APPENDIX D
Terrestrial Existing Conditions and Impact Assessment Report

Terrestrial Ecosystem Existing Conditions and Impact Assessment Report

Highway 7 – County Road 26 to County Road 15
GWP 4044-16-00

Prepared For:

Ontario Ministry of Transportation

February 2026

CREATING QUALITY SOLUTIONS TOGETHER

Ainley GROUP

TERRESTRIAL ECOSYSTEM EXISTING CONDITIONS AND IMPACT ASSESSMENT REPORT

for

GWP 4044-16-00

Highway 7 from County Road 26 (Fowlers Corners) to County Road 15 (North Monaghan Parkway)

Geographic Townships of Cavan, Monaghan, Smith, and Emily within the County of Peterborough and City of Kawartha Lakes

ONTARIO MINISTRY OF TRANSPORTATION

Prepared by Ainley Group

February 2026

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TABLE OF CONTENTS

List of Tables

List of Figures

List of Appendices

1.0 INTRODUCTION

Ainley Group was retained by the Ministry of Transportation (MTO), Eastern Region, to complete a terrestrial ecosystem existing conditions and impact assessment study on Highway 7 from County Road 26 (Fowlers Corners) to County Road 15 (North Monaghan Parkway). The proposed works are discussed in **Section 2.0**, and the study limits are shown on **Figure 1**.

This report has been prepared in accordance with the *Environmental Reference for Highway Design* (*ERD*; 2013), and the MTO Environmental Standards and Practices. The intention of the report is to provide background and technical information to support Highway 7 improvements, and to support the environmental requirements under the *Class Environmental Assessment for Provincial Transportation Facilities* (*Class EA*; 2000). This report documents the results of the terrestrial existing conditions and impact assessment review, and provides a summary of background information, literature review results, and field observations undertaken in June and November of 2024, including a review and assessment of vegetation, wetlands, wildlife, and terrestrial Species at Risk (SAR).

2.0 STUDY AREA

The project area is located within the geographic townships of Cavan, Monaghan, Smith and Emily within the County of Peterborough and City of Kawartha Lakes. The project limits encompass a portion of Highway 7 from County Road 26 to County Road 15 excluding 2.2 km of resurfacing at Lily Lake Road (**Figure 1**). The study limits are located within the Ministry of Natural Resources (MNR), Peterborough-Bancroft Work Centre. Site location plans outlining the project limits, culvert locations, and existing water crossings are provided as **Figures 2 - 16.**

Within the project limits, Highway 7 is currently a two-lane configuration, which conveys local, commercial and tourist traffic north and south across southern Ontario, between Highway 115 and Fowlers Corners.

2.1 Key Features of the Detail Design

The detail design assignment includes new installation of one (1), and replacement / rehabilitation works at fifteen (15) non-structural culverts within the study limits. The detail design assignment also includes pavement rehabilitation for 9.0 km within the project limits, as well as, partially paved shoulders, fully paved shoulders, intersections, granular sealing, and bridge resurfacing. These non-structural culverts and pavement rehabilitation areas were included as part of the terrestrial ecosystems existing conditions and impact assessment field review. The location of the non-structural culverts and pavement rehabilitations is provided in **Table 1**, and all features are shown on **Figures 2 - 16**.

Table 1A: Location of Work

WP	Work Location / Waterbody ID	Highway	Municipality	Latitude	Longitude	Proposed Action
4051-16-01	CV-0007-000964 (23+763) Roadside Drainage	7	Emily	44.3269	-78.4433	Cleanout
4051-16-01	CV-0007-005674 (23+770) Roadside Drainage	7	Emily	44.3269	-78.4425	Cleanout
4051-16-01	CV-0007-005675 (23+794) Roadside Drainage	7	Emily	44.3272	-78.4429	Cleanout
4051-16-01	CV-0007-005679 (23+822) Roadside Drainage	7	Emily	44.3272	-78.4428	Cleanout
4051-16-01	CV-0007-005678 (23+858) Roadside Drainage	7	Emily	44.3273	-78.4421	Cleanout
4051-16-01	CV-0007-005680 (23+859) Roadside Drainage	7	Emily	44.3275	-78.4414	Cleanout
4051-16-01	CV-0007-000965 (23+879) Roadside Drainage	7	Emily	44.3270	-78.4420	Cleanout
4051-16-01	CV-0007-005681 (23+928) Roadside Drainage	7	Emily	44.3266	-78.4423	Cleanout
4051-16-01	CV-0007-000966 (23+936) Roadside Drainage	7	Emily	44.3266	-78.4421	Cleanout
4051-16-01	CV-0007-000782 (24+327) Roadside Drainage to Headwaters of an Unnamed Tributary of Chemong Lake	7	Emily	44.3232	-78.4406	Open Cut Replacement / Ditch Cleanout
4051-16-01	CV-0007-000967 (24+330) Roadside Drainage to Headwaters of an	7	Emily	44.3231	-78.4404	Open Cut Replacement / Ditch Cleanout

WP	Work Location / Waterbody ID	Highway	Municipality	Latitude	Longitude	Proposed Action
	Unnamed Tributary of Chemong Lake					
4051-16-01	CV-0007-005928 (24+332) Roadside Drainage to Headwaters of an Unnamed Tributary of Chemong Lake	7	Emily	44.3232	-78.4405	New Installation / Ditch Cleanout
4051-16-01	CV-0007-005860 (25+272) Roadside Drainage	7	Emily	44.3149	-78.4371	Culvert Extension / Ditch Cleanout
4051-16-01	CV-0007-000968 (25+290) Roadside Drainage	7	Emily	44.3148	-78.4368	Culvert Extension / Ditch Cleanout
4051-16-01	CV-0007-000204 (25+450) Roadside Drainage	7	Emily	44.3136	-78.4363	Culvert Extension / Ditch Cleanout
4051-16-01	CV-0007-005926 (13+935) Roadside Drainage	7	Monaghan	44.2589	-78.4062	Open Cut Replacement / Ditch Cleanout

Table 1B: Location of Work

Location	Station / Address	Township	Proposed Work
Resurfacing	Throughout Project Limits	Cavan, Monaghan, Smith, and Emily	Resurfacing of 9.0 km of Highway 7 within the project limits.
Excavations for Stockdale Road Left Turn Lanes	25+030 to 25+550 Lt. 25+030 to 25+550 Rt.	Emily	Excavation and widening of the roadway

Location	Station / Address	Township	Proposed Work
Excavations for Maple Grove Road Right Turn Lane	12+830 to 12+995	Monaghan	Excavation and widening of the roadway
Traffic Count Station Installation	10+498 Lt. 13+400 Lt.	Monaghan	Traffic Count Station (Type 1)
Loop Detectors	10+498 Lt. 13+400 Lt.	Monaghan	Loop Detectors (Simple) Loop in Pavement
Concrete Curb and Gutter, Concrete Gutter Outlets	12+945 to 12+965 – 10 m Rt. 25+267 to 25+286 – 10.0 to 25.0 m Rt. 25+215 to 25+296 – 9.5 to 17.0 m Lt. 25+278 – 13 m Rt. 25+298 – 23 m Lt.	Emily	Replacement of concrete curb and gutter
Granular Sealing	10+448 to 10+536 SBL 10+475 to 10+563 NBL 10+626 to 10+688 SBL 10+694 to 10+756 NBL 11+597 to 11+666 SBL 11+606 to 11+655 NBL 11+686 to 11+757 NBL 11+688 to 11+750 SBL 12+205 to 12+261 NBL	Monaghan	Application of Type I granular sealant via machine or hand spraying

Figures 2 - 16 depict the natural heritage features of the study area including watercourse locations, wetland locations (and status), culvert crossings, and other significant environmental features.

At the locations where open-cut replacement / new culvert installation is proposed, construction is to be completed under / adjacent to the travelled lanes and will include the removal / reinstatement of a small area of asphalt / grass above each culvert. During the culvert replacement, general construction works are anticipated to be maintained within the highway platform; however, if temporary shoulder widening is required to accommodate traffic during construction, it will be contained within the existing roadway platform. Based on this, impacts outside of the current roadway footprint are anticipated to be minimal.

