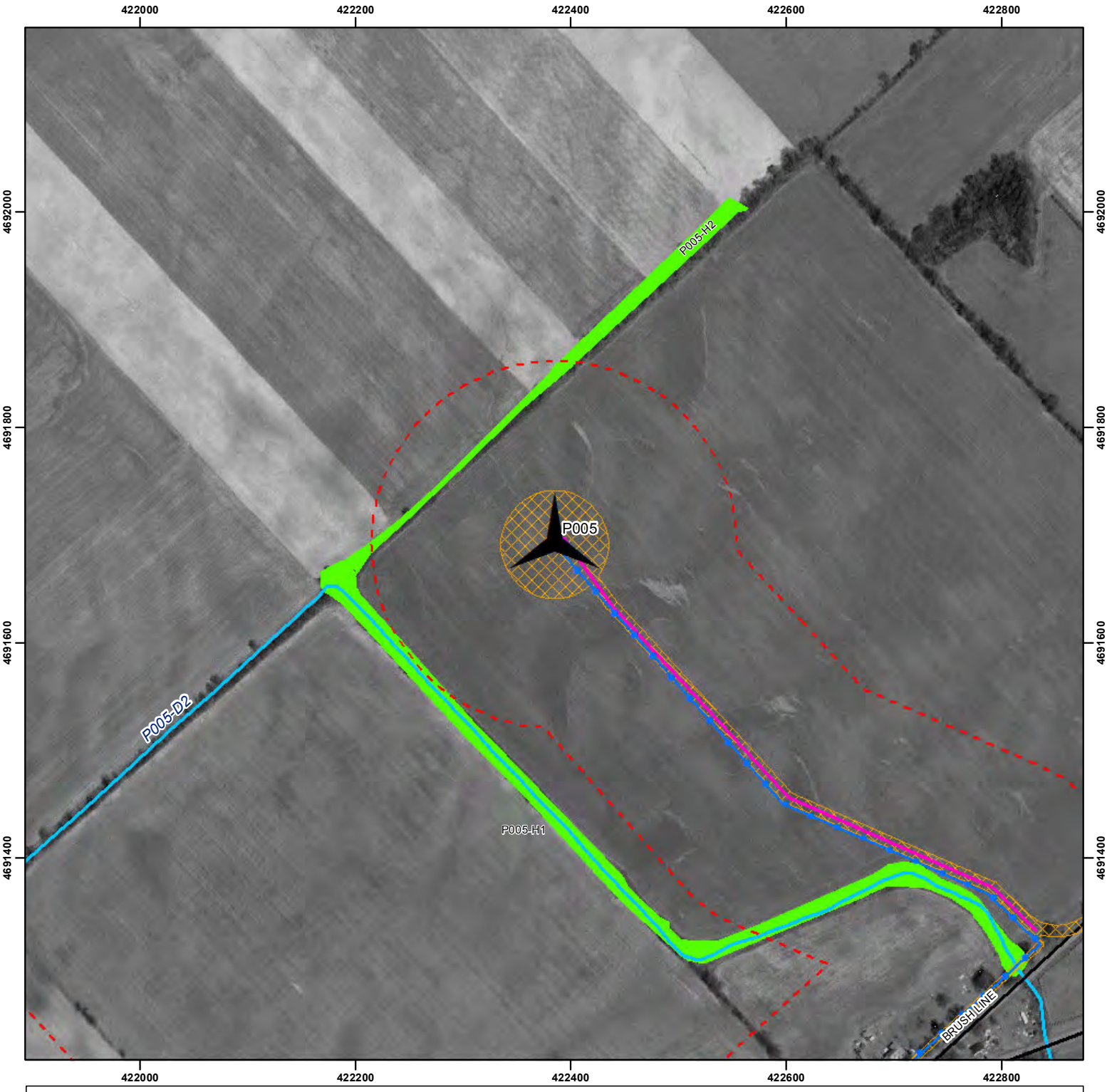

South Kent Wind Project

Turbine No. 5

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

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423800 424000 424200 424400

4690800 4690600 4690400 4690200 4690000

P167 P003-H2 P006 P009-H1 P009-D1 P009-H1 P009-H1 P007 P009-D1 P009-H4

South Kent Wind Project

Turbine No. 6

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd

423600 423800 424000 424200 424400

4690400 4690200 4690000 4689800 4689600

P003-H2
P006
P009-H1
P009-H1
P009-H4
P009-D1
P007
P009
P009-H4
P008
P009-H3

South Kent Wind Project

Turbine No. 7

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

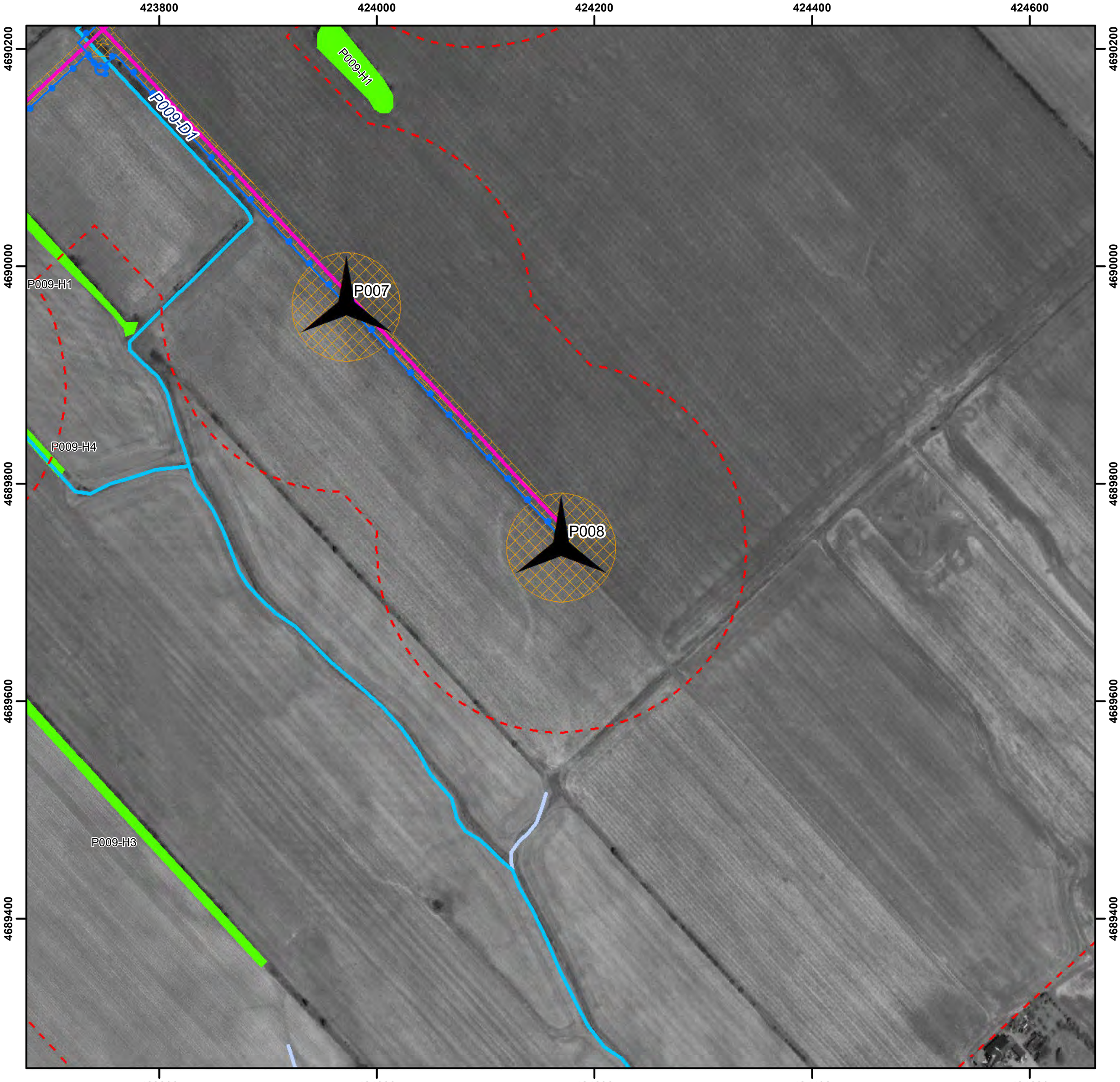
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 8

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd

423200 423400 423600 423800 424000

4690200 4690000 4689800 4689600

P009-H1 P009-D1 P009-H1 P009-H1 P009-H4 P009-H4 P009 P007 P009-H3 MULL RD STEFINA LINE P009-H5 P009-D2 P009-H3

423200 423400 423600 423800 424000

South Kent Wind Project

Turbine No. 9

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

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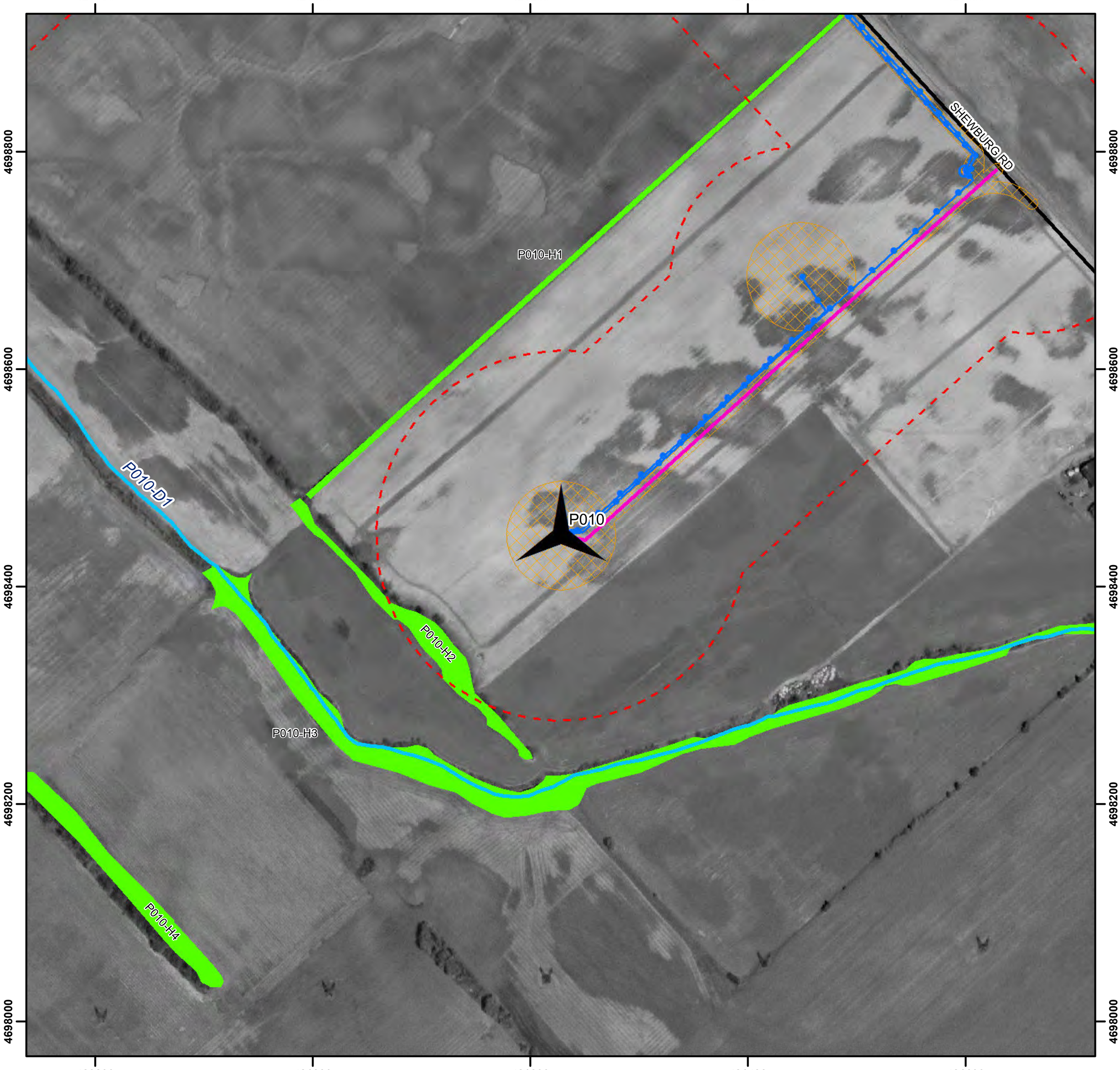


South Kent Wind Project

Turbine No. 10

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

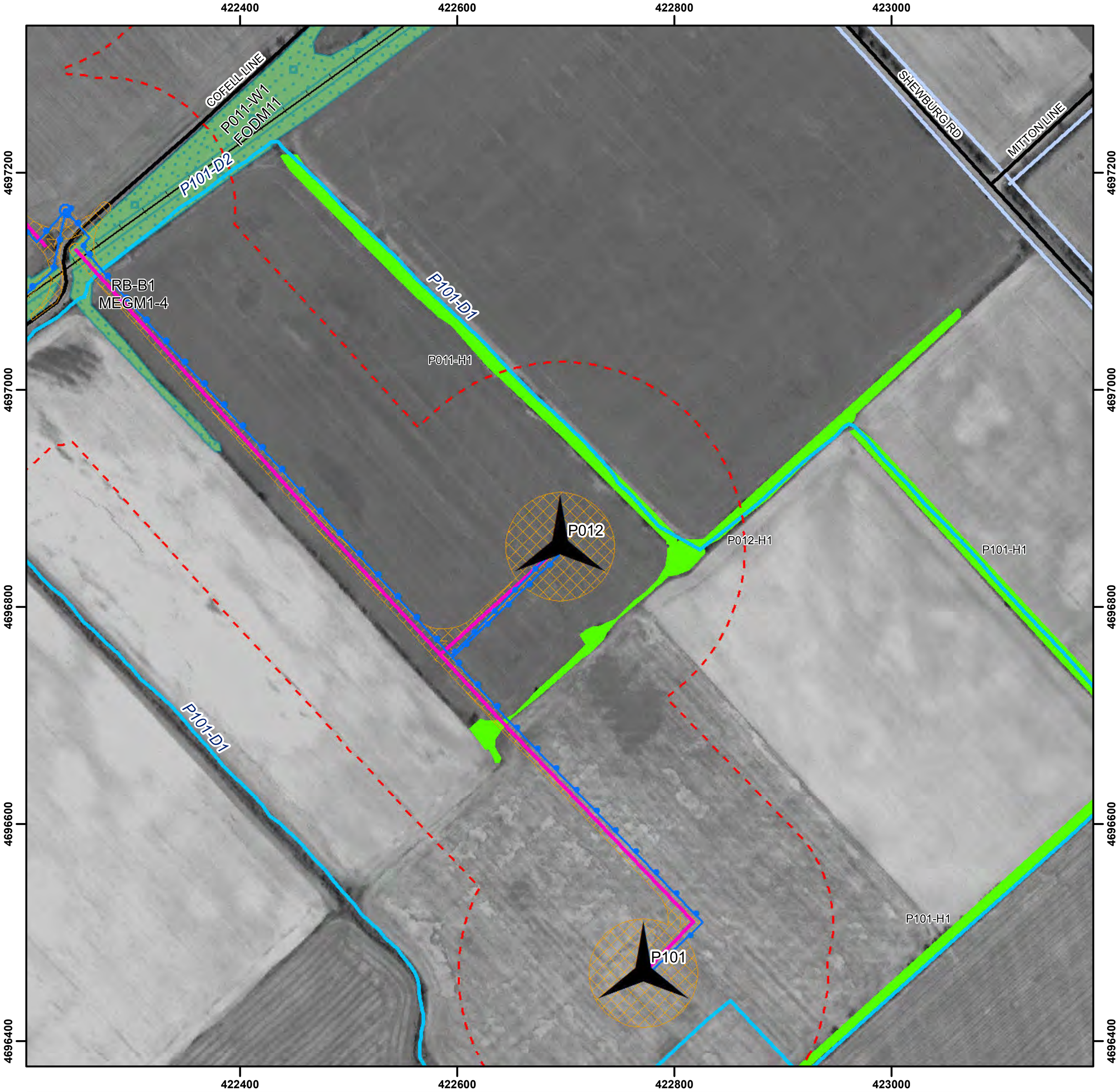
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 12

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd

South Kent Wind Project

Turbine No. 13

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

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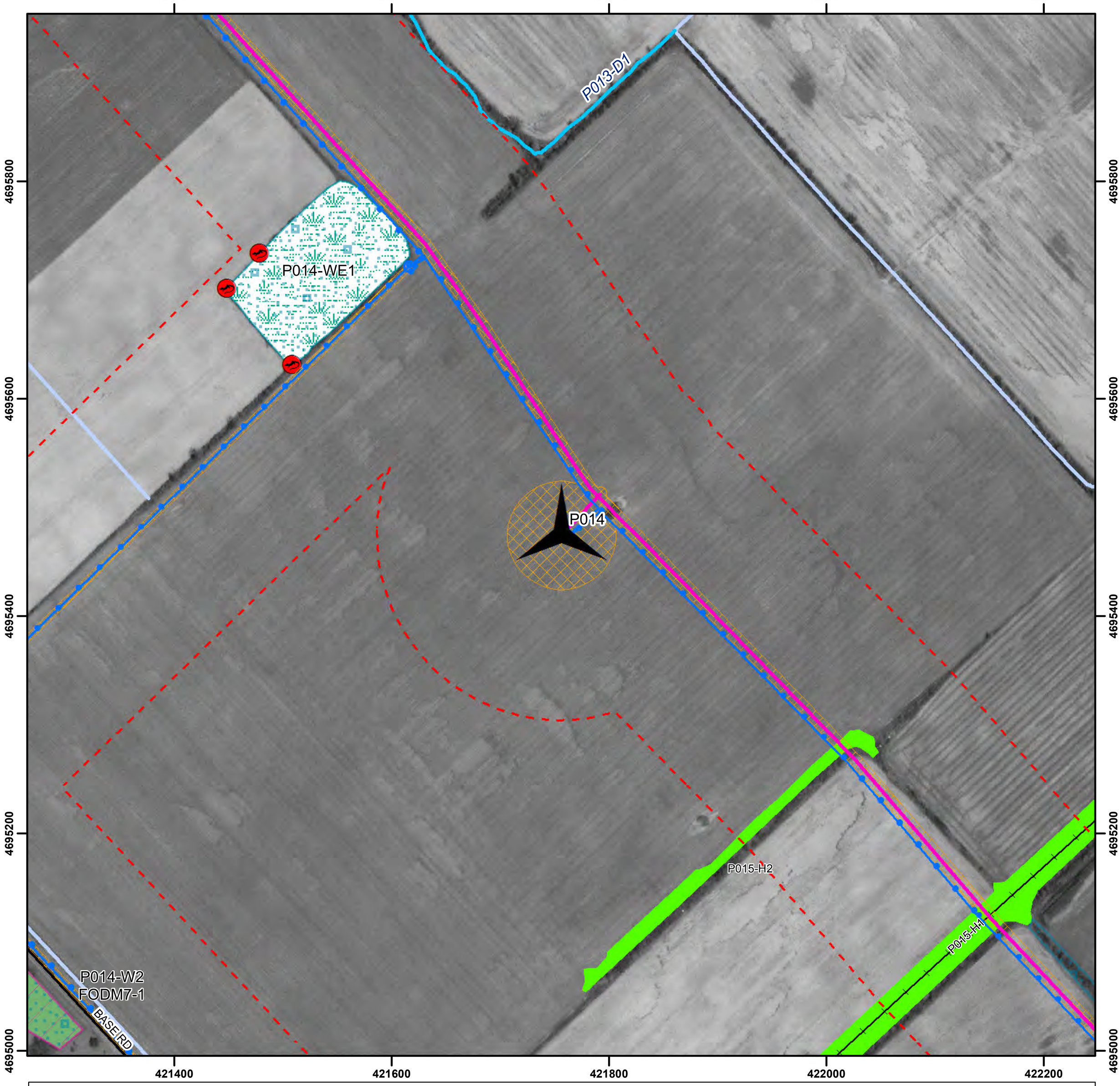

South Kent Wind Project

Turbine No. 14

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

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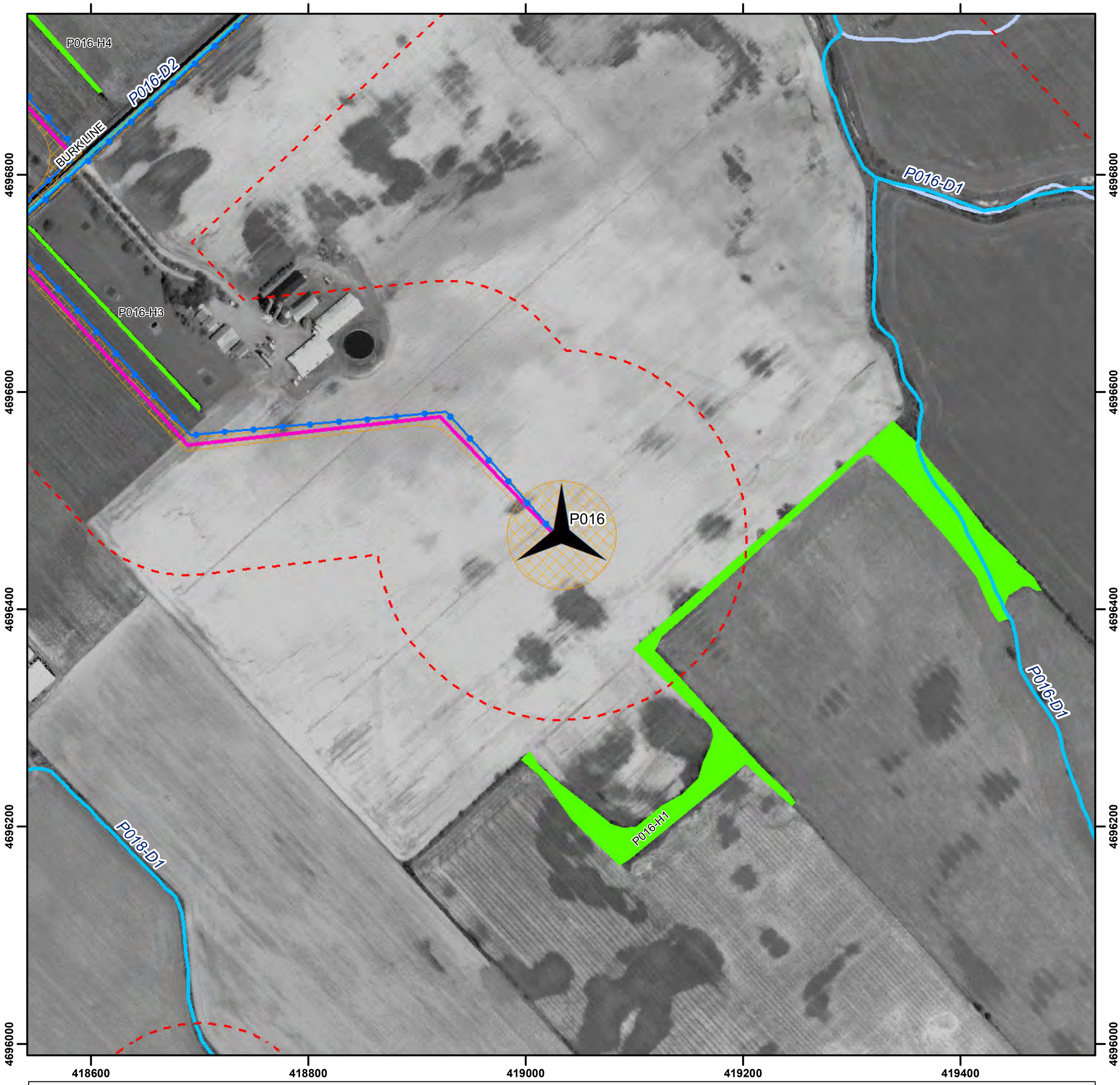

South Kent Wind Project

Turbine No. 16

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

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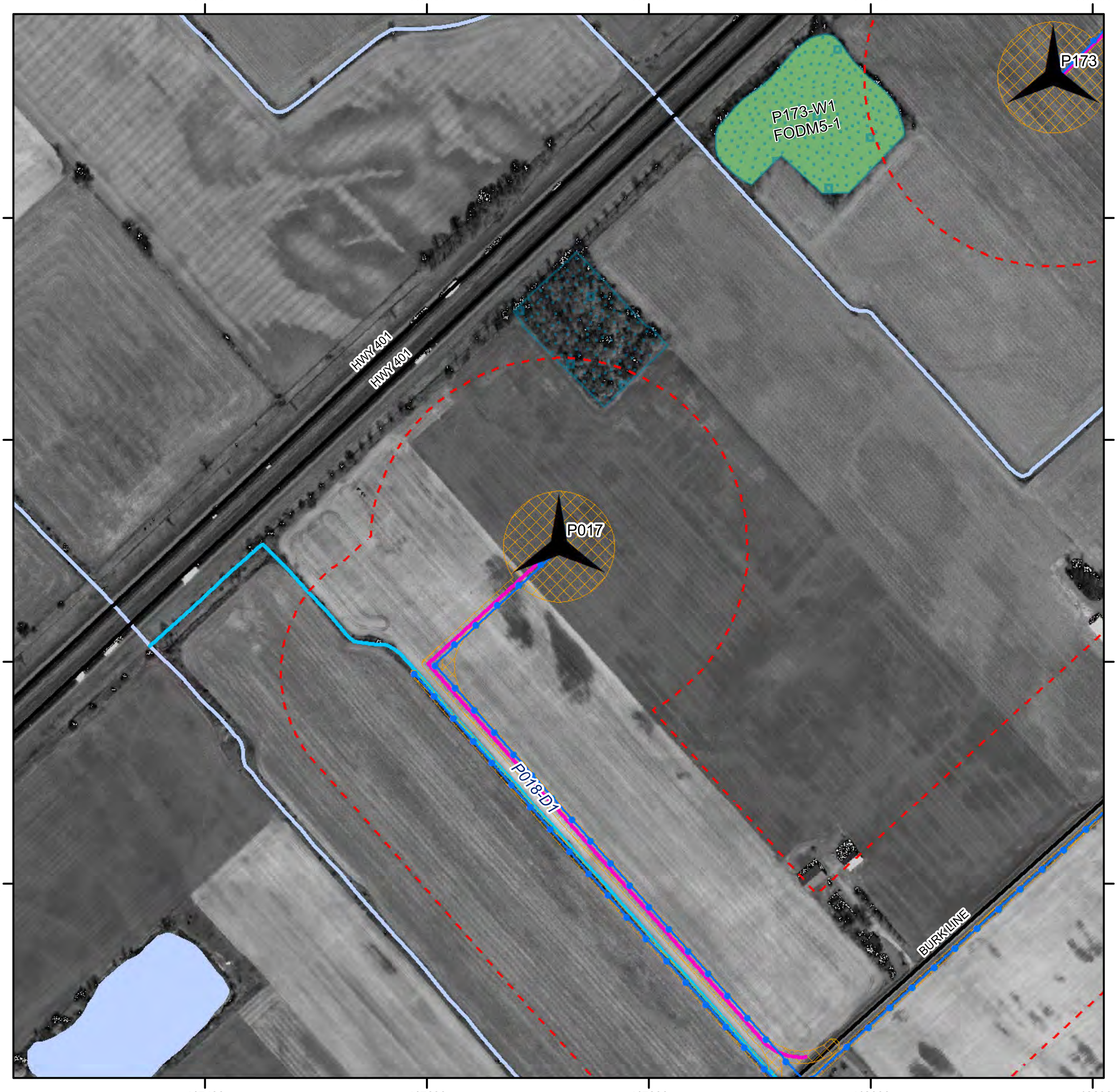
4697000 4696800 4696600 4696400



South Kent Wind Project

Turbine No. 17

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

N

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd

418200 418400 418600 418800 419000

4696200 4696000 4695800 4695600 4695400

P016-H1

P018-D1

P018

KNIGHTS LINE

South Kent Wind Project

Turbine No. 18

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

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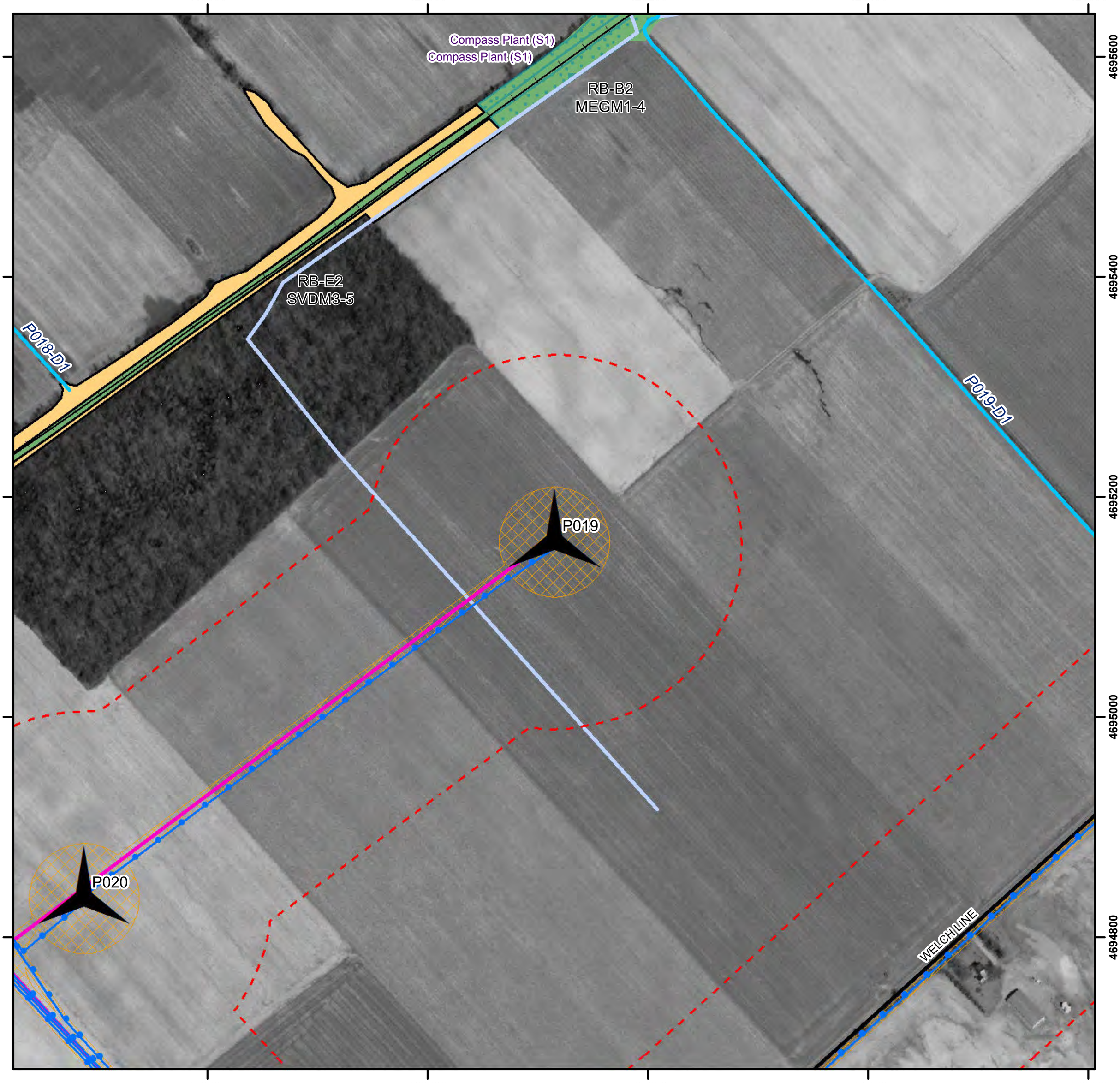

South Kent Wind Project

Turbine No. 19

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

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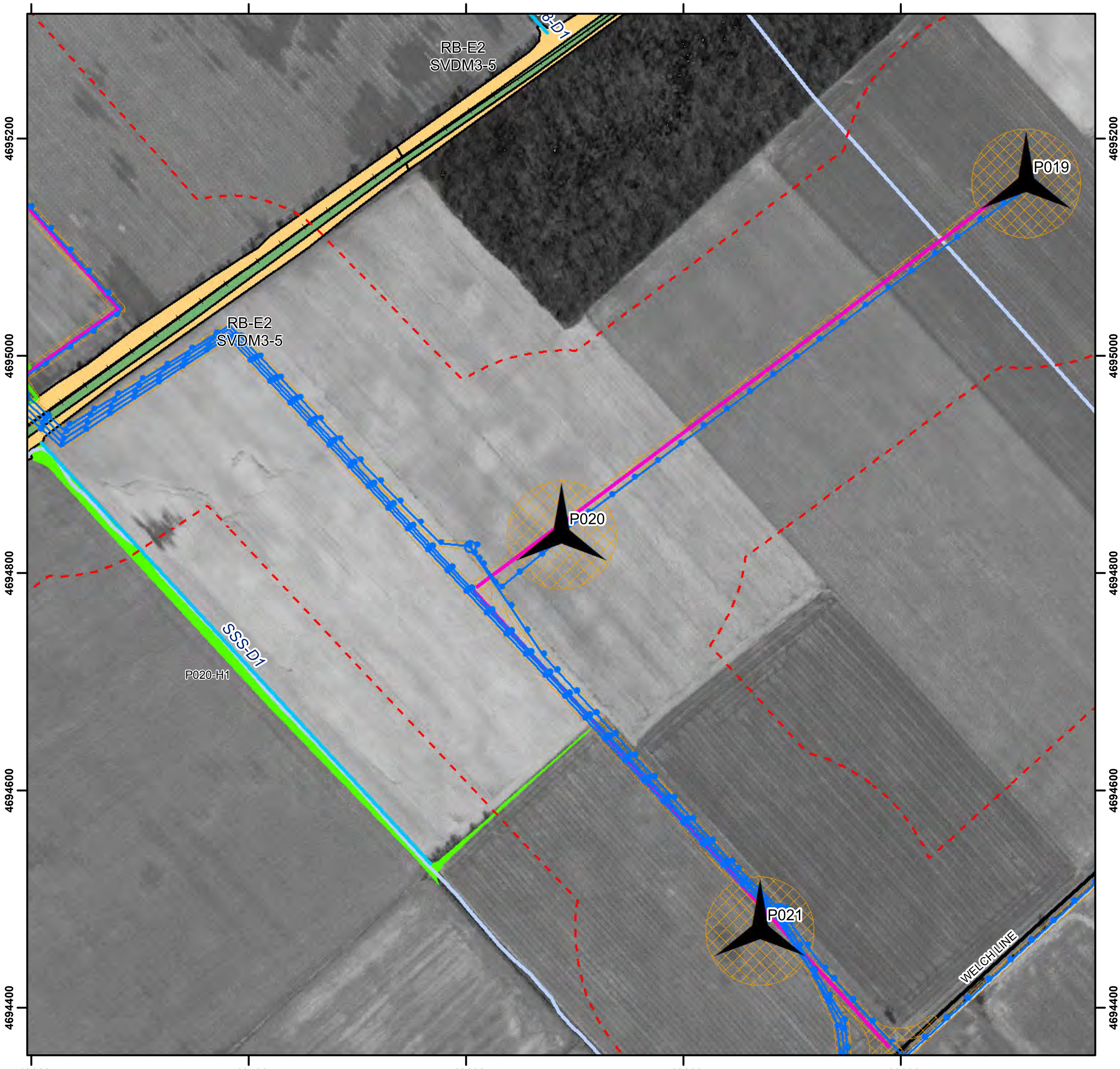

South Kent Wind Project

Turbine No. 20

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

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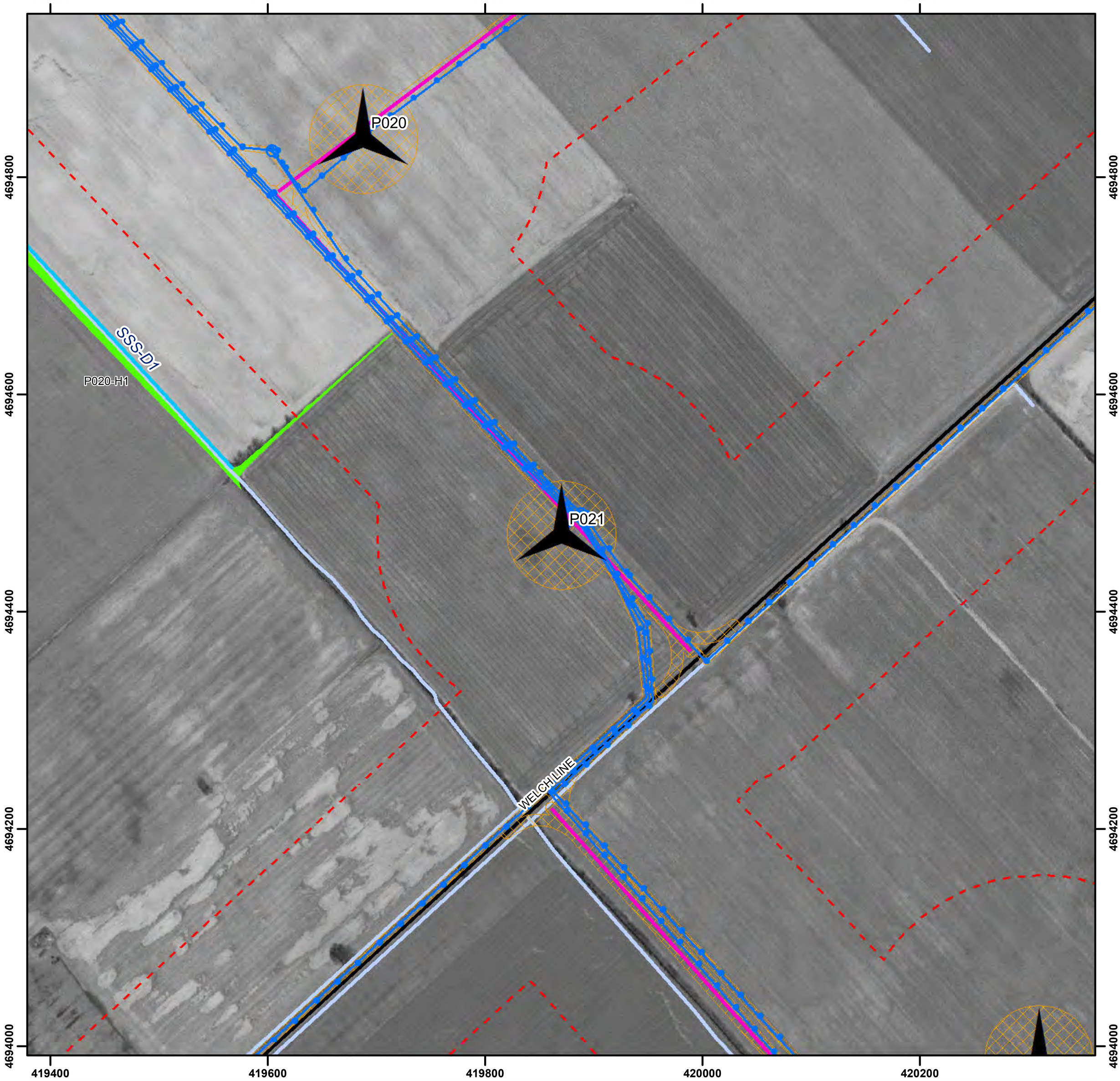

South Kent Wind Project

Turbine No. 21

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula (S)
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

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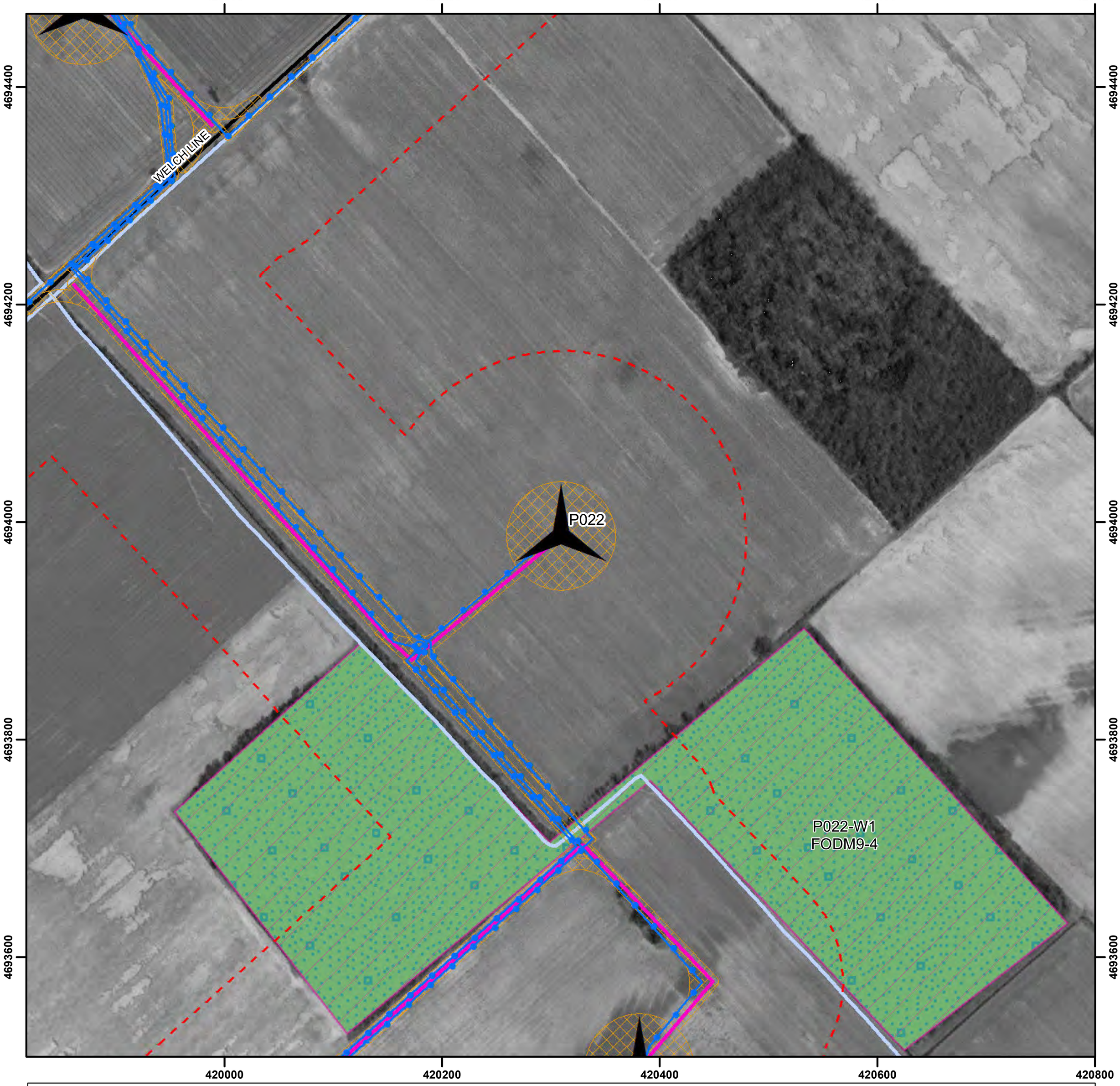

South Kent Wind Project

Turbine No. 22

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

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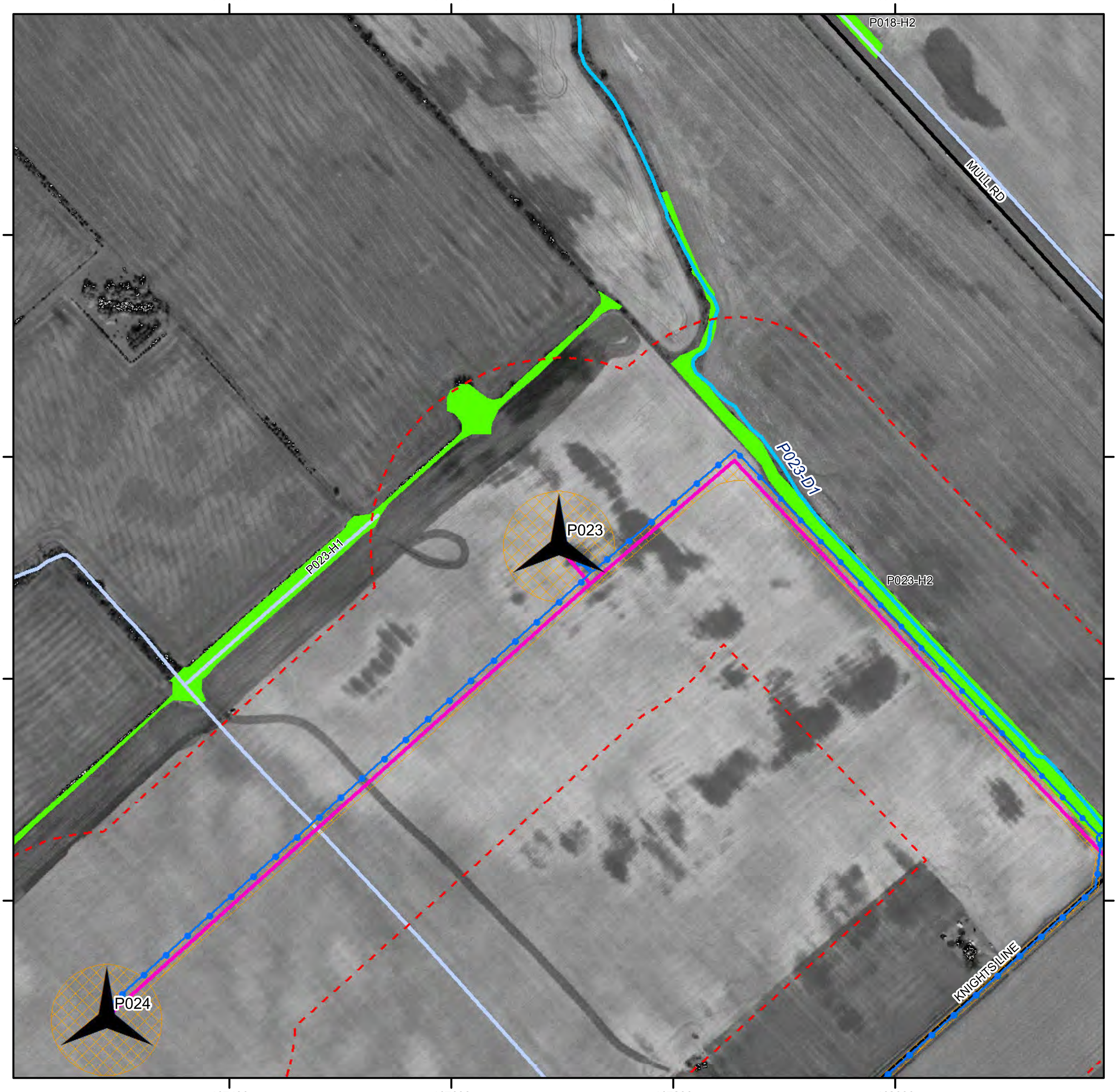


South Kent Wind Project

Turbine No. 23

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

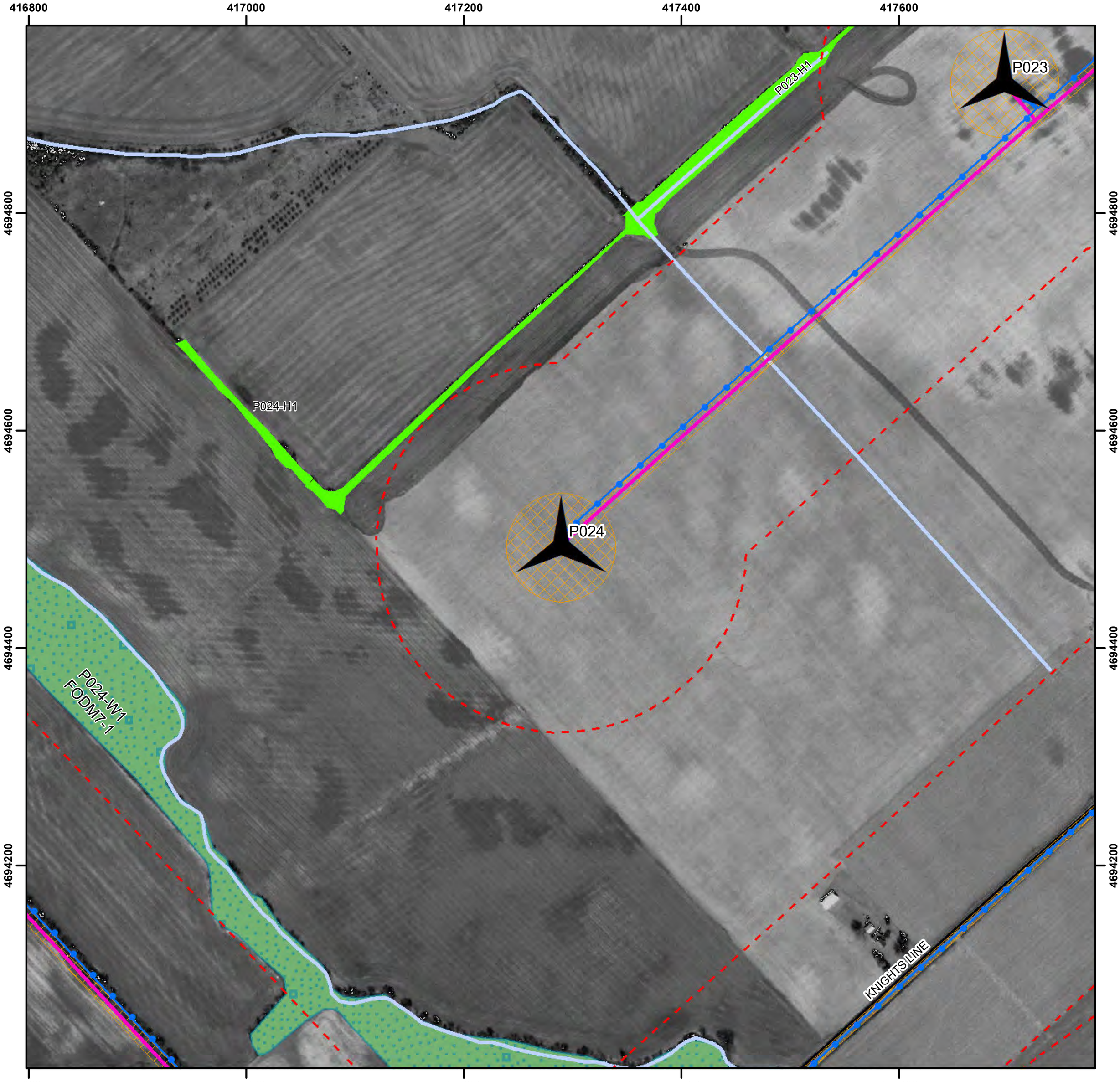
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 24

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd

418200 418400 418600 418800 419000

4693000 4692800 4692600 4692400 4692200

P155-H1
WELCH LINE
P026-D1
P026-H1
P026
P029-H1

South Kent Wind Project

Turbine No. 26

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula (S)
- Bat Maternity Roost

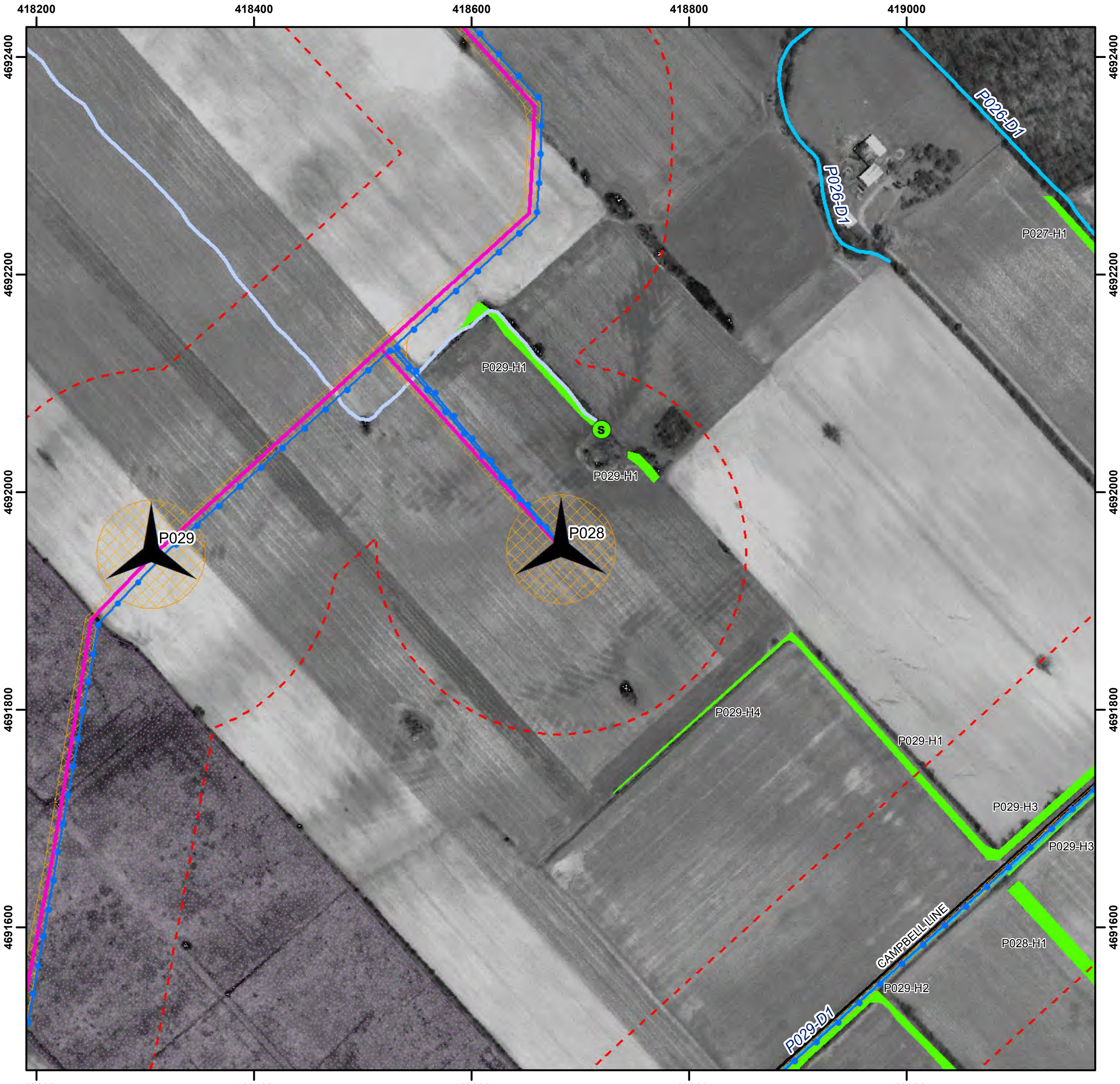
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 28

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd

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4692400 4692200 4692000 4691800 4691600

P029-H5 P029-H1 P029-H1 P029-H4 P135-H2 P030-D1

P029 P028

S

418000 418200 418400 418600

South Kent Wind Project

Turbine No. 29

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

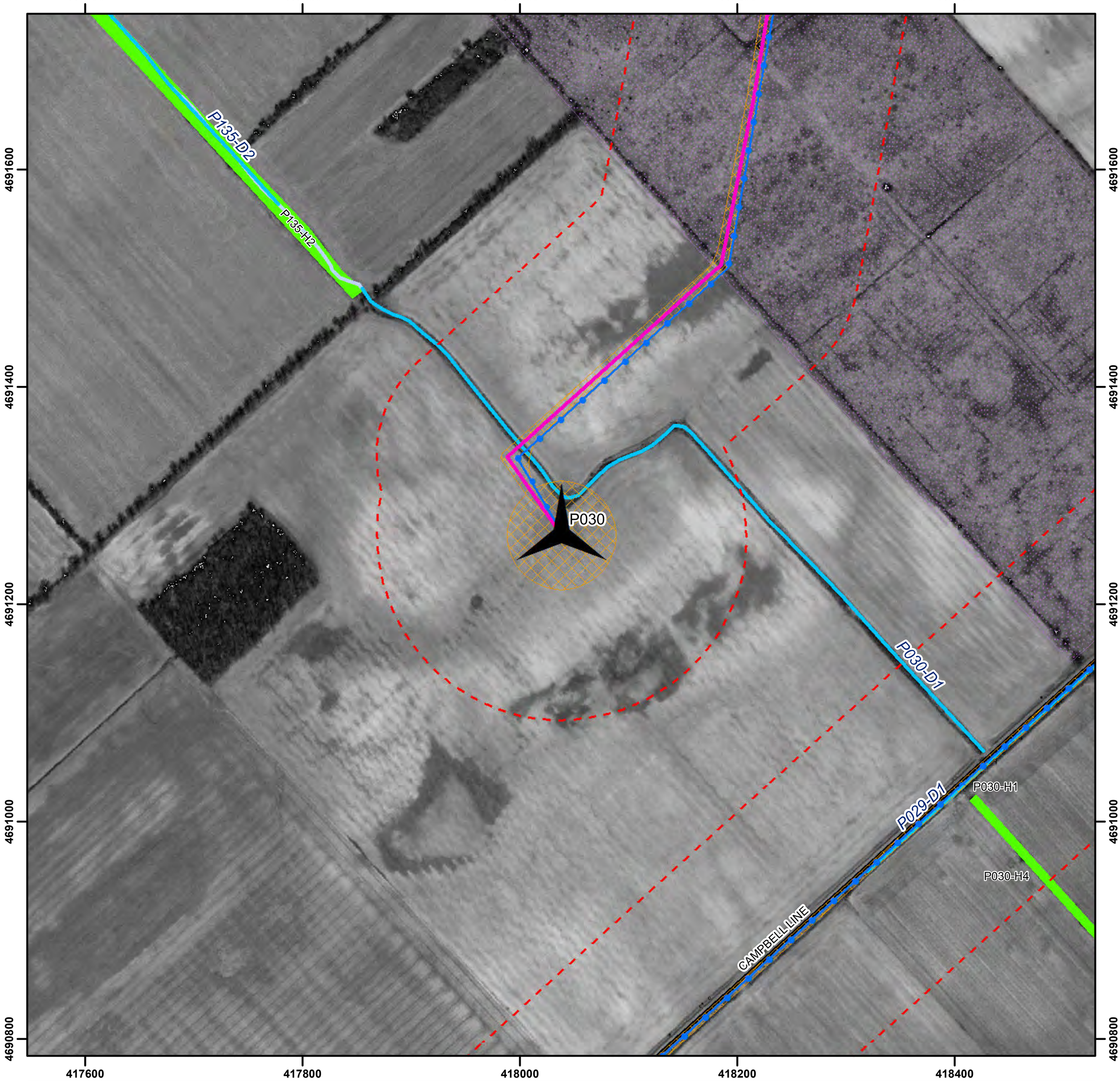
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 30

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

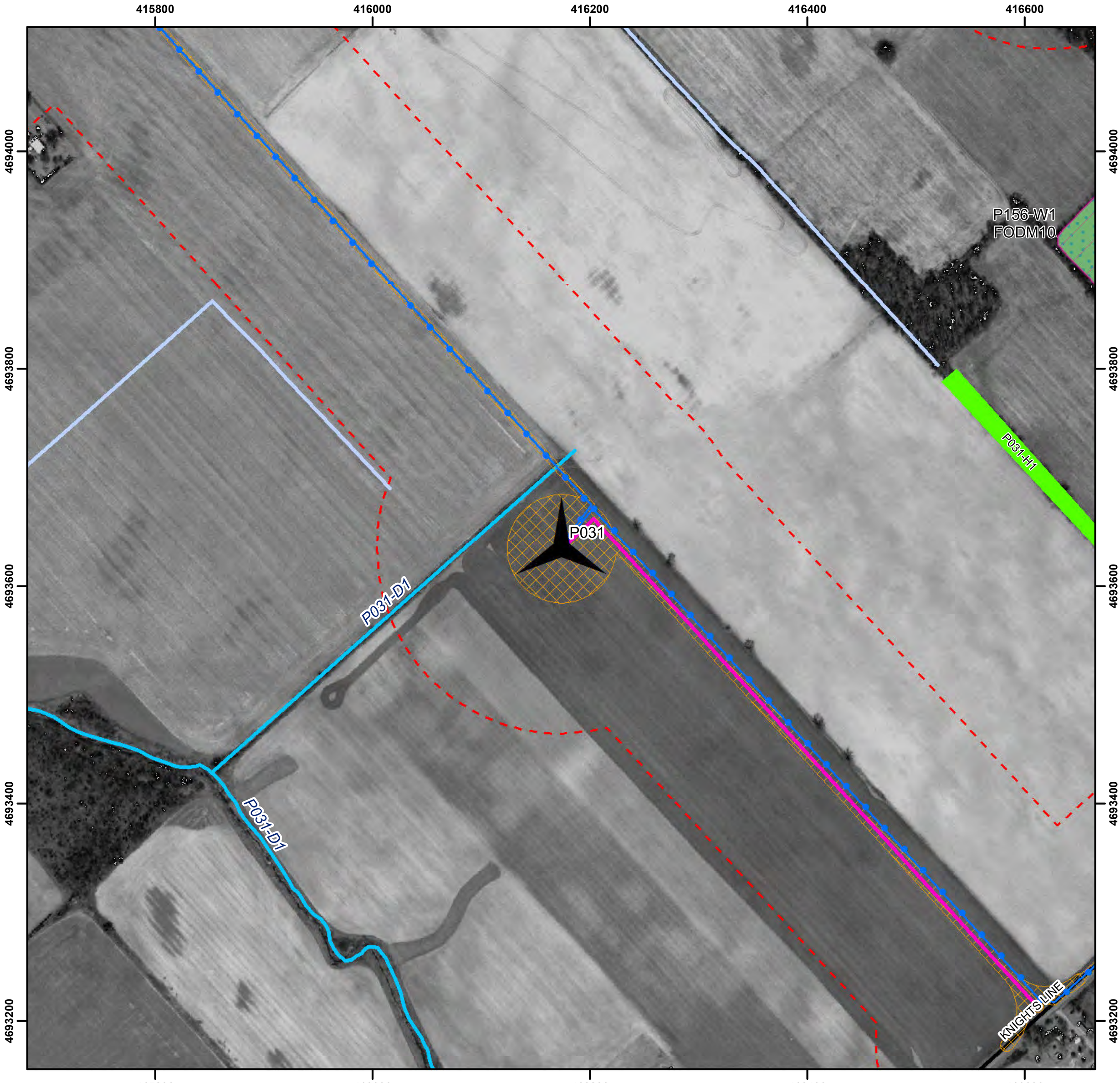
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 31

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

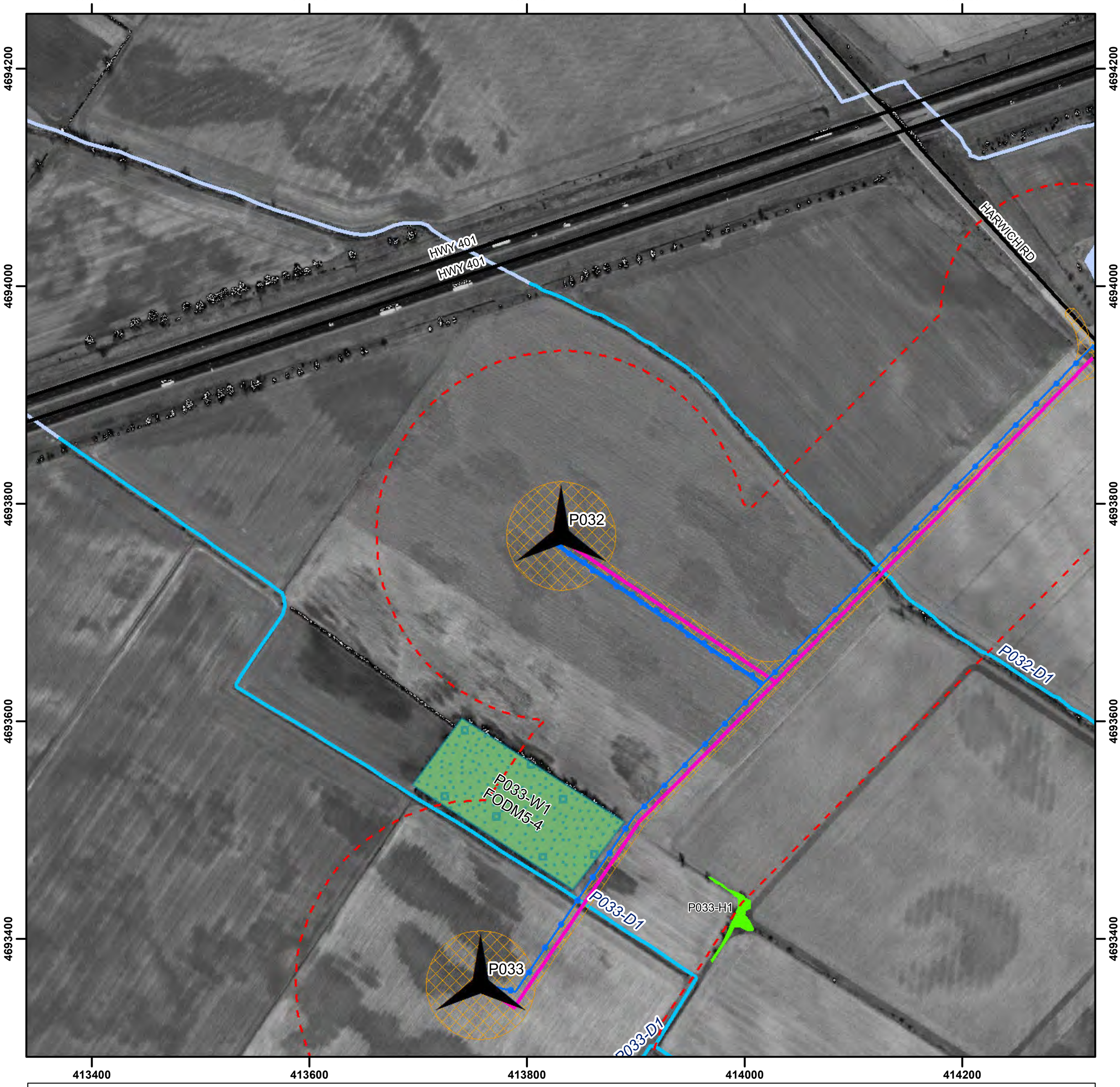
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 32

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

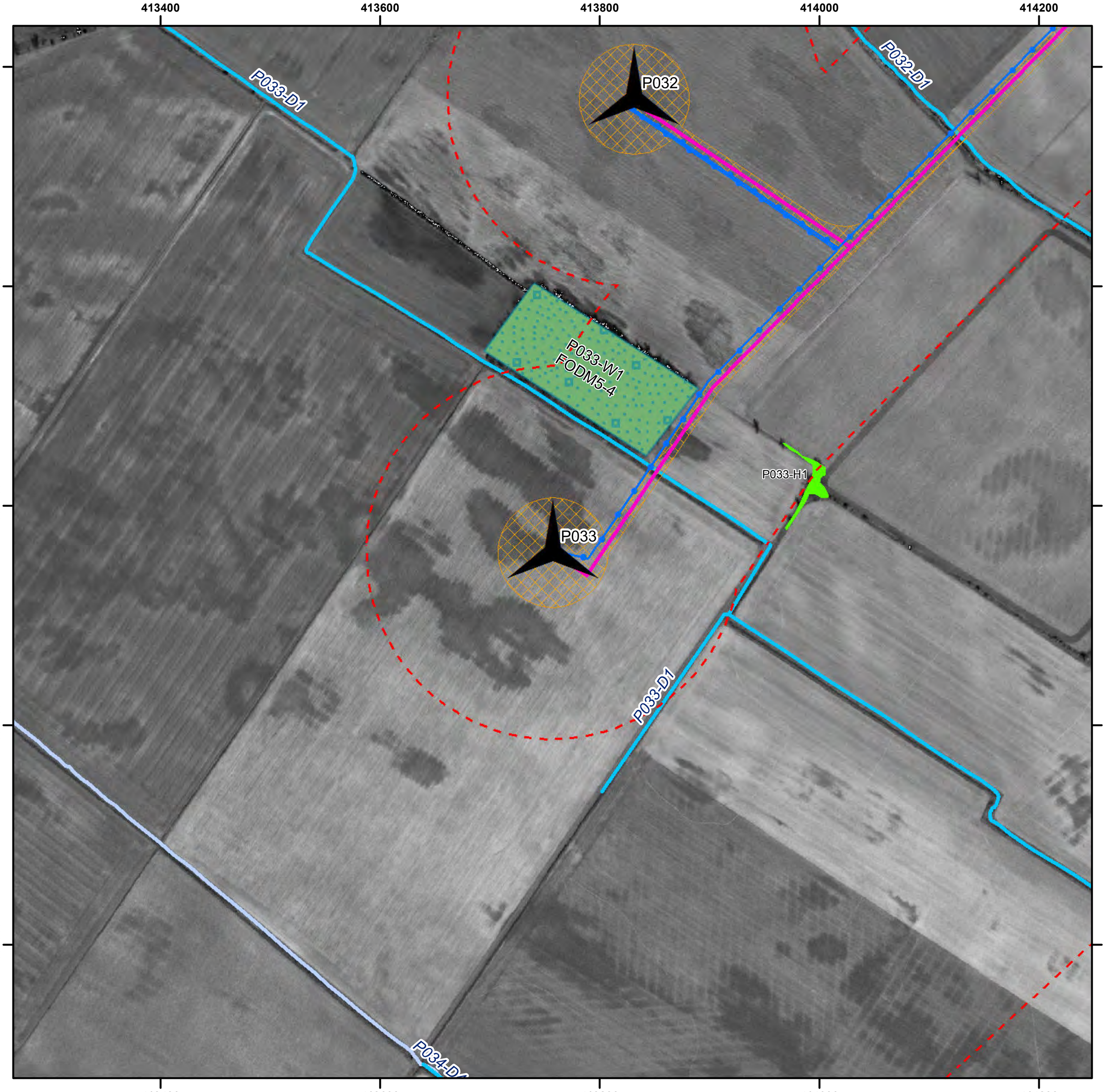
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 33

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

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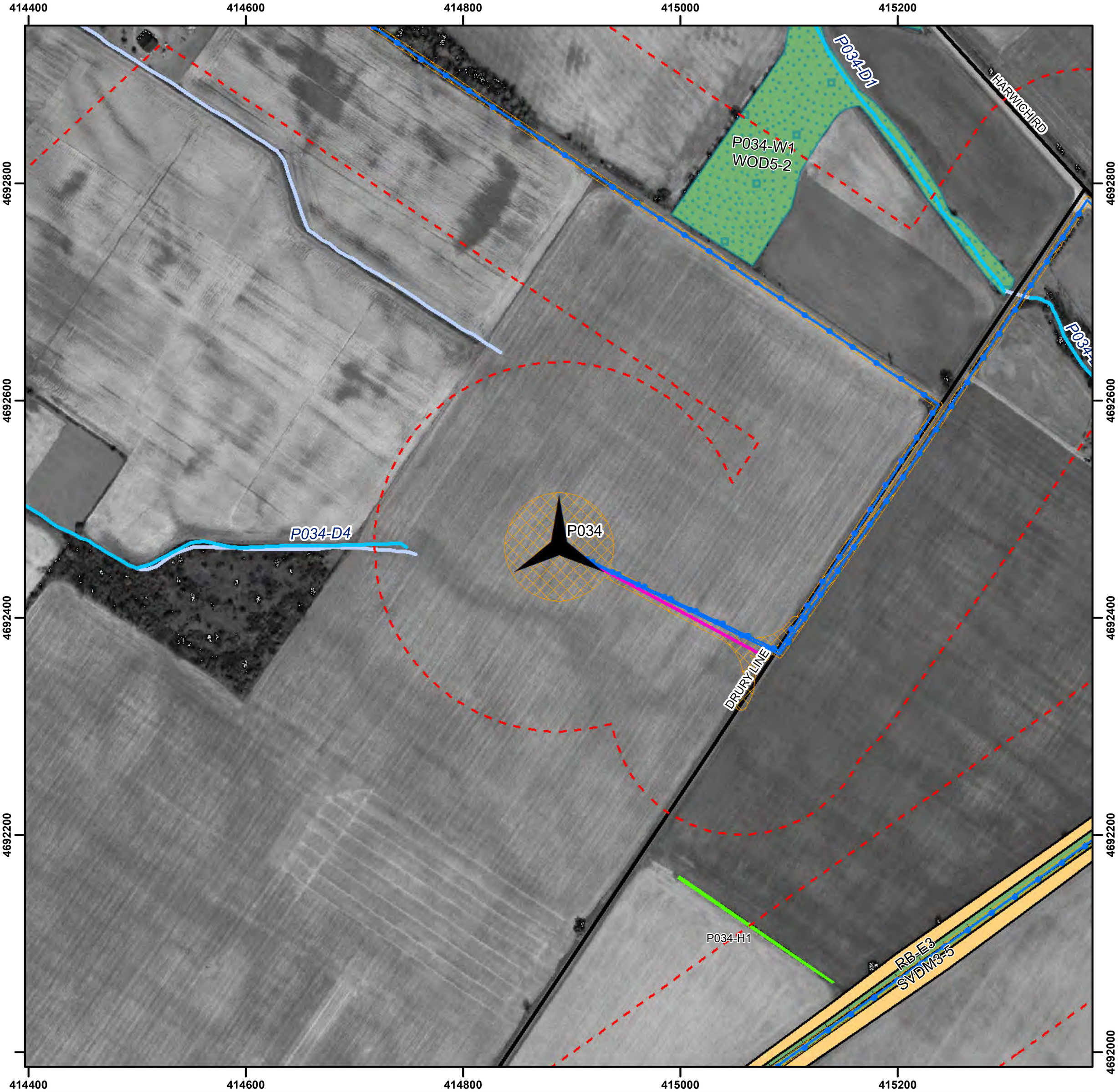

South Kent Wind Project

Turbine No. 34

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

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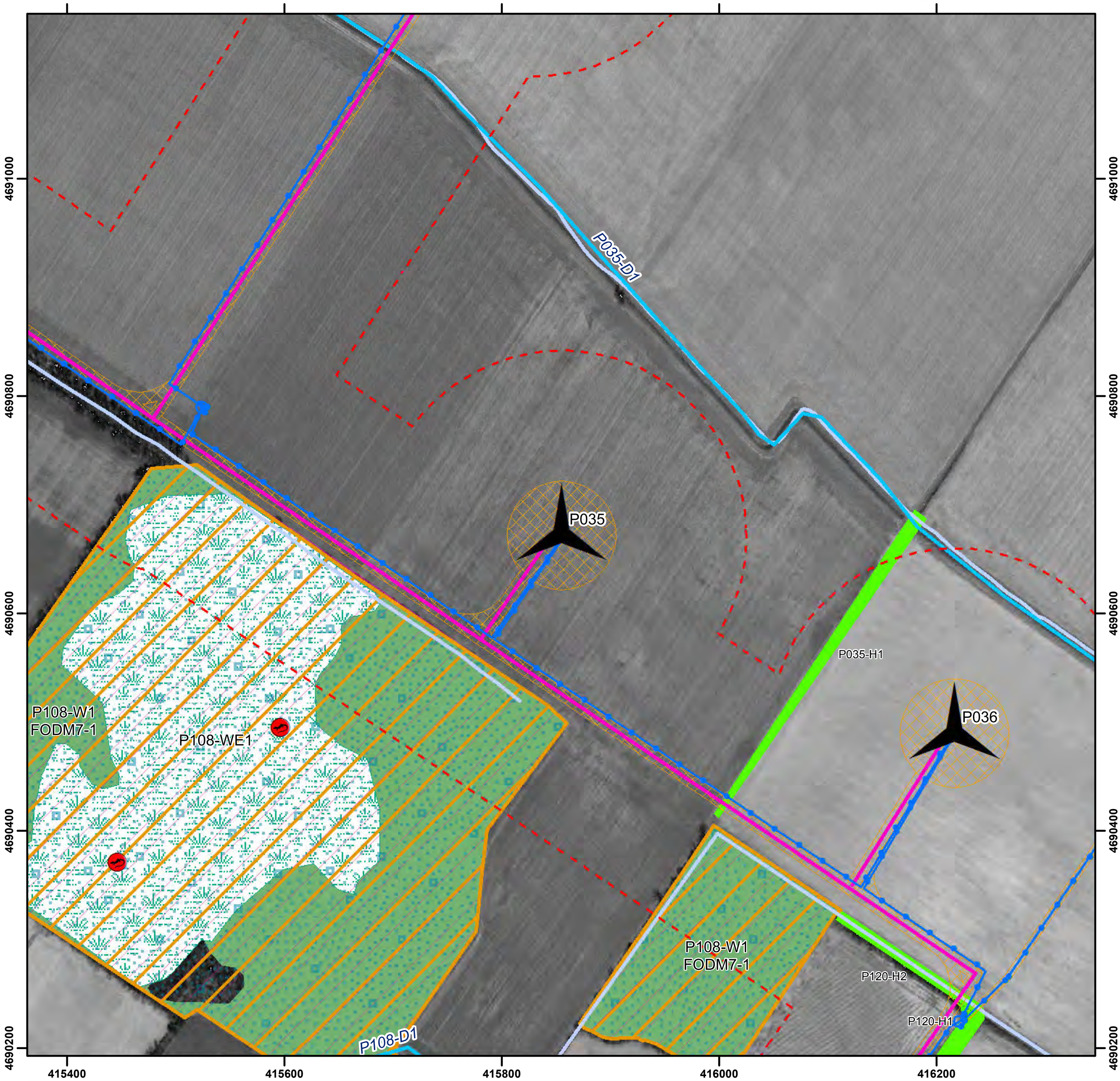

South Kent Wind Project

Turbine No. 35

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

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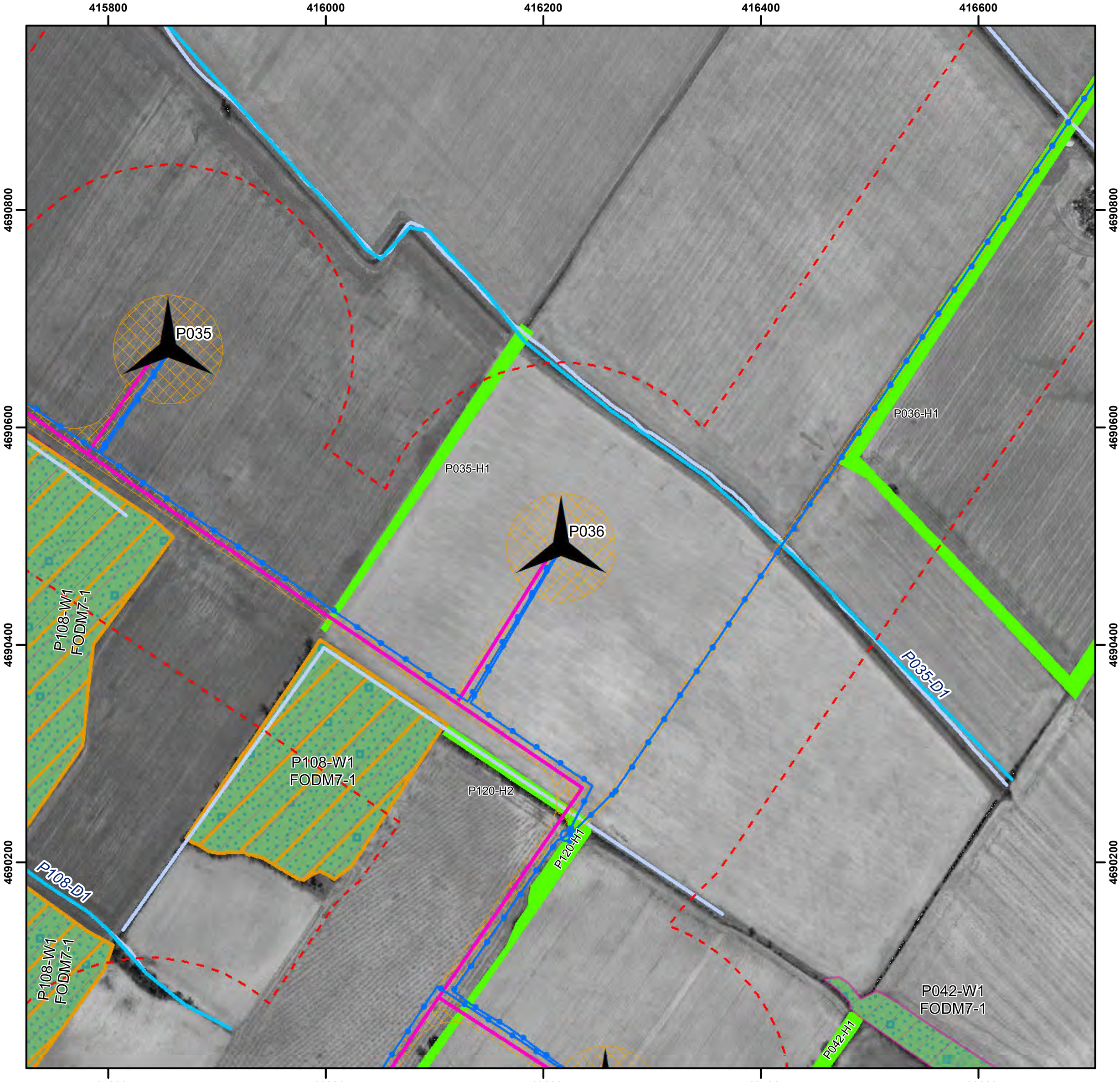

South Kent Wind Project

Turbine No. 36

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

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411800 412000 412200 412400 412600

4692600 4692400 4692200 4692000 4691800

P037-D1

P037

P038-H1

P037-H1

P038

COMMUNICATION RD

South Kent Wind Project

Turbine No. 37

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula (S)
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd

412000 412200 412400 412600 412800

4692200 4692000 4691800 4691600

P037-D1

P037

P037-H1

P038-H1

P038

COMMUNICATION RD

CLA-D3

South Kent Wind Project

Turbine No. 38

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

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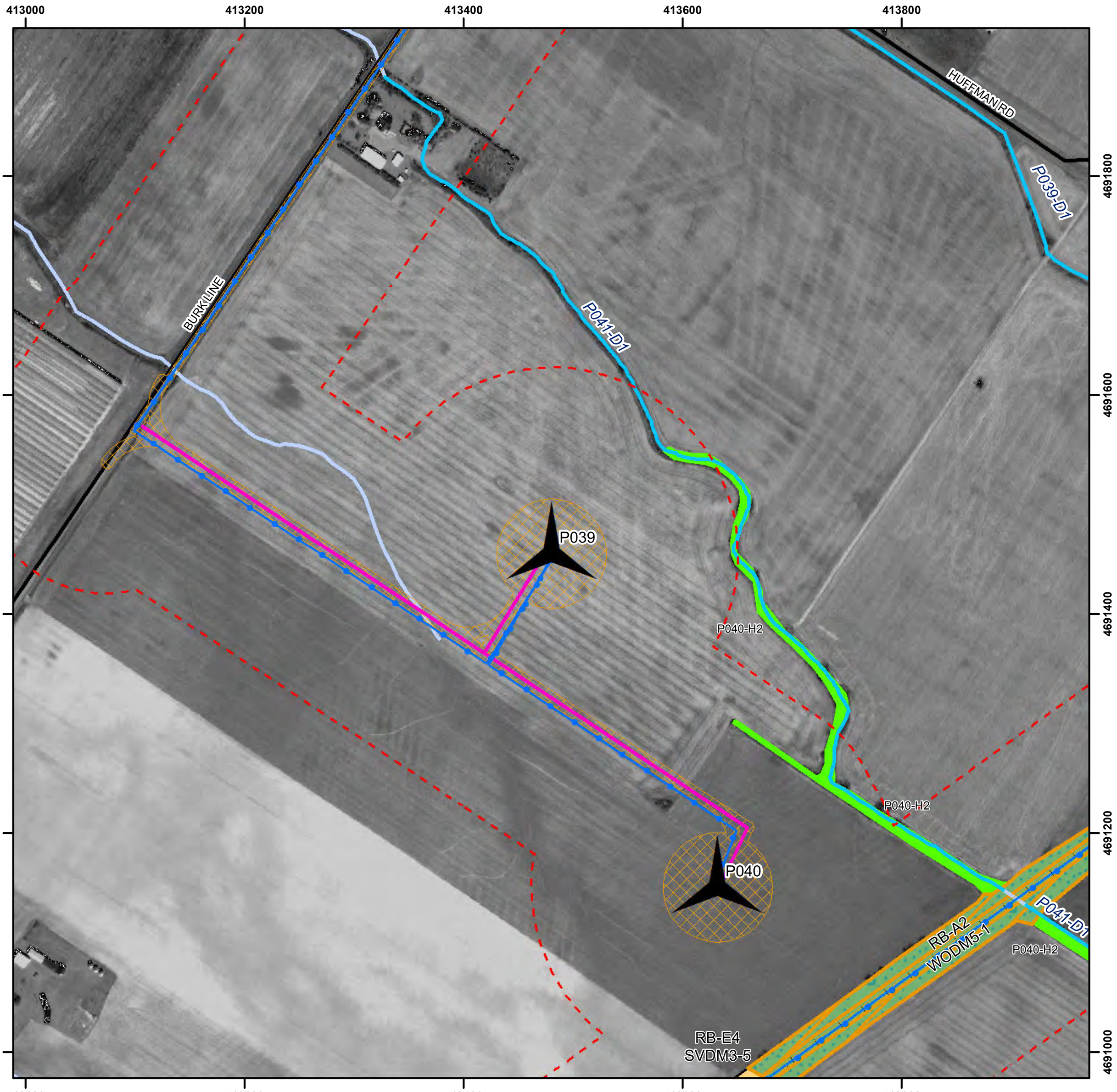


South Kent Wind Project

Turbine No. 39

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

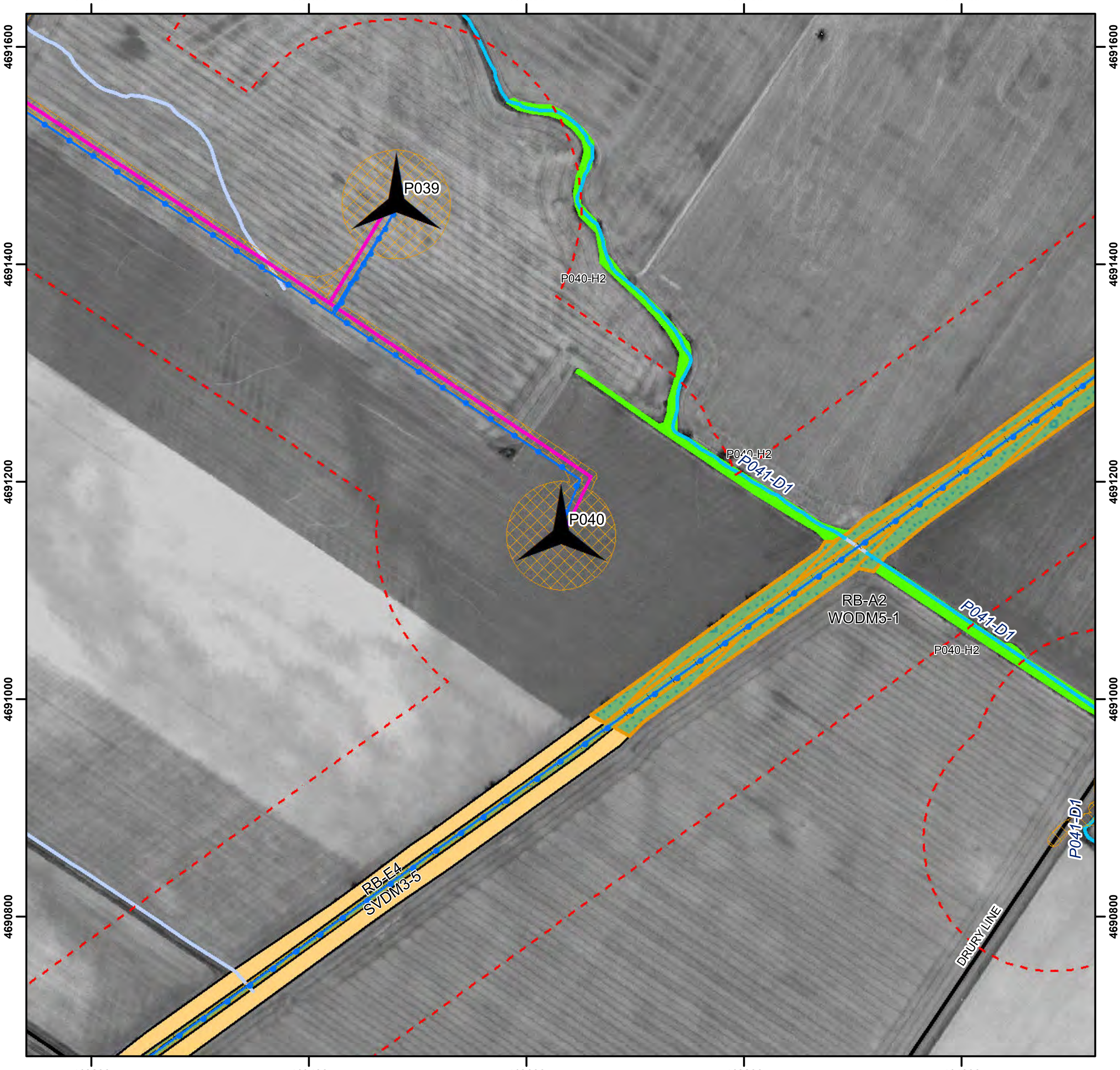
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 40

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd

414200 414400 414600 414800

4690800 4690600 4690400 4690200

DRURY LINE

P041-H1

P041-D1

P041

P108-D1

P108-H1

P108-H2

COMMUNICATION RD

South Kent Wind Project

Turbine No. 41

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

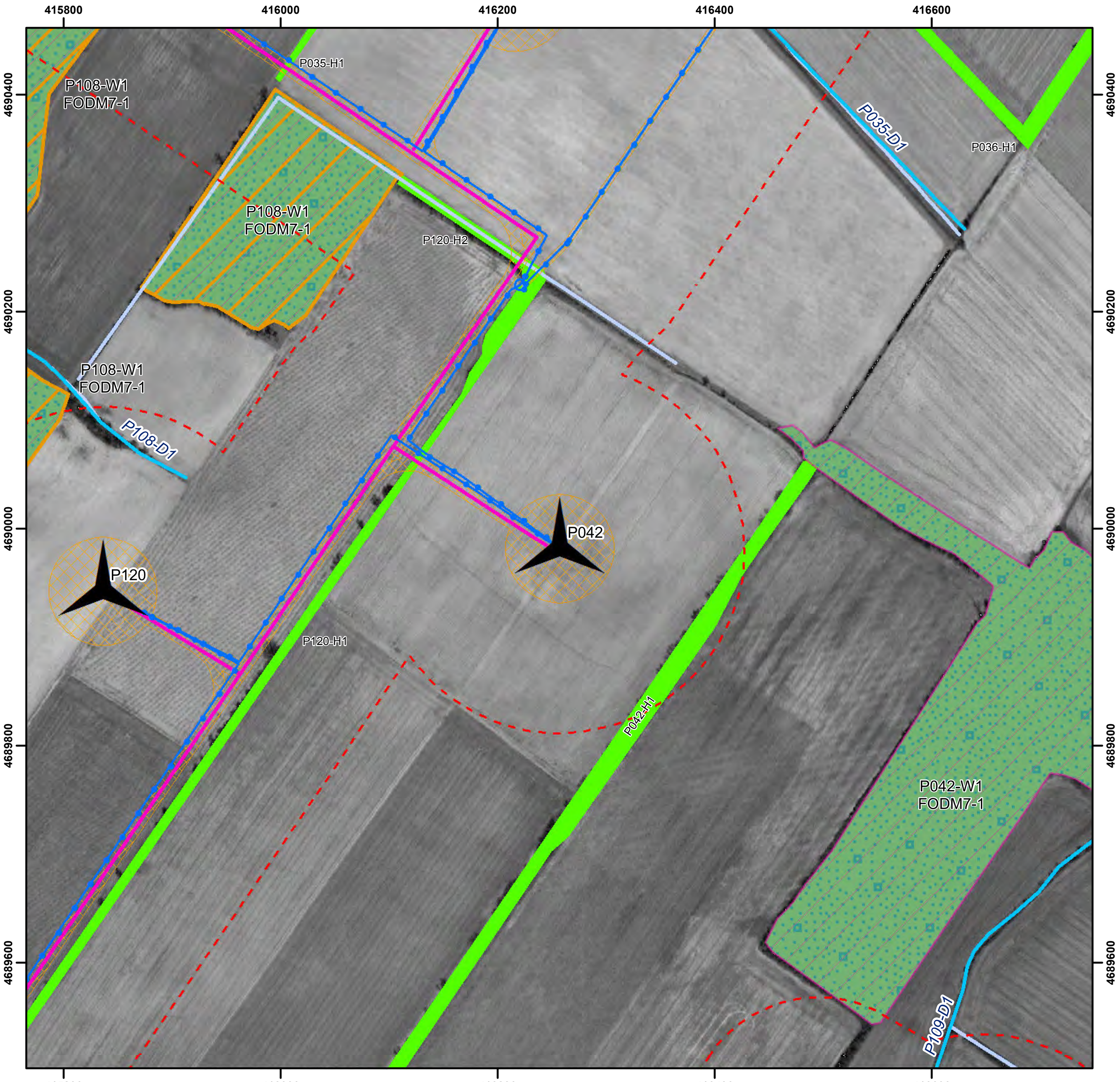
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 42

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd

410200 410400 410600 410800 411000

4692000 4691800 4691600 4691400 4691200

HORTON LINE

CLA-D2

P045-D1

P044

P044-H1

P045

P045-H1

South Kent Wind Project

Turbine No. 44

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd

410600 410800 411000 411200 411400

4691800 4691600 4691400 4691200 4691000

CLA-D2

P044

P044-H1

P045

P046

P045-H1

P045-D1

CLA-H1

CLA-H2

South Kent Wind Project

Turbine No. 45

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd

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4691600 4691400 4691200 4691000 4690800

P037-H1

COMMUNICATION RD

CLA-D2

P044-H1

P045

P046

P045-H1

CLA-H1

P045-D1

CLA-H2

P046-H1

South Kent Wind Project

Turbine No. 46

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd

409600 409800 410000 410200 410400

4690800 4690600 4690400 4690200 4690000

P051-D1
P051-H1
P051-H1
HORTON LINE
P052-H1
P052-D1
P052
P110-D1

South Kent Wind Project

Turbine No. 52

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd

411600 411800 412000 412200 412400

4689400

4689200

4689000

4688800

RB-B3
SVMM3

FARGO RD

P053

P053-W3
WODM5

P053-W4
FOD9-4

South Kent Wind Project

Turbine No. 53

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

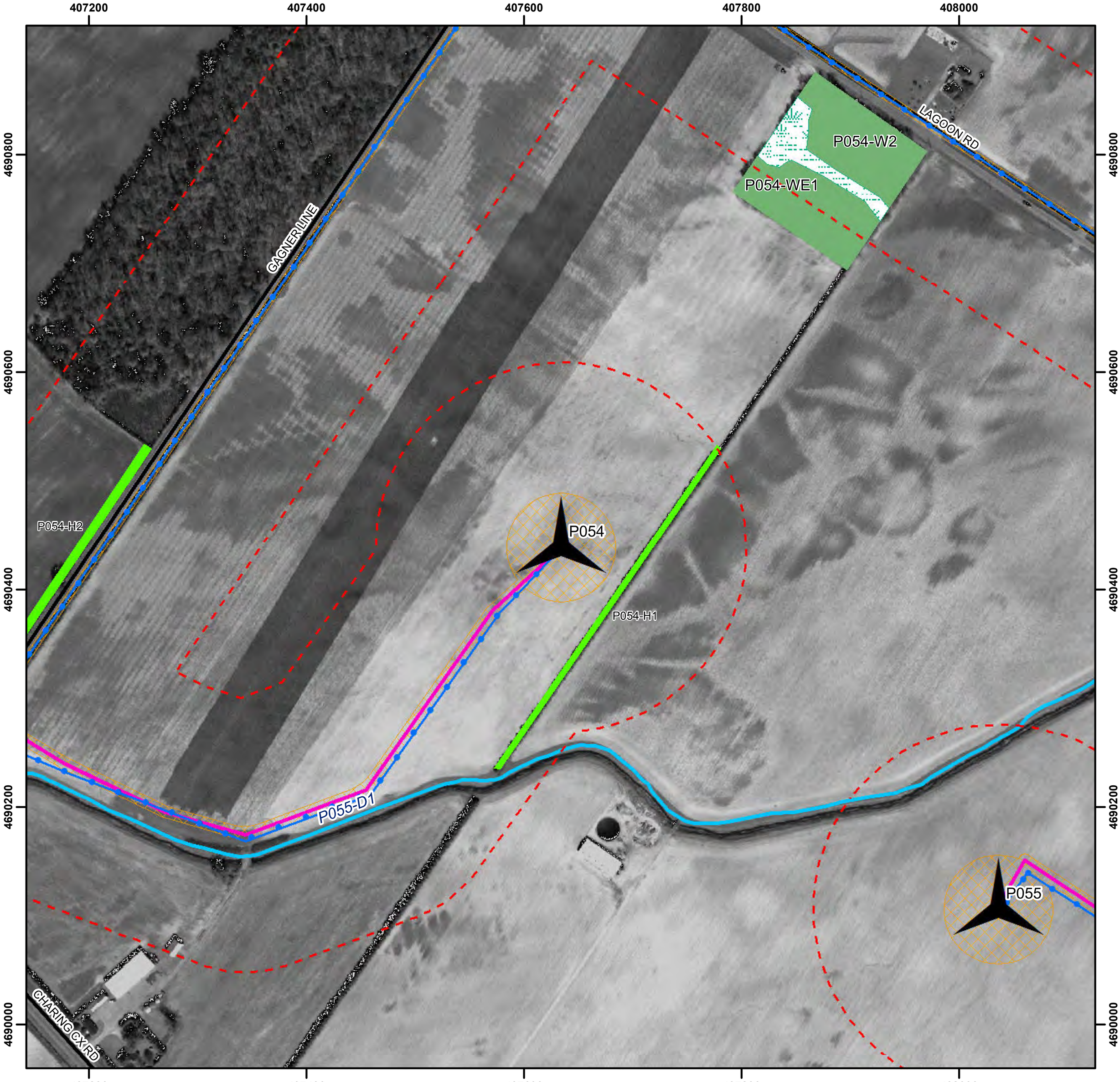
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 54