At the locations where cleanout, ditch cleanout, or repair is to occur, there will be no disruption to the existing asphalt surface; however, a localized working area within the ROW may be required to facilitate work activities. Repair works are generally proposed to consist of culvert extension.

Highway resurfacing is anticipated for the entire 9.0 km of the project limits (this excludes 2.2 km at Lily Lake Road). Throughout these limits excavation for widening, including the installation of left turn lanes at Stockdale Road and a right turn lane at Maple Grove Road is also proposed. During resurfacing two (2) traffic count stations will be installed within the pavement. During the resurfacing and shoulder works, general construction works are anticipated to be maintained within the existing roadway platform. Concrete curb and gutter, as well as granular sealing will take place throughout the project limits where required. Based on this, impacts outside of the current roadway footprint are anticipated to be minimal. No vegetation clearing is anticipated; however, some roadside vegetation may be temporarily impacted during the excavations.

The proposed work details and location information are provided in **Table 1A and 1B** and shown on **Figures 2 - 16**, with culvert photographs provided in **Appendix A**. Additional details pertaining to the potential impacts, from the proposed works are provided in **Section 7.0**.

3.0 SOURCES OF EXISTING BASELINE INFORMATION

Existing baseline information review was completed in consideration of guidance documents provided by MNR and MECP for the acquisition of desktop available existing conditions information. The following resources were identified and used to review background data on terrestrial and aquatic species within or in close proximity to the study area as part of the existing conditions and impact assessment.

- MNR – Land Information Ontario (LIO) / Natural Heritage Make-a-Map review for natural heritage data.
- Ebird - review for bird species observation data.
- Ontario Reptiles and Amphibians Atlas (ORAA) – review for herpetofaunal species background information.
- Ontario Breeding Bird Atlas (OBBA) – review for bird species background information.

- iNaturalist – review for wildlife and vegetation species observation data.
- Aerial Photographs – Aerial photographs of the study area were reviewed to observe current conditions as well as changes in the study area to better understand the site ecology.

Details pertaining to the above information sources and available information were utilized to compile existing conditions and impact information in the study area, and are summarized in the existing conditions section of the report.

The sections below summarize the above information sources and available information.

MNR Land Information Ontario

Mapping available from LIO and Natural Heritage Make-a-map were reviewed for natural heritage information. Five (5) watercourses were identified within the project limits, including; Jackson Creek, unnamed tributary of Chemong Lake, and several other unnamed tributaries. Several unevaluated wetlands exist adjacent to Highway 7, within the study area. Two (2) provincially significant wetlands (PSWs), have been identified within 1 km of the study area; Jackson Creek PSW and Cavan Bog PSW. One (1) evaluated wetland (other) has been identified within 1 km of the study area; Fowler's Corners Swamp. Three (3) ANSIs have been identified within 1 km of the Highway 7 project limits; Bridgenorth Esker Delta, Jackson Creek Drumlins, and Cavan Bog.

Ontario Breeding Bird Atlas (Bird Studies Canada, 2025)

The Ontario Breeding Bird Atlas (OBBA) was reviewed to determine observations of bird species (including SAR) which have historically occurred in the study area.

eBird (Cornell Lab of Ornithology, 2025)

eBird was reviewed to determine observations of bird species (including SAR) which have historically occurred in the study area.

Ontario Reptile and Amphibian Atlas (Ontario Nature, 2025)

The Ontario Reptile and Amphibian Atlas (ORAA) was reviewed for background information of herpetofaunal species (including SAR) which have historically occurred in the study area.

iNaturalist (California Academy of Sciences and the National Geographic Society, 2025)

iNaturalist was reviewed to determine observations of wildlife and vegetation species (including SAR) which have historically occurred in the study area.

Aerial Photographs

Aerial photographs have been used to acquire historic information on the area of study, and for visual observation of the natural and man-made changes to the area.

4.0 DATA COLLECTION METHODOLOGY

To evaluate existing terrestrial ecosystem conditions and species at risk in the area of study, the following tasks have been undertaken:

- A review of all relevant background information including the Natural Heritage Information Centre (NHIC), and information provided by the MNR.
- A review of habitat types for SAR having the potential to occur within the study limits as provided by the MNR and NHIC database.
- Reconnaissance and field reviews were conducted on June 21, 27, and November 19, 2024 to determine the presence of animal and plant species and to verify the habitat utilized by SAR within the study limits. Specific habitat requirements for each species are per the *MNR - Significant Wildlife Habitat Technical Guide* (2000).
- Mapping and reporting all SAR observed and identified during field investigations.
- Identification of environmental protection requirements relevant to the study area and SAR within.
- An analysis of the existing terrestrial habitat of the site including site geology and surficial deposits.
- Documentation of the findings of the current terrestrial conditions of the area of study in a formal report.

4.1 Field Survey Protocols

The following field survey protocols were completed to determine the vegetative, wildlife, migratory and breeding birds and herpetofaunal species within the study area. During the field surveys, emphasis was placed on SAR with the potential to occur within the study area. Field surveys included the following protocols:

Vegetation

Vegetation field surveys for species composition, and community mapping were completed within and adjacent to the study area on June 21, 27, and November 19, 2024. During field surveys vegetation species were recorded.

Migratory and Breeding Birds

Surveys of breeding birds were completed via incidental observations of species during site visits. Any breeding bird observations were noted along with locational information of the sighting.

Wildlife

Observations of wildlife (mammals, reptiles, amphibians, and birds) were recorded during field visits to assess vegetation, migratory and breeding birds, and herpetofaunal surveys completed

within the study area. Any wildlife observations were noted along with locational information of the sighting. Specific attention was given to the evaluation for the presence of SAR during any visit to the site, including SAR turtles.

Further information pertaining to wildlife surveys completed at the site is provided below. During the survey, reference for specific habitat requirements for each species was per the *MNR - Significant Wildlife Habitat Technical Guide* (2000).

Turtles

Field reviews and site reconnaissance was conducted on June 21, 27, and November 19, 2024 to confirm the presence of SAR turtle habitat and nesting potential within the project limits. Field reviews were conducted within the ROW at the locations identified for works, using specific habitat requirements of SAR turtles.

Incidental observations of turtles were also recorded, if any were observed during site visits with other intended purposes.

Snakes / Amphibians

The presence of snake and amphibian species was assessed in conjunction with all other field investigations. Areas adjacent to the culvert locations were reviewed for snake and amphibian species hunting or basking within the ROW. Snake / amphibian species observed during field investigations were recorded with the locational information included.

5.0 RELEVANT ENVIRONMENTAL PROTECTION REQUIREMENTS

5.1 Provincial Planning Policy

The Provincial Planning Statement (PPS) (MMAH, 2024) outlines policies related to natural heritage features (Section 4.1) and water resources (Section 4.2). The *Planning Act* requires that planning decisions shall be consistent with the PPS.
According to the PPS, development and site alteration shall not be permitted in:

- Significant wetlands in Ecoregions 5E, 6E and 7E, and
- Significant coastal wetlands.

Similarly, unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions, development and site alteration shall not be permitted within:

- Significant wetlands in the Canadian Shield north of Ecoregions 5E, 6E, and 7E,
- Significant woodlands (Ecoregions 6E and 7E, excluding islands in Lake Huron and the St. Mary's River),
- Significant valley lands (Ecoregions 6E and 7E, excluding islands in Lake Huron and the St. Mary's River),

- Significant wildlife habitat,
- Significant Areas of Natural and Scientific Interest (ANSI), and
- Coastal wetlands in Ecoregions 5E, 6E, and 7E.

Development and site alterations shall not be permitted in fish habitat or the habitat of endangered and threatened species, expect in accordance with provincial and federal requirements.

In addition, development and site alteration is not permissible on lands adjacent to the natural features and areas identified above unless the ecological function of the adjacent lands has been evaluated and it has been demonstrated that no negative impacts on natural features and functions will occur. Development and site alternation shall not be permitted in fish habitat except in accordance with federal and Ontario-specific requirements.

5.2 Ontario Endangered Species Act

In June 2007, Ontario enacted a provincial Endangered Species Act to protect “species at risk” (SAR) in Ontario. A “species at risk” is defined as any naturally-occurring plant or animal in danger of extinction or of disappearing from the province. Species are added to the Species at Risk in Ontario (SARO) List once they are evaluated and classified as “at risk”. Protection under the Act means this species is protected from being killed, harmed, harassed, or captured. Damaging or destroying the habitat of endangered or threatened species is also prohibited under the Act. Additionally, in order to conform to the PPS no development or site alteration is permitted in the significant habitat of a species of conservation concern (MMAH, 2020).

On July 1, 2013, regulatory changes for modernizing approvals for the Endangered Species Act (Ontario Regulation 176/13) came into effect. The regulation applies to all species on the SARO list as of January 24, 2014. The requirements of the regulation include common elements of minimizing adverse effects, mitigation plans, monitoring, and reporting and recording. The regulations have streamlined the approvals process by organizing control of activities into four categories; Elimination, Rules in Regulation, Registration and Review and Approval.

The regulations allow common, low risk and frequency activities to be governed by a standard set of rules instead of requiring a permit. Activities that fall under the eligibility conditions are permitted to proceed without the acquisition of a permit or licence while abiding by the regulations. Activities that do not meet the eligibility criteria and may have adverse effects on SAR require approval. The current governing authority for provincial SAR is the Ministry of Environment, Conservation, and Parks (MECP).

With regards to the review of SAR on the subject property, it is noted that the Government of Ontario is currently in the process of transitioning from the *Endangered Species Act (2007)* to the *Species Conservation Act (2025)*. As part of this transition, the *Endangered Species Act (2007)* has been amended until such time as the new supporting regulations have been created. The review of SAR on the subject property has been completed in consideration of the previous *Endangered Species Act (2007)*, as well as the current amended *Endangered Species Act (2007)*.

Background information sources indicate that there are twenty-two (22) terrestrial species at risk known to be present within the general study area. Additional information pertaining to terrestrial SAR and a description of their preferred habitat is included in **Section 6.5**.

6.0 EXISTING TERRESTRIAL HABITAT, SPECIES AND DESIGNATED AREAS

The following sections provide an overview of the natural environmental features of the study area based on agency consultation, the review of background information / reports, and field surveys conducted for vegetation communities, wildlife (including potential SAR), and watercourse / wetland habitat within and adjacent to the subject property.

6.1 Physiography, Geology, and Topographical Features

The study area is located within the Peterborough Drumlin Field physiographic region (Chapman and Putman, 1984). The landform features of the study area consist of approximately 3000 drumlins and many other drumlinoid hills and surface flutings (Chapman and Putnam, 1984). Several unnamed wetlands and two (2) PSWs – Jackson Creek PSW and Cavan Bog PSW, are present within or adjacent to the project limits (**Figures 2 - 16**). Several permanent and intermittent watercourses were identified within the project limits, such as Jackson Creek, unnamed tributary of Chemong Lake, and several other unnamed tributaries. (**Figures 2 - 16**).

The project limits fall within the Mixedwood Plains Ecozone, which is characterized by bedrock comprised predominantly of limestone, sandstone and shale, with outcroppings of sandstone and shale (MNR, 2009). Bedrock geology within the project limits is described as Middle Ordovician limestone, dolostone, shale, arkose, and sandstone of the Ottawa Group, Simcoe Group and Shadow Lake Formation (Ontario Geological Survey, 2010). Surficial geology within the general area consists of a mixture of till, fine textured glacio-lacustrine deposits, and bedrock.

6.2 Vegetation and Vegetation Communities

The study area is located in the 6E Lake Simcoe-Rideau Ecoregion within the Mixedwood Plains Ecozone, which is typically dominated by cropland, pasture, and abandoned fields, with deciduous, coniferous, and mixed forests present in small quantities (MNR, 2009). Field surveys were completed by Ainley Group on June 21, 27, and November 19, 2024 to document vegetative species and communities within and adjacent to the project limits. Vegetation within the study area was categorized in accordance with the Ecological Land Classification for Southern Ontario (Lee et. al., 1998), with vegetative communities' assigned ELC codes consistent with the amended ELC classification tables (2013).

The study area is comprised of seventeen (17) vegetation communities, each of which fall into one of the following general ecological groups; forest, agricultural, wetland, woodland, or disturbed. The following sections provide a detailed summary of the vegetation and vegetative communities observed within the study area. A complete listing of all vegetative species found in each community listed below is included in **Appendix C**. A photographic log showing the vegetative communities is included in **Appendix A**.

During the 2024 field investigations a review for invasive and noxious vegetation was completed and resulted in the identification of European Common Reed (*Phragmites australis australis*). The locations of identified European Common Reed within the study limits are provided in **Appendix D**.

Invasive and noxious vegetation should be removed in accordance with *SP ENVR0011 – Requirements for Herbicide Spraying and Mechanical Cutting of Invasive and Noxious Vegetation Species*. Mechanical removal of this species is recommended within the study limits.

6.2.1 Transportation (CVI_1)

This community, which includes Highway 7, was characterized by limited tree cover and was dominated by highway infrastructure and associated ground cover species typical of disturbed sites. Vegetation observed within this community included species such as; Grasses (*Poaceae sp.*), Canada Goldenrod (*Solidago canadensis*), Staghorn Sumac (*Rhus typhina*), Common Dandelion (*Taraxacum officinale*), Wild Parsnip (*Pastinaca sativa*), and Wild Carrot (*Daucus carota*), among other species.

6.2.2 Perennial Cover Crop (OAGM2)

This community was observed to have no tree cover. This vegetation community was dominated by Grasses (*Poaceae sp.*), Smooth Brome (*Bromus inermis*), and Wild Parsnip (*Pastinaca sativa*), among other species.

6.2.3 Fencerow (TAGM5)

This community was observed to have a tree cover of 25-60%. The dominant species observed within this community were Black Locust (*Robinia pseudoacacia*), Manitoba Maple (*Acer negundo*), and European Buckthorn (*Rhamnus cathartica*). Additional species observed included; Reed Canarygrass (*Phalaris arundinacea*), Goldenrod sp. (*Solidago sp.*), Riverbank Grape (*Vitis riparia*), Sugar Maple (*Acer saccharum*), and American Elm (*Ulmus americana*), among other species.

6.2.4 Annual Row Crop (OAGM1)

This community was observed to have no tree cover. The dominant species observed within this community were Corn (*Zea mays*) and Soybean (G*lycine max*).

6.2.5 Business Sector (CVC_1)

This community, which included commercial businesses, was characterized by limited tree cover, open lawn, and paved areas. Vegetation observed within this community included species such as; Grasses (*Poaceae sp.*), Staghorn Sumac (*Rhus typhina*), Manitoba Maple (*Acer negundo*), Tartarian Honeysuckle (*Lonicera tatarica*), White Clover (*Trifolium repens*), and Common Dandelion (*Taraxacum officinale*), among other species.

6.2.6 Low Density Residential (CVR_1)

This community was characterized by limited tree cover and was dominated by ground cover and manicured tree species. Vegetation observed within this community included species such as; Grasses (*Poaceae sp.*), Sugar Maple (*Acer saccharum*), Scots Pine (*Pinus sylvestris*), Silver Maple (*Acer saccharinum*), White Clover (*Trifolium repens*), Common Lilac (*Syringa vulgaris*), and White Cedar (*Thuja occidentalis*), among other species.

6.2.7 Open Pasture (OAGM4)

This community was observed to have very limited tree cover. The dominant species observed within this community were Grasses (*Poaceae sp.*), White Clover (*Trifolium repens*), Red Clover (*Trifolium pratense*), and Oxeye Daisy (*Leucanthemum vulgare*). Additional species observed included; Common Milkweed (*Asclepias syriaca*), Common Mullein (*Verbascum thapsus*), and Riverbank Grape (*Vitis riparia*), among other species.