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd

South Kent Wind Project

Turbine No. 55

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

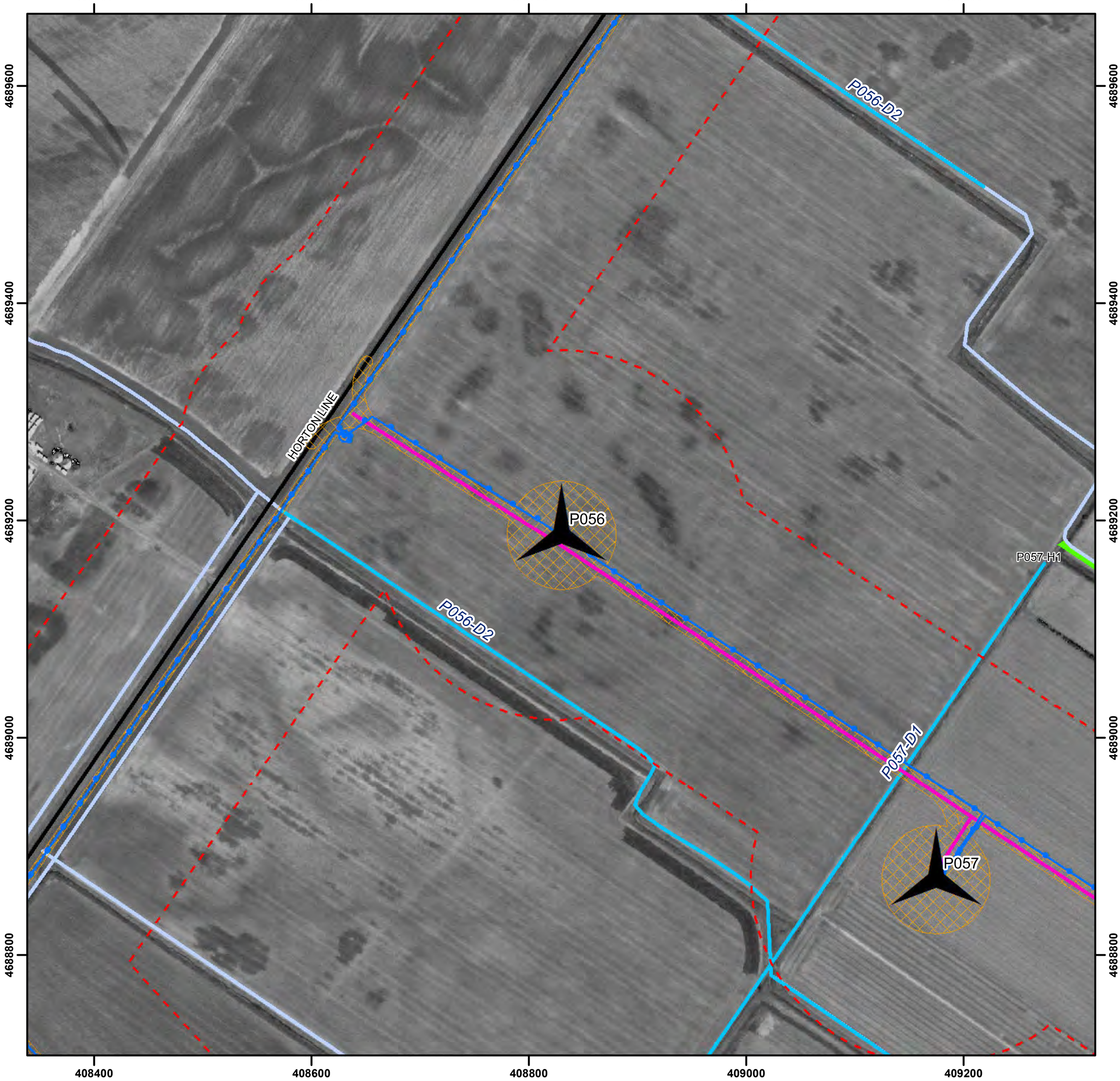
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 56

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

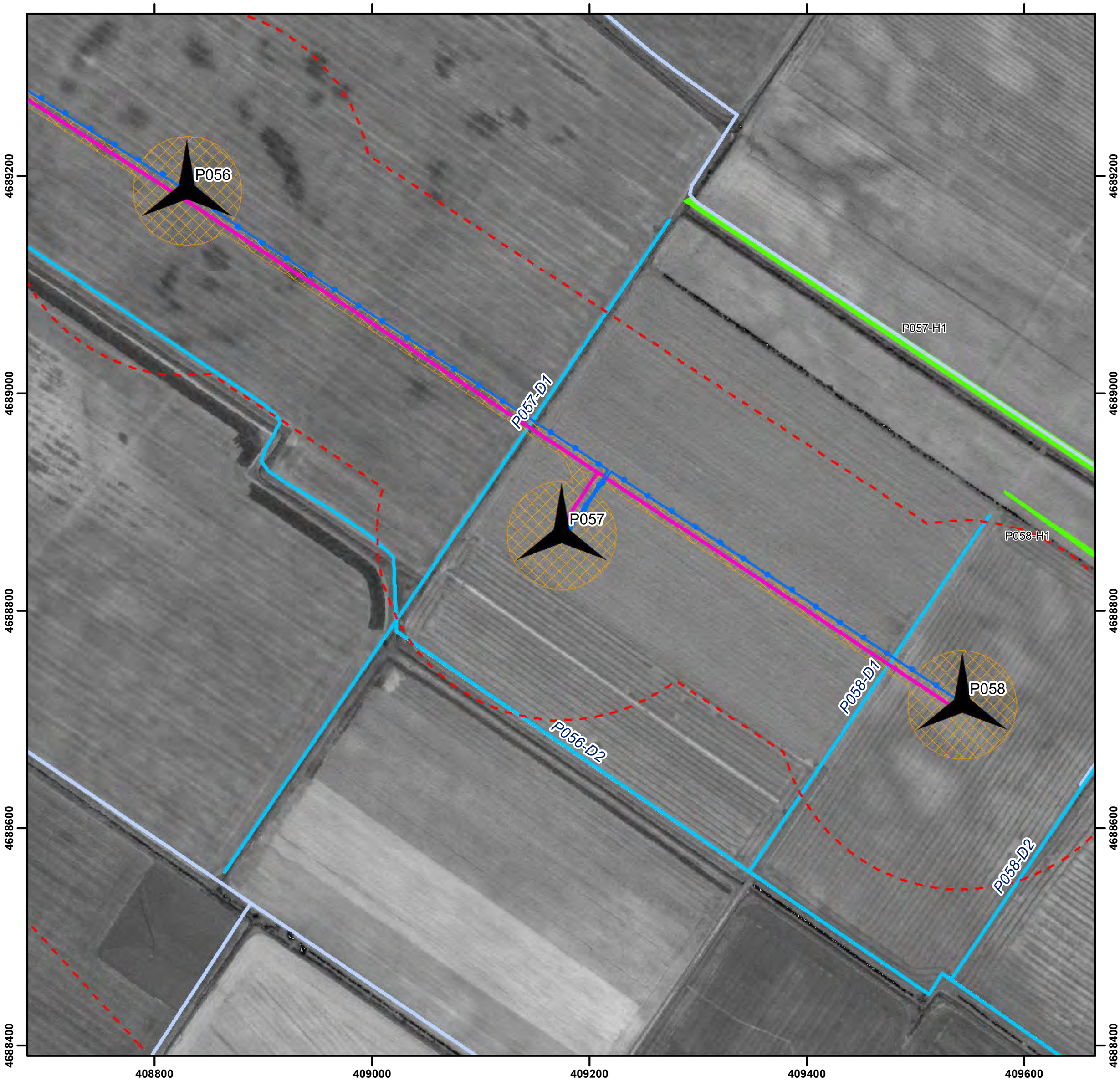
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 57

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd

409200 409400 409600 409800 410000

4689000 4688800 4688600 4688400

P057-D1
P057-H1
P058-D3
P057
P058-H1
P058-D1
P058
P056-D2
P058-D2
P058-H2
RB-E5
SVDM3-5
P056-D2
P058-D2

409200 409400 409600 409800 410000

South Kent Wind Project

Turbine No. 58

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd

406200 406400 406600 406800 407000

4688000 4687800 4687600 4687400 4687200

10TH LINE
P111-D1
P111-D1
P060-H5
P060
P060-H4
P060-D1
P060-H7
P060-H3
P060-H7
P060-H6

406200 406400 406600 406800 407000

South Kent Wind Project

Turbine No. 60

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula (S)
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd

401600 401800 402000 402200 402400

4687000 4686800 4686600 4686400

P061-H2
P094-H1
P061-H1
P061-D1
P061
P061-H3
P098-D1
P094-D5
P094-D2
NINTH LINE

South Kent Wind Project

Turbine No. 61

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

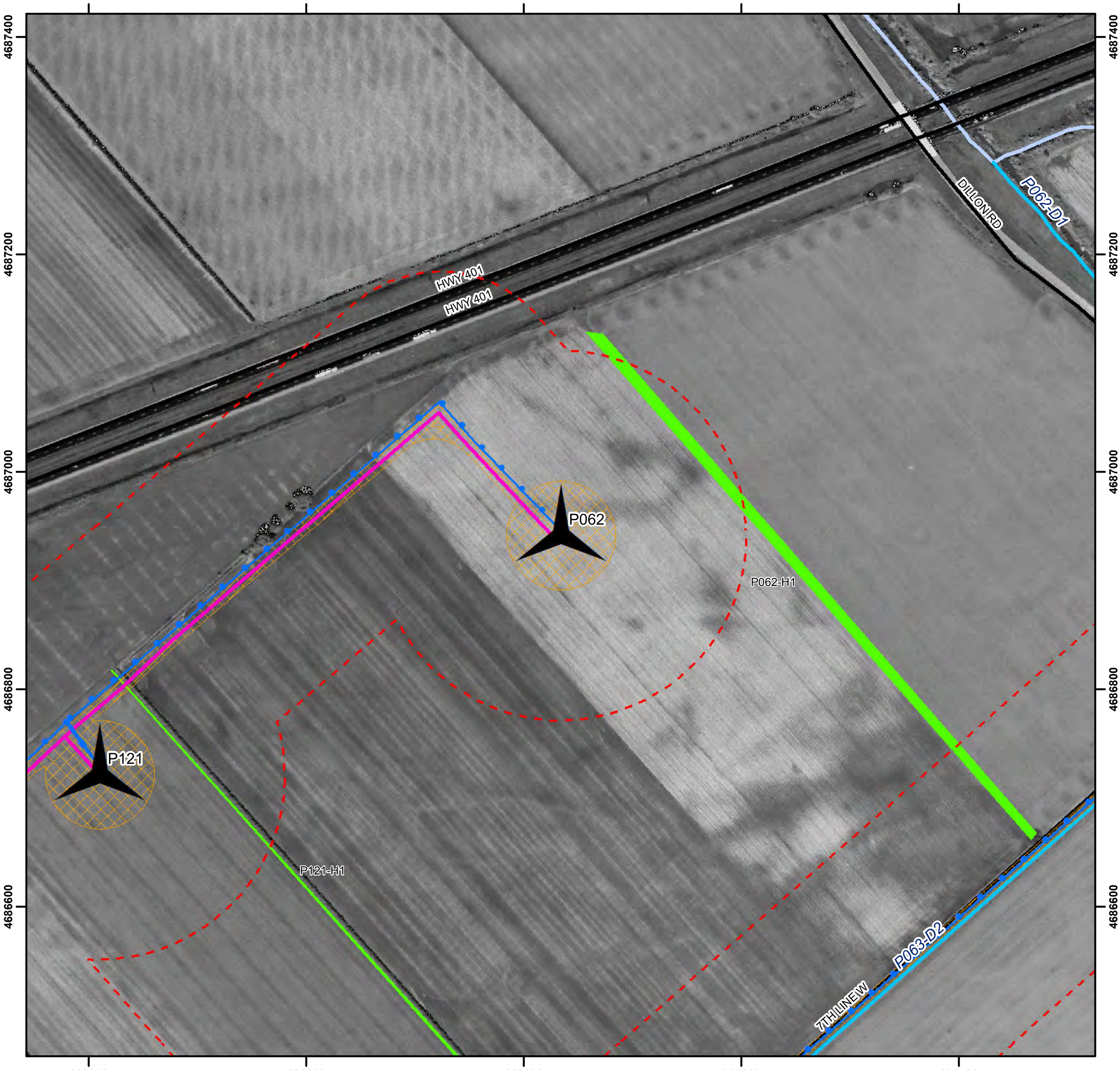
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 62

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

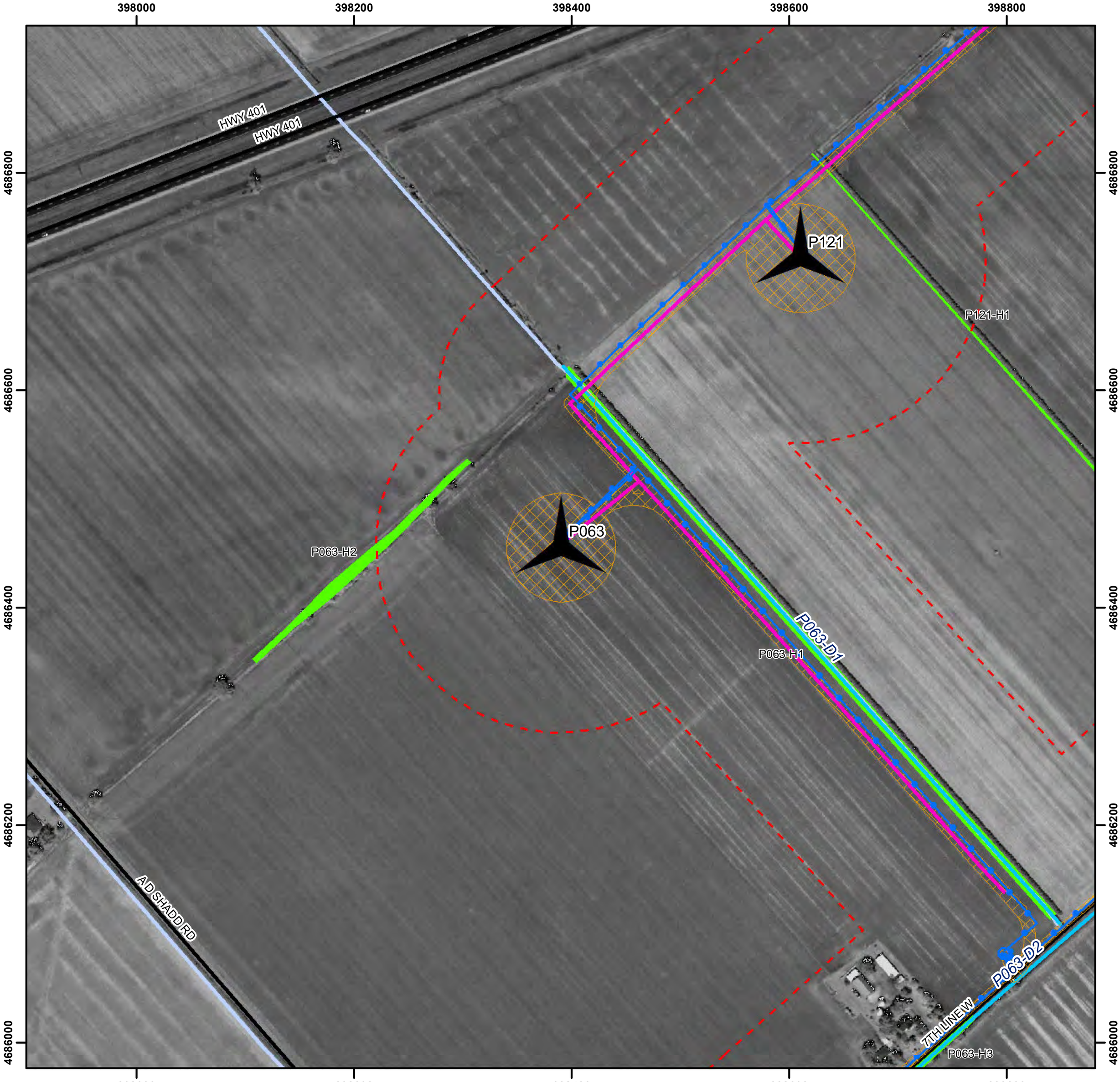
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 63

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula (S)
- Bat Maternity Roost

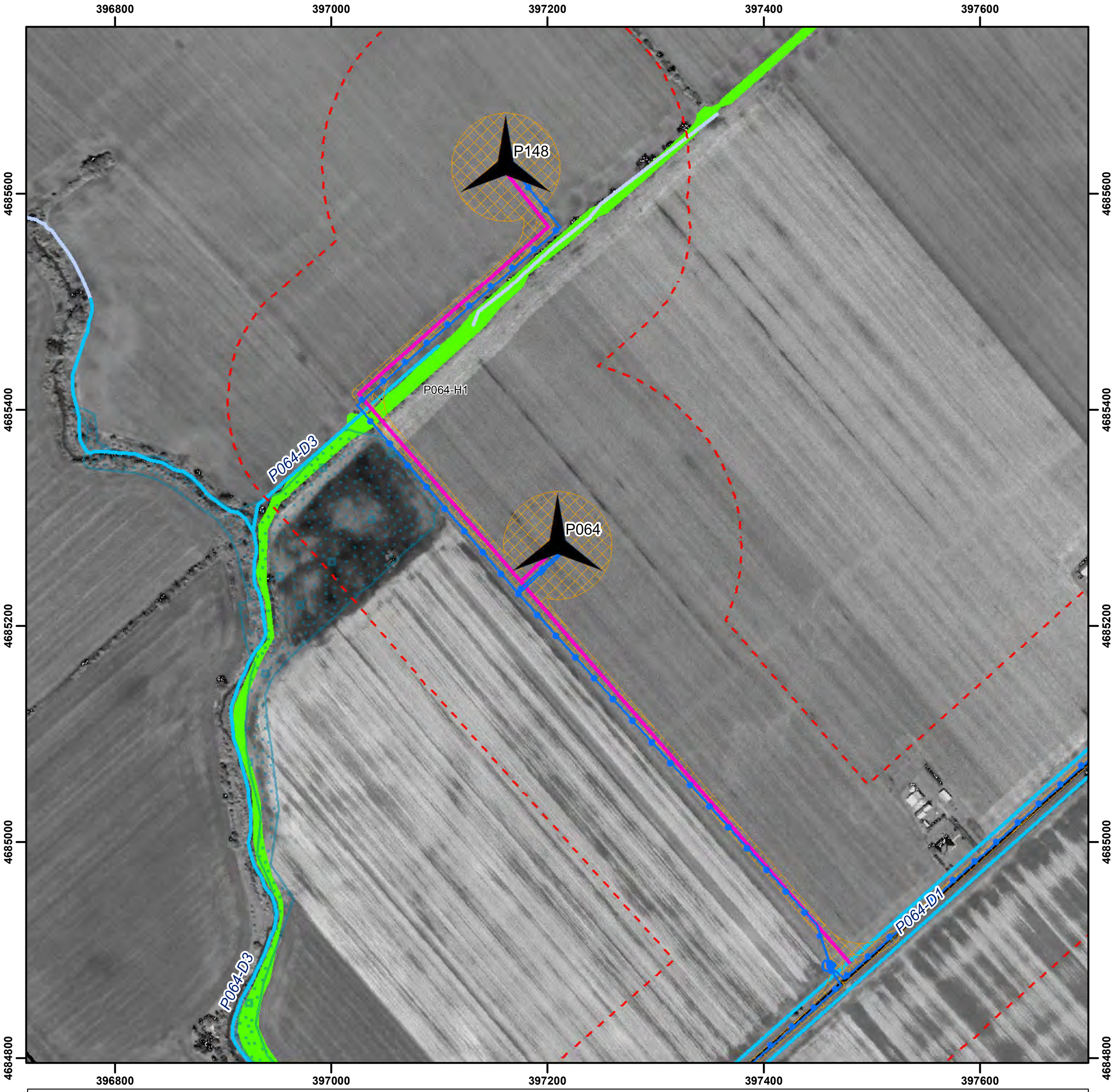
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 64

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd

400000 400200 400400 400600 400800

4686000 4685800 4685600 4685400 4685200 4685200

8TH LINE
P065-D1
P065-D2
P065-D3
P065-H1
P065
P065-W2
FODM9-3
P065-W1
WODM5-3
RB-A5
WODM5-1
RB-A5
WODM5-1
P065-H2

400000 400200 400400 400600 400800

South Kent Wind Project

Turbine No. 65

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd

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4684600 4684400 4684200 4684000 4683800

P066-H2
P066
P066-H3
P066-H1
RB-F3
SVDM3-5
P064-D1

South Kent Wind Project

Turbine No. 66

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd

394400 394600 394800 395000 395200

4684000 4683800 4683600 4683400 4683200

6TH LINE W

P067-H1

P067-H2

P067-D1

P067

RB-F3
SVDM3-5

RSS-H1

P068-D1

P068-H1

South Kent Wind Project

Turbine No. 67

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd

394000 394200 394400 394600 394800

4683400 4683200 4683000 4682800 4682600

RB-F3
SVDM3-5

P067

P068-H1

P068

P068-D1

7TH LINE W

South Kent Wind Project

Turbine No. 68

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- S — Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

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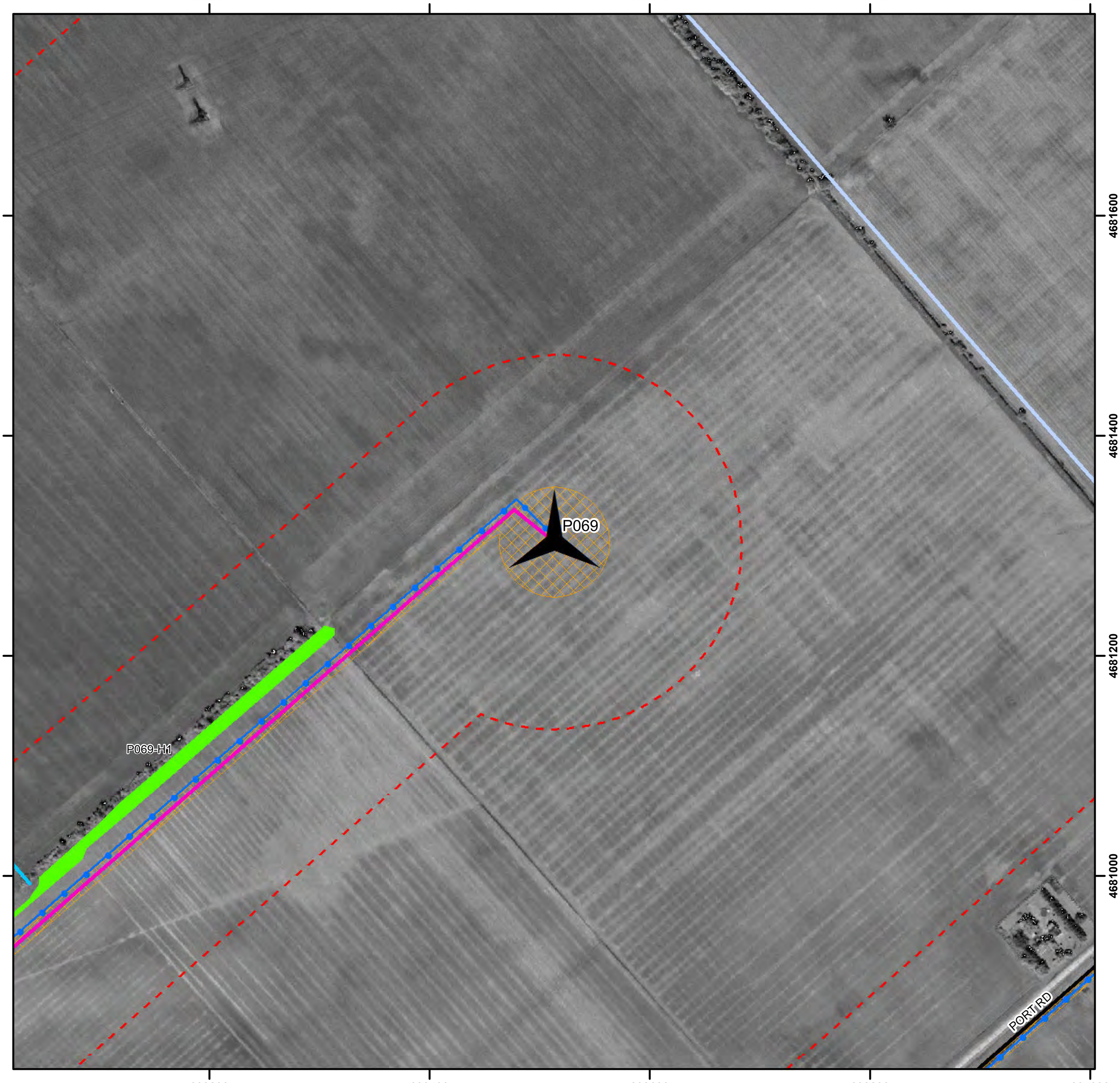


South Kent Wind Project

Turbine No. 69

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

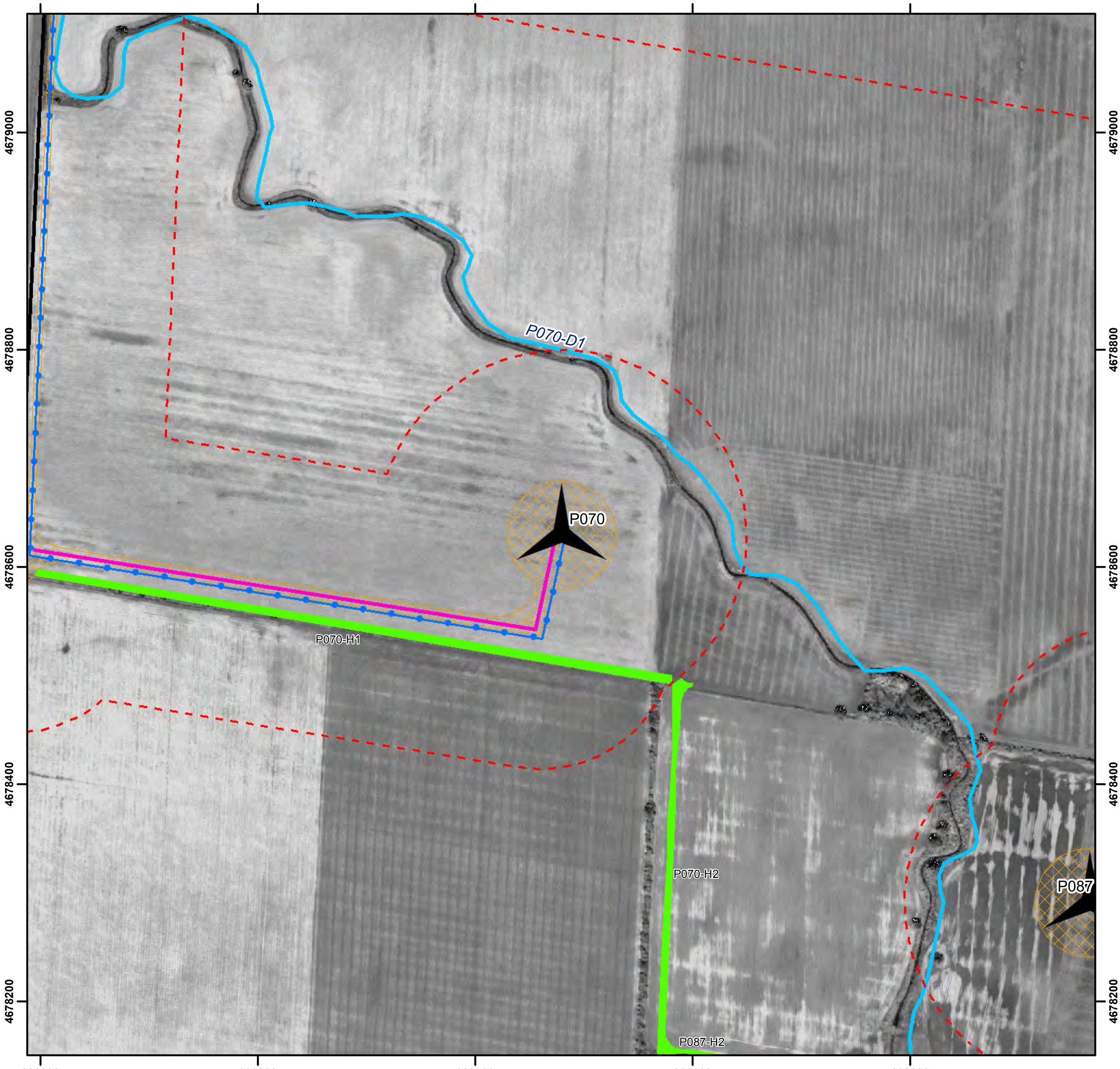
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 70

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

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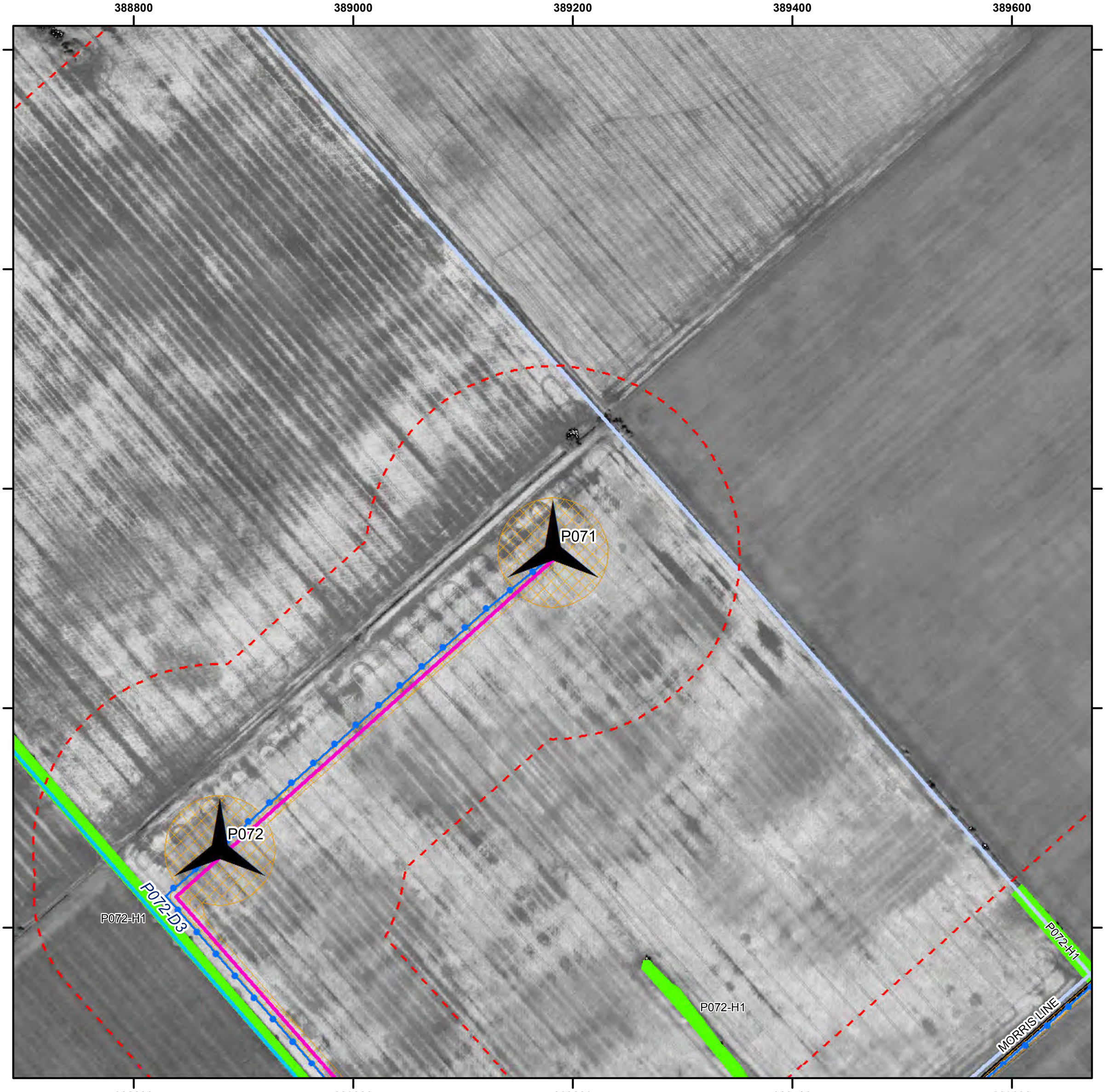

South Kent Wind Project

Turbine No. 71

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

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388400 388600 388800 389000 389200

4681200 4681000 4680800 4680600 4680400

P072-D3

P071

P072

P072-H1

P072-H1

S

MORRIS LINE

South Kent Wind Project

Turbine No. 72

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

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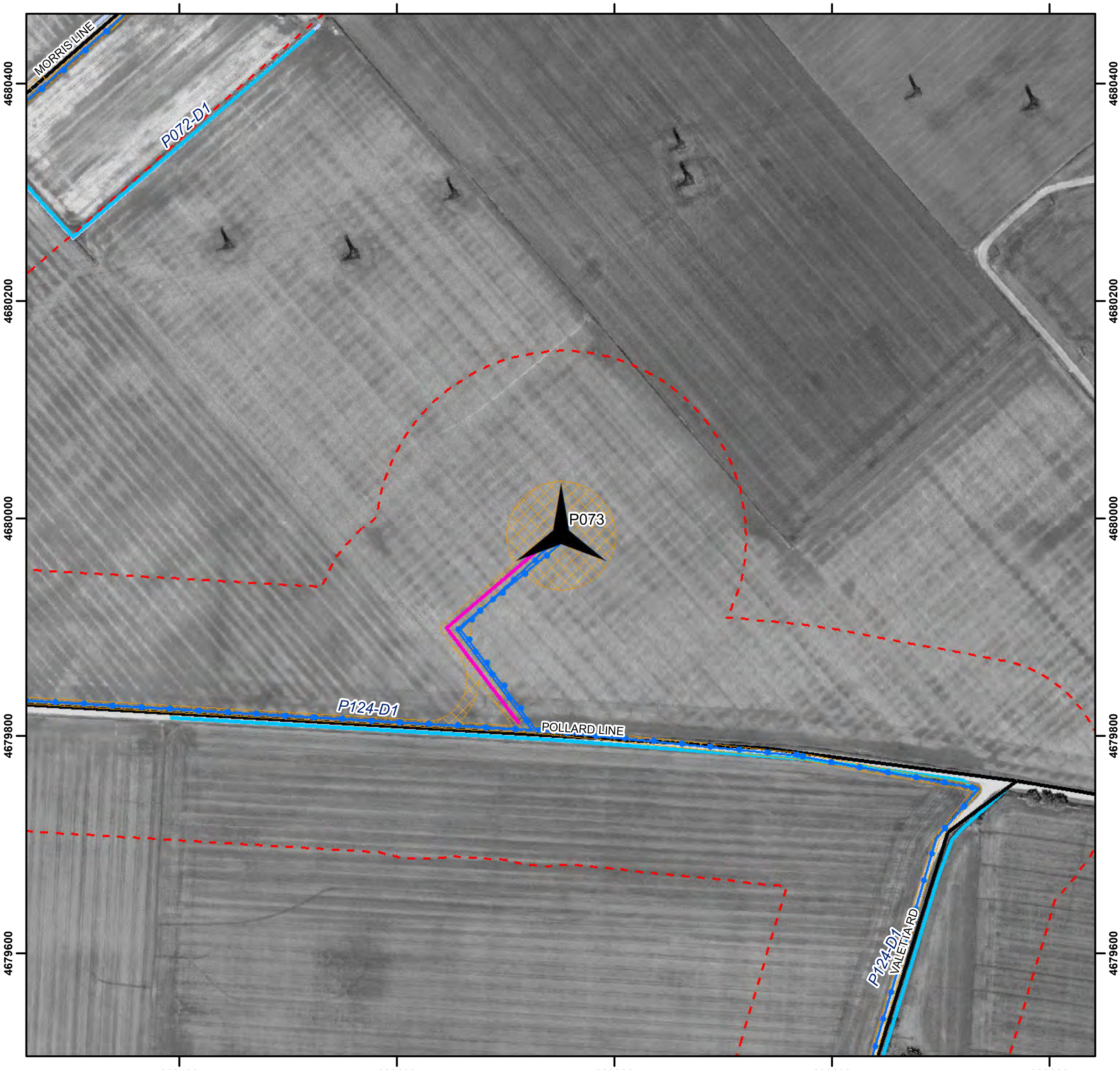

South Kent Wind Project

Turbine No. 73

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

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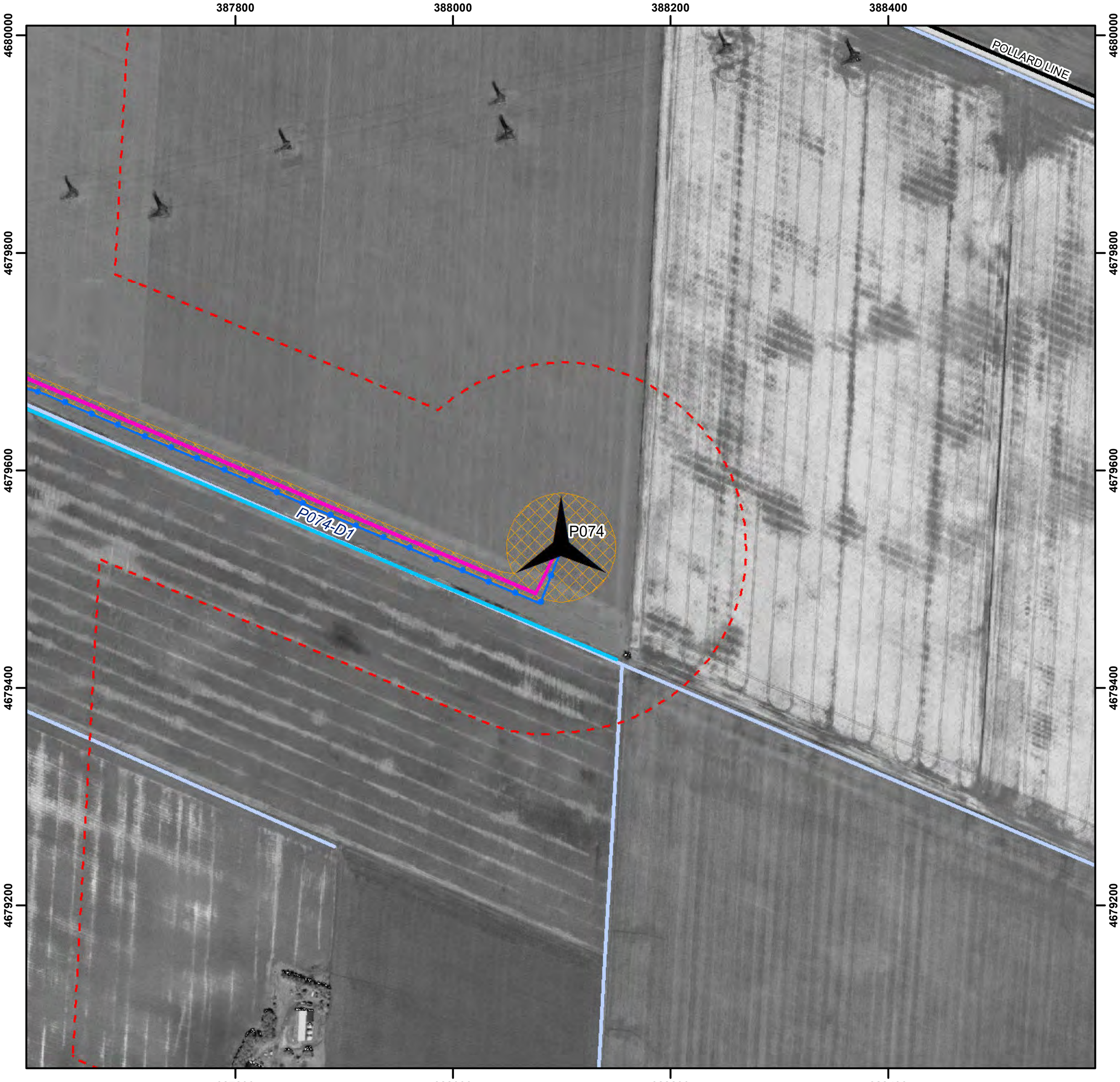

South Kent Wind Project

Turbine No. 74

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

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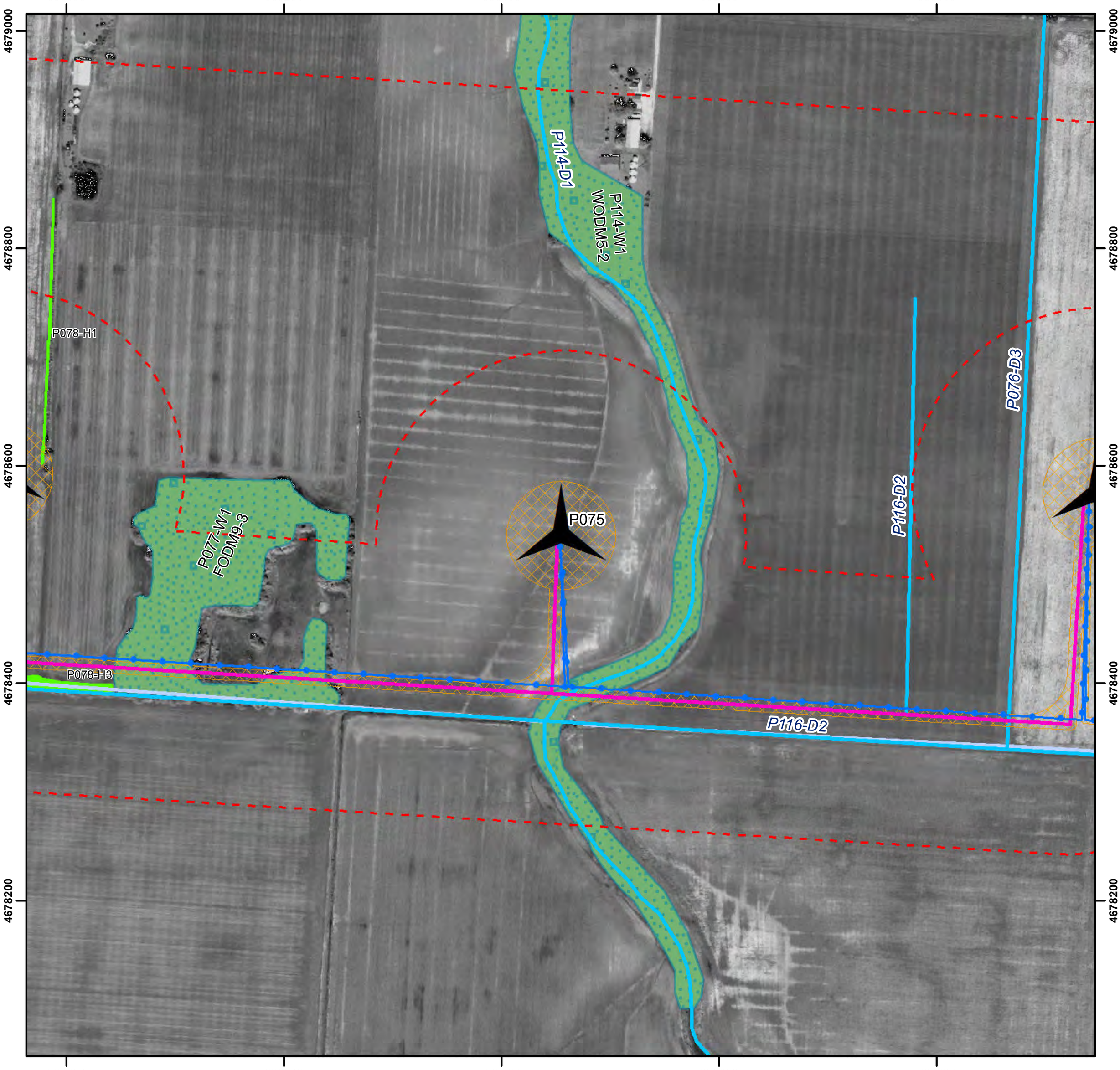

South Kent Wind Project

Turbine No. 75

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

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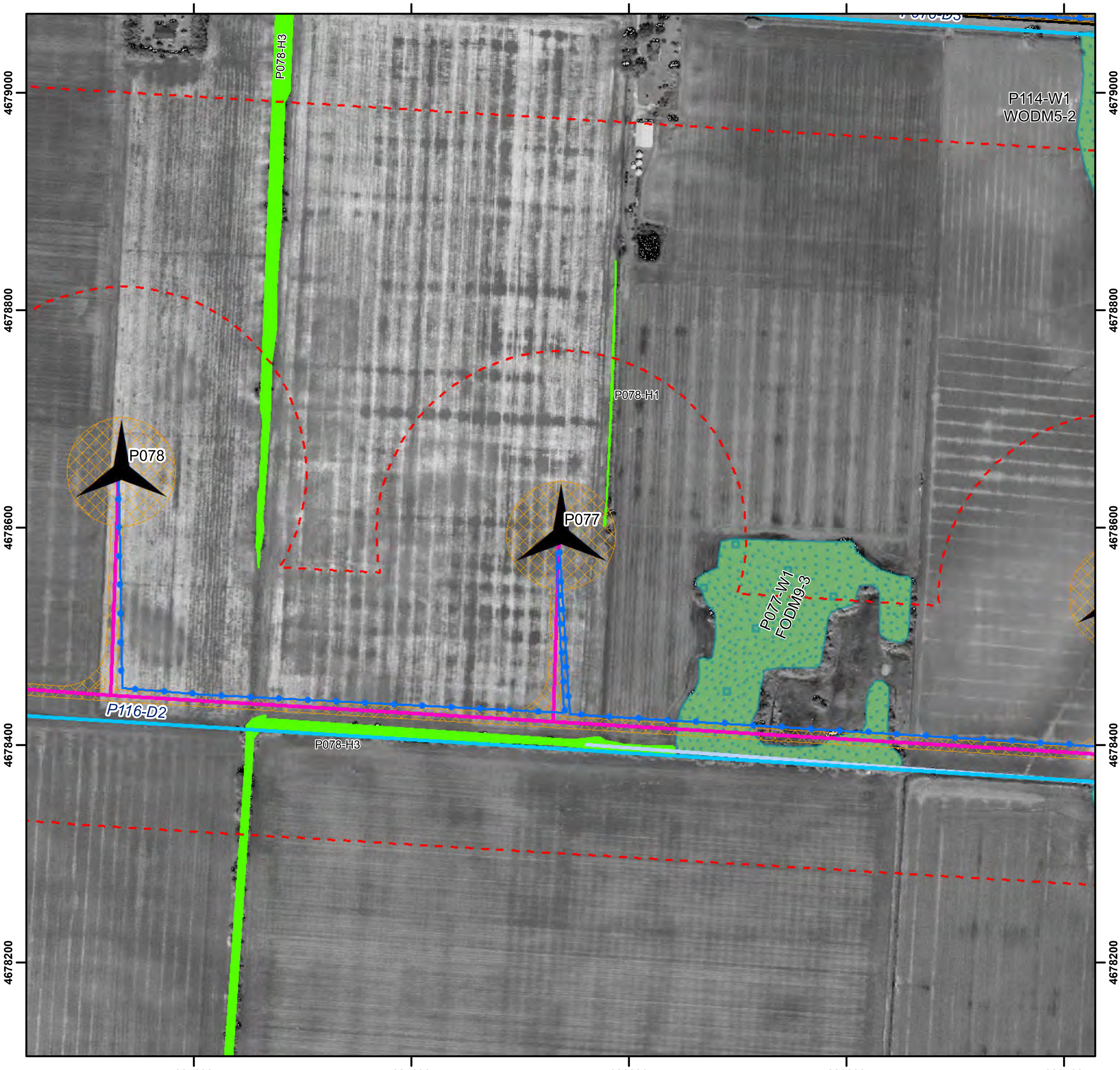


South Kent Wind Project

Turbine No. 77

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd

385200 385400 385600 385800 386000

4679000 4678800 4678600 4678400 4678200

MIDDLE LINE

P076

P078-H3

P078-H1

P078

P077

P078-H2

P116-D2

P078-H3

P078-H4

South Kent Wind Project

Turbine No. 78

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula (S)
- Bat Maternity Roost

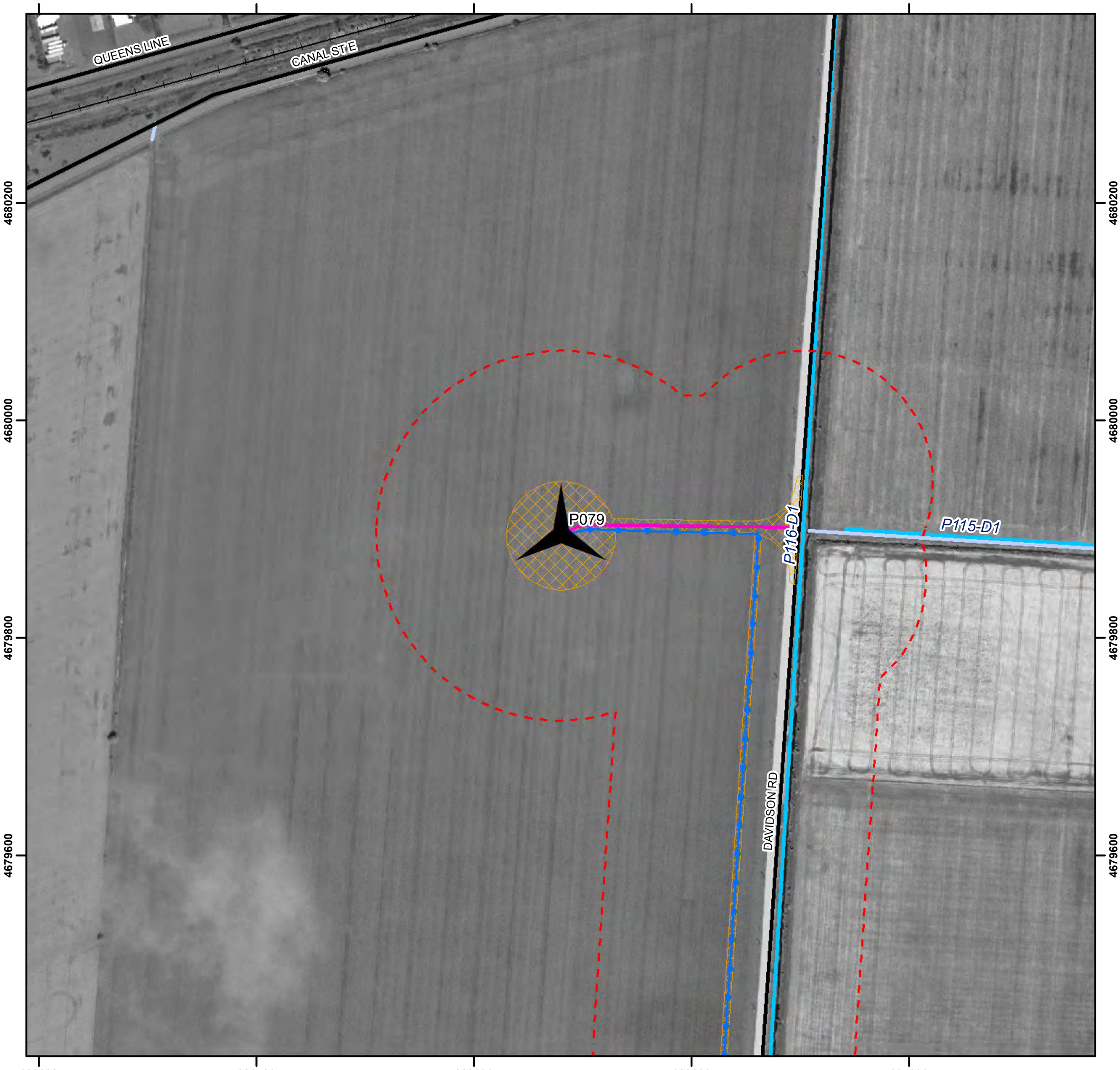
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 79

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

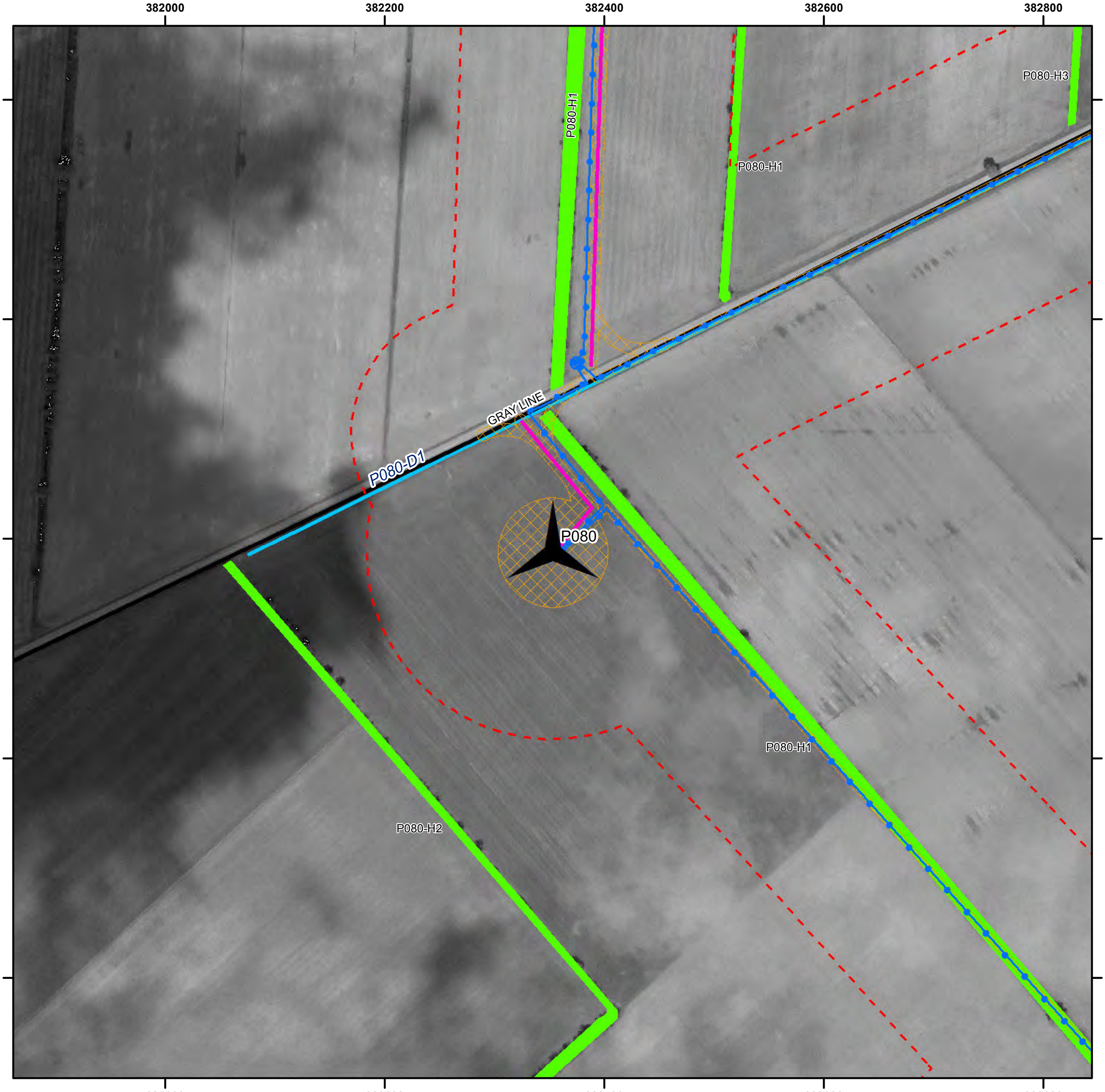
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 80

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

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4676400 4676200 4676000 4675800 4675600

P080-H1

ROSEDALE LINE

P082-D1

P083-H4

P081

P081-H2

P081-D2

P081-H1

COATSWORTH RD

South Kent Wind Project

Turbine No. 81

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

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4675600 4675400 4675200 4675000 4674800

P082-D1
P083-D1
P083-D5
P082-W1
FODM9-1
P082
P082-H1

South Kent Wind Project

Turbine No. 82

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

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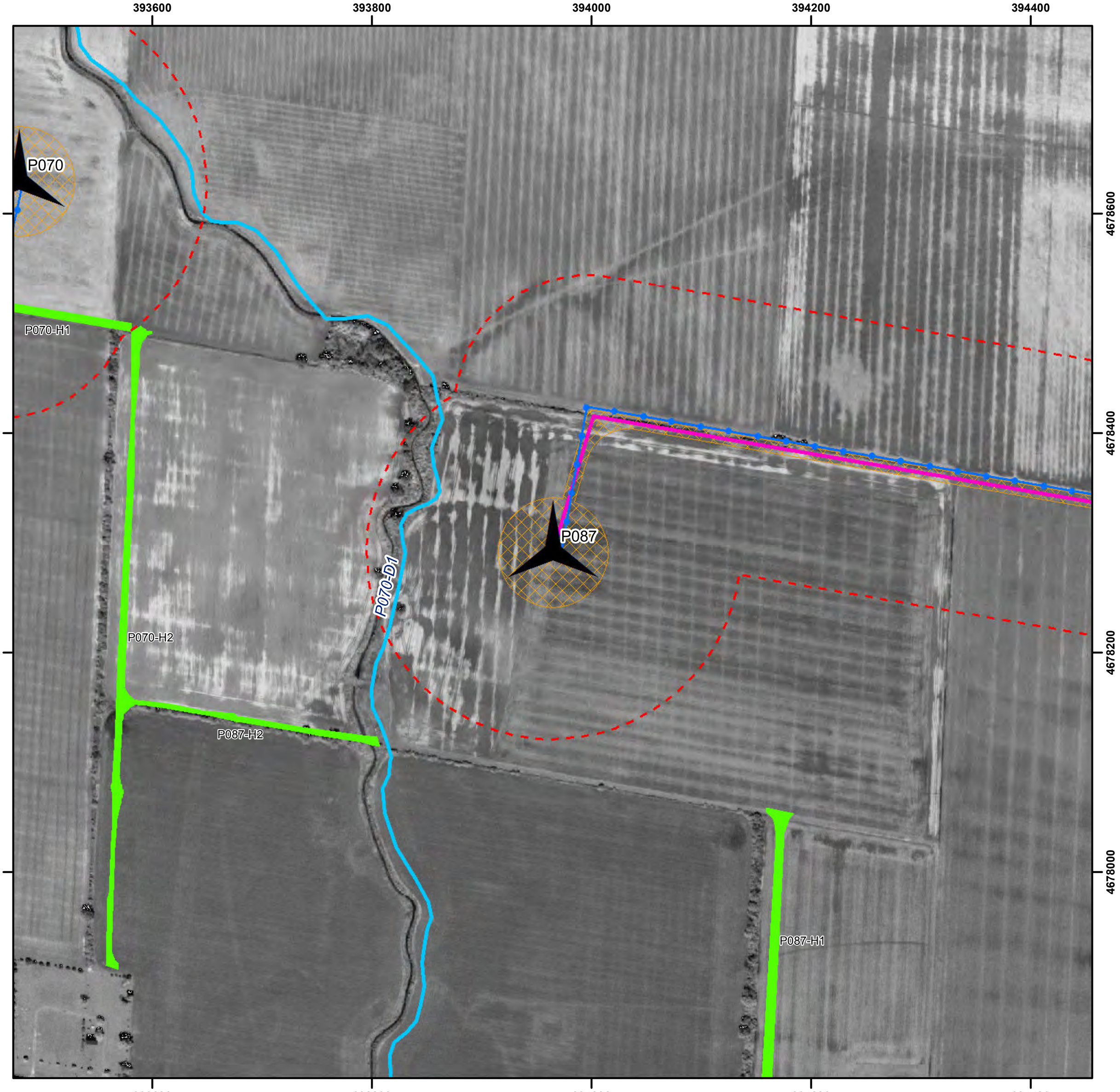

South Kent Wind Project

Turbine No. 87

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

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South Kent Wind Project

Turbine No. 91

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

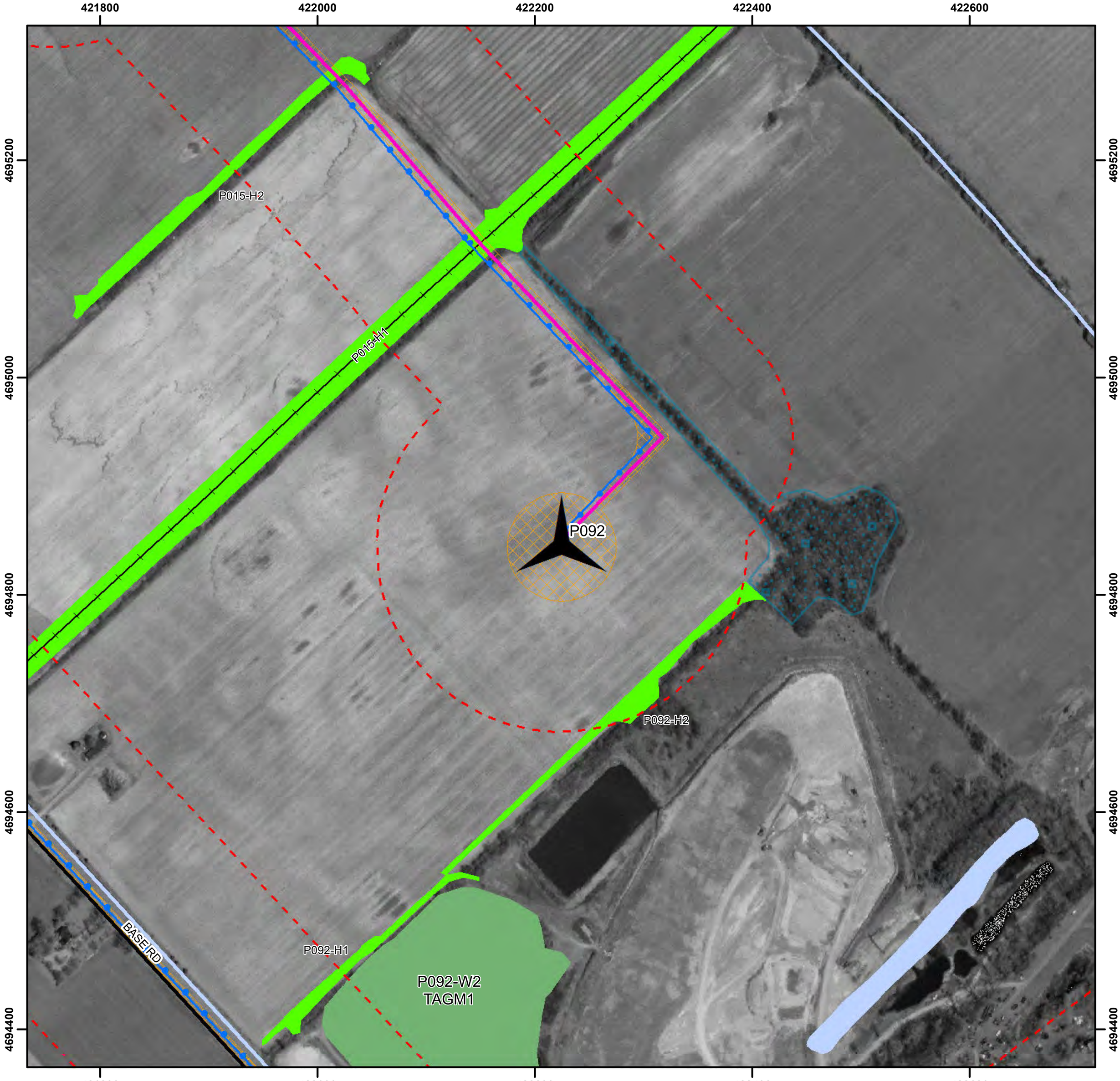
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 92

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

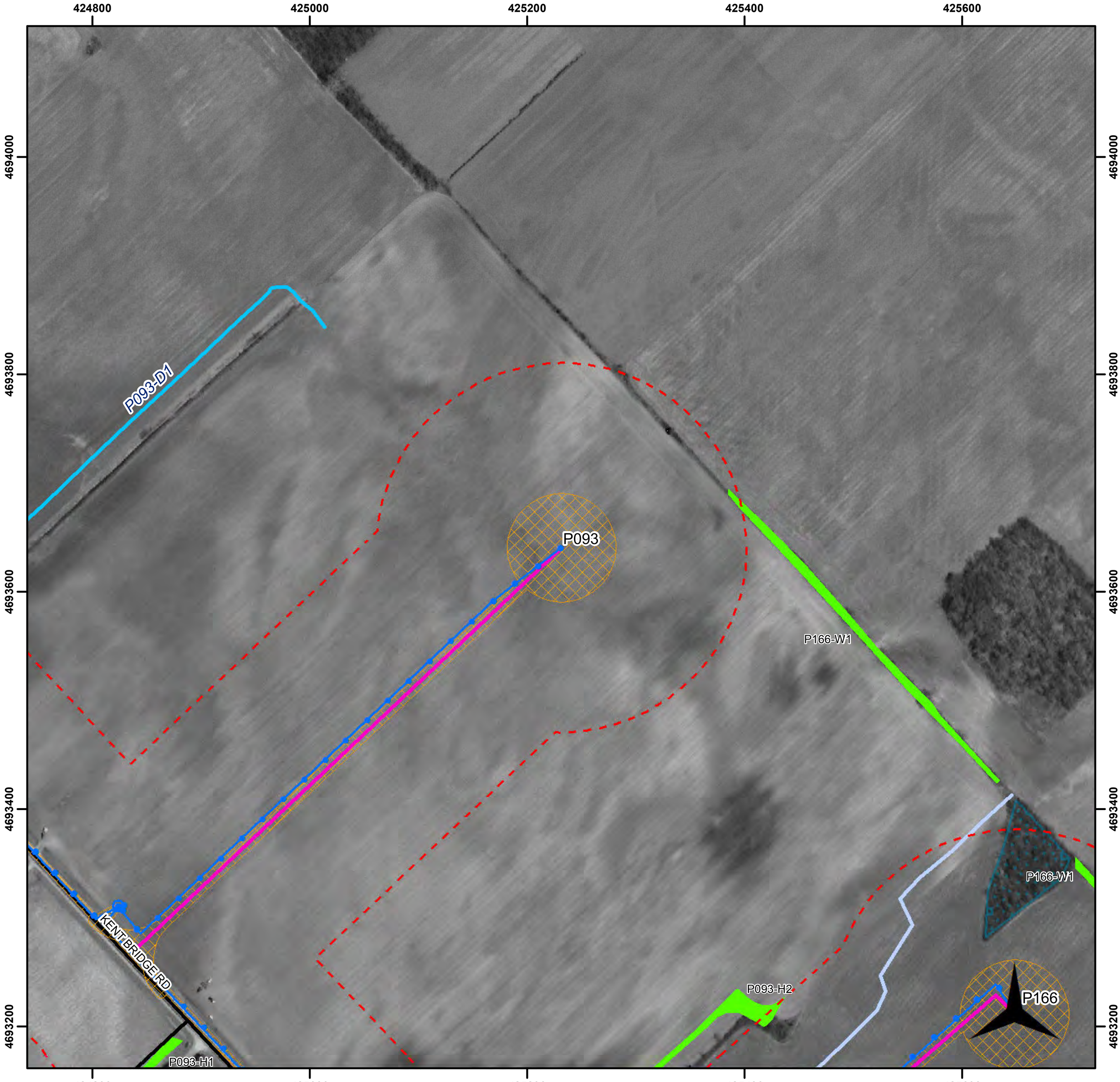
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 93

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

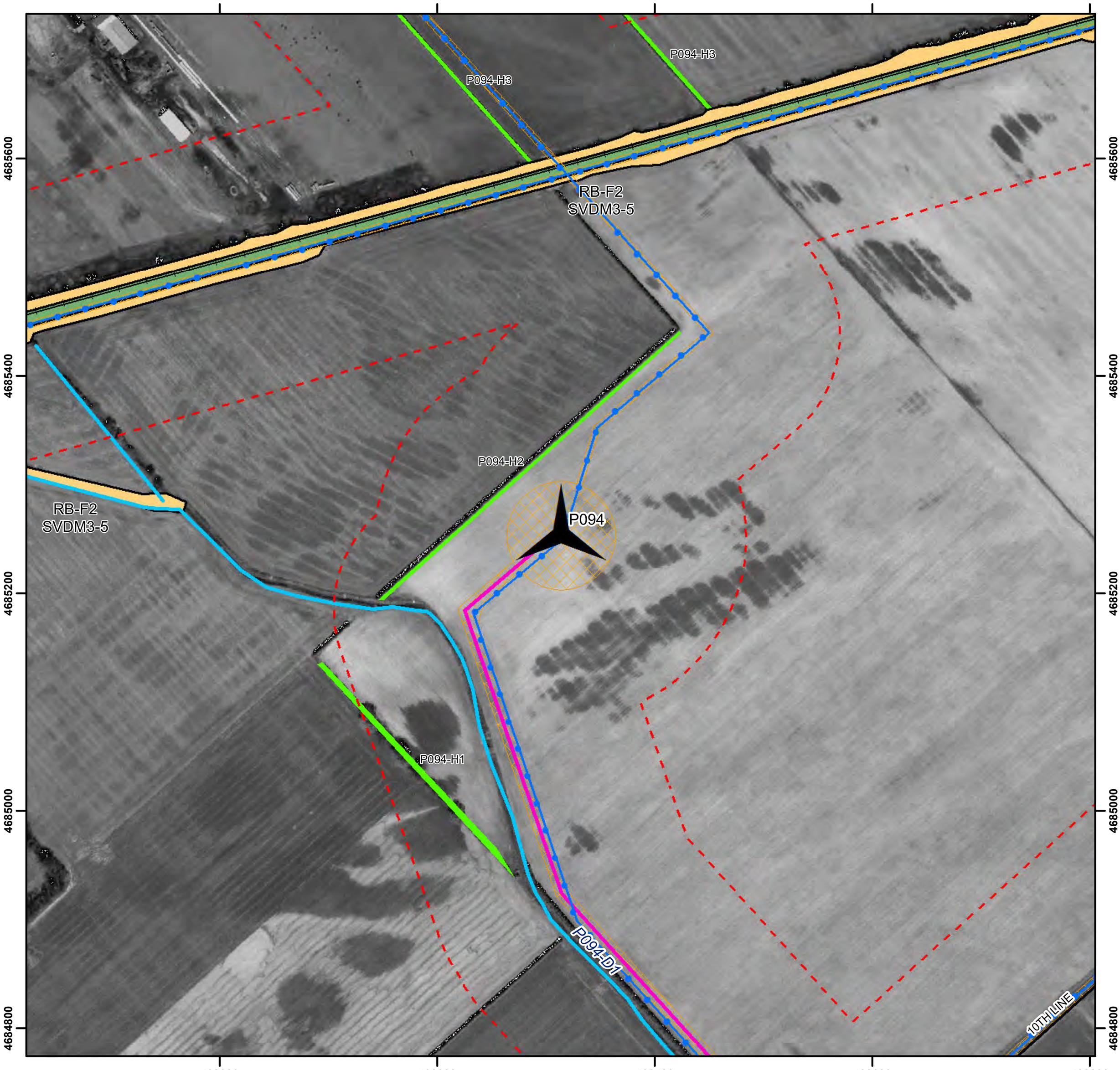
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 94

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

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391400 391600 391800 392000 392200

4681800 4681600 4681400 4681200 4681000

P095-H2

P095-H1

P071-D4

COOPER RD

P095

FINN LINE

South Kent Wind Project

Turbine No. 95

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

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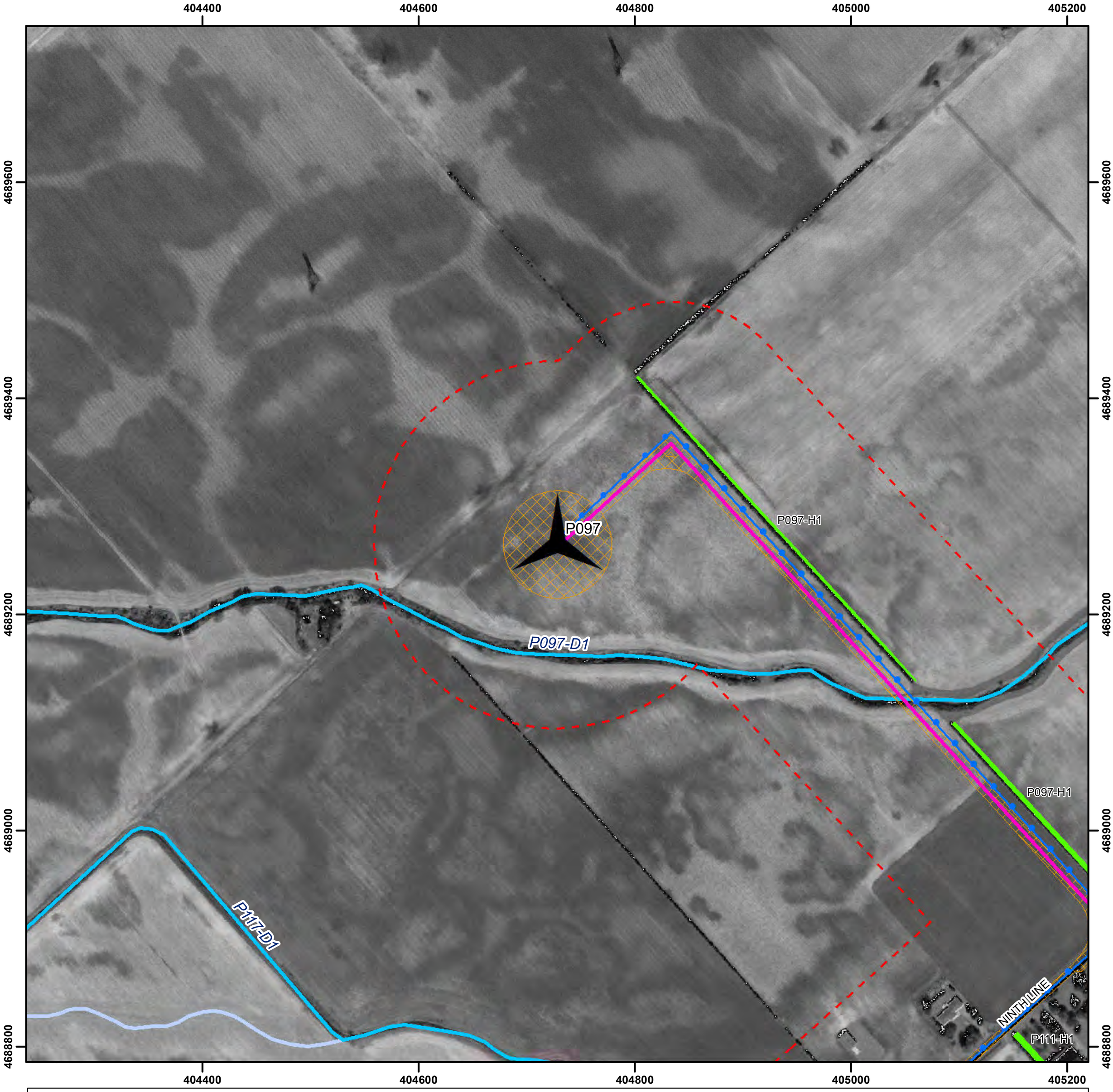

South Kent Wind Project

Turbine No. 97

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd

South Kent Wind Project

Turbine No. 98

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd

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4685200

4685000

4684800

4684600

P099

P099-H1

P119-H1

6TH LINE W

P066-H3

South Kent Wind Project

Turbine No. 99

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

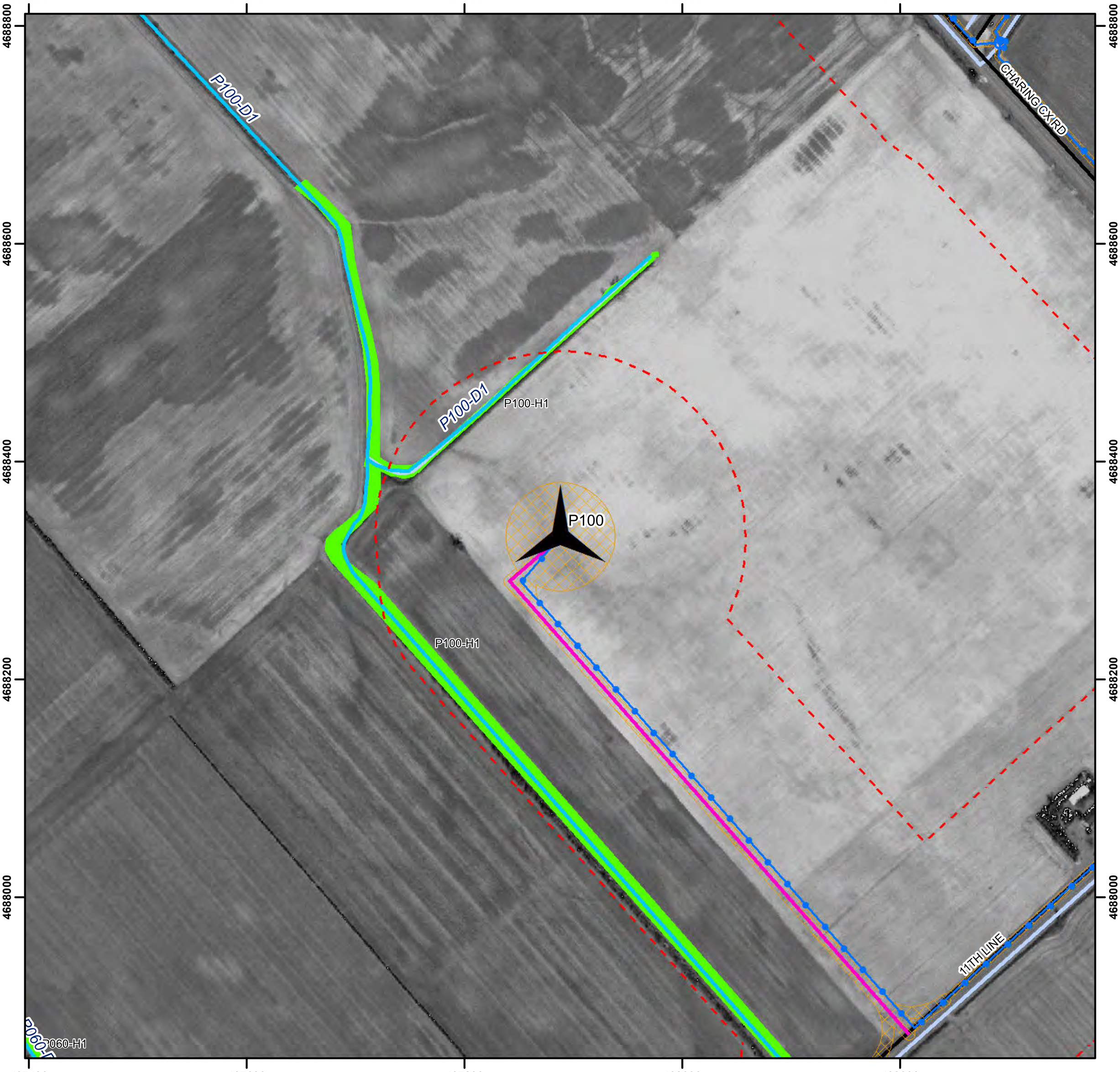
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 100

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

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4696800 4696600 4696400 4696200 4696000

P011-H1
P012
P012-H1
P101-H1
P101
P101-D1
P014-D1
P014-D1

South Kent Wind Project

Turbine No. 101

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

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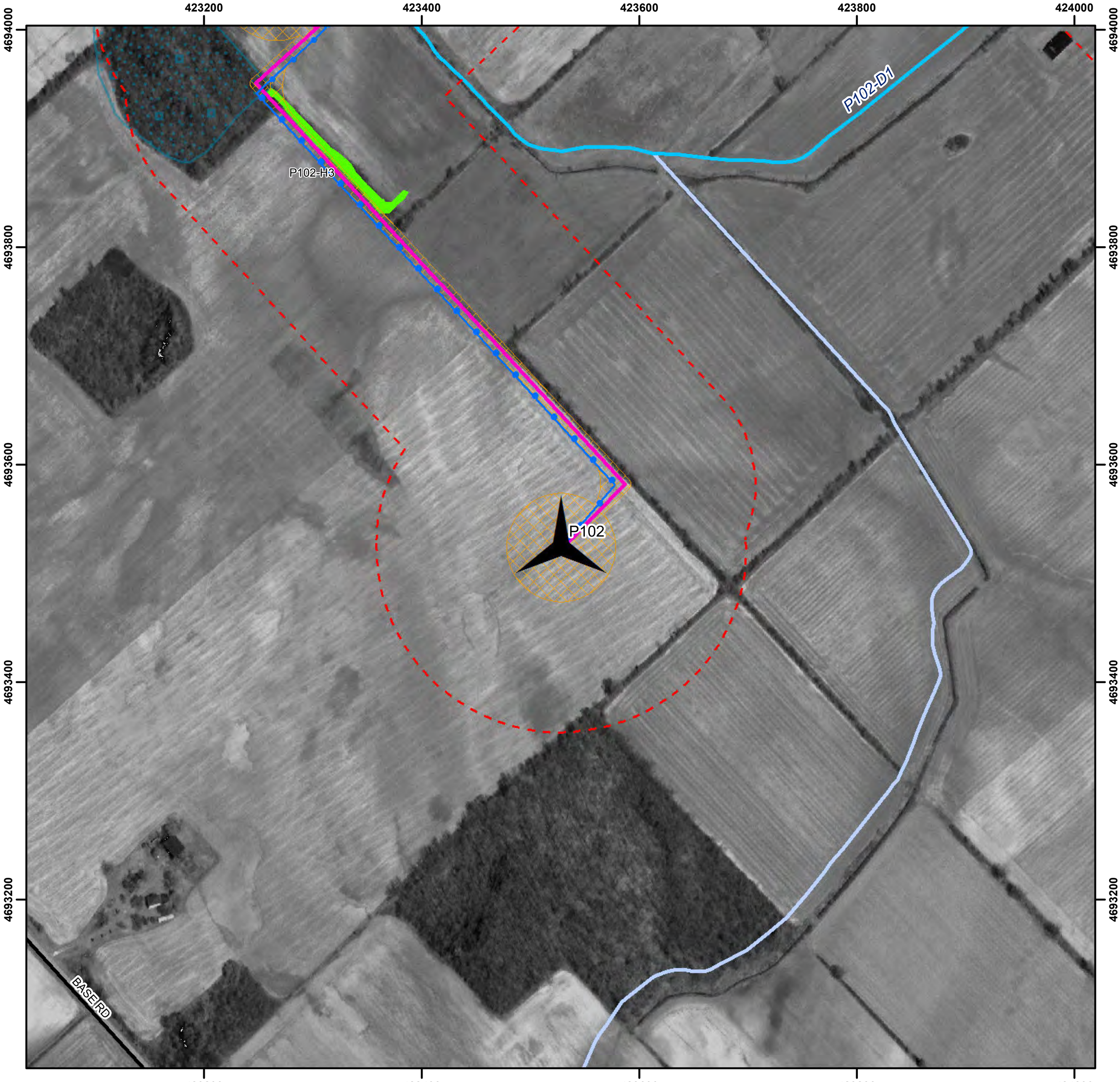


South Kent Wind Project

Turbine No. 102

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

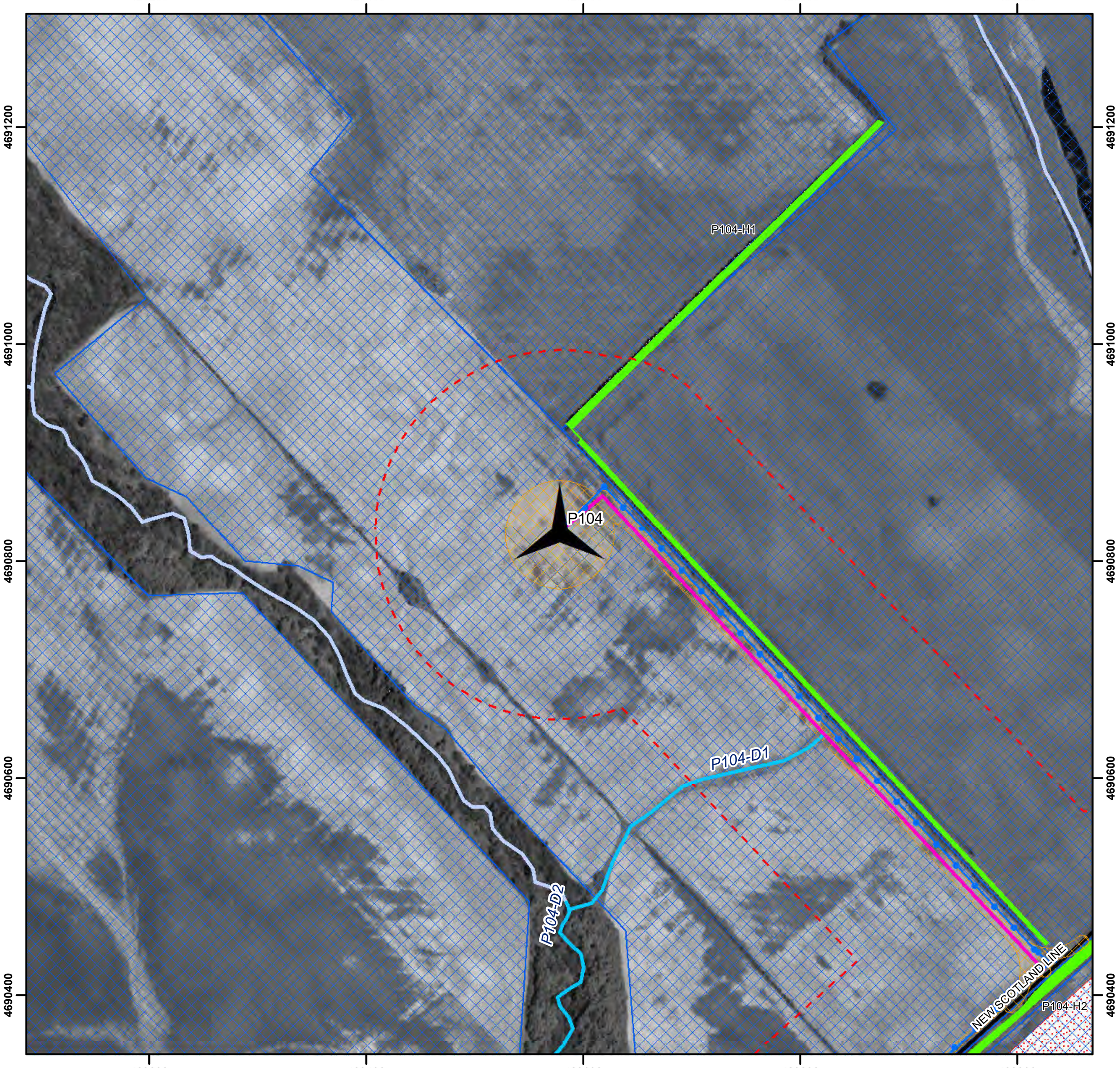
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 104

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

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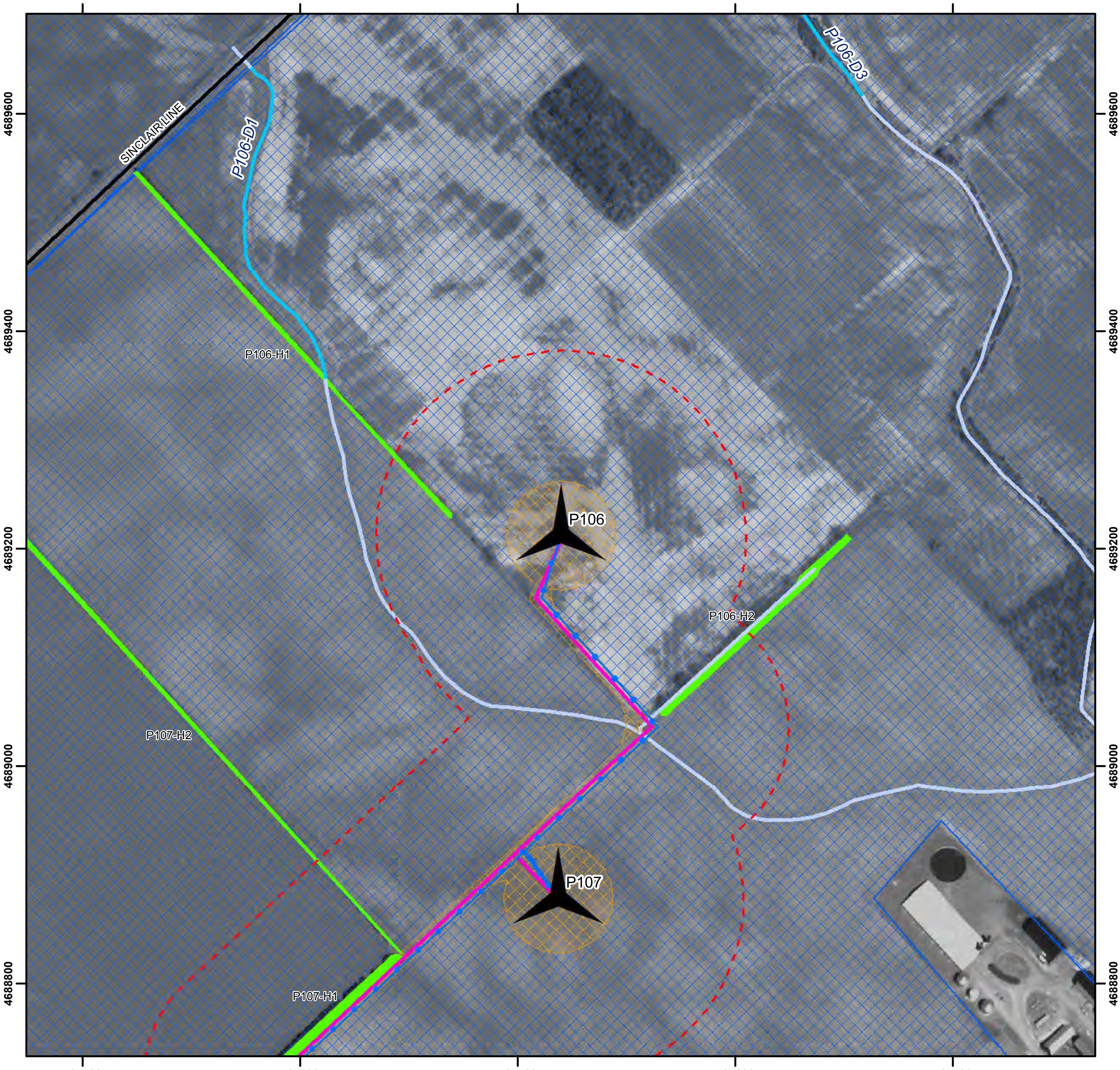

South Kent Wind Project

Turbine No. 106

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

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4689200 4689000 4688800 4688600 4688400

P106-H1

P106

P106-H2

P107-H2

P107

P107-H1

P171

P002-D2

Greater Rondeau Important Bird Area (ON007)

South Kent Wind Project

Turbine No. 107

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- S — Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

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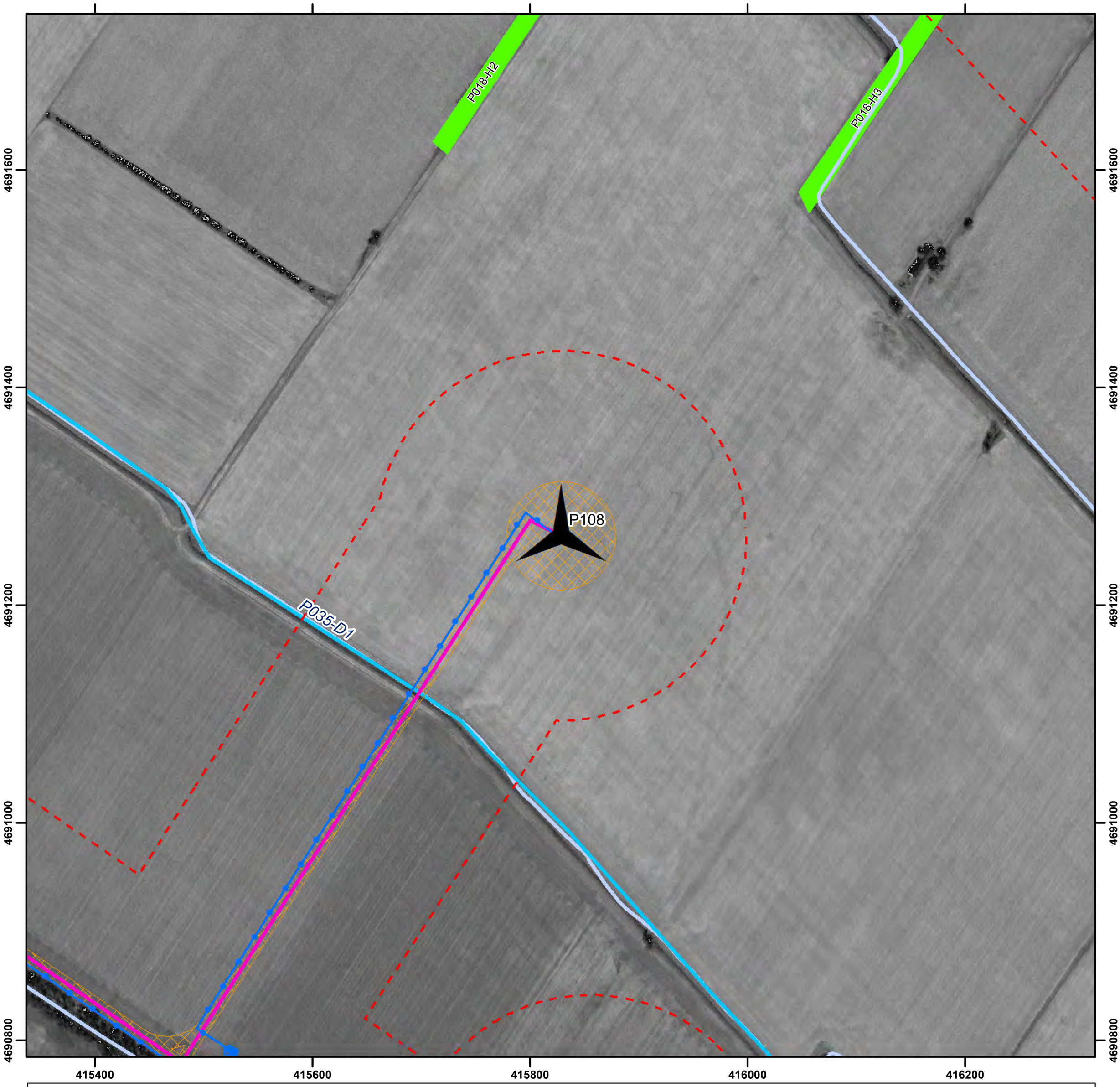