6.2.8 Dry – Fresh Sugar Maple Deciduous Forest (FODM5-1)

This deciduous forest community was observed to have a tree canopy of 60% or greater. The dominant species observed within this community was Sugar Maple (*Acer saccharum*). Additional species observed included; European Buckthorn (*Rhamnus cathartica*), Grasses (*Poaceae sp.*), Zigzag Goldenrod (*Solidago flexicaulis*), White Ash (*Fraxinus americana*), Mayapple (*Podophyllum peltatum*), and Red Trillium (*Trillium erectum*), among other species.

6.2.9 Pondweed Submerged Shallow Aquatic (SAS_1-1)

This community was observed to have limited tree cover and be dominated by aquatic species. Dominant species were observed to consist of; Floating-leaved Pondweed (*Potamogeton natans*), and European Frogbit (*Hydrocharis morsus-ranae*), with lesser amounts of Narrow-leaved Cattail (*Typha angustifolia*), Large Yellow Pond-lily (*Nuphar advena*), among other species.

6.2.10 Dry – Fresh White Cedar Coniferous Forest (FOCM2-2)

This coniferous forest community was observed to have a tree canopy of 60% or greater. The dominant species observed within this community was White Cedar (*Thuja occidentalis*). Additional species observed included; White Spruce (*Picea glauca*), European Buckthorn (*Rhamnus cathartica*), Canada Goldenrod (*Solidago canadensis*), Riverbank Grape (*Vitis riparia*), Apple sp. (*Malus sp.*), and Oxeye Daisy (*Leucanthemum vulgare*), among other species.

6.2.11 Reed-canary Grass Graminoid Mineral Meadow Marsh (MAMM1-3)

This community was observed to have limited tree cover and be dominated by wetland species. Dominant species were observed to consist of; Reed Canarygrass (*Phalaris arundinacea*), with lesser amounts of Broad-leaved Cattail (*Typha latifolia*), and Red-osier Dogwood (*Cornus sericea*), among other wetland species.

6.2.12 Bebb's Willow Mineral Deciduous Thicket Swamp (SWTM3-2)

This community was observed to have a shrub cover of 25-60%. The dominant species observed within this community were Bebb's Willow (*Salix bebbiana*), Black Willow (*Salix nigra*), and Reed Canarygrass (*Phalaris arundinacea*). Additional species observed included; Purple Loosestrife (*Lythrum salicaria*), and Broad-leaved Cattail (*Typha latifolia*), among other wetland species.

6.2.13 Dry – Fresh Poplar Deciduous Forest (FODM3-1)

This deciduous forest community was observed to have a tree canopy of 60% or greater. The dominant species observed within this community was Trembling Aspen (*Populus tremuloides*). Additional species observed included; Balsam Poplar (*Populus balsamifera*), European Buckthorn (*Rhamnus cathartica*), Riverbank Grape (*Vitis riparia*), Goldenrod sp. (*Solidago sp.*), White Cedar (*Thuja occidentalis*), Oxeye Daisy (*Leucanthemum vulgare),* White Birch (*Betula papyrifera*)*,* and American Elm (*Ulmus americana*), among other species.

6.2.14 Cattail Mineral Shallow Marsh (MASM1-1)

This community was observed to have limited tree cover and be dominated by wetland species. Dominant species were observed to consist of; Broad-leaved Cattail (*Typha latifolia*), and Narrow-leaved Cattail (*Typha angustifolia*). Additional species observed included Bebb's Willow (*Salix bebbiana*), Black Willow (*Salix nigra*), Purple Loosestrife (*Lythrum salicaria*), and American Elm (*Ulmus americana*), among other species.

6.2.15 Dry Fresh Coniferous Woodland (WOCM1)

This coniferous woodland community was observed to have a tree canopy of 25-60%. The dominant species observed within this community were Scots Pine (*Pinus sylvestris*), White Spruce (*Picea glauca*), and White Cedar (*Thuja occidentalis*). Additional species observed included; Grasses (*Poaceae sp.*), Goldenrod sp. (*Solidago sp.*), American Elm (*Ulmus americana*), Riverbank Grape (*Vitis riparia*), Oxeye Daisy (*Leucanthemum vulgare)* and European Buckthorn (*Rhamnus cathartica*), among other species.

6.2.16 Dry – Fresh Scotch Pine Naturalized Coniferous Plantation (FOCM6-3)

This coniferous plantation community was observed to have a tree canopy of 60% or greater. The dominant species observed within this community were Scots Pine (*Pinus sylvetris*), Common Buckthorn (*Rhamnus cathartica*), White Ash (*Fraxinus americana*), Goldenrod sp. (*Solidago sp.*). Additional species observed included; American Elm (*Ulmus americana*), White Spruce (*Picea glauca*), and Oxeye Daisy (*Leucanthemum vulgare),* among other species.

6.2.17 Green Lands (CGL)

This community was characterized by limited tree cover and was dominated by ground cover and manicured tree species. Vegetation observed within this community included species such as;

Grasses (*Poaceae sp.*), Sugar Maple (*Acer saccharum*), Basswood (*Tilia americana*), White Ash (*Fraxinus americana*), and White Clover (*Trifolium repens)*, among other species.

6.3 Birds, Wildlife, and Herpetofaunal Species and Habitat

Habitat within the study area includes agricultural fields, forested areas, wetlands, and watercourses, allowing for a wide variety of birds, wildlife, and herpetofaunal species with the potential to occur within the study limits. The following sections detail the species formerly reported to occur within the study area, as well as those observed during field investigations in 2024.

6.3.1 Bird Species

Incidental observations of bird species were documented within the study area during the field investigations in 2024. Species which were observed during incidental observations are provided in the list below.

A total of eleven (11) bird species were observed (visually or audibly) within the study area. A summary of the species list (common names) is included below:

- Field Sparrow
- Song Sparrow
- American Goldfinch
- Northern Cardinal
- Common Yellowthroat
- Blue Jay
- American Crow
- American Robin
- Eastern Wood-Pewee
- Savannah Sparrow
- Chipping Sparrow

A summary of the observed species (complete with scientific names), including a species-specific tally of observed individuals, and comments regarding the observations is included in **Appendix E**. In addition, a summary of species observations for all Ontario Breeding Bird Atlas squares for which Highway 7 within the project limits bisects have been included in **Appendix E**.

No bird nests were observed during field investigations in 2024 within the study limits.

Mitigation measures to limit the potential for impacts to the nests / individuals are provided in **Section 8.0**.

6.3.2 Wildlife Species/ Herpetofaunal Species

Wildlife species within the study area were documented via direct observation and interpretation of sign (i.e. tracks, scat, vocalizations, etc.). No wildlife species were observed during the environmental investigations by Ainley Group in 2024. However, the adjacent forest, wetlands, and low-lying areas are anticipated to provide habitat for typical mammals of southern Ontario including White-tailed Deer (*Odocoileus virginianus*), Coyote (*Canis latrans*), Snowshoe Hare (*Lepus americanus*), and other small to medium sized mammals. Forest areas are likely used as a movement corridor for wildlife.

Herpetofaunal species within the study area were documented when observed according to the field survey protocols specified within **Section 4.1**. Herpetofaunal species observed during the field surveys completed within the study area in 2024 included; Green Frog (*Lithobates clamitans*).

6.4 Significant Natural Heritage Features

6.4.1 Significant Wetlands

There are two (2) provincially significant wetlands (PSWs) located within 1 km of the Highway 7 project limits:

- **Jackson Creek PSW**
    - PSW is located at the central area of the project limits of Highway 7
    - There are no culverts works proposed adjacent to the PSW; however resurfacing works will take place adjacent to the PSW. No work should be performed beyond the designated ROW during resurfacing works.
- **Cavan Bog PSW**
    - PSW is located at the central area of the project limits of Highway 7
    - There are no culverts works proposed adjacent to the PSW; however resurfacing works will take place adjacent to the PSW. No work should be performed beyond the designated ROW during resurfacing works.

6.4.2 Significant Coastal Wetlands

Per the Natural Heritage Reference Manual (MNR, 2010), a coastal wetland is defined as:

a) any *wetland* that is located on one of the Great Lakes or their connecting channels (Lake St. Clair, St. Mary's, St. Clair, Detroit, Niagara and St. Lawrence Rivers); or

b) any other *wetland* that is on a tributary to any of the above-specified water bodies and lies, either wholly or in part, downstream of a line located 2 kilometers upstream of the 1:100-year flood line (plus wave run-up) of the large water body to which the tributary is connected.

Based on this definition, neither the Jackson Creek PSW or Cavan Bog PSW meet the definition of a coastal wetland. As such, no impacts to significant coastal wetlands are anticipated as a result of the undertaking.

6.4.3 Significant Woodlands

Significant woodlands were identified on the subject property in City of Kawartha Lakes, and Cavan Monaghan Township planning and natural heritage documentation. There are no significant woodlands present in the project area where culvert works are proposed. Significant woodlands are present throughout the project limits where resurfacing works are proposed. No resurfacing work is proposed beyond the designated ROW, therefore, no impacts to significant woodlands are anticipated as a result of the undertaking.

6.4.4 Significant Valleylands

No significant valleylands were identified on the subject property in County of Peterborough, or City of Kawartha Lakes, planning and natural heritage documentation. As such, no impacts to significant valleylands are anticipated as a result of the undertaking.

6.4.5 Significant Wildlife Habitat

A review of the MNR's Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E was completed and compared to the birds, wildlife, and herpetofaunal species observed within the study area, and information obtained from background information sources.

Background information from NHIC indicates the presence of a Mixed Wader Nesting Colony in the general study area. Per the *Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E*, such nesting areas are identified as Colonially Nesting Bird Breeding Habitat (Trees / Shrubs) and consist of a presence of ten (10) or more active nests for Great Blue Heron or, the presence of one (1) or more for Black-crowned Night Heron and are found in live or dead standing trees in wetland communities. No nests of the identified bird species' were observed within the study limits, and works will be limited to the Highway 7 ROW. As such, no impacts to the identified Mixed Wader Nesting Colony are anticipated as a result of the undertaking.

Background information from NHIC indicates the presence of a Colonial Waterbird Nesting Area in the general study area. Per the *Significant Wildlife Habitat Criteria Schedules For Ecoregion 6E*, such nesting areas are identified as Colonially Nesting Bird Breeding Habitat (Ground) and consist of greater than twenty-five (25) active nests for Herring Gulls or Ring-billed Gulls, greater than five (5) active nests for Common Tern, greater than two (2) active nests of Caspian Tern, presence of five (5) or more pairs of Brewer's Blackbird, or any active nesting colony of one (1) or more Little Gull or Great Black-backed Gull and are found in rock or bedrock marsh and meadow marsh wetland communities, or cultural meadow, cultural thicket, or cultural savannah communities. No nests of the identified bird species' were observed within the study limits, and works will be limited to the Highway 7 ROW. As such, no impacts to the identified Colonial Waterbird Nesting Area are anticipated as a result of the undertaking.

No other Seasonal Concentration Areas, Specialized Habitat for Wildlife, Habitat for Species of Conservation Concern, or Animal Movement Corridors were identified as a result of the field surveys completed by Ainley Group within the study area.

6.4.6 Areas of Natural and Scientific Interest

One (1) regional ANSI, the Bridgenorth Esker Delta Earth Science ANSI, has been identified within the Highway 7 project limits. This ANSI is located at the northern extent of the project limits, approximately 850 m to the north of the project limits. Provided the distance of the proposed work from the ANSI is maintained, no impacts to the feature are anticipated as a result of the undertaking.

Two (2) provincial ANSIs, the Jackson Creek Drumlins Earth Science ANSI (located approximately 340 m east of the project limits) and the Cavan Bog Life Science ANSI (located approximately 560 m west of the project limits), have been identified within the general area of the Highway 7 project limits. Both of these ANSIs are located at the southern extent of the project limits. Provided the distance of the proposed work from the ANSIs, no impacts to the features are anticipated as a result of the undertaking.

6.4.7 Rare Species or Communities

A site assessment for the presence of rare species, and associated habitat, as well as rare vegetation communities was conducted based on background information provided by agencies (i.e. NHIC website) and observations during field visits in 2024. As a part of this assessment, the following rare terrestrial species or vegetation communities were identified as having the potential to occur within the study limits.

Table 2: Rare Species or Vegetation Communities with the Potential to Occur within the Study Limits

Species (Latin Name)	Species / Community (Common Name)	Global Rank	Provincial Rank
Spatula discors	Blue-winged Teal	G5	S3B, S4M
Viridothelium virens	Speckled Blister Lichen	G4G5	S3
Senna hebecarpa	Wild Senna	G5	S1
Cypripedium arietinum	Ram's-head Lady's slipper	G3	S3

Blue-winged Teal

Blue-winged Teal is a bird species which is commonly found in shallow ponds and wetlands (All About Birds, 2023). No Blue-winged Teal were observed during site visits by Ainley Group in 2024.

Speckled Blister Lichen

Speckled Blister Lichen generally occurs in forest communities, but can occur in riparian and wetland environments as well (Wildflower Search, 2025). No Speckled Blister Lichen were observed during site visits by Ainley Group in 2024.

Wild Senna

Wild Senna occurs in disturbed habitats with damp soil, it is often found in man-made habitats, floodplains, forest edges, meadows and fields or along shorelines (Go Botany, 2025). No Wild Senna was observed during site visits by Ainley Group in 2024.

Ram's-head Lady's slipper

Ram's-head Lady's slipper generally occurs in terrestrial and wetland habitats, such as forests and swamps (Go Botany, 2025). No Ram's-head Lady's slipper was observed during site visits by Ainley Group in 2024.

6.5 Species at Risk (SAR)

A site assessment for the presence of SAR and associated habitat was conducted based on background information provided by agencies and internet data sources, and observations during field visits in 2024. As part of this assessment, the following SAR were identified as having the potential to occur within the study limits.

Table 3: SAR with the Potential to Occur within the Study Limits

Species (Latin Name)	Species (Common Name)	Federal Status	Provincial Status
Juglans cinerea	Butternut	Endangered	Endangered
Myotis lucifugus	Little Brown Bat	Endangered	Endangered
Myotis leibii	Eastern Small-footed Myotis	Endangered	Endangered
Myotis septentrionalis	Northern Long-eared Bat	Endangered	Endangered
Perimyotis subflavus	Tri-coloured Bat	Endangered	Endangered
Lasionycteris noctivagans	Silver-haired Bat	Endangered	Endangered

Species (Latin Name)	Species (Common Name)	Federal Status	Provincial Status
Lasiurus borealis	Eastern Red Bat	Endangered	Endangered
Lasiurus cinereus	Hoary Bat	Endangered	Endangered
Melanerpes erythrocephalus	Red-headed Woodpecker	Endangered	Endangered
Fraxinus nigra	Black Ash	Not at Risk	Endangered
Ixobrychus exilis	Least Bittern	Threatened	Threatened
Emydoidea blandingii	Blanding's Turtle	Endangered	Threatened
Dolichonyx oryzivorus	Bobolink	Threatened	Threatened
Sturnella magna	Eastern Meadowlark	Threatened	Threatened
Hirundo rustica	Barn Swallow	Threatened	Special Concern
Cardellina canadensis	Canada Warbler	Threatened	Special Concern
Contopus virens	Eastern Wood-Pewee	Special Concern	Special Concern
Sternotherus odoratus	Eastern Musk Turtle	Special Concern	Special Concern
Euphagus carolinus	Rusty Blackbird	Special Concern	Special Concern
Chelydra serpentina	Snapping Turtle	Special Concern	Special Concern
Hylocichla mustelina	Wood Thrush	Threatened	Special Concern
Ammodramus savannarum	Grasshopper Sparrow	Special Concern	Special Concern

Details pertaining to respective species are provided in **Table 4** below, with general locations of SAR observations and natural heritage features shown on **Figures 2 - 16**. The potential for specific listed SAR to occur at individual culvert locations within the study area is also summarized below and further detailed within **Table 5**.