South Kent Wind Project

Turbine No. 108

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

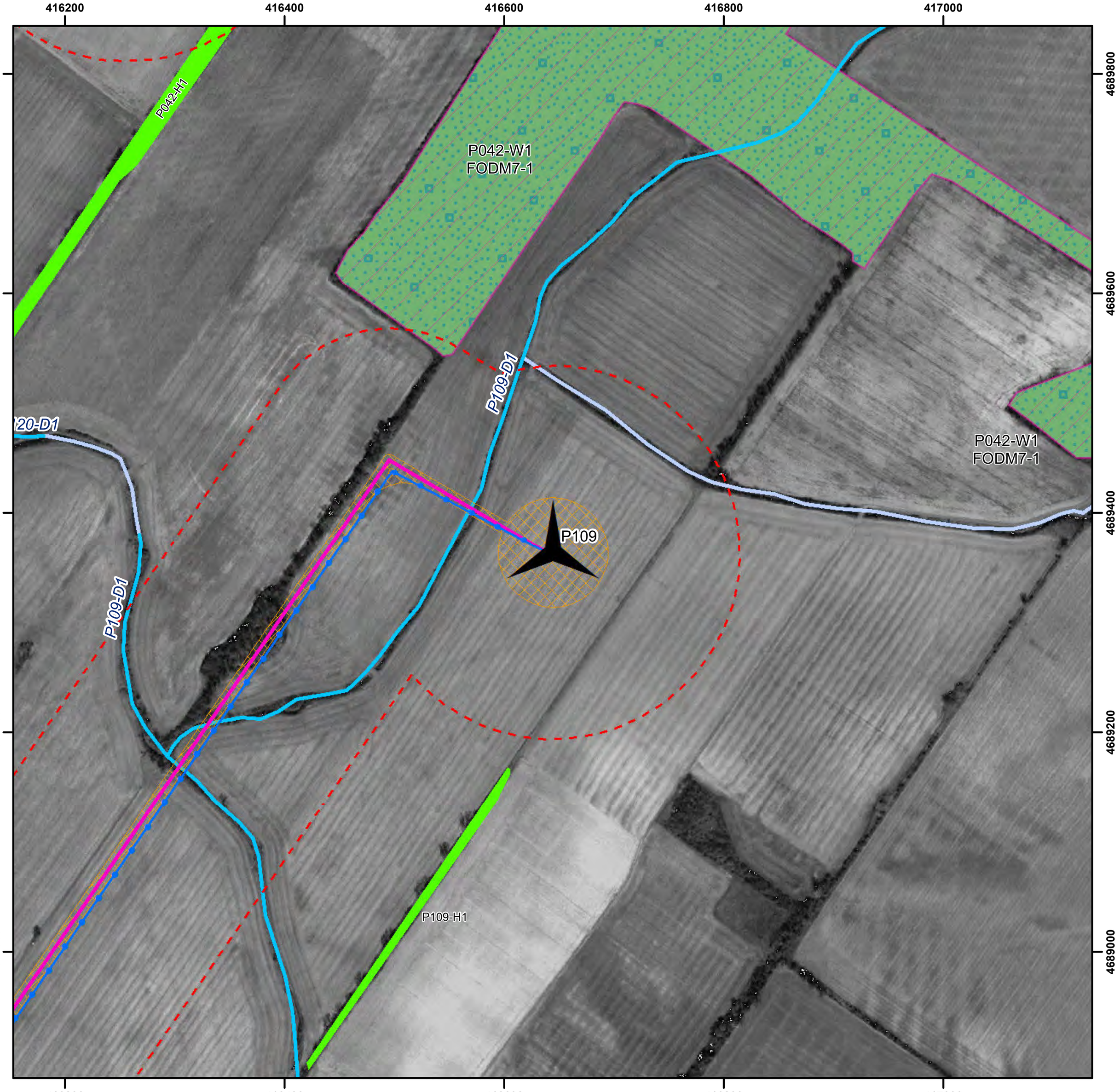
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 109

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
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- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

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4687800 4687600 4687400 4687200

P059-H2
P117-D1
P111-D
P111-H2
P111-WE1
P111-D2
P111
P111-H3
P111-H4
P111-W1
FOD5-7
BLOOMFIELD RD
10TH LINE

South Kent Wind Project

Turbine No. 111

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- S — Reptile Hibernacula
- Bat Maternity Roost

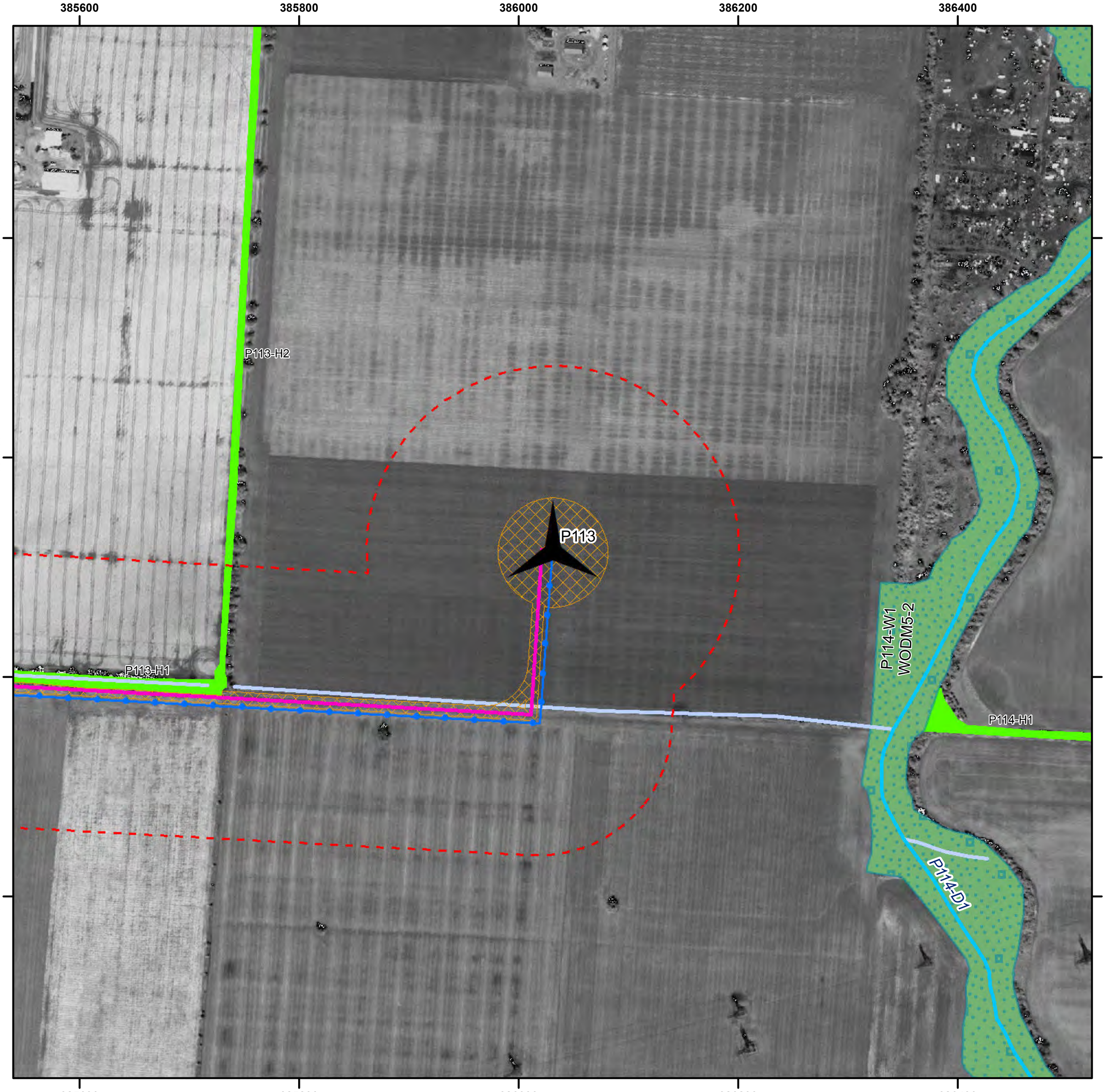
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 113

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

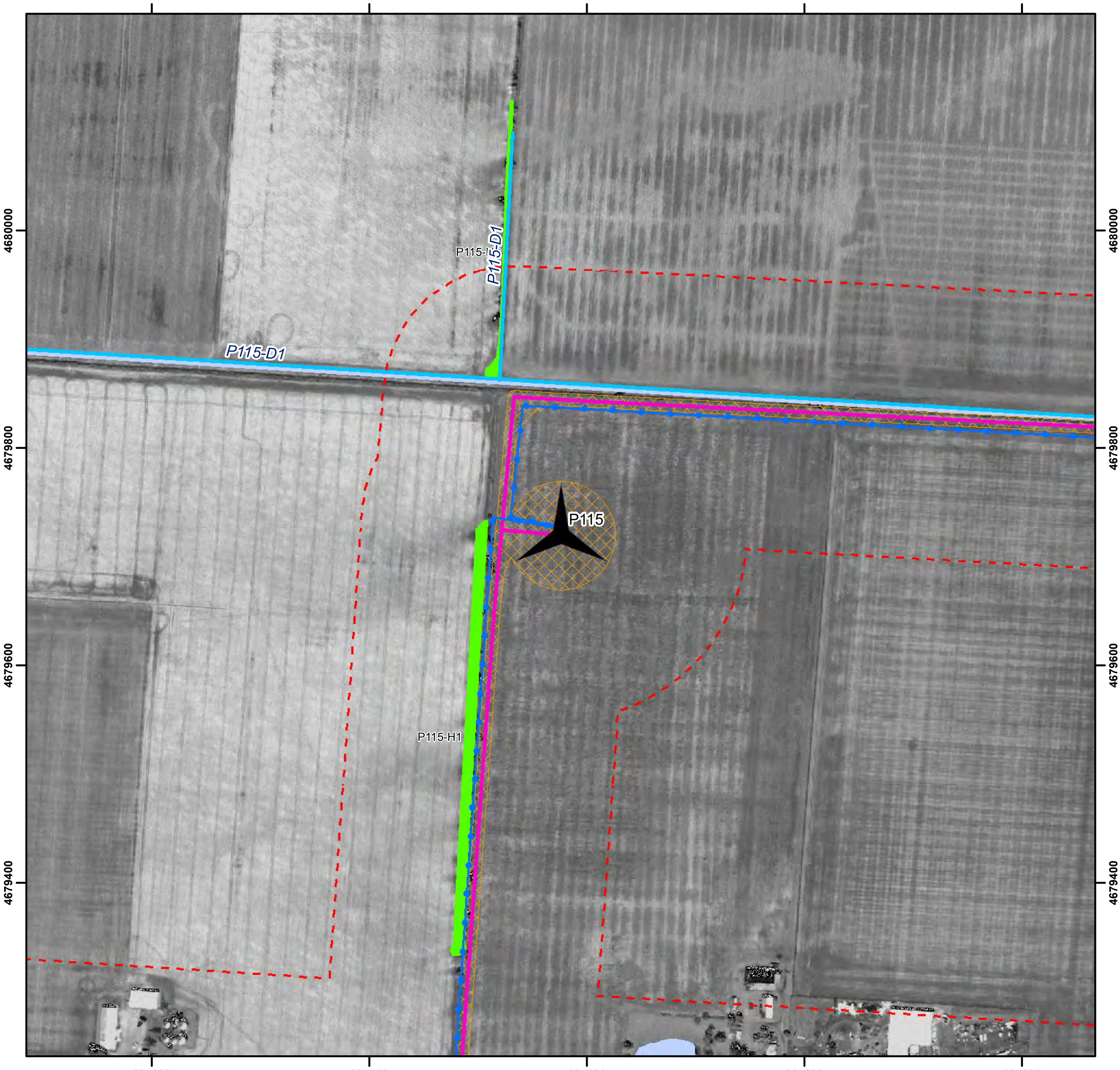
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 115

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

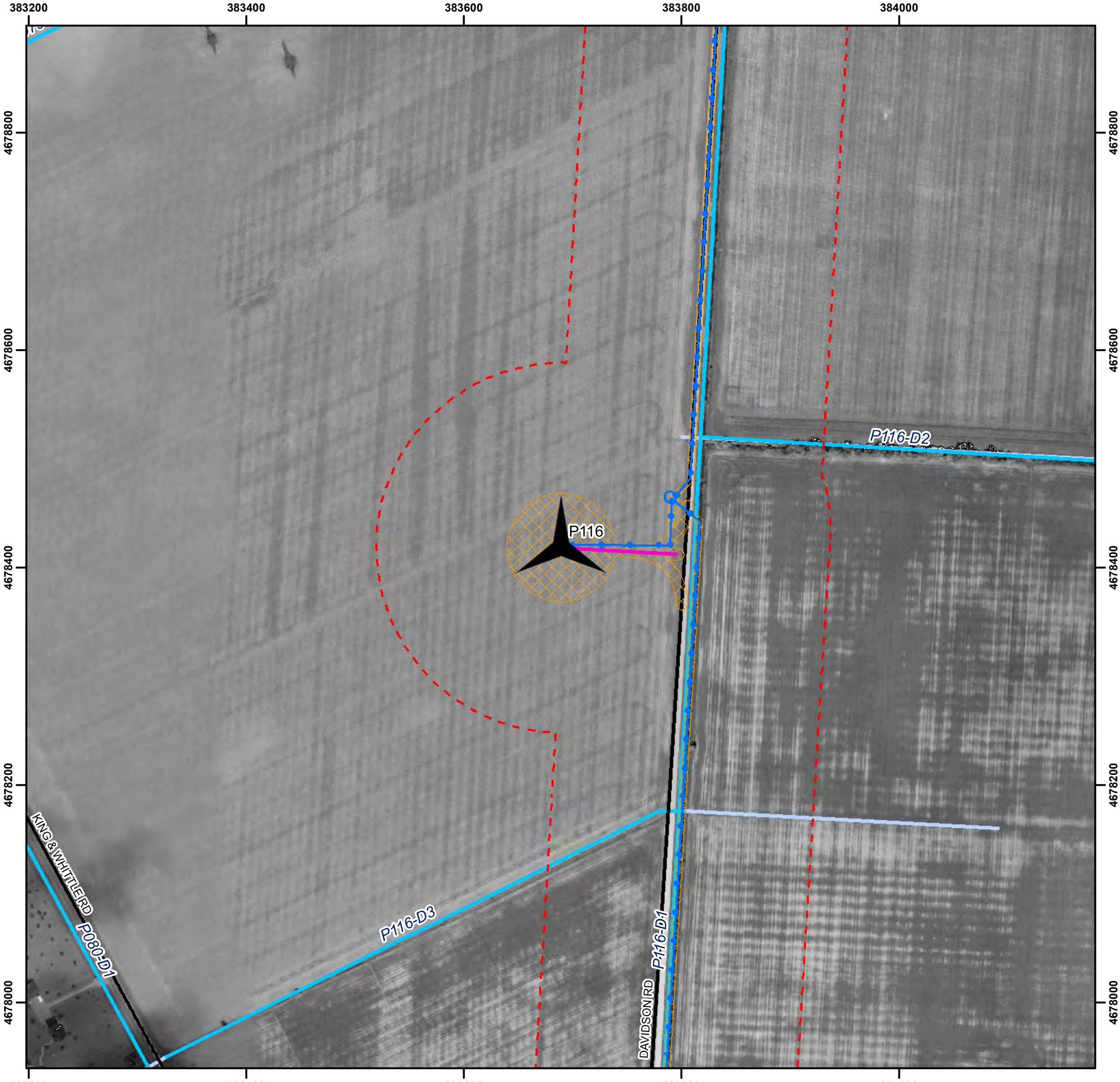
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 116

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

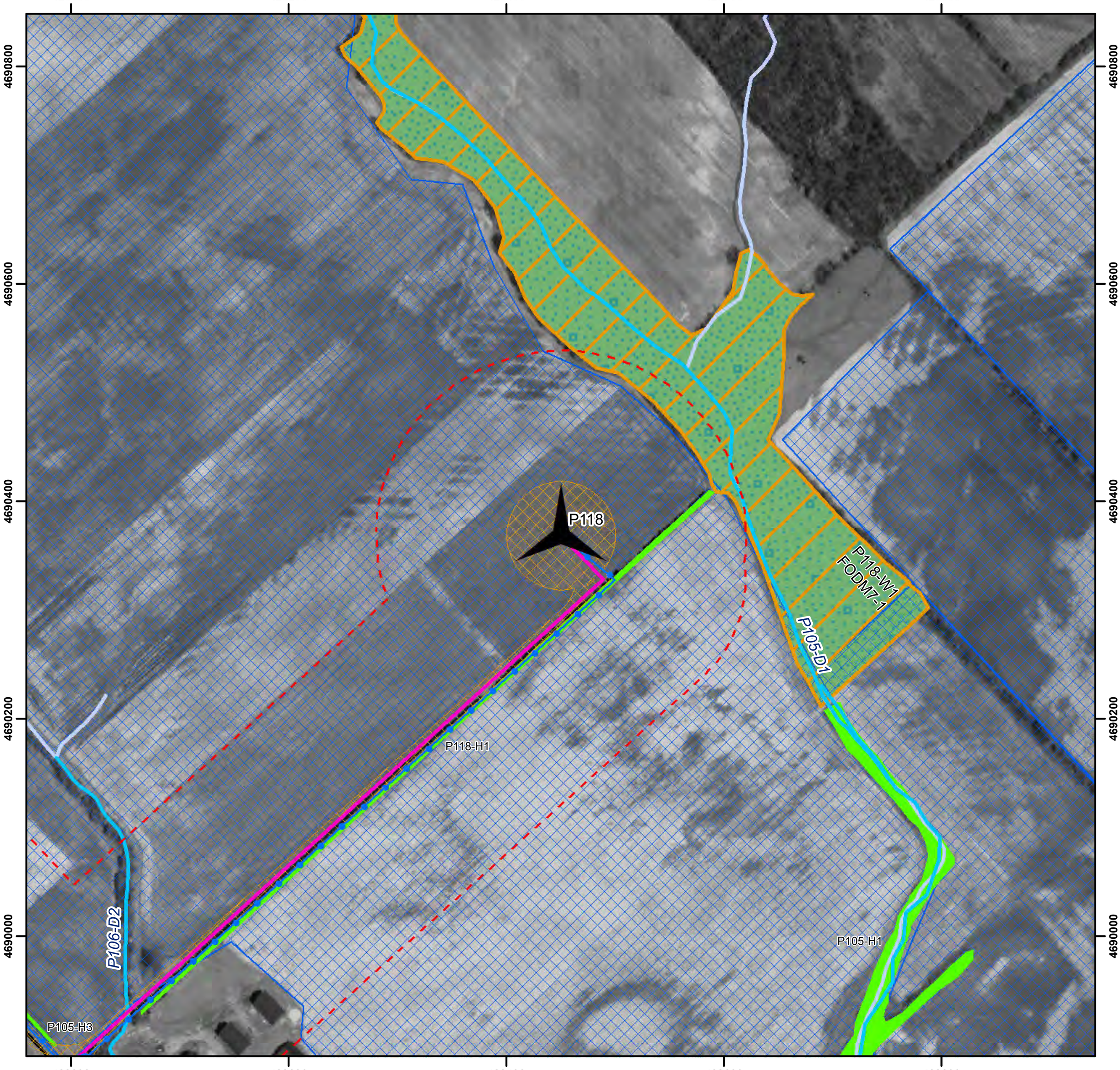
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 118

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula (S)
- Bat Maternity Roost

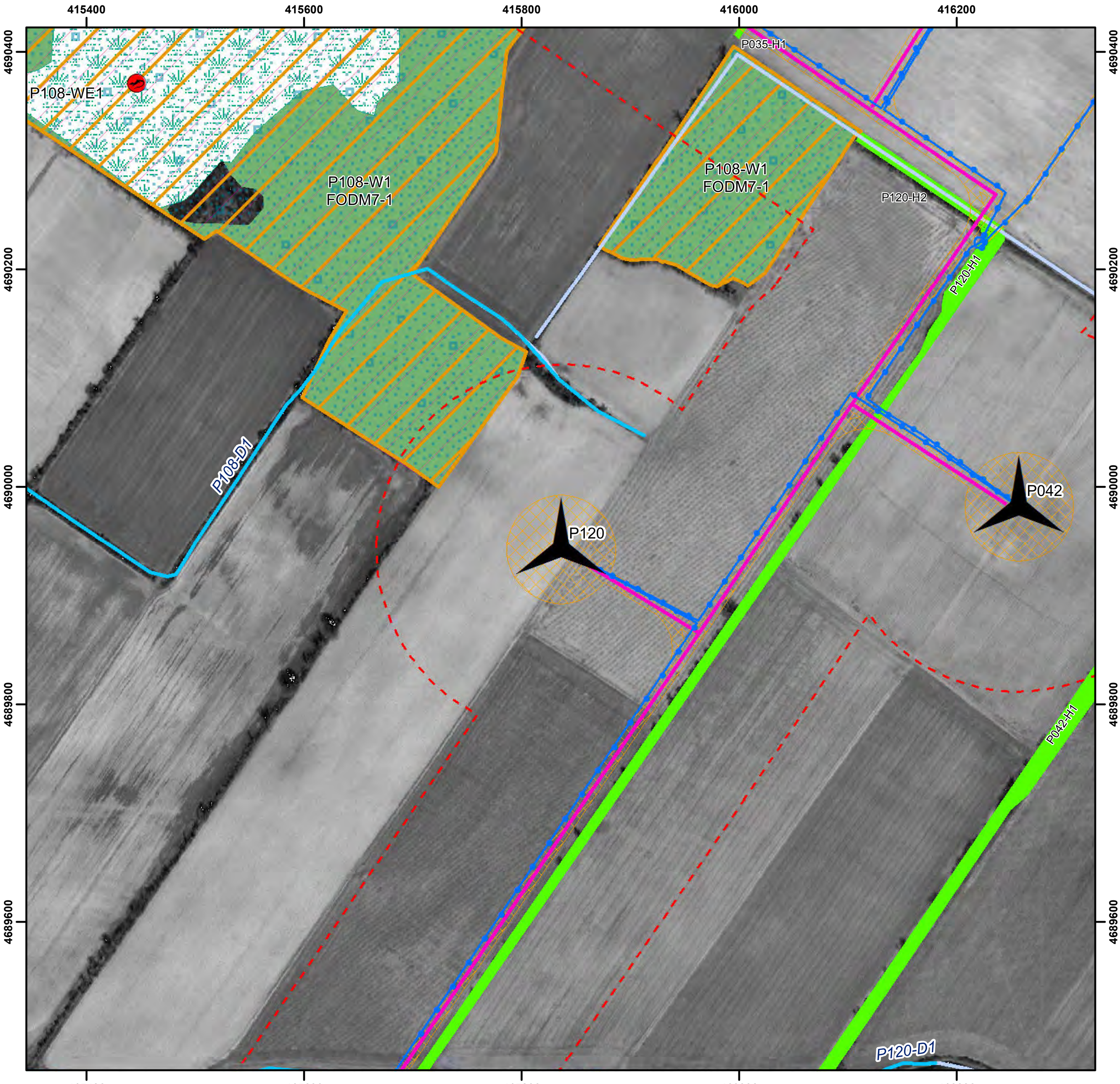
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 120

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

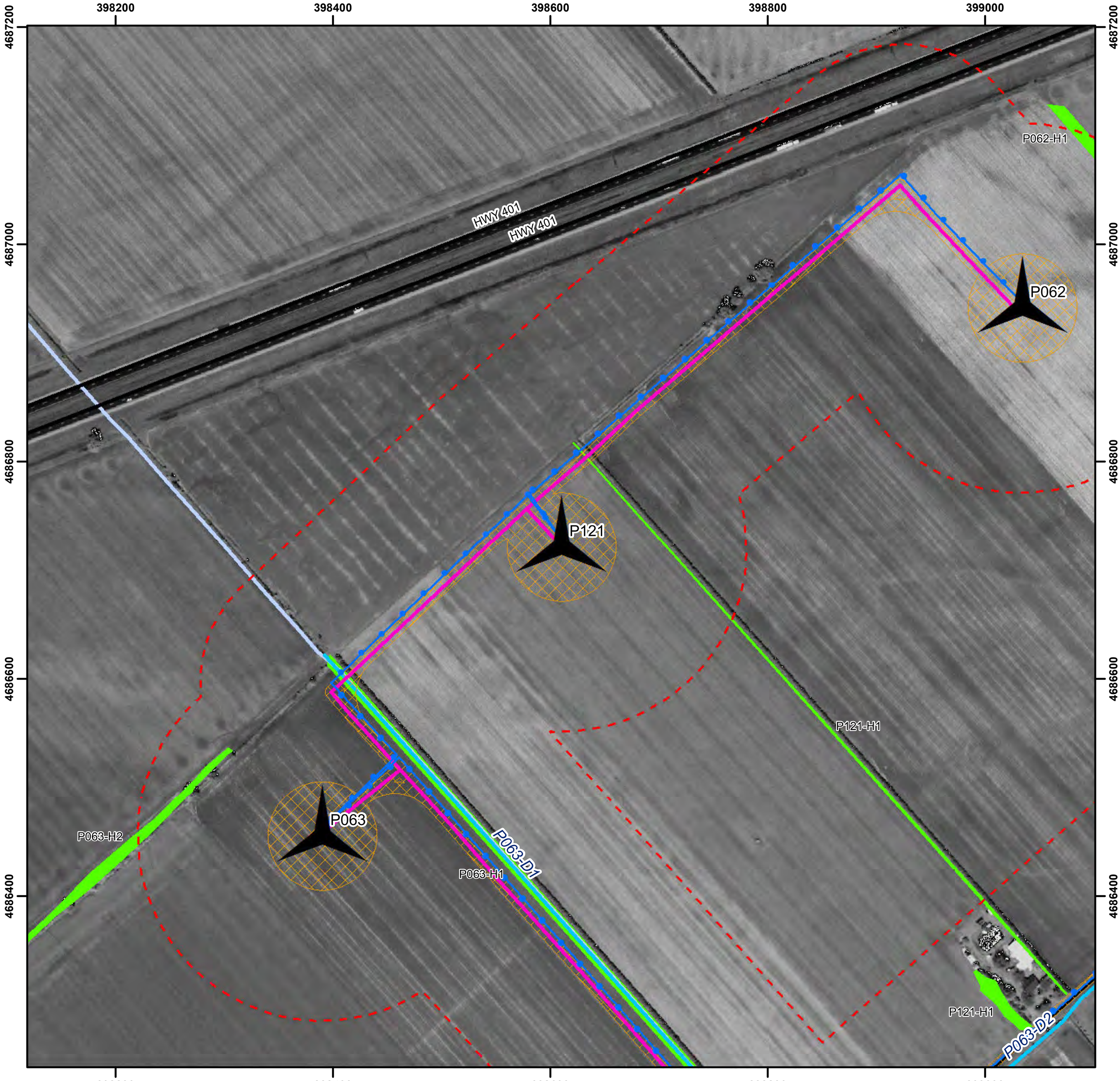
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 121

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula (S)
- Bat Maternity Roost

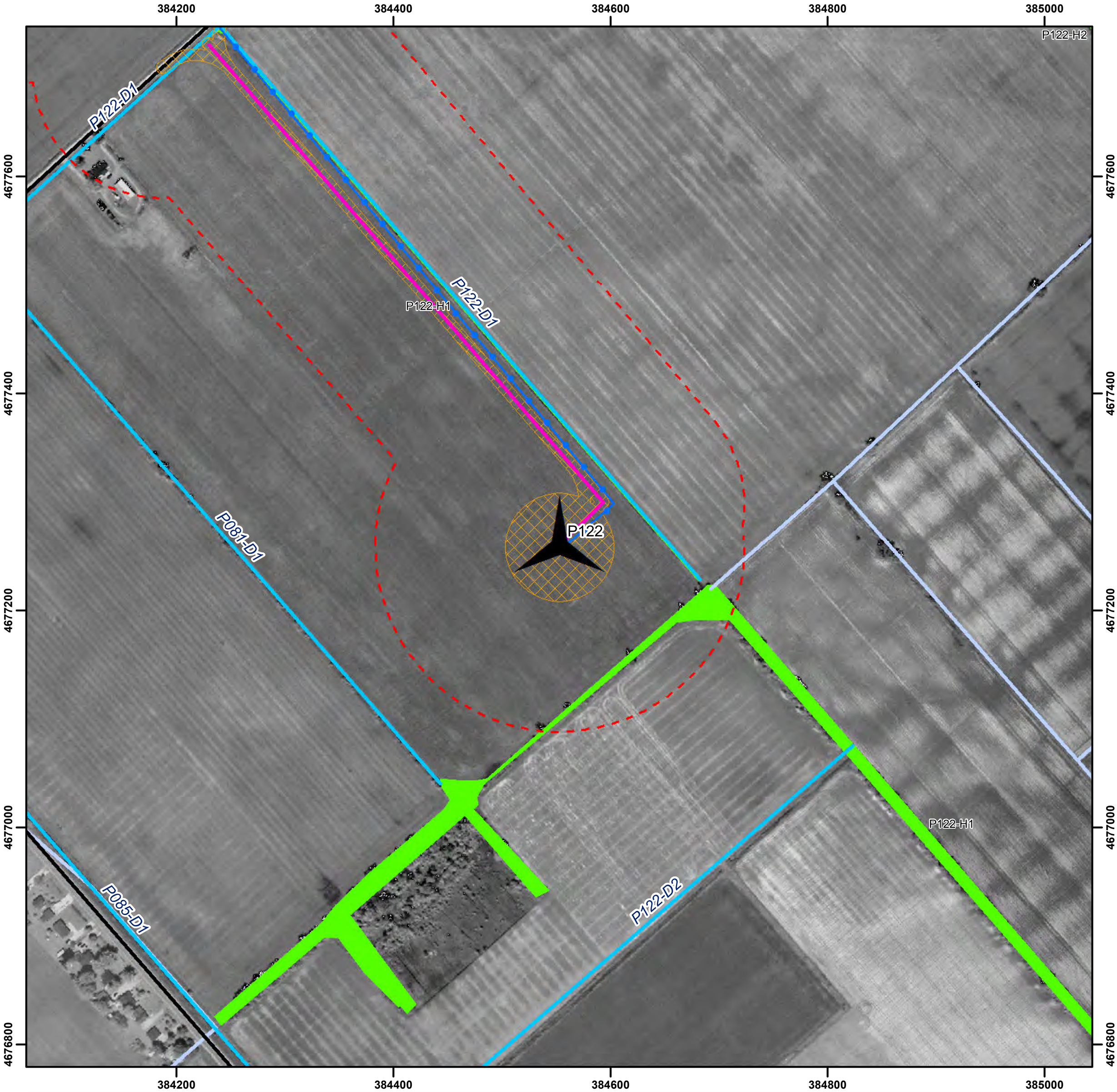
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 122

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd

389200 389400 389600 389800 390000

4679400 4679200 4679000 4678800 4678600

P124-D2

P124

P124-H1

VALETTA RD

P124-D1

South Kent Wind Project

Turbine No. 124

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

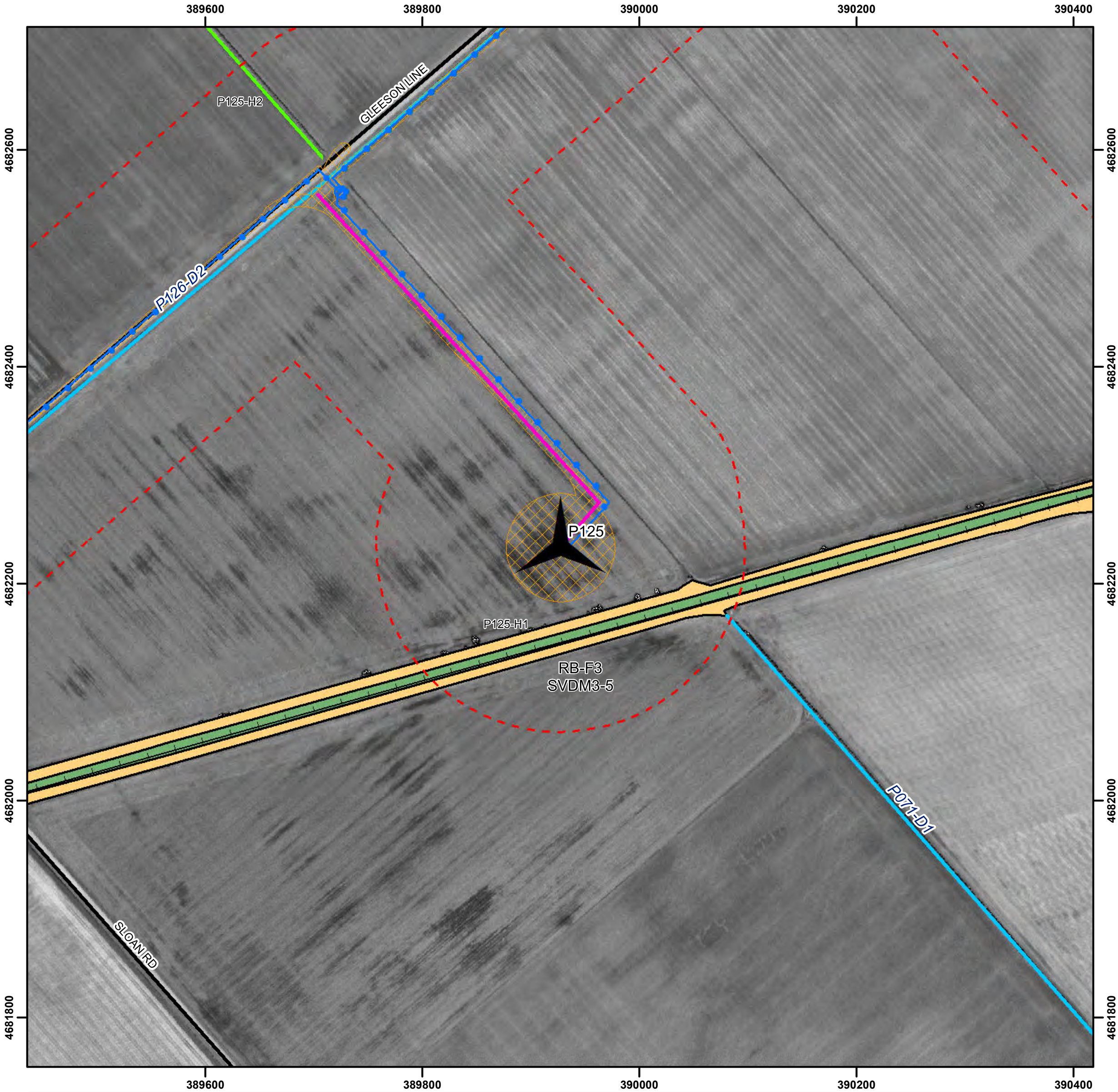
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 125

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula (S)
- Bat Maternity Roost

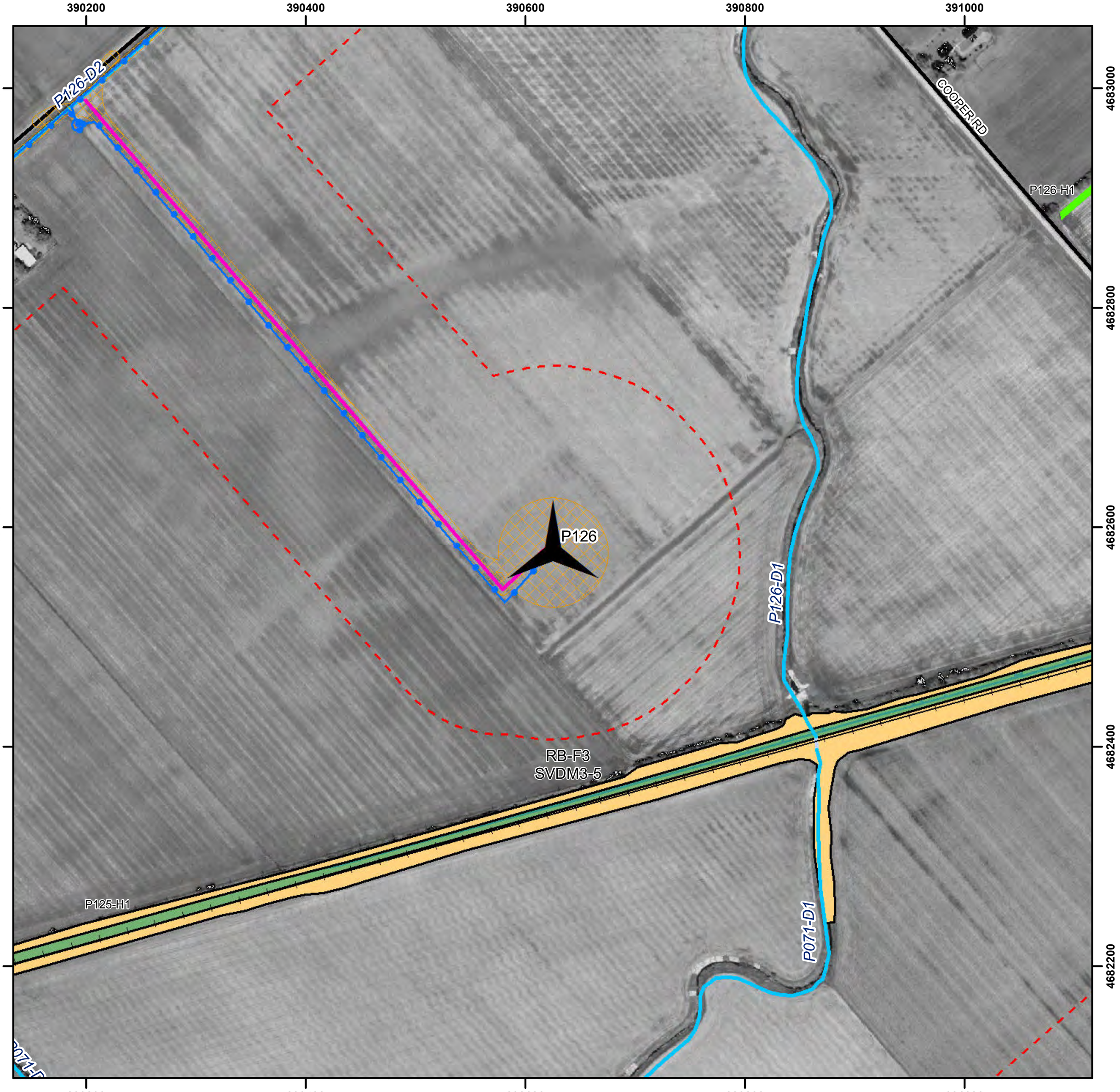
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 126

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd

386600 386800 387000 387200 387400

4679000 4678800 4678600 4678400 4678200

P076-D3

MIDDLE LINE

P114-W1
WODM5-2

P114-D1

P076-D3

P116-D2

P132

P116-D2

P114-D1

P114-W1
WODM5-2

386600 386800 387000 387200 387400

South Kent Wind Project

Turbine No. 132

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula (S)
- Bat Maternity Roost

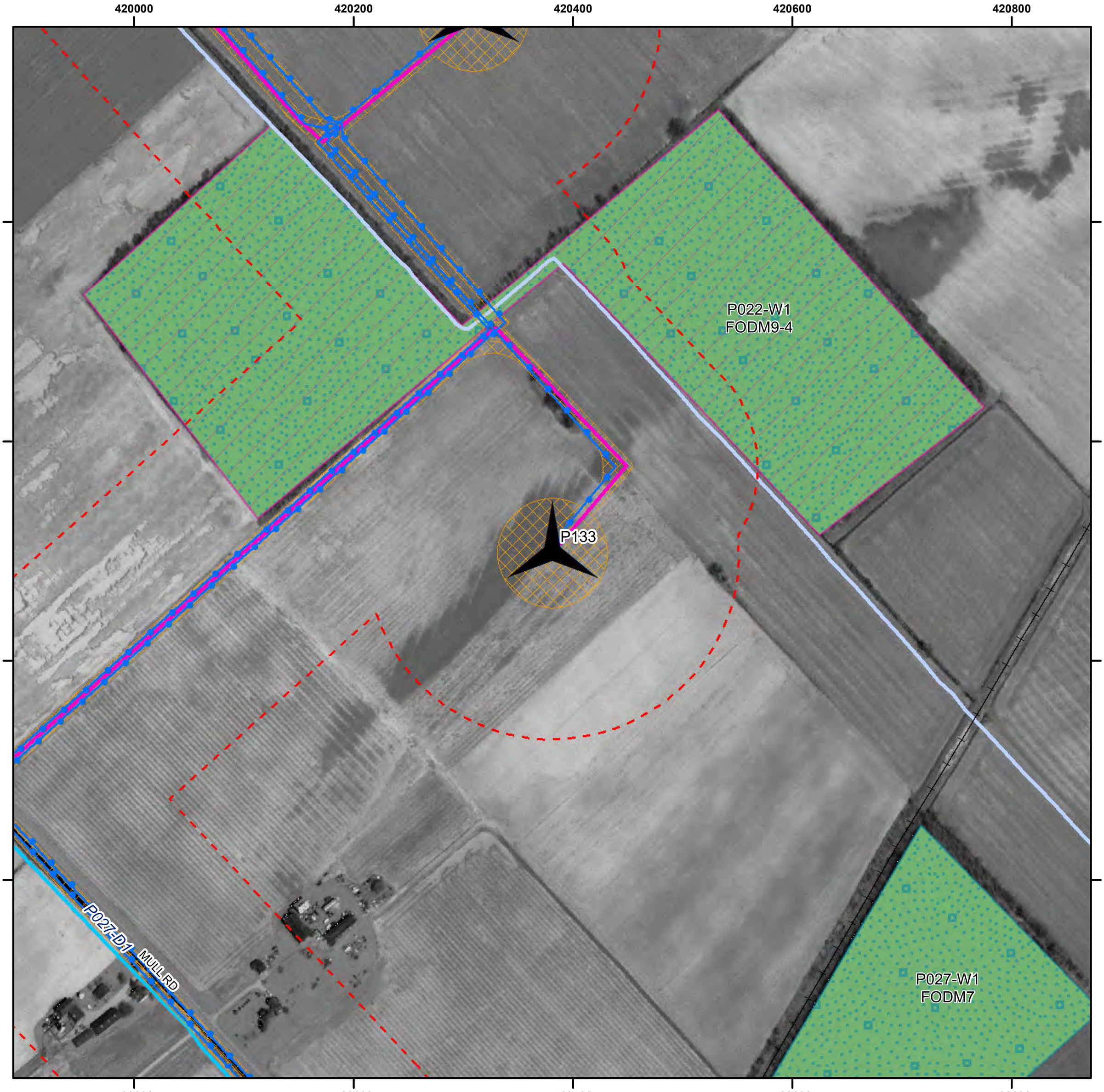
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 133

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula (S)
- Bat Maternity Roost

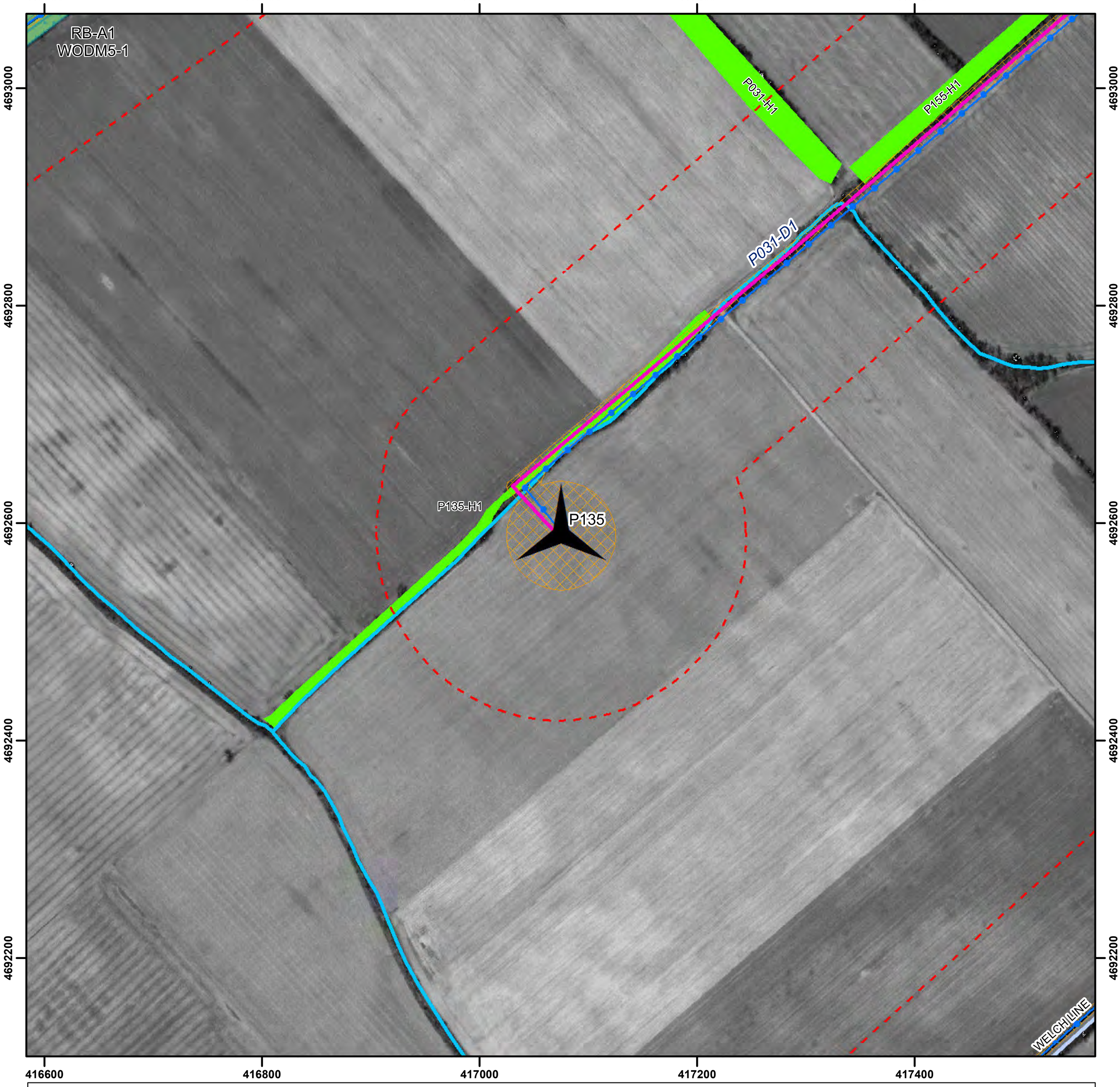
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 135

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- S — Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd

426800 427000 427200 427400 427600

4692200 4692000 4691800 4691600 4691400

P001

P001-W1
FODM7-1

P001-H2

P138-H1

P138

P138-H1

P138-H3

P105-D1

P138-H2

South Kent Wind Project

Turbine No. 138

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd

425400 425600 425800 426000 426200

4688000 4687800 4687600 4687400 4687200

SINCLAIR LINE

P139

P139-H1

P139-D2

P139-D1

MULL RD

South Kent Wind Project

Turbine No. 139

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

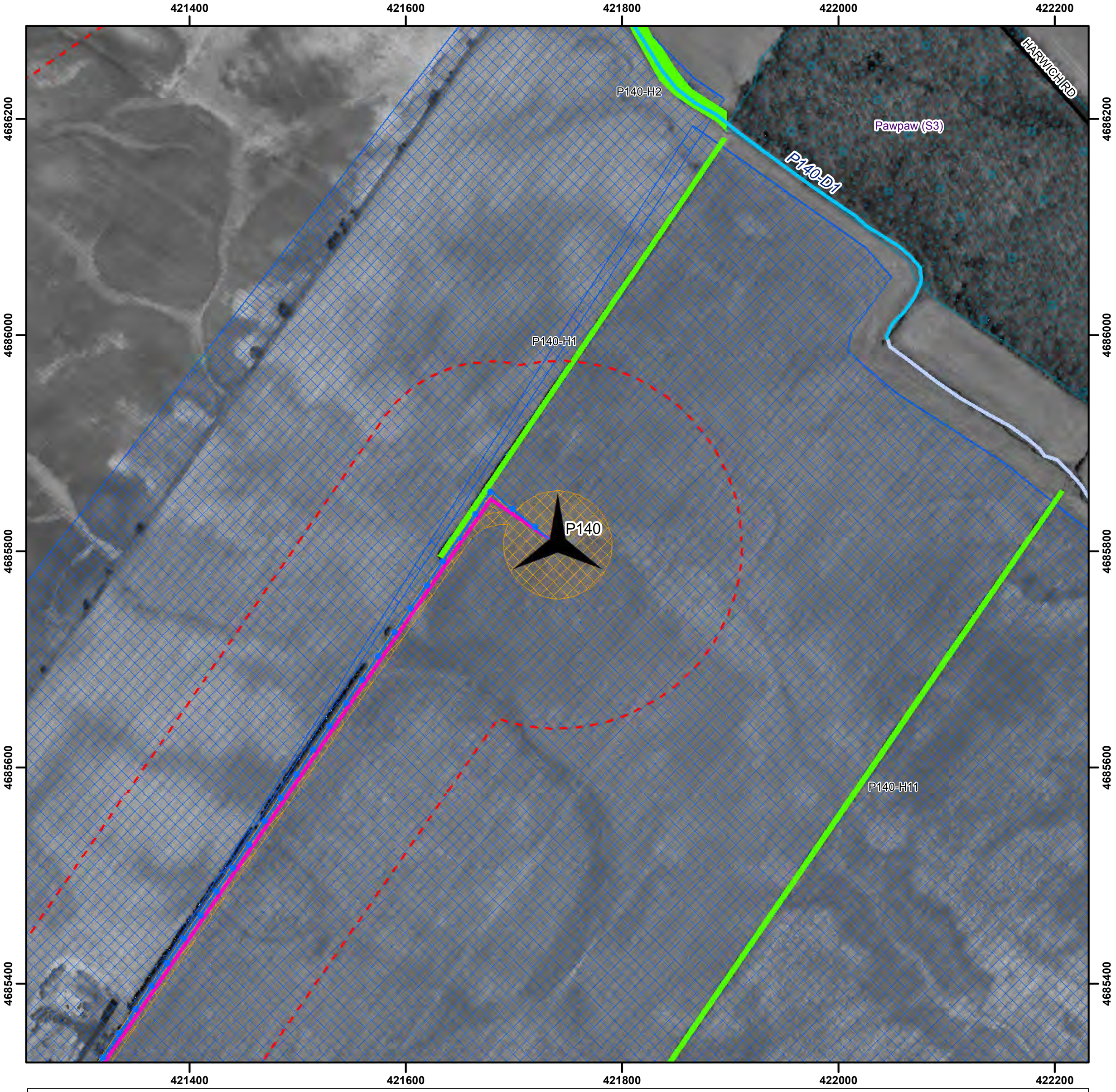
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 140

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

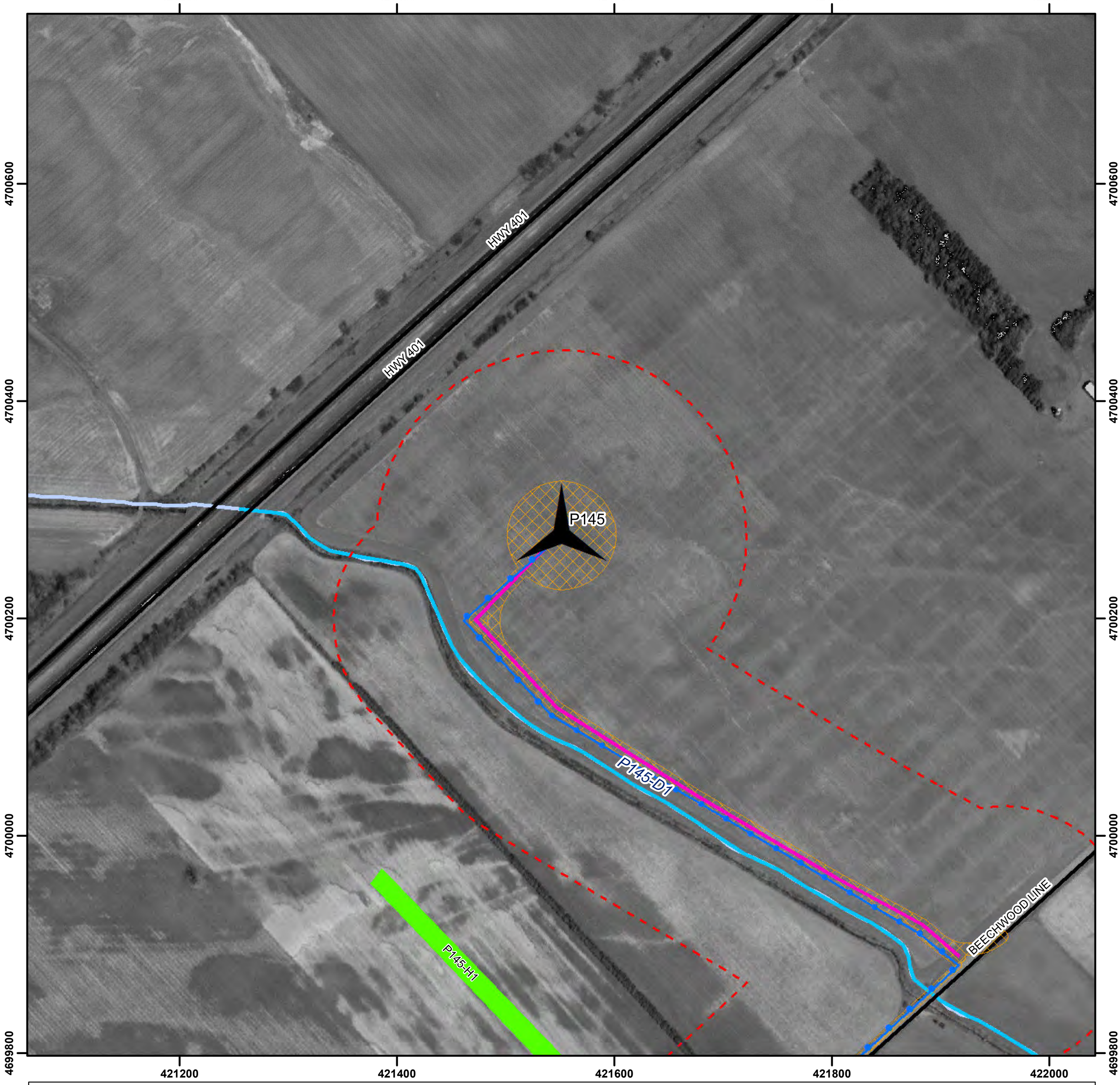
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 145

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd

396800 397000 397200 397400 397600

4686000 4685800 4685600 4685400 4685200

6TH LINE W

P148

P064

P064-H1

P064-D3

P064-D3

South Kent Wind Project

Turbine No. 148

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd

403200 403400 403600 403800 404000

4688800 4688600 4688400 4688200 4688000

8TH LINE

P059-H2

P149

P117-D1

BLOOMFIELD RD

P149-H6

South Kent Wind Project

Turbine No. 149

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

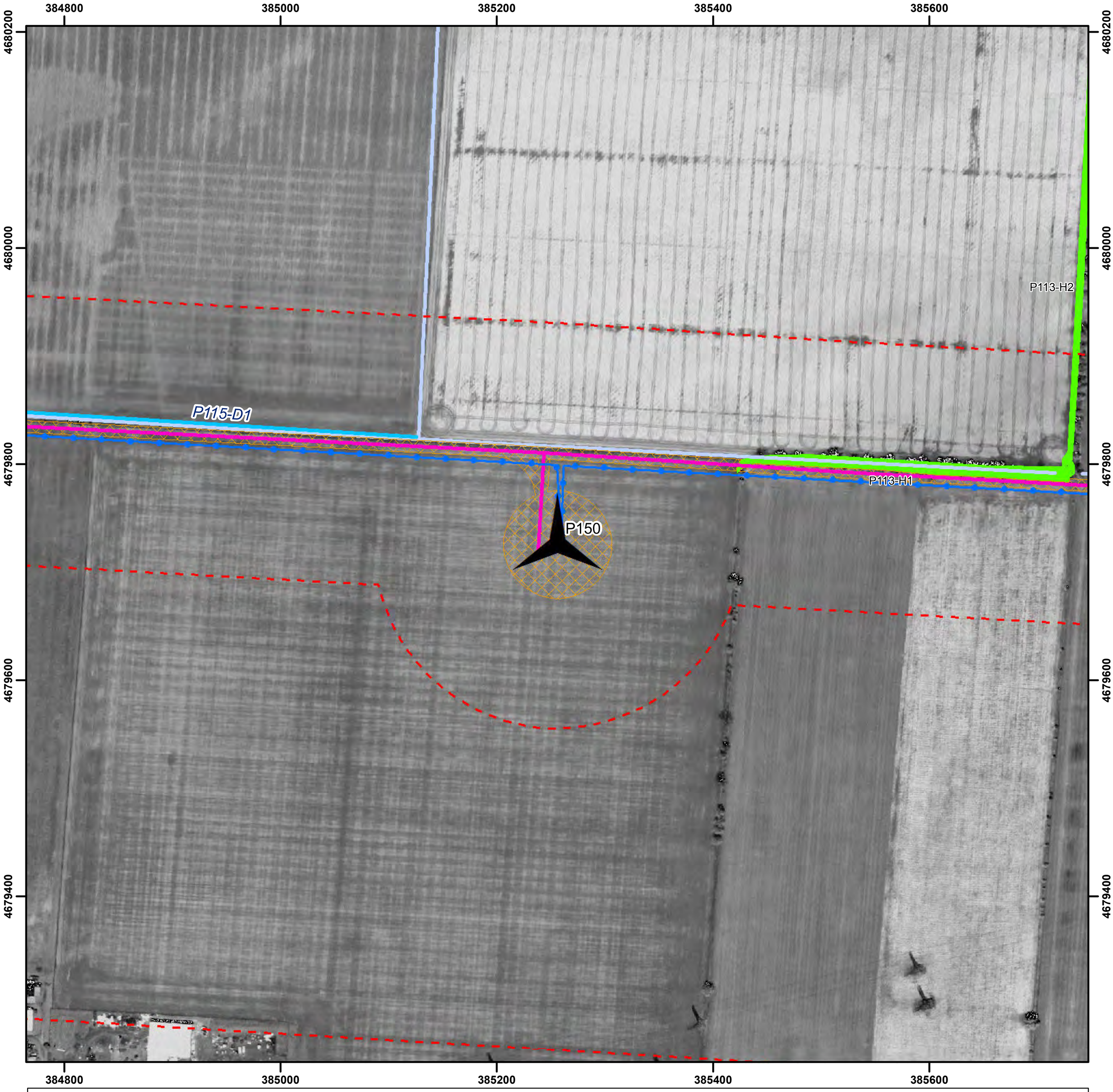
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 150

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

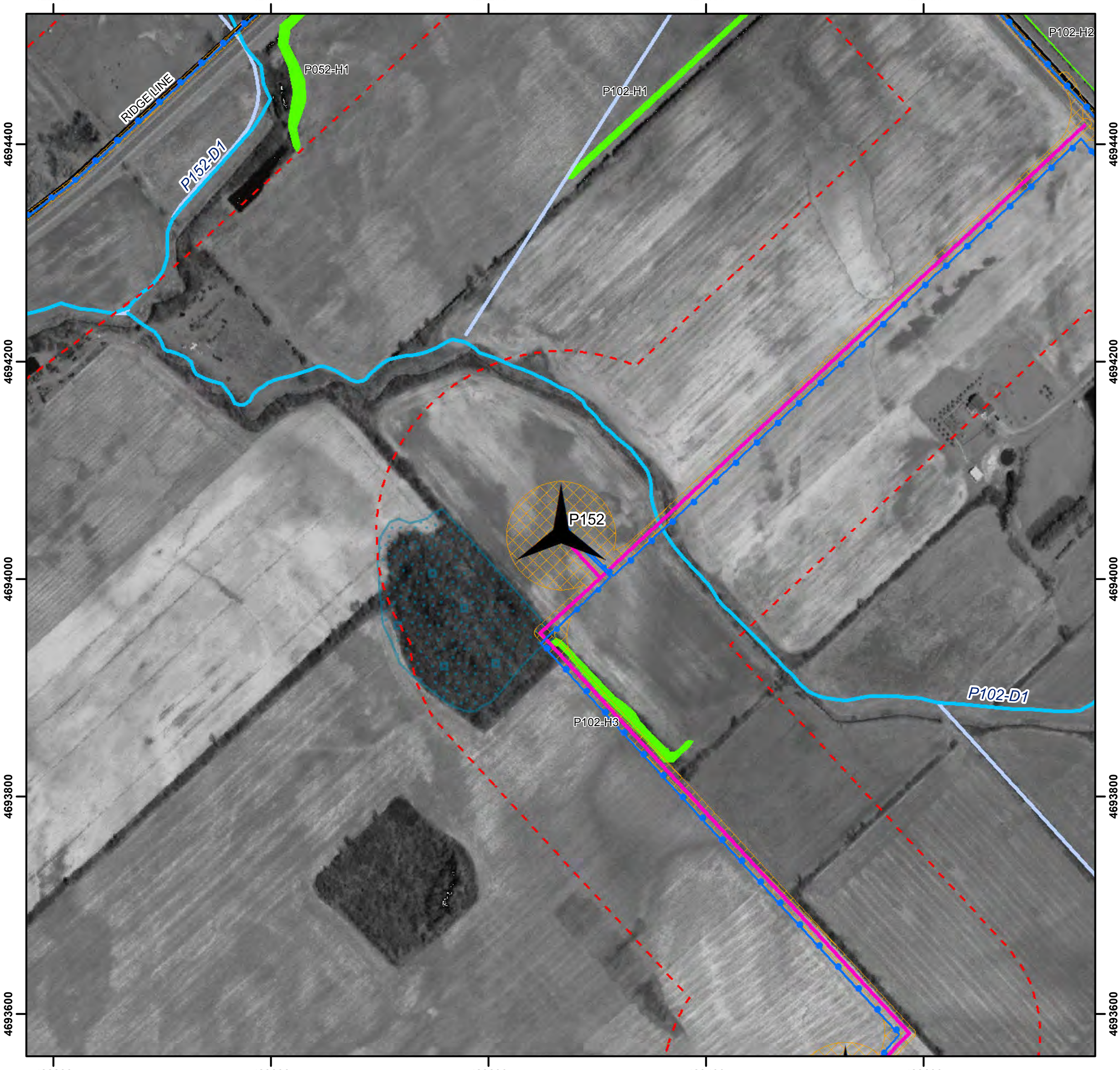
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 152

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

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382000 382200 382400 382600 382800

4678200 4678000 4677800 4677600 4677400

P154

P080-H1

P080-H1

P080-H3

P080-H3

P080-D1

GRAY LINE

South Kent Wind Project

Turbine No. 154

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

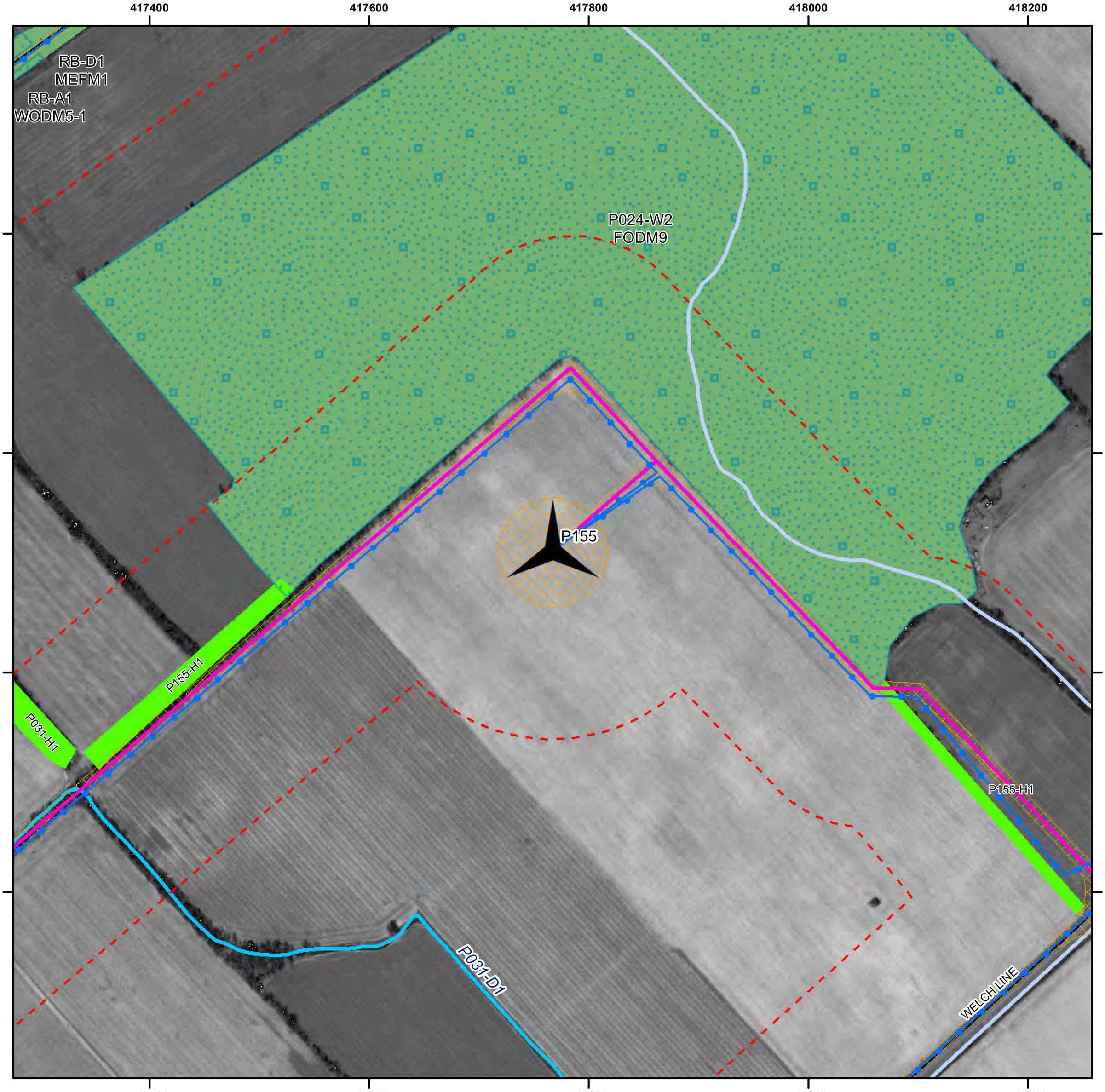
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 155

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

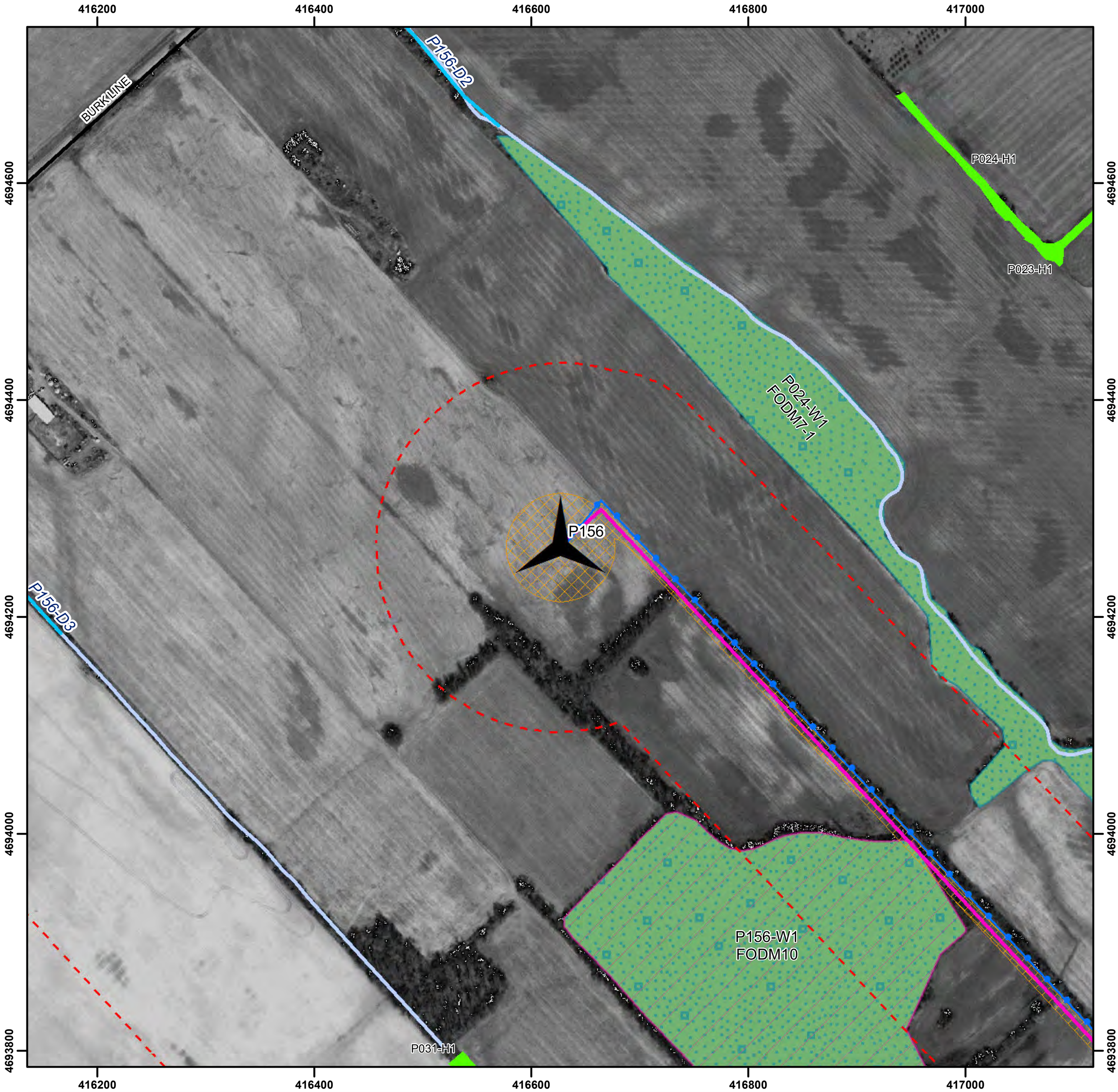
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 156

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

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391200 391400 391600 391800 392000

4683800 4683600 4683400 4683200 4683000

P127-D1

P127-H2

P127-H1

P161

P126-H1

South Kent Wind Project

Turbine No. 161

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

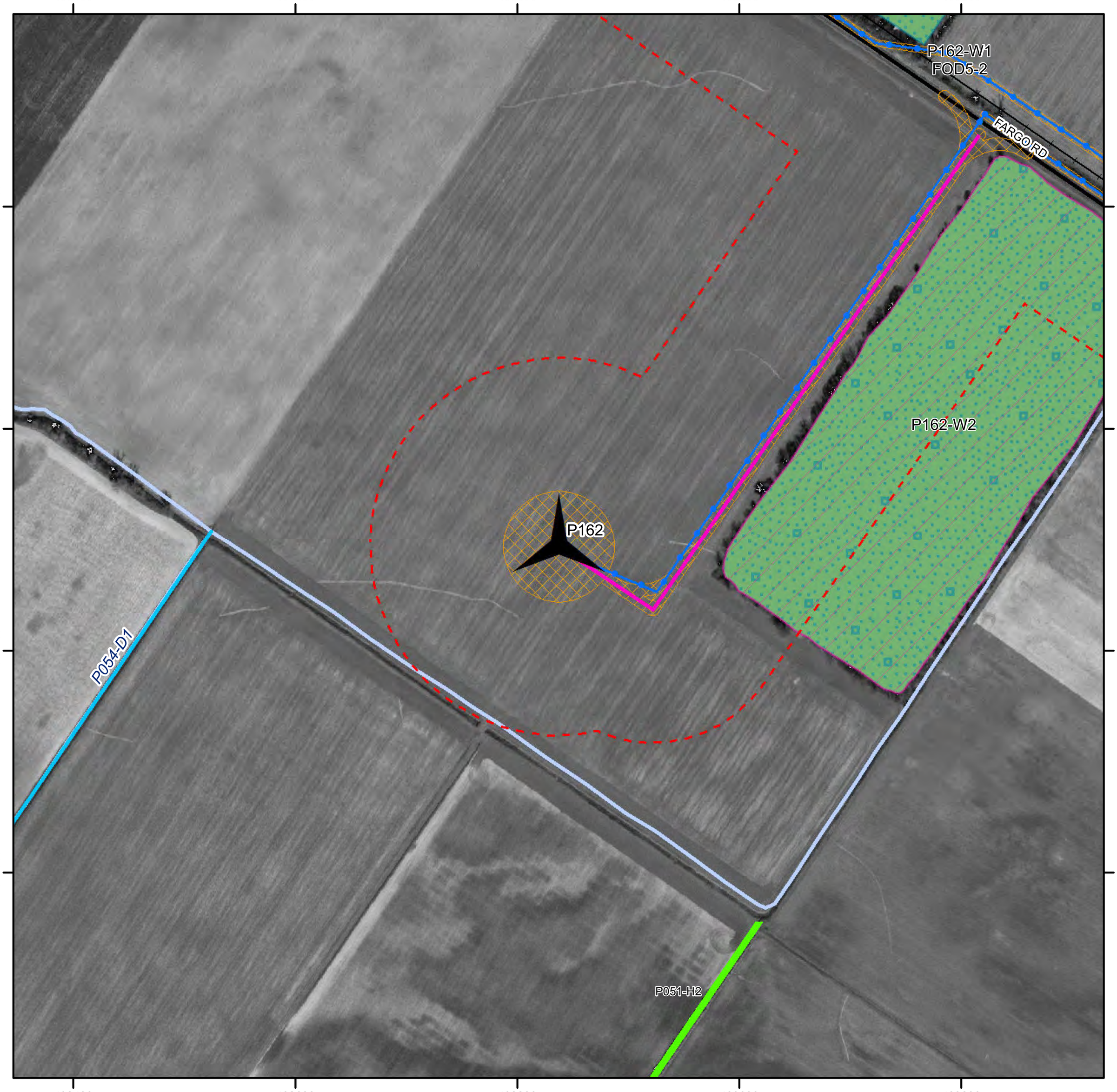
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 162

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd

South Kent Wind Project

Turbine No. 163

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

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Legend

- Project Area (April 20th, 2012)
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Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

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406200 406400 406600 406800 407000

4689400 4689200 4689000 4688800 4688600

P096-D1

P112-H1

P112-D1

P164

P164-H1

P060-D1

10TH LINE

P060-H2

406200 406400 406600 406800 407000

South Kent Wind Project

Turbine No. 164

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
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- Cabling
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- Watercourse (Permanent)
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- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

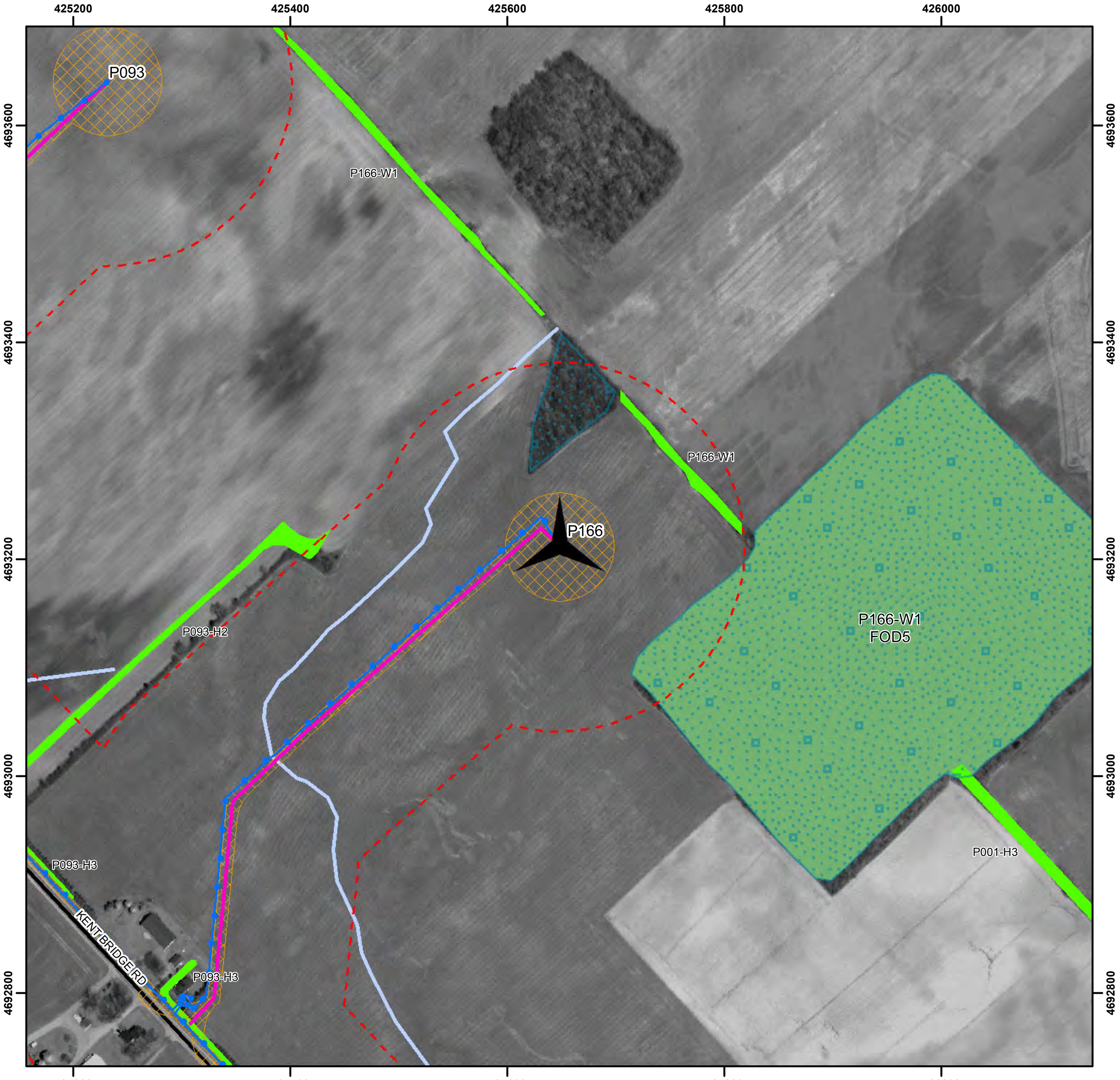
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 166

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd

423400 423600 423800 424000 424200

4691000 4690800 4690600 4690400 4690200

FRONT LINE

P167

P003-H2

P009-D1

P006

P009-H1

South Kent Wind Project

Turbine No. 167

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd

421800 422000 422200 422400 422600

4697800 4697600 4697400 4697200 4697000

ONEILL LINE

SHEWBURG RD

P168

COFELL LINE

P011-W1
FODM11

P101-D2

P101-D1

P011-H1

P011-D1

RB-B1
MEGM1-4

P101-D1

South Kent Wind Project

Turbine No. 168

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
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- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

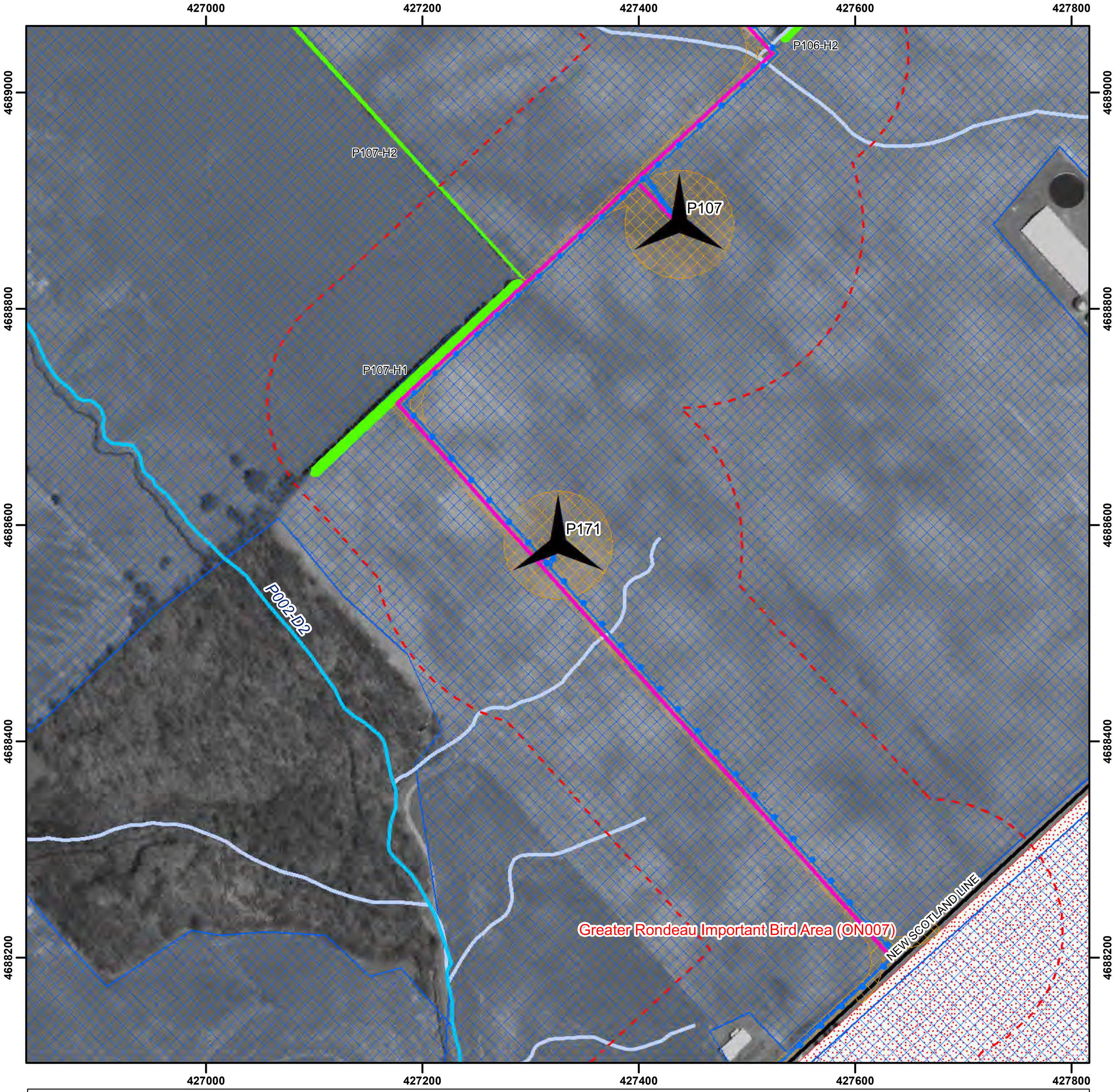
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 171

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

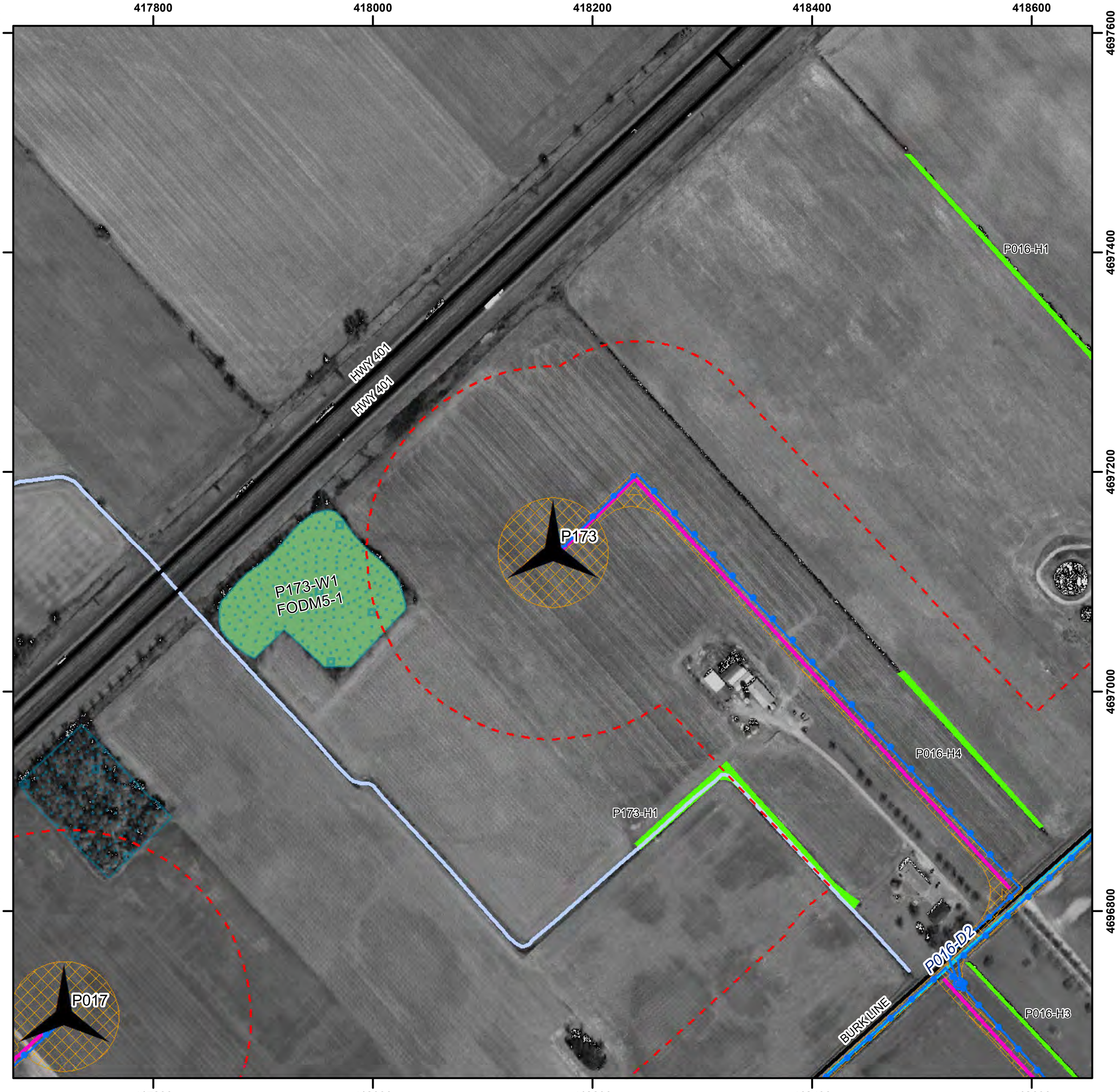
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 173

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

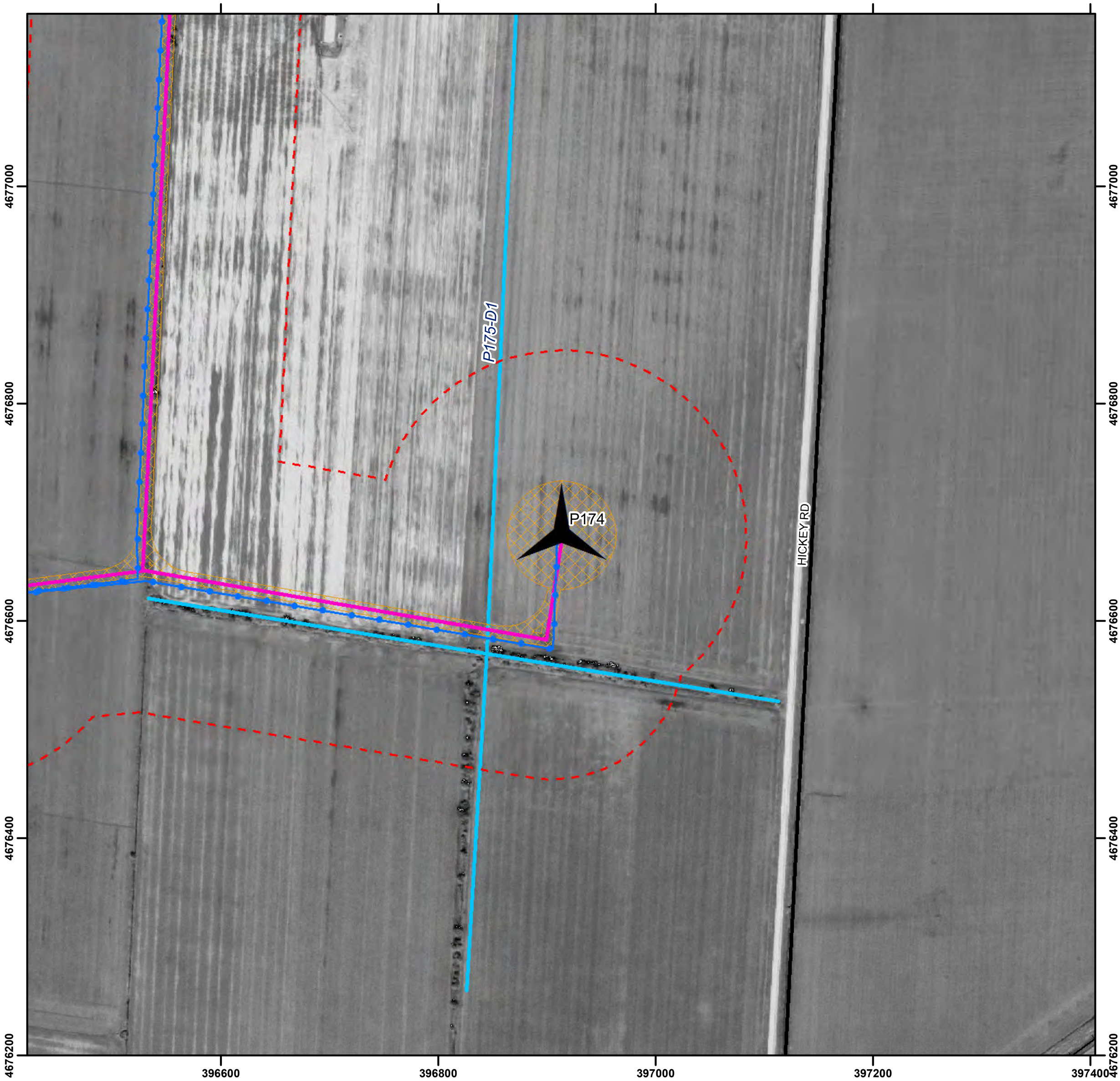
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 174

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
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- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

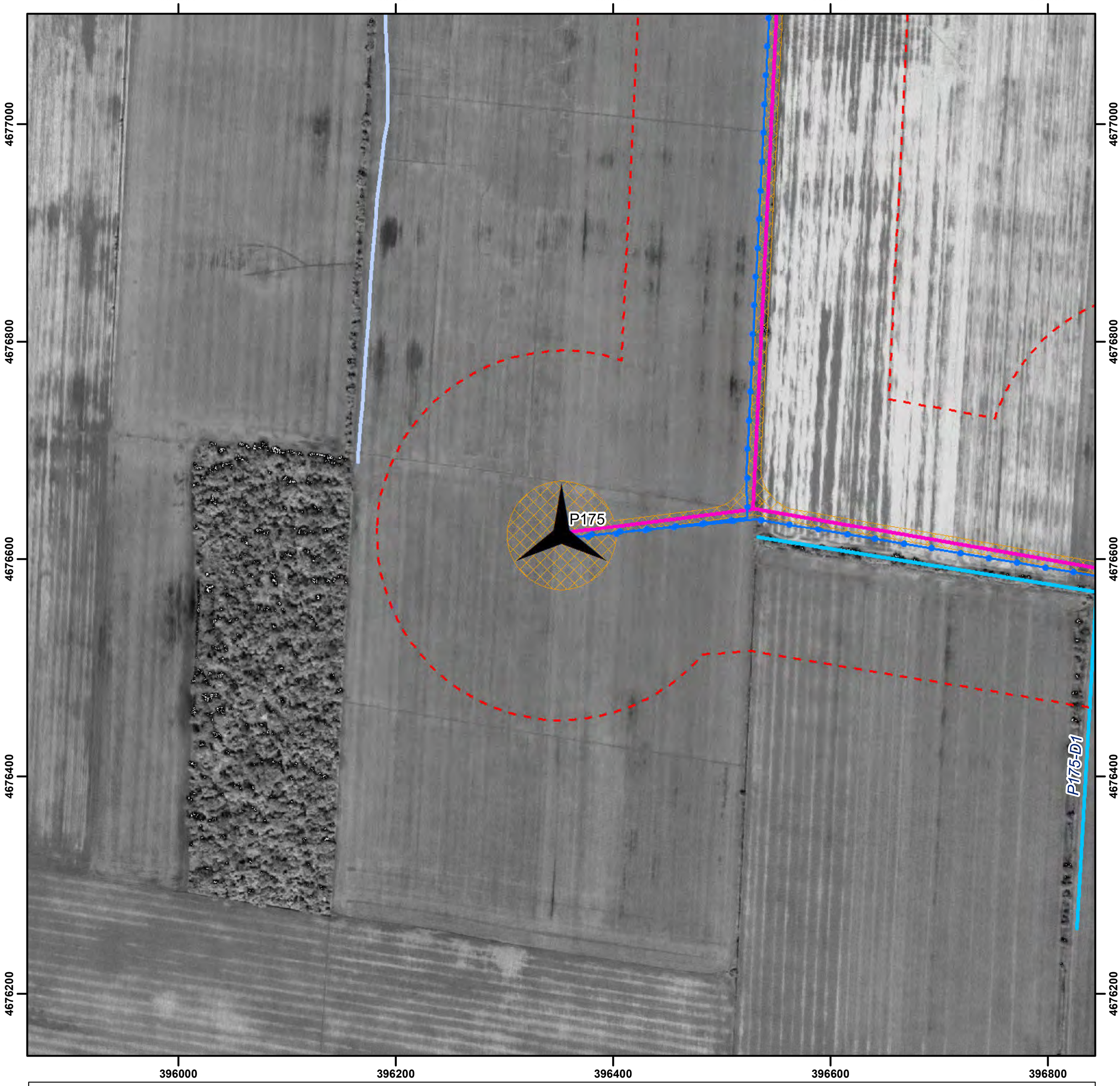
Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd



South Kent Wind Project

Turbine No. 175

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd

394800 395000 395200 395400 395600

4677200 4677000 4676800 4676600

HASKELL RD

P087-D2

P176

394800 395000 395200 395400 395600

South Kent Wind Project

Turbine No. 176

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Date: April-23-12
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:5,000 (at 8.5 X 11")

N

0 25 50 100 150 200 m

Legend

- Project Area (April 20th, 2012)
- Constructible Area
- Proposed Turbine (L20)
- Access Road
- Substation
- Cabling
- Railway
- Road
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Hedgerow
- Woodland (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula (S)
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat (Woodland)

Candidate Habitat of Species of Conservation Concern

- Area Sensitive Bird Breeding Habitat
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_MicrositesMaps_CANDIDATE_5K_2012_04_20_SWM.mxd

Appendix V
Site Investigation Transmission Corridor Maps

Figure 1

South Kent Wind Project

Candidate Wildlife Habitat - Transmission Corridor

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

0 0.225 0.45 0.9 km

April 27, 2012
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:35,000 (at 11x17")

Legend

- Project Area (April, 2012)
- Constructible Area
- Proposed Turbine (L020)
- Substation
- Cabling
- Access Road
- Railway
- Highway
- Primary Road
- Secondary Road
- Waterbody
- Watercourse (Permanent)
- Watercourse (NRSI)
- Wetland Area (NRSI)
- Hedgerow
- Wooded Areas (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat

Candidate Habitat of Species of Conservation Concern

- Area of Natural and Scientific Interest
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_Fig1-8_Trans_CandidateMaps_25K_2012_04_27_SWM.mxd

Figure 2

South Kent Wind Project

Candidate Wildlife Habitat - Transmission Corridor

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

0 0.225 0.45 0.9 km

April 27, 2012
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:35,000 (at 11x17")

Legend

- Project Area (April, 2012)
- Constructible Area
- Proposed Turbine (L020)
- Substation
- Cabling
- Access Road
- Railway
- Highway
- Primary Road
- Secondary Road
- Waterbody
- Watercourse (Permanent)
- Watercourse (NRSI)
- Wetland Area (NRSI)
- Hedgerow
- Wooded Areas (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas
- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat
- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat

Candidate Habitat of Species of Conservation Concern
- Area of Natural and Scientific Interest
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_Fig1-8_Trans_CandidateMaps_25K_2012_04_27_SWM.mxd

Figure 3

South Kent Wind Project

Candidate Wildlife Habitat - Transmission Corridor

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

0 0.225 0.45 0.9 km

April 27, 2012
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:35,000 (at 11x17")

Legend

- Project Area (April, 2012)
- Constructible Area
- Proposed Turbine (L020)
- Substation
- Cabling
- Access Road
- Railway
- Highway
- Primary Road
- Secondary Road
- Waterbody
- Watercourse (Permanent)
- Watercourse (NRSI)
- Wetland Area (NRSI)
- Hedgerow
- Wooded Areas (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas
- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat
- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat

Candidate Habitat of Species of Conservation Concern
- Area of Natural and Scientific Interest
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_Fig1-8_Trans_CandidateMaps_25K_2012_04_27_SWM.mxd

Figure 4

South Kent Wind Project

Candidate Wildlife Habitat - Transmission Corridor

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

0 0.225 0.45 0.9 km

April 27, 2012
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:35,000 (at 11x17")

Legend

- Project Area (April, 2012)
- Constructible Area
- Proposed Turbine (L020)
- Substation
- Cabling
- Access Road
- Railway
- Highway
- Primary Road
- Secondary Road
- Waterbody
- Watercourse (Permanent)
- Watercourse (NRSI)
- Wetland Area (NRSI)
- Hedgerow
- Wooded Areas (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas
- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat
- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat

Candidate Habitat of Species of Conservation Concern
- Area of Natural and Scientific Interest
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_Fig1-8_Trans_CandidateMaps_25K_2012_04_27_SWM.mxd

Figure 5

South Kent Wind Project

Candidate Wildlife Habitat - Transmission Corridor

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

0 0.225 0.45 0.9 km

April 27, 2012
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:35,000 (at 11x17")

Legend

- Project Area (April, 2012)
- Constructible Area
- Proposed Turbine (L020)
- Substation
- Cabling
- Access Road
- Railway
- Highway
- Primary Road
- Secondary Road
- Waterbody
- Watercourse (Permanent)
- Watercourse (NRSI)
- Wetland Area (NRSI)
- Hedgerow
- Wooded Areas (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas
- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat
- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat

Candidate Habitat of Species of Conservation Concern
- Area of Natural and Scientific Interest
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_Fig1-8_Trans_CandidateMaps_25K_2012_04_27_SWM.mxd

Figure 6

South Kent Wind Project

Candidate Wildlife Habitat - Transmission Corridor

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

0 0.225 0.45 0.9 km

April 27, 2012
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:35,000 (at 11x17")

Legend

- Project Area (April, 2012)
- Constructible Area
- Proposed Turbine (L020)
- Substation
- Cabling
- Access Road
- Railway
- Highway
- Primary Road
- Secondary Road
- Waterbody
- Watercourse (Permanent)
- Watercourse (NRSI)
- Wetland Area (NRSI)
- Hedgerow
- Wooded Areas (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas
- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat
- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat

Candidate Habitat of Species of Conservation Concern
- Area of Natural and Scientific Interest
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_Fig1-8_Trans_CandidateMaps_25K_2012_04_27_SWM.mxd

Figure 7

South Kent Wind Project

Candidate Wildlife Habitat - Transmission Corridor

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

0 0.225 0.45 0.9 km

April 27, 2012
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:35,000 (at 11x17")

Legend

- Project Area (April, 2012)
- Constructible Area
- Proposed Turbine (L020)
- Substation
- Cabling
- Access Road
- Railway
- Highway
- Primary Road
- Secondary Road
- Waterbody
- Watercourse (Permanent)
- Watercourse (NRSI)
- Wetland Area (NRSI)
- Hedgerow
- Wooded Areas (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat

Candidate Habitat of Species of Conservation Concern

- Area of Natural and Scientific Interest
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_Fig1-8_Trans_CandidateMaps_25K_2012_04_27_SWM.mxd

Figure 8

South Kent Wind Project

Candidate Wildlife Habitat - Transmission Corridor

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

0 0.225 0.45 0.9 km

April 27, 2012
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:35,000 (at 11x17")

Legend

- Project Area (April, 2012)
- Constructible Area
- Proposed Turbine (L020)
- Substation
- Cabling
- Access Road
- Railway
- Highway
- Primary Road
- Secondary Road
- Waterbody
- Watercourse (Permanent)
- Watercourse (NRSI)
- Wetland Area (NRSI)
- Hedgerow
- Wooded Areas (NRSI)
- Important Bird Area

Candidate Seasonal Concentration Areas

- Waterfowl Stopover and Staging Area
- Reptile Hibernacula
- Bat Maternity Roost

Candidate Rare Vegetation Communities and Specialized Wildlife Habitat

- Tallgrass Prairie
- Savannah
- Amphibian Breeding Habitat

Candidate Habitat of Species of Conservation Concern

- Area of Natural and Scientific Interest
- Open Country Bird Breeding Habitat
- Habitat for Species Ranked S1-S3

Path: X:\1184_ChathamKentWF\NRSI_1184_Fig1-8_Trans_CandidateMaps_25K_2012_04_27_SWM.mxd

Appendix VI
Site Investigation Field Notes

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description Page 1 of 2

Site:	South Kent Wind # 1184
Polygon:	POO1 - W1
UTM:	-
Date:	06/10/10 Time: 1315
Surveyor(s):	BAM
Weather:	16°C, 0 wind, 40% cloud, No rain

Community Classification

Vegetation Type:		Fresh-Moist White Elm Lowland Deciduous Forest Type (FODM7-1)
X	Inclusion:	White Elm Mineral Deciduous Swamp Type (SWDM4-2)
X	~~Complex~~:	Open Water (OA)

Inclusion

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb. Bedrock	X Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	X Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
X Treed	X Surficial Dep.	Floating-Lvd.	Bryophyte	
	Bedrock	Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
~~*~~	~~Super-canopy~~			
1	Canopy	2	3	White Elm > Basswood = Shagbark hickory
2	Sub-canopy	3	4	White Elm > Shagbark > Bur Oak
3	Understorey	1/3	2	Grey dogwood > river bank grape
4	Groundcover	0.1	3	Poison ivy > wild strawberry > aven's

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	A	10 - 24	R	25 - 50	N	> 50
Snags	R	< 10	O	10 - 24	R	25 - 50	N	> 50
Deadfall/Logs	O	< 10	R	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer	X	Young		Mid-age		Mature		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description Page 2 of 2

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Basswood	O	O			
White Elm	A	A			
Bur Oak	O	O	R		
Green Ash		O		A	
Grey dogwood			O		
Black Walnut	O	O			
Shagbark hickory	O	O			
E. Cottonwood	O				
Red Oak	R				
Incision					
Black Maple					
White Elm					
Canary reed					
Jewel weed					
avens sp					
prickly ash					

Species	Layer 1	2	3	4	Sample
Avens sp.				A	
Multiflor = Carex			O	O	
herb robert				O	
garden currant				O	
wild strawberry				A	
poison ivy				A	
calico aster				O	
river bank grape			O	O	
wild red raspberry				O	
Tar ag-wort				O	
Virginia Creeper				O	

Wildlife and Other Notes

OA - dug ditch/pond w an old cobble dam
↳Access road goes between dam + forest
SWDM4-2 follows ditch (approx 6m wide) that has trickle out of dam

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent WF
Polygon:	P002-W1
UTM:	
Date:	Nov. 8/10
Time:	-
Surveyor(s):	BAM
Weather:	5°C, 0% C.C. Wind 1, No Rain

Community Classification

Vegetation Type:	Coniferous Plantation (TAGM1)
Inclusion:	-
Complex:	-

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	✓ Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
Natural	Carb Bedrock	Tableland	Sand Dune	Swamp	Woodland
✓ Cultural		✓ Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	✓ Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	✓ Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
✓ Treed	✓ Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	~~Super-canopy~~			
1	Canopy	2	0	
2	Sub-canopy	3	4	White Pine > Red Pine
3	Understorey	4/5	0	
4	Groundcover	6/7	1	Smooth brome > garlic mustard

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	R	< 10	A	10 - 24	N	25 - 50	N	> 50
Snags	N	< 10	N	10 - 24	N	25 - 50	N	> 50
Deadfall/Logs	N	< 10	N	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer	X	Young		Mid-age		Mature		Old Growth

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
White Pine		A			
Red Pine		O			

Species	Layer 1	2	3	4	Sample
Smooth brome				O	
Garlic Mustard				O	

Wildlife and Other Notes

Roadside

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent WF
Polygon:	P002-W2
UTM:	
Date:	Nov. 8/10
Time:	-
Surveyor(s):	BAM
Weather:	8°C, 0% C.C, Wind 1, No rain

Community Classification

Vegetation Type:	Fresh-Moist White Elm Lowland Deciduous Forest Type (FODM7-1)
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	✓ Mineral Soil	✓ Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
✓ Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	✓ Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
✓ Treed	✓ Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	✓ Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	~~Super-canopy~~			
1	Canopy	2	0	
2	Sub-canopy	3	4	White elm > Green Ash > Willow sp
3	Understorey	4/5	3	Red osier dogwood > white elm
4	Groundcover	4	2	Reed canary grass = Can. Goldenrod > Aver sp.

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	A	10 - 24	N	25 - 50	N	> 50
Snags	O	< 10	O	10 - 24	N	25 - 50	N	> 50
Deadfall/Logs	R	< 10	R	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer	X	Young		Mid-age		Mature		Old Growth

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Green Ash		O			
White Elm		A	O		
Willow sp.		R			
red osier dogwood			O		

Species	Layer 1	2	3	4	Sample
Aver sp.				O	
Can. goldenrod				O	
reed canary grass				O	
Common Burdock				R	

Wildlife and Other Notes

Roadside

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent WF
Polygon:	P004-W1
UTM:	
Date:	Nov. 8/10 — Time:
Surveyor(s):	BAM
Weather:	8°C 0% C.C. Wind 1, No Rain

Community Classification

Vegetation Type:	White Ash Deciduous Woodland Type (WOD M4-2)	
X	Inclusion:	Dry-Fresh Mixed Meadow Ecosite (MEMM 3)
	Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	✓ Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min.	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
Natural	Carb. Bedrock	✓ Tableland	Sand Dune	Swamp	✓ Woodland
✓ Cultural		Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
✓ Treed	✓ Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	✓ Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy			
1	Canopy	2	1	White Ash
2	Sub-canopy	3	3	White Ash
3	Understorey	1/3	3	White Ash > Hawthorn > red cedar
4	Groundcover	2/7	3	Smooth Brome > Can. Goldenrod

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	A	10 - 24	A	25 - 50	A	> 50
Snags	O	< 10	O	10 - 24	N	25 - 50	N	> 50
Deadfall/Logs	R	< 10	N	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer	X	Young		Mid-age		Mature		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
White Ash	R	A	O		
hawthorn sp.			O		
Red cedar			O		

Species	Layer 1	2	3	4	Sample
Smooth Brome				A	
Can. goldenrod				A	

Wildlife and Other Notes

Roadside

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent WF
Polygon:	P005 - W1
UTM:	-
Date:	Nov. 8/10
Time:	
Surveyor(s):	BAM
Weather:	8°C, 0% C.C., Wind 1, No Rain

Community Classification

Vegetation Type:	Deciduous Plantation (TAGM3)
Inclusion:	-
Complex:	-

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	✓ Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
Natural	Carb. Bedrock	✓ Tableland	Sand Dune	Swamp	Woodland
✓ Cultural		Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	✓ Plantation

Cover	Site	Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
✓ Treed	✓ Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	✓ Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	~~Super-canopy~~			
1	Canopy	2	1	White Ash
2	Sub-canopy	3	4	White Ash ≫ Willow sp. > Red Cedar
3	Understorey	4/5	2	White Ash
4	Groundcover	6/7	4	Can. Goldenrod > Smooth Brome > Barnyard Grass

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	A	10 - 24	R	25 - 50	N	> 50
Snags	O	< 10	O	10 - 24	N	25 - 50	N	> 50
Deadfall/Logs	R	< 10	N	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age	Pioneer	Young	Mid-age	Mature	Old Growth
		X			

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
White Ash	R	A	O		
Willow sp.		O			
Red Cedar		O			

Species	Layer 1	2	3	4	Sample
Smooth Brome				A	
Barnyard Grass				O	
Common Milkweed				O	
Can. Goldenrod				A	

Wildlife and Other Notes

Roadside

- Include two fencerows one of planted willows and one of red cedar along the roadside

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site: Chatham - Kent WF	1184
Polygon: T23 - FODM11 (Poll-W1)	
UTM: 17T 0422277 4697137	
Date: Sept. 1, 2010	Time: 10:30
Surveyor(s): CLH, AGR	
Weather: Sunny, hot, humid 30°C, Wind 3,5W CC60% no precip	

Community Classification

Vegetation Type:		FODM11 Naturalized Deciduous Hedgerow
X	Inclusion:	CVI_1 railway bed
	Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	✓ Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	✓ Thicket Hedgerow
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
✓ Natural	Carb Bedrock	✓ Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
✓ Treed	✓ Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	✓ Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy	1	0	—
1	Canopy	2	0	—
2	Sub-canopy	3	3	White Ash > Balsam Poplar > Staghorn Sumac > Hawthorn
3	Understorey	4 5	4	Red-panicled Dogwood > Solidago altissima > Red Raspberry > Crack Willow
4	Groundcover	6	4	Riverbank Grape > Virginia Creeper > Poverty Oats > Butter n Eggs

HT Codes: 1 >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7 <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4 >60%

Size Class Analysis	O	< 10	O	10 - 24	N	25 - 50	N	> 50
Snags	O	< 10	N	10 - 24	N	25 - 50	N	> 50
Deadfall/Logs	R	< 10	N	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N None R Rare O Occasional A Abundant

Community Age		Pioneer	✓	Young		Mid-age		Mature	Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site: Chatham - Kent WF	1184
Polygon: T23 - FODM11	
UTM: 17T 0422277 4697137	
Date: Sept 1, 2010	Time: 10:30
Surveyor(s): CLH, AGR	
Weather: sunny, hot, humid 30°C, Wind 3,5W CC60% no precip	

Layers: 2 3 4,5 6,7 (1=canopy 2=sub-canopy 3=understorey 4=ground layer)

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Staghorn Sumac		O	O		
Crataegus sp.		O	O		
Solidago altissima			O		
Vipers - bugloss				O	
timothy				O	
wild carrot				O	
red-panicled dogwood			O		
Butter n Eggs				O	
Crack willow		O	O		
Riverbank Grape			O	O	
Parthenocissus inserta			O	O	
Balsam Poplar		O	O		
Weeping Willow		R			
Burdock				R	
Bull Thistle			O		
White Ash		O	O		
Fragaria virg... ssp. melanotasium			O	O	
ragweed				O	
meadow Goat's Beard				O	
Thimbleberry			O		
Teasel			R		
White Elm		R			
Common Mullein			O		

Species	Layer 1	2	3	4	Sample
Poverty oats				O	
Red Cedar			O		
Purple Loosestrife			O		
Tall Sunflower			R		
Red-Osier Dogwood			O		

Wildlife and Other Notes

Community follows ditch and old railway bed.

AMRO MODO Photos: CLH's camera 934, 935.
AMGO
ORCA
Cabbage White Clouded Sulphur Red Admiral
Viceroy Black Swallowtail

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent Wind Farm
Polygon:	T25 (P013-W1)
UTM:	
Date:	Sept. 1/2010 Time: 1220
Surveyor(s):	CLH, AGR
Weather:	Sunny, 30°C

Community Classification

Vegetation Type:	FODM7-1 ; Fresh-Moist Elm Lowland
Inclusion:	FODM2-2 ; Dry-Fresh Oak Hickory
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil	X Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll Upland	Bluff	Fen	X Forest
	Site	Cliff		Bog	Plantation

Cover		Open Water	Plant Form		
Open		Shallow Water	Plankton	Forb	Coniferous
Shrub		X Surficial Dep.	Submerged	Lichen	Mixed
X Treed		Bedrock	Floating-Lvd	Bryophyte	
			Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy			
1	Canopy	2	3	Am Elm > Manitoba Maple
2	Sub-canopy	3	2	Buckthorn > Shagbark Hickory = Am. Elm
3	Understorey	3	2	Buckthorn
4	Groundcover	6	4	Garlic Mustard

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7 <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4 >60%

Size Class Analysis	A	< 10	A	10 - 24	O	25 - 50	R	> 50
Snags	A	< 10	O	10 - 24	R	25 - 50	N	> 50
Deadfall/Logs	A	< 10	O	10 - 24	R	25 - 50	N	> 50

Abundance Codes N None R Rare O Occasional A Abundant

Community Age	Pioneer	X Young	Mid-age	Mature	Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	South Kent WF
Polygon:	T25 - FODM7-1
UTM:	17T 0420732 4697196
Date:	Sept. 1/2010 Time: 1220
Surveyor(s):	CLH, AGR
Weather:	Sunny, 31°C

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Am. Elm	D	O			
Man. Maple	O	A			
Red Oak	O				
Buckthorn		D	D		
White Ash	R				
Shagbark Hickory		O			
Siberian Elm	R				
Hawthorn.		O			

Species	Layer 1	2	3	4	Sample
Garlic Mustard				D	
Virginia Creeper				A	
Yellow Avens				R	
Riverbank Grape				O	
Downy Yellow Violet				R	
Virginia Wild Rye				R	
Dame's Rocket				R	
Poison Ivy				R	
Burdock				R	
Yellow				R	
Broad-leaved Plantain				R	

Wildlife and Other Notes

939-902 Photo No.
White-tailed Deer (skull)
Pileated
Black-billed Cuckoo
American Robin (nest)
Gray Catbird
Green Frog
Question mark

Access road will go through

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent Wind
Polygon:	P014 - W1
UTM:	
Date:	08/10/10
Time:	1310
Surveyor(s):	BAM
Weather:	19°C, 10% CC wind 2 from SW No Rain

Community Classification

Vegetation Type:	Fresh-Moist Oak-Maple Deciduous Forest Type (FOD9-2)
Inclusion:	-
Complex:	-

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min.	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb. Bedrock	X Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	X Forest
	Site	Cliff		Bog	Plantation

Cover		Open Water	Plant Form		
Open		Shallow Water	Plankton	Forb	Coniferous
Shrub		X Surficial Dep.	Submerged	Lichen	Mixed
X Treed		Bedrock	Floating-Lvd	Bryophyte	
			Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	~~Super-canopy~~			
1	Canopy	2	4	Silver Maple >> Bur Oak > Basswood
2	Sub-canopy	3	3	White Elm > Silver Maple > Shagbark hickory
3	Understorey	4/5	3	White Elm > Common Buckthorn > gray dogwood
4	Groundcover	6/7	B	Virginia Creeper > Garlic mustard > wild strawberry

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis							
	N	< 10	A	10 - 24	O	25 - 50	N	> 50
Snags	O	< 10	O	10 - 24	R	25 - 50	N	> 50
Deadfall/Logs	A	< 10	O	10 - 24	R	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young	X	Mid-age		Mature		Old Growth

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Silver Maple	D	O			
Bur Oak	O	O			
White Elm		A	O		
Common Buckthorn			O		
gray dogwood			O		
Shagbark hickory		O	O	O	
Basswood	R	O		O	

Species	Layer 1	2	3	4	Sample
aven sp.				O	
wild strawberry				O	
Virginia creeper				A	
poison ivy				O	
riverbank grape			O	O	
black raspberry				O	
garlic mustard				A	
red raspberry				O	
garden currant				R	
three seeded mercury				A	
violet sp.				O	
Virginia Stickseed				R	
Canada goldenrod				O	
multiflora rose				O	

Wildlife and Other Notes

frogs and [illegible] but not [illegible] dry due to the drought

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description Page 1 of 2

Site:	South Kent WF
Polygon:	P014 - W2
UTM:	-
Date:	Nov. 7/10
Time:	
Surveyor(s):	RAM
Weather:	7°C, 20% C.C. Wind 2, No rain

Community Classification

Vegetation Type:	Fresh - Moist White Elm Lowland Dec. Forest Type (FODM7-1)	
Inclusion:	-	
Complex:	-	

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	✓ Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
✓ Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural		✓ Roll Upland	Bluff	Fen	✓ Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
✓ Treed	✓ Surficial Dep.	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	✓ Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	~~Super-canopy~~			
1	Canopy	2	4	White Elm > Freeman's Maple
2	Sub-canopy	3	2	White Elm ≫ White oak
3	Understorey	4/5	0	
4	Groundcover	6/7	4	reed canary grass > can. goldenrod > Ken. bluegrass

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	R	< 10	A	10 - 24	R	25 - 50	N	> 50
Snags	R	< 10	R	10 - 24	N	25 - 50	N	> 50
Deadfall/Logs	O	< 10	O	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young	X	Mid-age		Mature	Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description Page 2 of 2

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Freeman's Maple	A	O			
White elm	A	O			
White Oak		R			

Species	Layer 1	2	3	4	Sample
reed canary grass				O	
canada thistle				O	
Can. goldenrod				O	
avens sp.				O	
Ken. bluegrass				O	

Wildlife and Other Notes

Roadside
- Cattle grazing

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent WF
Polygon:	POI5-W1
UTM:	
Date:	Nov. 8/10
Time:	900
Surveyor(s):	BAM
Weather:	7°C, 0% C.C., Wind 1, No rain

Community Classification

Vegetation Type:	Fresh-Moist Bur Oak Dec. Forest Type (FODM9-3)
Inclusion:	-
Complex:	-

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	✓ Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Mtn	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
✓ Natural	Carb. Bedrock	✓ Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	✓ Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
✓ Treed	✓ Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	✓ Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	~~Super-canopy~~			
1	Canopy	2	4	Bur Oak >> White Ash > Cottonwood
2	Sub-canopy	3	3	Bur Oak > White Ash
3	Understorey	4/5	2	Gray dogwood >> Bur Oak
4	Groundcover	6/7	2	Can. goldenrod > red raspberry

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0: none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	O	< 10	A	10 - 24	O	25 - 50	N	> 50
Snags	O	< 10	O	10 - 24	R	25 - 50	N	> 50
Deadfall/Logs	O	< 10	O	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age	Pioneer	Young	Mid-age	Mature	Old Growth
			X		

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Bur Oak	A	A	O		
White Ash	O	O			
Cottonwood	R				
Gray dogwood					

Species	Layer 1	2	3	4	Sample
red raspberry				O	
riverbank grape			O	O	
Can. goldenrod				O	

Wildlife and Other Notes

Roadside

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent Wind Farm
Polygon:	T30 (P017-W1)
UTM:	
Date:	Sept. 1/2010 Time: 1505
Surveyor(s):	CLH, AGR
Weather:	sunny, 32°C

Community Classification

Vegetation Type:	FODM8-3; Fresh-Moist Cottonwood Forest
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	✓ Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
✓ Natural	Carb. Bedrock	✓ Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll Upland	Bluff	Fen	✓ Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
✓ Treed	✓ Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	✓ Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy			
1	Canopy	2	3	Cottonwood > White Ash = Basswood = Red Maple
2	Sub-canopy	2	3	Sumac > Basswood
3	Understorey	3	3	Sumac = Buckthorn
4	Groundcover	4	2	Thimbleberry > Red Raspberry > Garlic Mustard

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0: none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	A	10 - 24	O	25 - 50	O	> 50
Snags	A	< 10	O	10 - 24	R	25 - 50	R	> 50
Deadfall/Logs	A	< 10	R	10 - 24	R	25 - 50	N	> 50

Abundance Codes: N None R Rare O Occasional A Abundant

Community Age	Pioneer	Young	Mid-age	Mature	Old Growth
			X		

PLANT SPECIES LIST

Site:	South Kent WF 1184
Polygon:	T30
UTM:	17T 0417801 4696895
Date:	Sept. 1/2010 Time: 1505
Surveyor(s):	CLH, AGR
Weather:	Sunny, 32°C

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Ironwood		O			
White Elm	O	O			
Manitoba Maple	R	O			
Basswood	O	A			
Black Cherry		O			
Red Maple	A				
Cottonwood	D				
Bitternut Hickory		O			
Staghorn Sumac	O	D	A		

Species	Layer 1	2	3	4	Sample
Blue Cohosh				A	
Jack-in-the-Pulpit				O	
Enchanter's Nightshade				R	
Thimbleberry				D	
Yellow Avens				R	
Virginia Creeper				A	
garlic mustard				A	
Burdock				O	
Common Buckthorn				O	
Riverbank Grape				D	
White Baneberry				R	
Poison Ivy				O	
Wild Red Raspberry				D	
Wild Leek				R	
Ginger				O	

Wildlife and Other Notes

dead while 951

Photos 948-949 (sumac)
950 (sumac snag)
951 (community photo)

• heavily disturbed (w. invasives, dirt mounds, etc)

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent WF
Polygon:	P019-W1
UTM:	
Date:	Nov. 7/10
Time:	1630
Surveyor(s):	BAM
Weather:	6°C, 10% C.C., Wind 2, No Rain

Community Classification

Vegetation Type:	Fresh-Moist Poplar Dec. Woodland Type (WODM5-1)
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	✓ Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
✓ Natural	Carb Bedrock	✓ Tableland	Sand Dune	Swamp	✓ Woodland
Cultural		Roll Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover		Open Water	Plant Form		
Open		Shallow Water	Plankton	Forb	Coniferous
Shrub	✓	Surficial Dep	Submerged	Lichen	Mixed
✓ Treed		Bedrock	Floating-Lvd	Bryophyte	
			Graminoid	✓ Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	~~Super-canopy~~			
1	Canopy	2	3	Trembling aspen > white elm
2	Sub-canopy	3	4	Trembling aspen > cherry sp. > elm
3	Understorey	4/5	2	gray dogwood > white elm
4	Groundcover	6/7	1	Can. goldenrod > red raspberry > aven. sp.

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	A	10 - 24	R	25 - 50	N	> 50
Snags	A	< 10	A	10 - 24	N	25 - 50	N	> 50
Deadfall/Logs	A	< 10	O	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer	X	Young		Mid-age		Mature		Old Growth

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Trembling aspen	O	O			
White Elm	O	O	O		
Cherry sp.	O	O			
Sycamore	R				
gray dogwood			O		

Species	Layer 1	2	3	4	Sample
Red raspberry				O	
calico aster				O	
avens sp.				O	
Can. goldenrod				O	

Wildlife and Other Notes

Flooded from rain today

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent WF 1184
Polygon:	P022-W1
UTM:	-
Date:	07/10/10 Time: 350
Surveyor(s):	BAM
Weather:	16°C 0% C.C. Wind 2 from N No Rain

Community Classification

Vegetation Type:	Fresh-moist Shagbark hickory Dec. forest type (FODM7-4)
Inclusion:	-
Complex:	-

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb. Bedrock	X Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll Upland	Bluff	Fen	X Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
X Treed	X Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	~~Super-canopy~~			
1	Canopy	2	4	Shagbark hickory > Bur oak > Silver Maple
2	Sub-canopy	3	3	Shagbark hickory > white elm > basswood
3	Understorey	4/5	3	White elm > Shagbark > choke cherry
4	Groundcover	6/7	2	Avens > wild strawberry > poison ivy

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	A	10 - 24	O	25 - 50	O	> 50
Snags	R	< 10	R	10 - 24	O	25 - 50	N	> 50
Deadfall/Logs	A	< 10	O	10 - 24	R	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young		Mid-age	X	Mature		Old Growth

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Shagbark hickory	A	O	O		
Bur oak	A	O			
Silver Maple	A	O	O		
White Elm	O	O	A		
Basswood		O	O		
Green Ash		O	O	O	
Choke Cherry			O		
Grey dogwood			O		
Prickly Ash			O		

Species	Layer 1	2	3	4	Sample
Wild Strawberry				A	
Zig Za. Goldenrod				A	
Avens sp.				A	
Poison Ivy			O	A	
Riverbank Grape			O	O	
Violet Sp.				O	
black raspberry				O	
Garlic Mustard				O	

Wildlife and Other Notes

Drier due to surrounding tile drainage

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Keri Wind #1184
Polygon:	POLE W2
UTM:	-
Date:	07/10/10 Time: 0915
Surveyor(s):	EAM
Weather:	16°C, Dry, Calm, Wind 2 from N, No Rain

Community Classification

Vegetation Type:	Fresh-Moist Shagbark Hickory Deciduous Forest Type (FOD M9-4)
Inclusion:	-
Complex:	-

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb. Bedrock	X Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	X Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	X Shallow Water	Submerged	Lichen	Mixed
X Treed	X Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	~~Super-canopy~~			
1	Canopy	2	4	Shagbark hickory > [illegible]
2	Sub-canopy	3	3	Shagbark hickory > White Elm > Green Ash
3	Understorey	1/2	3	White Elm > Shagbark Hickory > choke cherry
4	Groundcover	1/2	2	Avens > wild strawberry > poison ivy

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	A	10 - 24	O	25 - 50	O	> 50
Snags	R	< 10	R	10 - 24	O	25 - 50	N	> 50
Deadfall/Logs	A	< 10	O	10 - 24	R	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young		Mid-age	X Mature	Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
White Elm	O	O	A		
Green Ash		O	O	O	
Silver maple	A	O	O		
Shagbark hickory		O	O		
Bur Oak	A	O			
Basswood		O	O		
snake root			O		
black walnut		R			
grey dogwood			O		

Species	Layer 1	2	3	4	Sample
Canada Goldenrod				O	
Riverbank grape			O	O	
wild strawberry				A	
Zig Zag Goldenrod				A	
avens sp.				A	
garden currant				O	
aster sp.				O	
False Solomon's Seal				O	
Heath aster				R	
Virginia Creeper				O	
poison ivy			O	A	
black raspberry				O	
sedge sp.				O	
Violet sp.				O	
multiflora rose				R	
prickly ash			O		
Riddell Sedge				O	

Wildlife and Other Notes

- [illegible]

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent Wind #1184
Polygon:	P024 - W1
UTM:	
Date:	07/10/10
Time:	1115
Surveyor(s):	BAM
Weather:	19°C, Wind 15km N, 0% C.C., No Rain

Community Classification

Vegetation Type:	Fresh-Moist White Elm Lowland Deciduous Forest Type (FODM7-1)
Inclusion:	–
Complex:	–

Polygon Description

System	Substrate	Topo Feature		Community	
[X] Terrestrial	[ ] Organic	[ ] Lacustrine	[ ] Talus	[ ] Lake	[ ] Barren
[ ] Wetland	[X] Mineral Soil	[ ] Riverine	[ ] Crevice/Cave	[ ] Pond	[ ] Meadow
[ ] Aquatic	[ ] Parent Min	[ ] Bottomland	[ ] Alvar	[ ] River	[ ] Prairie
	[ ] Acidic Bedrock	[ ] Terrace	[ ] Rockland	[ ] Stream	[ ] Thicket
History	[ ] Basic Bedrock	[ ] Valley Slope	[ ] Beach/Bar	[ ] Marsh	[ ] Savannah
[X] Natural	[ ] Carb. Bedrock	[X] Tableland	[ ] Sand Dune	[ ] Swamp	[ ] Woodland
[ ] Cultural		[ ] Roll. Upland	[ ] Bluff	[ ] Fen	[X] Forest
	Site	[ ] Cliff		[ ] Bog	[ ] Plantation

Cover		Plant Form		
[ ] Open	[ ] Open Water	[ ] Plankton	[ ] Forb	[ ] Coniferous
[ ] Shrub	[X] Surficial Dep.	[ ] Submerged	[ ] Lichen	[ ] Mixed
[X] Treed	[ ] Bedrock	[ ] Floating-Lvd	[ ] Bryophyte	
		[ ] Graminoid	[X] Deciduous	

Stand Description

	Layer	HT	Cover	Species
~~-~~	~~Super-canopy~~			
1	Canopy	2	4	White Elm > Shagbark hickory >> Bur oak
2	Sub-canopy	3	3	White Elm > Shagbark hickory >> Bur oak
3	Understorey	½	3	White Elm > prickly ash > gray dogwood
4	Groundcover	½	3	wild strawberry > broad leaved sedge sp.

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	A	10 - 24	R	25 - 50	N	> 50
Snags	O	< 10	O	10 - 24	R	25 - 50	N	> 50
Deadfall/Logs	O	< 10	R	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer	[X]	Young		Mid-age		Mature		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Shagbark hickory	O	O	O		
Bur Oak	R	O	O		
Basswood	R	O			
prickly ash			O		
White Elm	A	A	O		
gray dogwood			O		
White Ash	R			O	

Species	Layer 1	2	3	4	Sample
awned sedge				O	
broad leaved sedge sp.				A	
wild strawberry				A	
garlic mustard				O	
virginia creeper				O	
riverbank grape			O	O	
poison ivy				O	
Canada goldenrod				O	
Ken. bluegrass				O	

Wildlife and Other Notes

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent WF
Polygon:	P024-W2
UTM:	-
Date:	Nov 7/10
Time:	1500
Surveyor(s):	BAM
Weather:	8°C 10% C, Wind 2, No Rain

Community Classification

Vegetation Type:	Fresh Moist Oak-Maple-Hickory Dec. Forest Ecosite (FOD M9)
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	✓ Mineral Soil	✓ Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
✓ Natural	Carb. Bedrock	✓ Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	✓ Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
✓ Treed	✓ Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	✓ Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	~~Super-canopy~~			
1	Canopy	2	4	Bur oak > Basswood = Silver Maple
2	Sub-canopy	3	3	" > " = White Elm
3	Understorey	V/S		
4	Groundcover	G/F		

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis		< 10		10 - 24		25 - 50		> 50
Snags	O	< 10	O	10 - 24	R	25 - 50	N	> 50
Deadfall/Logs		< 10		10 - 24		25 - 50		> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age	Pioneer	X Young	Mid-age	Mature	Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample	Species	Layer 1	2	3	4	Sample
Bur oak	O	O									
Basswood	O	O									
Silver Maple	O										
Shagbark Hickory	O	O									
White Elm	O	O									

Wildlife and Other Notes

Roadside - limited view

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description Page 1 of 2

Site:	South Kent - Wind - #1184
Polygon:	POZG - W1
UTM:	
Date:	07/10/10 **Time:** 1325
Surveyor(s):	BAM
Weather:	20°C, Wind 2 from N, 0% C.C., No rain

Community Classification

Vegetation Type:	Fresh-Moist White Elm Lowland Deciduous Forest Type (FODM7-1)
Inclusion:	-
Complex:	-

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb Bedrock	X Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	X Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	X Surficial Dep	Submerged	Lichen	Mixed
X Treed	Bedrock	Floating-Lvd.	Bryophyte	
		Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	~~Super-canopy~~			
1	Canopy	2	4	Silver Maple > White Elm > Shagbark Hickory
2	Sub-canopy	3	3	Silver Maple > White Elm > Shagbark Hickory
3	Understorey	4/5	3	White Elm > gray dogwood > green ash
4	Groundcover	G/F	3	wild strawberry > poison ivy > avens > violet sp.

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	A	10 - 24	O	25 - 50	N	> 50
Snags	O	< 10	A	10 - 24	O	25 - 50	N	> 50
Deadfall/Logs	A	< 10	A	10 - 24	R	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young	X	Mid-age		Mature		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description Page 2 of 2

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	**Time:**
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
E. Cottonwood	O				
Shagbark Hickory	O	O			
White Elm	O	O	O		
Silver Maple	A	A			
Green Ash		O	O	A	
gray dogwood			O		

Species	Layer 1	2	3	4	Sample
poison ivy				A	
Calcocastel				C	
Canada anemone				O	
avens sp.				A	
violet sp.				O	
wild strawberry				A	
broad leaved sedge				O	
garlic mustard				O	
stream - tile/seep				O	
black raspberry				O	
coltsfoot				O	
broad leaved plant				O	

Wildlife and Other Notes

COHA - Farmer's tame [illegible] Silver Maple boot [illegible]

BLJA Swallow [illegible] of community

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent WF
Polygon:	P027 W1
UTM:	
Date:	Nov 8/10
Time:	1450
Surveyor(s):	BAM
Weather:	8°C. 10% C.C. Wind !, No Rain

Community Classification

Vegetation Type:	Fresh-Moist lowland Deciduous Forest Ecosite (FOD M7)
☐ Inclusion:	
☒ Complex:	Goldenrod Forb Meadow Type (MEFM1-1)

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	☐ Organic	☐ Lacustrine	☐ Talus	☐ Lake	☐ Barren
☐ Wetland	✓ Mineral Soil	☐ Riverine	☐ Crevice/Cave	☐ Pond	✓ Meadow
☐ Aquatic	☐ Parent Min	☐ Bottomland	☐ Alvar	☐ River	☐ Prairie
	☐ Acidic Bedrock	☐ Terrace	☐ Rockland	☐ Stream	☐ Thicket
History	☐ Basic Bedrock	☐ Valley Slope	☐ Beach/Bar	☐ Marsh	☐ Savannah
✓ Natural	☐ Carb Bedrock	✓ Tableland	☐ Sand Dune	☐ Swamp	✓ Woodland
☐ Cultural		☐ Roll Upland	☐ Bluff	☐ Fen	☐ Forest
	Site	☐ Cliff		☐ Bog	☐ Plantation

Cover		Plant Form		
☐ Open	☐ Open Water	☐ Plankton	✓ Forb	☐ Coniferous
☐ Shrub	☐ Shallow Water	☐ Submerged	☐ Lichen	☐ Mixed
✓ Treed	✓ Surficial Dep	☐ Floating-Lvd	☐ Bryophyte	
	☐ Bedrock	☐ Graminoid	✓ Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	~~Super-canopy~~			
1	Canopy	2	3	Green Ash > White Elm > Cottonwood
2	Sub-canopy	3	4	" > " > Bur Oak
3	Understorey	4/5	3	White elm > gray dogwood > Green Ash
4	Groundcover	6/7	2	Can. Goldenrod > avens sp. > Smooth Brome

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	N	< 10	A	10 - 24	R	25 - 50	N	> 50
Snags	O	< 10	O	10 - 24	R	25 - 50	N	> 50
Deadfall/Logs	O	< 10	R	10 - 24	R	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age	☐ Pioneer	☒ Young	☐ Mid-age	☐ Mature	☐ Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Green Ash	O	A	O		
White elm	O	A	O		
Bur oak		O			
Cottonwood	O	O			
Red raspberry		O	O		
gray dogwood			O		
Complex					
Can. Goldenrod				A	
Wild Carrot				A	
tease				O	
red osier dogwood			O	O	
red cedar			O		

Species	Layer 1	2	3	4	Sample
Can. Goldenrod				O	
N.E. Aster				O	
Smooth Brome				O	
Multiflora rose			O	O	
avens sp.				O	

Wildlife and Other Notes

Roadside

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent WF
Polygon:	T49 (P029-W1)
UTM:	
Date:	Sept. 3 2010
Time:	1620
Surveyor(s):	CLH
Weather:	23°C 100% CC Wind 4 no precip

Community Classification

Vegetation Type:	FODM6-4 F-m Sugar maple-wh Elm Decid Forest Type
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural		X Roll Upland	Bluff	Fen	X Forest
	Site	Cliff		Bog	Plantation

Cover		Open Water	Plant Form		
Open		Shallow Water	Plankton	Forb	Coniferous
Shrub	X	Surficial Dep	Submerged	Lichen	Mixed
X Treed		Bedrock	Floating-Lvd	Bryophyte	
			Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy	1	—	—
1	Canopy	2	4	Sugar maple = Bur oak = Shagbark hickory > White Elm
2	Sub-canopy	3	2	Sugar maple > White Elm > Bur oak > Shagbark Hickory
3	Understorey	4/5	1	White Elm > Sugar Maple > Gray Dogwood > Basswood
4	Groundcover	6/7	2	Garlic mustard > Lg-lvd Asters > Yellow Asters > Ench. Nightshade

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	O	< 10	A	10 - 24	R	25 - 50	N	> 50
Snags	O	< 10	O	10 - 24	R	25 - 50	N	> 50
Deadfall/Logs	A	< 10	O	10 - 24	R	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young		Mid-age	X	Mature	Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	T49
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 710 2-10 0.5-2 <0.5 (1=canopy 2=sub-canopy 3=understorey 4=ground layer)

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
White Elm	O	O	O	D	
E Red Cedar		R		R	
Basswood	O		R		
Shagbark Hickory	O	R			
Sugar Maple	O	O	R	O	
Bur oak	O	O			
Freeman's maple	R				
Red oak	R				
Staghorn Sumac		R			
Gray Dogwood			O		

Species	Layer 1	2	3	4	Sample
garlic mustard				O	
yellow Asters				O	
Ench. Nightshade				O	
Poison Ivy				R	
Dame's Rocket				R	
Blue Cohosh				O	
Lg-lvd Asters				O	

Wildlife and Other Notes

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent Wind #1184
Polygon:	P030 - W1
UTM:	
Date:	07/10/10
Time:	14 10
Surveyor(s):	BAM
Weather:	20°C, 0% C.C. Wind 2 from N, No rain

Community Classification

Vegetation Type:	Fresh-Moist Elm Deciduous Woodland Type (W) (DDM5-2)
Inclusion:	-
Complex:	-

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb. Bedrock	X Tableland	Sand Dune	Swamp	X Woodland
Cultural		Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover	Site	Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
X Treed	X Surficial Dep.	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
~~**~~	~~Super-canopy~~			
1	Canopy	2	1	White Elm
2	Sub-canopy	3	3	White Elm >> Silver Maple > green ash
3	Understorey	4/5	3	White Elm > Green Ash > gray dogwood
4	Groundcover	6/7	4	avens > wild strawberry > poison ivy

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	O	10 - 24	R	25 - 50	N	> 50
Snags	O	< 10	A	10 - 24	R	25 - 50	N	> 50
Deadfall/Logs	O	< 10	O	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer	X	Young		Mid-age		Mature		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
White Elm	R	A	O		
Silver Maple		O			
Bur oak		R			
Green Ash		R	O	A	
gray dogwood			O		

Species	Layer 1	2	3	4	Sample
Calico aster				O	
avens sp.				D	
wild strawberry				A	
red raspberry				O	
poison ivy				O	
virginia creeper		R	O	O	
timothy				O	
river bank grape		R	O	O	

Wildlife and Other Notes

Dominated by Green Ash snags, all approx 20 cm dbh

- May have been a plantation → Emerald Ash borer?

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	Chatham-Kent WF #1184
Polygon:	P032-W1
UTM:	–
Date:	2/10/16 Time: 1655
Surveyor(s):	RAM
Weather:	11°C Wind 3 km W, 90% cloud, light rain

Community Classification

Vegetation Type:	Dry-Fresh Sugar Maple-Iron wood Dec. Forest Type (FoDM5-4)
Inclusion:	–
Complex:	–

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min.	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb. Bedrock	X Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	X Forest
	Site	Cliff		Bog	Plantation

Cover		Open Water	Plant Form		
Open		Shallow Water	Plankton	Forb	Coniferous
Shrub	X	Surficial Dep	Submerged	Lichen	Mixed
X Treed		Bedrock	Floating-Lvd	Bryophyte	
			Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	~~Super-canopy~~			
1	Canopy	2	4	Sugar Maple >> Shagbark hickory - Am Beech
2	Sub-canopy	3	3	Sugar Maple > Iron wood >> Am. Beech
3	Understorey	4/5	3	Iron wood > Sugar Maple > prickly ash
4	Groundcover	6/7	1	garlic Mustard > prickly ash > bur oak

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis							
	A	< 10	A	10 - 24	O	25 - 50	O	> 50
Snags	O	< 10	O	10 - 24	O	25 - 50	N	> 50
Deadfall/Logs	O	< 10	A	10 - 24	O	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young		Mid-age	X	Mature		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Sugar Maple	A	A	O	O	
Iron wood		O	O		
Am Beech	R	O			
prickly Ash			O	O	
white ash				O	
Shagbark hickory	R	R	O		
Black cherry		R	R		
Blue beech		R	O		
Bur oak	R			O	

Species	Layer 1	2	3	4	Sample
garlic mustard				O	
Garden currant				O	
white aster sp.				R	
Hvestorrel gall fungus				R	

Wildlife and Other Notes

- lots of Ash snags
- several Sugar maple >50 cm dbh

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent WF
Polygon:	P034-W1
UTM:	
Date:	Nov. 7/10
Time:	1230
Surveyor(s):	BAM
Weather:	7°C, 20% C.C. Wind 2, No rain

Community Classification

Vegetation Type:	Fresh-Moist Elm Deciduous Woodland Type (WODM5-2)
Inclusion:	-
Complex:	-

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	✓ Mineral Soil	✓ Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
✓ Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	✓ Woodland
Cultural		Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover		Open Water	Plant Form		
Open		Shallow Water	Plankton	Forb	Coniferous
Shrub		✓ Surficial Dep	Submerged	Lichen	Mixed
✓ Treed		Bedrock	Floating-Lvd	Bryophyte	
			Graminoid	✓ Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy			
1	Canopy	2	3	White Elm >> Silver Maple
2	Sub-canopy	3	3	White Elm > Silver maple > Sumac
3	Understorey	4/5	3	hawthorn > gray dogwood > Red Cedar
4	Groundcover	6/7	4	Can. goldenrod > smooth brome > calico aster

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	A	10 - 24	R	25 - 50	N	> 50
Snags	O	< 10	O	10 - 24	R	25 - 50	N	> 50
Deadfall/Logs	R	< 10	R	10 - 24	R	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age	Pioneer	Young	Mid-age	Mature	Old Growth
		✗			

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
White elm	A	A	O		
Silver Maple	R	R			
hawthorn			O		
Red Cedar		R	O		
Gray dogwood			O		
Staghorn Sumac		R	O		

Species	Layer 1	2	3	4	Sample
Can. Goldenrod				A	
Calico Aster				O	
Smooth brome				A	
Wild carrot				O	

Wildlife and Other Notes

Roadside

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	Chatham Kent WF
Polygon:	P042 - W1
UTM:	-
Date:	21/10/10
Time:	
Surveyor(s):	BAM
Weather:	12°C Wind 3 from W, 80% CC No rain

Community Classification

Vegetation Type:		Fresh-Moist White Elm Lowland Dec Forest Type (FOD M7-1)
	Inclusion:	-
	Complex:	-

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb. Bedrock	X Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll Upland	Bluff	Fen	X Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
X Treed	X Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy			
1	Canopy	2	4	White elm > Silver Maple > bur oak
2	Sub-canopy	3	3	White elm > Silver Maple > bur oak
3	Understorey	4/5	3	White elm >> green Ash > Shagbark hickory
4	Groundcover	6/7	2	Green Ash > Avens sp. > Calico Aster

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	A	10 - 24	O	25 - 50	N	> 50
Snags	O	< 10	A	10 - 24	O	25 - 50	N	> 50
Deadfall/Logs	A	< 10	O	10 - 24	R	25 - 50	N	> 50

Abundance Codes N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young	X	Mid-age		Mature		Old Growth

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
White Elm	A	O	A	O	
Bur oak	O	O			
Silver Maple	A	O			
Shagbark hickory	R	O	O		
Basswood		O			
Green Ash		R	O	A	

Species	Layer 1	2	3	4	Sample
Avens sp.				O	
Garlic Mustard				O	
violet sp.				O	
Poison Ivy				O	
Calico Aster				O	

Wildlife and Other Notes

Abundant Green Ash snags in canopy

- Drier due to tile drainage in surrounding area

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent Wind #1184
Polygon:	P047-W1
UTM:	-
Date:	07/10/10
Time:	1520
Surveyor(s):	BAM
Weather:	19°C, 0% C.C., Wind 2 from NW, No rain

Community Classification

Vegetation Type:	Fresh Moist Bur Oak Deciduous Forest Type (FODM9-3)
Inclusion:	-
Complex:	-

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Mtn	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb. Bedrock	X Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	X Forest
	Site	Cliff		Bog	Plantation

Cover		Open Water	Plant Form		
Open		Shallow Water	Plankton	Forb	Coniferous
Shrub	X	Surficial Dep.	Submerged	Lichen	Mixed
X Treed		Bedrock	Floating-Lvd	Bryophyte	
			Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	~~Super-canopy~~			
1	Canopy	2	4	Bur oak = White Elm > Silver Maple
2	Sub-canopy	3	3	White Elm > Bur oak > river bank grape
3	Understorey	4/5	3	river bank grape > multiflora rose > prickly ash
4	Groundcover	6/7	3	Garlic mustard > wild strawberry > Canada thistle

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	A	10 - 24	A	25 - 50	N	> 50
Snags	O	< 10	O	10 - 24	O	25 - 50	N	> 50
Deadfall/Logs	O	< 10	O	10 - 24	R	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young	X	Mid-age		Mature		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Bur Oak	O	O			
Red Oak		O			
White Elm	O	O			
hawthorn sp.		O			
prick. ash			O		
Shag bark hickory	R	O			
Silver Maple	O				
White ash	R	O		O	

Species	Layer 1	2	3	4	Sample
avens sp.				O	
garlic mustard				A	
Small white aster				O	
Canada goldenrod				O	
multiflora rose			O	O	
wild strawberry				A	
giant ragweed				O	
River bank grape		O	O	O	
poison ivy		R	O	O	
Virginia creeper				O	
red raspberry				O	

Wildlife and Other Notes

-

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description Page 1 of 2

Site:	South Kent WF
Polygon:	P047-W2
UTM:	
Date:	Nov. 6/10
Time:	1730
Surveyor(s):	BAM
Weather:	2°C, 60%, C.C., Wind 2, No rain

Community Classification

Vegetation Type:		Fresh-Moist White Elm Lowland Dec. Forest (FODM9-1)
	Inclusion:	–
	Complex:	–

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	✓ Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
✓ Natural	Carb. Bedrock	✓ Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	✓ Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
✓ Treed	✓ Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	✓ Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	~~Super-canopy~~			
1	Canopy			
2	Sub-canopy	3	4	White Elm >> Bur Oak > Silver Maple
3	Understorey	4/5	3	White Elm > Bur Oak
4	Groundcover			

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	A	10 - 24	N	25 - 50	N	> 50
Snags	O	< 10	O	10 - 24	N	25 - 50	N	> 50
Deadfall/Logs		< 10		10 - 24		25 - 50		> 50

Abundance Codes: N. None R: Rare O: Occasional A: Abundant

Community Age		Pioneer	X	Young		Mid-age		Mature	Old Growth

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
White elm		D	O		
bur oak		O	O		
silver Maple		R			

Species	Layer 1	2	3	4	Sample
Canada Goldenrod					
Calico Aster					
riverbank grape					
red raspberry					

Wildlife and Other Notes

Completed from transect

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description Page 1 of 2

Site:	South Ken - WAM # 1184
Polygon:	P049-W1
UTM:	
Date:	07/10/10
Time:	1610
Surveyor(s):	BAM
Weather:	19°C, 0% C.C., Wind 2 from NW, No rain

Community Classification

Vegetation Type:	Fresh Moist White Elm Lowland Deciduous Forest Type (FODM7-1)
Inclusion:	-
Complex:	-

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb Bedrock	X Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll Upland	Bluff	Fen	X Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
X Treed	X Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	~~Super-canopy~~			
1	Canopy	2	4	White Elm > Shagbark hickory > Silver Maple
2	Sub-canopy	3	3	White Elm > Bur oak > Red Oak
3	Understorey	4/5	3	White Elm > Basswood > riverbank grape
4	Groundcover	6/7	3	Garlic Mustard > wild strawberry > avens

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	A	10 - 24	O	25 - 50	N	> 50
Snags	O	< 10	O	10 - 24	O	25 - 50	N	> 50
Deadfall/Logs	O	< 10	O	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young	X	Mid-age		Mature		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description Page 2 of 2

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Bur Oak	R	O			
Red Oak		O			
White Elm	A	A	O	O	
Shagbark hickory	O	O			
Silver Maple	O	O			
E Cottonwood	O	O			
Basswood		O	O		

Species	Layer 1	2	3	4	Sample
avens sp.				O	
garlic mustard				A	
Small white aster				O	
Can. Goldenrod				O	
wild strawberry				A	
poison ivy				O	
red raspberry				O	
virginia creeper				O	
Ken Blue grass				O	
riverbank grape			O	O	

Wildlife and Other Notes

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent WF
Polygon:	P049-W2
UTM:	
Date:	Nov. 6/10
Time:	1745
Surveyor(s):	BAM
Weather:	2°C, 60% C.C., Wind 2, No Rain

Community Classification

Vegetation Type:	Fresh-Moist Cottonwood Dec. forest Type (FODM8-3)
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	✓ Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
✓ Natural	Carb. Bedrock	✓ Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll Upland	Bluff	Fen	✓ Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
✓ Treed	✓ Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	✓ Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy			
1	Canopy			
2	Sub-canopy	3	4	Cottonwood >> Red Oak
3	Understorey	4/5	3	Cottonwood > Prickly Ash > Gray dogwood
4	Groundcover	6/7	4	Can. Goldenrod > wild strawberry > Prickly Ash

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	A	10 - 24	N	25 - 50	N	> 50
Snags	R	< 10	R	10 - 24	N	25 - 50	N	> 50
Deadfall/Logs	R	< 10	R	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer	X	Young		Mid-age		Mature		Old Growth

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
E. Cottonwood		A	A		
Prickly Ash			O	O	
Red Oak		R			
hawthorn sp.			O		
Gray dogwood			O		

Species	Layer 1	2	3	4	Sample
Can. Goldenrod				A	
Wild Strawberry				A	
N.E. Aster				O	
Raspberry sp.		O	O	O	
Smooth Brome				O	

Wildlife and Other Notes

Completed [illegible]

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent WF
Polygon:	POS3-W1
UTM:	—
Date:	Nov 6 /10
Time:	1820
Surveyor(s):	RAM
Weather:	2°C, 60% C.C., Wind 1, No Rain

Community Classification

Vegetation Type:	Gray Dogwood Dec. Shrub Thicket Type (THDM2-4)
Inclusion:	—
Complex:	—

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	✓ Mineral Soil	Riverine	Crevice/Cave	Pond	✓ Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
✓ Natural	Carb. Bedrock	✓ Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
✓ Open	Open Water	Plankton	✓ Forb	Coniferous
Shrub	✓ Surficial Dep	Submerged	Lichen	Mixed
Treed	Bedrock	Floating-Lvd	Bryophyte	
		Graminoid	Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy			
1	Canopy			
2	Sub-canopy	3	1	Red Cedar > White Spruce > White Cedar
3	Understorey	4/5	3	Gray dogwood > Stag horn sumac
4	Groundcover	6/7	4	Can. Goldenrod > Smooth Brome

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	D	< 10	R	10 - 24	N	25 - 50	N	> 50
Snags	N	< 10	N	10 - 24	N	25 - 50	N	> 50
Deadfall/Logs	N	< 10	N	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer	X	Young		Mid-age		Mature		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
White Spruce		R			
Red Cedar		R	R		
White Cedar		R			
Sugar Maple			R		
Gray dogwood			A		
Stag horn Sumac			A		

Species	Layer 1	2	3	4	Sample
Can. Goldenrod				A	
Smooth Brome				A	
Wild Carrot				A	

Wildlife and Other Notes

Roadside

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent WF
Polygon:	P053 - W2
UTM:	
Date:	Nov 6/10 — **Time:** 1825
Surveyor(s):	BAM
Weather:	2°C 60% C.C. wind 1, No rain

Community Classification

Vegetation Type:	Smooth Brome Gram. Meadow Type (MEGM13-5)
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	✓ Mineral Soil	Riverine	Crevice/Cave	Pond	✓ Meadow
Aquatic	Parent Mn.	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	✓ Valley Slope	Beach/Bar	Marsh	Savannah
✓ Natural	Carb. Bedrock	✓ Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
✓ Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
Treed	✓ Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	✓ Graminoid	Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy			
1	Canopy			
2	Sub-canopy			
3	Understorey	4/5	1	Gray dogwood > Red Cedar
4	Groundcover	6/7	4	Smooth brome > Reed Canary Grass

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	R < 10	N 10 - 24	N 25 - 50	N > 50
Snags	N < 10	N 10 - 24	N 25 - 50	N > 50
Deadfall/Logs	N < 10	N 10 - 24	N 25 - 50	N > 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age	X	Pioneer		Young		Mid-age		Mature		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	**Time:**
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Gray dogwood			R		
Red Cedar			R		

Species	Layer 1	2	3	4	Sample
Smooth Brome				A	
Reed Canary Grass				A	
Switchgrass				O	
Pereity oats				O	
tall sunflower				O	
Can. Thistle				O	
Wild Carrot				O	

Wildlife and Other Notes

Roadside

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent WF
Polygon:	P053-W3
UTM:	
Date:	Nov 6/10
Time:	1840
Surveyor(s):	RAM
Weather:	2°C, 60% C C. wind 1, No rain

Community Classification

Vegetation Type:	Fresh-Moist Deciduous Woodland Type (WODM5)
Inclusion:	-
Complex:	-

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	✓ Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
✓ Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	✓ Woodland
Cultural		Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
✓ Treed	✓ Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	✓ Deciduous	

Stand Description

	Layer	HT	Cover	Species
~~-~~	~~Super-canopy~~			
1	Canopy			
2	Sub-canopy	3	3	White Elm > Bur oak = Cottonwood
3	Understorey	4/5	3	gray dogwood > Staghorn sumac
4	Groundcover	0/1	3	Smooth brome > Can. goldenrod

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	O	< 10	O	10 - 24	N	25 - 50	N	> 50
Snags	O	< 10	O	10 - 24	N	25 - 50	N	> 50
Deadfall/Logs	O	< 10	R	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer	X	Young		Mid-age		Mature		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
White Elm		O	O		
Cottonwood		O	O		
Bur oak		O			
Red Oak		O			
Staghorn sumac			O		
gray dogwood			O		

Species	Layer 1	2	3	4	Sample
Smooth Brome				A	
Canada goldenrod				A	

Wildlife and Other Notes

Roadside - very limited view

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	Sth Kent WF
Polygon:	POSS-W
UTM:	
Date:	Nov. 7/15
Time:	1000
Surveyor(s):	BAM
Weather:	5°C, 50% CC, Wind 3, No rain

Community Classification

Vegetation Type:	Dry-Fresh Sugar Maple-Basswood Dec. Forest Type (FODM5 6)
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	✓ Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min.	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
✓ Natural	Carb. Bedrock	✓ Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	✓ Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
✓ Treed	✓ Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	✓ Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	~~Super-canopy~~			
1	Canopy	2	4	Sugar Maple > Basswood > Am. Beech
2	Sub-canopy	3	3	Sugar Maple > Basswood > Am. Beech
3	Understorey	4/5	2	Sugar Maple > Basswood
4	Groundcover	6/7	1	garlic mustard > calico aster > red asp.

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	A	10 - 24	O	25 - 50	N	> 50
Snags	O	< 10	O	10 - 24	R	25 - 50	N	> 50
Deadfall/Logs	O	< 10	O	10 - 24	R	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young	X	Mid-age		Mature		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Sugar Maple	A	A	O		
Basswood	O	O	O		
Ironwood		R			
Bur oak	R				
Red oak	R				
White Ash	R				
Am. Beech	O	O			
Black cherry	R	R			

Species	Layer 1	2	3	4	Sample
calico aster				O	
garlic mustard				O	
Rose sp.				O	
[illegible]					

Wildlife and Other Notes

Roadside

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description Page 1 of 2

Site:	South Kent WF
Polygon:	POG2-W1
UTM:	
Date:	Nov. 6/10 — Time:
Surveyor(s):	BAM
Weather:	1°C, 40% C.C., Wind 2, No rain

Community Classification

	Vegetation Type:	Fresh-Moist Graminoid Meadow Ecosite (MEGM4)
X	Inclusion:	Open Water (OAW)
	Complex:	-

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	✓ Mineral Soil	Riverine	Crevice/Cave	Pond	✓ Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
✓ Natural	Carb. Bedrock	✓ Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
✓ Open	Open Water	Plankton	Forb	Coniferous
Shrub	✓ Shallow Water	Submerged	Lichen	Mixed
Treed	✓ Surficial Dep	Floating-Lvd.	Bryophyte	
	Bedrock	✓ Graminoid	Deciduous	

Stand Description

	Layer	HT	Cover	Species
~~-1~~	~~Super-canopy~~			
1	Canopy			
2	Sub-canopy	3	1	White elm
3	Understorey	4/5	1	hawthorn sp > white elm
4	Groundcover	6/7	4	smooth brome > barnyard grass > can goldenrod

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	O	< 10	R	10 - 24	N	25 - 50	N	> 50
Snags	R	< 10	N	10 - 24	N	25 - 50	N	> 50
Deadfall/Logs	N	< 10	N	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age	X	Pioneer		Young		Mid-age		Mature		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description Page 2 of 2

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Hawthorn sp.			O		
White elm		R	R		

Species	Layer 1	2	3	4	Sample
Smooth Brome				A	
barnyard grass				A	
canada goldenrod				O	
yarrow				O	
red raspberry				O	
wild strawberry				O	
Wild carrot				O	

Wildlife and Other Notes

Roadside

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page 1 of 2

Site: South Kent WF
Polygon: POO4 - W1
UTM:
Date: Nov 6/10 | Time:
Surveyor(s): BAM
Weather: 1°C, 40% C.C. Wind 2, No Rain

Community Classification

Vegetation Type:	Dry-Fresh Exotic Dec. Forest Type (FODM4-12)
☐ Inclusion:	-
☐ Complex:	-

Polygon Description

System
- ☑ Terrestrial
- ☐ Wetland
- ☐ Aquatic

History
- ☐ Natural
- ☑ Cultural

Cover
- ☐ Open
- ☐ Shrub
- ☑ Treed

Substrate
- ☐ Organic
- ☑ Mineral Soil
- ☐ Parent Mtn
- ☐ Acidic Bedrock
- ☐ Basic Bedrock
- ☐ Carb. Bedrock

Site
- ☐ Open Water
- ☐ Shallow Water
- ☑ Surficial Dep
- ☐ Bedrock

Topo Feature
- ☐ Lacustrine
- ☐ Riverine
- ☐ Bottomland
- ☐ Terrace
- ☐ Valley Slope
- ☐ Tableland
- ☑ Roll. Upland
- ☐ Cliff
- ☐ Talus
- ☐ Crevice/Cave
- ☐ Alvar
- ☐ Rockland
- ☐ Beach/Bar
- ☐ Sand Dune
- ☐ Bluff

Community
- ☐ Lake
- ☐ Pond
- ☐ River
- ☐ Stream
- ☐ Marsh
- ☐ Swamp
- ☐ Fen
- ☐ Bog
- ☐ Barren
- ☐ Meadow
- ☐ Prairie
- ☐ Thicket
- ☐ Savannah
- ☐ Woodland
- ☑ Forest
- ☐ Plantation

Plant Form
- ☐ Plankton
- ☐ Submerged
- ☐ Floating-Lvd
- ☐ Graminoid
- ☐ Forb
- ☐ Lichen
- ☐ Bryophyte
- ☑ Deciduous
- ☐ Coniferous
- ☐ Mixed

Stand Description

Layer	HT	Cover	Species
~~Super-canopy~~			
1 Canopy	2	4	European white poplar
2 Sub-canopy	3	3	European white poplar
3 Understorey	4/5	2	European white poplar >> riverbank grape
4 Groundcover	6/7	2	Garlic mustard > avens sp. > Can. goldenrod

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m
Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	O	< 10	O	10 - 24	O	25 - 50	N	> 50
Snags	N	< 10	N	10 - 24	R	25 - 50	N	> 50
Deadfall/Logs	O	< 10	O	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age	☐	Pioneer	☐	Young	☒	Mid-age	☐	Mature	☐	Old Growth

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NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page 2 of 2

PLANT SPECIES LIST

Site:
Polygon:
UTM:
Date: | Time:
Surveyor(s):
Weather:

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	Layer 2	Layer 3	Layer 4	Sample
Euro. white Poplar	A	O	O		
Garden currant				R	
riverbank grape			R	R	
Can. goldenrod				O	
Garlic mustard				O	
avens sp.				O	

Wildlife and Other Notes

Roadside

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site: South Kent Wind Farm	1184
Polygon: T100 (POG5-W1)	
UTM:	
Date: Sept 2, 2010	Time: 0940
Surveyor(s): CLH	
Weather: 28°C, hot, humid CC 80%	no precip

Community Classification

	Vegetation Type:	WODM5-3 Fresh-moist manitoba maple deciduous woodland
X	Inclusion:	FODM11 Bur Oak Mixed. Decid. Hedgerow.
	Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	Mineral Soil	✓ Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
✓ Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	✓ Woodland
Cultural		Roll Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	✓ Surficial Dep	Submerged	Lichen	Mixed
✓ Treed	Bedrock	Floating-Lvd	Bryophyte	
		Graminoid	✓ Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy	1		
1	Canopy	2	3	manitoba maple > white elm > white ash > Eastern cottonwood
2	Sub-canopy	3	4	manitoba maple > white elm > Staghorn Sumac > hawthorn
3	Understorey	4/5	4	manitoba maple > gray dogwood > hawthorn > Solidago altissima
4	Groundcover	6/7	3	garlic mustard > common buckthorn > broad-leaved plantain

HT Codes: 1 >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7 <0.2m

Cover Codes: 0:none 1: 0 - 10% 2 10 - 25 3: 25 - 60% 4 >60%

Size Class Analysis	A	< 10	R	10 - 24	N	25 - 50	N	> 50
Snags	O	< 10	O	10 - 24	N	25 - 50	N	> 50
Deadfall/Logs	O	< 10	R	10 - 24	N	25 - 50	N	> 50

Abundance Codes N: None R Rare O Occasional A Abundant

Community Age	Pioneer	✓ Young	Mid-age	Mature	Old Growth

PLANT SPECIES LIST

Site: South Kent Wind Farm	
Polygon: T100	
UTM:	
Date: Sept 2, 2010	Time: 0940
Surveyor(s): CLH	
Weather: 28°C, hot, humid CC 80%	no precip

Layers: 2 = 1=canopy; 3 = 2=sub-canopy; 4,5 = 3=understorey; 6,7 = 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Sumac		O	O		
Manitoba maple	O	A	O		
Hawthorn sp.		O	O		
white elm	O	O	R		
Multiflora Rose			O		
Solidago altissima			O		
black walnut			R		
stinging nettle			O		
gray dogwood			O		
garlic mustard				A	
buckthorn		O	O	O	
barnyard grass			O		
swamp beggarticks			O		
Poa palustris				O	
Giant ragweed			O		
N.E. Aster			O		
pinoak		R			
bur oak	O	O			
cottonwood	O	O			
White ash		O	O		
teasel				R	
broad-leaved plantain				O	

Species	Layer 1	2	3	4	Sample

Wildlife and Other Notes

Photos 0952, 0953 Creek is [illegible] pools.
AMRO
BCJA
deer tracks
raccoon tracks

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	Chatham-Kent WF # 1164
Polygon:	P065-W2
UTM:	~
Date:	20/10/10 Time: 1750
Surveyor(s):	BAM
Weather:	14°C, Wind 3 from SW, 70%, C.C., Norain

Community Classification

Vegetation Type:	Fresh-Moist Bur Oak Dec. Forest Type (FODM4-3)
Inclusion:	-
Complex:	-

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb. Bedrock	X Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	X Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
X Treed	X Surficial Dep.	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	~~Super-canopy~~			
1	Canopy	2	4	Bur Oak > Shagbark hickory > Red Oak
2	Sub-canopy	3	3	Bur Oak > Shagbark hickory > white elm
3	Understorey	4/5	2	white elm > prickly ash > [illegible]
4	Groundcover	6/7	1	garlic mustard > avens > black raspberry

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	A	10 - 24	O	25 - 50	N	> 50
Snags	O	< 10	O	10 - 24	O	25 - 50	N	> 50
Deadfall/Logs	O	< 10	O	10 - 24	R	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young	X	Mid-age		Mature		Old Growth

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Bur Oak	O	A			
Red Oak	O	O			
Shagbark hickory	O	O			
white elm	O	O	O	O	
prickly ash			O		
Green ash		R	O	O	
gray dogwood			R		
pin oak		R			

Species	Layer 1	2	3	4	Sample
Cal[illegible]				O	
garlic mustard				A	
red raspberry				O	
poison ivy				O	
riverbank grape			O	O	
avens sp.				O	
dandelion				R	
black raspberry				O	
Canada goldenrod				O	
violet sp.				O	

Wildlife and Other Notes

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent WF
Polygon:	POG5-W3
UTM:	
Date:	Nov. 6/18
Time:	
Surveyor(s):	BAM
Weather:	2°C 30% CC, Wind C, No rain

Community Classification

Vegetation Type:	Fresh-Moist Bur Oak Dec. Forest type (FOMM9-3)
Inclusion:	-
Complex:	-

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	✓ Mineral Soil	✓ Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
✓ Natural	Carb Bedrock	✓ Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll Upland	Bluff	Fen	✓ Forest
	Site	Cliff		Bog	Plantation

Cover		Open Water	Plant Form		
Open		Shallow Water	Plankton	Forb	Coniferous
Shrub		✓ Surficial Dep.	Submerged	Lichen	Mixed
✓ Treed		Bedrock	Floating-Lvd	Bryophyte	
			Graminoid	✓ Deciduous	

Stand Description

	Layer	HT	Cover	Species
~~✓~~	~~Super-canopy~~			
1	Canopy	2	4	Bur oak > White Elm > Silver Maple
2	Sub-canopy	3	3	White Elm > Shagbark hickory > Bur oak
3	Understorey			
4	Groundcover			

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	A	10 - 24	O	25 - 50	N	> 50
Snags	R	< 10	O	10 - 24	O	25 - 50	N	> 50
Deadfall/Logs		< 10		10 - 24		25 - 50		> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age	Pioneer	Young	Mid-age	Mature	Old Growth
			✓		

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample	Species	Layer 1	2	3	4	Sample
Bur Oak	A	O									
Silver Maple	O										
White Elm	O	A									
Shagbark hickory		O									

Wildlife and Other Notes

Roadside with limited view

- Difficult to judge [illegible] leaves [illegible] off

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	Chatham Kent WF - 1154
Polygon:	P077-W1
UTM:	-
Date:	20/10/10
Time:	1320
Surveyor(s):	RAM
Weather:	16°C, 20% C.C, Wind 2 from SW, No rain

Community Classification

	Vegetation Type:	Freshmesic Bur oak Dec. Forest Type (FODM9-3)
X	Inclusion:	Goldenrod Forb Meadow Type (MEFM1-1)
	Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Mtn	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb. Bedrock	X Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	X Forest
	Site	Cliff		Bog	Plantation

Cover	Site	Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
X Treed	X Surficial Dep	Floating-Lvd.	Bryophyte	
	Bedrock	Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	~~Super-canopy~~			
1	Canopy	2	4	Bur oak > white Elm > Shagbark hickory
2	Sub-canopy	3	3	Bur oak > white Elm > Shagbark hickory
3	Understorey	4/5	3	White Elm > Shagbark hickory > grapevine
4	Groundcover	5/7	2	Green Ash > Avens > poison ivy

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis							
	A	< 10	A	10 - 24	O	25 - 50	O	> 50
Snags	O	< 10	O	10 - 24	R	25 - 50	R	> 50
Deadfall/Logs	A	< 10	O	10 - 24	R	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young	X	Mid-age		Mature		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Bur oak	O	A			
Shagbark hickory	O	O	O	O	
White Elm	O	A	A		
Green Ash				A	
Red Oak	R	R			
Cottonwood	R	O	O		
grapevine			O	A	
Silver Maple	R				

Species	Layer 1	2	3	4	Sample
Avens sp.				R	
Poison ivy			O	O	
multi-flora rose				O	
Sedge sp.				R	

Wildlife and Other Notes

ATV trail

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent WF
Polygon:	P082-W1
UTM:	
Date:	Nov. 4/10
Time:	15:07
Surveyor(s):	CLH
Weather:	90% CC Wind 3 N, 8°C. no precip.

Community Classification

Vegetation Type:	FOOM9-1 F-M oak - Sugar maple Deciduous forest
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural		X Roll. Upland	Bluff	Fen	X Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
X Treed	Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy	1	0	—
1	Canopy	2	4	Red oak = Sugar maple > White elm > Bur oak > Shagbark Hickory
2	Sub-canopy	3	3	White elm > Sugar maple > Red Oak > Bur oak
3	Understorey	4/3	2	Canada Goldenrod
4	Groundcover	4/7		

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	O	< 10	O	10 - 24	R	25 - 50	N	> 50
Snags	O	< 10	R	10 - 24	R	25 - 50	N	> 50
Deadfall/Logs	O	< 10	R	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young	X	Mid-age		Mature		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	P082-W1
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 710 2-10 0.5-2 <0.5
1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Red oak	O	D			
Shagbark Hickory	R				
White Elm	O	O			
Sugar Maple	O	O			
Bur oak	O	R			

Species	Layer 1	2	3	4	Sample
Canada Goldenrod			O		

Wildlife and Other Notes

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent WF
Polygon:	P085 - W1
UTM:	
Date:	Nov. 3/10
Time:	1209
Surveyor(s):	CLT
Weather:	Sunny, 70% CC, 8°C, Wind 2 N

Community Classification

Vegetation Type:	FODM7-1 Fm White Elm Lowland Decid Forest
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural		X Roll. Upland	Bluff	Fen	X Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
X Treed	X Surficial Dep.	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy	1	0	—
1	Canopy	2	4	White Elm = Freeman's maple > Bur Oak > Red Oak
2	Sub-canopy	3	2	White Elm > Bur Oak
3	Understorey	4/5	1	White Elm > White Oak > Sumac > Golden rod
4	Groundcover	6	2	Garlic Mustard = Orchard Grass

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	D	< 10	D	10 - 24	N	25 - 50	N	> 50
Snags	R	< 10	N	10 - 24	N	25 - 50	N	> 50
Deadfall/Logs	R	< 10	N	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer	X	Young		Mid-age		Mature		Old Growth

PLANT SPECIES LIST

Site:	
Polygon:	P085 - W1
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 710 2-0 05-2 C0-5
1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Freeman's maple	O	O			
White Elm	O	O			
Red Oak	R				
White Oak	R				
Bur Oak	R				

Species	Layer 1	2	3	4	Sample
Canada Goldenrod			O		
Garlic Mustard				O	
Orchard Grass				O	

Wildlife and Other Notes

The majority of this woodland has been removed recently, with a few trees remaining scattered outside present boundary that have been trimmed. Small white Cedars planted along edge of ditch recently. Looks like the property is being prepped for a house to be built.

Brush pile at western tip

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent WF 1184
Polygon:	P085-W2
UTM:	
Date:	Nov. 4/10 — Time: 1225
Surveyor(s):	CLH
Weather:	80% CC, no precip. Wind 2 N, 8 °C

Community Classification

Vegetation Type:	FODM9-2 F.m Oak - maple Decid. Forest
Inclusion:	
Complex:	

Not wet enough for swamp. Oak likely selectively removed leading to Swamp maple dominance

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural		X Roll, Upland	Bluff	Fen	X Forest
	Site	Cliff		Bog	Plantation

Cover			Plant Form		
Open	Open Water	Plankton	Forb	Coniferous	
Shrub	X Surficial Dep	Submerged	Lichen	Mixed	
X Treed	Bedrock	Floating-Lvd	Bryophyte		
		Graminoid	X Deciduous		

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy	1	0	—
1	Canopy	2	4	Freeman's maple only
2	Sub-canopy	3	2	Freeman's maple
3	Understorey	4/3	4	Canada Goldenrod > Gray Dogwood > Wild carrot > White oak
4	Groundcover	4/3	3	Grass-lvd Goldenrod > Red Raspberry > Garlic mustard > Riverbank Grape

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	O	< 10	O	10 - 24	N	25 - 50	N	> 50
Snags	R	< 10	N	10 - 24	N	25 - 50	N	> 50
Deadfall/Logs	R	< 10	N	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer	X	Young		Mid-age		Mature		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	P085-W2
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 710 2-10 0.5-2 <0.5. 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Freemans maple	D				
Riverbank Grape				O	
Red Raspberry				O	
White Oak			R		
Gray Dogwood			O		

Species	Layer 1	2	3	4	Sample
Canada Goldenrod			O		
Wild Carrot			O		
Garlic Mustard				O	
Grass-lvd Goldenrod				O	

Wildlife and Other Notes

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site: South Kent WF	1184
Polygon: P086-W1	
UTM:	
Date: Nov 4 2010	Time:
Surveyor(s): CH	
Weather: 5°C, CC 70%, Wind 2 N	

Community Classification

Vegetation Type:	FODM9-3 F-M Bur Oak Dcid Forest
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	X Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural		X Roll Upland	Bluff	Fen	X Forest
	Site	Cliff		Bog	Plantation

Cover	Site	Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
X Treed	X Surficial Dep	Floating-Lvd.	Bryophyte	
	Bedrock	Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy	1	0	—
1	Canopy	2	4	Bur Oak > White Elm > Red Oak
2	Sub-canopy	3	2	Bur Oak > Green Ash > White Elm
3	Understorey	3/5	1	Bur oak > White Elm > Green Ash > Hawthorn
4	Groundcover	6/7	1	Canada Goldenrod

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	O	< 10	A	10 - 24	O	25 - 50	R	> 50
Snags	O	< 10	R	10 - 24	N	25 - 50	N	> 50
Deadfall/Logs	O	< 10	R	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young		Mid-age	X Mature	Old Growth

PLANT SPECIES LIST

Site:	
Polygon: P086-W1	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 710 2-10 6.5-2 <0.5
1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample	Species	Layer 1	2	3	4	Sample
Bur Oak	A	O	O	O		Canada Goldenrod			O		
White Elm	O	O	R	O							
Red Oak	R	O									
Green Ash		O	R	R							

Wildlife and Other Notes

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent WF
Polygon:	PO90-W1
UTM:	
Date:	Nov. 7/10
Time:	
Surveyor(s):	RAM
Weather:	5°C, 50% C.C., Wind 3, No Rain

Community Classification

Vegetation Type:	Dry-Fresh Mixed Meadow Ecosite MEMM3
Inclusion:	-
Complex:	-

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	✓ Mineral Soil	Riverine	Crevice/Cave	Pond	✓ Meadow
Aquatic	Parent Mln	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
✓ Natural	Carb Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural		✓ Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
✓ Open	Open Water	Plankton	✓ Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
Treed	✓ Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	✓ Graminoid	Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	~~Super-canopy~~			
1	~~Canopy~~	2	0	
2	Sub-canopy	3	1	White Ash > White elm
3	Understorey	4/5	0	
4	Groundcover	6/7	4	Can. Goldenrod > Smooth brome > Can thistle

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	O	< 10	N	10 - 24	N	25 - 50	N	> 50
Snags	R	< 10	N	10 - 24	N	25 - 50	N	> 50
Deadfall/Logs	R	< 10	N	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer	X	Young		Mid-age		Mature		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
White Elm		O			
White Ash		O			

Species	Layer 1	2	3	4	Sample
Smooth Brome				A	
Can. Goldenrod				A	
Can. Thistle				O	
Barnyard grass				O	

Wildlife and Other Notes

Roadside

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	Chatham - East WF = 1184
Polygon:	P091 - W1
UTM:	
Date:	21/10/10 **Time:** 1540
Surveyor(s):	BAM
Weather:	12°C 50% CC wind 1 from W no rain

Community Classification

Vegetation Type:	Fresh-Moist Sugar Maple White Elm Ash Forest Type (FODM6-4)
Inclusion:	—
Complex:	—

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb Bedrock	X Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll Upland	Bluff	Fen	X Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
X Treed	X Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
~~*~~	~~Super-canopy~~			
1	Canopy	2	4	Sugar Maple > white elm > bitternut > cherry
2	Sub-canopy	3	3	" > " > "
3	Understorey	4/5	3	Sugar Maple > common buckthorn > prickly ash
4	Groundcover	7	2	garlic mustard > avens > white ash

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	A	10 - 24	O	25 - 50	N	> 50
Snags	O	< 10	A	10 - 24	O	25 - 50	N	> 50
Deadfall/Logs	O	< 10	O	10 - 24	O	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young	X	Mid-age		Mature		Old Growth

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	**Time:**
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Sugar maple	O	O			
Black maple	O	O			
Basswood	O	O	O		
White elm	A	A	O		
Bitternut	A	A	A	O	
Common buckthorn			O	O	
Black cherry		R	R		
Cottonwood	R				
White ash			O	O	
prickly ash			O		
black walnut		R			
red oak	R			O	

Species	Layer 1	2	3	4	Sample
Garlic mustard				A	
avens sp.				A	
Carex sp. wet				O	
black raspberry				O	
bittersweet nightshade				O	
violet sp.				O	
Can. thistle				O	
Eurasian				O	
hispid cudweed				O	
garden currant				R	
Timson weed				R	

Wildlife and Other Notes

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent WF
Polygon:	P091-W2
UTM:	
Date: Nov 8/10	Time:
Surveyor(s):	BAM
Weather:	8°C, 0% C.C., Wind 1, No Rain

Community Classification

Vegetation Type:	Fresh-Moist White Elm Lowland Dec Forest Type (FODM7-1)
[X] Inclusion:	Open Water (OAW)
[X] Complex:	Buckthorn Dec. Shrub Thicket Type (THDM2-6)

Polygon Description

System	Substrate	Topo Feature		Community	
[X] Terrestrial	[ ] Organic	[ ] Lacustrine	[ ] Talus	[ ] Lake	[ ] Barren
[ ] Wetland	[X] Mineral Soil	[X] Riverine	[ ] Crevice/Cave	[ ] Pond	[ ] Meadow
[ ] Aquatic	[ ] Parent Min	[ ] Bottomland	[ ] Alvar	[ ] River	[ ] Prairie
	[ ] Acidic Bedrock	[ ] Terrace	[ ] Rockland	[ ] Stream	[ ] Thicket
History	[ ] Basic Bedrock	[ ] Valley Slope	[ ] Beach/Bar	[ ] Marsh	[ ] Savannah
[X] Natural	[ ] Carb Bedrock	[ ] Tableland	[ ] Sand Dune	[ ] Swamp	[ ] Woodland
[ ] Cultural		[ ] Roll Upland	[ ] Bluff	[ ] Fen	[X] Forest
	Site	[ ] Cliff		[ ] Bog	[ ] Plantation

Cover		Plant Form		
[ ] Open	[ ] Open Water	[ ] Plankton	[ ] Forb	[ ] Coniferous
[ ] Shrub	[ ] Shallow Water	[ ] Submerged	[ ] Lichen	[ ] Mixed
[X] Treed	[X] Surficial Dep	[ ] Floating-Lvd	[ ] Bryophyte	
	[ ] Bedrock	[ ] Graminoid	[X] Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy			
1	Canopy	2	3	White Elm ≫ Manitoba Maple
2	Sub-canopy	3	2	Buckthorn > White elm
3	Understorey	4/5	2	Buckthorn
4	Groundcover	6/7	4	Garlic Mustard > Avens > Can. goldenrod

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	A	10 - 24	O	25 - 50	R	> 50
Snags	A	< 10	O	10 - 24	R	25 - 50	N	> 50
Deadfall/Logs	A	< 10	O	10 - 24	R	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age	[ ]	Pioneer	[X]	Young	[ ]	Mid-age	[ ]	Mature	[ ]	Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
White Elm	D	O			
Man. Maple	O	A			
Buckthorn		A	A		
Inclusion					
Red Oak	O				
Shagbark hickory		O			
Hawthorn		O			
Buckthorn		O	O		

Species	Layer 1	2	3	4	Sample
Garlic Mustard				A	
Virginia Creeper				O	
Avens sp.				O	
Can. Goldenrod				O	
Riverbank grape			R	O	

Wildlife and Other Notes

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent Wind #1184
Polygon:	P092 - W1
UTM:	
Date:	08/10/10 — Time: 1130
Surveyor(s):	PAM
Weather:	18°C Wind 2 SW, 10% C.C. No Rain

Community Classification

Vegetation Type:	Fresh Moist Bur Oak Deciduous Forest Type (FOM9-3)
Inclusion:	-
Complex:	-

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb Bedrock	X Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	X Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	X Shallow Water	Submerged	Lichen	Mixed
X Treed	X Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	~~Super-canopy~~	-	-	
1	Canopy	2	4	Bur oak > white Elm > white ash
2	Sub-canopy	3	3	white Elm > Silver maple > Bur Oak
3	Understorey	4/5	2	Prickly ash > white Elm = Basswood
4	Groundcover	6/7	3	Garl. mustard > Virginia creeper

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	O	< 10	A	10 - 24	A	25 - 50	N	> 50
Snags	R	< 10	O	10 - 24	O	25 - 50	R	> 50
Deadfall/Logs	A	< 10	A	10 - 24	O	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age	Pioneer	Young	X Mid-age	Mature	Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Bur Oak	A	O		O	
Basswood	R	O	O		
White ash	R	O		O	
Silver Maple		O			
Shagbark hickory		O			
White Elm	R	O	O		
prickly ash			O		

Species	Layer 1	2	3	4	Sample
Garl. mustard				A	
Poison Ivy				O	
Motherwort				O	
avens sp.				O	
Virginia creeper				A	
River bank grape			O	O	
black raspberry				O	
Small white aster				O	
Canada goldenrod				O	
broad leaf sedge sp.				O	
garden cress?				R	

Wildlife and Other Notes

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent Wind #1184
Polygon:	P092 - W2
UTM:	
Date:	08/10/10
Time:	1320
Surveyor(s):	BAM
Weather:	19°C, 10% C.C., Wind 2 from SW, No Rain

Community Classification

Vegetation Type:	Coniferous Plantation (TAGM1)
Inclusion:	-
Complex:	-

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Mtn	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
Natural	Carb. Bedrock	X Tableland	Sand Dune	Swamp	Woodland
X Cultural		Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	X Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	X Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
X Treed	X Surficial Dep.	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy			
1	Canopy			
2	Sub-canopy	3	4	White Pine
3	Understorey	4 5		
4	Groundcover	5	1	Garlic Mustard > dandelion

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	O	10 - 24	N	25 - 50	N	> 50
Snags	R	< 10	R	10 - 24	N	25 - 50	N	> 50
Deadfall/Logs	O	< 10	N	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer	X	Young		Mid-age		Mature		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
White Pine		D			

Species	Layer 1	2	3	4	Sample
dandelion				O	
Garlic mustard				O	
Smooth Brome			O		

Wildlife and Other Notes

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent
Polygon:	P102-W1
UTM:	-
Date:	Nov. 8/10 — Time:
Surveyor(s):	BAM
Weather:	9 C, 0% C.C., Wind 1, No rain

Community Classification

Vegetation Type:	Fresh-Moist Oak-Maple-Hickory Forest (FOD M9)
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	✓ Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
✓ Natural	Carb Bedrock	✓ Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll Upland	Bluff	Fen	✓ Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
✓ Treed	✓ Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	✓ Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	~~Super-canopy~~			
1	Canopy	2	4	Bur Oak > Silver Maple = Red Oak
2	Sub-canopy	3	3	Bur Oak > White Elm = Red Oak
3	Understorey			
4	Groundcover			

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	O	< 10	A	10 - 24	O	25 - 50	N	> 50
Snags	O	< 10	O	10 - 24	O	25 - 50	N	> 50
Deadfall/Logs		< 10		10 - 24		25 - 50		> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young	X	Mid-age		Mature		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample	*	Species	Layer 1	2	3	4	Sample
Bur oak	O	O										
Red Oak	O	O										
Shagbark hickory	R											
Silver Maple	O											
White Elm	O	O										

Wildlife and Other Notes

From distant roadside

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent WF
Polygon:	P102 - W2
UTM:	
Date:	Nov. 8/10 — Time:
Surveyor(s):	BAM
Weather:	8°C, 0% C.C. Wind 1, No rain

Community Classification

Vegetation Type:	Fresh-Moist Oak-Maple-Hickory Forest Ecosite (FOMM1)
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	✓ Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Mtn	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
✓ Natural	Carb. Bedrock	✓ Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	✓ Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
✓ Treed	✓ Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	✓ Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy			
1	Canopy	2	4	Bur Oak > Silver Maple > Red Oak
2	Sub-canopy	3	3	White elm > Bur oak > Shagbark hickory
3	Understorey			
4	Groundcover			

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	O	< 10	A	10 - 24	O	25 - 50	N	> 50
Snags	O	< 10	O	10 - 24	O	25 - 50	N	> 50
Deadfall/Logs		< 10		10 - 24		25 - 50		> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young	X	Mid-age		Mature		Old Growth

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Bur Oak	O	O			
Shagbark hickory	O	O			
Silver Maple	O				
Red Oak	O	O			
White Elm	O	O			

Species	Layer 1	2	3	4	Sample

Wildlife and Other Notes

From Roadside

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent WF
Polygon:	P103-W1
UTM:	
Date:	Nov. 8/10
Time:	1030
Surveyor(s):	BAN
Weather:	8°C 0% CC. Wind | No rain

Community Classification

Vegetation Type:	Dry-Fresh Dec. Woodland Ecosite (WODM4)	
X Inclusion:	Dry-Fresh Sugar Maple - White Ash Dec. Forest	(FODM5-8)
Complex:		

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	✓ Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min.	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
✓ Natural	Carb Bedrock	✓ Tableland	Sand Dune	Swamp	✓ Woodland
Cultural	**Site**	Roll Upland	Bluff	Fen	Forest
		Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
✓ Treed	✓ Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	✓ Deciduous	

Stand Description

	Layer	HT	Cover	Species
~~*~~	~~Super-canopy~~			
1	Canopy	2	1	White Ash
2	Sub-canopy	3	3	hawthorn sp. > Mar. Maple > Staghorn sumac
3	Understorey	3/5	2	" > Staghorn sumac > White Ash
4	Groundcover	G/T	4	Can. Goldenrod > Smooth Brome > N.E. Aster

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	O	< 10	O	10 - 24	N	25 - 50	N	> 50
Snags	R	< 10	R	10 - 24	N	25 - 50	N	> 50
Deadfall/Logs	R	< 10	R	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer	X	Young		Mid-age		Mature		Old Growth

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Hawthorn sp.		O	O		
Acer		O			
Staghorn sumac		O	O		
White Ash	R	O	O		
Mar. Maple		O			
Red Cedar					
Inclusion					
Sugar Maple	A	A	O		
White Ash	O	O			

Species	Layer 1	2	3	4	Sample
Can. Goldenrod				A	
Smooth Brome				A	
Multiflora rose				O	
wild carrot				O	
wild parsnip				R	
Common Milkweed				O	
N.E. Aster				O	
Prairie Rose				R	

Wildlife and Other Notes

Rootsice

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent Woods 1184
Polygon:	P106-W1
UTM:	-
Date:	06/10/10 Time: 1415
Surveyor(s):	BAM
Weather:	Temp 10°C, wind 1 from NE, 60% cloud, Nuvar

Community Classification

Vegetation Type:	Fresh-Moist Bitternut Hickory Deciduous Forest Type (FODM9-5)
Inclusion:	-
Complex:	-

Polygon Description

System	Substrate	Topo Feature		Community	
[X] Terrestrial	[ ] Organic	[ ] Lacustrine	[ ] Talus	[ ] Lake	[ ] Barren
[ ] Wetland	[X] Mineral Soil	[ ] Riverine	[ ] Crevice/Cave	[ ] Pond	[ ] Meadow
[ ] Aquatic	[ ] Parent Min.	[ ] Bottomland	[ ] Alvar	[ ] River	[ ] Prairie
	[ ] Acidic Bedrock	[ ] Terrace	[ ] Rockland	[ ] Stream	[ ] Thicket
History	[ ] Basic Bedrock	[ ] Valley Slope	[ ] Beach/Bar	[ ] Marsh	[ ] Savannah
[X] Natural	[ ] Carb. Bedrock	[X] Tableland	[ ] Sand Dune	[ ] Swamp	[ ] Woodland
[ ] Cultural		[ ] Roll. Upland	[ ] Bluff	[ ] Fen	[X] Forest
	Site	[ ] Cliff		[ ] Bog	[ ] Plantation

Cover		Plant Form		
[ ] Open	[ ] Open Water	[ ] Plankton	[ ] Forb	[ ] Coniferous
[ ] Shrub	[ ] Shallow Water	[ ] Submerged	[ ] Lichen	[ ] Mixed
[X] Treed	[X] Surficial Dep.	[ ] Floating-Lvd	[ ] Bryophyte	
	[ ] Bedrock	[ ] Graminoid	[X] Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	~~Super-canopy~~			
1	Canopy	2	4	Bitternut hickory = Black ash > Basswood
2	Sub-canopy	3	3	Bitternut hickory > Iron wood = Sugar Maple
3	Understorey	4/5	3	Bitternut hickory > Nine bark spp. > choke cherry
4	Groundcover	6/7	4	Garlic mustard > avens > poison ivy

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	A	10 - 24	A	25 - 50	O	> 50
Snags	R	< 10	R	10 - 24	R	25 - 50	N	> 50
Deadfall/Logs	A	< 10	O	10 - 24	R	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young	[X]	Mid-age		Mature		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Manitoba maple		O			
Basswood	A	O			
Black ash	A	O			
Bitternut hickory	R	O	A	O	
burdock		R			
E. cottonwood	O				
Am. Beech	O				
Iron wood		O			
choke cherry			O		
Sugar Maple	R	O	O		
Northern Gooseberry		R			
Stinging nettle	R				

Species	Layer 1	2	3	4	Sample
Virginia creeper			O	A	
riverbank grape			O	A	
garlic mustard				A	
Fragaria virginiana				O	
avens spp.				D	
red raspberry				A	
wild. stickseed				O	
poison ivy				A	
burdock				O	
bittersweet nightshade				O	
false solomon's seal				O	
three seeded mercury				O	
avens - rooted				D	

Wildlife and Other Notes

BLJA
EUST
CEDW

- ATV trails & dumping A

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	Chatham Kent WF - #1184
Polygon:	P108 - W1
UTM:	-
Date:	21/10/10 **Time:** 1300
Surveyor(s):	PAM
Weather:	12°C. Wind 3 from W. 80% CC. No rain

Community Classification

Vegetation Type:	Fresh-Moist White elm lowland dec. Forest Type (FOD7-1)
Inclusion:	-
Complex:	-

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb Bedrock	X Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll Upland	Bluff	Fen	X Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
X Treed	X Surficial Dep	Floating-Lvd.	Bryophyte	
	Bedrock	Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
~~*~~	~~Super-canopy~~			
1	Canopy	2	4	Silver Maple > white elm > bur oak
2	Sub-canopy	3	3	white elm > silver maple > bur oak
3	Understorey	4/5	3	white elm >> green ash > shag bark
4	Groundcover	6/7	2	Green ash >> white elm > avens sp.

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	A	10 - 24	O	25 - 50	N	> 50
Snags	O	< 10	A	10 - 24	O	25 - 50	N	> 50
Deadfall/Logs	A	< 10	O	10 - 24	A	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young	X	Mid-age		Mature	Old Growth

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	**Time:**
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Bur oak	O	O			
Shag bark hickory	R	O	O		
Silver Maple	A	O			
White elm	O	O	A	O	
Green Ash			O	A	
Basswood		O			

Species	Layer 1	2	3	4	Sample
Calico aster				O	
poison ivy				O	
avens sp.				O	
bladder sedge				O	
garlic mustard				O	
violet sp.				O	
riverbank grape				O	
wild cucumber				R	
multiflora rose				O	

Wildlife and Other Notes

- Greenish snags abundant in canopy
- May have been a swamp but now moist forest prob. due to tile drainage surrounding
- May have vernal pools
- May be [illegible]

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Keppel WF
Polygon:	P112-W1
UTM:	
Date:	Nov 6/10
Time:	1420
Surveyor(s):	BAM
Weather:	3°C 30% Cc Wind 2 No rain

Community Classification

Vegetation Type:	Dry-Fresh Sugar Maple Deciduous Forest Type (FOD5-2)
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	✓ Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
✓ Natural	Carb. Bedrock	✓ Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	✓ Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
✓ Treed	✓ Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	✓ Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	~~Super-canopy~~			
1	Canopy	2	4	Sugar Maple > Am Beech > White elm
2	Sub-canopy	3	3	Sugar Maple > Am Beech > Bitternut hickory
3	Understorey	4/5	2	Sugar Maple >> hawthorne sp.
4	Groundcover	6/7	2	garlic mustard >> poison ivy > [illegible]

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	O	< 10	A	10 - 24	A	25 - 50	N	> 50
Snags	O	< 10	O	10 - 24	O	25 - 50	N	> 50
Deadfall/Logs	A	< 10	O	10 - 24	O	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young	X	Mid-age		Mature		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample	Species	Layer 1	2	3	4	Sample
Sugar Maple	A	A	O	O		Garlic mustard				A	
Am Beech	A	O				poison ivy				R	
Bitternut hickory	R	O				red raspberry				O	
White Elm	R	R				[illegible]				O	
Black cherry		R				[illegible]			O	O	
hawthorne sp.		R	O			[illegible]				O	
White Ash	R			O		[illegible]				O	

Wildlife and Other Notes

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	Chatham Kent WF #1184
Polygon:	P114-W1
UTM:	
Date:	20/10/10
Time:	1220
Surveyor(s):	RAM
Weather:	16°C 20% Cld, Wind 2 from SW, No rain

Community Classification

Vegetation Type:	Fresh-Moist Elm Dec Woodland type 4 (WODM5-2)
Inclusion:	-
Complex:	-

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil	X Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	X Woodland
Cultural		Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
X Treed	X Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	~~Super-canopy~~			
1	Canopy	2	3	White Elm
2	Sub-canopy	3	3	White Elm >> hawthorn > black walnut
3	Understorey	4/5	3	Staghorn Sumac > hawthorn > W-cedar
4	Groundcover	6/7	2	Canada goldenrod > Prickly lettuce > garlic mustard

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0: none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis		< 10		10 - 24		25 - 50		> 50
	A		O		N		N	
Snags	O	< 10	O	10 - 24	N	25 - 50	N	> 50
Deadfall/Logs	O	< 10	O	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age	Pioneer	X Young	Mid-age	Mature	Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
White Elm	O	A	O		
hawthorn sp.		O	O		
Staghorn Sumac		O	O		
Green Ash		R			
White Mulberry		R			
black Walnut		O	O		

Species	Layer 1	2	3	4	Sample
Canada goldenrod				A	
Prickly lettuce		R	O	A	
calico aster				O	
Multiflora rose				O	
wild carrot				O	
garlic mustard				O	
~~Riverbank grape~~				O	
~~New England aster~~				O	

Wildlife and Other Notes

Photos 313 + 314 From bridge

Road Kill: Fox Snake observed at creek crossing

17 T 0386589 - 4660

Photos 315 - 316 → Mature Forest on South

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	Sandy Point NF
Polygon:	P117-W1
UTM:	-
Date:	Nov 6/18
Time:	1600
Surveyor(s):	RAM
Weather:	3C, 50% cover, wind 2, Nov-6

Community Classification

Vegetation Type:	Dry-Fresh Sugar Maple-Beech Deciduous Forest Type (FOD5-2)
Inclusion:	-
Complex:	-

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	✓ Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
✓ Natural	Carb. Bedrock	✓ Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll Upland	Bluff	Fen	✓ Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
✓ Treed	✓ Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	✓ Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	~~Super-canopy~~			
1	Canopy	2	4	Sugar Maple > Beech > Elm
2	Sub-canopy	3	2	Sugar Maple > Elm > Beech
3	Understorey	1	2	Sugar Maple > Elm
4	Groundcover			

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	O	< 10	A	10 - 24	O	25 - 50	N	> 50
Snags	O	< 10	O	10 - 24	O	25 - 50	N	> 50
Deadfall/Logs		< 10		10 - 24		25 - 50		> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young	X	Mid-age		Mature		Old Growth

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample	Species	Layer 1	2	3	4	Sample
Sugar Maple	A	A	D								
Beech	O	O									
White Elm	O	O	O								

Wildlife and Other Notes

From road - to white limestone trail

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent Wind #118
Polygon:	P118-W1
UTM:	
Date:	06/10/10 Time:
Surveyor(s):	BAM
Weather:	19°C, Wind 0, 20% C.C., Nov 1

Community Classification

Vegetation Type:		Fresh-Moist White Elm Lowland Deciduous Forest Ecosite (FOD M7-1)
X	Inclusion:	Open water (AO) - (Agricultural Reservoir)
	Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil	X Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	X Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
X Treed	X Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy			
1	Canopy	2	4	Basswood > White Elm > Black Walnut
2	Sub-canopy	3	3	White elm > Basswood > green Ash
3	Understorey	4/5	2	Black Walnut > white elm > grape
4	Groundcover	5/7	4	Garlic mustard > grape > avens

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	A	10 - 24	O	25 - 50	R	> 50
Snags	O	< 10	O	10 - 24	R	25 - 50	N	> 50
Deadfall/Logs	A	< 10	O	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young	X	Mid-age		Mature		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Black Walnut	O	O	A		
Basswood	A	A			
Green ash	O	O		O	
White Elm	A	A	A		
Sugar Maple	O			O	
Red oak	O				

Species	Layer 1	2	3	4	Sample
Black raspb.				O	
garlic mustard				D	
River bank grape			O	A	
Virginia Creeper				O	
Aster sp.				O	
wild cucumber				O	
Canada goldenrod				O	
burdock				O	
red raspberry				O	
Wood nettle				O	
dirt cress weed				O	
Fine seeded ryegrass				O	

Wildlife and Other Notes

Riverine woodlot that stretches south along the narrow drain (P105-D1)

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site: South Kent WF	1184
Polygon: P136 - W1	
UTM:	
Date: Nov. 4 /10	Time: 10:15
Surveyor(s): CLH	
Weather: OC 70%, 5°C, Wind 2 N, no precip.	