Table 4 - Species at Risk Summary

Common Name	Species Name	G Rank	S Rank	Federal Status	Provincial Status	Habitat Requirements
Butternut	*Juglans cinerea*	G3	S2?	END	END	Found alone or in small groups, in mixed hardwood stands or along fence lines or open fields / agricultural areas. Prefers moist well drained soil, and is rarely found on dry rocky soil.
Little Brown Bat	*Myotis lucifugus*	G3G4	S3	END	END	Roost in buildings or trees but often select attics, barns, or abandoned buildings.
Eastern Small-footed Myotis	*Myotis leibii*	G4	S2S3	END	END	These bats can be found roosting in a variety of habitats ranging from rock outcrops, buildings, bridges, caves, mines, or hollow trees. Roost locations often change on a daily basis
Northern Long-eared Bat	*Myotis septentrionalis*	G2G3	S3	END	END	Are associated with boreal forests and choose to roost under loose bark and in the cavities of trees. Most often hibernate in caves and abandoned mines.
Tri-coloured Bat	*Perimyotis subflavus*	G3G4	S3?	END	END	During the summer they can be found in a variety of forested habitats including older forests but can occasionally be found in barns or other structures. They forage over water and along streams in the forest.
Silver-haired Bat	*Lasionycteris noctivagans*	G3G4	S4	END	END	Roost in tree cavities or under exfoliating bark. Generally, forage in wetlands, open areas, and edge habitats in forested landscapes.
Eastern Red Bat	*Lasiurus borealis*	G3G4	S4	END	END	Roost in trees by hanging from branches. Generally, forage in wetlands, open areas, and edge habitats in forested landscapes.
Hoary Bat	*Lasiurus cinereus*	G3G4	S4	END	END	Roost in trees by hanging from branches. Generally, forage in wetlands, open areas, and edge habitats in forested landscapes.
Red-headed Woodpecker	*Melanerpes erythrocephalus*	G5	S3	END	END	Usually found in open wooded areas and woodland edges with numerous dead trees which the birds use for nesting and as a food source.
Black Ash	*Fraxinus nigra*	G5	S4	No Status	END	Shade intolerant hardwood species found in moist sites such as swamps, bogs, fens, and floodplains.

Table 4 - Species at Risk Summary

Common Name	Species Name	G Rank	S Rank	Federal Status	Provincial Status	Habitat Requirements
Least Bittern	*Ixobrychus exilis*	G4G5	S4B	THR	THR	Deep marshes, swamps, bogs; marshy borders of lakes, ponds, streams, ditches; dense emergent vegetation of cattail, bulrush, sedge; nests in cattails; intolerant of loss of habitat and human disturbance.
Blanding's Turtle	*Emydoidea blandingii*	G4	S3	END	THR	Can be found in many types of wetland habitat but prefers a complex of upland and wetland habitat types. Habitat preferences consists of shallow and deep pools of water connected by channels, open or absent tree canopy, trees along the waters edge, a dense cover of shrubs with hummocks and tussocks through the wetland, and organic debris in the substrate.
Bobolink	*Dolichonyx oryzivorus*	G5	S4B	THR	THR	Dense grasses or hayfields south of the boreal forest of Ontario, where they build their small nests on the ground. Feed off insects that are found in these grassy environments.
Eastern Meadowlark	*Sturnella magna*	G5	S4B, S3N	THR	THR	Moderately tall grasslands, pastures, hayfields, alfalfa fields, weedy borders of croplands, orchards, airports, roadsides, shrubby overgrown fields and any other open areas present. Commonly seen sitting on small trees, fence posts or shrubs.
Barn Swallow	*Hirundo rustica*	G5	S4B	THR	SC	Farmlands or rural areas; cliffs, caves, rock niches; buildings or other man-made structures for nesting; open country near body of water.
Canada Warbler	*Cardellina canadensis*	G5	S5B	THR	SC	Found in a wide range of coniferous and deciduous forests, typically in forest types that are wet with a well developed dense shrub layer. Nests are often found on or near the ground.
Eastern Wood-Pewee	*Contopus virens*	G5	S4B	SC	SC	Found in the mid-canopy layer of forest clearings and edges of deciduous and mixed forest. Most abundant in mature forest stands with little understory.

Table 4 - Species at Risk Summary

Common Name	Species Name	G Rank	S Rank	Federal Status	Provincial Status	Habitat Requirements
Eastern Musk Turtle	*Sternotherus odoratus*	G5	S3	SC	SC	Aquatic, except when laying eggs; shallow slow moving water of lakes, streams, marshes and ponds; hibernate in underwater mud, in banks or in muskrat lodges; eggs are laid in debris or under stumps or fallen logs at waters edge; often share nest sites; sometimes congregate at hibernation sites; not readily observed.
Rusty Blackbird	*Euphagus carolinus*	G4	S4B, S3N	SC	SC	Typically found near coniferous forests with wetlands within the vicinity. During the winter this species can be found in wet woodlands and often forages in agricultural fields.
Snapping Turtle	*Chelydra serpentina*	G5	S4	SC	SC	Permanent, semi-permanent fresh water marshes, swamps or bog; rivers and streams with soft muddy banks or bottoms; often uses soft soil or clean dry sand on south-facing slopes for nest sites; may nest at some distance from water; often hibernate together in groups in mud under water; home range size approx. 28 ha.
Wood Thrush	*Hylocichla mustelina*	G4	S4B	THR	SC	Found in mature deciduous and mixed forest. Limited to moist stands with well-developed undergrowth and tall trees.
Grasshopper Sparrow	*Ammodramus savannarum pratensis*	G5	S4B	SC	SC	The Grasshopper Sparrow is a grassland bird species known to nest in hayfields, pastures, alvars, prairies, and occasionally grain crops. The species will create a well-hidden cup shaped nest woven from grasses.

1. List of Species at Risk determined by the MNRF, Natural Heritage Information Centre, eBird, OBBA, iNaturalist, ORAA, and field visits by
2. Ministry of Natural Resources. 2000. Significant Wildlife Habitat Guide