Community Classification

Vegetation Type:	FODM 9-2 F-M Oak-Maple Decid. Forest
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min.	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural		X Roll. Upland	Bluff	Fen	X Forest
	Site	Cliff		Bog	Plantation

Cover		Open Water	Plant Form		
Open		Shallow Water	Plankton	Forb	Coniferous
Shrub		X Surficial Dep.	Submerged	Lichen	Mixed
X Treed		Bedrock	Floating-Lvd	Bryophyte	
			Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy	1	0	—
1	Canopy	2	3	Red Oak = Bur Oak > Freemans maple > Basswood
2	Sub-canopy	3	4	Bur Oak = Green Ash > Red Oak > Freeman's Maple
3	Understorey	4/5	2	Green Ash > Bur oak > Red Oak > Hawthorn sp.
4	Groundcover	6/7	2	Gray Dogwood > Heal-All > Garlic Mustard

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0: none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	O	10 - 24	O	25 - 50	O	> 50
Snags	O	< 10	R	10 - 24	N	25 - 50	N	> 50
Deadfall/Logs	O	< 10	R	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young	X	Mid-age		Mature		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon: P136 - W1	
UTM:	
Date:	Time: 1000
Surveyor(s): CLH	
Weather:	

Layers: 710 2-10 0.5-2 <0.5
1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Basswood	O		O	O	
Red Oak	O	O	O	O	
Freemans Maple	O	O		R	
Green Ash		O	O	R	
Bur Oak	O	O	A	O	
Hawthorn sp.			O		
Rosa multiflora		R	R		
Gray Dogwood			O	O	
Riverbank Grape	O	O		O	

Species	Layer 1	2	3	4	Sample
Heal-All				O	
Canada Goldenrod			O		

Wildlife and Other Notes

Many regenerating trees. Understorey thick with seedlings
Some very large trees
some mid. sized

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	Sou - x Kaf - WF
Polygon:	9139 - W1
UTM:	-
Date:	Nov 8/10
Time:	
Surveyor(s):	BAM
Weather:	8°C 0% C.C. Wind 1, No rain

Community Classification

Vegetation Type:	Mixed Plantation (TAGM2)
Inclusion:	-
Complex:	-

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	✓ Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	Woodland
✓ Cultural		Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	✓ Plantation

Cover		Open Water	Plant Form		
Open		Shallow Water	Plankton	Forb	Coniferous
Shrub		✓ Surficial Dep.	Submerged	Lichen	✓ Mixed
✓ Treed		Bedrock	Floating-Lvd	Bryophyte	
			Graminoid	Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy			
1	Canopy			
2	Sub-canopy	3	4	White Spruce > Sugar Maple > White Cedar
3	Understorey	4/5	3	White spruce > White cedar
4	Groundcover	1/1	3	Can. Goldenrod > Smooth Brome > Wild Carrot

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	A	10 - 24	N	25 - 50	N	> 50
Snags	R	< 10	R	10 - 24	N	25 - 50	N	> 50
Deadfall/Logs	N	< 10	N	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer	X	Young		Mid-age		Mature		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
White Cedar		O	O		
Sugar Maple		O			
White ash		O			
White spruce		A	O		

Species	Layer 1	2	3	4	Sample
Can. Goldenrod				A	
Smooth Brome				A	
Wild Carrot				O	

Wildlife and Other Notes

Roadside

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent WF
Polygon:	P139-WZ
UTM:	
Date:	Nov. 8/10
Time:	1240
Surveyor(s):	BAM
Weather:	7°C, 0% C.C. Wind 1, Nbrain

Community Classification

Vegetation Type:	Dry-Fresh Sugar Maple Dec. Forest Type (FOD5-1)
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	✓ Mineral Soil	✓ Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
✓ Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	✓ Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
✓ Treed	✓ Surficial Dep.	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	✓ Deciduous	

Stand Description

	Layer	HT	Cover	Species
~~*~~	~~Super-canopy~~			
1	Canopy	2	4	Sugar Maple > Green Ash > Am. Beech
2	Sub-canopy	3	3	Sugar Maple > Green Ash > White elm
3	Understorey	4/5	2	Sugar Maple > Green Ash > White elm
4	Groundcover	6/7	3	Can. Goldenrod > smooth brome > avens sp.

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	A	10 - 24	R	25 - 50	N	> 50
Snags	O	< 10	O	10 - 24	R	25 - 50	N	> 50
Deadfall/Logs	O	< 10	O	10 - 24	R	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young	X	Mid-age		Mature		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Green Ash	O	O	O		
Sugar Maple	A	O	O		
Am. Beech	O	O			
White Elm	R	O	O		
Basswood	R	R			
Black Walnut	O	O			

Species	Layer 1	2	3	4	Sample
Can. Goldenrod				A	
Smooth brome				A	
red raspberry				O	
avens sp.				O	
garlic mustard				O	

Wildlife and Other Notes

Roadside

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent WF 1184
Polygon:	P129 - W3
UTM:	-
Date:	Nov. 8/10
Time:	
Surveyor(s):	EAM
Weather:	8°C, 0% C.C., Wind 1, No rain

Community Classification

Vegetation Type:	Sumac Deciduous Shrub Thicket Type (TADM 2-1)
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	✓ Mineral Soil	✓ Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	✓ Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
✓ Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover		Open Water	Plant Form		
Open		Shallow Water	Plankton	Forb	Coniferous
Shrub	✓	Surficial Dep	Submerged	Lichen	Mixed
✓ Treed		Bedrock	Floating-Lvd	Bryophyte	
			Graminoid	✓ Deciduous	

Stand Description

	Layer	HT	Cover	Species
~~-~~	~~Super-canopy~~			
1	Canopy	2	2	Bur oak > Cottonwood > white elm
2	Sub-canopy	3	3	Staghorn sumac > white elm > Cottonwood
3	Understorey	4/5	3	staghorn sumac > willow sp. > Gray dogwood
4	Groundcover	6/7	3	Can. goldenrod > smooth brome > reed canary

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	A	10 - 24	R	25 - 50	N	> 50
Snags	O	< 10	O	10 - 24	N	25 - 50	N	> 50
Deadfall/Logs	O	< 10	R	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer	X	Young		Mid-age		Mature		Old Growth

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Cottonwood	R	O			
Willow sp.		R	O		
Staghorn sumac		O	O		
Bur oak	O				
White Elm	R	O			
Gray dogwood			O		

Species	Layer 1	2	3	4	Sample
Can. goldenrod				O	
reed canary grass				O	
smooth brome				O	
avens sp.				O	

Wildlife and Other Notes

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South-Kor. - WF [illegible]
Polygon:	F140-W1
UTM:	
Date:	[illegible] Time: 1520
Surveyor(s):	BAI
Weather:	20° [illegible]

Community Classification

Vegetation Type:	Dry Fresh Sugar Maple-Beech Dec Forest Type (FODM5-2)
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb Bedrock	X Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	X Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	X Shallow Water	Submerged	Lichen	Mixed
X Treed	X Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy			
1	Canopy	2	4	Sugar Maple - Fir Spec. >> Black Cherry
2	Sub-canopy	3	3	" >> " >> "
3	Understorey	4	3	Black Cherry = Sugar Maple
4	Groundcover	5	2	Herbs mostly >2" Dbh saplings

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	A	10 - 24	A	25 - 50	R	> 50
Snags	R	< 10	R	10 - 24	R	25 - 50	N	> 50
Deadfall/Logs	A	< 10	R	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young		Mid-age	X	Mature	Old Growth

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Sugar Maple	A	A	O		
Am. Beech	O	O			
Black Cherry	R	O	O		
White Ash				O	
Basswood		R			
Yellow Birch	R				
Black Walnut		R			
Bass. Fern		R			

Species	Layer 1	2	3	4	Sample
Red Cherry				O	
Red Maple				O	
Eastern Hemlock				O	
Poison Ivy / Virginia Creeper				O	
Enchanter's Nightshade				R	
Canada Mayflower				O	

Wildlife and Other Notes

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent WF #1184
Polygon:	CLA-W1
UTM:	
Date:	26/10/16 Time: 1240
Surveyor(s):	RAM
Weather:	20°C 100% c.c wind 4 dom W

Community Classification

Vegetation Type:	Deciduous Plantation (FAGM2)
Inclusion:	
Complex:	Goldenrod Forb Meadow Type (MEFM11)

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	Mineral Soil	Riverine	Crevice/Cave	Pond	X Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
Natural	Carb. Bedrock	X Tableland	Sand Dune	Swamp	Woodland
X Cultural		Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	X Plantation

Cover		Plant Form		
Open	Open Water	Plankton	X Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
X Treed	X Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy			
1	Canopy			
2	Sub-canopy			
3	Understorey			
4	Groundcover	6	4	Cover >> NE. Aster

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	N < 10	N 10 - 24	N 25 - 50	N > 50
Snags	A < 10	N 10 - 24	N 25 - 50	N > 50
Deadfall/Logs	O < 10	N 10 - 24	N 25 - 50	N > 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer	X	Young		Mid-age		Mature		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
White Ash				R	
Red Cedar				O	

Species	Layer 1	2	3	4	Sample
Canada goldenrod				D	
new-growing ash				O	
wild carrot				O	
barnyard grass				O	

Wildlife and Other Notes

Completed Form from [illegible]

White ash plantation (all <10cm dbh) - all dead/snags

- [illegible]

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page __ of __

Site:	South Kent WF
Polygon:	CLA - WZ
UTM:	-
Date:	Nov. 7/10
Time:	1100
Surveyor(s):	BAM
Weather:	5°C, 60% C.C., wind 3, No rain

Community Classification

Vegetation Type:	Fresh-Moist White Elm Lowland Dec. Forest Type (FOOM7-1)
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	✓ Mineral Soil	✓ Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
✓ Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	✓ Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
✓ Treed	✓ Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	✓ Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	~~Super-canopy~~			
1	Canopy	2	4	White Elm
2	Sub-canopy	3	3	White Elm
3	Understorey	4/5	3	White Elm > Hawthorn sp.
4	Groundcover	6/7	2	Aves sp. > Can. goldenrod > red raspberry

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	O	< 10	A	10 - 24	R	25 - 50	N	> 50
Snags	O	< 10	O	10 - 24	R	25 - 50	N	> 50
Deadfall/Logs	O	< 10	O	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer	X	Young		Mid-age		Mature		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page ___of___

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
White Elm	D	A	O		
Hawthorn sp.			O		

Species	Layer 1	2	3	4	Sample
Aves sp.				O	
Can. goldenrod				O	
red raspberry				R	

Wildlife and Other Notes

Raccoon

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent INF
Polygon:	PSS-W1
UTM:	-
Date:	Nov 7/10 — **Time:** 1340
Surveyor(s):	RAM
Weather:	3°C 25 cm wind 2 No rain

Community Classification

Vegetation Type:		Coniferous Plantation (TAGM1)
	Inclusion:	-
X	**Complex:**	Deciduous Plantation (TAGM3)

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	✓ Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Mtn	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
Natural	Carb. Bedrock	~ Tableland	Sand Dune	Swamp	Woodland
✓ Cultural		Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	✓ Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	✓ Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
✓ Treed	✓ Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	~~Super-canopy~~			
1	Canopy	2	4	White pine > white spruce > sugar Maple
2	Sub-canopy	3	3	white pine > white spruce >> sugar Maple
3	Understorey	4/5	2	Sugar Maple
4	Groundcover	6/7	3	Smooth brome > Can. goldenrod > aster sp.

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	O	< 10	A	10 - 24	O	25 - 50	N	> 50
Snags	O	< 10	O	10 - 24	R	25 - 50	N	> 50
Deadfall/Logs	R	< 10	R	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young	X	Mid-age		Mature		Old Growth

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	**Time:**
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
White Pine	A	O			
White spruce	A	O			
Sugar Maple	O	O	O		
Complex					
Silver maple	A	A			
White Elm	O	O			
Staghorn Sumac		O	O		
Cottonwood	O	O			

Species	Layer 1	2	3	4	Sample
Red raspberry				O	
Smooth brome				O	
Can. goldenrod				O	
aster sp.				O	

Wildlife and Other Notes

Roadside

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	Sarl-Bar-WF
Polygon:	PSS-WZ
UTM:	-
Date:	Nov. 7/10
Time:	1400
Surveyor(s):	RAM
Weather:	8°C, 10% C.C., Wind 2, No rain

Community Classification

Vegetation Type:	Dry Fresh Sugar Maple - Beech Dec. Forest Type (FOD M3-)
Inclusion:	-
Complex:	-

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	✓ Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
✓ Natural	Carb. Bedrock	✓ Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll Upland	Bluff	Fen	✓ Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
✓ Treed	✓ Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	✓ Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	~~Super-canopy~~			
1	Canopy	2	4	Sugar Maple > Am. Beech > Red Oak
2	Sub-canopy	3	3	Sugar Maple > Am. Beech > Ironwood
3	Understorey	4/5	2	Sugar Maple > Ironwood > White elm
4	Groundcover	6/7	2	

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	A	10 - 24	O	25 - 50	N	> 50
Snags	O	< 10	O	10 - 24	R	25 - 50	N	> 50
Deadfall/Logs	O	< 10	O	10 - 24	R	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young	X	Mid-age		Mature		Old Growth

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Sugar Maple	A	A	O		
Am. Beech	O	O			
White Elm	R	O	O		
Red Oak	R				
Cottonwood	R				
Ironwood		O	O		

Species	Layer 1	2	3	4	Sample
?					

Wildlife and Other Notes

Roadside

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent WF
Polygon:	PSS - W3
UTM:	–
Date:	Nov. 7/10
Time:	–
Surveyor(s):	RAM
Weather:	5°C 50% c.c. Wind 3 No rain

Community Classification

Vegetation Type:	Dry-Fresh Mixed Meadow Ecosite (MEMM3)
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	✓ Mineral Soil	Riverine	Crevice/Cave	Pond	✓ Meadow
Aquatic	Parent Mtn	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
✓ Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural		✓ Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
✓ Open	Open Water	Plankton	✓ Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
Treed	✓ Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	✓ Graminoid	Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	~~Super-canopy~~			
1	Canopy	2	0	–
2	Sub-canopy	3	1	Red Cedar
3	Understorey	4/5	1	hawthorn sp
4	Groundcover	6/7	4	Can. Goldenrod > Smooth brome > heath aster

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	R	< 10	N	10 - 24	N	25 - 50	N	> 50
Snags	N	< 10	N	10 - 24	N	25 - 50	N	> 50
Deadfall/Logs	N	< 10	N	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age	X	Pioneer		Young		Mid-age		Mature		Old Growth

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Red Cedar		R			
hawthorn sp			R		

Species	Layer 1	2	3	4	Sample
Can. goldenrod				A	
Smooth Brome				A	
Wild Carrot				O	
Heath Aster				O	
N.E. Aster				O	
Reed Canary grass				O	

Wildlife and Other Notes

Roadside

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	1184 South West (Rail corridor)
Polygon:	A RB-A
UTM:	
Date:	Oct. 27, 2010 Time:
Surveyor(s):	PWD, SM
Weather:	11°C. 0% CC, No rain, Wind-4

Community Classification

Vegetation Type:	Mid-age Deciduous Regeneration WODM5-1 F·m
Inclusion:	CVI-1 Railway
Complex:	

Poplar Decid. Woodland Type cult

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	X Woodland
Cultural		X Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
X Treed	X Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy			
1	Canopy	2	3	Trembling Aspen > White Elm >> Silver Maple > Red Oak
2	Sub-canopy	3	2	Trembling Aspen > White Elm > Manitoba Maple > Silver Maple
3	Understorey	4	1	Red Raspberry > Canada Goldenrod = Staghorn Sumac > Phragmites
4	Groundcover	6	2	Red Fescue > Field Horsetail > Riverbank Grape > Wild Carrot

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0: none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis							
	A	< 10	A	10 - 24	O	25 - 50	N	> 50
Snags	O	< 10	O	10 - 24	R	25 - 50	N	> 50
Deadfall/Logs	O	< 10	R	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O Occasional A: Abundant

Community Age									
	Pioneer		Young	X	Mid-age		Mature		Old Growth

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Canada Goldenrod			A		
Tall Goldenrod			O		
Field Horsetail				O	
Riverbank Grape			O	O	
Multiflora Rose			R		
Common Milkweed			O		
Wild Carrot			O	O	
Garlic Mustard				R	
Catnip				O	
Canada Thistle			R		
Bull Thistle			R		
Phragmites			A		
Alfalfa				R	
Mullein			O		
Green Foxtail			O	O	
Orchard Grass					
Red Fescue				O	
Smooth Brome					
Reed Canary Grass			R	R	
Sow Thistle				O	
Goat's Beard				R	
Red Raspberry			A		
Yellow Evening Primrose			O		

Species	Layer 1	2	3	4	Sample
Sulphur Cinquefoil				O	
Bouncing Bet				O	
Teasel				O	
Viper's Bugloss				O	
Field Bindweed			R	R	
Bittersweet Nightshade				O	
Ground Ivy				R	
Clammy Groundcherry				O	
Yarrow				O	
Cocklebur				R	
White Mulberry		R	R		
Siberian Elm			R	R	
Grey Dogwood			D		
Staghorn Sumac		A	A		
Tartarian Honeysuckle			R		
East. Red Cedar		R	O		
Common Buckthorn		R	O		
Manitoba Maple		O	O		
White Elm	O	O	O		
Red Oak	R				
Silver Maple	R	O	O		
Green Ash		R	R		
Trembling Aspen	D	D	O		

Wildlife and Other Notes

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	1184 South Kent (Rail corridor)
Polygon:	B
UTM:	
Date:	October 27, 2010 — Time: 8:00
Surveyor(s):	Pat Deacon, Siobhan Murray
Weather:	11°C, 0% CC, No rain, Wind-4

Community Classification

	Vegetation Type:	Tallgrass Prairie (Degraded) SYMM3 F-M mixed Savanna Ecosite CUT
X	Inclusion:	CVI-1 Railway
X	Complex:	MEGM1-4 Dry, mixed Graminoid Tallgrass Prairie Type

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min.	Bottomland	Alvar	River	X Prairie
	Acidic Bedrock	X Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
X Open	Open Water	Plankton	Forb	Coniferous
Shrub	X Surficial Dep	Submerged	Lichen	Mixed
Treed	Bedrock	Floating-Lvd	Bryophyte	
		X Graminoid	Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy			
1	Canopy	2	1	Trembling Aspen > White Elm
2	Sub-canopy	3	3	E Red Cedar > Trembling Aspen > Hawthorn sp. = Manitoba Maple
3	Understorey	4	4	Red Raspberry = Grey Dogwood > Staghorn Sumac > Phragmites
4	Groundcover	5	1	Field Horsetail = Red fescue > Mullein > Riverbank Grape

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	O	< 10	R	10 - 24	R	25 - 50	N	> 50
Snags	O	< 10	R	10 - 24	N	25 - 50	N	> 50
Deadfall/Logs	R	< 10	N	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O Occasional A: Abundant

Community Age		Pioneer		Young		Mid-age	X	Mature		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Big Bluestem			O		
Indian Grass			R		
Prairie Cord Grass			O		
Canada Goldenrod			A		
Teasel			O		
Riverbank Grape			O	O	
Purple Loosestrife			O		
Red Raspberry			A		
Tall Goldenrod			O		
Wild Strawberry				O	
Common Milkweed			O		
Wild Carrot			A		
Field Horsetail				O	
New England Aster			O		
Heath Aster			A		
Purple-stem Aster			O		
Calico Aster			R		
Panicled Aster			O		
Common Dandelion				R	
Mullein			O	O	
Yellow Evening Primrose			O		
Switch Grass			O		
Tall Sunflower			O		

Species	Layer 1	2	3	4	Sample
Canada Thistle			O		
Compass Plant			R		
Grass-leaved Goldenrod			O		
Yellow Toadflax				O	
Multiflora Rose			O		
Phragmites			A		
Low Hop Clover				O	
Catnip				O	
Sand Dropseed				R	✓
Prairie 3 Awn Grass				R	✓
Red fescue				O	
Yarrow				O	
Smooth Brome			R		
Grey Dogwood			A		
Staghorn Sumac			A		
Hawthorn sp.		O			
Manitoba Maple		O	O		
Trembling Aspen	O	O			
White Elm	R	O			
Eastern Red Cedar		O	O	O	
Black Cherry		R			
East. White Cedar		O			
Weeping Willow		R			

Wildlife and Other Notes

Notable tallgrass prairie from • Base Rd - Shewburg Rd.
• Bloomfield Rd - Communication Rd.
Sporadic prairie grass west of McKinlay - Bloomfield Rd.
Sand Dropseed @ Morris Line / Cooper Rd!
Compass Plant - 1000 flowering stems N4207597 E4696053 (East of Base Road)

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	1184 South Kent (Rail corridor)
Polygon:	C
UTM:	
Date:	Oct. 28. 2010 — Time:
Surveyor(s):	PWD, SM
Weather:	5°C, 100% CC, No rain, Wind-4

Community Classification

Vegetation Type:	Mature Deciduous Forest Edge
Inclusion:	
Complex:	

FoDM5-8 Dry-Fresh Sugar maple-White Ash Deciduous Forest Type

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min.	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	X Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover		Open Water	Plant Form		
Open	Shallow Water	Plankton	Forb	Coniferous	
Shrub	X Surficial Dep.	Submerged	Lichen	Mixed	
X Treed	Bedrock	Floating-Lvd	Bryophyte		
		Graminoid	X Deciduous		

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy			
1	Canopy	2	2	Sugar Maple = White Ash > White Elm > Black Cherry
2	Sub-canopy	3	4	Sugar Maple > Black Walnut > Black Cherry > Shagbark Hickory
3	Understorey	5	4	Red Raspberry > Sugar Maple = Grey Dogwood > Riverbank Grape
4	Groundcover	6	1	Field Horsetail > Green Foxtail > Wild Carrot > Wild Strawberry

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	A	10 - 24	R	25 - 50	M	> 50
Snags	O	< 10	R	10 - 24	M	25 - 50	M	> 50
Deadfall/Logs	O	< 10	O	10 - 24	R	25 - 50	M	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young	X	Mid-age		Mature		Old Growth

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Black Cherry	R	O			
Sugar Maple	O	O	O		
White Oak		R			
Shagbark Hickory		O			
White Ash	O				
White Elm	R				
Common Buckthorn		R	O		
Staghorn Sumac			R		
Grey Dogwood			O		
Black Walnut		O	O		
Canada Goldenrod			R		
Riverbank Grape		O	O		
Wild Strawberry				O	
Catnip				R	
Green Foxtail				O	
Red Raspberry			A		
Teasel			O		
White Sweet Clover			R	R	
Yellow Evening Primrose			O		
Quack Grass			O		
Smooth Brome			R		
New England Aster			O		
Common Milkweed			O		

Species	Layer 1	2	3	4	Sample
Field Horsetail				O	
Wild Carrot			O	O	
Garlic Mustard				O	
Virgin's Bower		R	O		
Moonseed			R		

Wildlife and Other Notes

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	1184 South Kent (Rail Corridor)
Polygon:	D
UTM:	
Date:	Oct. 27, 2010 — Time: 14:00
Surveyor(s):	PWD, SM
Weather:	11°C, 0%CC, No rain, Wind-4

Community Classification

Vegetation Type:	Open Highly Disturbed Land MEFM1
Inclusion:	CUT-1 Railway
Complex:	

Dry-Fresh Forb meadow Ecosite.

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil	Riverine	Crevice/Cave	Pond	X Meadow
Aquatic	Parent Mtn.	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	X Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	Woodland
X Cultural		Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover		Open Water	Plant Form		
X Open		Shallow Water	Plankton	X Forb	Coniferous
Shrub		X Surficial Dep	Submerged	Lichen	Mixed
Treed		Bedrock	Floating-Lvd	Bryophyte	
			Graminoid	Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy		—	—
1	Canopy		—	—
2	Sub-canopy	3	1	Staghorn Sumac > Manitoba Maple > East. Red Cedar = Trembling Aspen.
3	Understorey	5	4	Spotted Knapweed >> Canada Goldenrod > Red Raspberry > Riverbank Grape
4	Groundcover	6	3	Spotted Knapweed >> Riverbank Grape = Vipers Bugloss

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7 <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis		< 10		10 - 24		25 - 50		> 50
	O		R		N		N	
Snags	R	< 10	N	10 - 24	N	25 - 50	N	> 50
Deadfall/Logs	O	< 10	R	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O Occasional A: Abundant

Community Age		Pioneer		Young		Mid-age		Mature		Old Growth
	X									

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

	Species	Layer 1	2	3	4	Sample
*	Spotted Knapweed			D	D	
	Canada Goldenrod			A		
	Vipers Bugloss				O	
	Riverbank Grape			O	O	
	Mullein			O		
	Red Raspberry			O		
	Yellow Evening Primrose			R		
	Alfalfa				R	
	Asparagus			R		
	Bladder Campion				R	
*	Green Pigweed			A	R	
*	Canada Thistle			O		
*	Bull Thistle			O		
	East. Red Cedar		R	O		
	Manitoba Maple		O	O		
	Trembling Aspen		R	O		
	Staghorn Sumac		O			
	Common Buckthorn			R		
	Apple sp.		R			

	Species	Layer 1	2	3	4	Sample

Wildlife and Other Notes

- approximately 75%+ exotic invasive species (transition into tallgrass at west end near Fargo).
- * 2 polygons like this... the western is dominated by Spotted Knapweed, the eastern is similar composition but knapweed replaced with Green Pigweed, Canada Thistle and Bull Thistle.

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	1184 South Kent (Rail Corridor)
Polygon:	E
UTM:	
Date:	Oct. 27, 2010 — Time: 8:00
Surveyor(s):	PWD, SM
Weather:	11°C, 0%CC, No rain, Wind-4

Community Classification

Vegetation Type:	Open Thicket/Meadow SVDM3-5 White Birch/Poplar Deciduous Savanna Type CUT
Inclusion:	CVI-1 Railway
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	X Terrace	Rockland	Stream	X Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
Natural	Carb Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
X Shrub	Shallow Water	Submerged	Lichen	Mixed
Treed	X Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy			
1	Canopy	2	1	Trembling Aspen > White Elm
2	Sub-canopy	3	3	Manitoba Maple > Common Buckthorn = Hawthorn sp. > E. Red Cedar
3	Understorey	6	3	Red Raspberry > Canada Goldenrod > Grey Dogwood > Staghorn Sumac
4	Groundcover	7	2	Field Horsetail > Riverbank Grape > Green Foxtail > Quack Grass

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	O	< 10	O	10 - 24	R	25 - 50	N	> 50
Snags	O	< 10	N	10 - 24	N	25 - 50	N	> 50
Deadfall/Logs	N	< 10	N	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O Occasional A: Abundant

Community Age	Pioneer	X Young	Mid-age	Mature	Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Trembling Aspen	O				
Bur Oak			R		
White Elm	O				
Green Ash		R	R		
Black Cherry		O	R		
Pin Cherry		O			
Manitoba Maple		A	O		
Hawthorn sp.		O			
Common Buckthorn		O			
White Spruce		R			
E. Red Cedar		O	O		
Red Oak		R	R		
Grey Dogwood			A		
Pussy Willow			R		
Staghorn Sumac			A		
Red Raspberry			D		
Canada Goldenrod			D		
Tall Goldenrod			O		
Riverbank Grape			O	O	
Wild Carrot			A		
Green Foxtail			A	O	
Common Milkweed			O		
Wild Bergamot			R		

Species	Layer 1	2	3	4	Sample
Field Horsetail				A	
Smooth Rose			R		
Multiflora Rose			O		
Garlic Mustard				R	
Catnip				O	
Poison Ivy				R	
Phragmites			A		
Witch Grass				O	
Green Pigweed			R		
Mullein			O		
Smooth Brome			O		
Orchard Grass				O	
Quack Grass				O	
Sow Thistle				O	
New England Aster			O		
Velvetleaf			O		
Sweet White Clover			O		
Clammy Groundcherry				O	
Dandelion				O	
Purple-stem Aster			O		
Sulphur Cinquefoil				R	
Spreading Dogbane			R		

Wildlife and Other Notes

(3) Eastern Cottontail
(3) White-tailed Deer
(1) Muskrat
(2) American Kestrel

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	184 South Kent (Rail Corridor)
Polygon:	F
UTM:	
Date:	Oct. 28, 2016 — Time:
Surveyor(s):	RWD, SM
Weather:	5°C, 100% CC, No rain, Wind-4

Community Classification

Vegetation Type:	Open Thicket / Meadow SWDM3-5 CUT
Inclusion:	CVI-1 Railway
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil (Railbed)	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min.	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	X Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
Natural	Carb. Bedrock	X Tableland	Sand Dune	Swamp	Woodland
X Cultural		Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover	Site	Plant Form		
X Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
Treed	X Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy			
1	Canopy	2	1	Trembling Aspen > White Elm >> Bur Oak
2	Sub-canopy	3	3	Trembling Aspen > White Elm > Hawthorn sp.
3	Understorey	6	3	Red Raspberry > Phragm.tes = Vipers Bugloss > Wild Carrot.
4	Groundcover	7	1	Red fescue > Field Horsetail > Riverbank Grape > Alfalfa

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	O	< 10	O	10 - 24	N	25 - 50	N	> 50
Snags	O	< 10	N	10 - 24	N	25 - 50	N	> 50
Deadfall/Logs	O	< 10	N	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O Occasional A: Abundant

Community Age	Pioneer	X Young	Mid-age	Mature	Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Canada Goldenrod			O		
Tall Goldenrod			R		
Canada Thistle			O		
Bull Thistle			R		
Bouncing Bet				O	
Wild Carrot			A		
Catnip			O		
Heath Aster			R		
New England Aster			O		
Purple-stemmed Aster			R		
Wild Strawberry				R	
Yellow Evening Primrose			O		
Multiflora Rose			O		
Riverbank Grape			O	O	
White Sweet Clover				O	
Alfalfa				O	
Low Hop Clover				O	
Field Horsetail				O	
Common Milkweed			O		
Vipers Bugloss			A		
Grass-leaved Goldenrod			O		
Garlic Mustard				R	
Yellow Toadflax				O	

Species	Layer 1	2	3	4	Sample
Smooth Brome			O		
Red Fescue				A	
Green Foxtail			O		
Quack Grass				R	
Bladder Campion				O	
Mullein			O		
Phragmites			A		
Sow Thistle			O		
Red Raspberry			A		
Sand Dropseed				R	
Tall Cordgrass				R	
Hawthorn sp.		O			
Bur Oak	R	R			
White Elm	O	O			
Common Buckthorn			R		
Trembling Aspen	O	O	O		
Grey Dogwood			A		
Staghorn Sumac			A		

Wildlife and Other Notes

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page __ of __

Site:	P007-W1
Polygon:	
UTM:	17: 492765 4689363
Date:	April 6/2011 Time: 11:28
Surveyor(s):	NGM, KGB
Weather:	3°C, S-3, 100%, drizzle

Community Classification

Vegetation Type:	FOM10 Fresh-Moist Carolinian Dec. Forest
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	✓ Organic	Lacustrine	Talus	Lake	Barren
Wetland	Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
✓ Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	✓ Woodland
Cultural		Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
✓ Treed	✓ Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	✓ Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy			
1	Canopy	3	3	Gr. Ash > Shagbark Hickory > Am. Beech
2	Sub-canopy	4	3	Gr. Ash > Shagbark Hickory >
3	Understorey	5	2	Red Osier Dog. > Bayberry > Sassafras
4	Groundcover	6	3	Goldenrod sp. > Field Straw > Cut-grass

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	< 10	10 - 24	25 - 50	> 50
Snags	< 10	10 - 24	25 - 50	> 50
Deadfall/Logs	< 10	10 - 24	25 - 50	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age	Pioneer	Young	Mid-age	Mature	Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page ____of____

PLANT SPECIES LIST

Site:	P007-W1
Polygon:	
UTM:	
Date:	April 6/2011 Time: 11:28
Surveyor(s):	NGM, KGB
Weather:	3°C, S-3, 100% Drizzle

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Red cedar	—	O	O	O	
Black Locust	—	—	O	O	
Red Osier Dogwood	—	—	O	O	
Silver Maple	O	O	O	O	
Sugar Maple	R	R	R	R	
Blue Beech	R	R	R	R	
Bayberry	—	—	A	A	
Green Ash	O	O	O	O	
Field Strawberry	—	—	—	A	
Goldenrod sp.	—	—	—	A	
Cut Grass	—	—	—	A	
Com. Apple	—	—	O	O	
Hawthorn sp.	—	—	O	O	
Shagbark Hickory	O	O	O	O	
White Elm	R	R	R	R	
Am. Beech	O	O	O	O	
Riverbank Grape	—	—	R	O	
Tulip Tree	R	R	R	R	
Sassafras	—	—	R	O	
Norway Spruce	R	R	R	R	

Species	Layer 1	2	3	4	Sample

Wildlife and Other Notes

Wildlife Observation Form

Page __ of __

NATURAL RESOURCE SOLUTIONS INC.

Site:	P007-W1
Polygon:	
UTM:	17T 0492767 4689320
Date:	April 6/11 **Time:** 10:30am
Surveyor(s):	NGM, KCB
Weather:	5°C, rain, CC 100, wind S2

Species Observed *Check for Wildlife Habitat that may be associated with an observation*

TY	Species	EV	Notes	#		TY	Species	EV	Notes	#
	Northern Flicker									
	Dk. Eyed Junco									
	Song Sparrow									
	Ring-billed Gull									
	Mourning Dove									
	Red-winged B.B.									

Faunal Type Codes (TY)

B=Bird M=Mammal H=Herpetofauna L=Lepidoptera F=Fish D=Dragonfly or Damselfly

Evidence Codes (EV)

Breeding Birds

SH- Suitable Habitat
SM- Singing Male
T- Territory
A- Anxienty Behavior
D- Courtship Display
N- Nest Building
P- Pair
V- Visiting Nest
DD- Distraction Display
NE- Nest with Eggs
AE-Adult entering nest
NU- Used nest
FY- Fledged Young
FS- Food/Fecal Sac

Other Wildlife

OB- Observed
DP- Distinctive Parts
TK- Tracks
VO- Vocalization
HO- House/Den
FE- Feeding Evidence
CA- Carcass/Bones
FY- Eggs or young
SC- Scat
SI- Other Signs (Specify)

Wildlife Habitat Form

Page __ of __

NATURAL RESOURCE SOLUTIONS INC.

Site:	
Polygon:	
UTM:	
Date:	**Time:**
Surveyor(s):	
Weather:	

Wildlife Habitat (Check all that apply AND record UTM / mark on map)

Habitats and Habitat Features are independent of wildlife observations

Habitat Type

___ Deciduous Forest
___ Mixed Forest
___ Coniferous Forest
___ Marsh
___ Swamp
___ Bog
___ Fen
___ Water (Shallow & Open)
___ Meadow
___ Tallgrass Prairie
___ Thicket
___ Savannah
___ Woodland
___ Valley (Describe Below)
___ Headwater Area (check for Seeps/Springs)

Habitat Features

Birds
___ Spring Flooded Field
___ Stick Nest (Raptors, Herons)
___ Snag (Raptors, Herons)
___ Tree Cavity Nest (Ducks)
___ Seep/Spring (Turkeys/Grouse)

Bats
___ Cave Entrance
___ Mine Shaft
___ Snag (>20cm DBH)

Mink/Otter/Fisher/Marten
___ Snag
___ Burrow
___ Den
___ Tree Cavity
___ Fallen Log

Deer/Moose
___ Seep/Spring
___ Mineral Lick

Snakes
___ Burrow
___ Fallen Rotting Log
___ Old Well
___ Rock Pile/Stone Wall
___ Organics Pile
___ Log Pile
___ Karst
___ Broken/Fissured Rock
___ Old Foundation
___ Old Bridge/Concrete Culvert

Amphibians and Turtles
___ Vernal Pool/Woodland Pond (Amphibian Breeding)
___ Sand (Turtle Nesting)
___ Fine/Sandy Gravel (Turtle Nesting)

Invertebrates
___ Crayfish Chimney

For every Habitat Type or Habitat Feature, record UTM below (for each occurrence) or mark on map

Habitat Feature:	UTM	Description

Describe Valley (depth, geomorphological traits):

Additional Details:

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Chatham Kent Wind Farm - 1184

Site:	
Polygon:	P053-WN4
UTM:	
Date: April 5 2011	Time: 2:07
Surveyor(s):	SAG DWD
Weather:	Wind-8 temp-5 / Cloud-80 precip-none

Community Classification

Vegetation Type:	FOD9-4 - Fresh moist Shagbark Hickory deciduous
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb. Bedrock	X Tableland	Sand Dune	Swamp	√ Woodland
Cultural		Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover		Open Water	Plant Form		
Open		Shallow Water	Plankton	Forb	Coniferous
Shrub		Surficial Dep	Submerged	Lichen	Mixed
X Treed		Bedrock	Floating-Lvd	Bryophyte	
			Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy	1	3	Red Maple, Shagbark, white Ash
1	Canopy	2	3	Red maple, white elm
2	Sub-canopy	4	3	Shagbark Hickory, Hickory Sp.
3	Understorey	6	1	Grey dogwood, fraxinites, red osier dogwood
4	Groundcover	7	1	clover, wild strawberry

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	A	10 - 24	D	25 - 50	R	> 50
Snags	N	< 10	O	10 - 24	H	25 - 50	M	> 50
Deadfall/Logs	A	< 10	A	10 - 24	A	25 - 50	M	> 50

Abundance Codes: N None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young	X	Mid-age		Mature	Old Growth

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample	Species	Layer 1	2	3	4	Sample
Red maple	D	A	A	A							
Shagbark Hic	A	A	A	A							
White Ash	A	A	A	O							
Red Cedar	—	—	—	R							
Red oak	—	R	R	—							
Bur Oak	O	O	O	—							
Blue Beech	—	—	—	O							

Wildlife and Other Notes

Pictures:
100 - 0095
0096
Heard Western chorus frogs at intersection of Farso and railroad tracks.
Beside turnip field

Chatham Kent wind Farm - 1184

Wildlife Observation Form

NATURAL RESOURCE SOLUTIONS INC.

Site:	
Polygon:	P053-W4
UTM:	
Date:	April 5, 2011 **Time:** 2:36
Surveyor(s):	SAG, PWD
Weather:	1. Cloud 50, wind-1 temp 5, precip-none

Species Observed *Check for Wildlife Habitat that may be associated with an observation*

TY	Species	EV	Notes	#		TY	Species	EV	Notes	#
B	RTHA	SM								
H	Eastern Chorus Frog	SC								
H	Western Chorus Frog	VO								

Faunal Type Codes (TY)

B=Bird M=Mammal H=Herpetofauna L=Lepidoptera F=Fish D=Dragonfly or Damselfly

Evidence Codes (EV)

Breeding Birds

SH- Suitable Habitat
SM- Singing Male
T- Territory
A- Anxienty Behavior
D- Courtship Display
N- Nest Building
P- Pair
V- Visiting Nest
DD- Distraction Display
NE- Nest with Eggs
AE-Adult entering nest
NU- Used nest
FY- Fledged Young
FS- Food/Fecal Sac

Other Wildlife

OB- Observed
DP- Distinctive Parts
TK- Tracks
VO- Vocalization
HO- House/Den
FE- Feeding Evidence
CA- Carcass/Bones
FY- Eggs or young
SC- Scat
SI- Other Signs (Specify)

Wildlife Habitat Form

NATURAL RESOURCE SOLUTIONS INC.

Site:	
Polygon:	
UTM:	
Date:	**Time:**
Surveyor(s):	
Weather:	

Wildlife Habitat (Check all that apply AND record UTM / mark on map)

Habitats and Habitat Features are independent of wildlife observations

Habitat Type

- X Deciduous Forest
- ___ Mixed Forest
- ___ Coniferous Forest
- ___ Marsh
- ___ Swamp
- ___ Bog
- ___ Fen
- ___ Water (Shallow & Open)
- ___ Meadow
- ___ Tallgrass Prairie
- ___ Thicket
- ___ Savannah
- ___ Woodland
- ___ Valley (Describe Below)
- ___ Headwater Area (check for Seeps/Springs)

Habitat Features

Birds

- X Spring Flooded Field
- ___ Stick Nest (Raptors, Herons)
- ___ Snag (Raptors, Herons)
- ___ Tree Cavity Nest (Ducks)
- ___ Seep/Spring (Turkeys/Grouse)

Bats

- ___ Cave Entrance
- ___ Mine Shaft
- ___ Snag (>20cm DBH)

Mink/Otter/Fisher/Marten

- ___ Snag
- ___ Burrow
- ___ Den
- ___ Tree Cavity
- ___ Fallen Log

Deer/Moose

- ___ Seep/Spring
- ___ Mineral Lick

Snakes

- ___ Burrow
- ___ Fallen Rotting Log
- ___ Old Well
- ___ Rock Pile/Stone Wall
- ___ Organics Pile
- ___ Log Pile
- ___ Karst
- ___ Broken/Fissured Rock
- ___ Old Foundation
- ___ Old Bridge/Concrete Culvert

Amphibians and Turtles

- ___ Vernal Pool/Woodland Pond (Amphibian Breeding)
- ___ Sand (Turtle Nesting)
- ___ Fine/Sandy Gravel (Turtle Nesting)

Invertebrates

- ___ Crayfish Chimney

For every Habitat Type or Habitat Feature, record UTM below (for each occurrence) or mark on map

Habitat Feature:	UTM	Description

Describe Valley (depth, geomorphological traits):

Additional Details:

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	
Polygon:	FOD4-W1
UTM:	17T 0397696 4686008
Date: 21, April, 2011	Time: 10:45
Surveyor(s):	SAG, PWD
Weather:	CC-60%, temp-7, precip-none, w=2

Community Classification

Vegetation Type:	FODM 4-2 - Dry-fresh white Ash hardwood deciduous
Inclusion:	forest type
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb Bedrock	X Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll Upland	Bluff	Fen	X Forest
	Site	Cliff		Bog	Plantation

Cover		Open Water	Plant Form		
Open		Shallow Water	Plankton	Forb	Coniferous
Shrub		Surficial Dep	Submerged	Lichen	Mixed
X Treed		Bedrock	Floating-Lvd.	Bryophyte	
			Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy	2		Silver maple > white Ash, > White Elm
1	Canopy	3		Silver maple > white Ash > white Elm
2	Sub-canopy	5		Hawthorn, crab apple
3	Understorey	6		burdock, prickly ash, honeysuckle, river bank grape
4	Groundcover	7		garlic mustard, virginia water leaf

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	A	10 - 24	C	25 - 50	R	> 50
Snags	N	< 10	A	10 - 24	O	25 - 50	N	> 50
Deadfall/Logs	A	< 10	A	10 - 24	A	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young	X	Mid-age		Mature		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample	Species	Layer 1	2	3	4	Sample
Silver maple	A	A	O	O							
White Elm	O	A	A	-							
Black walnut	-	O	O	-							
White Ash	A	A	A	O							
Crabapple	-	A	A	N							
Red oak	O	O	-	-							
Shagbark	-	O	-	-							
Manitoba M	-	-	R	-							

Wildlife and Other Notes

Wildlife Observation Form

NATURAL RESOURCE SOLUTIONS INC.

Site:	
Polygon:	P064-W1
UTM:	17T 0397648 4686008
Date:	April 21, 2011 **Time:** 10:45
Surveyor(s):	SAG, PND
Weather:	CC - 60%, temp-7, precip-none, w=2

Species Observed *Check for Wildlife Habitat that may be associated with an observation*

TY	Species	EV	Notes	#		TY	Species	EV	Notes	#
B	Mockingbird	SM		1						
	Redwing BL	SM		2						
	Ruby Crowned Kinglet	SM		1						
	Flicker	SM		1						
	Chickadee	SM		2						
	Downy Woodpecker	SM		1						
	NOCA	SM		1						
	EAST	SM		1						
	Yellow rumped	SM		1						
↓	White tailed deer	TK		1						

Faunal Type Codes (TY)

B=Bird M=Mammal H=Herpetofauna L=Lepidoptera F=Fish D=Dragonfly or Damselfly

Evidence Codes (EV)

Breeding Birds

SH- Suitable Habitat
SM- Singing Male
T- Territory
A- Anxienty Behavior
D- Courtship Display
N- Nest Building
P- Pair
V- Visiting Nest
DD- Distraction Display
NE- Nest with Eggs
AE-Adult entering nest
NU- Used nest
FY- Fledged Young
FS- Food/Fecal Sac

Other Wildlife

OB- Observed
DP- Distinctive Parts
TK- Tracks
VO- Vocalization
HO- House/Den
FE- Feeding Evidence
CA- Carcass/Bones
FY- Eggs or young
SC- Scat
SI- Other Signs (Specify)

Wildlife Habitat Form

NATURAL RESOURCE SOLUTIONS INC.

Site:	
Polygon:	
UTM:	
Date:	**Time:**
Surveyor(s):	
Weather:	

Wildlife Habitat (Check all that apply AND record UTM / mark on map)

Habitats and Habitat Features are independent of wildlife observations

Habitat Type

- ✓ Deciduous Forest
- ___ Mixed Forest
- ___ Coniferous Forest
- ___ Marsh
- ___ Swamp
- ___ Bog
- ___ Fen
- ___ Water (Shallow & Open)
- ___ Meadow
- ___ Tallgrass Prairie
- ___ Thicket
- ___ Savannah
- ___ Woodland
- ___ Valley (Describe Below)
- ___ Headwater Area (check for Seeps/Springs)

Habitat Features

Birds

- ___ Spring Flooded Field
- ___ Stick Nest (Raptors, Herons)
- ✓ Snag (Raptors, Herons)
- ___ Tree Cavity Nest (Ducks)
- ___ Seep/Spring (Turkeys/Grouse)

Bats

- ___ Cave Entrance
- ___ Mine Shaft
- ✓ Snag (>20cm DBH)

Mink/Otter/Fisher/Marten

- ✓ Snag
- ___ Burrow
- ___ Den
- ___ Tree Cavity
- ✓ Fallen Log

Deer/Moose

- ___ Seep/Spring
- ___ Mineral Lick

Snakes

- ___ Burrow
- ✓ Fallen Rotting Log
- ___ Old Well
- ___ Rock Pile/Stone Wall
- ___ Organics Pile
- ___ Log Pile
- ___ Karst
- ___ Broken/Fissured Rock
- ___ Old Foundation
- ___ Old Bridge/Concrete Culvert

Amphibians and Turtles

- ___ Vernal Pool/Woodland Pond (Amphibian Breeding)
- ___ Sand (Turtle Nesting)
- ___ Fine/Sandy Gravel (Turtle Nesting)

Invertebrates

- ___ Crayfish Chimney

For every Habitat Type or Habitat Feature, record UTM below (for each occurrence) or mark on map

Habitat Feature:	UTM	Description

Describe Valley (depth, geomorphological traits):

Additional Details:

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description Page 1 of 4

Chatham Kent Wind Farm 1184

Site:	
Polygon:	P098 - W1
UTM:	
Date: April 5, 2011	Time: 9:21
Surveyor(s):	SAG PWD
Weather:	% Cloud: 100 wind: 2 precip: none temp: 5

Community Classification

Vegetation Type:	FOD7-1: Fresh moist white Elm lowland deciduous Forest Type
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Mtn	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
/ Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	X Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
X Treed	Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy	3	3	white ash = white Elm > bur oak > basswood
1	Canopy	4	4	shagbark hickory, black locust
2	Sub-canopy	5	4	Shagbark hickory
3	Understorey	6	2	grey dogwood
4	Groundcover	7	1	Riverbank Grape, wild strawberry, herb robert, elder, buckeye, queen anns lace, canada goldenrod, tall goldenrod, yellow avens, primrose, Avens sp

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	N	< 10	A	10 - 24	A	25 - 50	N	> 50
Snags	N	< 10	A	10 - 24	A	25 - 50	N	> 50
Deadfall/Logs	A	< 10	A	10 - 24	X	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age	Pioneer	X Young	Mid-age	Mature	Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description Page 2 of 4

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
white elm	A	A	A	–	
white Ash	A	A	A	–	
Basswood	R	–	–	–	
Shagbark	–	R	R	–	
Japanese Buttermut	–	–	–	O	

May have been hybrid →

Species	Layer 1	2	3	4	Sample

Wildlife and Other Notes

Contains stream

great horned owl seen perched on edge of woodlot, and hunting in adjacent field to the north east

Chatham Kent Wind Farm

Wildlife Observation Form

NATURAL RESOURCE SOLUTIONS INC.

Site:	
Polygon:	P098-W1
UTM:	
Date:	April 5, 2011 **Time:**
Surveyor(s):	
Weather:	

Species Observed *Check for Wildlife Habitat that may be associated with an observation*

TY	Species	EV	Notes	#		TY	Species	EV	Notes	#
M	White tailed deer	TK								
M	Eastern Coloniak	FE								
B	Sosp	SM								
B	AMRO	SM								
B	GC. KI.	SM								
B	RWBL	SM								
B	Great horned owl	OB								

Faunal Type Codes (TY)

B=Bird M=Mammal H=Herpetofauna L=Lepidoptera F=Fish D=Dragonfly or Damselfly

Evidence Codes (EV)

Breeding Birds

SH- Suitable Habitat
SM- Singing Male
T- Territory
A- Anxienty Behavior
D- Courtship Display
N- Nest Building
P- Pair
V- Visiting Nest
DD- Distraction Display
NE- Nest with Eggs
AE-Adult entering nest
NU- Used nest
FY- Fledged Young
FS- Food/Fecal Sac

Other Wildlife

OB- Observed
DP- Distinctive Parts
TK- Tracks
VO- Vocalization
HO- House/Den
FE- Feeding Evidence
CA- Carcass/Bones
FY- Eggs or young
SC- Scat
SI- Other Signs (Specify)

Wildlife Habitat Form

NATURAL RESOURCE SOLUTIONS INC.

Site:	
Polygon:	
UTM:	
Date:	**Time:**
Surveyor(s):	
Weather:	

Wildlife Habitat (Check all that apply AND record UTM / mark on map)

Habitats and Habitat Features are independent of wildlife observations

Habitat Type

- ___ Deciduous Forest
- ___ Mixed Forest
- ___ Coniferous Forest
- ___ Marsh
- ___ Swamp
- ___ Bog
- ___ Fen
- X Water (Shallow & Open)
- ___ Meadow
- ___ Tallgrass Prairie
- ___ Thicket
- ___ Savannah
- ___ Woodland
- ___ Valley (Describe Below)
- ___ Headwater Area (check for Seeps/Springs)

Habitat Features

Birds

- ___ Spring Flooded Field
- ___ Stick Nest (Raptors, Herons)
- X Snag (Raptors, Herons)
- X Tree Cavity Nest (Ducks)
- ___ Seep/Spring (Turkeys/Grouse)

Bats

- ___ Cave Entrance
- ___ Mine Shaft
- X Snag (>20cm DBH)

Mink/Otter/Fisher/Marten

- ___ Snag
- ___ Burrow
- ___ Den
- ___ Tree Cavity
- ___ Fallen Log

Deer/Moose

- ___ Seep/Spring
- ___ Mineral Lick

Snakes

- ___ Burrow
- X Fallen Rotting Log
- ___ Old Well
- ___ Rock Pile/Stone Wall
- ___ Organics Pile
- X Log Pile
- ___ Karst
- ___ Broken/Fissured Rock
- ___ Old Foundation
- ___ Old Bridge/Concrete Culvert

Amphibians and Turtles

- ___ Vernal Pool/Woodland Pond (Amphibian Breeding)
- ___ Sand (Turtle Nesting)
- ___ Fine/Sandy Gravel (Turtle Nesting)

Invertebrates

- ___ Crayfish Chimney

For every Habitat Type or Habitat Feature, record UTM below (for each occurrence) or mark on map

Habitat Feature:	UTM	Description
Snag		lots of snags over 20cm
Tree Cavity Nest		small, not wood duck

Describe Valley (depth, geomorphological traits):

Additional Details:

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Chatham Kent Wind Farm

Site:	
Polygon:	P111-W1
UTM:	
Date:	Apr. 14, 2011 **Time:** 12:38
Surveyor(s):	SAG, PWD
Weather:	Temp-14, %cloud-100, precip-none wind-5

Community Classification

Vegetation Type:		FOD5-7-Fresh dry sugar maple deciduous forest type
	Inclusion:	
	Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb. Bedrock	X Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	X Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
X Treed	X Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy	1	4	Black Cherry, Sugar maple, Basswood, American Beech, Siberian elm, Ppt or Sp.
1	Canopy	2	4	White Ash, Sugar maple, Beech, black Cherry
2	Sub-canopy	4	3	Basswood, Sugar maple, American beech, White Elm
3	Understorey	6	2	Aster sp., Red Ash, basswood, Sugar maple, Black cherry, Poplar sp.
4	Groundcover	7	1	Violets, garlic mustard

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A < 10	A 10 - 24	A 25 - 50	O > 50
Snags	R < 10	A 10 - 24	A 25 - 50	R > 50
Deadfall/Logs	A < 10	A 10 - 24	A 25 - 50	N > 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young	X	Mid-age		Mature		Old Growth

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	**Time:**
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Sugar Maple	D	A	D	–	
Black Cherry	O	O	O	–	
American Beech	O	O	R	–	
White Ash	O	O	R	–	
Red Ash	–	–	R	–	
Basswood	R	O	R	–	
Shagbark	O	R	–	–	
bitternut	O	R	–	–	
White elm	–	–	R	–	
Poplar sp.	R	–	–	–	

Species	Layer 1	2	3	4	Sample

Wildlife and Other Notes

Chatham Kent Wind Farm

Wildlife Observation Form

NATURAL RESOURCE SOLUTIONS INC.

Site:	
Polygon:	P111 - W1
UTM:	
Date:	April 4 2011 Time: 12:38
Surveyor(s):	SAG, EWD
Weather:	Temp - 14 V.cloud - 100 precip - light rain wind - 5

Species Observed — *Check for Wildlife Habitat that may be associated with an observation*

TY	Species	EV	Notes	#		TY	Species	EV	Notes	#
B	AMRO	SM		2						
B	BCCH	SM		10						
A	Spring Peeper	VO		10						
B	RWBL	SM		20						
B	COGR	SM		1						
B	WBNU	T		1						
B	NBSA	BS								

Faunal Type Codes (TY)

B=Bird M=Mammal H=Herpetofauna L=Lepidoptera F=Fish D=Dragonfly or Damselfly

Evidence Codes (EV)

Breeding Birds

SH- Suitable Habitat
SM- Singing Male
T- Territory
A- Anxienty Behavior
D- Courtship Display
N- Nest Building
P- Pair
V- Visiting Nest
DD- Distraction Display
NE- Nest with Eggs
AE-Adult entering nest
NU- Used nest
FY- Fledged Young
FS- Food/Fecal Sac

Other Wildlife

OB- Observed
DP- Distinctive Parts
TK- Tracks
VO- Vocalization
HO- House/Den
FE- Feeding Evidence
CA- Carcass/Bones
FY- Eggs or young
SC- Scat
SI- Other Signs (Specify)

Wildlife Habitat Form

NATURAL RESOURCE SOLUTIONS INC.

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Wildlife Habitat (Check all that apply AND record UTM / mark on map)

Habitats and Habitat Features are independent of wildlife observations

Habitat Type

- [X] Deciduous Forest
- [ ] Mixed Forest
- [ ] Coniferous Forest
- [ ] Marsh
- [ ] Swamp
- [ ] Bog
- [ ] Fen
- [X] Water (Shallow & Open)
- [ ] Meadow
- [ ] Tallgrass Prairie
- [ ] Thicket
- [ ] Savannah
- [ ] Woodland
- [ ] Valley (Describe Below)
- [ ] Headwater Area (check for Seeps/Springs)

Habitat Features

Birds

- [ ] Spring Flooded Field
- [ ] Stick Nest (Raptors, Herons)
- [ ] Snag (Raptors, Herons)
- [X] Tree Cavity Nest (Ducks)
- [ ] Seep/Spring (Turkeys/Grouse)

Bats

- [ ] Cave Entrance
- [ ] Mine Shaft
- [✓] Snag (>20cm DBH)

Mink/Otter/Fisher/Marten

- [ ] Snag
- [ ] Burrow
- [ ] Den
- [ ] Tree Cavity
- [ ] Fallen Log

Deer/Moose

- [ ] Seep/Spring
- [ ] Mineral Lick

Snakes

- [ ] Burrow
- [X] Fallen Rotting Log
- [ ] Old Well
- [X] Rock Pile/Stone Wall
- [ ] Organics Pile
- [X] Log Pile
- [ ] Karst
- [ ] Broken/Fissured Rock
- [ ] Old Foundation
- [ ] Old Bridge/Concrete Culvert

Amphibians and Turtles

- [ ] Vernal Pool/Woodland Pond (Amphibian Breeding)
- [ ] Sand (Turtle Nesting)
- [ ] Fine/Sandy Gravel (Turtle Nesting)

Invertebrates

- [ ] Crayfish Chimney

For every Habitat Type or Habitat Feature, record UTM below (for each occurrence) or mark on map

Habitat Feature:	UTM	Description
tree cavity Nest		
Snag		many decomposited snags
Fallen rottings		wood
Rockpile		concrete
log pile		cut down wood logs

Describe Valley (depth, geomorphological traits):

Additional Details: Rockpile slopes (rubble)

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	P111-W2
Polygon:	
UTM:	
Date:	April 5 2011 — Time: 11:00am
Surveyor(s):	KSJ, KEB
Weather:	2°C, Wind S(N), CC 100%, No precip

Community Classification

	Vegetation Type:	Silver Maple Mineral Deciduous Swamp (SWDM1-2)
	Inclusion:	
	Complex:	

Polygon Description

System		Substrate		Topo Feature			Community			
X	Terrestrial		Organic		Lacustrine		Talus		Lake		Barren
	Wetland		Mineral Soil		Riverine		Crevice/Cave		Pond		Meadow
	Aquatic		Parent Min	X	Bottomland		Alvar		River		Prairie
			Acidic Bedrock		Terrace		Rockland		Stream		Thicket
History			Basic Bedrock		Valley Slope		Beach/Bar		Marsh		Savannah
X	Natural		Carb. Bedrock		Tableland		Sand Dune	X	Swamp	X	Woodland
	Cultural				Roll. Upland		Bluff		Fen		Forest
		Site			Cliff				Bog		Plantation

Cover		Site		Plant Form					
	Open		Open Water		Plankton		Forb		Coniferous
	Shrub	X	Surficial Dep		Submerged		Lichen		Mixed
X	Treed		Bedrock		Floating-Lvd		Bryophyte		
					Graminoid	X	Deciduous		

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy			
1	Canopy	1	4	Silver Maple > Black Ash > Cottonwood
2	Sub-canopy	2	3	Bitternut Hickory > Am. Elm > Cherry sp.
3	Understorey	3	2	Am. Elm > Black Ash > Virginia Creeper
4	Groundcover	5	1	Garlic Mustard > Beggars Ticks

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	O	< 10	O	10 - 24	A	25 - 50	O	> 50
Snags	R	< 10	R	10 - 24	O	25 - 50	R	> 50
Deadfall/Logs	R	< 10	A	10 - 24	O	25 - 50	R	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young		Mid-age	X	Mature		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	P111-W2
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample	Species	Layer 1	2	3	4	Sample
Silver Maple	A										
Cottonwood	O										
Am. Elm	O	O	O								
Black Ash	O		O								
Burr Oak	R										
Bitternut Hickory	O	O									
Cherry sp.		R									
Virginia Creeper			O								
Velvetleaf				R							
Garlic Mustard				O							
Beggars Ticks				O							
Tall Goldenrod				O							

Wildlife and Other Notes

Wildlife Observation Form

NATURAL RESOURCE SOLUTIONS INC.

Site:	P111-W2
Polygon:	
UTM:	
Date:	Apr 5, 2011 **Time:** 11:00am
Surveyor(s):	KSJ KEB
Weather:	2°C, Wind S(N), CC 100%, No precip

Species Observed *Check for Wildlife Habitat that may be associated with an observation*

TY	Species	EV	Notes	#		TY	Species	EV	Notes	#
B	Song Sparrow	SM		2						
B	Am. Robin	SH		4						
B	RW Blackbird	SH		15						
B	N. Cardinal	SH		1						
B	Wild Turkey	SH		5+						
M	Deer	TK		5+						
M	Rabbit	SC		1						
M	Coyote	SC		1						

Faunal Type Codes (TY)

B=Bird M=Mammal H=Herpetofauna L=Lepidoptera F=Fish D=Dragonfly or Damselfly

Evidence Codes (EV)

Breeding Birds

SH- Suitable Habitat
SM- Singing Male
T- Territory
A- Anxienty Behavior
D- Courtship Display
N- Nest Building
P- Pair
V- Visiting Nest
DD- Distraction Display
NE- Nest with Eggs
AE-Adult entering nest
NU- Used nest
FY- Fledged Young
FS- Food/Fecal Sac

Other Wildlife

OB- Observed
DP- Distinctive Parts
TK- Tracks
VO- Vocalization
HO- House/Den
FE- Feeding Evidence
CA- Carcass/Bones
FY- Eggs or young
SC- Scat
SI- Other Signs (Specify)

Wildlife Habitat Form

NATURAL RESOURCE SOLUTIONS INC.

Site:	P111-W2
Polygon:	
UTM:	
Date:	**Time:**
Surveyor(s):	
Weather:	

Wildlife Habitat (Check all that apply AND record UTM / mark on map)

Habitats and Habitat Features are independent of wildlife observations

Habitat Type

- ✓ Deciduous Forest
- ___ Mixed Forest
- ___ Coniferous Forest
- ___ Marsh
- ✓ Swamp
- ___ Bog
- ___ Fen
- ___ Water (Shallow & Open)
- ___ Meadow
- ___ Tallgrass Prairie
- ___ Thicket
- ___ Savannah
- ___ Woodland
- ___ Valley (Describe Below)
- ___ Headwater Area (check for Seeps/Springs)

Habitat Features

Birds

- ✓ Spring Flooded Field
- ___ Stick Nest (Raptors, Herons)
- ✓ Snag (Raptors, Herons)
- ___ Tree Cavity Nest (Ducks)
- ___ Seep/Spring (Turkeys/Grouse)

Bats

- ___ Cave Entrance
- ___ Mine Shaft
- ✓ Snag (>20cm DBH)

Mink/Otter/Fisher/Marten

- ✓ Snag
- ___ Burrow
- ___ Den
- ✓ Tree Cavity
- ✓ Fallen Log

Deer/Moose

- ___ Seep/Spring
- ___ Mineral Lick

Snakes

- ___ Burrow
- ✓ Fallen Rotting Log
- ___ Old Well
- ___ Rock Pile/Stone Wall
- ✓ Organics Pile
- ✓ Log Pile
- ___ Karst
- ___ Broken/Fissured Rock
- ___ Old Foundation
- ___ Old Bridge/Concrete Culvert

Amphibians and Turtles

- ___ Vernal Pool/Woodland Pond (Amphibian Breeding)
- ___ Sand (Turtle Nesting)
- ___ Fine/Sandy Gravel (Turtle Nesting)

Invertebrates

- ___ Crayfish Chimney

For every Habitat Type or Habitat Feature, record UTM below (for each occurrence) or mark on map

Habitat Feature:	UTM	Description
	(all within small woodlot)	

Describe Valley (depth, geomorphological traits):

Additional Details:

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page __ of __

Site:	P140-W2
Polygon:	
UTM:	17T 0421536 4688223
Date:	April 6/2011 Time: 9:26
Surveyor(s):	N&M, K&B
Weather:	4°C, 100% CC, drizzle, SW2

Community Classification

Vegetation Type:	Fresh-Moist Carr/Swamp (FODM10) Forest
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	✓ Organic	Lacustrine	Talus	Lake	Barren
Wetland	Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
✓ Natural	Carb Bedrock	✓ Tableland	Sand Dune	Swamp	✓ Woodland
Cultural		Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
✓ Treed	✓ Surficial Dep.	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	✓ Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy			
1	Canopy	2	3	Green Ash > Silver Maple > Shagbark Hickory
2	Sub-canopy	3	3	Green Ash > Silver Maple > White Oak
3	Understorey	4	2	Red Raspberry > Buttonbush > Prickly Ash
4	Groundcover	5	1	Red Osier Sp. > Field Strawberry > Moss sp.

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	< 10	10 - 24	25 - 50	> 50
Snags	< 10	(10 - 24)	25 - 50	> 50
Deadfall/Logs	< 10	10 - 24	25 - 50	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age	Pioneer	(Young)	Mid-age	Mature	Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page ___of___

PLANT SPECIES LIST

Site:	P140-W2
Polygon:	
UTM:	
Date:	April 6/2011 Time: 9:26
Surveyor(s):	N&M, K&B
Weather:	4°C, 100% CC, Drizzle, SW2

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Black Locust	—	—	O	O	
Am. Beech	R	R	D	O	
Cottonwood	R	R	R	R	
Hawthorn	—	—	R	R	
Shagbark Hickory	O	O	O	O	
Red Osier Dogwood	—	—	O	S	
Green Ash	A	A	A	A	
White Oak	O	O	O	O	
Tulip Tree	R	R	R	R	
~~Red Pine~~ Red	—	—	R	R	
White Pine	R	R	R	R	
Riverbank Grape	—	—	O	O	
Prickly Ash	—	—	O	O	
Field Strawberry	—	—	—	A	
Buttonbush	—	—	O	O	
Moss sp.	—	—	—	O	
Hepatica	—	—	—	O	
Sedge Cultivar	—	—	—	R	
Red Raspberry	—	—	D	O	
Goldenrod sp.	—	—	—	R	
Red Oak	R	R	R	R	

Species	Layer 1	2	3	4	Sample

Wildlife and Other Notes

Pics. #93-97, from Nathan's

Wildlife Observation Form

Page 1 of 2

NATURAL RESOURCE SOLUTIONS INC.

Site:	P140 W2
Polygon:	
UTM:	17T 0421536 4688223
Date:	April 6/11 **Time:** 9:30
Surveyor(s):	NGM, KGB
Weather:	3°C, Rain, OC 100%, Wind 5a

Species Observed *Check for Wildlife Habitat that may be associated with an observation*

TY	Species	EV	Notes	#		TY	Species	EV	Notes	#
B	Song Sparrow			1						
B	Am. Robin			1						
B	Red-tailed Hawk			1						
B	Downy Woodpecker			1						
B	Red-bellied Woodpecker			1						
B	Brown creeper			1						
B	Golden-crowned Kinglet			1						
M	Raccoon									

Faunal Type Codes (TY)

B=Bird M=Mammal H=Herpetofauna L=Lepidoptera F=Fish D=Dragonfly or Damselfly

Evidence Codes (EV)

Breeding Birds

SH- Suitable Habitat
SM- Singing Male
T- Territory
A- Anxienty Behavior
D- Courtship Display
N- Nest Building
P- Pair
V- Visiting Nest
DD- Distraction Display
NE- Nest with Eggs
AE-Adult entering nest
NU- Used nest
FY- Fledged Young
FS- Food/Fecal Sac

Other Wildlife

OB- Observed
DP- Distinctive Parts
TK- Tracks
VO- Vocalization
HO- House/Den
FE- Feeding Evidence
CA- Carcass/Bones
FY- Eggs or young
SC- Scat
SI- Other Signs (Specify)

Wildlife Habitat Form

Page __ of __

NATURAL RESOURCE SOLUTIONS INC.

Site:	
Polygon:	
UTM:	
Date:	**Time:**
Surveyor(s):	
Weather:	

Wildlife Habitat (Check all that apply AND record UTM / mark on map)

Habitats and Habitat Features are independent of wildlife observations

Habitat Type

- ✓ Deciduous Forest
- ___ Mixed Forest
- ___ Coniferous Forest
- ___ Marsh
- ___ Swamp
- ___ Bog
- ___ Fen
- ___ Water (Shallow & Open)
- ___ Meadow
- ___ Tallgrass Prairie
- ___ Thicket
- ___ Savannah
- ___ Woodland
- ___ Valley (Describe Below)
- ___ Headwater Area (check for Seeps/Springs)

Habitat Features

Birds
- ___ Spring Flooded Field
- ___ Stick Nest (Raptors, Herons)
- ___ Snag (Raptors, Herons)
- ___ Tree Cavity Nest (Ducks)
- ___ Seep/Spring (Turkeys/Grouse)

Bats
- ___ Cave Entrance
- ___ Mine Shaft
- ___ Snag (>20cm DBH)

Mink/Otter/Fisher/Marten
- ___ Snag
- ___ Burrow
- ___ Den
- ___ Tree Cavity
- ___ Fallen Log

Deer/Moose
- ___ Seep/Spring
- ___ Mineral Lick

Snakes
- ___ Burrow
- ___ Fallen Rotting Log
- ___ Old Well
- ___ Rock Pile/Stone Wall
- ___ Organics Pile
- ___ Log Pile
- ___ Karst
- ___ Broken/Fissured Rock
- ___ Old Foundation
- ___ Old Bridge/Concrete Culvert

Amphibians and Turtles
- ___ Vernal Pool/Woodland Pond (Amphibian Breeding)
- ___ Sand (Turtle Nesting)
- ___ Fine/Sandy Gravel (Turtle Nesting)

Invertebrates
- ___ Crayfish Chimney

For every Habitat Type or Habitat Feature, record UTM below (for each occurrence) or mark on map

Habitat Feature:	UTM	Description

Describe Valley (depth, geomorphological traits):

Additional Details:

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page __ of __

Site:	P156-W1
Polygon:	
UTM:	17T 0417042 4693590
Date:	April 7/2011 — Time: 9:03
Surveyor(s):	N&M, KGB
Weather:	2°C,

Community Classification

Vegetation Type:	FOD7-10 Fresh-Moist Carolinian Dec. Forest
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	✓ Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
✓ Natural	Carb Bedrock	✓ Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	✓ Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	✓ Shallow Water	Submerged	Lichen	Mixed
Treed	✓ Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	✓ Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy			
1	Canopy	2	3	Shagbark Hickory > Green Ash > Tulip Tree
2	Sub-canopy	3	3	Shag Hick > Silver Maple > Tulip Tree
3	Understorey	4	2	S. Hickory > Silver Maple > R.O. Dogwood
4	Groundcover	5	1	R.B. grape > C. Horsetail > Moss sp.

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	< 10	10 - 24	25 - 50	> 50
Snags	< 10	10 - 24	25 - 50	> 50
Deadfall/Logs	< 10	10 - 24	25 - 50	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age	Pioneer	Young	Mid-age	Mature	Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page ___of___

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample	Species	Layer 1	2	3	4	Sample
Red Cedar			R	R							
S. Hop-Maple	O	O	O	O							
Shag. Hickory	D	D	O	O							
Green Ash	D	D	O	O							
Tulip Tree	A	A	A	A							
Poison Ivy			O	O							
Goldenrod sp.				R							
Pagoda Dogwood			O	O							
Basswood		O	O	O							
Hawthorn			R	R							
Am. Beech	R	R	R	R							
Moss sp.				D							
Red Osier Dogwood			O	O							
C. Horsetail				A							
Sugar Maple	O	O	O	O							
[illegible] grape				O							
Riverbank grape				O							

Wildlife and Other Notes

Wildlife Observation Form

Page __ of __

NATURAL RESOURCE SOLUTIONS INC.

Site:	P154 W1
Polygon:	
UTM:	17T 0[illegible]
Date:	April 7/21 **Time:** [illegible]
Surveyor(s):	NW & M, RGB
Weather:	1-5 C Partial, Brz, wind SE, 5 C

Species Observed *Check for Wildlife Habitat that may be associated with an observation*

TY	Species	EV	Notes	#		TY	Species	EV	Notes	#
	Golden-crowned Kinglet									
	Am. Robin									
	Mallard									
	Red-winged Blackbird									
	Am. Tree Sparrow									
	Blue Jay									
	Song Sparrow									
	Red-tailed Hawk									
	Pine Siskin									
	Yellow-rumped Warbler									
	Brown Creeper									
	Black-capped Chickadee									

Faunal Type Codes (TY)

B=Bird M=Mammal H=Herpetofauna L=Lepidoptera F=Fish D=Dragonfly or Damselfly

Evidence Codes (EV)

Breeding Birds

SH- Suitable Habitat
SM- Singing Male
T- Territory
A- Anxienty Behavior
D- Courtship Display
N- Nest Building
P- Pair
V- Visiting Nest
DD- Distraction Display
NE- Nest with Eggs
AE-Adult entering nest
NU- Used nest
FY- Fledged Young
FS- Food/Fecal Sac

Other Wildlife

OB- Observed
DP- Distinctive Parts
TK- Tracks
VO- Vocalization
HO- House/Den
FE- Feeding Evidence
CA- Carcass/Bones
FY- Eggs or young
SC- Scat
SI- Other Signs (Specify)

Wildlife Habitat Form

Page __ of __

NATURAL RESOURCE SOLUTIONS INC.

Site:	
Polygon:	
UTM:	
Date:	**Time:**
Surveyor(s):	
Weather:	

Wildlife Habitat (Check all that apply AND record UTM / mark on map)

Habitats and Habitat Features are independent of wildlife observations

Habitat Type

- ✓ Deciduous Forest
- ___ Mixed Forest
- ___ Coniferous Forest
- ___ Marsh
- ___ Swamp
- ___ Bog
- ___ Fen
- ___ Water (Shallow & Open)
- ___ Meadow
- ___ Tallgrass Prairie
- ___ Thicket
- ___ Savannah
- ___ Woodland
- ___ Valley (Describe Below)
- ___ Headwater Area (check for Seeps/Springs)

Habitat Features

Birds
- ___ Spring Flooded Field
- ___ Stick Nest (Raptors, Herons)
- ___ Snag (Raptors, Herons)
- ___ Tree Cavity Nest (Ducks)
- ___ Seep/Spring (Turkeys/Grouse)

Bats
- ___ Cave Entrance
- ___ Mine Shaft
- ___ Snag (>20cm DBH)

Mink/Otter/Fisher/Marten
- ___ Snag
- ___ Burrow
- ___ Den
- ___ Tree Cavity
- ___ Fallen Log

Deer/Moose
- ___ Seep/Spring
- ___ Mineral Lick

Snakes
- ___ Burrow
- ___ Fallen Rotting Log
- ___ Old Well
- ___ Rock Pile/Stone Wall
- ___ Organics Pile
- ___ Log Pile
- ___ Karst
- ___ Broken/Fissured Rock
- ___ Old Foundation
- ___ Old Bridge/Concrete Culvert

Amphibians and Turtles
- ___ Vernal Pool/Woodland Pond (Amphibian Breeding)
- ___ Sand (Turtle Nesting)
- ___ Fine/Sandy Gravel (Turtle Nesting)

Invertebrates
- ___ Crayfish Chimney

For every Habitat Type or Habitat Feature, record UTM below (for each occurrence) or mark on map

Habitat Feature:	UTM	Description

Describe Valley (depth, geomorphological traits):

Additional Details:

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Project: Chatham Kent Wind Farm 1184

Site:	
Polygon:	P162 - W1
UTM:	
Date: April 5, 2011	Time: 11 37
Surveyor(s):	SAG PWD
Weather:	temp-4 / cloud-100 precip none wind-4

Community Classification

Vegetation Type:	FOOS-2: Dry Fresh Sugar maple - Beech deciduous forest type
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Mtn.	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb. Bedrock	X Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	X Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
X Treed	Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy	1	4	Sugar maple > Am beech > White Ash > Bur Oak
1	Canopy	2	4	Sugar maple, Bur oak, Beech, Black Cherry
2	Sub-canopy	3	3	Sugar maple, beech, Ironwood, Black Cherry
3	Understorey	6	3	Am. Beech, Sugar maple, black cherry, bitternut H.
4	Groundcover	7	1	Wild Leek, running strawberry, [illegible] American Elderberry, Sugar maple

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A < 10	A 10 - 24	A 25 - 50	A > 50
Snags	N < 10	A 10 - 24	A 25 - 50	O > 50
Deadfall/Logs	A < 10	A 10 - 24	A 25 - 50	O > 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young		Mid-age	X Mature	Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample	Species	Layer 1	2	3	4	Sample
Sugar maple	D	D	A	A							
Ironwood	O	O	O	—							
Red oak	O	—	—								
White oak	O	O	—								
Bur Oak	A	A	—								
Sycamore	O	O	—								
Am. Beech	A	A	A	A							
Bitternut H.	O	O	—	O							
Shagbark Hickory	O	O	O	—							
White Ash	A	A	—	A							
Basswood	A	O	O	O							
Black Cherry	R	R	A	A							
Red maple	R	—	—	R							
Slippery Elm	—	R	—								
Balsam Fir	—	—	—	O							
Black Ash											
Black Ash	A	—	A	—							
Blue Beech	—	—	O	—							

Wildlife and Other Notes

pictures 100 - 0093
100 - 0094

- Located in CH Wilson Conservation area

Chatham Kent Wind Farm 1184

Wildlife Observation Form

Page 3 of 4

NATURAL RESOURCE SOLUTIONS INC.

Site:	
Polygon:	PH2-W1
UTM:	
Date:	April 5, 2011 **Time:**
Surveyor(s):	BAR, PWD
Weather:	Temp-4, %Cloud 80, wind-3

Species Observed *Check for Wildlife Habitat that may be associated with an observation*

TY	Species	EV	Notes	#		TY	Species	EV	Notes	#
B	BCKI	SM		5						
B	VISSA	SU		1						
B	AMRO	SM		4						
B	RUBL	SM		20						
M	Eastern cottontail	TK		—						
M	Red Squirrel	HO		—						
B	Winter Wren	SM		1						
B	blue & creeper	FS		1						
B	Gr-Cheeked Thr	SM		2						
H	Chorus Frog	VO		10						

Faunal Type Codes (TY)

B=Bird M=Mammal H=Herpetofauna L=Lepidoptera F=Fish D=Dragonfly or Damselfly

Evidence Codes (EV)

Breeding Birds

SH- Suitable Habitat
SM- Singing Male
T- Territory
A- Anxienty Behavior
D- Courtship Display
N- Nest Building
P- Pair
V- Visiting Nest
DD- Distraction Display
NE- Nest with Eggs
AE-Adult entering nest
NU- Used nest
FY- Fledged Young
FS- Food/Fecal Sac

Other Wildlife

OB- Observed
DP- Distinctive Parts
TK- Tracks
VO- Vocalization
HO- House/Den
FE- Feeding Evidence
CA- Carcass/Bones
FY- Eggs or young
SC- Scat
SI- Other Signs (Specify)

Wildlife Habitat Form

Page 4 of 4

NATURAL RESOURCE SOLUTIONS INC.

Site:	
Polygon:	
UTM:	
Date:	**Time:**
Surveyor(s):	
Weather:	

Wildlife Habitat (Check all that apply AND record UTM / mark on map)

Habitats and Habitat Features are independent of wildlife observations

Habitat Type

- [X] Deciduous Forest
- [ ] Mixed Forest
- [ ] Coniferous Forest
- [ ] Marsh
- [ ] Swamp
- [ ] Bog
- [ ] Fen
- [ ] Water (Shallow & Open)
- [ ] Meadow
- [ ] Tallgrass Prairie
- [ ] Thicket
- [ ] Savannah
- [ ] Woodland
- [ ] Valley (Describe Below)
- [ ] Headwater Area (check for Seeps/Springs)

Habitat Features

Birds

- [ ] Spring Flooded Field
- [ ] Stick Nest (Raptors, Herons)
- [X] Snag (Raptors, Herons)
- [X] Tree Cavity Nest (Ducks)
- [ ] Seep/Spring (Turkeys/Grouse)

Bats

- [ ] Cave Entrance
- [ ] Mine Shaft
- [X] Snag (>20cm DBH)

Mink/Otter/Fisher/Marten

- [ ] Snag
- [ ] Burrow
- [ ] Den
- [ ] Tree Cavity
- [ ] Fallen Log

Deer/Moose

- [ ] Seep/Spring
- [ ] Mineral Lick

Snakes

- [ ] Burrow
- [X] Fallen Rotting Log
- [ ] Old Well
- [X] Rock Pile/Stone Wall
- [ ] Organics Pile
- [X] Log Pile
- [ ] Karst
- [ ] Broken/Fissured Rock
- [ ] Old Foundation
- [ ] Old Bridge/Concrete Culvert

Amphibians and Turtles

- [X] Vernal Pool/Woodland Pond (Amphibian Breeding)
- [ ] Sand (Turtle Nesting)
- [ ] Fine/Sandy Gravel (Turtle Nesting)

Invertebrates

- [ ] Crayfish Chimney

For every Habitat Type or Habitat Feature, record UTM below (for each occurrence) or mark on map

Habitat Feature:	UTM	Description
Tree Cavity Nest		Right size for Redbellied or Red-headed Woodpecker to
Fallen log		lots of large & rotten logs
Vernal Pool		Shallow standing water,
Rock pile		Bunch of Railroad ties
Log pile		deadfall very dense in some places

Describe Valley (depth, geomorphological traits):

Additional Details:

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent
Polygon:	P162 - W2
UTM:	17T 0409261 4691631
Date:	June 3, 2011 — Time: 14:10
Surveyor(s):	PWD
Weather:	Sunny, 22°C, Wind 3/270°, 10% c.c.

Community Classification

Vegetation Type:	Dry-Fresh Sugar Maple - Ironwood Deciduous Forest Ecosite (FOD5-5)
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min.	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb. Bedrock	X Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll Upland	Bluff	Fen	X Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
X Treed	X Surficial Dep.	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy			
1	Canopy	1	3	Sugar Maple = White Ash > American Elm > Basswood.
2	Sub-canopy	2	3	Sugar Maple = White Ash > Silver Maple = Basswood
3	Understorey	4	2	White Ash > Spicebush > Grey Dogwood > Red Currant
4	Groundcover	7	4	Virginia Creeper >> Clearweed > Poison Ivy > White Ash

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	A	10 - 24	A	25 - 50	O	> 50
Snags	O	< 10	O	10 - 24	O	25 - 50	R	> 50
Deadfall/Logs	A	< 10	O	10 - 24	R	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age	Pioneer	Young	Mid-age	X Mature	Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page 1 of 1

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Sugar Maple	D	A	O		
American Elm	A	O	O		
White Ash	D	A	A	A	
Nanny berry			O		
Spicebush			A		
Common Buckthorn			O		
Euro. Highbush Cranberry			O		
Basswood	O	A	A		
Grey Dogwood			O		
Red Raspberry			O		
Red Currant			O		
Silver Maple	O	O	O		
Black Cherry	R	O	O		
Tulip Tree	R	R			
Prickly Ash			O		
Hawthorn sp.			O		
E. Cottonwood		O	O		
Shagbark Hickory		R			

Species	Layer 1	2	3	4	Sample
Virginia Creeper				D	
Clearweed				A	
Jack-in-the-Pulpit				O	
Baneberry sp.				O	
Yellow Avens				O	
Purple-stemmed Aster				O	
Poison Ivy				A	
Spinulose Wood Fern				R	
Juliz Solomon's Seal				O	
Philadelphus Mockorange				R	
Garlic Mustard				R	
Common Blue Violet				R	
Mayapple				O	

Wildlife and Other Notes

E. Cottontail
American Robin - @ young
Catbird
Tiger Swallowtail

Large vernal pool 17T 0409248 4691566
appx. 75m x 50m
- large snags in wet depression
- only surveyed front 100m (access)

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	P166-W1
Polygon:	
UTM:	17T 0425941 4693186
Date:	April 5/2011 Time: 1:50-2:23
Surveyor(s):	N&M, K&B
Weather:	5°C, 80% CC, N@6

Community Classification

Vegetation Type:	Dry-Fresh Sugar Maple (FOD5) Deciduous Forest
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	✓ Organic	Lacustrine	Talus	Lake	Barren
Wetland	Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min.	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
✓ Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural		✓ Roll. Upland	Bluff	Fen	✓ Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
✓ Treed	✓ Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	✓ Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy			
1	Canopy	2	3	Sugar Maple > Silver Maple > Am. Beech
2	Sub-canopy	3	1	Sugar Maple > Silver Maple > Am. Beech
3	Understorey	4	1	Sugar Maple > Riverbank grape > Horsetail
4	Groundcover	5	1	Leaves > Moss

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	< 10	10 - 24	25 - 50	> 50
Snags	(< 10)	10 - 24	25 - 50	> 50
Deadfall/Logs	(< 10)	10 - 24	25 - 50	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young	X	Mid-age		Mature		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	P166-W1
Polygon:	
UTM:	
Date:	April 5/2011 Time: 1:50pm - 2:23
Surveyor(s):	N&M, K&B
Weather:	5°C, 80% CC, N@6

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample	Species	Layer 1	2	3	4	Sample
Black Cherry	R	R	O	O							
Basswood	R	R	R	R							
Sugar Maple	D	D	D	D							
Sumac	R	–	R	R							
Riverbank Grape	–	–	R	R							
Red Raspberry	–	–	–	R							
Moss sp.	–	–	–	O							
Hepatica ?	–	–	–	R							
American Beech	R	R	R	R							
Poison Ivy	–	–	–	R							
Horsetail				A							
Ash sp.	R	R	R	R							
White Oak	R	R	R	R							
Ostrich Fern	–	–	–	R							
Blue Beech	–	R	R	R							
Serviceberry	–	–	R	R							
Cottonwood	R	R	R	R							
Buttonbush	–	–	–	O							
Silver Maple	O	O	O	O							
Tuliptree	R	R	R	R							
Shagbark Hickory	R	R	R	R							

Wildlife and Other Notes

Wildlife Observation Form

Page __ of __

NATURAL RESOURCE SOLUTIONS INC.

Site:	P166 W2
Polygon:	
UTM:	17T 0425941 4693116
Date:	April 5/11 **Time:** 13:50 – 14:23
Surveyor(s):	NGM KGB
Weather:	4°C, wind 6 N, C.C 50

Species Observed *Check for Wildlife Habitat that may be associated with an observation*

TY	Species	EV	Notes	#		TY	Species	EV	Notes	#
B	Bonaparte's Gull		Migrant	7						
B	Red-bellied Woodpecker	SH		1						
B	Eastern Kingbird			1						
B	Black-capped Chickadee			5						
B	Wood Duck	SH		4						
B	Gold-crowned Kinglet			3						

Faunal Type Codes (TY)

B=Bird M=Mammal H=Herpetofauna L=Lepidoptera F=Fish D=Dragonfly or Damselfly

Evidence Codes (EV)

Breeding Birds

SH- Suitable Habitat
SM- Singing Male
T- Territory
A- Anxienty Behavior
D- Courtship Display
N- Nest Building
P- Pair
V- Visiting Nest
DD- Distraction Display
NE- Nest with Eggs
AE-Adult entering nest
NU- Used nest
FY- Fledged Young
FS- Food/Fecal Sac

Other Wildlife

OB- Observed
DP- Distinctive Parts
TK- Tracks
VO- Vocalization
HO- House/Den
FE- Feeding Evidence
CA- Carcass/Bones
FY- Eggs or young
SC- Scat
SI- Other Signs (Specify)

Wildlife Habitat Form

Page __ of __

NATURAL RESOURCE SOLUTIONS INC.

Site:	
Polygon:	
UTM:	
Date:	**Time:**
Surveyor(s):	
Weather:	

Wildlife Habitat (Check all that apply AND record UTM / mark on map)

Habitats and Habitat Features are independent of wildlife observations

Habitat Type

- ✓ Deciduous Forest
- ___ Mixed Forest
- ___ Coniferous Forest
- ___ Marsh
- ___ Swamp
- ___ Bog
- ___ Fen
- ___ Water (Shallow & Open)
- ___ Meadow
- ___ Tallgrass Prairie
- ___ Thicket
- ___ Savannah
- ___ Woodland
- ___ Valley (Describe Below)
- ___ Headwater Area (check for Seeps/Springs)

Habitat Features

Birds
- ___ Spring Flooded Field
- ___ Stick Nest (Raptors, Herons)
- ___ Snag (Raptors, Herons)
- ___ Tree Cavity Nest (Ducks)
- ___ Seep/Spring (Turkeys/Grouse)

Bats
- ___ Cave Entrance
- ___ Mine Shaft
- ___ Snag (>20cm DBH)

Mink/Otter/Fisher/Marten
- ___ Snag
- ___ Burrow
- ___ Den
- ___ Tree Cavity
- ___ Fallen Log

Deer/Moose
- ___ Seep/Spring
- ___ Mineral Lick

Snakes
- ___ Burrow
- ___ Fallen Rotting Log
- ___ Old Well
- ___ Rock Pile/Stone Wall
- ___ Organics Pile
- ___ Log Pile
- ___ Karst
- ___ Broken/Fissured Rock
- ___ Old Foundation
- ___ Old Bridge/Concrete Culvert

Amphibians and Turtles
- ___ Vernal Pool/Woodland Pond (Amphibian Breeding)
- ___ Sand (Turtle Nesting)
- ___ Fine/Sandy Gravel (Turtle Nesting)

Invertebrates
- ___ Crayfish Chimney

For every Habitat Type or Habitat Feature, record UTM below (for each occurrence) or mark on map

Habitat Feature:	UTM	Description

Describe Valley (depth, geomorphological traits):

Additional Details:

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page __ of __

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Community Classification

Vegetation Type:	Fresh-Moist White Elm Lowland Decid. Forest (FODM7-1)
Inclusion:	none
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	X Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	X Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
X Treed	X Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	~~Super-canopy~~			
1	Canopy	2	2	wh. elm = green ash
2	Sub-canopy	3	3	wh. elm = green ash » black cherry
3	Understorey	4	2	prickly ash > blackberry sp. > raspberry
4	Groundcover	7	4	goldenrod sp. > wh. avens = virginia creeper

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	A	10 - 24	O	25 - 50	N	> 50
Snags	A	< 10	O	10 - 24	R	25 - 50	N	> 50
Deadfall/Logs	A	< 10	R	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age	Pioneer	Young	X Mid-age	Mature	Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page ____of____

PLANT SPECIES LIST

Site:	South Kent WF (1184 A)
Polygon:	P165 - W2
UTM:	17T 0425657 4693355
Date:	July 27/11 Time: 14:00
Surveyor(s):	AM, DJR, W
Weather:	Sunny, hot + humid 29°C, wind 2 from W, C

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
staghorn sumac			R	R	
black cherry	R				
gray dogwood			O	O	
nannyberry		O	O		
hawthorn sp.		R	R		
prickly ash		O	A		
bitternut hickory		R			
choke cherry		O	O	O	
black cherry		R	D		
red cedar		R	R		
Manitoba maple				O	
wh. elm	A	A	O		
common apple		R			
smooth serviceberry			R		
green ash	A	A	O		
basswood		R	R	R	

Species	Layer 1	2	3	4	Sample
jumpseed				R	
Summer grape				C	
wh. avens				A	
black cherry sp.			A	O	
Enchanter's nightshade				O	
virginia creeper				A	
nettle sp.				R	
viola sp.				R	
agrimony				R	
pk. lady's thumb				R	
bedstraw				R	
goldenrod sp.				A	
Enchanter's nightshade				C	
wild strawberry				O	
herb robert				R	
poison ivy				O	
Enchanter's nightshade				C	
fall dandelion				R	
carex sp.				R	

Other Notes (Landowner Contact, General Notes, etc.)

- green ash mostly dead + resprouting along lower trunks
- wh. elm also in decline
- dead/dying ash classified as 'O' for snags ~ 10-24 dbh.

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page __ of __

Site:	Pit-W1
Polygon:	
UTM:	17T 0427015 4688426
Date:	April 6/2011 Time: 1:50
Surveyor(s):	NRM, SGB
Weather:	4°C, S-3, moderate rain

Community Classification

Vegetation Type:	FOD5-2 Dry-Fresh Oak, Maple, Hickory Deciduous Forest
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	✓ Mineral Soil	✓ Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
✓ Natural	Carb Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll Upland	Bluff	Fen	✓ Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
✓ Treed	✓ Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	✓ Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy			
1	Canopy	2	3	Sugar Maple > White Oak > Am Beech
2	Sub-canopy	3	3	Sugar Maple > [illegible] > Red Oak
3	Understorey	5	2	Red Raspberry > Poison Ivy > Sassafras
4	Groundcover	6	3	Rubus sp. > Sensitive fern > Avens sp.

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	< 10	10 - 24	25 - 50	> 50
Snags	< 10	10 - 24	25 - 50	> 50
Deadfall/Logs	< 10	10 - 24	25 - 50	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age	Pioneer	Young	Mid-age	Mature	Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page ___of___

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Riverbank Grape	—	—	—		
Silver Maple	D	O	O	O	
Green Ash	O	O	O	O	
Poison Ivy			O	O	
Tulip Tree	R	R	R	R	
Hepatica	—	—	—	R	
Horsetails				O	
White Oak	A	A	A	A	
Moss sp.				A	
Red Oak	O	O	O	O	
Sugar Maple	D	A	A	A	
Am. Beech	A	A	A	A	
Shagbark Hickory	O	O	O	O	
Black Walnut	R	R	R	R	
Sassafras			R	R	
Red Raspberry				O	
Bitternut Hickory	R	R	R	R	
Hawthorn sp.				R	
Serviceberry			R	R	
Mint sp.				R	
Reed Canary Grass				R	
Phragmites				R	
Avens sp.				R	

Species	Layer 1	2	3	4	Sample
Blue Beech	R	R	R	R	
Ironwood		R	R	R	

Wildlife and Other Notes

Wildlife Observation Form

Page __ of __

NATURAL RESOURCE SOLUTIONS INC.

Site:	P171W1
Polygon:	
UTM:	17T 0427861 4688426
Date:	April 6/11 **Time:** 1:50
Surveyor(s):	NGM, KGB
Weather:	3°C, moderate rain, C.C 100%, wind S2

Species Observed *Check for Wildlife Habitat that may be associated with an observation*

TY	Species	EV	Notes	#		TY	Species	EV	Notes	#
B	Savannah Sparrow			1						
B	Song Sparrow			5						
B	Am. Robin			2						
M	White-tailed Deer		tracks	1						
B	Amer. Crow			2						

Faunal Type Codes (TY)

B=Bird M=Mammal H=Herpetofauna L=Lepidoptera F=Fish D=Dragonfly or Damselfly

Evidence Codes (EV)

Breeding Birds

SH- Suitable Habitat
SM- Singing Male
T- Territory
A- Anxienty Behavior
D- Courtship Display
N- Nest Building
P- Pair
V- Visiting Nest
DD- Distraction Display
NE- Nest with Eggs
AE-Adult entering nest
NU- Used nest
FY- Fledged Young
FS- Food/Fecal Sac

Other Wildlife

OB- Observed
DP- Distinctive Parts
TK- Tracks
VO- Vocalization
HO- House/Den
FE- Feeding Evidence
CA- Carcass/Bones
FY- Eggs or young
SC- Scat
SI- Other Signs (Specify)

Wildlife Habitat Form

Page __ of __

NATURAL RESOURCE SOLUTIONS INC.

Site:	
Polygon:	
UTM:	
Date:	**Time:**
Surveyor(s):	
Weather:	

Wildlife Habitat (Check all that apply AND record UTM / mark on map)

Habitats and Habitat Features are independent of wildlife observations

Habitat Type

- V Deciduous Forest
- ___ Mixed Forest
- ___ Coniferous Forest
- ___ Marsh
- ___ Swamp
- ___ Bog
- ___ Fen
- ___ Water (Shallow & Open)
- ___ Meadow
- ___ Tallgrass Prairie
- ___ Thicket
- ___ Savannah
- ___ Woodland
- ___ Valley (Describe Below)
- ___ Headwater Area (check for Seeps/Springs)

Habitat Features

Birds
- ___ Spring Flooded Field
- ___ Stick Nest (Raptors, Herons)
- ___ Snag (Raptors, Herons)
- ___ Tree Cavity Nest (Ducks)
- ___ Seep/Spring (Turkeys/Grouse)

Bats
- ___ Cave Entrance
- ___ Mine Shaft
- ___ Snag (>20cm DBH)

Mink/Otter/Fisher/Marten
- ___ Snag
- ___ Burrow
- ___ Den
- ___ Tree Cavity
- ___ Fallen Log

Deer/Moose
- ___ Seep/Spring
- ___ Mineral Lick

Snakes
- ___ Burrow
- ___ Fallen Rotting Log
- ___ Old Well
- ___ Rock Pile/Stone Wall
- ___ Organics Pile
- ___ Log Pile
- ___ Karst
- ___ Broken/Fissured Rock
- ___ Old Foundation
- ___ Old Bridge/Concrete Culvert

Amphibians and Turtles
- ___ Vernal Pool/Woodland Pond (Amphibian Breeding)
- ___ Sand (Turtle Nesting)
- ___ Fine/Sandy Gravel (Turtle Nesting)

Invertebrates
- ___ Crayfish Chimney

For every Habitat Type or Habitat Feature, record UTM below (for each occurrence) or mark on map

Habitat Feature:	UTM	Description

Describe Valley (depth, geomorphological traits):

Additional Details:

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page __ of __

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Community Classification

Vegetation Type:	Dry-Fresh Sugar Maple Decid. Forest (FOD M5-1)
Inclusion:	none
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural		X Roll. Upland	Bluff	Fen	X Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
X Treed	X Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	~~Super-canopy~~			
1	Canopy	1	4	sugar maple >> am. beech = wh. ash > black cherry
2	Sub-canopy	2	3	sugar maple >>> am. beech
3	Understorey	3	1	sugar maple > am. beech = wh. ash
4	Groundcover	7	4	poison ivy = virginia creeper > sp. grass = ELB = ench. nightshade

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0: none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis		< 10		10 - 24		25 - 50		> 50
	O		A		A		R	
Snags	R	< 10	R	10 - 24	O	25 - 50	N	> 50
Deadfall/Logs	O	< 10	R	10 - 24	R	25 - 50	N	> 50

Abundance Codes: N: None R Rare O: Occasional A: Abundant

Community Age		Pioneer		Young		Mid-age	X	Mature		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page ___ of ___

PLANT SPECIES LIST

Site:	South bent WF (1184 A)
Polygon:	P173-W1
UTM:	17T 0417933 4697069
Date:	July 27/11 Time: 12:30
Surveyor(s):	AMO, JRW
Weather:	Sunny, 27°C, Wind 4 from W, C.C. 40%

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
staghorn sumac			R		
wh. ash	A	O	O	O	
sugar maple	D	D	A	O	
wh. elm		R	R		
choke cherry			O		
shag bark hickory		R	R	R	
basswood	R	O			
black cherry	O				
am. beech	R	O	O	O	
wh. ash	R	R			
red oak				O	
sambucus sp.			R		
bitternut hickory	R	R			
pignut hickory		R			

Species	Layer 1	2	3	4	Sample
virginia creeper				A	
trillium sp.				O	
big leaf aster				R	
goldenrod sp.				O	
wild leek				R	
hawthorn sp				R	
false solomons seal				O	
enchanters nightshade				A	
garlic mustard				R	
poison ivy				A	
moonseed				O	
grass sp (wood)				R	
jack pulpit				R	
wh. avens				R	
foamflower				R	
stinging nettle				A	
jumpseed				R	
wood sorrel				R	
enchanters nightshade				A	
sensitive fern				R	
viola sp				R	
blue cohosh				R	
jewelweed				R	
sarsaparilla				A	

Other Notes (Landowner Contact, General Notes, etc.)

- possible grey hickory - see photos
- wh ash mostly dead or dying - classified as "O" for snags 25-50 dbh
- hunting blind in woodlot (makeshift)

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent UF 1184B
Polygon:	P030 - W2
UTM:	0407171 4691570
Date:	Oct 18 2011 Time: 15:15
Surveyor(s):	KJW HLW
Weather:	overcast, 12°C, 100% CC, wind 1/NE

Community Classification

Vegetation Type:	Fresh-Moist Cottonwood Deciduous Forest Type (FODM8-3)
Inclusion:	Shallow Water (SA)
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	✓ Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
Natural	Carb Bedrock	Tableland	Sand Dune	Swamp	Woodland
✓ Cultural		Roll. Upland	Bluff	Fen	✓ Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
✓ Treed	✓ Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	✓ Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy	1	1	Eastern Cottonwood
1	Canopy	2	4	Eastern Cottonwood > Freeman's Maple > White Willow
2	Sub-canopy	3	3	Eastern Cottonwood > Mulberry sp. > Freeman's Maple > White Elm
3	Understorey	4/5	3	Silky Dogwood > White Ash > Prickly Ash > White Elm
4	Groundcover	4/5	2	Poison Ivy > Grass sp. > Calico Aster > Vinca sp.

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	O	< 10	O	10 - 24	O	25 - 50	> 50
Snags		< 10		10 - 24		25 - 50	> 50
Deadfall/Logs	O	< 10	O	10 - 24	O	25 - 50	R > 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age	Pioneer	Young	Mid-age	Mature	Old Growth
				✓	

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	South Kent UF 1184B
Polygon:	P030 - W2
UTM:	0407171 4691570
Date:	Oct 18 2011 Time: 15:15
Surveyor(s):	KJW HLW
Weather:	overcast, 12°C, 100% CC, wind 1/NE

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Mulberry sp.		O	O	O	
Sugar Maple	O	O	O	O	
White Ash	O	O	O	O	
White Willow	O	O	O	O	
Eastern Cottonwood	O	O	O	O	
Prickly Ash			O		
White Elm		O	O	O	
Silky Dogwood			O	O	
Freeman's Maple	O	O	O	O	
Basswood			R		
Riverbank Grape		O	O		
Common Juniper			R		
White Spruce		R	R		
Black Walnut	O	O			
Staghorn Sumac			O	O	
Common Red Raspberry			O	O	
Black Cherry		R			
Manitoba Maple			O		
Highbush Cranberry			R		
INCLUSION					
Red Osier Dogwood			O	O	
Green Ash			O	O	
Mulberry sp.		O	O	O	
Freeman's Maple		O	O	O	
Carex sp.				O	
Willow sp.		O	O		
Bittersweet Nightshade				O	
Canary Reed Grass				O	

Species	Layer 1	2	3	4	Sample
Garlic Mustard				O	
Poison Ivy				O	
False Strawberry				R	
Canada Goldenrod				O	
Yellow Avens				O	
Vinca sp. (common)				O	
Grass sp.				O	
Common Plantain				O	
Calico Aster				O	
New England Aster				O	
Common Burdock				O	
White Baneberry				R	
Wild Ginger				O	

Wildlife Observation Form

NATURAL RESOURCE SOLUTIONS INC.

Site:	South Kent 1843
Polygon:	P030 - W2
UTM:	0419110 4688742
Date:	October 13, 2011 **Time:** 15:13
Surveyor(s):	HLW, KTW
Weather:	12°C, 100% cloud cover, wind from NE

Species Observed — *Check for Wildlife Habitat that may be associated with an observation*

TY	Species	EV	Notes	#		TY	Species	EV	Notes	#
M	Grey Squirrel	OB		1						
B	Wh-thr nighthawk	DP		2						
M	E-Cottontail	OB		1						
B	Sparrow sp	OB		1						

Faunal Type Codes (TY)

B=Bird M=Mammal H=Herpetofauna L=Lepidoptera F=Fish D=Dragonfly or Damselfly

Evidence Codes (EV)

Breeding Birds

SH- Suitable Habitat
SM- Singing Male
T- Territory
A- Anxienty Behavior
D- Courtship Display
N- Nest Building
P- Pair
V- Visiting Nest
DD- Distraction Display
NE- Nest with Eggs
AE-Adult entering nest
NU- Used nest
FY- Fledged Young
FS- Food/Fecal Sac

Other Wildlife

OB- Observed
DP- Distinctive Parts
TK- Tracks
VO- Vocalization
HO- House/Den
FE- Feeding Evidence
CA- Carcass/Bones
FY- Eggs or young
SC- Scat
SI- Other Signs (Specify)

Wildlife Habitat Form

NATURAL RESOURCE SOLUTIONS INC.

Site:	South Kent 1843
Polygon:	P030 - W2
UTM:	0419110 4688732
Date:	October 14, 2011 **Time:** 15:13
Surveyor(s):	HLW, KJW
Weather:	12°C, 100% cloud cover, wind from NE

Wildlife Habitat (Check all that apply AND record UTM / mark on map)

Habitats and Habitat Features are independent of wildlife observations

Habitat Type

- [✓] Deciduous Forest
- [ ] Mixed Forest
- [ ] Coniferous Forest
- [ ] Marsh
- [ ] Swamp
- [ ] Bog
- [ ] Fen
- [ ] Water (Shallow & Open)
- [ ] Meadow
- [ ] Tallgrass Prairie
- [ ] Thicket
- [ ] Savannah
- [ ] Woodland
- [ ] Valley (Describe Below)
- [ ] Headwater Area (check for Seeps/Springs)

Habitat Features

Birds

- [ ] Spring Flooded Field
- [ ] Stick Nest (Raptors, Herons)
- [ ] Snag (Raptors, Herons)
- [ ] Tree Cavity Nest (Ducks)
- [ ] Seep/Spring (Turkeys/Grouse)
- [ ] Cliffs/Banks

Bats

- [ ] Cave Entrance
- [ ] Mine Shaft
- [ ] Snag (>20cm DBH)

Mink/Otter/Fisher/Marten

- [ ] Snag
- [✓] Burrow
- [ ] Den
- [ ] Tree Cavity
- [ ] Fallen Log

Deer/Moose

- [ ] Seep/Spring
- [ ] Mineral Lick

Snakes

- [ ] Burrow
- [✓] Fallen Rotting Log
- [ ] Old Well
- [ ] Rock Pile/Stone Wall
- [ ] Organics Pile
- [ ] Log Pile
- [ ] Karst
- [ ] Broken/Fissured Rock
- [ ] Old Foundation
- [ ] Old Bridge/Concrete Culvert

Amphibians and Turtles

- [ ] Vernal Pool/Woodland Pond (Amphibian Breeding)
- [ ] Sand (Turtle Nesting)
- [ ] Fine/Sandy Gravel (Turtle Nesting)

Invertebrates

- [ ] Crayfish Chimney

For every Habitat Type or Habitat Feature, record UTM below (for each occurrence) or mark on map

Habitat Feature:	UTM	Description
Large rotting log	0419146 4688744	>50 dbh
Burrows	0419101 4688827	2 holes, 1 photo taken

Describe Valley (depth, geomorphological traits):

Additional Details:

- Shallow water inclusion, approx. 1 metre deep (UTM: 0419147 4688732)
- Trails through woodland, gazebo, ornamental decorations
- Photo 176 - 1174 - burrow - Photo 176 - 1175 + 1176 = shallow pond

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent 11843
Polygon:	P030-W2
UTM:	0418493 4689349
Date:	Oct 20, 2011 Time: 11:05
Surveyor(s):	KJW, HLW
Weather:	overcast, 10°C, 100% cc, wind 3/W

Community Classification

Vegetation Type:	TAGM2 - Mixed Plantation
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	✓ Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	Woodland
✓ Cultural		✓ Roll. Upland	Bluff	Fen	✓ Forest
	Site	Cliff		Bog	Plantation

Cover	Site	Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	✓ Mixed
✓ Treed	✓ Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy	1	O	
1	Canopy	2	4	Silver Maple > Black Walnut > White Spruce > Freeman's Maple
2	Sub-canopy	3	3	Silver Maple > Black Walnut > White Elm > White Spruce
3	Understorey	4/5	2	Hackberry > White Ash > Hawthorne sp.
4	Groundcover	6/7	2	Garlic Mustard > Herb-Robert > Goutweed

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0: none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	O	< 10	O	10 - 24	R	25 - 50	N	> 50
Snags	N	< 10	N	10 - 24	N	25 - 50	N	> 50
Deadfall/Logs	O	< 10	O	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young	✓	Mid-age		Mature		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	South Kent 11843
Polygon:	P030-W2
UTM:	0418493 4689349
Date:	Oct. 20, 2011 Time: 11:05
Surveyor(s):	KJW HLW
Weather:	overcast, 10°C, 100% cc, wind 3/W

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Freeman's Maple	O	O	O	O	
Black Locust	O	O	O	O	
White Pine	O	O			
White Spruce	O	O			
White Ash		O	O	O	
Hackberry			O	O	
Black Walnut	O	O	O		
Common Buckthorn			O	O	
Silver Maple	O	O	O	O	
Norway Maple	O	O	O	O	
Red Oak	O	O	O		
Basswood	R				
Common Elder			R		
White Elm		O	O	O	
Hawthorne sp.			O	O	
Tamarack	R				

Species	Layer 1	2	3	4	Sample
Garlic Mustard				O	
Grass sp.				O	
Sow-thistle				O	
Herb-Robert				O	
Forget-me-not				O	
Yellow Avens				O	
Goldenrod				O	
Stinging Nettle				R	
Woodland Strawberry				O	
Canada Goldenrod				O	
Common Burdock				R	
Bindweed sp.				O	
Blue Jean Iris				R	

Wildlife Observation Form

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NATURAL RESOURCE SOLUTIONS INC.

Site:	South Kent NE WMA
Polygon:	P020 - N2
UTM:	
Date:	October 20, 2011 **Time:** 11:03
Surveyor(s):	TLW, KJW
Weather:	10°, 100% cloud cover, wind 3 from W, Vale

Species Observed						Check for Wildlife Habitat that may be associated with an observation			
TY	Species	EV	Notes	#	TY	Species	EV	Notes	#
B	Am. Goldfinch	DF		3					
B	Red-winged BB			1					

Faunal Type Codes (TY)

B=Bird M=Mammal H=Herpetofauna L=Lepidoptera F=Fish D=Dragonfly or Damselfly

Evidence Codes (EV)

Breeding Birds

SH- Suitable Habitat
SM- Singing Male
T- Territory
A- Anxienty Behavior
D- Courtship Display
N- Nest Building
P- Pair
V- Visiting Nest
DD- Distraction Display
NE- Nest with Eggs
AE-Adult entering nest
NU- Used nest
FY- Fledged Young
FS- Food/Fecal Sac

Other Wildlife

OB- Observed
DP- Distinctive Parts
TK- Tracks
VO- Vocalization
HO- House/Den
FE- Feeding Evidence
CA- Carcass/Bones
FY- Eggs or young
SC- Scat
SI- Other Signs (Specify)

Wildlife Habitat Form

Page 4 of 4

NATURAL RESOURCE SOLUTIONS INC.

Site:	South Kent NE WMA
Polygon:	P020 - N2
UTM:	
Date:	October 20, 2011 **Time:** 11:03
Surveyor(s):	TLW, KJW
Weather:	10°, 100% cloud cover, wind 3 from W, Vale

Wildlife Habitat (Check all that apply AND record UTM / mark on map)

Habitats and Habitat Features are independent of wildlife observations

Habitat Type

___ Deciduous Forest
√ Mixed Forest
___ Coniferous Forest
___ Marsh
___ Swamp
___ Bog
___ Fen
___ Water (Shallow & Open)
___ Meadow
___ Tallgrass Prairie
___ Thicket
___ Savannah
___ Woodland
___ Valley (Describe Below)
___ Headwater Area (check for Seeps/Springs)

Habitat Features

Birds

___ Spring Flooded Field
___ Stick Nest (Raptors, Herons)
___ Snag (Raptors, Herons)
___ Tree Cavity Nest (Ducks)
___ Seep/Spring (Turkeys/Grouse)
___ Cliffs/Banks

Bats

___ Cave Entrance
___ Mine Shaft
___ Snag (>20cm DBH)

Mink/Otter/Fisher/Marten

___ Snag
___ Burrow
___ Den
___ Tree Cavity
___ Fallen Log

Deer/Moose

___ Seep/Spring
___ Mineral Lick

Snakes

___ Burrow
___ Fallen Rotting Log
___ Old Well
___ Rock Pile/Stone Wall
___ Organics Pile
___ Log Pile
___ Karst
___ Broken/Fissured Rock
___ Old Foundation
___ Old Bridge/Concrete Culvert

Amphibians and Turtles

___ Vernal Pool/Woodland Pond (Amphibian Breeding)
___ Sand (Turtle Nesting)
___ Fine/Sandy Gravel (Turtle Nesting)

Invertebrates

___ Crayfish Chimney

For every Habitat Type or Habitat Feature, record UTM below (for each occurrence) or mark on map

Habitat Feature:	UTM	Description
Bank Swallow Nest		2 nests

Describe Valley (depth, geomorphological traits):

Additional Details:

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent 11848
Polygon:	P030 - M1
UTM:	0418485 4689347
Date:	October 20, 2011 **Time:** 11:15
Surveyor(s):	HLW, KJW
Weather:	10°C, 100% cloud cover, Mist 2 from N. to W.

Community Classification

Vegetation Type:	MEF - Forb Meadow
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	Mineral Soil	Riverine	Crevice/Cave	Pond	✓ Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	Woodland
✓ Cultural		✓ Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	✓ Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
✓ Treed	✓ Surficial Dep	Floating-Lvd.	Bryophyte	
	Bedrock	Graminoid	Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy			
1	Canopy	4	1	Red-osier Dogwood > Red Cedar > Russian Olive > Hawthorn sp.
2	Sub-canopy	5	4	Spotted Knotweed > Canada Goldenrod > New England Aster > Queen Anne's Lace
3	Understorey	6	3	Spotted Knotweed > Canada Goldenrod
4	Groundcover	7	1	Birdsfoot Trefoil sp. > Kentucky Bluegrass > Sedge sp. > Wild Strawberry

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	N < 10	N 10 - 24	N 25 - 50	N > 50
Snags	N < 10	N 10 - 24	N 25 - 50	N > 50
Deadfall/Logs	N < 10	N 10 - 24	N 25 - 50	N > 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age	✓	Pioneer		Young		Mid-age		Mature	Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	South Kent 11848
Polygon:	P030 - M1
UTM:	0418485 4689347
Date:	October 20 2011 **Time:** 11:15
Surveyor(s):	HLW, KJW
Weather:	10°, 100% cloud cover, Mist 2 from N. to W.

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Red-osier Dogwood	O	O			
Red Cedar	O	O			
Russian Olive	O	O			
Hawthorn sp.	O				

Species	Layer 1	2	3	4	Sample
Spotted Knotweed		A			
Canada Goldenrod		D	O		
Kentucky Bluegrass		O	O		
New England Aster		O	O		
Birds foot Trefoil			O		
Sedge sp.			O	O	
Wild Strawberry			O		
Queen Anne's Lace		O			
Wild Strawberry				O	

Wildlife Observation Form

NATURAL RESOURCE SOLUTIONS INC.

Site:	South Kent [illegible]
Polygon:	[illegible]
UTM:	[illegible]
Date:	[illegible] **Time:** [illegible]
Surveyor(s):	[illegible]
Weather:	[illegible]

Species Observed *Check for Wildlife Habitat that may be associated with an observation*

TY	Species	EV	Notes	#		TY	Species	EV	Notes	#
B	Ring-billed Gull	NE		5						

Faunal Type Codes (TY)

B=Bird M=Mammal H=Herpetofauna L=Lepidoptera F=Fish D=Dragonfly or Damselfly

Evidence Codes (EV)

Breeding Birds

SH- Suitable Habitat
SM- Singing Male
T- Territory
A- Anxienty Behavior
D- Courtship Display
N- Nest Building
P- Pair
V- Visiting Nest
DD- Distraction Display
NE- Nest with Eggs
AE-Adult entering nest
NU- Used nest
FY- Fledged Young
FS- Food/Fecal Sac

Other Wildlife

OB- Observed
DP- Distinctive Parts
TK- Tracks
VO- Vocalization
HO- House/Den
FE- Feeding Evidence
CA- Carcass/Bones
FY- Eggs or young
SC- Scat
SI- Other Signs (Specify)

Wildlife Habitat Form

NATURAL RESOURCE SOLUTIONS INC.

Site:	South Kent [illegible]
Polygon:	[illegible]
UTM:	[illegible]
Date:	[illegible] **Time:** [illegible]
Surveyor(s):	[illegible]
Weather:	[illegible]

Wildlife Habitat (Check all that apply AND record UTM / mark on map)

Habitats and Habitat Features are independent of wildlife observations

Habitat Type

___ Deciduous Forest
___ Mixed Forest
___ Coniferous Forest
___ Marsh
___ Swamp
___ Bog
___ Fen
___ Water (Shallow & Open)
✓ Meadow
___ Tallgrass Prairie
___ Thicket
___ Savannah
___ Woodland
___ Valley (Describe Below)
___ Headwater Area (check for Seeps/Springs)

Habitat Features

Birds

___ Spring Flooded Field
___ Stick Nest (Raptors, Herons)
___ Snag (Raptors, Herons)
___ Tree Cavity Nest (Ducks)
___ Seep/Spring (Turkeys/Grouse)
___ Cliffs/Banks

Bats

___ Cave Entrance
___ Mine Shaft
___ Snag (>20cm DBH)

Mink/Otter/Fisher/Marten

___ Snag
___ Burrow
___ Den
___ Tree Cavity
___ Fallen Log

Deer/Moose

___ Seep/Spring
___ Mineral Lick

Snakes

___ Burrow
___ Fallen Rotting Log
___ Old Well
___ Rock Pile/Stone Wall
___ Organics Pile
___ Log Pile
___ Karst
___ Broken/Fissured Rock
___ Old Foundation
___ Old Bridge/Concrete Culvert

Amphibians and Turtles

___ Vernal Pool/Woodland Pond (Amphibian Breeding)
___ Sand (Turtle Nesting)
___ Fine/Sandy Gravel (Turtle Nesting)

Invertebrates

___ Crayfish Chimney

For every Habitat Type or Habitat Feature, record UTM below (for each occurrence) or mark on map

Habitat Feature:	UTM	Description

Describe Valley (depth, geomorphological traits):

Additional Details:

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent UF 1184B
Polygon:	P054-W1
UTM:	0407551 / 4690944
Date:	Oct. 20, 2011 Time: 13:45
Surveyor(s):	KJW HLW
Weather:	Raining, 10°C, 100% CC, Wind 2/W

Community Classification

Vegetation Type:	DAVI - Fresh-Sum Maple-Beech Deciduous Forest Type (FODM 5-2)
√ Inclusion:	Deciduous Plantation (TAGM3)
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
√ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min.	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
√ Natural	Carb. Bedrock	√ Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	√ Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
√ Treed	√ Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	√ Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy	1		
1	Canopy	2	4	Sugar Maple > American Beech > Bur oak > Freeman's Maple
2	Sub-canopy	3	3	Sugar Maple > American Beech > White Elm > Freeman's Maple
3	Understorey	4/5	2	Sugar Maple > Choke cherry > American Beech > Common Red Raspberry
4	Groundcover	0/1	2	Garlic Mustard > Bittersweet Nightshade > Clearweed > False Nettle

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	O	< 10	O	10 - 24	O	25 - 50	R	> 50
Snags	O	< 10	O	10 - 24	O	25 - 50	R	> 50
Deadfall/Logs	O	< 10	A	10 - 24	A	25 - 50	O	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young		Mid-age	√	Mature		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	South Kent UF 1184B
Polygon:	P054-W1
UTM:	0407551 / 4690944
Date:	Oct. 20, 2011 Time: 13:45
Surveyor(s):	KJW, HLW
Weather:	Raining, 10°C, 100% CC, Wind 2/W

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Sugar Maple	O	O	O	O	
Bur Oak	O	O	O	O	
American Beech	O	O	O	O	
White Elm		O	O	O	
Choke Cherry			O	O	
White Ash	O	O	O	O	
Shagbark Hickory	R	O	O	O	
Freeman's Maple	O	O	O	O	
Prickly Ash			O	O	
Black Maple	R				
Riverbank Grape			O	O	
Common Buckthorn			O		
Black Cherry	O	O	O	O	
Common Red Raspberry			O	O	
Bristly Greenbrier				O	
Currant sp.			O	O	Y
Prickly Gooseberry			O		
White Baneberry				O	
Tulip Tree	R				
Virginia Creeper			O		
Mulberry sp.		O	O		
Wild Raisin'			R		
Yellow Birch		R			

Species	Layer 1	2	3	4	Sample
Calico Aster				O	
Herb Robert				O	
Garlic Mustard				O	
Bittersweet Nightshade				O	
Enchanter's Nightshade				O	
Yellow Avens				O	
Woodland Strawberry				O	
Poison Ivy				O	
Blue Cohosh				O	
Clearweed				O	
Stinging Nettle				O	
Spinulose Wood Fern				R	
Hop Sedge				O	
Christmas Fern				R	
False Nettle				O	
Carex sp.				O	
Grass sp.				O	
Plantain-leaved Sedge				O	
Violet sp.				O	
Sensitive Fern				O	
Wild Leek				R	
Sharp-lobed Hepatica				R	
Blue-stemmed Goldenrod				O	
Moss sp.				O	

Wildlife Observation Form

NATURAL RESOURCE SOLUTIONS INC.

Site:	South Kent 1184B
Polygon:	POS4-W1
UTM:	0407557 4690944
Date:	October 20, 2011 **Time:** 13:45
Surveyor(s):	HLW, KJM
Weather:	10°C, 90% cloud cover, wind 2 from W, rain

Species Observed — *Check for Wildlife Habitat that may be associated with an observation*

TY	Species	EV	Notes	#		TY	Species	EV	Notes	#
B	Turkey Vultures	OB		14						
B	Blue Jay	OB		12						
B	Nothern-ringed Flicker	OB		1						
B	Kinglet sp.	VO		1						
B	Am. Robin	VO		1						
L	Monarch	OB		1						

Faunal Type Codes (TY)

B=Bird M=Mammal H=Herpetofauna L=Lepidoptera F=Fish D=Dragonfly or Damselfly

Evidence Codes (EV)

Breeding Birds

SH- Suitable Habitat
SM- Singing Male
T- Territory
A- Anxienty Behavior
D- Courtship Display
N- Nest Building
P- Pair
V- Visiting Nest
DD- Distraction Display
NE- Nest with Eggs
AE-Adult entering nest
NU- Used nest
FY- Fledged Young
FS- Food/Fecal Sac

Other Wildlife

OB- Observed
DP- Distinctive Parts
TK- Tracks
VO- Vocalization
HO- House/Den
FE- Feeding Evidence
CA- Carcass/Bones
FY- Eggs or young
SC- Scat
SI- Other Signs (Specify)

Wildlife Habitat Form

NATURAL RESOURCE SOLUTIONS INC.

Site:	South Kent 1184B
Polygon:	POS4-W1
UTM:	0407557 4690944
Date:	October 20, 2011 **Time:** 13:45
Surveyor(s):	KJM, HLW
Weather:	10°C, 90% cloud cover, wind 2 from W, rain

Wildlife Habitat (Check all that apply AND record UTM / mark on map)

Habitats and Habitat Features are independent of wildlife observations

Habitat Type

- [✓] Deciduous Forest
- [ ] Mixed Forest
- [ ] Coniferous Forest
- [ ] Marsh
- [ ] Swamp
- [ ] Bog
- [ ] Fen
- [ ] Water (Shallow & Open)
- [ ] Meadow
- [ ] Tallgrass Prairie
- [ ] Thicket
- [ ] Savannah
- [ ] Woodland
- [ ] Valley (Describe Below)
- [ ] Headwater Area (check for Seeps/Springs)

Habitat Features

Birds

- [ ] Spring Flooded Field
- [ ] Stick Nest (Raptors, Herons)
- [✓] Snag (Raptors, Herons)
- [ ] Tree Cavity Nest (Ducks)
- [ ] Seep/Spring (Turkeys/Grouse)
- [ ] Cliffs/Banks

Bats

- [ ] Cave Entrance
- [ ] Mine Shaft
- [ ] Snag (>20cm DBH)

Mink/Otter/Fisher/Marten

- [ ] Snag
- [ ] Burrow
- [ ] Den
- [ ] Tree Cavity
- [ ] Fallen Log

Deer/Moose

- [ ] Seep/Spring
- [ ] Mineral Lick

Snakes

- [ ] Burrow
- [✓] Fallen Rotting Log
- [ ] Old Well
- [ ] Rock Pile/Stone Wall
- [ ] Organics Pile
- [ ] Log Pile
- [ ] Karst
- [ ] Broken/Fissured Rock
- [ ] Old Foundation
- [ ] Old Bridge/Concrete Culvert

Amphibians and Turtles

- [ ] Vernal Pool/Woodland Pond (Amphibian Breeding)
- [ ] Sand (Turtle Nesting)
- [ ] Fine/Sandy Gravel (Turtle Nesting)

Invertebrates

- [ ] Crayfish Chimney

For every Habitat Type or Habitat Feature, record UTM below (for each occurrence) or mark on map

Habitat Feature:	UTM	Description
Lots of fallen rotting logs		10-30 dbh
Snag	0407446 4690941	South, photo taken
Rotting log	N407461 4691044	>50 dbh

Describe Valley (depth, geomorphological traits):

Additional Details:

- White Ash Plantation inclusion in SW portion of the wood with goldenrod in the understorey, Red Raspberry
- Snag = Photo 177-1178

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent 1184B
Polygon:	P054 - W2
UTM:	0407171 / 4691570
Date:	Oct. 20, 2011 — Time: 15:15
Surveyor(s):	KJW, HLW
Weather:	showers, 10°C, 100% CC, wind 2 / W

Community Classification

Vegetation Type:	Open Water (OA)
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
Terrestrial	Organic	✓ Lacustrine ?	Talus	Lake	Barren
Wetland	Mineral Soil	Riverine	Crevice/Cave	✓ Pond	Meadow
✓ Aquatic	Parent Mn	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	Woodland
✓ Cultural		Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
✓ Open	✓ Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
Treed	Surficial Dep	✓ Floating-Lvd	Bryophyte	
	Bedrock	✓ Graminoid	Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy			
1	Canopy	2	1	White Willow > Eastern Cottonwood
2	Sub-canopy	3	1	Mulberry sp.
3	Understorey	4/5	1	Narrow-leaved Cattail > Willow sp. > Prickly Ash > European Cranberry
4	Groundcover	6/7	1	Reed Canarygrass > Canada Goldenrod > Blue Flag Iris > Yellow Pond Lily

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0: none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	O	< 10	O	10 - 24	O	25 - 50	N	> 50
Snags	N	< 10	N	10 - 24	N	25 - 50	N	> 50
Deadfall/Logs	N	< 10	N	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age	Pioneer	Young	Mid-age	Mature	Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	South Kent 1184B
Polygon:	P054 - W2
UTM:	0407171 / 4691570
Date:	Oct 20, 2011 — Time: 15:15
Surveyor(s):	KJW, HLW
Weather:	showers, 10°C 100% CC wind 2 / W

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
White Willow	O				
Balsam Poplar				O	
Mulberry sp.		O			
Staghorn Sumac			O		
Riverbank Grape				O	
Freeman's Maple	O			O	
Willow sp.			O	O	
Eastern Cottonwood	O				
European Cranberry			O		
Prickly Ash			O		

Species	Layer 1	2	3	4	Sample
Typha angustifolia			O		
Foxtail				O	
Canada Goldenrod				O	
Dog's Bane ericoides				O	
Iris sp.				O	Y
Catnip				O	
Blue Flag Iris				O	
Heath Aster				O	
Reed Canary Grass				O	
Stinging Nettle				O	
Scirpus sp.				O	
Water Horehound				O	
Yellow Pond Lily				O	
Carex sp.				O	

Wildlife Observation Form

NATURAL RESOURCE SOLUTIONS INC.

Site:	South Kent 184B
Polygon:	P054 - W2
UTM:	0407171 4691570
Date:	Oct. 20, 2011 **Time:** 15:15
Surveyor(s):	KJW, HLW
Weather:	10°C, Showers, 100% CC, wind 2/W

Species Observed — *Check for Wildlife Habitat that may be associated with an observation*

TY	Species	EV	Notes	#		TY	Species	EV	Notes	#
B	Am. Crow	VO		6						
B	Sparrow SP	OB		3						

Faunal Type Codes (TY)

B=Bird M=Mammal H=Herpetofauna L=Lepidoptera F=Fish D=Dragonfly or Damselfly

Evidence Codes (EV)

Breeding Birds

SH- Suitable Habitat
SM- Singing Male
T- Territory
A- Anxienty Behavior
D- Courtship Display
N- Nest Building
P- Pair
V- Visiting Nest
DD- Distraction Display
NE- Nest with Eggs
AE-Adult entering nest
NU- Used nest
FY- Fledged Young
FS- Food/Fecal Sac

Other Wildlife

OB- Observed
DP- Distinctive Parts
TK- Tracks
VO- Vocalization
HO- House/Den
FE- Feeding Evidence
CA- Carcass/Bones
FY- Eggs or young
SC- Scat
SI- Other Signs (Specify)

Wildlife Habitat Form

NATURAL RESOURCE SOLUTIONS INC.

Site:	South Kent 184B
Polygon:	P054 - W2
UTM:	0407171 4691570
Date:	Oct 20, 2011 **Time:** 15:15
Surveyor(s):	KJW, HLW
Weather:	10°C, Showers, 100% CC, wind 2/W

Wildlife Habitat (Check all that apply AND record UTM / mark on map)

Habitats and Habitat Features are independent of wildlife observations

Habitat Type

___ Deciduous Forest
___ Mixed Forest
___ Coniferous Forest
___ Marsh
___ Swamp
___ Bog
___ Fen
✓ Water (Shallow & Open)
___ Meadow
___ Tallgrass Prairie
___ Thicket
___ Savannah
___ Woodland
___ Valley (Describe Below)
___ Headwater Area (check for Seeps/Springs)

Habitat Features

Birds

___ Spring Flooded Field
___ Stick Nest (Raptors, Herons)
___ Snag (Raptors, Herons)
___ Tree Cavity Nest (Ducks)
___ Seep/Spring (Turkeys/Grouse)
___ Cliffs/Banks

Bats

___ Cave Entrance
___ Mine Shaft
___ Snag (>20cm DBH)

Mink/Otter/Fisher/Marten

___ Snag
___ Burrow
___ Den
___ Tree Cavity
___ Fallen Log

Deer/Moose

___ Seep/Spring
___ Mineral Lick

Snakes

___ Burrow
___ Fallen Rotting Log
___ Old Well
___ Rock Pile/Stone Wall
___ Organics Pile
___ Log Pile
___ Karst
___ Broken/Fissured Rock
___ Old Foundation
___ Old Bridge/Concrete Culvert

Amphibians and Turtles

___ Vernal Pool/Woodland Pond (Amphibian Breeding)
___ Sand (Turtle Nesting)
___ Fine/Sandy Gravel (Turtle Nesting)

Invertebrates

___ Crayfish Chimney

For every Habitat Type or Habitat Feature, record UTM below (for each occurrence) or mark on map

Habitat Feature:	UTM	Description

Describe Valley (depth, geomorphological traits):

Additional Details:

- Photos 177 – 1179 + 1180 + 1181
- Open water, depth unknown, some floating emergents around edges

ELC (1184)

Sept. 1st, 2010 South Kent WF

HEDGEROWS TAGMS CLH, AGR

sunny, 30°C, Wind 4 SW, CC 60%, no precip

T20-H1:

- eastern white cedar

T20-H2:

- silver maple
- cherry
- red oak
- red cedar
- white cedar
- staghorn sumac
- white mulberry
- buckthorn
- hawthorn.

T23-H1:

- sparsely treed hedgerow
- trembling aspen, American elm, white ash, hackberry, grey dogwood

T24-H1:

- very sparse deciduous hedgerow
- red oak, white spruce, hackberry, American elm.

South Kent Wind Farm 1184 Sept. 2/2010

HEDGEROWS - TAGMS Treed Agriculture - Fencerows CLH

28°, hot, humid

CC 95%

wind 4

T20-H1 dead elm, dead white ash, white oak, grey dogwood, hawthorn, riverbank grape

T98-H1 - white cedar fencerow. Follows drain.

H2 - white elm, hawthorn, red oak grey dogwood, bur oak, dead white ash, basswood, white ash, staghorn sumac

T101 - H1 staghorn sumac, hawthorn, shagbark hickory basswood, white ash, silver maple, very large dead white ash (not much exfoliating bark, no cavities), bur oak, prickly ash, black cherry, gray dogwood red oak. trembling aspen. 2nd very large dead white ash has some exfoliating bark, small cavity @ BH, white elm. 3rd largo white ash - no cavities or exfoliating bark. 1-9

* tall, large trees no canopy gaps.

South Kent WF 1184 Sept 3/2010 CLH

HEDGEROWS - TAGMS

Treed Agriculture - Fencerows. 0800.

23°C
100% CC
wind 4.

T54 - H1 needs to be checked. (along with woodlot)

T50 - H1 needs to be checked (along with woodlot - dead ash).

T51 - H1 short section within 120m on South side of road. a few elm trees.

T49 - H1 thin shrub juniper. scattered young cottonwood.

T49 - H2 white elm, gray dogwood, basswood, sumac, shagbark hickory, bur oak.

T49 - H3 gray dogwood, with scattered E. cottonwood.

T49 - H4 bur oak, juniper, shagbark hickory, gray dogwood, silver maple 1-

T89 - H3 basswood, white elm, hawthorn E. cottonwood. Salix exigua, Shagbark Hickory, prickly ash Freeman's maple sparser. Follows ditch.

T90 - H1 bur oak, white elm, tall dead white ash, cottonwood, hawthorn, prickly ash

T84 - H1 white cedar. no access, not visible for other possible hedgerows.

T83 - H1 white spruce

T79 - H1 Norway spruce. Ig grassy ditch intersects this hedgerow.

T68 - H1 Freeman's maple, bur oak, basswood no access. dense.

T69 - H1 planted dense red oak side along road also has planted Norway spruce

T61 - H1 planted norway spruce

3-4

T21 - H1:
- sparse shrub hedgerow extending from woodlot
- willow sp., hawthorn sp.

T36 - T35

T36 - T35 - creek does not have hedgerow (Sparse trees and marsh species) along west side

T35 - H1 (creek to North)
- treed hedgerow, some shrub sections
- Shagbark Hickory, White Elm, dying green ash, white oak, c buckthorn, grey dogwood,

T29 - white elm, common buckthorn, gray dogwood, silver maple, hawthorns, red cedar, bur oak.

T25 - H1 Shrubby hedgerow, some young white elm. Salix exigua, Salix sp., gray dogwood, red osier dogwood along creek.

T101-H2 bur oak, gray dogwood, prickly ash, hawthorn, basswood, white elm, large dead white ash (no exfoliating bark or crevices), sumac.

T103 - H1 dead white ash (young), young trembling aspen.

T98 (not a hedgerow) sparse shrubs along ditch. hawthorn, young basswood

T87 - H1 (no access) Basswood, wh elm sparse with tall, thick shrubs (gray dogwood)

T88 - H1 follows ditch (this one still has water). mostly shrubs with some groves of trees (elm, etc.) no access.
- H2 white cedar.

T89 - H1 rock elm, hawthorn, bur oak, S. altissima, gray dogwood NE Aster, trembling aspen, Shagbark Hickory, sumac, white ash, dead tree with exfoliating bark (mostly gone)
- H2 white elm, Shagbark hickory, bur oak, large dying hawthorns, basswood,

2-4

T47 - H1 treed. black walnut, bur oak, white elm, dying white ash. basswood, gray dogwood.

T47 - H2 manitoba maple, sumac, dying white ash, juniper, prickly ash, basswood, white elm

T45 - H1 bur oak, dying ash, sumac, basswood

T45 - H2 dying ash, white elm. young trees

T45 - H3 mostly shrub, some young trees. gray dogwood, Shagbark hickory,

T40 - H1 young trees following ditch. black walnut, bur oak, white mulberry, white ash.

T40 - H2 shrubs only, gray dogwood.

T40 - H3 young white cedar & juniper with clumps of dying ash, white elm.

2-

T66 - H1 bur oak, some dead ash, Shagbark Hickory dense.

T74 - H1 needs to be checked
H2 needs to be checked

T73 - H1 basswood, dead ash, bur oak.

T71 - H1 needs to be checked (along with woodlot)

T64 - H1 cottonwood, white elm, bur oak, dead ash, basswood, gray dogwood.

T65 - H1 needs to be checked
H2 needs to be checked.

T77 - H1 Scattered mature bur oak along the ditch.

4-4

T 41-H1 dead+dying ash, white elm, basswood.

3-

South Kent Wind
NRS1 # 1184

06/10/10
BAM

Hedgrows (TAGMS) - Dominant tree + shrub species

P107-H1 : White Cedar, Norway Spruce, Black Walnut
- No Snags

P107-H2 : white Cedar - No Snags

P106-H1 : white cedar, staghorn sumac
- large ash snag near P106

P106-H2 : white elm, white ash - Many Snags

P118-H1 : white Cedar - No snags

P104-H1 : Norwayspruce, white cedar - No Snags

P103-H1 : White Ash, staghornsumac - No Snags

P001-H1 : Norway spruce, white cedar, black Walnut
- No snags

P001-H2 : Norway spruce, white cedar, green ash
- No snags - Very sparse

07/10/10

P022-H1 : Sparse White Elm, Gray Dogwood
- No snags, along dry ditch

Chatham-Kent Wind Farm
#1184 -NRS1

20/10/10
BAM

Fencerow (TAGMS) descriptions

P113-H2 : Sparse Bur oak, no snags

P114-H1 : Bur Oak, hawthorn, Many snags

P115-H1 : Bur Oak, Cottonwood, no snags

P122-H1 : Bur oak, White Elm, cottonwood
- few snags, More sparse on west branch

P088-H1 : White Elm, Bur oak, red cedar
- few snags

P125-H1 : Sparse white elm, cottonwood, gray dogwood
- no snags

P127-H1 : Black Walnut, Bur oak, Red oak - few snags

P121-H1 : White cedar shrub

21/10/10

P094-H2 : white cedar shrub
P094-H3 : immature white elm, hawthorn sp.

NRS1-1184 Fencerows cont...

BAM
21/10/10

P108-H1 : sparse elm, hawthorn, gray dogwood
- few snags

P108-H2 : clumps of green ash snags, forbs, bur oak

P120-H1 : sparse bur oak, elm, silver Maple
- few snags

P120-H2 : bur oak - few snags

P042-H1 : white elm, bur oak, hawthorn - few snags

P109-H1 : Cottonwood, gray dogwood - no snags

P010-H3 : immature elm, sumac, gray dogwood
- few snags

P091-H1 : Sparse scotts pine, ash snags
P091-H2 : red oak, elm, walnut - few snags

P033-H1 : Bur oak, elm, few ash snags

P023 -H1 : Sparse white cedar, white Elm
- few snags

P029-H1 : Sparse cottonwood, gray dogwood, goldenrod
- No snags

P027-H1 : Bur oak, black walnut, gray dogwood
- No snags

P050-H1 : Bur oak, white elm, gray dogwood
- Many snags

08/10/10

P009-H1 : Hawthorn, Shagbark hickory, E. Cottonwood
- few snags

P009-H3 : Sparse white Elm, Shagbark, gray dogwood
- No snags

P009-H2 : White cedar - No snags

P009-H4 : Very sparse, 1 mature bur oak, white elm

P004-H1 : Shagbark, Cottonwood, - Many snags

P003-H1 : Shagbark, White Elm, cottonwood - few snags

P003-H2 : White Elm, Cottonwood - Many snags

P005-H1 : Sparse Elm, Walnut, Staghorn sumac - No snags

P005-H2 : Elm, Bur oak, Shagbark - few snags

P098-H1 : immature white elm, Bur oak, sumac
- few snags

P098-H2 : white elm, bur oak, basswood - few snags

P129-H1 : Sparse white elm, white ash, sumac

P059-H1 : White cedar shrub

P059-H2 : Norway spruce, white cedar

P097-H1 : White cedar

P096-H1 : Norway spruce, white elm, cottonwood - few snags

P096-H2 : Norway Spruce - no snags

P100-H1 : Sparse white elm, hawthorn, red cedar
- few snags

P044-H1 : very sparse bur oak, elm, - few snags

P044-H2 : sparse bur oak, elm, - several snags

P045-H1

P040-H1 : white elm, cottonwood, hawthorn - few snags

No. 392
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Hedgerow (TAGM5) - Dominant tree + shrub species

P092-H1: E. Cottonwood, Red Oak, White Elm
- No Snags

P092-H2: Staghorn Sumac, gray dogwood, hawthorn
- No Snags

P015-H1: Silver Maple, Cottonwood, prickley ash
- No Snags - old railway line.

P015-H2: White Elm, Bur Oak, Cottonwood - few snags

Oct. 13 2010 CLH, BAM

P105-H1 Separated out from woodlot. Tree info from P105-D1 (treed ditch)
White elm, Basswood, Black Walnut.

P026-H1 treed ditch. tree info from P026-D1
gray dogwood, sparse white elm

P083-H2 thick fencerow of bur oak follows ditch.

P083-H3 Deciduous. Bur oak, white elm. gray dogwood. trees are young + somewhat scattered.

P083-H4 planted white cedar
large brush pile at the west end of this, in the field Crew, + likely to be removed). Long Black O-pipe recently installed here for tile drainage.

P083-H5 Shrub. Hawthorn. follows very negligible ditch

P081-H1 Bur Oak, Pin oak, hawthorns.
connects to Oak-dominated forest (diff kinds of oaks)

P082-W2 same as P082-W1. Small fragment. no large snags.

P082-H1 D. White elm, some bur oak

P081-H3 C. Red cedar, white ash, hawthorn, bur oak, white cedar
follows Ditch P082-D1

P081-H4 Silver maple

19°C, 90% C.C. wind 4 from W

Fencerows

P085-H1: Small line of elms, one ash, - no snags

P119-H1: Bur oak, white elm, - few snags

R55-H1: immature elm, bur oak, cotton wood - no snags

P065-H2: sumac, gray dogwood, spare cottonwood - no snags

P111-H1 - Norway spruce

CLA-H1 - Sparse bur oak, elm, - many snags
CLA-H2 - Norway spruce
CLA-H3 - Sparse elm, - few snags
CLA-H4 - sumac, hawthorn, dogwood - no snags

P135-H1 - sparse elm; few snags

P024-H2 - sparse bur oak, sumac, cottonwood - no snags

South Kent WF Nov. 4/10
Fencerows (TAGM5) CLH

P115-H2 Deciduous. white Elm, - Bur Oak, hawthorn.

Note: Climbing Prairie Rose along Railbed North of P115 (marked on map in red) -> R.S.

P136 - no hedgerows within 120m.
No ditch on the west side of the road
Grassy ditch (no standing water) approx 3 feet deep from level ground on East side. very scattered shrubs + small trees.
Along South side is a 3 ft wide grass strip. West side of City Rd 4 with no ditch is mowed grass. East side is mowed grass, wider (~ 5m before ditch)

P136-H1 Short Coniferous. Planted White Cedar associated with farm buildings on edge of field. No surface features. No other species associated.

Mowed Grass edges along 5th Cone. Line
No ditches

1184
BAM
Fencerows cont...

P013-H1: Sparse elm, dec. shrub - few snags

P010-H4: white elm - some snags

P138-H1: Sparse elm, hawthorn - few snags
P138-H2: white cedar, gray dogwood

P139-H1: white cedar

P140-H1: Norway spruce
P140-H2: Willow shrub, elm, cottonwood

P080-H3 Dead white Ash, pin oak, basswood, live white ash pile of rocks, debris, soil, bit of burn at the very southern end.

P080-H4 D. pin oak, bur oak, white elm.

P122-H2 D. Bur oak, balsam poplar, gray dogwood, white elm.

P122-H3 D. planted white cedar.

P078-H4 D bur oak, Norway Spruce, prickly ash also: P078-H3 Same species.

P078-H5 C planted white cedar

P114-H2 D Bur Oak, Shagbark ~~Hickory~~, Pin Oak

P114-H3 D. W Elm, Hawthorn

P125-H2 C. planted wh. cedar

P080-H1 D. Bur oak, white Elm

4-4

P085-H2 Shrubs. Sumac with v. young White Elm along a small ditch. Brush Pile at the end of it

P085-H3 Deciduous White Elm of varying ages.

P085-H4 Deciduous. Bur Oak, White Elm follows small ditch

P085-H5 Decid. Freeman's maple, White cedar, Gray Dogwood, White Elm.

P085-H6 planted White cedar

P085-W3 - clumps of trees. 1 large scots pine plus sumac, Rae, white elm

P085-H7 - Decid. Bur oak, red oak

P085-H8 - Decid. Bur oak, white Elm, Red oak. Ditch runs adjacent

P083-H1 planted white cedar + Norway Spruce white pine, Scots pine

2-4

South Kent WF — Page 1 of 5
NRSI - 1184 — 1205, Nov. 5/10 BAM

5°C, 80%, C.C. wind 3, No rain

Fencerows within 120m of all Project components

RL-H1: Planted white cedar and sparse cottonwood, -around constructed open water (OAW)

RL-H2: Sparse white elm, hawthorn sp,

P114-H2: Red oak, white Elm (mature)
P095-H1: Mature + immature Bur oak
P126-H1: immature Bur oak, hawthorn
P125-H2: white cedar shrub
P127-H2: white cedar
P095-H2: Norway spruce, white cedar
P069-H2: Sparse cottonwood, willow shrub (riveline)
P070-H3: White cedar shrub
P070-H4: Sparse mature silver Maple
P087-H3: immature bur oak, basswood, apple
P087-H4: immature bur oak, silver Maple
P087-H5: sparse immature white elm, hawthorn sp, rose Prairie *
P087-H6: " " " , red oak, stag horn sumac
P087-H7: mature silver Maple
P095-H3: Norway Spruce, white cedar

South Kent WF — Page 3 of 5
NRSI-1184 — Nov 7/10 BAM
Fencerows cont...

P100-H5: Norway Spruce
P051-H2: White Cedar P051-H1: White Cedar
P040-H2: Immature white elm, gray dogwood
P039-H1: white cedar
P038-H2: white cedar
P037-H2: white cedar
P034-H1: Norway Spruce (immature)
P034-H2: Norway Spruce, red cedar, white cedar
P032-H1: Red cedar, cottonwood, black locust
P055-H1: Norway Spruce, white cedar
P055-H2: Norway Spruce
P055-H3: Immature white Pine, white cedar, Norway Spruce
P034-H3: Red Cedar
P031-H1: Bur oak, Basswood, white elm
P031-H2: Green ash, Basswood, shag bark hickory
P018-H1: Bur oak, white elm, red cedar shrub
P016-H2: white pine, white cedar, norway spruce (shrub)
P016-H3: Norway spruce
P016-H4: White cedar shrub
P014-H1: White Spruce
P101-H1: Gray dogwood, staghornsumac, Sparse immature white elm

South Kent Wind — Page 1 of
NRSI # 1184 — 06/10/10 BAM

P106-D1: timothy, red clover, orchard grass
- No water present

P105-D1: White Elm, Basswood, Black walnut
- Many Snags, flowing water

P104-D1: Reed Canary grass, smooth brome
- No water present

P023-D1: Black Walnut, cattail, goldenrod
- Deep ditch but no water present

P031-D1: Goldenrod, Gray dogwood, grasses
- No snags or water present

P026-D1: Sparse white elm, gray dogwood, reed canary
- no water

South Kent WF — Page 5 of 5
NRSI 1184 — Nov. 8/10 BAM
7°C, 0% C.C. Wind 1, No Rain
Fencerows cont...

P139-H4: White Cedar
P139-H5: White Cedar
P139-H6: White cedar, black walnut, green ash (both)
P139-H7: White cedar (both)
P009-H5: Norway Spruce
P005-H3: White elm, Staghornsumac
P005-H4: White cedar, White Spruce
P005-H5: Silver Maple, gray dogwood, staghorn Sumac
P005-H6: Silver Maple, Immature Basswood
P005-H7: Red Oak, White Elm (mature)
P138-H3: Norway Spruce
P008-H2: White Cedar Shrub
P008-H3: Norway Spruce

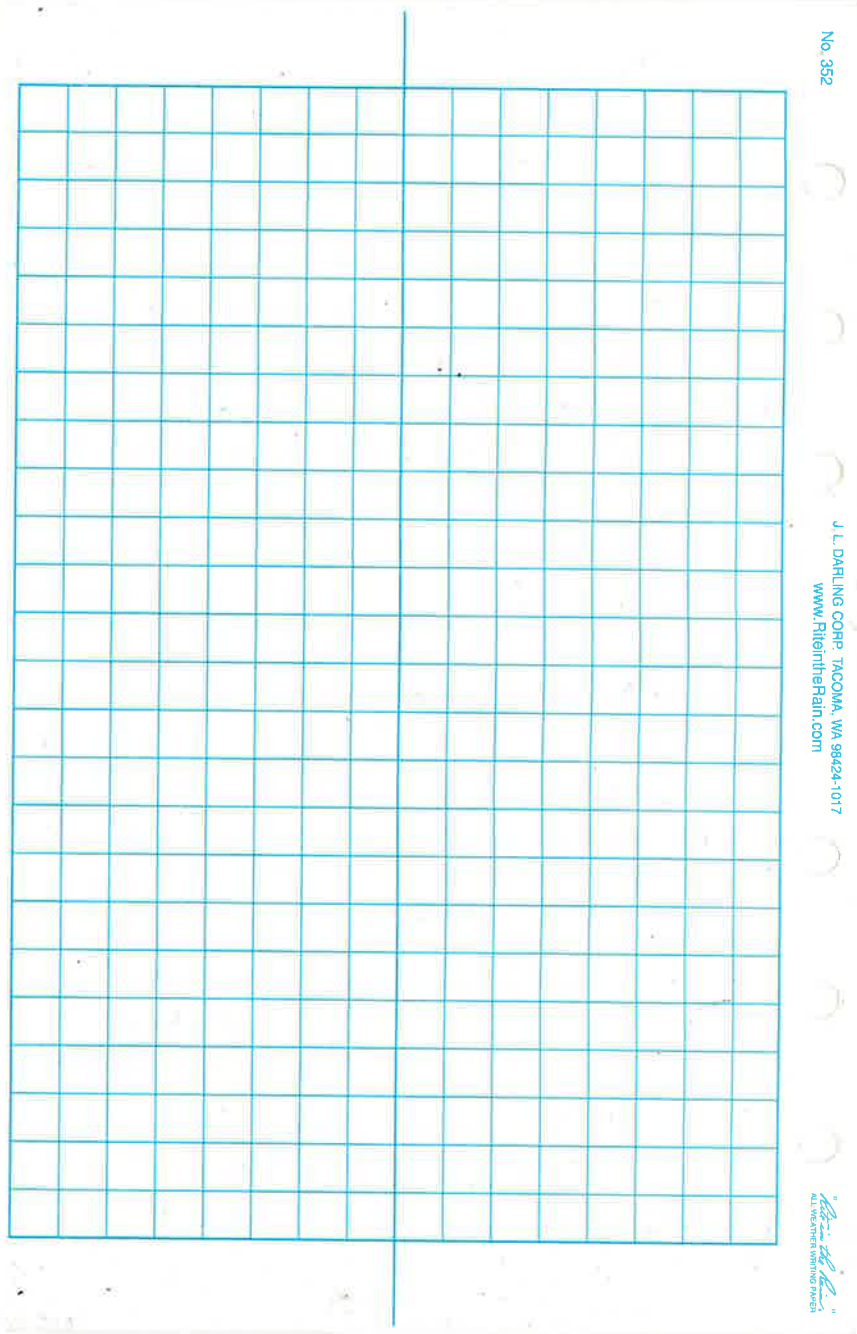
P095-H4: Immature bur oak, white elm, staghorn sumac
P088-H2: sparse, mature bur oak, white elm,
P088-H3: norway spruce, white cedar shrub
P088-H4: Sparse bur oak, white elm
P068-H2: Manitoba Maple, Honey Locust, Euro. White Poplar,
P094-H3: white cedar
1°C, 40% C.C: Wind 2, No rain 930- Nov 6/10
P094-H4, white elm (immature), hawthorn
P066-H3: staghorn sumac, white elm, hawthorn
P064-H2: bur oak, staghorn sumac
RS5-H2: bur oak, white elm
P064-H3: white elm
P064-H4: Euro. white poplar
P064-H5: White Elm, cottonwood, white Ash - riverine
P063-H3: Silver Maple, gray dogwood, prickly ash
P065-H2: Manitoba Maple, Cottonwood, white elm,
P061-H1: immature elm, silver maple, willow shrub - riverine
P097-H1: Norway Spruce
P096-H3: Mature Norway Spruce,
P112-H1: Norway Spruce, White Cedar
P058-H2: White Cedar Shrub
P100-H2: immature white elm, basswood, bur oak
P100-H3: Cottonwood, bur oak, hawthorne sp.
P100-H4: Bur oak, White ash

P015-H3: white cedar, black walnut (immature)
P102-H1: Norway spruce, white cedar
P102-H2: White Cedar shrub
P102-H4: Immature Dec. tree
P093-H1: Norway Spruce
P093-H2: Staghorn sumac, white elm, hawthorn
P093-H3: Norway Spruce, white cedar
P001-H3: Mature, black walnut, staghorn sumac
P001-H4: white cedar, Norway Spruce, Cottonwood
P104-H2: Norway spruce, black walnut, basswood
P104-H3: Man. Maple, white Elm, white Pine
P105-H2: Willow sp. Trees (Planted)
P106-H3: Norway spruce,
P105-H3: Norway spruce, white spruce, white cedar
P105-H4: Euro white Poplar, stag horn sumac
P002-H1: Norway spruce, white cedar
P008-H1: Silver Maple red cedar (planted)
P139-H2: Green ash white elm - riverine
P139-H3: Black Walnut, staghorn sumac
P102-H3: Bur oak, Silver Maple, white elm, some snags

P030-D1: Cattail, Wild Carrot, Water Plantain - Little water

P009-D1: Goldenrod, Cattail, Aster - Little water

Oct. 13 2010 CEH, BAM
P035-D1: cattail, smooth brome. little water
P041-D1: "
P013-D1: elm lowland. defined channel ~ 2m wide, little water, unvegetated.
P013-D2: cattail, willow shrubs.
P018-D1: goldenrod, smooth brome, cattail
P045-D1: grassy. "
P052-D1: "
P110-D1: "
P055-D1: "
P082-D1: "
P057-D1: "
P060-D1: water in ditch. gray dogwood & some groves of elm.
P063-D1: some water, grassy, some gray dogwood, edged by white cedar plantings.
P071-D1: grassy. Goldenrod, smooth brome. BAM
P126-D1: "
P072-D1: "
P070-D1: "



P032-D1: reed canary, mixed forb - water pres.

P033-D1: Cattail, goldenrod, grasses, - no water

Chatham Kent Wind Farm Page 1 of
NRSI #1184 20/10/10
BAM

Drainage Feature Descriptions

P114-D1: white elm, hawthorn, sumac
- perm, wet, deep + wide channel
- smaller + less tree cover in South

P115-D1: cattail, goldenrod, timothy, - no water

P122-D1: timothy, giant ragweed - no water

P068-D1: reed canary grass, purple loosestrife, cattail
- no water present

P065-D1: sparse cottonwood, willow shrub, goldenrod
- deep + wide channel with permanent water

21/10/10

P094-D1: timothy, cattail, giant ragweed
- no water

P098-D1: reed canary grass, white elm
- some water, little flow

1-5

South Kent WF 1184
Ditches, Drains, Creeks Nov. 3/10
CLH

P136-D1 Ditch, ~ 5 Ft deep. No standing water. Grasses + goldenrods. ~ 3m from lip to lip. Scattered shrubs + young trees. Very steep with very narrow area for water.

P086-D1 Ditch, very narrow, approx 3Ft deep from lip, 2 m wide from lip to lip. Cattails + Phragmites in the very bottom, growing thickly. Runs along S side of 5TH Conc. Line.

P086-D2 Wider, more incised ditch. Grasses + Goldenrods. Very narrow at bottom. Bridge (not new) where it crosses 5TH conc. line.

P086-D3 Similar to D2. cattails + Phragmites in bottom. Bridge where it crosses road.

P086-D4 Wider Ditch. ~ 8 m from lip to lip, ~ 8ft deep from lip to bottom. Narrow (~1.5Ft) at bottom. Bottom filled w cattails. Upper edges have goldenrods, Sumac, Red cedar, Teasel, grass, Ragweed, Gray Dogwood, timothy, barnyard grass.

South Kent WF Page 1 of
NRSI #1184 26/10/10
BAM

19°C, 90% C.C., Wind 4 from W

Drainage features

P111-D1: mixed grasses + forbs

CLA-D1: goldenrod, willow shrub, elm - water present.
CLA-D2: elm, goldenrod - water present.

P024-D1: goldenrod, sumac, willow shrub - water present

SSS-D1: sparse elm saplings, mixed forbs - water present.

P139-D1: willow shrub, sumac, cottonwood saplings
- water present

P140-D1: willow shrub, elm, cottonwood - water present.

P129-D1: cattail, sparse white elm, white ash
- no water present.

P097-D1; sparse willow shrub, silver maple saplings,
- reed canary grass, - water present

P096-D1; sparse gray dogwood, grass + forb
- no water

P100-D1: cattail, forb, sparse white elm - water present

P058-D1: Mixed grasses + forbs - no water
P058-D2: Mixed grasses + forbs - no water

P108-D1: mixed forbs, gray dogwood, sparse elm
- no water present

P120-D1: grasses + forbs, very sparse staghorn sumac
- no water present.

P109-D1: goldenrod, ragweed, sparse dec. shrub - water

P010-D1; forb, elm, dogwood, - perm. water

2-6

P086-D5 Narrow, Steep Ditch. ~2m wide at top. ~4ft deep
Access Road for Kruger goes right along the East side. Ditch does not cross road. Grasses + Goldenrods, some patches of cattails

P085-D1 Ditch. ~8m from lip to lip, ~8 ft deep. ~4ft wide at bottom. Full of cattails. Upper lips are mowed grass. runs along E side of West side is mowed grass only.

P085-D2 very small ditch. ~1.5m lip to lip, covered in grass only.

P085-D3 small ditch, goldenrods + asters with some Phragmites in places.

P085-D4 small ditch, ~1.5m wide, 3ft deep. Grasses

P085-D5 Narrow ditch, Grasses

P085-D6 Small ditch, Hedgerow is growing out of the ditch directly

P085-D7 Ditch runs adjacent to Hedgerow. Grassy, on East side of road a culvert runs to connect D7 ~ D1 under a land bridge

P083-D1 grassy ditch · canada goldenrod, multiflora rose, cattails, barnyard grass,

P083-D2 small creek. Standing water. Aquatic species, cattails. mostly grassy banks w multiflora rose.

P083-D3 S side of road Steep ditch. grassy (timothy, orchard grass, curly dock a couple of rock piles (small)

P083-D4 follows South side of road. a couple of recent rock piles (small). Grassy; goldenrods

P083-D5 runs N-S. ~4ft wide at bottom, choked with cattails. banks grassy, w flat top goldenrod, canada goldenrod etc. on southern side of the road it is narrower, & the hedgerow is growing out of the ditch.

P082-D1 runs along South side of road. Cattails at bottom, sides calico aster, canada goldenrod, burdock, orchard grass

P081-D1 reed canary at the bottom, orchard grass, Phragmites, sparse Canada goldenrod

3_6

* Equivalent to P126-D2 (BAM)

P125-D1 steep ditch - phragmites, cattail

P081-D2 small ditch, grassy sides with goldenrods, reed canary in the channel, portions are shrubby (P081-H2)

P116-D1 big, steep ditch - ~1.5 m wide at bottom; emergent equatics, some sections of cattail + phragmite; sides of ditch mixed grass + forbs.

P116-D2 steep ditch, ~3ft wide channel. scattered red cedar, sumac, young bur oak + young white elm along edge. channel full of phragmites + cattails.

P126-D1 natural creek (but channelized immediately south of Gleeson Line) grasses + goldenrods along edges. open water channel, red cedar, sumac, sparse along upper edges

5-6

South Kent WF Page 3 of 5
NRS1 - 1184 Nov.6/10
Drains cont... BAM

P094-D3: Cattail, Phragmites - no water
P094-D4: goldenrod, astes, Mixed grasses - no water
P094-D5: reed canary grass, goldenrod, white elm - water
P061-D1: goldenrod, immature elm, silver maple - water (2m)
P061-D2: reed canary, smooth brome, immature elm - no water
P117-D1: reed canary, goldenrod - no water
P097-D2: reed canary, cattail - no water
P112-D1: reed canary, smooth brome, aster - water (1m)
P100-D2: immature white elm, basswood, bur oak - water (1m)
P100-D1: goldenrod, Phragmites, reed canary - no water
P117-D2: reed canary, Phragmites, goldenrod - water (1m)
P049-D1: mixed grasses, cattail Phragmites - No water
P053-D1: goldenrod, Phragmites, asters - No water
P053-D2: goldenrod, Smooth brome, Red Cedar - Water (1m)
P053-D3: " " " - Water (2m)
P049-D2: smooth brome, goldenrod - no water
5°C, 50% C.C, Wind 3, No rain 900 - Nov. 7/10
P046-D1: Phragmites, reed canary grass, - no water
P051-D1: Cattail, reed canary, Phragmites - water (1m)
P055-D2: Cattail, reed canary, Phragmites - no water
P056-D2: Canada Goldenrod, Calico aster, cattail - No water
P051-D2: reed canary, Phragmites - Water (<1m)
P051-D3: avens sp., garlic mustard, stinging nettle - no water

South Kent WF Page 1 of 5
NRS1 1184 1230 Nov. 5/10
BAM

5°C, 80% C.C, Wind 3, No rain

Drains within 120M of all Project Components

P114-D2: Mixed grasses, cattail - No water
P114-D3: Mixed grasses, goldenrod - some water
P074-D1: Phragmites, cattail, goldenrod - No water
P076-D1: Mixed grasses, goldenrod, wild carrot - Some water
P124-D1: Aster, ragweed, teasel - no water
P071-D2: reed canary grass, smooth brome - Some water
P071-D3: reed canary, cattail, Phragmites - no water
P071-D4: reed canary, cattail - no water
P126-D2: reed canary, smooth brome - no water
P127-D1: goldenrod, smooth brome, Phragmites - no water
P069-D1: mixed grasses - no water
P069-D2: Sparse cottonwood, willow shrub, goldenrod - water present.
P069-D3 - Mixed grasses - no water
P070-D2 * cattail, asters, - no water
P070-D3 - cattail, reed canary, goldenrod, sparse bur oak - water present.
P070-D4 - goldenrod, asters, smooth brome - no water

P122-D2 steep ditch. filled with Phragmites. Grassy upper edges. Connected via culvert to P085-D1

P079-D1 gently sloped mown grass down to ~1.5 ft wide cattails.

P080-D1 cattail phragmites at bottom (which is ~ 4 ft wide) sides have grasses, prickly ash, teasel, scouring rush

P076-D1 mowed grass sides, very narrow bottom. Grasses ~ forby

P076-D2 deep ditch, grassy sides, timothy in the bottom ~ 3 ft wide, no standing water

P076-D3 large ditch. some (~ 0.5ft) standing water in bottom. 4ft wide at bottom

P074-D1 ~ 4ft wide, full of Typha angustifolia & Phragmites

P113-D1 steep ditch, phragmites, cattail

P115-D2 small, shallow ditch, some cattails grassed sides

4_6

RB-D1 large ditch. channel ~ 2m wide. cattails, phragmites, willow sp. trembling aspen. water.

6_6

NRSI 1184 Page 4 of 5

South Kent WF Nov. 7/10 BAM

Drains cont...

CLA-D3: Phragmites, cattail, hawthorn - no water
P040-D1: Cattail, Phragmites, goldenrod - no water
P040-D2: Goldenrod, aster, hawthorn - no water
P039-D1: Cattail, Phragmites, goldenrod - no water
P037-D1: Cattail, goldenrod, reed canary - no water
P034-D1: white elm, gray dogwood, - no water
P034-D2: Cattail, reed canary grass - no water
PSS-D1: Reed canary grass, goldenrod - water (1m)
PSS-D2: Reed canary, goldenrod, willow shrub - water (5m)
P034-D3: Reed canary, goldenrod, Phragmites - no water
SSS-D2: reed canary, Phragmites, brome - no water
SSS-D3: Can. goldenrod, gray dogwood, brome - water (<1m)
P019-D1: smooth brome, N.E. Aster, Can. goldenrod - water (<1m)
P016-D1: immature Nan. Maple, willow shrub - water (2m)
P016-D2: reed canary, cattail, Phragmites - no water
P018-D1: (extended both ends)
P019-D2: Cattail, Phragmites (both ditches) - no water
P013-D1: (extended across railway)
P011-D1: willow shrub, red raspberry, goldenrod - water (1m)
P011-D2: Red osier dogwood, P011-H1, P012-H1 - no water
P101-D1: Reed canary grass, goldenrod, smooth brome - no water
P029-D1: gray dogwood, red cedar, cattail, immature white elm - no water

NRSI 1184 Page 2 of 5

South Kent WF Nov 5/10 BAM

Drains cont...

P087-D1: Cattail, asters, goldenrod - no water
P087-D2: water plantain, aster, cattail - water present.
P087-D3: mixed grasses - no water
P088-D1: Goldenrod, curled dock, smooth brome, sparse sumac and immature white elm - some water
P088-D2: mixed grasses, water plantain, goldenrod, - water
P088-D3: reed canary grass, goldenrod, asters - water
P127-D2: reed canary, goldenrod, purple loosestrife - significant water (approx 3m wide).
P095-D1: reed canary, aster, cattail - no water

1°C, 40% C.C., wind 2, No rain 930 Nov 6./10

P067-D1: goldenrod, gray dogwood, cattail - water
P064-D1: goldenrod, purple loosestrife - water
P064-D2: white elm, cottonwood, goldenrod - water
P063-D2: goldenrod, mixed grasses - no water
P062-D1: goldenrod, willow shrub, Mixed grasses - water (4m wide)
P129-D2: Phragmites, sumac, goldenrod
P065-D2: immature white elm, willow shrub - water (1m) wide
P094-D2: goldenrod, mixed grasses, bur oak - water (1m)"
P064-D3: cattail, purple loosestrife - water (<1m)"

South Kent WF
NRSI - # 1184
6°C, 0% C.C., Wind 1, No rain
Nov. 8/10
BAM

Drain 5 cont...

P014-D1: cattail, Phragmites, goldenrod - no water
P102-D1: cattail, goldenrod, gray dogwood - no water
P093-D1: calico aster, goldenrod, immature elm - no water
P103-D1: cottonwood, willow shrub, goldenrod - no water
P104-D2: Man Made, white elm, smooth brome - water (1m)
P106-D2: goldenrod, willow shrub, smooth brome - no water
P106-D3: reed canary grass, goldenrod, ragweed - water (<1m)
P002-D1: reed canary, Phragmites, redosier dogwood - no water
P002-D2: reed canary grass, red osier dogwood - water (<1m)
P004-D1: reed canary, goldenrod, willow shrub - no water
P139-D2: reed canary, green ash, white elm - water (1m)
P139-D1 (extend to N side of road.)
P139-D3: Green ash, Black Walnut, can. goldenrod (1m)
P140-D2: basswood, sugar Maple, goldenrod (1m)
P009-D2: Cattail, Phragmites
P005-D1: Can. goldenrod, Staghorn Sumac, white elm (<1m)
P005-D2: Cattail, Phragmites, gray dogwood - no water
P027-D1: Phragmites, goldenrod, cattail - no water
P

NATURAL RESOURCE SOLUTIONS INC.

Aquatic, Terrestrial and Wetland Biologists

Fauna Observations

Project Name: South Kent WF **Project #:** 1184

Observer(s): CM

Date: Nov. 4 2010 **Time (24h):**

Polygon: **Weather:** Precipitation: none Temp (°C): 5

Wind Speed & Direction: 1 Cloud %: 40%

Species	#	Time (24h)	Behaviour/Observation
Northern Harrier	1	0945	flying NE N of P115
Am. Crow	10	0950	" W of P115
Gray Squirrel (Black)	1	1030	P136-W1
Horned Lark	13	1108	Along 5th Conc. Line by P086
Red-tailed Hawk	1	1155	perched ~~vasque~~ near P085 along KSW Road
Opossum	1	1500	roadkill near P081
House Sparrow	35	1515	perching in P088-H2 (n3)
Mourning Dove	12	1550	perched near P081
American Kestrel	1	1645	flying near P122
muskrat	1	1935	swimming - P126-D1

SAR observations must also include a specific UTM location.

Wind speed (Beaufort): **0**=calm; **1**=smoke drifts; **2**=wind felt on face; **3**=leaves move; **4**=sm.branches move; **5**=sm.trees move; **6**=lrg branches move; **7**=lrg trees move; **8**=twigs break off, hard to walk; **9**=light structural damage; **10**=trees uprooted

Behaviour: foraging, mobbing, migration, flying, perching, perched on ground, swimming, breeding (include evidance).

NATURAL RESOURCE SOLUTIONS INC.

Aquatic, Terrestrial and Wetland Biologists

Fauna Observations

Project Name: Chatham-Kent WP **Project #:** 1184

Observer(s): OLH, AGR

Date: Sept 1, 2010 **Time (24h):** 0930 -

Polygon: **Weather:** Precipitation: none Temp (°C): 30

Wind Speed & Direction: 3 SW Cloud %: 50

Species	#	Time (24h)	Behaviour/Observation
NOCA	1	0945	T20-H1
BHCO	1	0945	T20-H1
MODO	11	1011	T22. Fld, T25.
NOFL	1	1040	T23-H1
raccoon	1		roadkill
Black-tailed Jackrabbit	11		T23 - Nat. Hedgerow
Vicevy	11		T23 Nat Hedgerow
monarch	1	1220	T25
BBCU	1	1220	T25 - Forest
TUVU	1	1220	T25
AMRO	1	1220	T25-empty nest
GRCA	11		T25, T23-Nat Hedgerow
AMGO	111		T25, T23-Nat Hedgerow
Green Frog	1		T25
Question mark	1		T25.
Deer			T36-bed, T25 skull
KILL	1		T09

SAR observations must also include a specific UTM location.

Wind speed (Beaufort): **0**=calm; **1**=smoke drifts; **2**=wind felt on face; **3**=leaves move; **4**=sm.branches move; **5**=sm.trees move; **6**=lrg branches move; **7**=lrg trees move; **8**=twigs break off, hard to walk; **9**=light structural damage; **10**=trees uprooted

Behaviour: foraging, mobbing, migration, flying, perching, perched on ground, swimming, breeding (include evidance).

NATURAL RESOURCE SOLUTIONS INC.

Aquatic, Terrestrial and Wetland Biologists

Fauna Observations

Project Name: South Kent WF **Project #:** 1184

Observer(s): CLH

Date: Sept 2 /2010 **Time (24h):** 0900 –

Polygon: **Weather:** Precipitation: none Temp (°C): 28

Wind Speed & Direction: 4 Cloud %: 95

Species	#	Time (24h)	Behaviour/Observation
MODO	####1		T100, T89
SAVS	11		T100, T101
AMRO	1		T100
Deer tracks, bed	1		T100
BLSA	1111		T100, T98, T101
Kestrel	11		T98, T91, T89
TUVU	11		T101, T89
monarch	11		T89
TRES	11		T73 (plus T71 flock nearby)
BARS	1		west of T71

SAR observations must also include a specific UTM location.

Wind speed (Beaufort): **0**=calm; **1**=smoke drifts; **2**=wind felt on face; **3**=leaves move; **4**=sm.branches move; **5**=sm.trees move; **6**=lrg branches move; **7**=lrg trees move; **8**=twigs break off, hard to walk; **9**=light structural damage; **10**=trees uprooted

Behaviour: foraging, mobbing, migration, flying, perching, perched on ground, swimm breeding (include evidance).

NATURAL RESOURCE SOLUTIONS INC.

Aquatic, Terrestrial and Wetland Biologists

Fauna Observations

Project Name: SouthKent WF **Project #:** 1184

Observer(s): CLH

Date: Sept. 3/2010 **Time (24h):** 0900-

Polygon: **Weather:** Precipitation: rain Temp (°C): 23

Wind Speed & Direction: 4 Cloud %: 100

Species	#	Time (24h)	Behaviour/Observation
red-tailed hawk	1	0920	T49-H4
EUST			flock T47
TRES			flock T47
MODO	++++	0945	T44
pickerel frog	1	0955	crossing road by T46. walk time.

SAR observations must also include a specific UTM location.

Wind speed (Beaufort): **0**=calm; **1**=smoke drifts; **2**=wind felt on face; **3**=leaves move; **4**=sm.branches move; **5**=sm.trees move; **6**=lrg branches move; **7**=lrg trees move; **8**=twigs break off, hard to walk; **9**=light structural damage; **10**=trees uprooted

Behaviour: foraging, mobbing, migration, flying, perching, perched on ground, swimming, breeding (include evidance).

South Kent WF
NRSI #1184

BAM

Incidental Wildlife Observations - 21/10/10

- BLJA	SOSP	- EUST
- COGR	AMCR	- KILL
- AMKE	- AMGO	GCKI
- RTHA	- TUVU	CEDW
- NOHA	RBGU	- NOFL
HOSP	DOWO	BCCH
SNBU	HOLA	- MODO
- AMRO	CAGO	MALL

Whitetailed Deer
Gray Squirrel
Raccoon (road killed)
Opossum (road killed)
Grand hog

Foxsnake (road killed) - photos 1-4
- 17T 0386589 - 4680429 (near P114)
Garter snake (road killed)

April 7/2011 S. Kent → 1184 (1/2)
NGM, KGB 1°C, foggy, S-1

Rhythm area

Site 12 (P023-D1)

Red Cedar
European White Birch
Scott's Pine
Bull Thistle
Red Osier Dogwood
Lilac
Norway Spruce
Buckthorn
Black Locust
Gray Dogwood
Goldenrod sp.
E. White Cedar
C. Apple

Sumac
Queen Ann's Lace
Silver Maple

Site 13 (P023-H2)

hedgerow
E. White Cedar
Norway Spruce
Queen Ann's Lace
Goldenrod sp.

> dominant

S. Kent 1184 - KGB, NGM (3/3)
April 7/2011 - 1°C, fog, S-1

Site 16 (P013-H3)

Norway Spruce
Bull Thistle
E. White Cedar

> Dominant grass, hedgerow

Red Cedar
Man. Maple
Goldenrod sp.
Gray Dogwood
Wild Rose
Riverbank Grape
C. Apple
Lilac

(2/2)

Site 14

Norway Spruce
E. White Cedar
Red Cedar
Silver Maple
Lilac
Honeysuckle
C. Cattail
Gray Dogwood
Queen Anne's Lace
C. Mullen
Tulip Tree
C. Apple
Manitoba Maple
Cottonwood
Wild Rose
Riverbank Grape

Site 15 - barren → swampy → small ditch

Bull Thistle
Red Cedar
Goldenrod sp.
Asparagus
Mullen
Battery
Norway Spruce
Wild Rose
Silver Maple
C. Apple
Hawthorn
Queen Anne's Lace
Phragmites
Bur Oak
Pussy willow
Manitoba Maple
Scott's Pine
E. White Cedar
Red Osier Dogwood
Gray Dogwood

- Sav. Sparrow (1)
- Song Sparrow (1)
- Am. Robin (1)
- White-Tailed Deer
- American Crow (2)

April 7/11

1°C, wind S1, fog, C.C 100%

Site 12

- Morning dove (2)
- Eur. starling (10)
- Comm. Grackle (5)
- Killdeer (2)
- Am. Robin (3)
- Dark-eyed Junco (1)
- Horned Lark (2)
- House Sparrow (8)

Site 14

- Common Grackle (10)
- American Robin (5)
- Northern Cardinal (1)
- Northern Flicker (2)
- Am. Crow (1)

Site 15

- Am. Robin (10
- Euro. Starling (6)
- House Sparrow (1)
- Red-winged Blackbird (8)
- Mourning Dove (3)
- Northern Cardinal (2)
- Song Sparrow (1)

Site 16

- Com. Grackle (1)
- Am. Robin (1)

project: South Kent Wind Farm - 1084A - ELC work (micrositing)
Date. April 21, 2011
Temp- 4, wind- 3 precip- none, cc- 70%.
SAG, PWP

Highlighted area near P095 (south of morris & cooper) - nothing new, bare corn feild. P071 - D4 present but previously looked at.
10:23

Area south of P113-H1 - nothing - bare wheat feild
10:33

Pollard Line between McKinlay & Morris - ditch on south side - completely bare
10:37

P068 Highlighted Area - very sparse hedgerow (~10 trees) - bur oak, shagbark hickory, soft maple, eastern white cedar
10:45

P063-H1 - 100% white cedar
P063-D1 - red osier dogwood, teasel, buckthorn, young elm, cat tail, grey dogwood
11:59

P094-D1 - 100% white cedar
P094-H1 - yellow locust, grey and red osier dogwood, teasel, canada and tall goldenrod, mullein, queen annes lace
12:08

P055-D1 - treeless large ditch - teasel, canary grass, queen annes lace, aster sp. grey dogwood
12:30

P109-D1
13:17 - temp up to ~10°, cc- 80%., w- 2. Ditch same as old description, a few snags present

P031 (13:30) - highlighted area bare.

P016 (13:35) - highlighted area bare

P014 (13:47) - highlighted area bare

Kent bridges btw Front & Eds North East (14:01) - white cedar = white spruce >> white Ash, willow, manitoba maple, red cedar, reed canary grass, teasel, queen annes lace
- bare to the south west of the road.

Shawburse - South of oneil - hedgerow bur oak, red cedar, teasel, red osier dogwood, apple, multiflora rose prickly ash, buckthorn, poplar, hawthorn, white ash

Incidentals - 2 ground hogs @ 8th & dillon, north of oneil - P010-D1 - Jackrabbit seen.

April 4, 2011 South Kent WF
PWD, SAG #1184A
Temp- 14, w-6, precip - light rain, % cloud 100

P111 - H4: 13:48
Hedgerow, no snags, or deadfall above 25 bdh
White spruce >> white cedar > red cedar

P149-H1 14:02
Planted hedgerow, mixed. No deadfall, one small snag.
White Spruce > White Ash > white Elm

P163-H1, H2, H3 } 1 large planted hedgerow, with some very small deadfall, no snags
White Spruce > white cedar
14:18

P097 - H1 - Coniferous hedgerow, no snags or deadfall, 100% white cedar
14:25

April 4 South Kent WF
PWD, SAG #1184A
Temp 16, w-6, % Cloud - 100, precip - light rain

P111-D5 - 14:38
Drainage ditch, partly naturalized
No deadfall, snags, or trees greater that 24cm dbh.
Willow sp >> red cedar > black walnut > white elm
Muskrat trail observed.

P060-D1 15:09
Drainage ditch, no dead fall, 1 snag 25-50 cm dbh
Poplar sp > Willow sp > Bur oak > red cedar

P164-H 15:18
Mixed hedgerow, some deadfall & snags (10-24 dbh)
Bur oak > white Elm > red cedar > staghorn Sumac

P100H2 - 15:30 - rain heavy now
Barely a hedgerow (sparse), a few trees with Kentucky bluegrass ground cover. Trees large
Red maple > red cedar > white cedar

April 7, 2011 South Kent Wind Farm
SAG, PWD 1184
Temp - 9° wind - 1 % cloud - 100
precip - none

P145 - D1 - 17:25 KILL HOLA SoSp
few bird nests, RWBL Calling, AMRO,
Manitoba maple, black walnut,
Hawthorn, american Elm, Buckthorn
reed canary grass ground cover
below canopy burdock choke cherry
teasel, honeysuckle sp, red osier & yellow evening primrose
River bankgrape
grey dogwood, multiflorel rose, garlic mustard
White Ash, Silver maple

P145 - H1 - 100% White spruce hedgerow,
no deadfall or snags.

P146 - H1 - 18:15 temp down to 5
Trees Black Walnut, white cedar, white spruce
Bitternut (D) hickory, staghorn sumac
black cherry, manitoba maple, Red maple
New england aster, canada golden rod, burdock
Shrubs Tall, goldenrod, reed canary grass,
ground cover garlic mustard, riverbankgrape,
grey dog wood, multiflora rose
Eastern Cottontail, deer, COGR, RWBL, AMRO, NOCA,

April 7, 2011 South Kent Wind Farm 1182
SAG PWD
Temp - 8, wind - 1, precip none, % cloud - 100

P173 - H1 Goldenrod, riverbank grape,
18:56 honeysuckle, Some dead dying
stuff
Hedgerow small, young, and
not in good health

April 8, 2011 South Kent WF 1182
temp - 4 precip - heavy rain, % cloud - 100
Wind - 3
PWD

P176 - D1 - 9:07
Very bare ditch with hardly any
water - a few small (less that 0.5m tall)
red cedar. 1 poplar sp. on opposite
side of road surrounding the pond.

P176 - D2 - 9:11
Roadside ditch about as bare as
P174 - D1, a few small red cedars

April 4, 2011 South Kent WF #1184A
SAG, PWD
Temp-11 w-6, % Cloud 100, precip- heavy rain

P094-H3 15:58
No snags, deadfall or trees above 10 cm
100% white cedar

P063-H2 16:14 rain light now
Hedgerow deciduous, no snags or deadfall
White Elm, silver maple
teasel, goldenrod, gray dogwood

P121-H2 16:24
Sparse deciduous hedgerow, no snags or
deadfall, some trees at least 50 cm dbh
Soft maple > bur oak > hard maple

April 5, 2011 South Kent WF #1184A
SAG PWD
Temp-5 w-4, % cloud-100, precip- none

P098-D1 - 849 (am)
-Ash, soft maple, white spruce
Kentucky blue grass ground cover
reed canary grass - birds WBNU, GCKI

1184-South Kent WF 1184, temp - 5, % cloud - 100,
W-4, precip- Heavy rain. PWD, SAG, April 5, 2011
P098-D2 -8:59
Reed canary grass, canada goldenrod,
grey dog wood, teasel.

P051-D3 - Shagbark Hickory, red oak, bur
oak, Sugar maple, apple,
ground cover - brome grass
9:00 am

P039-H2 - Eastern Red cedar, white
Ash, Bur oak, red oak, large
log pile in middle of cornfield
near road and ditch.

P031-H1 - White Spruce, Red cedar,
multiflora rose, white cedar,
Hawthorn, teasel, a few snags
9:31 am

10:00
P156-D2 - white spruce, red cedar,
grey dogwood, Hawthorn, teasel,
White Ash, Aspensp, Apple,
red maple
barberry, honeysuckle, reed
canary grass,

Chatham Kent Wind Farm - 1184 A
April 5, 2011
SAG, PWD
Temp - 10°, precip - none (just finished raining), % cloud - 95%, wind - 4

P156 - D3 - Red cedar, white cedar, White Ash, manitoba maple Red osier dogwood, apple, pussy willow, teasel
10:10

P156 - D4 - Red cedar, white cedar, white Ash, white spruce, sugar maple
Red osier dogwood, teasel
Hawthorn 10:15

P047 - H1 - Bur oak, eastern red cedar
10:20

P047 - D1 - Red cedar, planted black walnut, soft maple, willow sp, white elm. teasel, fragmites

Chatham Kent WF - 184A April 5, 2011
PWD, SAG Temp - 10, % Cloud - 8, precipnone
wind - 4

P075 - D2 - manitoba maple, white Ash, Red maple, white spruce, fragmites, white cedar, eastern Red cedar, grey dogwood, Hawthorn, poplar sp. Queen annes lace, cattails, canada golden rod.

April 8, 2011 Sauth Kent WF 1184
temp-4 precip-heavy rain, % cloud-100
wind-2

P17S - D1 - 9:13

Drain surrounded by corn & wheat feild with a few sparse shrubs and trees

Black walnut, red cedar, poplar sp bur oak, soft maple
Grey dogwood, fragmites, red osier dogwood fescue sp, reed canary grass, riverbank grape.

This is the ditch that corresponds to the underground cable where the wind turbines branch off is completely bare.

South Kent

1184A
KSJ, KEB
Apr 4/2011

P080 - H5 Dominant veg:

Burr Oak (D)	Tall Goldenrod
Prickly Ash (D)	Burdock
Crabapple	Timothy Grass
Staghorn Sumac (D)	Virginia creeper

Weather:
15°C
Rain
Wind: 4
CC: 100%

Wildlife observed:

Song Sparrow	A. Robin
N. Flicker	
Golden-crowned Kinglet	
N. Cardinal	
RW Blackbirds	
Killdeer	

Wildlife habitat:
Debris pile next to road
Vine pile (V. creeper) w/ fallen trees ~150m from rd and again ~200m from rd

P078 - D1 Dom Veg: Red Cedar (D) } on bank
Norway Spruce (D) }
Red Oak
Foxtail Grass

*note: existing crossing just E which would avoid P078-D1 and P078-H4

P078 - H4 Dom Veg: Am. Elm (D) with Red Raspberry
Burr Oak (D) Hickory sp.
Tall Goldenrod (D)

↳ small drainage ditch in centre of hedgerow
*KJ Frog heard calling in ditch
W. Chorus

Wild. Obs:
Wild Turkey prints
Song sparrow

P078-M3 Dom Veg: Burr Oak (D)
Dogwood sp. (D)
Tall Goldenrod (D)
Red Cedar
Prickly Ash
Hawthorn sp.

Wild. Habitat: Debris pile at proposed access rd crossing pt
Some snags
Lots of dead fall

P124-D2 (no access)

Dom Veg: Deciduous trees:
Hickory sp. (D)
Red Cedar (D)
Grasses (D)

4/6

P080-H6

Dom Veg: Burr Oak (D)
Milkweed
Red Cedar
Wild Carrot (D)
Wild red raspberry
Common Mullein

Wild. Habit:
Den at tree base ~ 250m from rd
└ Squirrel?
Deer browsed shrubs

2/6

1184A South Kent — 5 April 2011 — KSJ, KEB

Weather: 3°C, Wind 4, CC 100%, No precip.

P074-H1 — Dom Veg: White Elm (D)
Norway Spruce (D)
Common Mullein
Wild Carrot
Burr Oak

P127-H2 — Dom Veg: White Cedar (D)
Norway Spruce
Planted Deciduous trees
(no access)

P127-D2 — Dom Veg: Am. Elm (D)
Burr Oak (D)
Balsam Poplar
Reed Canary Grass (D)
Red Osier Dogwood
(creek)

Wild Habitat: debris pile just N of road on creek bank

Wild Obs: Great Blue Heron
RW Blackbird

Pg 1/#5

W. Chorus

P132-D1 — ~~[illegible]~~ frogs calling
Dom Veg: Grass sp. (D)

P075 Creek crossing: White Elm (D)
Grass sp.
Rock piles @ crossing

Wild. Obs: Deer tracks
Red-tailed Hawk

P072-D1 — Dom Veg: Red Cedar (D)
Staghorn Sumac (D)
Red Osier Dogwood
White Elm (D)
Grass sp.
Reed canary grass (D)

P072-H1 — Dom Veg: Reed Canary grass (D)
Red Osier dogwood (D)
Red Cedar (D)
Burr Oak (D)
Common Mullein
White Elm

Wild. Habitat: Culvert at road = larger cement block pile SW

P069-D4 Dom Veg
Norway Spruce (D)
White Elm (D)
Tall Goldenrod
Grasses (D)
- Manicured lawn on S side

P068-D2 Dom Veg
Green ~~White~~ Ash (D)
Burr oak (D)
Milkweed
Tall Goldenrod (D)
Grass sp.
Reed canary grass (D)

P068-D3 Dom Veg
White Elm (D)
Tall Goldenrod (D)
Canada Goldenrod
Wild Carrot
Grass Sp.

6/6

P095-H5 Dom Veg: Burr Oak (D)
Grasses

Wild ~~Habitat~~: ~~Some~~ snag

P095-D2 Dom Veg: Am. Elm (D)
Hawthorn sp.
Red Cedar

Wild ~~Veg~~: Snag

P069-D5 Dom Veg: Reed Canary Grass (D)
Teasel

P066-H4 Dom Veg: Honey Locust (D)
Shagbark Hickory

P066-H5 Dom Veg: Am. Elm (D)
Hawthorn sp.
Burdock (D)
Teasel
Honey Locust

2/5

P071-D1 Smooth Brome
Mixed grasses + forbs

P068-H2 Goldenrod sp.
Bur Oak (D)
Am. Elm (D)
Wild Carrot

P067-D2 Red Osier Dogwood (D)
White Cedar
Grasses (D)
Gray Dogwood
Green ~~Ash~~ Ash (D)

P067-H3 Red Cedar
Bur Oak (D)

Wild. Habitat: some snags

Wild. Obs: Gray squirrel (black morph)

P111-D2 - Water present
Dom Veg: Green Ash (D)
Reed Canary Grass (D)
Cattail

P111-H2 Dom Veg: Black Cherry Am. Beech (D)
Silver Maple (D) Bitternut Hickory
Cottonwood

Wild Hab: Some snags

P111-H3 Dom Veg: Bitternut Hickory
Am. Elm (D)
Basswood
Wild red raspberry (D)
Tall Goldenrod (D)
St. John's Wort

Wild Hab: many snags, some large

P099-H1 (no access)
- very little vegetation
- weeds, herbaceous
- scattered shrubs, no trees

P066-H2 (no access)
Burr Oak
Deciduous trees (D)
Scattered shrubs

P066-H1 (no access)
Deciduous trees (D)
- sparse

P064-H1 (no access)
Deciduous trees (D)
Shrubs - Willow sp.
Am. Elm

P065-D1
Willow sp. (D)
Cottonwood (D)
Teasel
Staghorn Sumac
Tall Goldenrod
Reed Canary Grass
Phragmites
Grass
Wild Habitat - (cement blocks piled (on creek banks)

P065-H3
Burr Oak (D)
Goldenrod sp.
Staghorn sumac

(1) South Kent - 1184

April 5/2011 NGM, KGB North - #16

3°C, 90% CC,

P010-HS → 17T 0421490 4698933

W. Cedar ~~hedgerow~~ - 100% 12:40pm

→ bordered by winter wheat, corn

Site 2 12:50

Sumac	Red Osier Dogwood	
Norway Spruce	Green Ash	
Hawthorn sp.	Cottonwood	
Elm (White)	Black Locust	Gray Dogwood
Silver Maple	Queen Ann's Lace	
Rose. sp.	Bur Oak	
Alder sp.	Common Burdock	
Red Cedar	Trembling Aspen	
Goldenrod sp.	Pin Cherry	
White Oak	Apple sp.	

P012-H2 - 1:17pm

Red Cedar	Red Raspberry
Bur Oak	Buckthorn
Red Osier Dogwood	Goldenrod
Phragmites	Wild Rose
Sumac	Shagbark Hickory
Hawthorn sp.	Riverbank Grape
Gray Dogwood	Alder sp.

P027-H1 3:04

Red Cedar	Shagbark Hickory
Bur Oak	Red Raspberry
Black Walnut	Manitoba Maple
Butternut Hickory	Buckthorn
Red Osier Dogwood	Riverbank Grape
Sumac	

Site 3 3:25 P155-H1

Horse-tail	Sumac
White Cedar	Apple sp.
Comm. Mullen	Queen Ann's Lace
C. Thistle	Black Locust
Wild Rose	Goldenrod sp.
Trembling Aspen	Silver Maple
Shagbark Hickory	Red Osier Dogwood
Black Walnut	Hawthorn sp.