Table 5 - Species at Risk Potential / Mitigation Measures

MTO Culvert No.	Station	Work Required	Adjacent Environment	Watercourse / Wetland	Potential for Species and/or Habitat to be Impacted1,2															Proposed Mitigation Measure
					Turtle Sp. (END or THR): Nesting	Turtle Sp. (END or THR): Overwintering	Butternut	Little Brown Bat	Eastern Small-footed Myotis	Northern Long-eared Bat	Tri-coloured Bat	Silver-haired Bat	Eastern Red Bat	Hoary Bat	Red-headed Woodpecker	Black Ash	Bobolink	Least Bittern	Eastern Meadowlark	
CV-0007-000964	23+763	Cleanout	Culvert CV-0007-000964 is a 300 mm CSP-U culvert proposed for cleanout. This location conveys roadside drainage adjacent to Highway 7. The surrounding environment consists of ROW and residential.	Roadside Drainage	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	
CV-0007-005674	23+770	Cleanout	Culvert CV-0007-005674 is 300 mm CSP-U culvert proposed for cleanout. This location conveys roadside drainage unnder Highway 7. The surrounding environment consists of ROW and residential.	Roadside Drainage	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	
CV-0007-005675	23+794	Cleanout	Culvert CV-0007-005675 is a 450 mm CSP-U culvert proposed for cleanout. This location conveys roadside drainage under Highway 7. The surrounding environment consists of ROW, and business sector.	Roadside Drainage	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	
CV-0007-005679	23+822	Cleanout	Culvert CV-0007-005679 is a 300 mm CSP-U culvert proposed for cleanout. This location conveys roadside drainage under Highway 7. The surrounding environment consists of ROW, and business sector.	Roadside Drainage	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	
CV-0007-005678	23+858	Cleanout	Culvert CV-0007-005678 is a 300 mm CSP-U culvert proposed for cleanout. This location conveys roadside drainage under Highway 7. The surrounding environment consists of ROW, and business sector.	Roadside Drainage	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	
CV-0007-005680	23+859	Cleanout	Culvert CV-0007-005680 is a 450 mm CSP-U culvert proposed for cleanout. This location conveys roadside drainage under Highway 7. The surrounding environment consists of ROW, and business sector.	Roadside Drainage	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	
CV-0007-000965	23+879	Cleanout	Culvert CV-0007-000965 is a 300 mm CSP-U culvert proposed for cleanout. This location conveys roadside drainage under Highway 7. The surrounding environment consists of ROW.	Roadside Drainage	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	
CV-0007-005681	23+928	Cleanout	Culvert CV-0007-005681 is a 300 mm CSP-U culvert proposed for cleanout. This location conveys roadside drainage under Highway 7. The surrounding environment consists of ROW, and agriculture.	Roadside Drainage	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	
CV-0007-000966	23+936	Cleanout	Culvert CV-0007-000966 is a 300 mm CSP-U culvert proposed for cleanout. This location conveys roadside drainage under Highway 7. The surrounding environment consists of ROW, and agriculture.	Roadside Drainage	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	
CV-0007-000782	24+327	Open Cut Replacement and Ditch Cleanout	Culvert CV-0007-000782 is a 900 mm SPCSP-U culvert proposed for open cut replacement and ditch cleanout. This location conveys roadside drainage to headwaters of an unnamed tributary of Chemong Lake under Highway 7. The surrounding environment consists of ROW, fencerow, and agriculture.	Roadside Drainage to Headwaters of an unnamed Tributary of Chemong Lake	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	
CV-0007-000967	24+330	Open Cut Replacement and Ditch Cleanout	Culvert CV-0007-000967 is a 900 mm SPCSP-U culvert proposed for open cut replacement and ditch cleanout. This location conveys roadside drainage to headwaters of an unnamed tributary of Chemong Lake under Highway 7. The surrounding environment consists of ROW, fencerow, and agriculture.	Roadside Drainage to Headwaters of an unnamed Tributary of Chemong Lake	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	
CV-0007-005928	24+332	New Culvert and Ditch Cleanout	CV-0007-005928 is to be installed (1200 mm). This location conveys roadside drainage to headwaters of an unnamed tributary of Chemong Lake under Highway 7. The surrounding environment consists of ROW, fencerow, and agriculture.	Roadside Drainage to Headwaters of an unnamed Tributary of Chemong Lake	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	
CV-0007-005860	25+272	Repair (Culvert extension) and Ditch Cleanout	Culvert CV-0007-005860 is a 750 mm CSP culvert proposed for repair. This location conveys roadside drainage under Highway 7. The surrounding environment consists of ROW, agriculture, and residential.	Roadside Drainage	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	
CV-0007-000968	25+290	Repair (Culvert extension) and Ditch Cleanout	Culvert CV-0007-000968 is a 600 mm CSP culvert proposed for repair. This location conveys roadside drainage under Highway 7. The surrounding environment consists of ROW, agriculture, and forest.	Roadside Drainage	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	
CV-0007-000204	25+450	Repair (Culvert extension) and Ditch Cleanout	Culvert CV-0007-000204 is a 750 mm CSP culvert proposed for repair. This location conveys roadside drainage under Highway 7. The surrounding environment consists of ROW and agricultural.	Roadside Drainage	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	
CV-0007-005926	13+935	Open Cut Replacement and Ditch Cleanout	Culvert CV-0007-005926 is 500 mm CSP culvert proposed for open cut replacement and ditch cleanout. This location conveys roadside drainage under Highway 7. The surrounding environment consists of ROW and business sector.	Roadside Drainage	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	
Resurfacing throughout the entire project limits	-	-	-	-	L	L	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	Pre-construction sweep by a trained person' The turtle nesting season is identified as May 15th to September 30th. If works are to occur at Jackson Creek (Monaghan Twp. - Stn. 11+505 to 11+665 Lt; Monaghan Twp. - Stn. 11+505 to 11+670 Rt; Monaghan Twp. - Stn. 11+680 to 11+720 Lt.; Monaghan Twp. - Stn. 11+685 to 11+725 Rt.) during the nesting season, temporary wildlife fencing should be installed (prior to May 15th).

1. List of Species at Risk provided by the MNFR ad NHIC web Application.
2. Potential for SAR to be present based on site visit by the Ainley Group, ad SAR potential information provided by the MNRF.

VL - Very Low Potential for Impacts
L - Low Potential for Impacts
M - Moderate Potential for Impacts
H - High Potential for Impacts
L* - Special Concern turtle species only

6.5.1 Butternut (*Juglans cinerea*) – Endangered

Butternut trees are a shade intolerant species that are often found alone or in small groups, in mixed hardwood stands or along fence lines or open fields / agricultural areas. This species prefers moist well drained soil, and is rarely found on dry rocky soil.

Based on a review of the early successional stages of vegetation and regrowth occurring within the project limits, potential suitable habitat for Butternut exists within the study area. However, there were no Butternuts observed within the study limits during field investigations in 2024.

6.5.2 Little Brown Bat (*Myotis lucifugus*) – Endangered

This small bat is considered to look similar to the Northern Long-eared Bat (**Section 6.5.4**). It can be found roosting in trees or buildings during the day, and often selects man-made structures (i.e. attics, abandoned buildings, barns) for summer maternity colony locations (MNR, 2021).

Deciduous, mixed, and coniferous forest communities identified beyond the Highway 7 ROW have the potential to provide roosting habitat for Little Brown Bat. However, there is no clearing or grubbing proposed within the project limits and the works are proposed to be limited to the highway ROW. As such, no impacts to Little Brown Bat are anticipated as a result of the undertaking.

6.5.3 Eastern Small-footed Myotis (*Myotis leibii*) – Endangered

The Eastern Small-footed Myotis can be found roosting in a variety of habitats ranging from rock outcrops, buildings, bridges, caves, mines, to hollow trees. Roost locations for the species often change on a daily basis (MNR, 2021).

Deciduous, mixed, and coniferous forest communities identified beyond the Highway 7 ROW have the potential to provide roosting habitat for Eastern Small-footed Myotis. However, there is no clearing or grubbing proposed within the project limits and the works are proposed to be limited to the highway ROW. As such, no impacts to Eastern Small-footed Myotis are anticipated as a result of the undertaking.

6.5.4 Northern Long-eared Bat (*Myotis septentrionalis*) – Endangered

Northern Long-eared Bat (Northern Myotis) is a long-eared bat which has dull yellow-brown fur and a pale grey underbelly. These individuals can be found throughout boreal forested areas in Ontario, where they commonly roost in cavities of trees or under loose bark (MNR, 2021).

Deciduous, mixed, and coniferous forest communities identified beyond the Highway 7 ROW have the potential to provide roosting habitat for Northern Long-eared Bat. However, there is no clearing or grubbing proposed within the project limits and the works are proposed to be limited to the highway ROW. As such, no impacts to Northern Long-eared Bat are anticipated as a result of the undertaking.

6.5.5 Tri-colored Bat (*Perimyotis subflavus*) – Endangered

Tri-colored Bat is a small pale brown bat with an orange-red muzzle, ears, and forearms, while the body and wings are dark brown. The Tri-colored Bat gets its name from the hairs on their backs which are black, yellow and brown (MNR, 2021). During the summer this bat species can be found in a variety of forested habitats where it roosts in older forests and occasionally barns or other structures. Despite roosting by themselves throughout the summer they overwinter in large groups usually in caves or underground locations (MNR, 2021).

Forest communities identified beyond the Highway 7 ROW have the potential to provide roosting habitat for Tri-colored Bat. However, there is no clearing or grubbing proposed within the project limits and the works are proposed to be limited to the highway ROW. As such, no impacts to Tri-colored Bat are anticipated as a result of the undertaking.

6.5.6 Silver-haired Bat (*Lasionycteris noctivagans*) – Endangered

The Silver-haired Bat is a large-bodied bat that has black or dark brown hair often with silver or grey tips (GOC, 2025). This species commonly roosts in tree cavities and under exfoliating bark and will migrate seasonally (GOC, 2025).