~~Site 4~~ 3:45 S55-D2

Red Cedar	Elm
Phragmites	~~Gray~~ Dogwood
Shagbark Hickory	Black Locust

April 6/2011 S. Kent - 1184 , MGM, KGB

4°C, 100% C.C., S. wind @ 2-3 Blenheim/Rondeau

Site 1 - P140-H1

hedgerow

White Cedar } dominant
Norway Spruce
Sugar Maple

Site 2 P140-

Manitoba Maple
Willow sp.
D- White Cedar
Ash sp.
Phragmites
White Pine
Goldenrod sp.
Black Locust
Red Osier Dogwood
Red Pine
Riverbank Grape
Pacific Yew
Blue Spruce
Sugar Maple
Trembling Aspen
Silver Maple
Red Maple
Red Raspberry
E White Birch
Tulip Tree

1184 - S. Kent Wed April 6/2011 3/4

Site 4 Road Transect

Red Cedar
Goldenrod sp.
Gray goldenrod
~~Willow~~ willow sp.
~~Apple~~ Common Apple
Hawthorn
Bull Thistle
Silver Maple
Red Osier Dogwood
Queen Anne's Lace
Cottonwood
grass sp.
Goldenrod sp.

Site 5 → P140-H4

White Cedar
Com. Apple
Blue Spruce
Scott's Pine
Silver Maple
Norway Spruce
Red Cedar
Goldenrod
Ash sp.
Bayberry
Red Osier Dogwood
Wild Rose
Black Locust
Bur Oak

1184-S. Kent Wed April 6/2011.

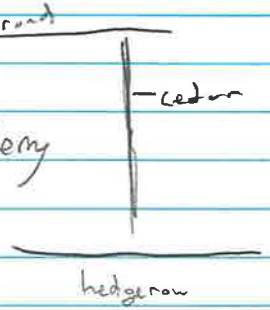
Site 6 P140-H5

Red Cedar	Hawthorn Sp.
Black Locust	Riverbank Grape
Sumac	Queen Ann's Lace
Manitoba Maple	Goldenrod sp.
Silver Maple	Nannyberry
Con. Cattail	Red Raspberry
Con. Burdock	Wild Cucumber
Shagbark Hickory	*dead calf
White Cedar - D	Gray Dogwood
Norway Spruce - D	@mast sites
Phragmites	Scott's Pine

~~Site 7~~ P167-H1

E. White Cedar - D

Red cedar	Wild rose
Nannyberry	Willow Sp.
River bank grape	Field strawberry
Green Ash	
White Oak	
Bur Oak	
Goldenrod Sp.	
Queen Anne's Lace	
Silver Maple	
Sumac	



Wed April 6/2011

P140-H3

Site 3 -> hedgerow Rondeau / Blenheim 1/2

Manitoba Maple	
Red Pine	Scott's Pine
White Cedar * - dominant	Pussy Willow
Silver Maple	
Buckthorn	
Norway Spruce	
Willow sp.	
Blue Spruce	
Red Osier Dogwood	
Bur Oak	
Bull Thistle	
Queen Ann's Lace	
Goldenrod sp.	
Red Cedar	
Tamarack	
Gray Dogwood	
Phragmites	
Pacific Yew	
E. White Birch	

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#1184

5 Kent - 1184 Wed April 6/2011 NGM, KGB
4°C, 100% cc, light rain, S-3

~~S118~~ P118-H1
- hedgerow
- E. White Cedar > dominant
Norway Spruce

~~S107~~ P107-D1

Com. Burdock	Silver Maple
Manitoba Maple	E. White Cedar
Goldenrod sp.	White Pine
~~Es~~ Riverbank Grape	Scott's Pine
Com. Cattails	Com. Apple
Norway Spruce	

Site 11 ; Incidentals - April 5/11
- Northern Harrier ♂ (1)
- Killdeer (1)
- Horned Lark (12)

April 6/11
3°C, wind 2 South, light rain
C.C 100%

1. - American Robin (3)
- Common Grackle (4)
- European Starling (1)
- Canada Geese (2)

3. - Am. Robin (4)
- Black-capped chickadee (2)
- Red-winged Blackbird (2)
- Comm. Grackle (8)

4. - common Grackle (5)
- Am. Robin
> Red-winged Blackbird (3)
- Blue Jay (1)
- Song Sparrow (1)
- Army-killed Gull (25)

Apr. 6/11

Site 5

- Song sparrow (1)
- House Sparrow (3)
- Mourning Dove (2)
- Common Grackle (1)
- Killdeer (2)
- Red-tailed Hawk (1)
- Horned Lark (3)
- East. Meadowlark (1)

Site 6

- Song Sparrow (1)
- Red-winged Blackbird (10)
- Am. Robin (1)
- Comm. Grackle (1)
- Am. Tree Sparrow (5)
- Eastern Towhee (1)
- Killdeer (5)
- Horned Lark (3)

Apr. 6/11 # 1184

Site 8

- Red-winged Blackbird (2)
- Common Grackle (12)
- American Robin (2)
- Mourning Dove

Site 9

- Com. Grackle (12)
- Am. Robin (1)
- Red-winged Blackbird (3)
- Mourning Dove (2)

South Kent WF (1184B) October 18, 2011
Weather: 10°C, 90% cloud cover, wind 1
Time: 11:00 Observers: HLW, KJW

P149-H1/2 = E. Wh. Cedar, Black Locust, Common Apple, White Ash, Riverbank Grape
- Cedars and locust mid-age

P149-H3 = E. Wh. Cedar, Wh. Ash, Wh. Spruce

P149-H4: Wh. Spruce, Black Walnut, E. Wh. Cedar, White Ash

P149-H5: White Spruce, E. Wh. Cedar, Riverbank Grape

P149-H6: E. Wh. Cedar,

P061-D3: Water present, Reed Canary Grass, Smooth Brome, Slender Willow, Tickseed

P061-H2: E. White Cedar, Some White Spruce, Few Balsam Poplar, Black Walnut

P061 - H3 : E. Wh. Cedar dominated, young to mid-age, with some white spruce

P054 - D1 : Smooth Brome, Reed canary, Teasel
- Water present

P164 - H2 : E. Wh. Cedar, White Spruce

P164 - H3 : E. White Cedar, White Spruce

P164 - D1 : Smooth Brome, Sedge sp., Goldenrod sp., White Elm
- Water Present

P054 - H2 : E. White Cedar dominated
- Densely treed

P054 - D1 : Narrow-leaved cattail, Phragmites, Kentucky Blue Grass, brass sp.
- No water present

P100-D3: Narrow-leaved cattail, Ash Sp. (a few), Smooth Brome, Multiflora Rose, Goldenrod sp.
- Water Present

P111-D6: Smooth Brome, Barnyard Grass, Goldenrod sp., Teasel
- Water Present

P111-H5: White Elm, White Ash, Hawthorne, Bur Oak (some), Goldenrod sp.

P111-D7: Goldenrod sp, Teasel, White Elm, Multiflora Rose, White Ash (Few), Smooth Brome
- Water Present
- Sparsely treed

P094-D6: Goldenrod sp., Smooth Brome, Slender willow, White Elm
- Water Present
- A few trees present

P094 - D7: Common Reed, Goldenrod sp., Teasel, White Elm, Smooth Brome
- Water present
- Few trees

P094 - D8: Narrow-leaved Cattail, Phragmites, Smooth Brome, Teasel,
- Water Present

P094 - H5: E. White cedar (dominant)

P094 - H6: White Ash, White Elm, Bur Oak, Staghorn Sumac, balsam poplar, freeman's maple
- A couple snags present, short (3 metres), approx 50 dbh

P094 - D9: Staghorn Sumac, Slender Willow, Basswood, Reed Canary Grass, Goldenrod sp., White Elm
- sparsely treed
- Water present

P094 - H7: E. White Cedar

P065 - D3: Freeman's Maple, Manitoba Maple, Hawthorn sp., Smooth Brome, Heath Aster
- Water present
- Treed
- Wildlife Observation: Junco

P065 - H5: Bur Oak, White Ash, Riverbank Grape, White Elm
- Mature trees

P065 - H6: Staghorn Sumac, Bur Oak, White Elm, Common Apple, White Ash

P066 - D1: Bur Oak, Manitoba Maple, White Ash, Gray Dogwood, Goldenrod sp., Heath Aster
- Water present
- Treed

P066 - D2: White Ash, Reed Canary (Grass) Smooth Brome, Heath Aster
- Water present

P140 - H6: E. White Cedar

P140 - H7: Eastern White Cedar, White Pine (1)

P140 - H8: Eastern White Cedar

P140 - H9: Eastern White Cedar

P140 - H10: Eastern White Cedar, Some riverbank grape

P140 - D3: Smooth Brome, Reed Canary Grass, Broad-leaved Cattail, Red cedar (Few), Duckweed
- Water Present

P140 - D4: Common Reed, Narrow-leaved cattail, Canada Goldenrod, Canary Reed Grass, Freeman's Maple, Willow sp.
- Water Present

P140-D5: Common Reed, Red-osier Dogwood, Scirpus sp., Narrow-leaved Cattail
- Water present

End weather: 12°C, light rain, wind 2 from NE, 100% cloud cover,
End time: 5:00

Date: October 19, 2011 Time: 9:00
Observers: HLW, KJW
Weather: 9°C, 100% cloud cover, wind 2 from N, light rain

P116-D3: Common Reed
- Some water present

P082-D2: Teasel, Sedge sp., Narrow-leaved cattail, Mixed Forbs, Grass sp.
- Some water present

P115-H3: White Ash, Bur Oak, Riverbank Grape, Deciduous shrubs

P075 - D3 : White Elm, White Ash, Freeman's Maple, Red-osier Dogwood, Multi-flora Rose
- Water present

P074 - D2 : Fox-tail Grass, Grasses sp., Mixed forbs
- No water present

P124 - H1 : Bur Oak, Common Apple, White Elm

P072 - D2 : CommonReed, Bur Oak, Freeman's Maple, Narrow-leaved Cattail
- Some water

P072 - D3 : Freeman's Maple, Balsam Poplar, Narrow-leaved cattail, Common Apple, Red Pine,
- Water present
- Treed

P125 - D1: Narrow-leaved Cattail, Grass sp., Fox-tail Grass, Red Cedar, Bur Oak, Goldenrod Sp.
- Water present

P161 - D1: White Vervain, Grass sp., Common Reed, Mixed forbs
- Water Present
- Wide channel (3m)

P068 - D4: Smooth Brome, Sedge sp., Mixed forb, Goldenrod sp.,
- Water present

P069 - D6: White Ash, Common Apple, White Elm, Goldenrod sp.
- Water present
- Treed

P062 - H1: Eastern White cedar

P058 - D3: Narrow-leaved cattail, Goldenrod sp., Heath Aster, Red cedar (1)

- No Water present

Wildlife observation (@ CLA-02):
Blue Heron

P024 - D4: Narrow-leaved cattail, Willow sp., White Vervain, Teasel, Red-osier Dogwood
- Water present

P140 - H6: Eastern White Cedar, Norway Spruce, Riverbank Grape

P140 - D6: Narrow-leaved Cattail, Goldenrod sp., Smooth Brome, Duckweed, Phragmites
- Water present

P140 - H7: Eastern White Pine, Norway Spruce, Freeman's Maple

P139 - D4: White Willow, White Ash, Eastern Cottonwood, Smooth Brome, Phragmites
- Water present

P139 - H8: Riverbank Grape, White Ash, Eastern Cottonwood, White Elm, White Willow, Freeman's Maple

- Possible woodlot, unable to assess from roadside

P139 - H9: Eastern White Cedar

P139 - H10: Black Walnut, Gray Dogwood, Staghorn Sumac, Eastern white Cedar, Freeman's Maple, White Ash, Goldenrod sp., Riverbank Grape, White Elm

- Very substantial hedgerow, approximately 10 metres wide

P139 - D5: Rice grass sp. (non-native), Duckweed, Scirpus sp., Willow sp., Staghorn Sumac, Smooth Brome,

- Water Present

P139 - H11: Eastern White Cedar

P171 - D1: Phragmites, Smooth Brome, Reed Canary Grass, Velvetleaf, White Ash (A few saplings)
- Water present

P171 - H1: White Pine, Black Walnut, White Ash, White Elm, White Spruce, Willow sp.
- Adjacent to drainage (P171 - D1)
- Substantial hedgerow, 15m width

P171 - H2: Norway Spruce, Eastern White Cedar

P171 - H3: Eastern White Cedar, Riverbank Grape

P171 - H4: Eastern White Cedar

P171 - H5: Scotch Pine, White Ash, Norway Spruce, Eastern White Cedar

P171 - D2: Red-osier Dogwood, Smooth Brome, Manitoba Maple (saplings), Common Burdock
- Water present

P140-D7: Phragmites, Goldenrod sp., White Elm, Grass sp.,
- No water present

P140-H8: Red-osier Dogwood, White Elm, White Ash, Bur Oak, Staghorn Sumac
- T-shaped hedgerow

P140-D8: Smooth Brome, Staghorn Sumac, Goldenrod sp.,
- Water present

P030-D2: Staghorn Sumac, Red-osier Dogwood, White Elm
- No water present
- Drainage not indicated on mapping

P030-H2: Bur Oak, White Elm, Red-osier Dogwood, Common Apple, White Pine, Staghorn Sumac

P030 - H3: Bur Oak, White Elm, White Ash, Red-osier Dogwood, Hawthorn sp., Staghorn Sumac (young)

P030 - H4: Red-osier Dogwood, White Elm, Bur Oak
- Sparsely treed, mostly shrubs

P028 - H1: Gray dogwood, White Elm, White Willow, Red-osier Dogwood
- Mix of mature trees and shrubs

P028 - H2: Dogwood sp., White Elm, White cedar

P028 - H3: White Elm, Red-osier Dogwood, Gray Dogwood, White Ash, Red Cedar

P028 - H4: Shagbark Hickory, White Elm, Basswood, Gray Dogwood,

P028 - H5: Dogwood sp., White Ash, White Elm, Hawthorn sp.

P028 - H6: Hawthorn sp., Dogwood sp.

P022 - D1: Red-osier, White Elm, White Ash, Goldenrod sp., Watercress

- Water present

P092 - H3: White Elm, Red Cedar, Gray Dogwood, Basswood, White Ash, Multi-flora Rose, Elderberry sp.
- Located along old rail line which has been removed

P092 - H4: Black Locust, Red Raspberry, Riverbank Grape, Black Walnut, Dogwood sp.

P092 - H5: Eastern White Cedar, Gray Dogwood, Staghorn Sumac, Red Cedar, Eastern Cottonwood, Elm sp.

P152-D1: Basswood, Slender willow, White Elm, Willow sp., Norway Spruce, Staghorn Sumac
~ Water present

P152-H1: Norway Spruce, Eastern White Cedar

End time: 16:30
End weather: 10°C, 100% cloud cover, wind 3 from N, rain

South Kent WF 11848
Date: October 20, 2011
Time: 9:00
Observers: HLW, KJW
Weather: 10°C, 100% cloud cover, wind 3 from W

P054-D1: Common Reed, Queen Anne's Lace, Smooth Brome, Sugar Maple (Sapling), White Ash (saplings)
- Runs through Woodlot (P054-W1)

P018-H2: Norway Spruce, White Elm, White Ash, Freeman's Maple

P018-H3: Eastern White Cedar, White Spruce

P018-H4: Red cedar

P135-D1: Narrow-leaved cattail, White Elm, Red cedar, Bur Oak, Red-osier Dogwood, Broad-leaved cattail
- Water present

P135 - D2: Bur Oak, White Ash, Mixed Forbs
- Treed
- Water present

P036 - H1: Gray Dogwood, White Ash, White Elm, Bur Oak,
- Sparsely treed

P036 - H2: White Elm, White Ash, Bur Oak, Red-osier Dogwood

P036 - D1: Queen Anne's Lace, Narrow-leaved cattail, Gray Dogwood, Fox-tail Grass

P135 - D3: Staghorn Sumac, White Elm, Goldenrod sp., Freeman's Maple, Red Cedar
- Treed
- Water present

P135-H2: White Elm, Red Cedar, Freeman's Maple, Bur Oak, Gray Dogwood

P029-H5: White Ash, White Elm, Gray Dogwood
- Sparsely treed

P155-D1: Goldenrod sp., Queen Anne's Lace, Smooth Brome
- Water present (some)
- No trees

P018-D2: Goldenrod sp., White Elm, Aster sp., Teasel
- Water present

P018-H2: Norway Spruce, Eastern White Cedar,

P023-D2: Common Reed, Balsam Poplar, Narrow-leaved cattail, Canary Reed Grass, Smooth Brome,
- Water present

P152 - D1: Red-osier Dogwood, Goldenrod sp., Red Raspberry,

- Water present

P140 - H9: Black Walnut, White Elm, Freeman's Maple

- Sparse arrangement of trees, grass mowed underneath
- Ornamental pond through centre

P140 - H10: Cedar sp., White Elm, Eastern Cottonwood, Willow sp., Maple sp., Black Walnut

P118 - D1: Goldenrod sp., Eastern Cottonwood, Reed Canary Grass, Smooth Brome, White Elm

- Water present

P002 - D3: Goldenrod sp., Teasel, Common Milkweed, Smooth Brome,

- Water present
- Rock pile (UTM: 0426428 4690836)

→ Photo 177 - 1177

End time: 15:45
End weather: 10°C, 100% cloud cover, light rain, wind 2 from W

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Modified ELC Community Description Page 1 of 2

Site:	South Kent Wind # 1184
Polygon:	POO1 - W1
UTM:	
Date:	06/10/10 **Time:** 1815
Surveyor(s):	BAM
Weather:	16°C, 0 wind, 40% cloud, No rain

Community Classification

Vegetation Type:	Fresh-Moist White Elm Lowland Deciduous Forest	Type (FODM7-1)
X **Inclusion:**	White Elm Mineral Deciduous Swamp Type (SWDM4-2)	
X ~~**Complex:**~~	Open Water (OA)	

Inclusion

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Mtn	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb. Bedrock	X Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	X Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
X Treed	X Surficial Dep.	Floating-Lvd.	Bryophyte	
	Bedrock	Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	~~Super-canopy~~			
1	Canopy	2	3	White Elm > Basswood = Shagbark hickory
2	Sub-canopy	3	4	White Elm > Shagbark > Bur Oak
3	Understorey	1/5	2	Grey dogwood > river bank grape
4	Groundcover	0.2	3	Poison Ivy > wild Strawberry > avens sp

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	A	10 - 24	R	25 - 50	N	> 50
Snags	R	< 10	O	10 - 24	R	25 - 50	N	> 50
Deadfall/Logs	O	< 10	R	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age	Pioneer	X Young	Mid-age	Mature	Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description Page 2 of 2

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	**Time:**
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Basswood	O	O			
White Elm	A	A			
Bur Oak	O	O	R		
Green Ash		O		A	
Grey dogwood			O		
Black Walnut	O	O			
Shagbark hickory	O	O			
E. Cottonwood	O				
Red Oak	R				
Inclusion					
Black Maple					
White Elm					
Common reed					
Jewel weed					
avens sp					
prickly ash					

Species	Layer 1	2	3	4	Sample
Avens sp.				A	
Manitoba maple			O	O	
herb robert				O	
garden currant				O	
wild strawberry				A	
poison ivy				A	
calico aster				O	
river bank grape			O	O	
wild red raspberry				O	
Can. goldenrod				O	
Virginia Creeper				O	

Wildlife and Other Notes

OA - dug ditch/pond w/ an old cobble dam
↳Access road goes between dam + forest
SWDM4-2 follows ditch (approx 6m wide) that has trickle out of dam.

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page __ of __

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Community Classification

Vegetation Type:	Fresh-moist Wh. Elm lowland Decid forest type (FOD M7-1)
Inclusion:	White Elm Mineral Decid. Swamp (SWD M4-2)
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min.	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
Treed	Surficial Dep.	Floating-Lvd.	Bryophyte	
	Bedrock	Graminoid	Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy			
1	Canopy			
2	Sub-canopy			
3	Understorey			
4	Groundcover			

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	< 10	10 - 24	25 - 50	> 50
Snags	< 10	10 - 24	25 - 50	> 50
Deadfall/Logs	< 10	10 - 24	25 - 50	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age	Pioneer	Young	Mid-age	Mature	Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page ___of___

PLANT SPECIES LIST

Site:	Chatham-Kent WF
Polygon:	POO-W1
UTM:	17T 0426715 4692345
Date:	July 14/11 Time: 15:00
Surveyor(s):	AMD KTC
Weather:	Sunny, 30°C, wind 2 from SW, CC. 70%

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
wh. elm	A	A	—		
basswood	A	A	—		
ov. ash	—	O	—	A	
Bur oak	O	O	R	—	
shag. hickory	O	O	—		
red oak	R	—	—		
black walnut	O	—	—		
gray dogwood	—	—	O	—	
choke cherry	—	O	O	—	
spicebush	—	O	O	—	

Species	Layer 1	2	3	4	Sample
wood strawberry	—	—	—	O	
viola sp.	—	—	—	O	
virginia creeper	—	—	—	O	
agrimony	—	—	—	R	
wh. avens	—	—	—	O	
aster sp.	—	—	—	O	
ench. nightshade	—	—	—	O	
carex sp.	—	—	—	O	
mayapple	—	—	—	R	
wild cucumber	—	—	—	O	
raspberry sp.	—	—	—	O	
goldenrod sp.	—	—	—	R	
poison ivy	—	—	—	A	
phragmites	—	—	—	O	
jewelweed	—	—	—	A	

Wildlife and Other Notes

- Common snipe seen
- 3 wild turkeys seen
- Significant quantity of crayfish chimneys seen in ephemeral drainage channels

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Wetland Vegetation Communities

Project Name: Chatham – Kent WF **Project #:** 1184A

Observer(s): AMD, KTC

Date: July 14/11 **Time (24h):** 15:51

Field #: **Weather:** Precipitation: none Temp (°C): 26

Map Code: POO1-W1 Wind Speed & Direction: 2, SW Cloud %: 70

Wetland Type: Swamp **Site Type:** P **Dominant Form:**

% Open Water: 0 **ELC Code:** SWDM4-2

Photos: Camera #6: 101-2452 → 101-2462, 101-2463 → 101-2466

Forms % (Circle those ≥25%)	Species (dominant species, secondary species, present species)
h	white elm, basswood, green ash, bur oak, shagbark hickory, red oak, black wal.
c	—
dc,dh,ds	—
ts	gray dogwood, choke cherry
ls	Spicebush
gc	woodland strawberry, viola sp., Virginia creeper, agrimony, avens sp., aster sp., enchanter's nightshade
ne	Carex sp., mayapple, gray dogwood, wild geranium, raspberry sp., goldenrod sp., poison ivy
be	phragmites, jewelweed
re	—
ff	—
f	—
su	—
m	on bare soil and on downed logs, @ base of trees in swamp

Soil type: 51 | Organic ☐ | Mineral ☒

Rare Species (Local, Regional, Provincial):
Common Snipe

Wildlife Notes:
– 3 wild turkeys seen in soybean field to SW of larger rectangular woodlot in the polygon
– Significant quantity of crayfish chimneys in ephemeral drainage channels

SAR observations must also include a specific UTM location.

Forms: **h**=deciduous trees; **c**=coniferous trees; **dh, dc, ds**=dead trees/shrubs; **ts**=tall shrubs; **ls**=low shrubs; **gc**=ground cover; **ne**=narrow emergents; **be**=broad emergents; **f**=floating plants; **ff**=free-floating plants; **su**=submerged plants; **m**=mosses

Wetland Type: **S**=swamp; **M**=marsh; **B**=bog; **F**=fen

Site Type: **L**=lacustrine; **P**=palustrine; **R**=riverine; **IS**=isolated

Soil type: **cl**=clay/loam; **sl**=silt/loam; **l**=limestone; **s**=sand; **hm**=humic/mesic; **f**=fibric; **g**=granite **Organic**= >60cm depth over mineral (>10cm over bedrock) **Mineral**= <60cm depth over mineral

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Wetland Vegetation Communities

Project Name: **Project #:**

Observer(s):

Date: **Time (24h):**

Field #: **Weather:** Precipitation: Temp (°C):

Map Code: Wind Speed & Direction: Cloud %:

Wetland Type: **Site Type:** **Dominant Form:**

% Open Water: **ELC Code:**

Photos:

Forms % (Circle those ≥25%)	Species (dominant species, secondary species, present species)
h	
c	
dc,dh,ds	
ts	
ls	
gc	
ne	
be	
re	
ff	
f	
su	
m	

Soil type: | Organic ☐ | Mineral ☐

Rare Species (Local, Regional, Provincial):

Wildlife Notes:

SAR observations must also include a specific UTM location.

Forms: **h**=deciduous trees; **c**=coniferous trees; **dh, dc, ds**=dead trees/shrubs; **ts**=tall shrubs; **ls**=low shrubs; **gc**=ground cover; **ne**=narrow emergents; **be**=broad emergents; **f**=floating plants; **ff**=free-floating plants; **su**=submerged plants; **m**=mosses

Wetland Type: **S**=swamp; **M**=marsh; **B**=bog; **F**=fen

Site Type: **L**=lacustrine; **P**=palustrine; **R**=riverine; **IS**=isolated

Soil type: **cl**=clay/loam; **sl**=silt/loam; **l**=limestone; **s**=sand; **hm**=humic/mesic; **f**=fibric; **g**=granite **Organic**= >60cm depth over mineral (>10cm over bedrock) **Mineral**= <60cm depth over mineral

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description Page 1 of 2

Site:	South Kent WF
Polygon:	P002-W2
UTM:	
Date:	Nov. 8/10
Time:	-
Surveyor(s):	BAM
Weather:	8°C, 0% C.C., Wind 1, No rain

Community Classification

Vegetation Type:	Fresh-Moist White Elm Lowland Deciduous Forest Type (FODM7-1)
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	✓ Mineral Soil	✓ Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
✓ Natural	Carb Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll Upland	Bluff	Fen	✓ Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
✓ Treed	✓ Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	✓ Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	~~Super-canopy~~			
1	Canopy	2	0	
2	Sub-canopy	3	4	White elm > Green Ash > Willow sp.
3	Understorey	4/5	3	Red osier dogwood > white elm
4	Groundcover	6/7	2	Reed canary grass = Can. Goldenrod > Aven sp.

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	A	10 - 24	N	25 - 50	N	> 50
Snags	O	< 10	O	10 - 24	N	25 - 50	N	> 50
Deadfall/Logs	R	< 10	R	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer	X	Young		Mid-age		Mature		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description Page 2 of 2

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Green Ash		O			
White Elm		A	O		
Willow sp.		R			
Red osier dogwood			O		

Species	Layer 1	2	3	4	Sample
Avens sp.				O	
Can. goldenrod				O	
reed canary grass				O	
Common Burdock				R	

Wildlife and Other Notes

Roadside

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page __ of __

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Community Classification

Vegetation Type:	Fresh-moist White Elm Lowland Decid forest (FOD M7-1)
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min.	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
	Open Water			
Open	Shallow Water	Plankton	Forb	Coniferous
Shrub	Surficial Dep.	Submerged	Lichen	Mixed
Treed	Bedrock	Floating-Lvd.	Bryophyte	
		Graminoid	Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy			
1	Canopy			
2	Sub-canopy			
3	Understorey			
4	Groundcover			

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	< 10	10 - 24	25 - 50	> 50
Snags	< 10	10 - 24	25 - 50	> 50
Deadfall/Logs	< 10	10 - 24	25 - 50	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age	Pioneer	Young	Mid-age	Mature	Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page ___of___

PLANT SPECIES LIST

Site:	Chatham-Kent WF
Polygon:	P002-W2
UTM:	17T 0425838 4690153
Date:	July 14/11 Time: 17:46
Surveyor(s):	AMD, KTC.
Weather:	Sunny & cloudy periods, 26°C, wind 2 from NE, 75% CC.

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
white elm	—	A	O	—	
gr. ash	O	O	—		
willow sp.	A	O	—		
black walnut	O	O	O	—	
manitoba maple	D	A	—		
red cedar	—	—	R	—	
gray dogwood	—	—	R	—	
prickly gooseberry	—	—	O	—	
blackberry sp.					

Species	Layer 1	2	3	4	Sample
reed canary grass	—	—	—	A	
jewelweed	—	—	—	O	
poison ivy	—	—	—	A	
avens - whirl.	—	—	—	O	
virginia creeper	—	—	—	A	
goldenrod sp.	—	—	—	A	

Wildlife and Other Notes

- monarch butterfly seen

pic
101 2467 - 101 2473

not applicable - no wetland @ this polygon

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Wetland Vegetation Communities

Project Name: 1184A Southkent WF **Project #:** 1184A
Observer(s): KTC, AMD
Date: 14th July 2011 **Time (24h):** 17:46
Field #: **Weather:** Precipitation: none Temp (°C): 26
Map Code: P002-W2 Wind Speed & Direction: 2 NE Cloud %: 75
Wetland Type: Floodplain **Site Type:** R **Dominant Form:**
% Open Water: stream **ELC Code:** FODM7-1
Photos: 101-2467 → 101-2473, Camera #6

Forms % (Circle those ≥25%)	Species (dominant species, secondary species, present species)
h	White Elm, Green ash, Willow sp, black walnut, manitoba maple
c	Red Cedar
dc,dh,ds	—
ts	manitoba maple, gray dogwood
ls	gooseberry - prickly
gc	Reed Canary grass, Jewelweed, blackberry, poison ivy
ne	not healthy enough and too disturbed to support aquatic species (flora)
be	
re	
ff	—
f	—
su	—
m	—

Soil type: sl/cl | Organic ☐ | Mineral ☒

Rare Species (Local, Regional, Provincial):
none seen

Wildlife Notes:
- monarch butterfly

SAR observations must also include a specific UTM location.

Forms: **h**=deciduous trees; **c**=coniferous trees; **dh, dc, ds**=dead trees/shrubs; **ts**=tall shrubs; **ls**=low shrubs; **gc**=ground cover; **ne**=narrow emergents; **be**=broad emergents; **f**=floating plants; **ff**=free-floating plants; **su**=submerged plants; **m**=mosses

Wetland Type: **S**=swamp; **M**=marsh; **B**=bog; **F**=fen

Site Type: **L**=lacustrine; **P**=palustrine; **R**=riverine; **IS**=isolated

Soil type: **cl**=clay/loam; **sl**=silt/loam; **l**=limestone; **s**=sand; **hm**=humic/mesic; **f**=fibric; **g**=granite **Organic**= >60cm depth over mineral (>10cm over bedrock) **Mineral**= <60cm depth over mineral

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Wetland Vegetation Communities

Project Name: **Project #:**
Observer(s):
Date: **Time (24h):**
Field #: **Weather:** Precipitation: Temp (°C):
Map Code: Wind Speed & Direction: Cloud %:
Wetland Type: **Site Type:** **Dominant Form:**
% Open Water: **ELC Code:**
Photos:

Forms % (Circle those ≥25%)	Species (dominant species, secondary species, present species)
h	
c	
dc,dh,ds	
ts	
ls	
gc	avens sp, virginia creeper, garlic mustard, bares rocket, gooseberry sp, enchanter's nightshade,
ne	plantain, teasel, b, t, sweet v, nightshade, tall meadow rue, burdock, goldenrod sp.
be	
re	
ff	
f	
su	
m	

Soil type: | Organic ☐ | Mineral ☐

Rare Species (Local, Regional, Provincial):

Wildlife Notes:

SAR observations must also include a specific UTM location.

Forms: **h**=deciduous trees; **c**=coniferous trees; **dh, dc, ds**=dead trees/shrubs; **ts**=tall shrubs; **ls**=low shrubs; **gc**=ground cover; **ne**=narrow emergents; **be**=broad emergents; **f**=floating plants; **ff**=free-floating plants; **su**=submerged plants; **m**=mosses

Wetland Type: **S**=swamp; **M**=marsh; **B**=bog; **F**=fen

Site Type: **L**=lacustrine; **P**=palustrine; **R**=riverine; **IS**=isolated

Soil type: **cl**=clay/loam; **sl**=silt/loam; **l**=limestone; **s**=sand; **hm**=humic/mesic; **f**=fibric; **g**=granite **Organic**= >60cm depth over mineral (>10cm over bedrock) **Mineral**= <60cm depth over mineral

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent Wind # 1154
Polygon:	P014 - W1
UTM:	
Date:	08/10/10 Time: 1310
Surveyor(s):	BAM
Weather:	19°C, 10% CC wind 2 from SW No rain

Community Classification

Vegetation Type:	Fresh-Moist Oak-Maple Deciduous Forest Type (FODM9-2)
Inclusion:	-
Complex:	-

Polygon Description

System	Substrate	Topo Feature		Community	
[X] Terrestrial	[ ] Organic	[ ] Lacustrine	[ ] Talus	[ ] Lake	[ ] Barren
[ ] Wetland	[X] Mineral Soil	[ ] Riverine	[ ] Crevice/Cave	[ ] Pond	[ ] Meadow
[ ] Aquatic	[ ] Parent Min.	[ ] Bottomland	[ ] Alvar	[ ] River	[ ] Prairie
	[ ] Acidic Bedrock	[ ] Terrace	[ ] Rockland	[ ] Stream	[ ] Thicket
History	[ ] Basic Bedrock	[ ] Valley Slope	[ ] Beach/Bar	[ ] Marsh	[ ] Savannah
[X] Natural	[ ] Carb. Bedrock	[X] Tableland	[ ] Sand Dune	[ ] Swamp	[ ] Woodland
[ ] Cultural		[ ] Roll. Upland	[ ] Bluff	[ ] Fen	[X] Forest
	Site	[ ] Cliff		[ ] Bog	[ ] Plantation

Cover		Plant Form		
[ ] Open	[ ] Open Water	[ ] Plankton	[ ] Forb	[ ] Coniferous
[ ] Shrub	[ ] Shallow Water	[ ] Submerged	[ ] Lichen	[ ] Mixed
[X] Treed	[X] Surficial Dep.	[ ] Floating-Lvd	[ ] Bryophyte	
	[ ] Bedrock	[ ] Graminoid	[X] Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	~~Super-canopy~~			
1	Canopy	2	4	Silver Maple >> Bur Oak >> Basswood
2	Sub-canopy	3	3	White Elm > Silver Maple > Shagbark hickory
3	Understorey	4/5	3	White Elm > Common Buckthorn > gray dogwood
4	Groundcover	6/7	3	Virginia Creeper > Garlic mustard > wild strawberry

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0: none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	O	< 10	A	10 - 24	O	25 - 50	N	> 50
Snags	O	< 10	O	10 - 24	R	25 - 50	N	> 50
Deadfall/Logs	A	< 10	O	10 - 24	R	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young	[X]	Mid-age		Mature		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Silver Maple	D	O			
Bur Oak	O	O			
White Elm		A	O		
Common Buckthorn			O		
gray dogwood				O	
Shagbark hickory		O	O	O	
Basswood	R	O		O	

Species	Layer 1	2	3	4	Sample
avens sp.				O	
wild strawberry				O	
Virginia creeper				A	
poison ivy				O	
riverbank grape			O	O	
black raspberry				O	
garlic mustard				A	
red raspberry				O	
garden currant				R	
Three seeded mercury				R	
violet sp.				O	
Virginia Stickseed				R	
Canada goldenrod				O	
multiflora rose				O	

Wildlife and Other Notes

Probable breeding habitat for [illegible] but unsuitable due to lack of [illegible]

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page __ of __

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Community Classification

Vegetation Type:	Fresh-moist Oak-maple recid
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
Treed	Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy			
1	Canopy			
2	Sub-canopy			
3	Understorey			
4	Groundcover			

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	< 10	10 - 24	25 - 50	> 50
Snags	< 10	10 - 24	25 - 50	> 50
Deadfall/Logs	< 10	10 - 24	25 - 50	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age	Pioneer	Young	Mid-age	Mature	Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page ___of___

PLANT SPECIES LIST

Site:	Chatham-kent WF
Polygon:	P014-W1
UTM:	17T 0421510 4695681
Date:	July 15/11 Time: 09:00
Surveyor(s):	AMD, KTC
Weather:	Sunny w/ cloudy periods, 27°C, wind 2 from SE, C.C. 20%

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
bur. oak	O	O	—		
wh. elm	—	A	—		
shag. bark	O	A	O	—	
freeborne maple	A	A	—		
common buckthorn	—	O	O	—	
basswood	D	A	—		
prickly ash	—	—	O	—	
wh. ash	O	O	O	—	
choke cherry	—	O	O	—	
ribes cynosbati	—	—	O	O	

Species	Layer 1	2	3	4	Sample
poison ivy	—	—	—	O	
virginia creeper	—	—	—	A	
garlic mustard	—	—	—	O	
wt. avens	—	—	—	O	
red raspberry	—	—	—	O	
riverbank grape	—	—	—	R	
ench. nightshade	—	—	—	R	

Wildlife and Other Notes

- site is relatively homogenous.

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent WF
Polygon:	P014-W2
UTM:	-
Date:	Nov. 7/10 — Time:
Surveyor(s):	RAM
Weather:	7°C, 20% CC, Wind 2, No rain

Community Classification

Vegetation Type:	Fresh-Moist White Elm lowland Dec. Forest Type (FODM7-1)
Inclusion:	-
Complex:	-

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	✓ Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
✓ Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural		✓ Roll. Upland	Bluff	Fen	✓ Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
✓ Treed	✓ Surficial Dep.	Floating-Lvd.	Bryophyte	
	Bedrock	Graminoid	✓ Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	~~Super-canopy~~			
1	Canopy	2	4	White Elm > Freeman's Maple
2	Sub-canopy	3	2	White Elm ≫ White oak
3	Understorey	4/5	0	
4	Groundcover	6/7	4	reed canary grass > can. goldenrod > Ken. bluegrass

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	R	< 10	A	10 - 24	R	25 - 50	N	> 50
Snags	R	< 10	R	10 - 24	N	25 - 50	N	> 50
Deadfall/Logs	D	< 10	O	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age	Pioneer	Young	Mid-age	Mature	Old Growth
			X		

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Freeman's Maple	A	O			
White elm	A	O			
White Oak		R			

Species	Layer 1	2	3	4	Sample
reed canary grass				O	
canada thistle				O	
Can. goldenrod				O	
avens sp.				O	
Ken. bluegrass				O	

Wildlife and Other Notes

Roadside
- Cattle grazing

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description Page __ of __

Site:	Chatham-Kent WF (1184 A)
Polygon:	P014-W2
UTM:	17T 0421005 4694982.
Date:	July 15/11 Time: 08:30
Surveyor(s):	AMD, KTC
Weather:	Sunny & cloudy periods, 25°C, wind 2 from SE, CC. 20%

Community Classification

	Vegetation Type:	Fresh-moist White Elm Lowland Decid. Forest (FODM7-1)
X	Inclusion:	Open Aquatic (OAO) (pond, <25% emergent vegetation)
	Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
Treed	Surficial Dep.	Floating-Lvd.	Bryophyte	
	Bedrock	Graminoid	Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy			
1	Canopy			
2	Sub-canopy			
3	Understorey			
4	Groundcover			

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	< 10	10 - 24	25 - 50	> 50
Snags	< 10	10 - 24	25 - 50	> 50
Deadfall/Logs	< 10	10 - 24	25 - 50	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age	Pioneer	Young	Mid-age	Mature	Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description Page ___of___

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
white elm	A	O	—	—	
shag. hick.	O	O	O	—	
freeman's maple	A	O	—	—	
red oak	O	O	O	—	
wh ash	O	O	O	—	
hawthorn sp.	—	O	O	—	
buckthorn	—	R	R	R	
rose sp.	—	—	A	A	
red raspberry	—	—	O	O	
bramble sp.	—	—	O	O	
prickly ash	—	O	O	—	

Species	Layer 1	2	3	4	Sample
heal all	—	—	—	A	
wh. avens	—	—	—	O	
wild strawberry	—	—	—	O	
poison ivy	—	—	—	A	
mayapple	—	—	—	R	
exotic sp.	—	—	—	O	
carex sp.	—	—	—	A	
sensitive fern	—	—	—	R	
soft stem bulrush	—	—	—	O	
bugleweed	—	—	—	O	
typha	—	—	—	O	
water plantain	—	—	—	O	

@ cattle watering hole

Wildlife and Other Notes

- cattle grazing throughout.
- green frog heard @ watering hole

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Wetland Vegetation Communities

Project Name: Chatham-kent wF **Project #:** 1184 A

Observer(s): AMD, KTC

Date: July 15/11 **Time (24h):** 08:00

Field #: **Weather:** Precipitation: none Temp (°C): 25

Map Code: P014-w2 Wind Speed & Direction: 2, SE Cloud %: 20

Wetland Type: pond **Site Type:** IS **Dominant Form:**

% Open Water: <5 **ELC Code:** FODM7-1

Photos: Camera #6 101-2487 → 101-2494

Forms % (Circle those ≥25%)	Species (dominant species, secondary species, present species)
h	white elm), shagbark hickory, freemans maple, red oak, wh. ash
c	—
dc,dh,ds	—
ts	hawthorn sp., bucktlorn,
ls	rosa sp., hawthorn sp., red raspberry, bramble sp., prickly ash
gc	heal all, wh. avens, wild strawberry, poison ivy, may apple, lots of exotics
ne	carex sp., sensitive fern, soft stem bulrush, bugleweed
be	typha, water plantain
re	—
ff	—
f	—
su	—
m	—

Soil type: C | | Organic ☐ Mineral ☒

Rare Species (Local, Regional, Provincial):

none

Wildlife Notes:

- cattle grazing throughout
- green frog heard @ watering hole.

SAR observations must also include a specific UTM location.

Forms: **h**=deciduous trees; **c**=coniferous trees; **dh, dc, ds**=dead trees/shrubs; **ts**=tall shrubs; **ls**=low shrubs; **gc**=ground cover; **ne**=narrow emergents; **be**=broad emergents; **f**=floating plants; **ff**=free-floating plants; **su**=submerged plants; **m**=mosses

Wetland Type: **S**=swamp; **M**=marsh; **B**=bog; F=fen

Site Type: **L**=lacustrine; **P**=palustrine; **R**=riverine; **IS**=isolated

Soil type: **cl**=clay/loam; **sl**=silt/loam; **l**=limestone; **s**=sand; **hm**=humic/mesic; **f**=fibric; **g**=granite **Organic**= >60cm depth over mineral (>10cm over bedrock)**Mineral**= <60cm depth over mineral

*note; wetland is constructed w berms as a cattle watering hole.

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Wetland Vegetation Communities

Project Name: **Project #:**

Observer(s):

Date: **Time (24h):**

Field #: **Weather:** Precipitation: Temp (°C):

Map Code: Wind Speed & Direction: Cloud %:

Wetland Type: **Site Type:** **Dominant Form:**

% Open Water: **ELC Code:**

Photos:

Forms % (Circle those ≥25%)	Species (dominant species, secondary species, present species)
h	
c	
dc,dh,ds	
ts	
ls	
gc	
ne	
be	
re	
ff	
f	
su	
m	

Soil type: | | Organic ☐ Mineral ☐

Rare Species (Local, Regional, Provincial):

Wildlife Notes:

SAR observations must also include a specific UTM location.

Forms: **h**=deciduous trees; **c**=coniferous trees; **dh, dc, ds**=dead trees/shrubs; **ts**=tall shrubs; **ls**=low shrubs; **gc**=ground cover; **ne**=narrow emergents; **be**=broad emergents; **f**=floating plants; **ff**=free-floating plants; **su**=submerged plants; **m**=mosses

Wetland Type: **S**=swamp; **M**=marsh; **B**=bog; F=fen

Site Type: **L**=lacustrine; **P**=palustrine; **R**=riverine; **IS**=isolated

Soil type: **cl**=clay/loam; **sl**=silt/loam; **l**=limestone; **s**=sand; **hm**=humic/mesic; **f**=fibric; **g**=granite **Organic**= >60cm depth over mineral (>10cm over bedrock)**Mineral**= <60cm depth over mineral

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent WF
Polygon:	P034-W1
UTM:	
Date:	Nov 7/10
Time:	1230
Surveyor(s):	EAM
Weather:	7°C, 20% C.C., Wind 2, No rain

Community Classification

Vegetation Type:		Fresh-Moist Elm Deciduous Woodland Type (WODM5-2)
	Inclusion:	-
	Complex:	-

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	✓ Mineral Soil	✓ Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min.	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
✓ Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	✓ Woodland
Cultural		Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
✓ Treed	✓ Surficial Dep.	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	✓ Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy			
1	Canopy	2	3	White Elm >> Silver Maple
2	Sub-canopy	3	3	White Elm > Silver maple > Sumac
3	Understorey	4/5	3	hawthorn > gray dogwood > Red Cedar
4	Groundcover	6/7	4	Can. goldenrod > smooth brome > calico aster

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	A	10 - 24	R	25 - 50	N	> 50
Snags	O	< 10	O	10 - 24	R	25 - 50	N	> 50
Deadfall/Logs	R	< 10	R	10 - 24	R	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer	☒	Young		Mid-age		Mature		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
White elm	A	A	O		
Silver Maple	R	R			
hawthorn			O		
Red Cedar		R	O		
Gray dogwood			O		
Staghorn Sumac		R	O		

Species	Layer 1	2	3	4	Sample
Can. Goldenrod				A	
Calico Aster				O	
Smooth brome				A	
wild carrot				O	

Wildlife and Other Notes

Roadside

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page __ of __

Site:	
Polygon:	
UTM:	
Date: July 15 /11	Time: 10:00
Surveyor(s):	
Weather:	

Community Classification

Vegetation Type:	Fresh-moist elm decid woodland type (wor MS-2)
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Mln.	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover	Site	Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
Treed	Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy			
1	Canopy			
2	Sub-canopy			
3	Understorey			
4	Groundcover			

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	< 10	10 - 24	25 - 50	> 50
Snags	< 10	10 - 24	25 - 50	> 50
Deadfall/Logs	< 10	10 - 24	25 - 50	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age	Pioneer	Young	Mid-age	Mature	Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page ___of___

PLANT SPECIES LIST

Site:	Chatham-Kent WF
Polygon:	P024-W1
UTM:	17T 0415024 4693007
Date: July 15/11	Time: 10:00
Surveyor(s):	AMD, KTC
Weather:	Sunny w cloudy periods, 25°C, wind 2 from SE, C.C. 20%

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
red cedar	—	—	R	—	
white elm	A	A	O	-	
wh. ash (lots dead)	O	O	O	O	
gray dogwood	—	O	—		
black cherry	O	O	—	—	
hawthorn sp.	-	A	—		
staghorn sumac	—	O	A	—	
bur oak	-	O	—	—	
manny berry	—	—	A	—	
silver maple	R	R	O	O	
prickly ash	—	—	A	—	
euro buckthorn	—	O	—	—	
choke cherry	—	—	O	—	
ribes americanum	—	—	O	—	

Species	Layer 1	2	3	4	Sample
red top grass	—	—	—	R	
common milkweed	—	—	—	O	
riverbank grape	—	—	—	A	
solidago sp.	—	—	—	A	
orchard grass	—	—	—	O	
philadelphia fleabane	—	—	—	R	
virginia creeper	—	—	—	A	
solidago altissima	—	—	—	D	
burdock	—	—	—	O	
white avens	—	—	—	O	
common cinquefoil	—	—	—	R	
teasel	—	—	—	R	
rose sp.	—	—	—	O	
giant ragweed	—	—	—	O	
timothy grass	—	—	—	O	
heath aster	—	—	—	R	
red canary grass	—	—	—	O	
ench nightshade	—	—	—	O	
can. honeysuckle	—	—	—	R	
heal all	—	—	—	A	
com. St johns wort	—	—	—	R	
jewelweed	—	—	—	R	
wh. sweet clover	—	—	—	A	
spreading dogbane	—	—	—	O	

Wildlife and Other Notes

- catbird heard
- vegetation did not suggest wetland.

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	Chatham Kent WF
Polygon:	P042 - W1
UTM:	-
Date:	21/10/10
Time:	
Surveyor(s):	BAM
Weather:	12°C Wind 3 from W, 80% CC, No rain

Community Classification

Vegetation Type:	Fresh Moist White Elm Lowland Rec Forest Type (FOD M7-1)
Inclusion:	-
Complex:	-

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min.	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb. Bedrock	X Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	X Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
X Treed	X Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy			
1	Canopy	2	4	White elm > Silver Maple > bur oak
2	Sub-canopy	3	3	White elm > Silver Maple > bur oak
3	Understorey	4/5	3	White elm >> green Ash > Shagbark hickory
4	Groundcover	6/7	2	Green Ash > Avens sp. > Calico Aster

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	A	10 - 24	O	25 - 50	N	> 50
Snags	O	< 10	A	10 - 24	O	25 - 50	N	> 50
Deadfall/Logs	A	< 10	O	10 - 24	R	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age	Pioneer	Young	X Mid-age	Mature	Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
White Elm	A	O	A	O	
Bur oak	O	O			
Silver Maple	A	O			
Shagbark hickory	R	O	O		
Basswood		O			
Green Ash		R	O	A	

Species	Layer 1	2	3	4	Sample
Avens sp.				O	
Garlic Mustard				O	
violet sp.				O	
Poison Ivy				O	
Calico Aster				O	

Wildlife and Other Notes

Abundant Green Ash snags in canopy

- Drier due to tile drainage in surrounding area

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page __ of __

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Community Classification

Vegetation Type:	Fresh-moist White Elm Lowland Decid forest type (FODM7-1)
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
Treed	Surficial Dep.	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy			
1	Canopy			
2	Sub-canopy			
3	Understorey			
4	Groundcover			

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	< 10	10 - 24	25 - 50	> 50
Snags	< 10	10 - 24	25 - 50	> 50
Deadfall/Logs	< 10	10 - 24	25 - 50	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age	Pioneer	Young	Mid-age	Mature	Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

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PLANT SPECIES LIST

Site:	Chatham-kent WF
Polygon:	P042-W1
UTM:	17T 0416853 4689757
Date: July 15/11	Time: 15:00
Surveyor(s):	AMD KTC
Weather:	Sunny w cloudy periods, 30°C, wind 2 from SE, C.C. 20%

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
green ash	–	R	U	A	
shag. hick	R	O	O	–	
wh. elm	A	U	A	O	
silver maple	A	O	–		
wh. mulberry	–	–	R	–	
spicebush	–	–	–	R	
prickly ash	–	–	O	–	
choke cherry	–	–	O	–	

Species	Layer 1	2	3	4	Sample
riverbank grape	–	–	–	A	
poison ivy	–	–	–	A	
solidago sp	–	–	–	O	
aster sp.	–	–	–	O	
jewelweed	–	–	–	R	
jewelweed	–	–	–	R	
duckweed sp	–	–	–	R	
water plantain	–	–	–	R	
broad leaved arrowhead	–	–	–	R	

in drainage channel

Wildlife and Other Notes

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent WF
Polygon:	POLY-W3
UTM:	
Date:	Nov. 6/18
Time:	
Surveyor(s):	BAM
Weather:	3°C, 30%, CC, Wind 2, No rain

Community Classification

Vegetation Type:	Fresh-Moist Bur Oak Dec. Forest type (FODM9-3)
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	✓ Mineral Soil	✓ Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min.	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
✓ Natural	Carb. Bedrock	✓ Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	✓ Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
✓ Treed	✓ Surficial Dep	Floating-Lvd.	Bryophyte	
	Bedrock	Graminoid	✓ Deciduous	

Stand Description

	Layer	HT	Cover	Species
	~~Super-canopy~~			
1	Canopy	2	4	Bur oak > White Elm > Silver Maple
2	Sub-canopy	3	3	White Elm > Shagbark hickory > Bur oak
3	Understorey			
4	Groundcover			

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	A	10 - 24	O	25 - 50	N	> 50
Snags	R	< 10	O	10 - 24	O	25 - 50	N	> 50
Deadfall/Logs		< 10		10 - 24		25 - 50		> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age	Pioneer	Young	Mid-age	Mature	Old Growth
			X		

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample	Species	Layer 1	2	3	4	Sample
Bur Oak	A	O									
Silver Maple	O										
White Elm	O	A									
Shagbark hickory		O									

Wildlife and Other Notes

Roadside with limited view

- Difficult to judge snags due to most leaves being off

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page __ of __

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Community Classification

Vegetation Type:	Fresh-Moist Bur Oak Decid. Forest (FODM9-3)
Inclusion:	Swamp Maple Mineral Decid. Swamp (SWDM3-3)
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
Treed	Surficial Dep.	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy			
1	Canopy			
2	Sub-canopy			
3	Understorey			
4	Groundcover			

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	< 10	10 - 24	25 - 50	> 50
Snags	< 10	10 - 24	25 - 50	> 50
Deadfall/Logs	< 10	10 - 24	25 - 50	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age	Pioneer	Young	Mid-age	Mature	Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page ____of____

PLANT SPECIES LIST

Site:	Chatham-Kent WF 1184A
Polygon:	P065-W3
UTM:	17T 0400162 4684868
Date:	July 15/11 Time: 19:00
Surveyor(s):	AMD, KTC
Weather:	Sunny 28°C, wind 2 from SE, cc. 20%

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
basswood	A	A	—		
silver maple	A	A	—		
red oak	O	O	—		
bur oak	O	O	—		
shagbark	O	O	—		
black maple	R	R	O	—	
ironwood	—	R	—		
wh. elm	O	A	—		
choke cherry	—	—	O	—	
freeman's maple	A	A	—		
hawthorn sp.	—	O	O	—	
prickly ash	—	R	O	—	
sugar maple	R	R	R	R	
prickly gooseberry				O	

Species	Layer 1	2	3	4	Sample
riverbank grape				A	
large flowered bell wort			—	O	
virginia creeper				O	
wild geranium				A	
poison ivy				O	
mayapple				R	
p					

Wildlife and Other Notes

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Wetland Vegetation Communities

Project Name: Chatham-Kent WF **Project #:** 1184 A

Observer(s): AMP, KTC

Date: July 15/11 **Time (24h):** 19:00

Field #: **Weather:** Precipitation: none Temp (°C): 28

Map Code: P065-W3 Wind Speed & Direction: 2, SE Cloud %: 20

Wetland Type: S **Site Type:** R **Dominant Form:**

% Open Water: 0 **ELC Code:** FOD M9-3

Photos: Camera #6 101-2558 → 101-2585

Forms % (Circle those ≥25%)	Species (dominant species, secondary species, present species)
h	freemans maple, basswood, shagbark hickory, redoak, black maple
c	—
dc,dh,ds	—
ts	hawthorn sp, prickly ash, choke cherry,
ls	prickly gooseberry, virginia creeper, riverbank grape.
gc	large flowered bellwort, wild geranium, poison ivy, may apple,
ne	—
be	—
re	—
ff	—
f	—
su	—
m	—

Soil type: cl/sl | Organic ☐ Mineral ☒

Rare Species (Local, Regional, Provincial): none.

Wildlife Notes: none.

SAR observations must also include a specific UTM location.

Forms: **h**=deciduous trees; **c**=coniferous trees; **dh, dc, ds**=dead trees/shrubs; **ts**=tall shrubs; **ls**=low shrubs; **gc**=ground cover; **ne**=narrow emergents; **be**=broad emergents; **f**=floating plants; **ff**=free-floating plants; **su**=submerged plants; **m**=mosses

Wetland Type: **S**=swamp; **M**=marsh; **B**=bog; **F**=fen

Site Type: **L**=lacustrine; **P**=palustrine; **R**=riverine; **IS**=isolated

Soil type: **cl**=clay/loam; **sl**=silt/loam; **l**=limestone; **s**=sand; **hm**=humic/mesic; **f**=fibric; **g**=granite **Organic**= >60cm depth over mineral (>10cm over bedrock)**Mineral**= <60cm depth over mineral

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Wetland Vegetation Communities

Project Name: **Project #:**

Observer(s):

Date: **Time (24h):**

Field #: **Weather:** Precipitation: Temp (°C):

Map Code: Wind Speed & Direction: Cloud %:

Wetland Type: **Site Type:** **Dominant Form:**

% Open Water: **ELC Code:**

Photos:

Forms % (Circle those ≥25%)	Species (dominant species, secondary species, present species)
h	
c	
dc,dh,ds	
ts	
ls	
gc	
ne	
be	
re	
ff	
f	
su	
m	

Soil type: | Organic ☐ Mineral ☐

Rare Species (Local, Regional, Provincial):

Wildlife Notes:

SAR observations must also include a specific UTM location.

Forms: **h**=deciduous trees; **c**=coniferous trees; **dh, dc, ds**=dead trees/shrubs; **ts**=tall shrubs; **ls**=low shrubs; **gc**=ground cover; **ne**=narrow emergents; **be**=broad emergents; **f**=floating plants; **ff**=free-floating plants; **su**=submerged plants; **m**=mosses

Wetland Type: **S**=swamp; **M**=marsh; **B**=bog; **F**=fen

Site Type: **L**=lacustrine; **P**=palustrine; **R**=riverine; **IS**=isolated

Soil type: **cl**=clay/loam; **sl**=silt/loam; **l**=limestone; **s**=sand; **hm**=humic/mesic; **f**=fibric; **g**=granite **Organic**= >60cm depth over mineral (>10cm over bedrock)**Mineral**= <60cm depth over mineral

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description Page 1 of 2

Site:	Chatham Kent WF - #1184
Polygon:	P103 - W1
UTM:	-
Date:	21/10/10 **Time:** 1300
Surveyor(s):	PAM
Weather:	12°C, wind 3 from W, 80% C.C. No rain

Community Classification

Vegetation Type:	Fresh-Moist White elm lowland dec. Forest type (FODM7-1)
Inclusion:	-
Complex:	-

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Mn.	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb. Bedrock	X Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	X Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
X Treed	X Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
~~*~~	~~Super canopy~~			
1	Canopy	2	4	Silver Maple > white elm > bur oak
2	Sub-canopy	3	3	white elm > silver Maple > bur oak
3	Understorey	1/3	3	white elm >> green ash > shag bark
4	Groundcover	0/1	2	Green ash >> white elm > avens sp.

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	A	10 - 24	O	25 - 50	N	> 50
Snags	O	< 10	A	10 - 24	O	25 - 50	N	> 50
Deadfall/Logs	A	< 10	O	10 - 24	A	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young	X	Mid-age		Mature	Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page 2 of 2

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	**Time:**
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Bur oak	O	O			
Shag bark hickory	R	O	O		
Silver Maple	A	O			
White elm	O	O	A	O	
Green Ash			O	A	
Basswood		O			

Species	Layer 1	2	3	4	Sample
calico aster				O	
poison ivy				O	
avens sp.				O	
bladder sedge				O	
garlic mustard				O	
violet sp				O	
riverbank grape				O	
wild cucumber				R	
multiflora rose				O	

Wildlife and Other Notes

- Green Ash snags abundant in canopy
- May have been a swamp but now moist forest prob. due to tile drainage surrounding.
- May have vernal pools
- May be transitional to Silver Maple

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description Page 1 of 2

Site:	Chatham-kent WF (1184 A)
Polygon:	P108-W1
UTM:	17T0415467 4690737
Date:	July 15/11 Time: 11:30
Surveyor(s):	AMD, KTC
Weather:	Sunny, 26°C, wind 2 (S), C.C 20%

Community Classification

Vegetation Type:	Fresh-Moist White Elm Lowland Decid. Forest (FODM7-1)
Inclusion:	Swamp/Silver Maple mineral Decid. Swamp (SWD3-2/3)
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min.	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb Bedrock	X Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	X Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
X Treed	X Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	~~Super-canopy~~			
1	Canopy	1	4	silver maple > wh. elm > gr. ash > basswood > red oak
2	Sub-canopy	3	3	white elm = basswood > shag. hick > Sugar maple
3	Understorey	4,5,6	3	spicebush > basswood > wh. ash.
4	Groundcover	7	2	Virginia creeper > wild geranium > * nettle sp.

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0: none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	A	10 - 24	O	25 - 50	O	> 50
Snags	O	< 10	O	10 - 24	O	25 - 50	N	> 50
Deadfall/Logs	O	< 10	R	10 - 24	R	25 - 50	R	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age	Pioneer	Young	Mid-age	Mature	Old Growth
			X	X	

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description Page 2 of 2

PLANT SPECIES LIST

Site:	Chatham-kent WF
Polygon:	
UTM:	
Date:	Time: 11:30
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
white elm	O	A	—		
Silver maple	A	O	O	-	
gr. ash	O	O	O	A	
Shag. hickory	R	O	O	-	
basswood	O	O	—		
prickly ash	—	O	-		
black currant	—	O	-		
beech	-	R	O	-	
black ch.	O	R	O	-	
Choke cherry	—	—	O	-	
Ironwood	—	—	O	-	
Basswood	O	A	O	-	
Red Oak	O	R	-	R	
Sugar Maple	O	O	—		
Sambucus americana	-	-	O	-	
spicebush	-	R	A	-	

Species	Layer 1	2	3	4	Sample
Fringed loosestrife	—	—	—	O	
carex sp	—	—	—	O	
wild ginger	—	—	—	R	
moonseed	—	—	—	R	
virginia creeper	—	—	—	A	
wild Geranium	—	—	—	A	
false nettle	—	—	—	O	
agrimony	—	—	—	R	
Enchanter's nightshade	—	—	—	O	
gooseberry	—	—	—	O	
jewelweed	—	—	—	R	
Viola species	—	—	—	O	
Sensitive fern	—	—	—	O	
Mayapple	—	—	—	O	
nightshade	—	—	—	R	
blackberry	—	—	—	O	
prickly gooseberry	—	—	—	O	
jack in pulpit	—	—	—	R	

Wildlife and Other Notes

- deer tracks
- red eyed vireo
- Gray fish chimneys

} all seen upon site visit

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description Page 1 of 4

Site:	P111-W2
Polygon:	
UTM:	
Date:	April 5, 2011 — Time: 11:00am
Surveyor(s):	KSJ, KEB
Weather:	2°C, wind S(N), CC 100%, No precip

Community Classification

Vegetation Type:	Silver Maple Mineral Deciduous Swamp	(SWDM3-2)
Inclusion:		
Complex:		

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min.	X Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb. Bedrock	Tableland	Sand Dune	X Swamp	X Woodland
Cultural		Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover	Site	Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
X Treed	X Surficial Dep.	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy			
1	Canopy	1	4	Silver maple > Black Ash > Cottonwood
2	Sub-canopy	2	3	Bitternut Hickory > Am. Elm > Cherry sp.
3	Understorey	3	2	Am. Elm > Black Ash > Virginia Creeper
4	Groundcover	5	1	Garlic Mustard > Beggars Ticks

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	O	< 10	O	10 - 24	A	25 - 50	O	> 50
Snags	R	< 10	R	10 - 24	O	25 - 50	R	> 50
Deadfall/Logs	R	< 10	A	10 - 24	O	25 - 50	R	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age	Pioneer	Young	Mid-age	Mature	Old Growth
				X	

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description Page 2 of 4

PLANT SPECIES LIST

Site:	P111-W2
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Silver Maple	A				
Cottonwood	O				
Am. Elm	O	O	O		
Black Ash	O		O		
Burr Oak	R				
Bitternut Hickory	O	O			
Cherry sp.		R			
Virginia Creeper			O		
Velvet Raf				R	
Garlic Mustard				O	
Beggars Ticks				O	
Tall Goldenrod				O	

Species	Layer 1	2	3	4	Sample

Wildlife and Other Notes

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description Page __ of __

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Community Classification

Vegetation Type:	Silver Maple Mineral Decid. Swamp (SWDM3-2)
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
Treed	Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy			
1	Canopy			
2	Sub-canopy			
3	Understorey			
4	Groundcover			

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis		< 10		10 - 24		25 - 50	> 50
Snags		< 10		10 - 24		25 - 50	> 50
Deadfall/Logs		< 10		10 - 24		25 - 50	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young		Mid-age		Mature	Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description Page ____of____

PLANT SPECIES LIST

Site:	Chatham-kent WF (1164A)
Polygon:	P111-W2
UTM:	17T 0404850 4687619
Date:	July 15/11 Time: 18:00
Surveyor(s):	AMD, KTC
Weather:	Sunny, 28°C, wind 2 from SE, cc 20%

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
black walnut	R	R	—		
basswood	O	O	O	—	
wh. elm	O	O	O		
black cherry	—	R	—	—	
staghorn sumac	—	—	R	T	
shagbark	A	A	—	—	
freeman's maple	D	A	—	—	
wh. ash	O	O	—		
burroak	R	R	O	—	
east. cottonwood	R	R	—	—	
hawthorn sp.	—	O	A	—	
black ash	R	R	R	O	
spicebush	—	D	D	—	

Species	Layer 1	2	3	4	Sample
poison ivy	—	—	—	O	
r. virginia rattle	—	—	—	O	
giant ragweed	—	—	—	R	
spreading dogbane	—	—	—	R	
riverbank grape	—	—	—	O	
virginia creeper	—	—	—	O	
garlic mustard	—	—	—	R	
viola sp.	—	—	—	O	
wh. avens	—	—	—	O	
jack pulpit	—	—	—	R	
wild geranium	—	—	—	A	
moonseed	—	—	—	R	
sensitive fern	—	—	—	R	
carex sp.	—	—	—	R	
euonymus obovata	—	—	—	R	

Wildlife and Other Notes

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Wetland Vegetation Communities

Project Name: Chatham-Kent WF **Project #:** 1184 A

Observer(s): AMD, KTC

Date: July 15/11 **Time (24h):** 18:00

Field #: **Weather:** Precipitation: none Temp (°C): 28

Map Code: P111-W2 Wind Speed & Direction: 2-, SE Cloud %: 20

Wetland Type: S **Site Type:** R **Dominant Form:**

% Open Water: 0 **ELC Code:** SWDM3-2

Photos: Camera #6 : 101-2544 → 101-2557

Forms % (Circle those ≥25%)	Species (dominant species, secondary species, present species)
h	white elm, freemans maple, hawthorn sp., basswood, black walnut
c	—
dc,dh,ds	—
ts	hawthorn sp., staghorn sumac (spicebush), chokecherry
ls	riverbank grape, v. riparia, creeper, ribes americanum (spicebush)
gc	stinging nettle, wild geranium, wh. avens, enchanters nightshade
ne	carex sp., sensitive fern
be	—
re	—
ff	—
f	—
su	—
m	on downed trees and @ base of some living trees

Soil type: unknown | Organic ☐ | Mineral ☐

Rare Species (Local, Regional, Provincial):

none.

Wildlife Notes:

- deer tracks in adjacent field to SE

SAR observations must also include a specific UTM location.

Forms: **h**=deciduous trees; **c**=coniferous trees; **dh, dc, ds**=dead trees/shrubs; **ts**=tall shrubs; **ls**=low shrubs; **gc**=ground cover; **ne**=narrow emergents; **be**=broad emergents; **f**=floating plants; **ff**=free-floating plants; **su**=submerged plants; **m**=mosses

Wetland Type: **S**=swamp; **M**=marsh; **B**=bog; **F**=fen

Site Type: **L**=lacustrine; **P**=palustrine; **R**=riverine; **IS**=isolated

Soil type: **cl**=clay/loam; **sl**=silt/loam; **l**=limestone; **s**=sand; **hm**=humic/mesic; **f**=fibric; **g**=granite **Organic**= >60cm depth over mineral (>10cm over bedrock)**Mineral**= <60cm depth over mineral

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Wetland Vegetation Communities

Project Name: **Project #:**

Observer(s):

Date: **Time (24h):**

Field #: **Weather:** Precipitation: Temp (°C):

Map Code: Wind Speed & Direction: Cloud %:

Wetland Type: **Site Type:** **Dominant Form:**

% Open Water: **ELC Code:**

Photos:

Forms % (Circle those ≥25%)	Species (dominant species, secondary species, present species)
h	
c	
dc,dh,ds	
ts	
ls	
gc	
ne	
be	
re	
ff	
f	
su	
m	

Soil type: | Organic ☐ | Mineral ☐

Rare Species (Local, Regional, Provincial):

Wildlife Notes:

SAR observations must also include a specific UTM location.

Forms: **h**=deciduous trees; **c**=coniferous trees; **dh, dc, ds**=dead trees/shrubs; **ts**=tall shrubs; **ls**=low shrubs; **gc**=ground cover; **ne**=narrow emergents; **be**=broad emergents; **f**=floating plants; **ff**=free-floating plants; **su**=submerged plants; **m**=mosses

Wetland Type: **S**=swamp; **M**=marsh; **B**=bog; **F**=fen

Site Type: **L**=lacustrine; **P**=palustrine; **R**=riverine; **IS**=isolated

Soil type: **cl**=clay/loam; **sl**=silt/loam; **l**=limestone; **s**=sand; **hm**=humic/mesic; **f**=fibric; **g**=granite **Organic**= >60cm depth over mineral (>10cm over bedrock)**Mineral**= <60cm depth over mineral

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page __ of __

Site:	P140-W2
Polygon:	
UTM:	17T 0421536 4688223
Date:	April 6/2011 Time: 9:26
Surveyor(s):	N&M, KGB
Weather:	4°C, 100% CC, drizzle, SW2

Community Classification

Vegetation Type:	Fresh-Moist Carolinian (FODM10) Forest
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	✓ Organic	Lacustrine	Talus	Lake	Barren
Wetland	Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min.	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
✓ Natural	Carb. Bedrock	✓ Tableland	Sand Dune	Swamp	✓ Woodland
Cultural		Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
✓ Treed	✓ Surficial Dep.	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	✓ Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy			
1	Canopy	2	3	Green Ash > Silver Maple > Shagbark Hickory
2	Sub-canopy	3	3	Green Ash > Silver Maple > White Oak
3	Understorey	4	2	Red Raspberry > Buttonbush > Prickly Ash
4	Groundcover	5	1	Red Osier > Field Strawberry > Moss sp.

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	< 10	10 - 24	25 - 50	> 50
Snags	< 10	(10 - 24)	25 - 50	> 50
Deadfall/Logs	< 10	(10 - 24)	25 - 50	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age	Pioneer	(Young)	Mid-age	Mature	Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page ___of___

PLANT SPECIES LIST

Site:	P140-W2
Polygon:	
UTM:	
Date:	April 6/2011 Time: 9:26
Surveyor(s):	N&M, KGB
Weather:	4°C, 100% CC, Drizzle, SW2

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample	Species	Layer 1	2	3	4	Sample
Black Locust	—	—	O	O							
Am. Beech	R	R	O	O							
Cottonwood	R	R	R	R							
Hawthorn	—	—	R	R							
Shellbark Hickory	O	O	O	O							
Red Osier Dogwood	—	—	O	O							
Green Ash	D	D	A	A							
White Oak	O	O	O	O							
Tulip Tree	R	R	R	R							
~~Eastern Red Cedar~~ Red	—	—	R	R							
White Pine	R	R	R	R							
Riverbank Grape	—	—	O	O							
Prickly Ash	—	—	O	O							
Field Strawberry	—	—	—	A							
Buttonbush	—	—	O	O							
Moss sp.	—	—	—	O							
Hepatica	—	—	—	O							
Skunk Cabbage	—	—	—	R							
Red Raspberry	—	—	D	O							
Goldenrod sp.	—	—	—	R							
Red Oak	R	R	R	R							

Wildlife and Other Notes

Pics. #93-97, from Nathan's

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description Page __ of __

-see original assessment -

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Community Classification

Vegetation Type:		Fresh-moist Carolinian (FODM10) Forest
X	Inclusion:	Green Ash Mineral Decid. Swamp (SWDM2-2)
	Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min.	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
Natural	Carb Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
Treed	Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy			
1	Canopy			
2	Sub-canopy			
3	Understorey			
4	Groundcover			

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	< 10	10 - 24	25 - 50	> 50
Snags	< 10	10 - 24	25 - 50	> 50
Deadfall/Logs	< 10	10 - 24	25 - 50	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age	Pioneer	Young	Mid-age	Mature	Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description Page ____of____

PLANT SPECIES LIST

Site:	Chatham-Kent WF 1184 A
Polygon:	P140-W2
UTM:	17T 0421369 4685818
Date:	July 14/11 Time: 19:33
Surveyor(s):	AMO, KTC
Weather:	24°C, Sunny, wind 1 from W, 40% C.C

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species trees & shrubs	Layer 1	2	3	4	Sample
	~~R~~	~~O~~	~~A~~	~~D~~	
white elm	-	O	O	-	
basswood	-	A	O	R	
red maple	A	A	R	R	
shagbark hick.	O	O	O	O	
green ash	O	O	A	A	
burr oak		R			
silver maple	O	—	—	—	
prickly ash	—	—	O	O	
choke cherry	—	—	O	O	
gray dogwood	—	—	R	R	

SWDM2-2

Species herbs	Layer 1	2	3	4	Sample
poison ivy	—	—	—	A	
virginia creeper	—	—	—	A	
starry false solomon	—	—	—	A	
solomons seal (sic)	—	—	—	O	
enchanter nightshade	—	—	—	O	
carex spp	—	—	—	R	
gooseberry sp.	—	—	—	R	
trillium sp.	—	—	—	R	
jack-in-the-pulpit	—	—	—	R	
white avens	—	—	—	O	
goldenrod sp.	—	—	—	R	
aster sp.	—	—	—	R	
wild geranium	—	—	—	O	
jewelweed	—	—	—	R	
raspberry sp.	—	—	—	R	

SWDM2-2

Wildlife and Other Notes

- pictures listed on soils sheet, deer tracks seen
- 4 wheeler trail, Mustela (weasel) skull seen
- 4 wheeler trail runs along edge of woodland
- small dwelling built inside woodlot @ middle-west area

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Wetland Vegetation Communities

Project Name: Chatham-Kent WF **Project #:** 1184A

Observer(s): AMD, KTC

Date: July 14/11 **Time (24h):** 20:00

Field #: **Weather:** Precipitation: none Temp (°C): 24

Map Code: P140-W2 Wind Speed & Direction: 1 W Cloud %: 40

Wetland Type: S **Site Type:** P **Dominant Form:**

% Open Water: 0 **ELC Code:** FODM10

Photos: Camera #6: 101-2475, 101-2478, 101-2479, 101-2481 → 101-2486

Forms % (Circle those ≥25%)	Species (dominant species, secondary species, present species)
h	white elm, basswood, red maple, shagbark hick., green ash, bur oak
c	—
dc,dh,ds	—
ts	gray dogwood, chokecherry, prickly ash
ls	gooseberry sp., virginia creeper, poison ivy,
gc	starry false solomon's seal, wh. avens, jewelweed, jack pulpit, wild geranium
ne	Carex sp.
be	—
re	—
ff	—
f	—
su	—
m	significant on forest floor and downed woody material.

Soil type: SI | Organic ☐ | Mineral ☒

Rare Species (Local, Regional, Provincial):

Wildlife Notes:
- deer tracks seen.
- weasel skull seen.

SAR observations must also include a specific UTM location.

Forms: **h**=deciduous trees; **c**=coniferous trees; **dh, dc, ds**=dead trees/shrubs; **ts**=tall shrubs; **ls**=low shrubs; **gc**=ground cover; **ne**=narrow emergents; **be**=broad emergents; **f**=floating plants; **ff**=free-floating plants; **su**=submerged plants; **m**=mosses

Wetland Type: **S**=swamp; **M**=marsh; **B**=bog; **F**=fen

Site Type: L=lacustrine; **P**=palustrine; **R**=riverine; **IS**=isolated

Soil type: **cl**=clay/loam; **sl**=silt/loam; **l**=limestone; **s**=sand; **hm**=humic/mesic; **f**=fibric; **g**=granite **Organic**= >60cm depth over mineral (>10cm over bedrock)**Mineral**= <60cm depth over mineral

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Wetland Vegetation Communities

Project Name: **Project #:**

Observer(s):

Date: **Time (24h):**

Field #: **Weather:** Precipitation: Temp (°C):

Map Code: Wind Speed & Direction: Cloud %:

Wetland Type: **Site Type:** **Dominant Form:**

% Open Water: **ELC Code:**

Photos:

Forms % (Circle those ≥25%)	Species (dominant species, secondary species, present species)
h	
c	
dc,dh,ds	
ts	
ls	
gc	
ne	
be	
re	
ff	
f	
su	
m	

Soil type: | Organic ☐ | Mineral ☐

Rare Species (Local, Regional, Provincial):

Wildlife Notes:

SAR observations must also include a specific UTM location.

Forms: **h**=deciduous trees; **c**=coniferous trees; **dh, dc, ds**=dead trees/shrubs; **ts**=tall shrubs; **ls**=low shrubs; **gc**=ground cover; **ne**=narrow emergents; **be**=broad emergents; **f**=floating plants; **ff**=free-floating plants; **su**=submerged plants; **m**=mosses

Wetland Type: **S**=swamp; **M**=marsh; **B**=bog; **F**=fen

Site Type: L=lacustrine; **P**=palustrine; **R**=riverine; **IS**=isolated

Soil type: **cl**=clay/loam; **sl**=silt/loam; **l**=limestone; **s**=sand; **hm**=humic/mesic; **f**=fibric; **g**=granite **Organic**= >60cm depth over mineral (>10cm over bedrock)**Mineral**= <60cm depth over mineral

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page __ of __

Site:	South West WF
Polygon:	CLA WZ
UTM:	-
Date:	Nov. 7/10
Time:	1100
Surveyor(s):	BAM
Weather:	5°C. 60% C.C., wind 3, No rain

Community Classification

Vegetation Type:	Fresh-Moist White Elm lowland Dec. Forest Type (FODM7-1)
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
✓ Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	✓ Mineral Soil	✓ Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Mtn	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
✓ Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	✓ Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
✓ Treed	✓ Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	✓ Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	~~Super-canopy~~			
1	Canopy	2	4	White Elm
2	Sub-canopy	3	3	White Elm
3	Understorey	3/5	3	White Elm > Hawthorn sp.
4	Groundcover	0/1	2	avens sp. > Can. goldenrod > red raspberry

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	O	< 10	A	10 - 24	R	25 - 50	N	> 50
Snags	O	< 10	O	10 - 24	R	25 - 50	N	> 50
Deadfall/Logs	O	< 10	O	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer	X	Young		Mid-age		Mature		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Page ___ of ___

PLANT SPECIES LIST

Site:	
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
White Elm	D	A	O		
Hawthorn sp.			O		

Species	Layer 1	2	3	4	Sample
Avens sp.				O	
Can. goldenrod				O	
red raspberry				R	

Wildlife and Other Notes

Roadside

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description Page __ of __

Site:	Chatham-Kent WF
Polygon:	
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Community Classification

Vegetation Type:	Fresh-Moist White Elm Lowland Decid forest type (FODM7-1)
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Mtn	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
Treed	Surficial Dep.	Floating-Lvd.	Bryophyte	
	Bedrock	Graminoid	Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy			
1	Canopy			
2	Sub-canopy			
3	Understorey			
4	Groundcover			

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	< 10	10 - 24	25 - 50	> 50
Snags	< 10	10 - 24	25 - 50	> 50
Deadfall/Logs	< 10	10 - 24	25 - 50	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age	Pioneer	Young	Mid-age	Mature	Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description Page ___of___

PLANT SPECIES LIST

Site:	Chatham-Kent WF
Polygon:	CLA-W2
UTM:	17T 0411886 4690890
Date:	July 15/11 Time: 16:00
Surveyor(s):	AMD, KTC
Weather:	Sunny w cloudy periods, 30°C, wind 3 from S, C.C. 20%.

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Salix sp.	A	O	—		
east cottonwood	O	O	—		
wh. elm	D	A	O	—	
basswood	—	O	O	—	
prickly ash	—	O	O	—	
manitoba maple	D	A	—		
wh. ash (mature)	A	O	O	O	
hawthorn sp.	—	A	A	—	
tartarian honeysuckle	—	O	—		
Lilac	—	R	R	—	
black cherry	—	R	R	—	
wh. mulberry	—	R	R	—	
common buckthorn	—	O	O	—	
gray dogwood	—	—	O	—	
chokecherry	—	—	O	—	

Species	Layer 1	2	3	4	Sample
water parsnip					
smooth brome					
riverbank grape					
solidago sp.					
raspberry sp.					
blackberry sp.					
burdock					
dames rocket					
daylily					
queen annes lace					
curled dock					
orchard grass					
sweet wh clover					
wild strawberry					
giant ragweed					

Wildlife and Other Notes

- significant exotic/invasive and pioneer species

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Wetland Vegetation Communities

Project Name: South Kent	**Project #:** 11848
Observer(s): CLH	
Date: Nov. 10, 2011	**Time (24h):** 17:30
Field #: P054-WE1	**Weather:** Precipitation: None Temp (°C):
Map Code: 51	Wind Speed & Direction: 3 SW Cloud %: 30
Wetland Type: Swamp	**Site Type:** I **Dominant Form:** h
% Open Water: 0	**ELC Code:** SWAM 3-3
Photos:	

Forms % (Circle those ≥25%)	Species (dominant species, secondary species, present species)
h	Freeman's maple, White elm.
c	
dc,dh,ds	
ts	
ls	
gc	
ne	
be	
re	
ff	
f	
su	
m	

Soil type:	See attached.	Organic ☐	Mineral ☒	SiC

Rare Species (Local, Regional, Provincial):	Wildlife Notes:
None	Red-tailed hawk observed at edge of community.

SAR observations must also include a specific UTM location.

Forms: **h**=deciduous trees; **c**=coniferous trees; **dh, dc, ds**=dead trees/shrubs; **ts**=tall shrubs; **ls**=low shrubs; **gc**=ground cover; **ne**=narrow emergents; **be**=broad emergents; **f**=floating plants; **ff**=free-floating plants; **su**=submerged plants; **m**=mosses

Wetland Type: **S**=swamp; **M**=marsh; **B**=bog; **F**=fen

Site Type: L=lacustrine; **P**=palustrine; **R**=riverine; **IS**=isolated

Soil type: **cl**=clay/loam; **sl**=silt/loam; **l**=limestone; **s**=sand; **hm**=humic/mesic; **f**=fibric; **g**=granite **Organic**= >60cm depth over mineral (>10cm over bedrock)**Mineral**= <60cm depth over mineral

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	
Polygon: POS4-W2	
UTM:	
Date: Nov. 10 2011	Time: 17:30
Surveyor(s): CH	
Weather: 6°C, CC 30%, Wind 2 km SW. No precip.	

Community Classification

Vegetation Type:	FODM5-8 Fresh-Moist Sugar maple - White Ash Deciduous Forest
[X] Inclusion:	SWDM3-3 Swamp maple Mineral Deciduous Swamp
[ ] Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
[X] Terrestrial	[ ] Organic	[ ] Lacustrine	[ ] Talus	[ ] Lake	[ ] Barren
[ ] Wetland	[X] Mineral Soil	[ ] Riverine	[ ] Crevice/Cave	[ ] Pond	[ ] Meadow
[ ] Aquatic	[ ] Parent Min	[ ] Bottomland	[ ] Alvar	[ ] River	[ ] Prairie
	[ ] Acidic Bedrock	[ ] Terrace	[ ] Rockland	[ ] Stream	[ ] Thicket
History	[ ] Basic Bedrock	[ ] Valley Slope	[ ] Beach/Bar	[ ] Marsh	[ ] Savannah
[X] Natural	[ ] Carb Bedrock	[ ] Tableland	[ ] Sand Dune	[ ] Swamp	[ ] Woodland
[ ] Cultural		[X] Roll. Upland	[ ] Bluff	[ ] Fen	[X] Forest
	Site	[ ] Cliff		[ ] Bog	[ ] Plantation

Cover		Plant Form		
[ ] Open	[ ] Open Water	[ ] Plankton	[ ] Forb	[ ] Coniferous
[ ] Shrub	[ ] Shallow Water	[ ] Submerged	[ ] Lichen	[ ] Mixed
[X] Treed	[X] Surficial Dep	[ ] Floating-Lvd	[ ] Bryophyte	
	[ ] Bedrock	[ ] Graminoid	[X] Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy	1	0	—
1	Canopy	2	4	Sugar maple > White Ash > Black cherry = Am. Beech = White Elm
2	Sub-canopy	2	3	Sugar maple > White Elm > White Ash > Black Cherry
3	Understorey	4 3	1	Red Elder > Choke Cherry > Red Raspberry > Black Cherry
4	Groundcover	4 3	1	Red Raspberry > Running Strawberry-Bush > Red Elder > Wild Ginger

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis		< 10		10 - 24		25 - 50		> 50
Snags	R	< 10	R	10 - 24	R	25 - 50	N	> 50
Deadfall/Logs	O	< 10	O	10 - 24	O	25 - 50	R	> 50

Abundance Codes: N None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young		Mid-age	[X]	Mature		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site: South Kent	
Polygon: POS4-W2	
UTM:	
Date: Nov. 10 2011	Time: 17:30
Surveyor(s):	
Weather:	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Sugar maple	O	O		O	
Black Cherry	O	O	O		
Trembling Aspen	O				
Am Beech	O	O			
Tulip Tree	R	O			
White Elm	O	O			
White Ash	O	O	O	O	
Ironwood	O	O			
Basswood	R				
* Bitternut	R				
Red Raspberry			O	O	
Running Strawberry-Bush				O	
Nannyberry			R		
Red Elder			O	O	
Choke Cherry			O		

Species	Layer 1	2	3	4	Sample
bladder Sedge				R	
Bitternut Hickory				R	
Calico Aster				R	
Poison Ivy		R			
Wild Ginger				O	
Christmas Fern				R	
Inclusion:					
Freeman's Maple	O				
White Elm	A	O			

Wildlife and Other Notes

Red tailed Hawk

* heavily browsed, large mature tree ITT 407899 4690847

Modified ELC Community Description

Soils	1	2	3
Position:	1		
Aspect:	/		
%	0		
Type	Sinda		
Class:	A.		

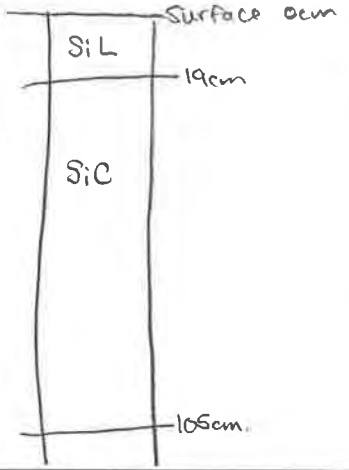
Strata: Texture	SiL			
Depth	19			
Strata: Texture	SiC			
Depth	105			
Strata: Texture				
Depth				
Strata: Texture				
Depth				
Effective Texture	SiC			
Surface Stoniness	0			
Surface Rockiness	0			
Depth to:				
Mottles	30			
Gley	30			
Bedrock	/			
Water table	/			
Carbonates	104			
Depth of Organics	0cm			
Pore Size Disc #1	19cm			
Pore Size Disc #2				
Pore Size Disc #3				
Moisture Regime	6/5			

Polygon:
P054 - W2

Tree Tally

Species	Tally 1	Tally 2	Tally 3
Total:			
Basal Area			
Snags			

NOTES:



Soil sample conducted at lowest point in the woodland (in area of freeman's maple + white elm). Entire core was very dry, very difficult to auger in SiC. This may have been wetter in the past but the absence of moisture in the core at this time of year suggests the soil is drier now. That is evident in the lack of understory/wetland indicator species - only Swamp maple and white elm suggests a moister area.

Photos: 100-1006, 67, 68, 69, 70, 71, 72, 73, 75

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site: South Kent Wind Project	11848
Polygon: B P004-M1 (adjacent to P004-W1 to South)	
UTM:	
Date: Nov. 10 2011	Time: 11:00 - 1300
Surveyor(s): CH	
Weather: 6°C, Sunny, CC80%, Wind 3 A SW	

Community Classification

Vegetation Type:	MEFM4 Fresh-moist Forb Meadow > Exposite
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil	Riverine	Crevice/Cave	Pond	X Meadow
Aquatic	Parent Min	X Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	Woodland
X Cultural		Roll Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
X Open	Open Water	Plankton	X Forb	Coniferous
Shrub	X Surficial Dep	Submerged	Lichen	Mixed
Treed	Bedrock	Floating-Lvd	Bryophyte	
		Graminoid	Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy	1	0	—
1	Canopy	2	0	—
2	Sub-canopy	3	1	E Red Cedar > Hawthorn sp. > Trembling Aspen
3	Understorey	4/5	4	Canada Goldenrod > Heath Aster > Flat-topped Goldenrod > Teasel
4	Groundcover	6/7	4	Smooth Brome > Teasel > Festuca arundinacea > Timothy

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0: none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	R	< 10	N	10 - 24	N	25 - 50	N	> 50
Snags	R	< 10	N	10 - 24	N	25 - 50	N	> 50
Deadfall/Logs	N	< 10	N	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age	X Pioneer	Young	Mid-age	Mature	Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site: South Kent WP	11848
Polygon: B P004-M1	
UTM:	
Date: Nov 10 2011	Time: 11:00 - 1300
Surveyor(s): CH	
Weather: 6°C, Sunny, CC80%, Wind 3	

Layers: 1=canopy (710) 2=sub-canopy (3.10) 3=understorey (0.5-2) 4=ground layer (<0.5)

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
E. Red Cedar		O	O	O	
Trembling Aspen		R			
Hawthorn sp.		R	O		
Red Osier			R		
Phragmites		R			
Canada Goldenrod			A		
Teasel			A	O	
Flat-top Goldenrod			A		
Gray Goldenrod				O	
Common Strawberry				O	
Heath Aster			A		
Timothy				O	
Festuca arundinacea				O	
New England Aster				O	
Common Milkweed			O		
Canada thistle				O	
Multiflora Rose				R	
Smooth Brome				A	

Wildlife and Other Notes

Photo 100 - 1028, 1032

Fringed with E Red Cedar

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site: South Kent WP	1184B
Polygon: J	P002-M1
UTM:	
Date: Nov. 10 2011	Time: 16:20
Surveyor(s): CLH	
Weather: 6°C, cc 40% Sunny	Wind 3 SW

Community Classification

Vegetation Type:	MEFM4 Fresh-Moist Cob meadow Ecosite
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil	Riverine	Crevice/Cave	Pond	X Meadow
Aquatic	Parent Min	X Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	X Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
X Open	Open Water	Plankton	X Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
Treed	X Surficial Dep.	Floating-Lvd.	Bryophyte	
	Bedrock	Graminoid	Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy	1	0	—
1	Canopy	2	0	—
2	Sub-canopy	3	1	Black Locust
3	Understorey	4/5	4	Canada Goldenrod >> White Elderberry > E. Red Cedar
4	Groundcover	6	1	Canada thistle (rest not visible)

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	R	< 10	N	10 - 24	N	25 - 50	N	> 50
Snags	N	< 10	N	10 - 24	N	25 - 50	N	> 50
Deadfall/Logs	N	< 10	N	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer	X	Young		Mid-age		Mature		Old Growth

PLANT SPECIES LIST

Site: South Kent WP	1184B
Polygon: J	
UTM:	
Date: Nov 10 2011	Time: 16:20
Surveyor(s): CLH	
Weather: 6°C cc 40% Sunny	Wind 3 SW

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Black Locust		R			
E. Red Cedar			R		
White Elderberry			O		

Species	Layer 1	2	3	4	Sample
Reed Canary			O		
(In channel only)					
Canada Goldenrod			D		
Canada Thistle				O	

Other Notes (Landowner Contact, General Notes, etc.)

P002-D18 runs through, hydro lines run across.

Photo 100-1062

roadside assessment

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site: South Kent WP	1184B
Polygon: D P139-W3	
UTM:	
Date: Nov. 10 2011	Time: 13:50
Surveyor(s): CLH	
Weather: 6°C, CC 40%, Wind 3/SW, Sunny	

Community Classification

Vegetation Type:	TAGM3 Deciduous Plantation
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Mtn	X Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	X Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
X Treed	X Surficial Dep.	Floating-Lvd.	Bryophyte	
	Bedrock	Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy	1	0	—
1	Canopy	2	0	—
2	Sub-canopy	3	4	White Ash >>> E. Red Cedar
3	Understorey	4/5	4	Canada Goldenrod>> E Red cedar > Sugar Maple
4	Groundcover	4/5	4	grass sp (brown)

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	N	10 - 24	N	25 - 50	N	> 50
Snags		< 10		10 - 24		25 - 50		> 50
Deadfall/Logs	N	< 10	N	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age	Pioneer	X Young	Mid-age	Mature	Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site: South Kent WP	1184B
Polygon: D P139-W3	
UTM:	
Date: Nov. 10 2011	Time: 13:50
Surveyor(s): CLH	
Weather: 6°C, CC 40%, Wind 3/SW, Sunny	

Layers: 710 2-10 0.5-2 <0.5
1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
White Ash		D			
E. Red Cedar		R	O		
Sugar maple			R		

Species	Layer 1	2	3	4	Sample
Canada Goldenrod			A		

Wildlife and Other Notes

Planted.
Mowed underneath on some of the rows (mostly those without E Red cedar regenerating).

Photo 100-1010

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent WP 11848
Polygon:	A (adjacent to P002-W2 to South) P139-W4
UTM:	
Date:	Nov. 10 2011 Time: 10:15
Surveyor(s):	CLH
Weather:	Sunny 10°C, wind 3 prom SW, CC 20%

Community Classification

Vegetation Type:	Fresh moist Deciduous Savanna Ecosite SVDM3
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	X Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	X Savannah
X Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
X Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
Treed	X Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	X Graminoid	Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy	1	0	
1	Canopy	2	2	Ash sp.
2	Sub-canopy	3	3	Ash sp. > Staghorn Sumac > E. Red Cedar > Norway Spruce
3	Understorey	4/5	4	Reed canary > Prairie Goldenrod > Gray Dogwood > Wild Carrot
4	Groundcover	4	1	Burdock (rest not visible)

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	N	< 10	N	10 - 24	R	25 - 50	N	> 50
Snags	N	< 10	N	10 - 24	N	25 - 50	N	> 50
Deadfall/Logs	R	< 10	N	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer	X	Young		Mid-age		Mature		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	South Kent WP 11848
Polygon:	A
UTM:	
Date:	Nov. 10 2011 Time: 10:15
Surveyor(s):	CLH
Weather:	10°C, Sunny, Wind 3 Prom SW, CC 30%

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Norway Spruce		O			
E. Red Cedar		O			
E. White Cedar		R			
Ash sp.	O	O	O		
Black Walnut		R			
Salix sp.		R			
Red Osier			O		
Staghorn Sumac		O	O		
Riverbank Grape		O			
Gray Dogwood		O	O		

Species	Layer 1	2	3	4	Sample
Teasel			R		
Canada Goldenrod			O		
Wild Carrot			O		
Burdock				O	
Reed Canary			O		

Wildlife and Other Notes

Photos 100 - 1023, 1024

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site: South Kent WP	1184B
Polygon: E (P139-WS)	
UTM:	
Date: Nov. 10, 2011	Time: 14:13
Surveyor(s): CLH	
Weather: 6°C, CC 40%, wind 3 / SW Sunny	

Community Classification

Vegetation Type:	WODM4-2 White Ash Deciduous Woodland Type
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Mtn	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	X Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	X Woodland
Cultural		Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
X Shrub	Shallow Water	Submerged	Lichen	Mixed
X Treed	X Surficial Dep	Floating-Lvd.	Bryophyte	
	Bedrock	Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy	1		—
1	Canopy	2	3	White Ash > Bur Oak > Black Walnut > E. Red Cedar
2	Sub-canopy	3	4	White Ash > Staghorn Sumac > Tartarian Honeysuckle > Sandbank Willow
3	Understorey	4	4	Canada Goldenrod >> Staghorn Sumac > tartarian Honeysuckle
4	Groundcover	5	2	Red Raspberry > Garlic Mustard

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	O	10 - 24	O	25 - 50	R	> 50
Snags	N	< 10	R	10 - 24	R	25 - 50	N	> 50
Deadfall/Logs	N	< 10	R	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer	X	Young		Mid-age		Mature		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site: South Kent WP	1184B
Polygon: E (P139-WS)	
UTM:	
Date: Nov. 10 2011	Time: 14:13
Surveyor(s): CLH	
Weather: 6°C CC 40%, Wind 3 / SW, Sunny.	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Crack willow		R			
E. Red Cedar	O				
Black Walnut	O				
White Ash	A	O			
Bur oak	O				
Red osier				R	
Staghorn Sumac		O	O		
Sandbank willow		O			
Salix pricophyla			R		
Tartarian Honeysuckle			O		
Lilac		O			
Viburnum opulus		R			
Red Raspberry				A	

Species	Layer 1	2	3	4	Sample
Canada goldenrod			O		
Wild Cucumber			R		
Garlic Mustard				A	

Wildlife and Other Notes

roadside
100 - 1043

follows creek.

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site: South Kent WP	11848
Polygon: F (P139-W6)	
UTM:	
Date: Nov. 10 2011	Time: 14:30
Surveyor(s): CLH	
Weather: 6°C, CC 40%, Wind 3 SW, Sunny	

Community Classification

	Vegetation Type:	FODM4-2 Dry-Fresh White Ash-Hardwood
X	Inclusion:	TAGM1 Deciduous Forest
	Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min.	X Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll Upland	Bluff	Fen	X Forest
	Site	Cliff		Bog	Plantation

Cover		Site	Plant Form		
Open	Open Water		Plankton	Forb	Coniferous
Shrub	Shallow Water	X Surficial Dep.	Submerged	Lichen	X Mixed
X Treed	Surficial Dep.	Bedrock	Floating-Lvd	Bryophyte	
	Bedrock		Graminoid	Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy	1	0	—
1	Canopy	2	4	White Ash > Trembling Aspen > White Spruce
2	Sub-canopy	3	3	White Ash > Trembling Aspen > White Cedar > Staghorn Sumac
3	Understorey	4/5	3	Canada Goldenrod > teasel > tartarian honeysuckle > white elderberry
4	Groundcover	6/7	3	grass sp. (largely not visible)

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	A	< 10	O	10 - 24	R	25 - 50	N	> 50
Snags	O	< 10	R	10 - 24	N	25 - 50	N	> 50
Deadfall/Logs	O	< 10	N	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young	X	Mid-age		Mature		Old Growth

PLANT SPECIES LIST

Site: South Kent WP	11848
Polygon: F (P139-W6)	
UTM:	
Date: Nov 10 2011	Time: 14:30
Surveyor(s): CLH	
Weather: 6°C, CC 40%, Wind 3 SW, Sunny	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

	Species	Layer 1	2	3	4	Sample
	Trembling Aspen	O	O			
	Crack willow	R				
	E White Cedar		O			
	White Ash	O	O			
Planted	White Spruce	O				
	E Red Cedar			O		
	Scots Pine		R			
	Tartarian Honeysuckle			O		
	White Elderberry			O		
	Staghorn Sumac		O			

Species	Layer 1	2	3	4	Sample
Canada Goldenrod			O		
Teasel			O		
grass sp				A	

Wildlife and Other Notes

100 - 1044

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent WP 1184B
Polygon:	G (P139-W7) G is part of P139-W7
UTM:	
Date:	Nov. 10 2011 Time: 14:45
Surveyor(s):	CLH
Weather:	6°C, CC 40%, Wind 3 SW Sunny

Community Classification

Vegetation Type:	FODM4 Dry-Fresh Upland Deciduous Forest Ecosite
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Mtn	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	X Valley Slope	Beach/Bar	Marsh	Savannah
Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	X Woodland
X Cultural		Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
X Treed	X Surficial Dep.	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy	1	0	—
1	Canopy	2	3 (55%)	Black Walnut >> Sugar maple > White Ash > Norway Spruce
2	Sub-canopy	3	4	Sugar maple = White Elm > Red oak > Staghorn Sumac
3	Understorey	4 5	4	Allegheny Blackberry = Red Raspberry > Gray Dogwood > Canada Goldenrod : Smooth Brome
4	Groundcover	6 7	1	Garlic mustard >> Multiflora rose > Red Osier

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0: none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	O	< 10	O	10 - 24	O	25 - 50	N	> 50
Snags	R	< 10	R	10 - 24	N	25 - 50	N	> 50
Deadfall/Logs	O	< 10	N	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young	X	Mid-age		Mature	Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site:	South Kent WP 1184B
Polygon:	G
UTM:	
Date:	Nov. 10 2011 Time: 1445
Surveyor(s):	CLH
Weather:	6°C, CC 40%, Wind 3 SW, Sunny

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

	Species	Layer 1	2	3	4	Sample
	White Elm	R	O			
Planted	Black Walnut	O	O	O		
	White Ash	O	O			
Planted	Sugar maple	O	O			
Planted	Tuliptree	R				
	E. Red Cedar	R	O	O		
Planted	White Birch	O				
Planted	Norway Maple		O			
	Scots Pine		O			
Planted	Red oak		O			
Planted	White oak		O			
Planted	Norway Spruce	O				
Planted?	Swamp Maple	O				
	White Elderberry			O		
	Euonymus sp. (wint.)			R		
	Autumn olive		R			
	Hawthorn sp.		R			
	Staghorn Sumac		O			
	Smooth Sumac			O		
	Allegheny Blackberry			A		
	Dog Rose			R		
	Gray Dogwood			A		
	Viburnum cassinoides		R	O		

	Species	Layer 1	2	3	4	Sample
	Garlic mustard			O	O	
	Red Raspberry			A		
	Canada Goldenrod			A		
	Multiflora Rose			O	O	
	Red osier			R	R	
	Smooth Brome			A		
Planted	White Pine	O				

Wildlife and Other Notes

Like an arboretum. Almost all trees appear to have been planted. There is a network of wide mowed paths throughout. Many of the planted trees are producing young.

Photos - 100 - 1046 - 1049

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site: South Kent WP	1184B
Polygon: H (P139-W8)	
UTM:	
Date: Nov. 10 2011	Time: 15:35
Surveyor(s): CLH	
Weather: 6°C, CC 40%, wind 3 / SW, Sunny	

Community Classification

Vegetation Type:	FODM5-2 Dry-Fresh Sugar Maple-Beech Deciduous Forest
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
[X] Terrestrial	[ ] Organic	[ ] Lacustrine	[ ] Talus	[ ] Lake	[ ] Barren
[ ] Wetland	[X] Mineral Soil	[ ] Riverine	[ ] Crevice/Cave	[ ] Pond	[ ] Meadow
[ ] Aquatic	[ ] Parent Min.	[ ] Bottomland	[ ] Alvar	[ ] River	[ ] Prairie
	[ ] Acidic Bedrock	[ ] Terrace	[ ] Rockland	[ ] Stream	[ ] Thicket
History	[ ] Basic Bedrock	[ ] Valley Slope	[ ] Beach/Bar	[ ] Marsh	[ ] Savannah
[X] Natural	[ ] Carb. Bedrock	[ ] Tableland	[ ] Sand Dune	[ ] Swamp	[ ] Woodland
[ ] Cultural		[X] Roll. Upland	[ ] Bluff	[ ] Fen	[X] Forest
	Site	[ ] Cliff		[ ] Bog	[ ] Plantation

Cover		Plant Form		
[ ] Open	[ ] Open Water	[ ] Plankton	[ ] Forb	[ ] Coniferous
[ ] Shrub	[ ] Shallow Water	[ ] Submerged	[ ] Lichen	[ ] Mixed
[X] Treed	[ ] Surficial Dep.	[ ] Floating-Lvd	[ ] Bryophyte	
	[ ] Bedrock	[ ] Graminoid	[X] Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy	1	0	—
1	Canopy	2	4	Sugar Maple > White Ash > American Beech > Basswood
2	Sub-canopy	3	3	Sugar Maple > American Beech > White Pine
3	Understorey	4/5	2	Canada Goldenrod > Red Raspberry > White Pine > White mulberry
4	Groundcover	6/7		not visible

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	[ ] < 10	[ ] 10 - 24	[ ] 25 - 50	[ ] > 50
Snags	[ ] < 10	[ ] 10 - 24	[ ] 25 - 50	[ ] > 50 Unknown
Deadfall/Logs	[ ] < 10	[ ] 10 - 24	[ ] 25 - 50	[ ] > 50 Unknown

Abundance Codes N: None R: Rare O: Occasional A: Abundant

Community Age	[ ] Pioneer	[ ] Young	[ ] Mid-age	[X] Mature	[ ] Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

PLANT SPECIES LIST

Site: South Kent WP	1184B
Polygon: H	
UTM:	
Date: Nov. 10 2011	Time: 15:35
Surveyor(s): CLH	
Weather: 6°C, CC 40%, Wind 3 SW, Sunny	

Layers: 1=canopy (>10) 2=sub-canopy (2-10) 3=understorey (0.5-2) 4=ground layer (<0.5)

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Sugar Maple	A	O			
Am. Beech	O	O			
White Ash	O				
White Pine		O	O		
Golden Willow	R				
Planted Norway Spruce	O				
Staghorn Sumac		O			
White mulberry			R		
White Cedar		R			
Basswood	O	O			
Bur Oak	O				

Species	Layer 1	2	3	4	Sample
Red Raspberry			O		
Canada Goldenrod			O		

Wildlife and Other Notes

100 - 1052 - 54

roadside

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description Page 1 of 2

Site: South Kent WP	1184B
Polygon: I (P139 - W9.)	
UTM:	
Date: Nov. 10 2011	Time: 16:00
Surveyor(s): CLT	
Weather: 6°C, CC 40% Sunny Wind 3 SW	

Community Classification

	Vegetation Type:	FoDM7 - 1 Fresh-moist White Elm Lowland Deciduous Forest
X	Inclusion:	TAGM3 Deciduous Plantation
	Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
X Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
Wetland	X Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min.	Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	X Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb. Bedrock	Tableland	Sand Dune	Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	X Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
X Treed	X Surficial Dep.	Floating-Lvd.	Bryophyte	
	Bedrock	Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy	1	0	—
1	Canopy	2	4	White Elm > Freeman's maple > Weeping Willow (70%)
2	Sub-canopy	3	4	White Elm = White Cedar = White Pine > Basswood
3	Understorey	4/5	3	Canada Goldenrod >> Sugar Maple
4	Groundcover	6		

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	O	< 10	O	10 - 24	C	25 - 50	R	> 50
Snags	O	< 10	R	10 - 24	N	25 - 50	N	> 50
Deadfall/Logs	R	< 10	R	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer		Young	X	Mid-age		Mature		Old Growth

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description Page 2 of 2

PLANT SPECIES LIST

Site: South Kent WP	1184B
Polygon: I	
UTM:	
Date: Nov. 10 2011	Time: 16:00
Surveyor(s): CLT	
Weather: 6°C, CC 40%, Sunny, Wind 3 SW	

Layers: 1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Weeping Willow	O				
Freeman's maple	O				
White Elm	O	O			
White Cedar		O			
Black Locust		R			
Basswood		R			
Sugar maple			O		
White Pine		O			
				Planted	

Species	Layer 1	2	3	4	Sample
Canada Goldenrod			O		
Inclusion					
Freeman's Maple		A			
Red oak		O			
Canada Goldenrod			A		

Other Notes (Landowner Contact, General Notes, etc.)

Photo 100-1059, 1060

roadside assessment

Deciduous Plantation in between the creek and the slope treed areas.

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Wetland Vegetation Communities

Project Name: South Kent WP. **Project #:** 11848

Observer(s): CLH.

Date: Nov 10 2011 **Time (24h):** 10:00

Field #: WET-A FD02-WE1 **Weather:** Precipitation: None Temp (°C): 6

Map Code: M1 Wind Speed & Direction: 3 SW Cloud %: 10

Wetland Type: Marsh **Site Type:** P. **Dominant Form:** ne

% Open Water: 0 % **ELC Code:** MAMM1-3

Photos: 100-1018, 1019.

Forms % (Circle those ≥25%)	Species (dominant species, secondary species, present species)
h	
c	
dc,dh,ds	
ts	
ls	
gc	teasel
(ne)	Phragmites, reed canary
be	
re	
ff	
f	
su	
m	

Soil type:		Organic ☐	Mineral ☒

Rare Species (Local, Regional, Provincial):	Wildlife Notes:

SAR observations must also include a specific UTM location.

Forms: **h**=deciduous trees; **c**=coniferous trees; **dh, dc, ds**=dead trees/shrubs; **ts**=tall shrubs; **ls**=low shrubs; **gc**=ground cover; **ne**=narrow emergents; **be**=broad emergents; **f**=floating plants; **ff**=free-floating plants; **su**=submerged plants; **m**=mosses

Wetland Type: **S**=swamp; **M**=marsh; **B**=bog; **F**=fen

Site Type: L=lacustrine; **P**=palustrine; **R**=riverine; **IS**=isolated

Soil type: **cl**=clay/loam; **sl**=silt/loam; **l**=limestone; **s**=sand; **hm**=humic/mesic; **f**=fibric; **g**=granite **Organic**= >60cm depth over mineral (>10cm over bedrock)**Mineral**= <60cm depth over mineral

No site access.

NATURAL RESOURCE SOLUTIONS INC

Modified ELC Community Description

Site:	South Kent WP 1184B
Polygon:	C (adjacent to POO4-W1) WET-B (POO4-WE1)
UTM:	Also called woodland POO4-W2
Date:	Nov. 10 2011 Time: 11:15 - 1300
Surveyor(s):	CLH
Weather:	6°C, wind 3 to SW, CC 35%, Sunny

Community Classification

Vegetation Type:	SWDM4-5 Poplar mineral deciduous Swamp
Inclusion:	
Complex:	

Polygon Description

System	Substrate	Topo Feature		Community	
Terrestrial	Organic	Lacustrine	Talus	Lake	Barren
X Wetland	X Mineral Soil	Riverine	Crevice/Cave	Pond	Meadow
Aquatic	Parent Min	X Bottomland	Alvar	River	Prairie
	Acidic Bedrock	Terrace	Rockland	Stream	Thicket
History	Basic Bedrock	Valley Slope	Beach/Bar	Marsh	Savannah
X Natural	Carb Bedrock	Tableland	Sand Dune	X Swamp	Woodland
Cultural		Roll. Upland	Bluff	Fen	Forest
	Site	Cliff		Bog	Plantation

Cover		Plant Form		
Open	Open Water	Plankton	Forb	Coniferous
Shrub	Shallow Water	Submerged	Lichen	Mixed
X Treed	X Surficial Dep	Floating-Lvd	Bryophyte	
	Bedrock	Graminoid	X Deciduous	

Stand Description

	Layer	HT	Cover	Species
*	Super-canopy	1	0	—
1	Canopy	2	3	Balsam Poplar >> Ash sp. > E. Cottonwood > Crack Willow
2	Sub-canopy	3	4	Sandbank Willow >> Balsam Poplar > Ash sp > E. Red Cedar
3	Understorey	4/5	4	Gray Dogwood > Red Osier > Red Pondweed > Dark Green Rushes
4	Groundcover	6/7	3	Grass sp > Toadflax > Heath Aster > Garlic Mustard

HT Codes: 1: >25m 2: 25 - 10m 3: 10 - 2m 4: 2 - 1m 5: 1 - 0.5m 6: 0.5 - 0.2m 7: <0.2m

Cover Codes: 0:none 1: 0 - 10% 2: 10 - 25 3: 25 - 60% 4: >60%

Size Class Analysis	O	< 10	O	10 - 24	O	25 - 50	R	> 50
Snags	R	< 10	R	10 - 24	N	25 - 50	N	> 50
Deadfall/Logs	O	< 10	N	10 - 24	N	25 - 50	N	> 50

Abundance Codes: N: None R: Rare O: Occasional A: Abundant

Community Age		Pioneer	X	Young		Mid-age		Mature		Old Growth

PLANT SPECIES LIST

Site:	South Kent WP 1184B
Polygon:	C (adjacent to POO4-W1)
UTM:	
Date:	Time:
Surveyor(s):	
Weather:	

Layers: 7/0 2-10 0.5-2 <0.5
1=canopy 2=sub-canopy 3=understorey 4=ground layer

Abundance Codes: R=rare O=occasional A=abundant D=dominant

Species	Layer 1	2	3	4	Sample
Sandbank willow		A			
Balsam Poplar	O	O			
Red Osier			O		
Gray Dogwood			O		
Ash sp.	R	O	O		
E. Red Cedar		R			
Crack willow	R				
E. Cottonwood	R				

Species	Layer 1	2	3	4	Sample
Canada Goldenrod			O		
Reed canary			O		
grass sp				O	
Toadflax				O	
Blue Vervain			O		
Heath Aster				O	
Dark Green Bulrush			O		
Garlic mustard				O	
Swamp Bonesetfleabane			O		
Red Raspberry				O	

Wildlife and Other Notes

adj to creek. 153-1229, 1080

Spoke to local man, said Ducks Unlimited put in a couple of ponds near Eds Line last year (2010).

NATURAL RESOURCE SOLUTIONS INC.

Aquatic, Terrestrial and Wetland Biologists

Wetland Vegetation Communities

Project Name: South Kent WP **Project #:** 11848

Observer(s): CLH

Date: Nov. 10 2011 **Time (24h):** 1115

Field #: WET-8 POOL-WE1, **Weather:** Precipitation: None Temp (°C): 6

Map Code: S1 Wind Speed & Direction: 2 / SW Cloud %: 35

Wetland Type: Swamp **Site Type:** P **Dominant Form:** TS

% Open Water: 0% **ELC Code:** SWDM4-5.

Photos: 160-1029, 1030

Forms % (Circle those ≥25%)	Species (dominant species, secondary species, present species)
(h)	Balsam Poplar
c	
dc,dh,ds	
(ts)	Sandbank Willow, grey dogwood
ls	
gc	
(ne)	reed canary
be	
re	
ff	
f	
su	
m	

Soil type: Organic ☐ Mineral ☒

Rare Species (Local, Regional, Provincial):	Wildlife Notes:

SAR observations must also include a specific UTM location.

Forms: **h**=deciduous trees; **c**=coniferous trees; **dh, dc, ds**=dead trees/shrubs; **ts**=tall shrubs; **ls**=low shrubs; **gc**=ground cover; **ne**=narrow emergents; **be**=broad emergents; **f**=floating plants; **ff**=free-floating plants; **su**=submerged plants; **m**=mosses

Wetland Type: **S**=swamp; **M**=marsh; **B**=bog; **F**=fen

Site Type: **L**=lacustrine; **P**=palustrine; **R**=riverine; **IS**=isolated

Soil type: **cl**=clay/loam; **sl**=silt/loam; **l**=limestone; **s**=sand; **hm**=humic/mesic; **f**=fibric; **g**=granite **Organic**= >60cm depth over mineral (>10cm over bedrock)**Mineral**= <60cm depth over mineral

Modified ELC Community Description

Soils	B 1	C 2	3
Position:	Lo	Lo	
Aspect:	/	/	
%	0	0	
Type:	Simple	Simple	
Class:	A	A	

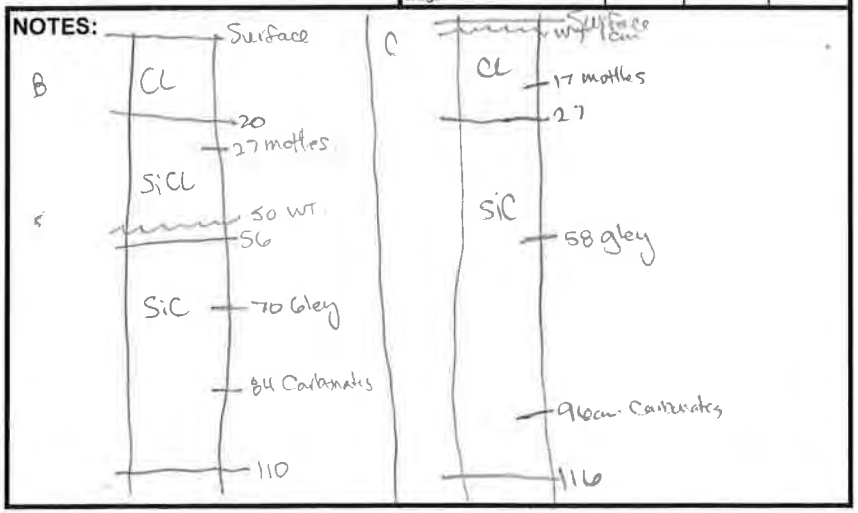
Strata:	Texture	CL	CL	
	Depth	20	27	
Strata:	Texture	SiCL	SiC	
	Depth	56	116	
Strata:	Texture	SiC		
	Depth	110		
Strata:	Texture			
	Depth			
Effective Texture		SiCL	CL	
Surface Stoniness		0	0	
Surface Rockiness		0	0	
Depth to:				
	Mottles	27	17	
	Gley	70	58	
	Bedrock	/	/	
	Water table	50	1 cm	
	Carbonates	84	96cm	
Depth of Organics		0.5cm	0.5cm	
Pore Size Disc #1		/		
Pore Size Disc #2				
Pore Size Disc #3				
Moisture Regime		Lo	Lo	

Polygon: B & C

Tree Tally

Species	Tally 1	Tally 2	Tally 3
Total:			
Basal Area			
Snags			

NOTES:



Wildlife Observation Form

NATURAL RESOURCE SOLUTIONS INC.

Site:	South Kent WP 1784B
Polygon:	Talbot Trail - Kent Bridge to Communication
UTM:	
Date:	Nov 10 2011 **Time:** 09:30 to 16:45
Surveyor(s):	CLH, SGB
Weather:	6°C, Cc 80% wind 3/SW Sunny

Species Observed *Check for Wildlife Habitat that may be associated with an observation*

TY	Species	EV	Notes	#		TY	Species	EV	Notes	#
B	Mourning Dove	OB	Flock	15						
B	Horned Lark	OB	Flock	25						
M	Deer	TK	B+C	*						
B	BC Chickadee	VO	C.	*						
M	Gray Squirrel	OB	Black	10						
B	Red-tailed Hawk	VO		*						
M	Raccoon	CA	roadkill	*						
B	Am Goldfinch	OB		12						

Faunal Type Codes (TY)

B=Bird M=Mammal H=Herpetofauna L=Lepidoptera F=Fish D=Dragonfly or Damselfly

Evidence Codes (EV)

Breeding Birds

SH- Suitable Habitat
SM- Singing Male
T- Territory
A- Anxienty Behavior
D- Courtship Display
N- Nest Building
P- Pair
V- Visiting Nest
DD- Distraction Display
NE- Nest with Eggs
AE-Adult entering nest
NU- Used nest
FY- Fledged Young
FS- Food/Fecal Sac

Other Wildlife

OB- Observed
DP- Distinctive Parts
TK- Tracks
VO- Vocalization
HO- House/Den
FE- Feeding Evidence
CA- Carcass/Bones
FY- Eggs or young
SC- Scat
SI- Other Signs (Specify)

Wildlife Habitat Form

NATURAL RESOURCE SOLUTIONS INC.

Site:	
Polygon:	
UTM:	
Date:	**Time:**
Surveyor(s):	
Weather:	

Wildlife Habitat (Check all that apply AND record UTM / mark on map)

Habitats and Habitat Features are independent of wildlife observations

Habitat Type

___ Deciduous Forest
___ Mixed Forest
___ Coniferous Forest
___ Marsh
___ Swamp
___ Bog
___ Fen
___ Water (Shallow & Open)
___ Meadow
___ Tallgrass Prairie
___ Thicket
___ Savannah
___ Woodland
X Valley (Describe Below)
___ Headwater Area (check for Seeps/Springs)

Habitat Features

Birds
___ Spring Flooded Field
___ Stick Nest (Raptors, Herons)
___ Snag (Raptors, Herons)
___ Tree Cavity Nest (Ducks)
___ Seep/Spring (Turkeys/Grouse)
___ Cliffs/Banks

Bats
___ Cave Entrance
___ Mine Shaft
___ Snag (>20cm DBH)

Mink/Otter/Fisher/Marten
___ Snag
___ Burrow
___ Den
___ Tree Cavity
___ Fallen Log

Deer/Moose
___ Seep/Spring
___ Mineral Lick

Snakes
___ Burrow
___ Fallen Rotting Log
___ Old Well
___ Rock Pile/Stone Wall
___ Organics Pile
___ Log Pile
___ Karst
___ Broken/Fissured Rock
X Old Foundation
___ Old Bridge/Concrete Culvert

Amphibians and Turtles
___ Vernal Pool/Woodland Pond (Amphibian Breeding)
___ Sand (Turtle Nesting)
___ Fine/Sandy Gravel (Turtle Nesting)

Invertebrates
___ Crayfish Chimney

For every Habitat Type or Habitat Feature, record UTM below (for each occurrence) or mark on map

Habitat Feature:	UTM	Description
old Foundation / Rubble Pile	marked on map.	Pile of stone, Remain old house, old boards and wood. Photo 100-1036, 1037.
Rubble Pile	marked on map (4-4)	100-1045
Rubble Pile	marked on map (5-5)	100-1051

Describe Valley (depth, geomorphological traits):

at E/F P002-014 meandering creek - ~10m deep.

Additional Details:

Appendix VII
Site Investigation Field Maps

COPY OF MASTER MAPS Nov 4/10 CH

MacDonald-Cartier Fwy
Baptiste Rd
401
Queens Line
R.F.
Mill St E
Mill St W
Queen St N
Queen St S
Tilbury
Middle Line
Wheatley Rd
46

P079
P080
P081
P113
P113-H2
P114
P115
P116
P122
P074
P075
P076
P077
P078
P072
P12

tilled
W wheat
old wheat surface smoothed
Soy
corn
Corn
Wheat
Barley
Fallow
P113-D1
P114-D1
P114-D3
P115-D1
P115-D2
P116-D2
P122-D1
P122-D2
P122-H1
P122-H2
P074-D1
P074-D3
P076-D1
P076-D2
P077-D1
P078-H2
P078-H3
P080-D1
P080-H1
P080-H2
P081-D1
P081-H1
P114-H1
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P122-W998
P122-W999
P122-W1000

17 T 384884.34 m E 4678716.84 m N elev 593 ft

Eye alt 2859

y Dates: May 9, 2004 - Jul 28, 2005

Copy of MASTER MAPS
Nov 4/10 Cut

MacDonald-Cartier Fwy
Baptiste Rd
401
Queens Line
R.S.
Mill St E
Mill St W
Queen St N
Queen St S
Tilbury
Middle Line
Wheatley Rd
46

P079
P080
P081
P113
P113-H2
P114
P115
P116
P116-D2
P122
P074
P075
P076
P077
P078
P072
P12

tilled
W wheat
old wheat surface smoothed
soy
corn
Wheat
Corn
Planted
P079-D1
P116-D2
P113-D1
P114-D1
P076-D2
P076-D1
P078-D1
P081-D1
P122-D1
P122-D2

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17 T 384884.34 m E 4678716.84 m N elev 593 ft
Eye alt 2859
Dates: May 9, 2004 - Jul 28, 2005

P081
P082
P083
P084
P085
P086
P136
Quinn
Stevenso
Coatsworth
Wheatley Rd
Campbell Rd
Soy
Corn
W wheat
Fallow
Pasture
Bridge
Hilled
Foam 9-2
Foam 9-3
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Image © 2010 GeoEye
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17 T 385524.74 m E 4672660.29 m N elev 600 ft
Eye alt 3786
Dates: May 9, 2004 - Jul 28, 2005


P062
P121
P063
P064
North Buxton
P119
P066
P067
Fletcher
P068
P126
P095
P069
P071
P072
Merlin Rd
Queens Line
401
MacDonald-Cartier Fwy
3 Line
Port Rd
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17 T 394276.56 m E 4683763.59 m N elev 593 ft
Eye alt 3786
Dates: May 9, 2004 - Jul 28, 2005

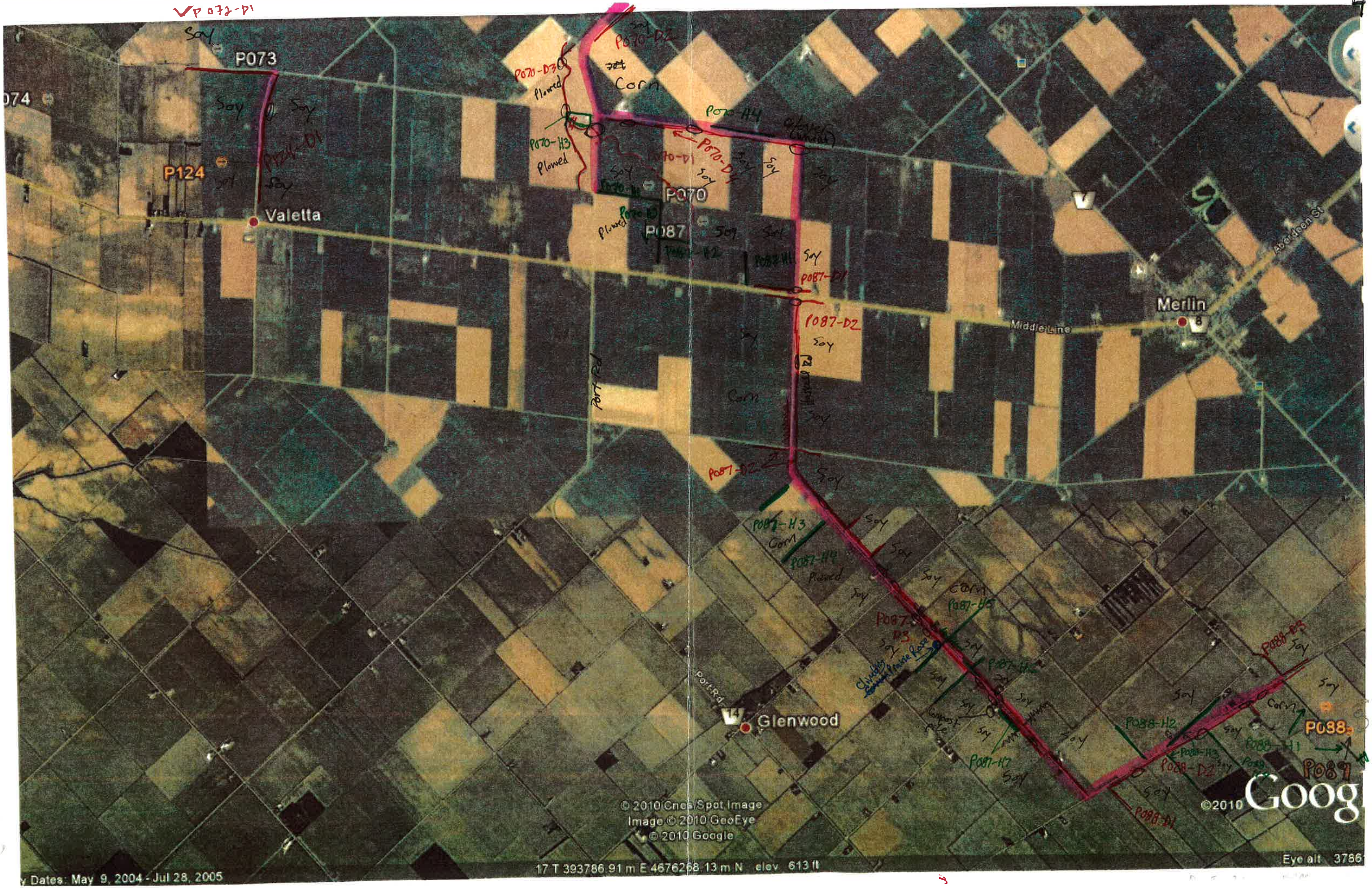
✓P072-D1
Soy
P073
074
Soy
Soy
P124-D1
P124
Soy
Soy
Valetta
P070-D3
Plowed
P070-H3
Plowed
P070-D2
Soy
Corn
P070-H4
Closed (Wheat)
P070-D1
P070-D4
Soy
Soy
Soy
Soy
Soy
P070-H1
P070
P070-H2
Plowed
P087
Soy
Soy
P087-H2
P087-H1
Soy
P087-D1
P087-D2
Soy
Port Rd
Corn
Soy
Soy
P087-D2
Soy
Middle Line
Merlin
Aberdeen St
P087-H3
Corn
P087-H4
Plowed
Soy
Soy
Soy
Soy
Corn
P087-H5
P087-D3
Soy
Prairie Rose
Soy
P087-H6
Soy
Compost pile
Soy
Soy
Soy
P087-H7
Soy
Port Rd
Glenwood
14
P088-D3
Soy
Soy
Soy
Corn
Soy
P088-H2
P088-H3
P088-D2
Soy
P088-H1
P088
P089
Soy
P088-D1
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Image © 2010 GeoEye
© 2010 Google
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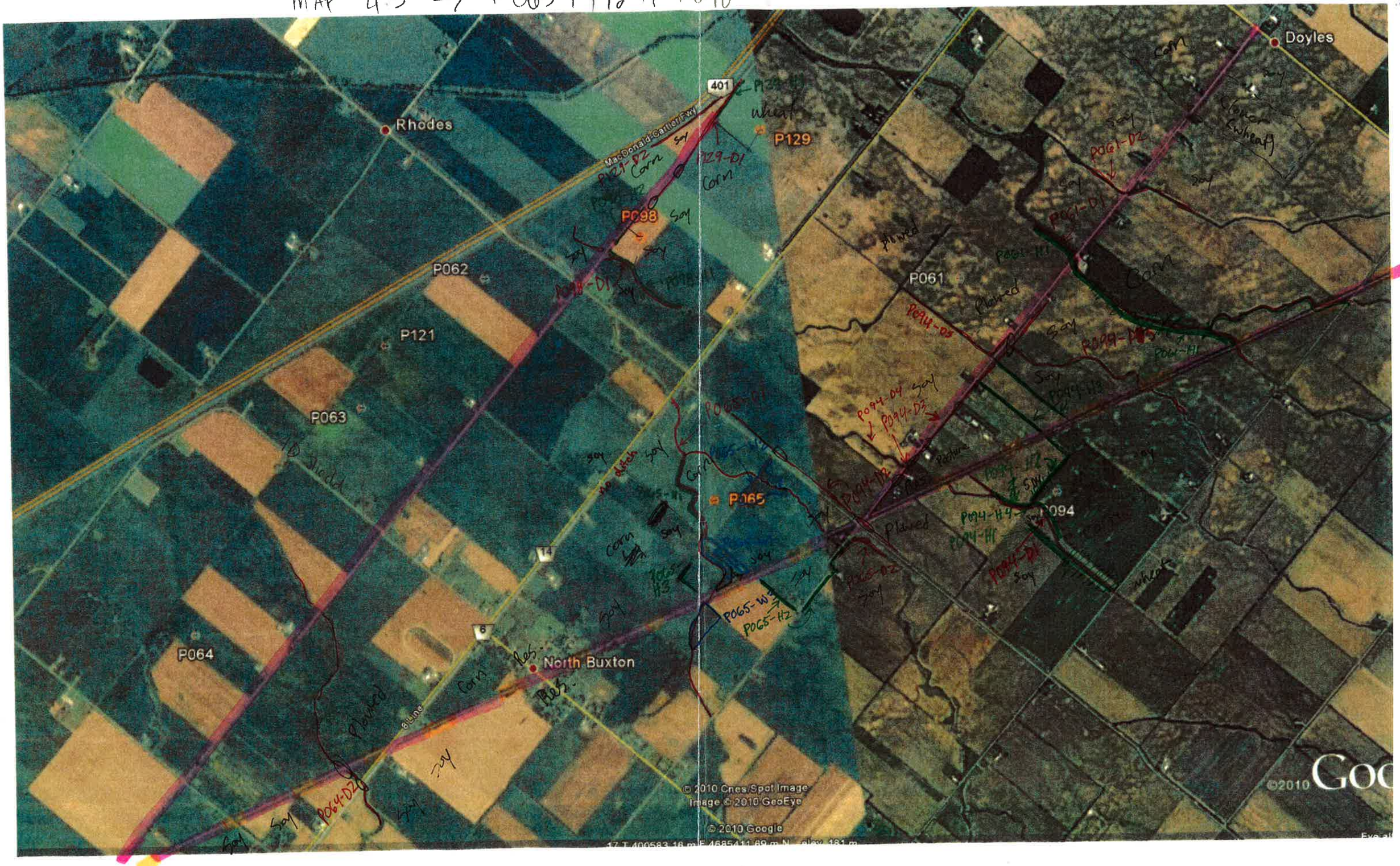
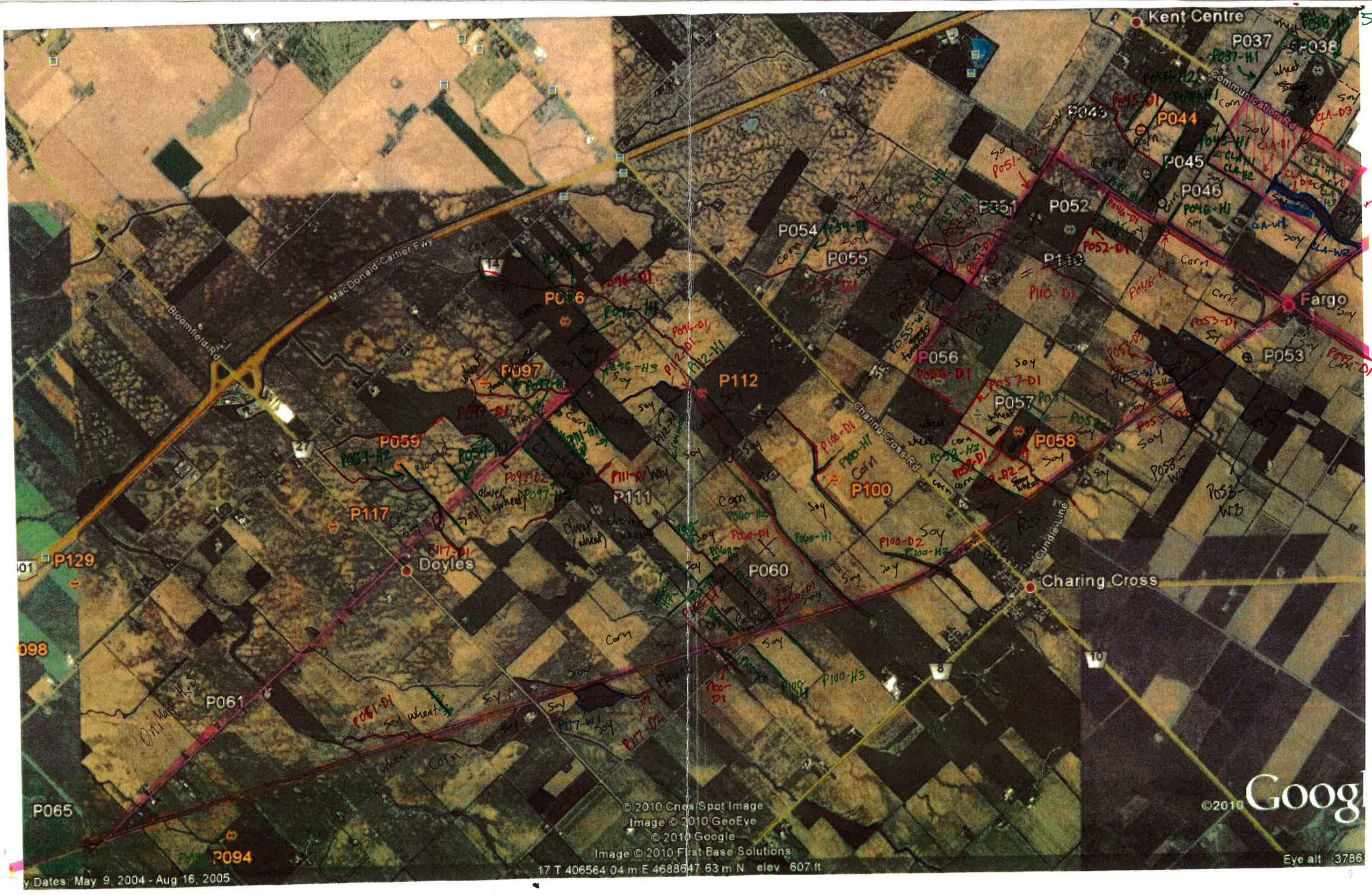
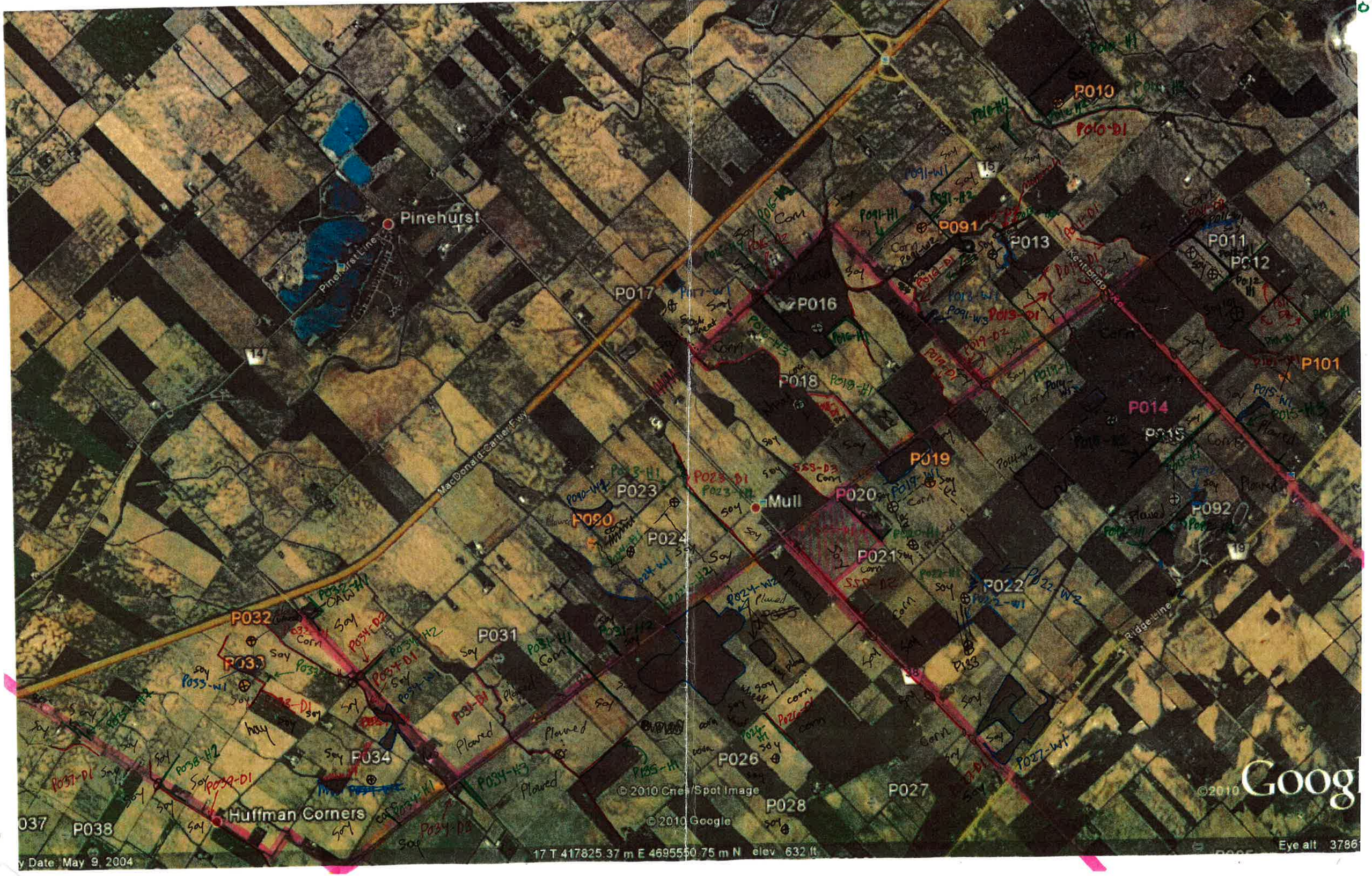
Dates: May 9, 2004 - Jul 28, 2005
17 T 393786.91 m E 4676268.13 m N elev 613 ft
Eye alt 3786

MAP 4.5 → P065, P129, P098




Kent Centre
P037
P037-H1
P038
P044
P045
P046
P046-H1
P051
P052
P052-D1
P054
P055
P056
P056-D1
P057
P057-D1
P058
P053
Fargo
P112
P111
P111-D1
P117
P117-D1
Doyles
P100
P100-D1
P100-D2
P100-H1
P100-H2
P100-H3
P060
Charing Cross
P129
P061
P065
P094
MacDonald-Cartier Fwy
Bloomfield Rd
Communication Rd
Charing Cross Rd
Gundrie Line
Corn
Soy
Wheat
Clover (wheat)
Fallow
Planted
Hay
© 2010 Cnes/Spot Image
Image © 2010 GeoEye
© 2010 Google
Image © 2010 First Base Solutions
17 T 406564.04 m E 4688647.63 m N elev 607 ft
Eye alt 3786
Dates: May 9, 2004 - Aug 16, 2005


Pinehurst
Pinehurst Line
P017
P016
P018
P091
P013
P010
P011
P012
P101
P014
P015
P019
P020
Mull
P092
P021
P022
P023
P090
P024
P032
P033
P031
P034
P026
P027
P028
Huffman Corners
P037
P038
MacDonald-Cartier Fwy
Ridge Line
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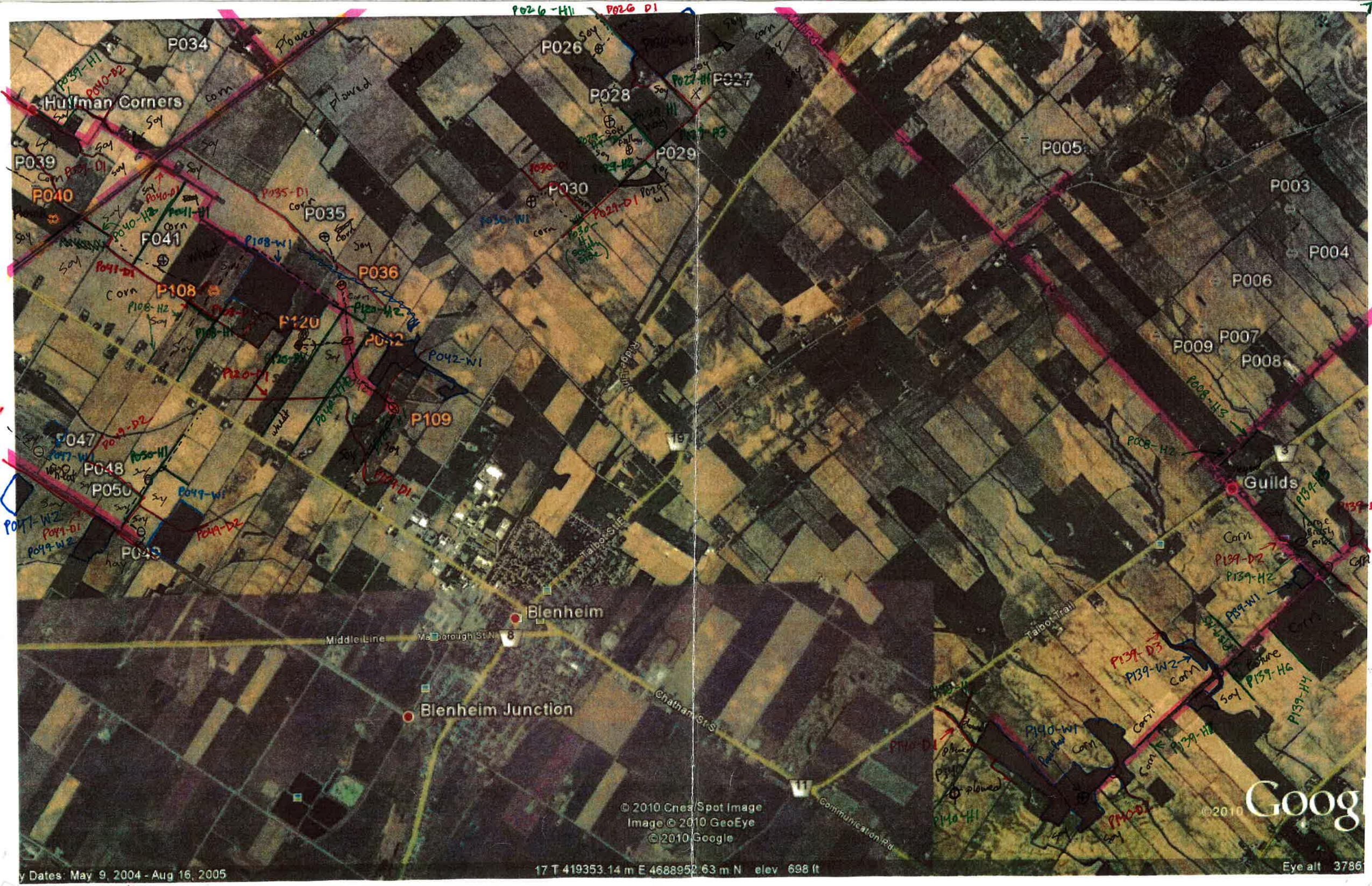
17 T 417825.37 m E 4695550.75 m N elev 632 ft
Eye alt 37861
Date: May 9, 2004


P034
Ploweed
P026
P026-H1
P026 D1
P027
P028
P029
P030
P030-H1
P030-W1
P027-D1
P027-H2
P027-P3
P039
P039-H1
P040-D2
Huffman Corners
Corn
Soy
P040
P040-D1
P040-H2
P041
P041-H1
P041-D1
P035
P035-D1
P036
P108
P108-W1
P108-H2
P108-H1
P120
P120-H2
P120-D1
P042
P042-W1
P109
P047
P047-D2
P047-W1
P048
P050
P049-W1
P049-D2
P049-D1
P049-W2
P047-W2
P047-D1
Blenheim
Middle Line
Main St N
Blenheim Junction
Talbot St E
Chatham St S
Communication Rd
Ridge Line
Talbot Trail
P005
P003
P004
P006
P007
P009
P008
P008-H3
P008-H2
Guilds
P139-H1
P139-D1
P139-D2
P139-H2
P139-W1
P139-D3
P139-W2
P139-H6
P139-H4
P139-H5
P140-W1
P140-D1
P140-H1
P140-D2
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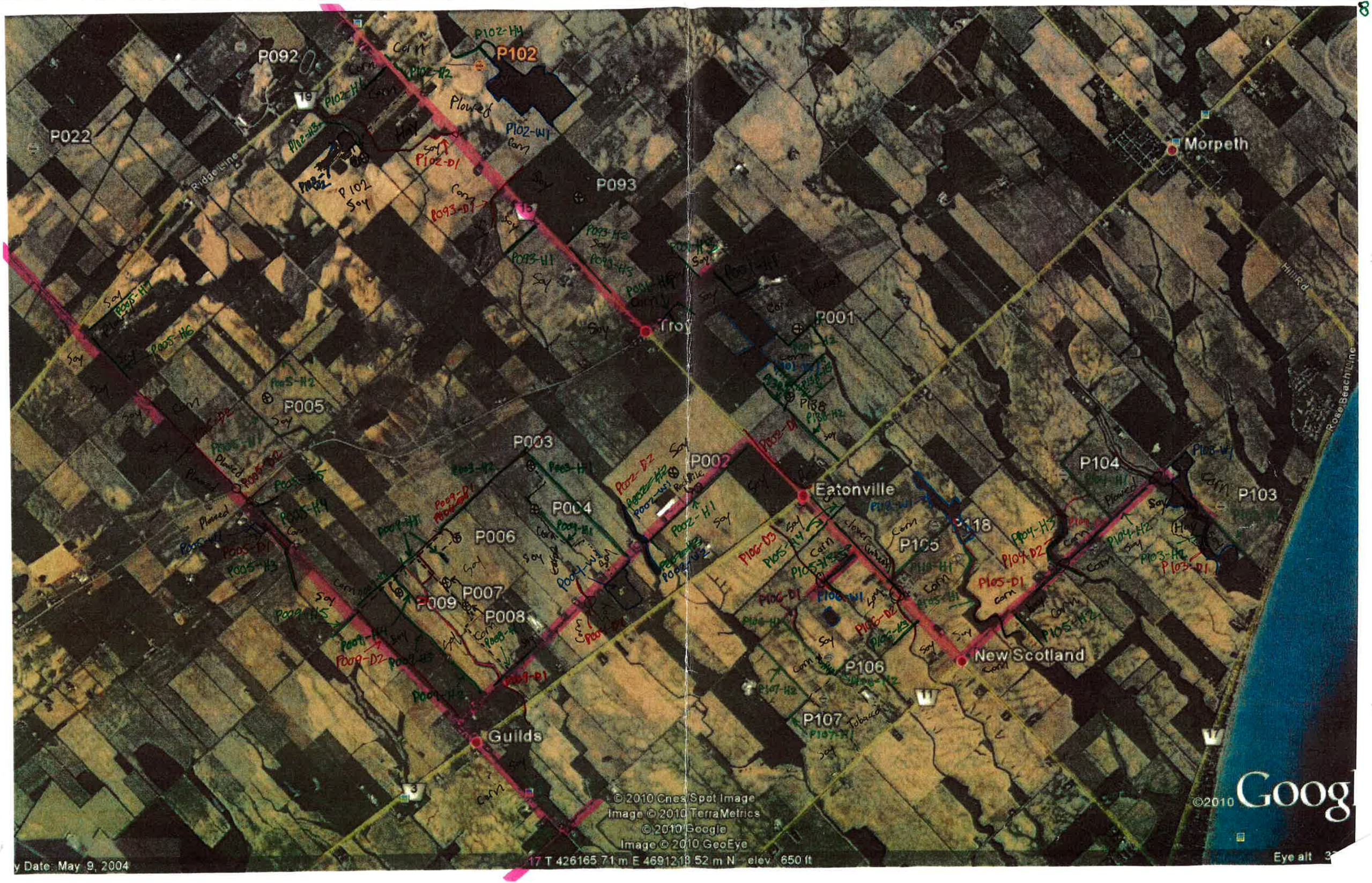
17 T 419353.14 m E 4688952.63 m N elev 698 ft
Eye alt 3786
y Dates: May 9, 2004 - Aug 16, 2005


P092
P102
P102-H4
P102-H2
P102-H1
P102-H3
P102-D1
P102-W1
Plowed
Hay
Corn
Soy
P102
Soy
P022
Ridgeline
P093
P093-D1
P093-H2
P093-H3
P093-H1
P093-H4
P093-H5
P093-H6
P093-H7
P093-H8
P093-W1
P093-W2
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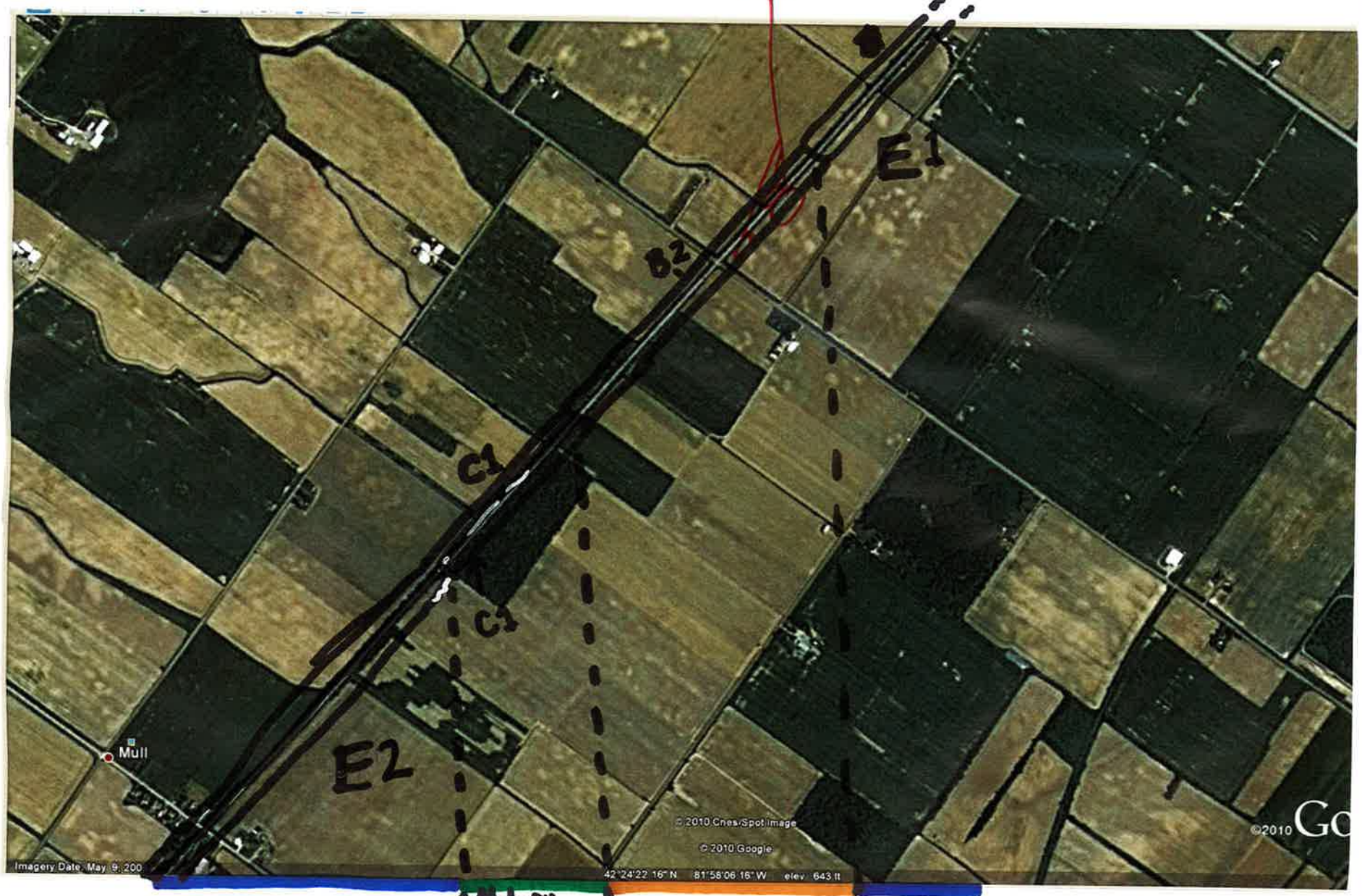
P093-W40



Open Thicket/ Meadow
RB-E

Mature Deciduous Forest Edge (South)
RB-C

Prairie
RB-B

Open Thicket/ Meadow
RB-E

Large patch of native cool grass

RB-B

Prairie

Compass plant (south side)

shown on pg 2

Open Thicket/ Meadow
RB-E

Prairie

Goldenrod, Indian grass, wild senna

RB-B

Mid-age Deciduous Regeneration

Mature Deciduous Forest Edge (south)

Open Highly Disturbed Land

Open Thicket/ Meadow

Mid age Decid. Regen

Open Thicket/ Meadow

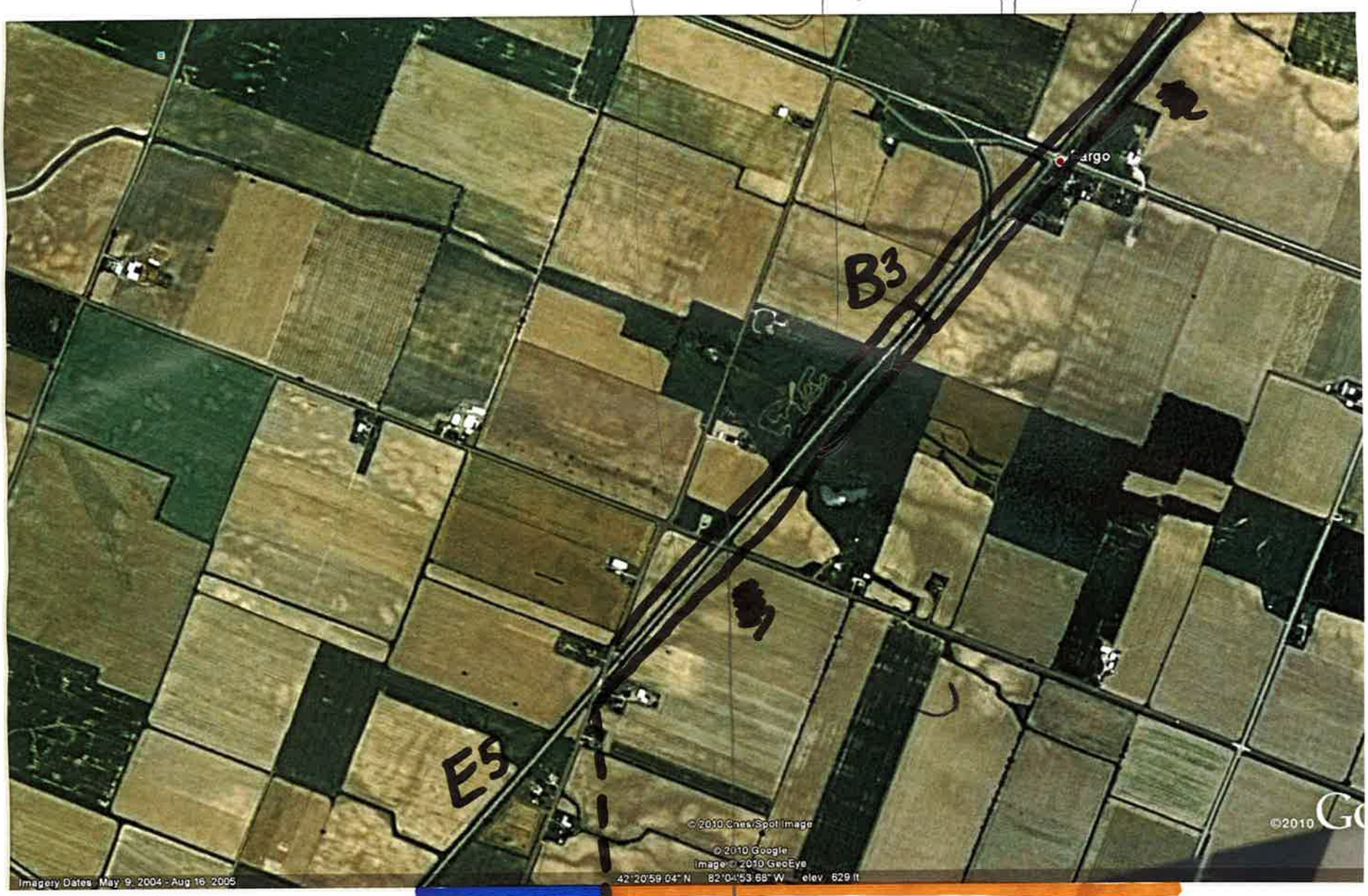
Prairie | Open Highly Disturbed Land | Open Thicket/ Meadow | Mid Age Dec. Regen.

Spotted Knapweed Down.

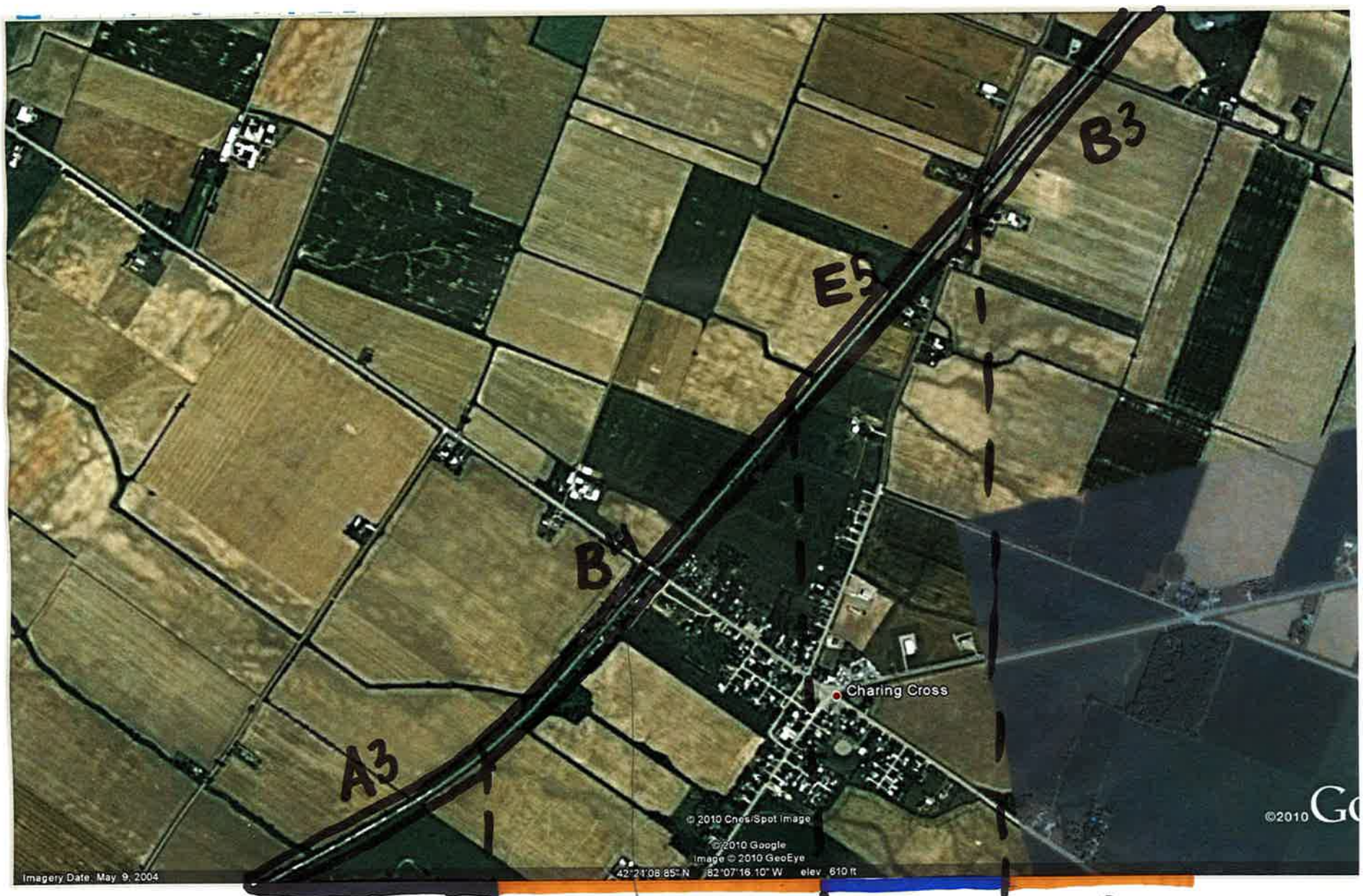
on N&S. slopes (planted)

Tall Sunflower

on South slope.



Open Thicket/ Meadow | Oct 28 2010 Start | Prairie



Midage Dec. Regen.

Prairie

Open Thicket/ Meadow

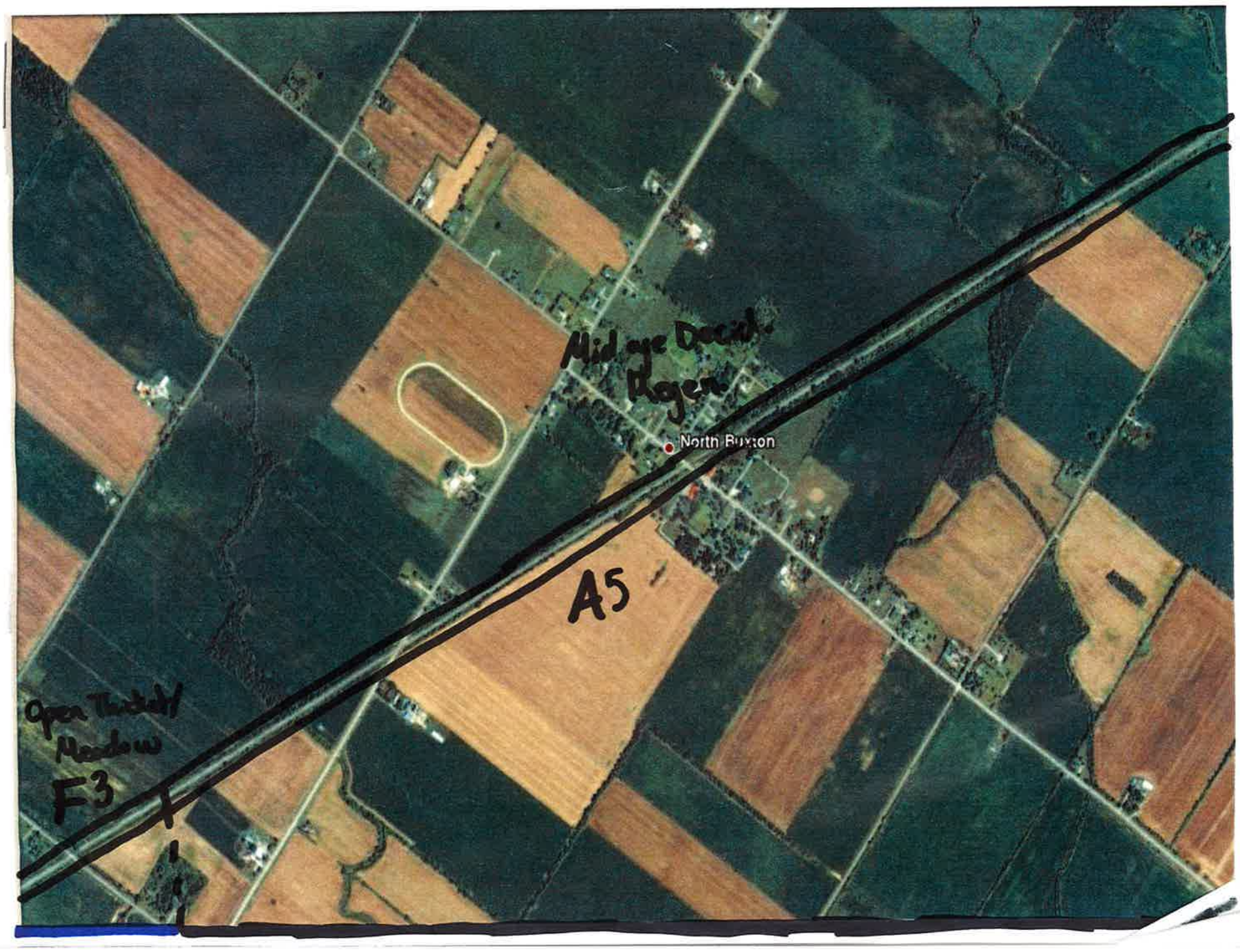
Prairie

Midage Decid. regen.

Mature Decid. Forest Edge (S)

Open Thicket/ Meadow

Midage Decid.



Midage Decid. / Regen.

Open Thicket/ Meadow

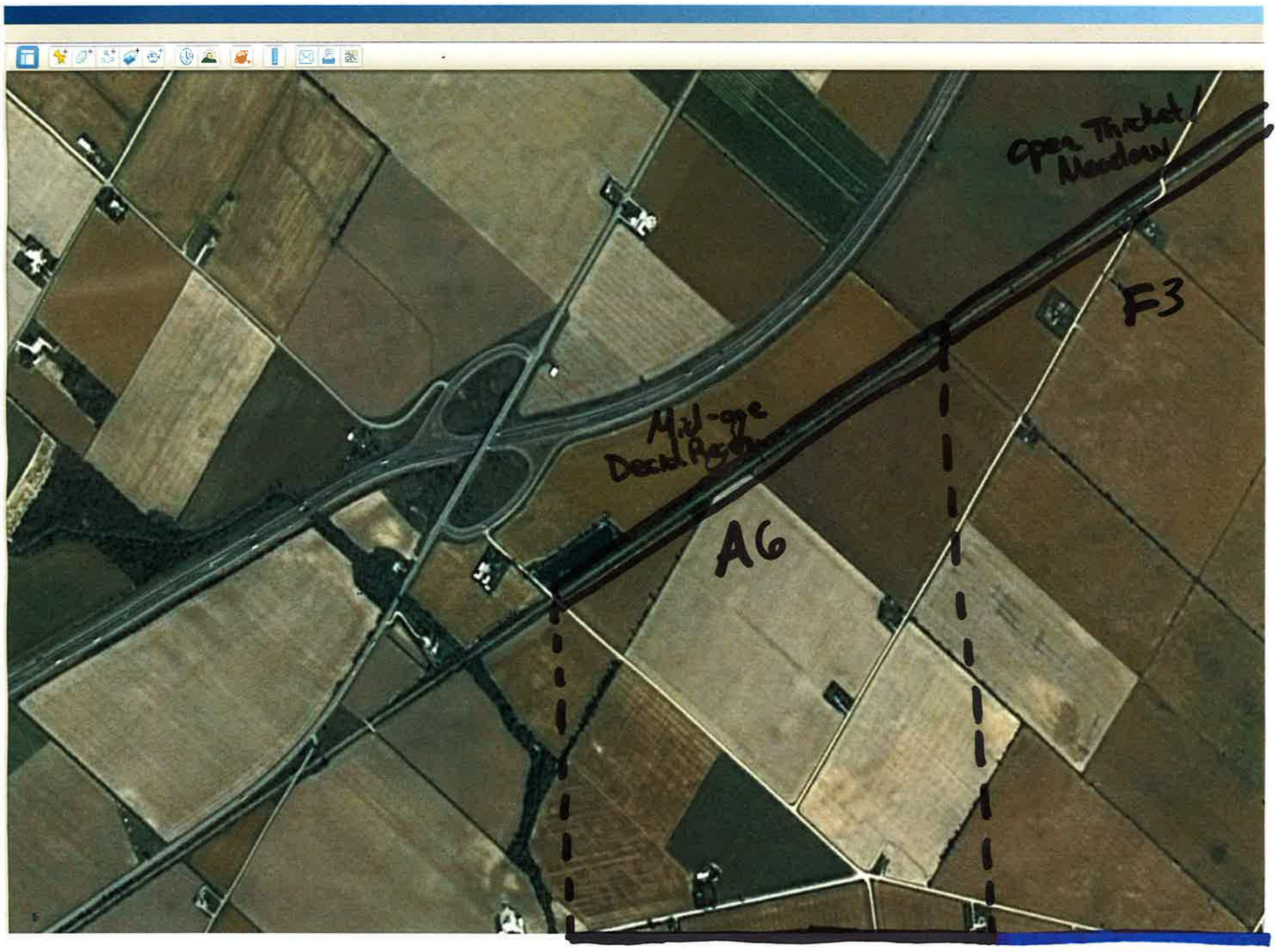
Midage / Decid. Regen.

Sand Dropseed (Splanlis?)

Photos end

Open Thicket/Meadow

Open Thicket/Meadow


Open Thicket / Meadow
F3
A6


Sol
PSS-W2
PSS-H2
PSS-H1
PSS-W1
PSS-W3
PSS-D2
PSS-D1
Com
Hay
alfalfa
Jenner Line
Snobelen Rd
MacDonald-Cartier Fwy
401
40
Communication Rd
Classic Car Dr
Horton Line
©2010 Cnes/Spot Image
Kent Centre
© 2010 Google
17 T 410722.73 m E 4693323.13 m N elev 600 ft
©2010

✓ P175-D1*

P176-D2

P176-D1 (Bare)

P175-D2

↖ just outside 120m

Figure 2-3

South Kent Wind Project

Vegetation Mapping

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

0 0.25 0.5 1 km

April 7, 2011
Project No. NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:35,000 (at 11x17")

Legend

- Project Area (Nov. 4, 2010)
- Proposed Turbine (L010)
- Electrical Substation
- Access Road
- 230kV Distribution Line
- Pole Mounted Switch
- Substation
- Underground Cabling
- Highway
- Primary Road
- Secondary Road
- Railway
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Wetland Area
- Ecological Land Classifcation
- Hedgerow
- Wooded Area
- Climbing Prairie Rose
- Compass-plant
- Monarch
- Pawpaw

NRSI_1184_Fig2-3_VegetationMapping_35k_2011_04_07_SWM

Figure 2-4

South Kent Wind Project

Vegetation Mapping

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

0 0.25 0.5 1 km

April 7, 2011
Project No. NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:35,000 (at 11x17")

Legend

- Project Area (Nov. 4, 2010)
- Proposed Turbine (L010)
- Electrical Substation
- Access Road
- 230kV Distribution Line
- Pole Mounted Switch
- Substation
- Underground Cabling
- Highway
- Primary Road
- Secondary Road
- Railway
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Wetland Area
- Ecological Land Classifcation
- Hedgerow
- Wooded Area
- Climbing Prairie Rose
- Compass-plant
- Monarch
- Pawpaw

NRSI_1184_Fig2-3_VegetationMapping_35k_2011_04_07_SWM

Figure 2-4

South Kent Wind Project

Vegetation Mapping

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

0 0.25 0.5 1 km

March 17, 2011
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:35,000 (at 11x17")

Legend

- Project Area (Nov. 4, 2010)
- Acciona
- Boralex
- Kruger Land Swap
- Pattern New
- Pattern
- Proposed Turbine (L008)
- Electrical Substation
- Access Road
- E-230kV Distribution Line
- E-Pole Mounted Switches
- Above Ground Cabling
- Underground Cabling
- E-Substation
- Highway
- Primary Road
- Secondary Road
- Railway
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Wetland Area
- Ecological Land Classifcation
- Hedgerow
- Wooded Area
- Climbing Prairie Rose
- Compass-plant
- Monarch
- Pawpaw

NRSI_1184_Fig2-4_VegetationMapping_35k_2011_03_17_SWM

384000 386000 388000 390000 392000 394000 396000

4686000 4684000 4682000 4680000

TECUMSEH LINE, POPPE RD, XANTOR LINE, DAUPHIN RD, LOYER LINE, RUMP RD, LOUDEN LINE, 3RD LINE, QUEENS LINE, 5TH LINE E, CTR RD, 6TH LINE E, FORBES LINE, MINT LINE, SINCLAIR RD, COUTTS LINE, BAERT RD, MCDOUGALL LINE, HWY 401, 5TH LINE W, 6TH LINE W, DRAKE RD, JEANNETTES CR RD, DASHWHEEL RD, GLEESON LINE, MERLIN RD, WELLWOOD RD, MORRIS LINE, RONEAU LINE, MCKINLAY RD, POLLARD LINE, FINN LINE, PORT RD, NINTH LINE, SLOAN RD, SHARP RD, OAK RD, DAVIDSON RD, COOPER RD, SWANTON LINE, 10TH LINE

P099, P148, P064, P099, P066, P067, P068, P126, P125, P161, P095, P069, P071, P072, P073, P074, P113, P114, P115, P150

P064-H1, P064-H2, P064-H3, P064-H4, P064-H5, P064-W1, P066-H1, P066-H2, P066-H3, P067-H1, P067-H2, P068-H1, P068-H2, P099-H1, P126-H1, P125-H1, P125-H2, P095-H1, P095-H2, P095-H3, P095-H4, P069-H1, P069-H2, P072-H1, P073-H1, P074-H1, P113-H1, P113-H2, P114-W1, P115-H1, P115-H2

RB-A5, RB-A6, RB-F3, RSS-H1, P064-D1, P064-D2, P064-D3, P066-D1, P067-D1, P068-D1, P068-D2, P095-D1, P126-D1, P125-D1, P125-D2, P161-D1, P161-D2, P095-D2, P095-D3, P095-D4, P069-D1, P069-D2, P071-D1, P072-D1, P072-D2, P072-D3, P073-D1, P074-D1, P113-D1, P114-D1, P114-D2, P115-D1, P115-D2, P150-D1

P099-H1, P099-H2, P099-H3, P066-H4, P066-H5, P068-H3, P068-H4, P068-H5, P068-D3, P068-D2, P069-D4, P069-D5

N

Figure 2-5

South Kent Wind Project

Vegetation Mapping

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

0 0.25 0.5 1 km

March 17, 2011
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:35,000 (at 11x17")

Legend

- Project Area (Nov. 4, 2010)
- Acciona
- Pattern New
- Pattern
- Bowark
- Boralex
- Kruger Land Swap
- Proposed Turbine (L008)
- Electrical Substation
- Access Road
- E-230kV Distribution Line
- E-Pole Mounted Switches
- Above Ground Cabling
- Underground Cabling
- E-Substation
- Highway
- Primary Road
- Secondary Road
- Railway
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Wetland Area
- Ecological Land Classifcation
- Hedgerow
- Wooded Area
- Climbing Prairie Rose
- Compass-plant
- Monarch
- Pawpaw

NRSI_1184_Fig2-5_VegetationMapping_35k_2011_03_17_SWM

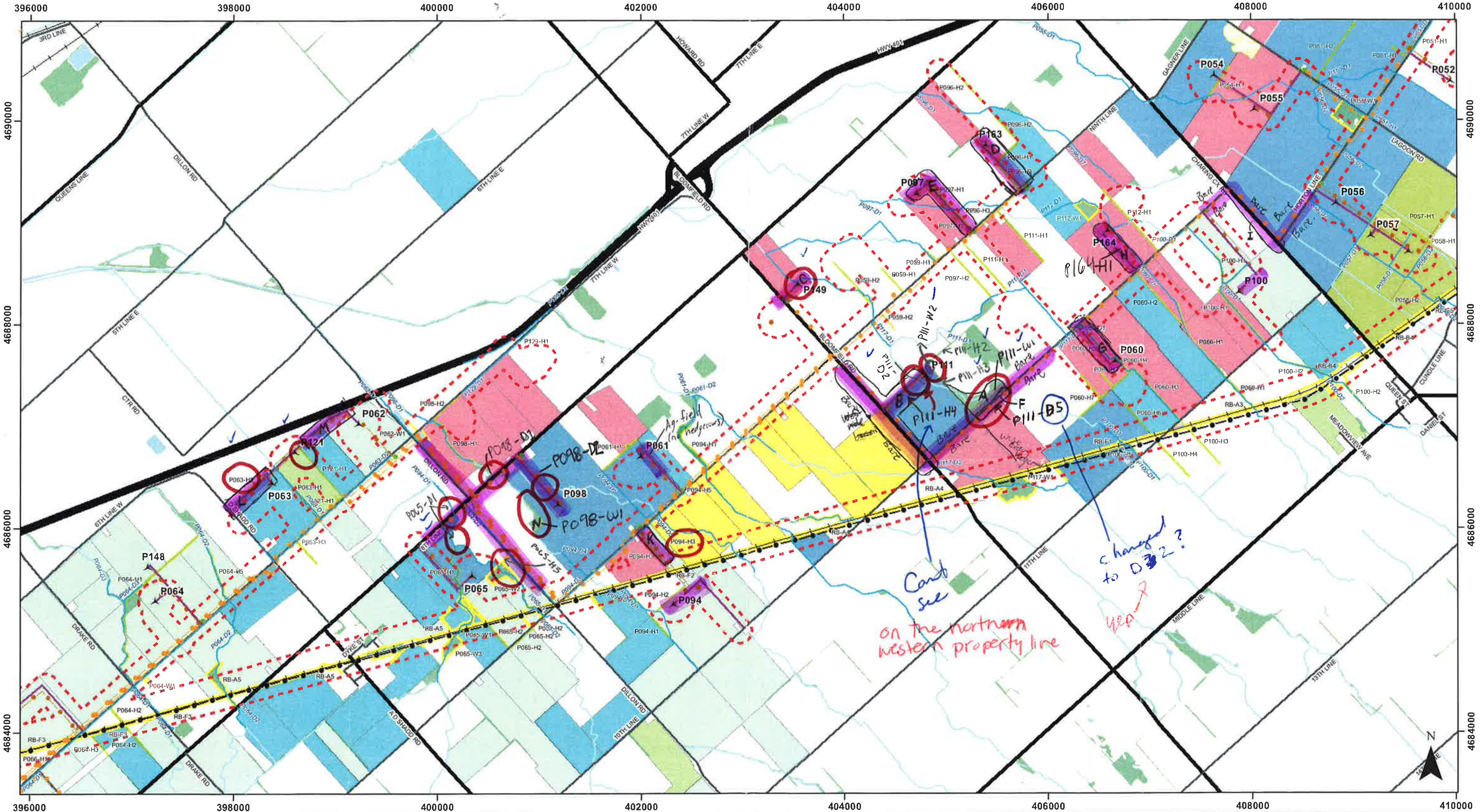


Figure 2-6

South Kent Wind Project

Vegetation Mapping

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

0 0.25 0.5 1 km

March 17, 2011
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:35,000 (at 11x17")

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Legend

- Project Area (Nov. 4, 2010)
- Kruger
- Pattern New
- Pattern
- Pattern Formerly Bowark
- Horton Line
- Bowark
- Boralex
- Proposed Turbine (L008)
- Electrical Substation
- Access Road
- Highway
- Primary Road
- Secondary Road
- Railway
- E-230kV Distribution Line
- E-Pole Mounted Switches
- Above Ground Cabling
- Underground Cabling
- E-Substation
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Wetland Area
- Ecological Land Classifcation
- Hedgerow
- Wooded Area

NRSI_1184_Fig2-6_VegetationMapping_35k_2011_03_17_SWM

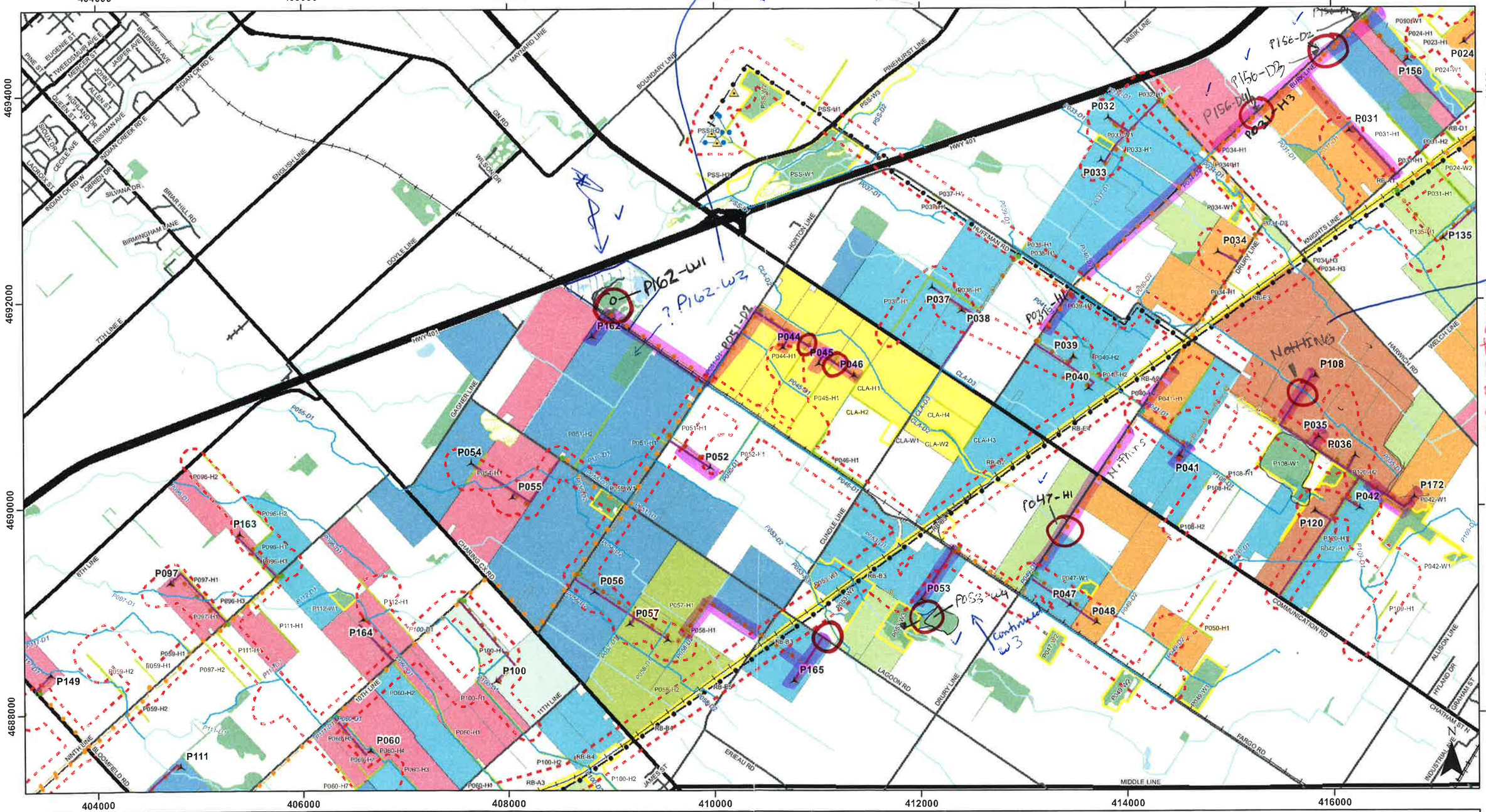

Figure 2-7

South Kent Wind Project

Vegetation Mapping

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

0 0.25 0.5 1 km

March 17, 2011
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:35,000 (at 11x17")

Legend

- Project Area (Nov. 4, 2010)
- Harwich
- Suncor
- Horton Line
- Kruger
- Bowark
- Boralex
- Pattern New
- Pattern
- Pattern Formerly Bowark
- E-230kV Distribution Line
- E-Pole Mounted Switches
- Above Ground Cabling
- Underground Cabling
- E-Substation
- Proposed Turbine (L008)
- Electrical Substation
- Access Road
- Primary Road
- Secondary Road
- Highway
- Railway
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Wetland Area
- Ecological Land Classifcation
- Hedgerow
- Wooded Area

NRSI_1184_Fig2-7_VegetationMapping_35k_2011_03_17_SWM

Figure 2-8

South Kent Wind Project

Vegetation Mapping

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

0 0.25 0.5 1 km

April 7, 2011
Project No NRSI-1184
UTM Zone 17, NAD 83
Scale 1:35,000 (at 11x17")

Legend

- Project Area (Nov. 4, 2010)
- Proposed Turbine (L010)
- Electrical Substation
- Access Road
- 230kV Distribution Line
- Pole Mounted Switch
- Substation
- Underground Cabling
- Highway
- Primary Road
- Secondary Road
- Railway
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Wetland Area
- Ecological Land Classifcation
- Hedgerow
- Wooded Area
- Climbing Prairie Rose
- Compass-plant
- Monarch
- Pawpaw

NRSI_1184_Fig2-8_VegetationMapping_35k_2011_04_07_SWM

P013 moved P013-D3 ✓ Already called H1 ✓

P010-H5

Ridgetown

P013-H3

P012-H2

P023-D1 moved.

P023-H2

P018 moved.

P156

P031 P156-W1

P155

P155-H1

no veg.

P027-H1

P093 no veg.

P166 P166W-1

P001-H3

P093-H2

P005-H3

P138

P138-H1

?? Can't see

? where

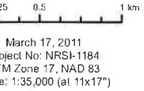

Figure 2-8

South Kent Wind Project

Vegetation Mapping

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

March 17, 2011
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:35,000 (at 11x17")

Legend

- Project Area (Nov. 4, 2010)
- Northland
- Harwich
- Suncor
- Pattern Formerly Bowark
- Horton Line
- Bowark
- Pattern
- Pattern New
- Proposed Turbine (L008)
- E-230kV Distribution Line
- E-Pole Mounted Switches
- Above Ground Cabling
- Underground Cabling
- E-Substation
- Electrical Substation
- Access Road
- Highway
- Primary Road
- Secondary Road
- Railway
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Wetland Area
- Ecological Land Classifcation
- Hedgerow
- Wooded Area

NRSI_1184_Fig2-8_VegetationMapping_35k_2011_03_17_SWM

* P018

Figure 2-9

South Kent Wind Project

Vegetation Mapping

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Ecologists

0 0.25 0.5 1 km

April 7, 2011
Project No. NRSI-1184
UTM Zone 17, NAD 83
Scale 1:35,000 (at 11x17")

Legend

- Project Area (Nov. 4, 2010)
- Proposed Turbine (L010)
- Electrical Substation
- Access Road
- 230kV Distribution Line
- Pole Mounted Switch
- Substation
- Underground Cabling
- Highway
- Primary Road
- Secondary Road
- Railway
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Wetland Area
- Ecological Land Classifcation
- Hedgerow
- Wooded Area
- Climbing Prairie Rose
- Compass-plant
- Monarch
- Pawpaw

NRSI_1184_Fig2-9_VegetationMapping_35k_2011_04_07_SWM

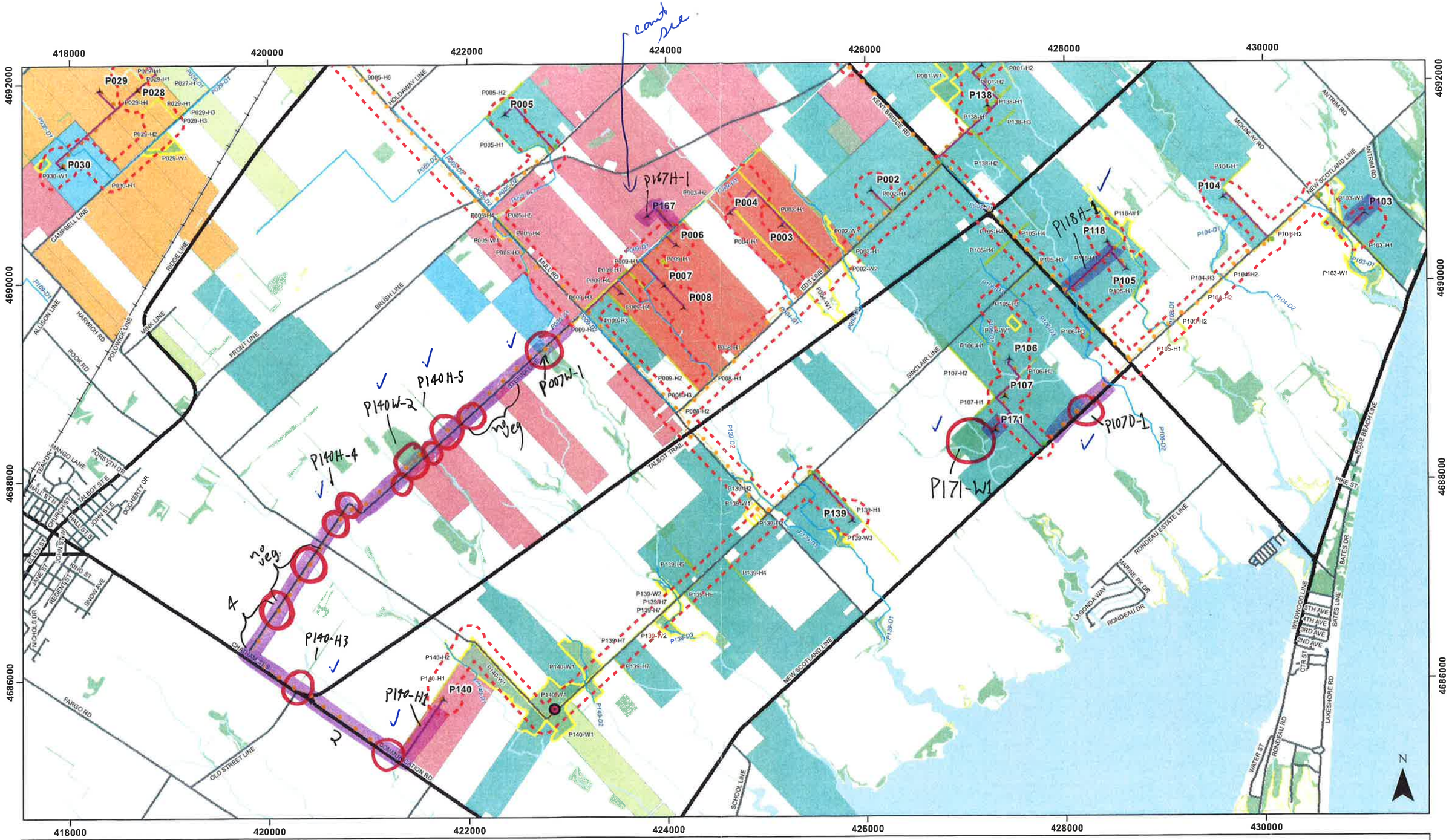

Figure 2-9

South Kent Wind Project

Vegetation Mapping

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

0 0.25 0.5 1 km

March 17, 2011
Project No: NRSI-1184
UTM Zone 17, NAD 83
Scale: 1:35,000 (at 11x17")

Legend

- Project Area (Nov. 4, 2010)
- Pattern New
- Pattern
- Northland
- Flat Creek
- Suncor
- Bowark
- Proposed Turbine (L008)
- Electrical Substation
- Access Road
- E-230kV Distribution Line
- E-Pole Mounted Switches
- Above Ground Cabling
- Underground Cabling
- E-Substation
- Highway
- Primary Road
- Secondary Road
- Railway
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Wetland Area
- Ecological Land Classifcation
- Hedgerow
- Wooded Area
- Climbing Prairie Rose
- Compass-plant
- Monarch
- Pawpaw

NRSI_1184_Fig2-9_VegetationMapping_35k_2011_03_17_SWM

I don't see it either, it must be on the property line and hard to see

cant see

Figure 2-10

South Kent Wind Project

Vegetation Mapping

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

0 0.25 0.5 1 km

April 7, 2011
Project No NRSI-1184
UTM Zone 17 NAD 83
Scale 1:35,000 (at 11x17")

Legend

- Project Area (Nov. 4, 2010)
- Proposed Turbine (L010)
- Electrical Substation
- Access Road
- 230kV Distribution Line
- Pole Mounted Switch
- Substation
- Underground Cabling
- Highway
- Primary Road
- Secondary Road
- Railway
- Watercourse (Permanent)
- Watercourse (NRSI)
- Waterbody
- Wetland Area
- Ecological Land Classifcation
- Hedgerow
- Wooded Area
- Climbing Prairie Rose
- Compass-plant
- Monarch
- Pawpaw

NRSI_1184_Fig2-10_VegetationMapping_35k_2011_04_07_SWM

This portion of Talbot Trail Not Part of Project Area

WET-A = P002-WE1

This part of Talbot Trail is not part of PA. 2_6

A = P139-W4

B = P004-M1

C = P004-WE1 / P004-W2

This part of Talbot Trail is not part of PA

D = P139-W3

P002-D15

E = P139-W5
F = P139-W6
G = P139-W7

G = P139 – W7

H = P139 – W8


7139-W9
soy
Soy
Talbot Trail
Harwich Rd
Soy
black walnut
white cedar
N. spruce
plantation
P002-1118
Soy
P002-D17
soy
plowed
plowed
tilled
hydro lines go through
Soy
planted N-spruce white cedar Silver maple white Pine
P002-D18
J
(putting green/ range ?) Lawn
Soy
soy
Soy
P002-D18
greenhouses
soy
Soy
Chatham St S
Old Street Line
11
403 m
Image © 2011 GeoEye
© 2011 Cnes/Spot Image
© 2011 Google
©2010 Google
Imagery Date: 8/16/2005
2009
17 T 421096.99 m E 4686272.27 m N elev 193 m
Eye alt 1.94 km
N

J= P002-M1

Nov. 10 2011 CLH

- - Unevaluated wetland boundary (MNR) from LIO