Forest communities identified beyond the Highway 7 ROW have the potential to provide roosting habitat for Silver-haired Bat. However, there is no clearing or grubbing proposed within the project limits and the works are proposed to be limited to the highway ROW. As such, no impacts to Silver-haired Bat are anticipated as a result of the undertaking.

6.5.7 Eastern Red Bat (*Lasiurus borealis*) – Endangered

This species has a medium to large body size and is reddish-orange in colour (GOC, 2025). The Eastern Red Bat will commonly roost in tree branches and migrate seasonally (GOC, 2025).

Forest communities identified beyond the Highway 7 ROW have the potential to provide roosting habitat for Eastern Red Bat. However, there is no clearing or grubbing proposed within the project limits and the works are proposed to be limited to the highway ROW. As such, no impacts to Eastern Red Bat are anticipated as a result of the undertaking.

6.5.8 Hoary Bat (*Lasiurus cinereus*) – Endangered

The Hoary Bat is a large-bodied bat, the largest bat species in Canada and is light yellow-brown on its face and neck and has white tipped hairs over the rest of its body (GOC, 2025). This species generally roosts in tree branches and will migrate seasonally (GOC, 2025).

Forest communities identified beyond the Highway 7 ROW have the potential to provide roosting habitat for Hoary Bat. However, there is no clearing or grubbing proposed within the project limits and the works are proposed to be limited to the highway ROW. As such, no impacts to Hoary Bat are anticipated as a result of the undertaking.

6.5.9 Red-headed Woodpecker (*Melanerpes erythrocephalus*) – Endangered

The Red-headed Woodpecker is a medium-sized bird (approx. 20 cm in length) and displays a vivid red head, neck and breast, with the rest being black and white with the white predominantly residing on the underside (MNR, 2020). The species prefers open woodland and woodland edges, often found in parks, golf courses and cemeteries, which typically provide dead trees for nesting and perching (MNR, 2020).

No individuals were encountered during field investigations in 2024, however; information from the OBBA notes potential for the species in the general study area. Habitat suitable for the species does occur within the study limits (adjacent woodlands); however, the works are proposed to be limited to the highway ROW. As such, no impacts to Red-headed Woodpecker are anticipated as a result of the undertaking.

6.5.10 Black Ash (*Fraxinus nigra*) – Endangered

Black Ash trees are a shade intolerant hardwood species that are predominantly found in moist sites such as swamps, bogs, fens and floodplains (MECP, 2019).

Black Ash can be found throughout most of Ontario, except the far north. During the field investigations in 2024 no Black Ash were encountered. However, information from background sources notes potential for the species in the general study area. Habitat suitable for the species does occur within the study limits (swamps); however, no individuals were observed and the works are proposed to be limited to the highway ROW. As such, no impacts to Black Ash are anticipated as a result of the undertaking.

6.5.11 Least Bittern (*Ixobrychus exilis*) – Threatened

The Least Bittern is typically found south of the Canadian Shield, in a variety of habitats, with strong preference to cattail marshes with a mixture of open pools and channels (MECP, 2019). Nesting preferences of this species include nest construction in stands of dense vegetation (i.e. cattails), which are almost always positioned near areas of open-water for foraging. This species is generally intolerant of human activities (i.e. loud noises, boat wakes, etc.), and will vacate marshes where human activities and influences are prominent (MECP, 2019).

No individuals were observed during field investigations by Ainley Group in 2024; however, element occurrences of Least Bittern have been identified within the study limits in background documents. Cattail marshes with open pools and channels were identified adjacent to Highway 7 within the study limits that may provide suitable habitat for Least Bittern; however, given that works will be maintained within the ROW, no impacts to Least Bittern are anticipated as a result of the undertaking.

6.5.12 Blanding's Turtle (*Emydoidea blandingii*) – Threatened

Blanding's Turtles can be found in many types of wetland habitat, but good quality habitat is interpreted to consist of a complex of upland and wetland habitat types in order to accommodate

the different stages of the turtle's life cycle. Kiviat (1997) notes the following characteristics consistent with good quality Blanding's Turtle habitat:

- Shallow (30 cm) and deep (120 cm) pools connected by channels.
- Opens or absent tree canopy.
- Tree species often along the wetland perimeter.
- A dense cover of shrubs, particularly Willow (*Salix sp.*) and Buttonbush (*Cephalanthus occidentalis*), with components of forbs and graminoids dispersed as hummocks and tussocks throughout the wetland.
- Coarse and fine organic debris in the substrate.

Wetlands and watercourses within the project limits were observed to provide habitat characteristics consistent with the description provided for Blanding's Turtles in the *MNR – Significant Wildlife Habitat: Technical Guide* (2000), the *MNR – General Habitat Description for the Blanding's Turtle* (July, 2013), and the *MNR (Southern Region) Forest Management Planning – Blanding's Turtle Suitable Aquatic Habitat and Area of Concern Application Protocol* (MNR, 2013). This is consistent with other background data sources (i.e. ORAA), which note observations of this species. Habitat with apparent suitability for Blanding's Turtles was observed within the project limits during the field reviews, particularly at the Jackson Creek Bridge resurfacing location:

- Monaghan Twp. – Stn. 11+505 to 11+665 Lt – Nesting and Hibernation
- Monaghan Twp. – Stn. 11+505 to 11+670 Rt – Nesting and Hibernation
- Monaghan Twp. – Stn. 11+680 to 11+720 Lt – Nesting and Hibernation
- Monaghan Twp. – Stn. 11+685 to 11+725 Rt – Nesting and Hibernation

No Blanding's Turtles were observed during the field investigations by Ainley Group in 2024; however, background information suggests the potential for Blanding's Turtle to exist within the study area. Mitigation measures to limit the potential for impacts to Blanding's Turtles are discussed in **Section 8.0**

6.5.13 Bobolink (*Dolichonyx oryzivorus*) – Threatened

Originally, Bobolinks were found living in the tallgrass prairies and open meadows of North America; however, since the switch to agricultural crops, Bobolinks are now commonly found in hayfields. In Ontario, they are found widely distributed throughout the province, south of the Boreal Forest (MNR, 2020). Bobolink populations are continuing to decline as farmers unintentionally disturb hayfield habitats, in which Bobolinks create their nest on the ground within the dense vegetation. This is believed to be the cause of Bobolink population declines.

Agricultural fields within the project limits were reviewed for habitat preference of this species including perennial cover crops (hay fields), and pasture lands with medium to tall grass

vegetation. Adjacent fields with annual row crops (i.e. corn, soybean) are not considered to be of preference. Based on the field review, suitable habitat may exist beyond the highway right-of-way within agricultural fields. As all works will be contained within the right-of-way, and no individuals were observed during field visits by Ainley Group in 2024, no impacts to Bobolink are anticipated as a result of the undertaking.

6.5.14 Eastern Meadowlark (*Sturnella magna*) – Threatened

Eastern Meadowlarks are medium-sized migratory songbirds that are easily identified by their bright yellow throat and belly that bears a black "v". They are commonly found south of the Canadian Shield, but are also present in areas such as Lake Nipissing, Tamiskaming, and Lake of the Woods (MNR, 2020). Eastern Meadowlarks inhabit moderately tall grasslands, pastures, hayfields, alfalfa fields, weedy borders of croplands, orchards, airports, roadsides, shrubby overgrown fields and any other open area that is present (MNR, 2020). They are commonly seen sitting on small trees, fence posts or shrubs, where they use the added height to project their songs.

Agricultural fields within the project limits were reviewed for habitat preference of this species including perennial cover crops (hay fields), and pasture lands with medium to tall grass vegetation. Adjacent fields with annual row crops (i.e. corn, soybean) are not considered to be of preference. Based on the field review, suitable habitat may exist beyond the highway right-of-way within agricultural fields. As all works will be contained within the right-of-way, and no individuals were observed during field visits by Ainley Group in 2024, no impacts to Eastern Meadowlark are anticipated as a result of the undertaking.

6.5.15 Barn Swallow (*Hirundo rustica*) – Special Concern

The Barn Swallow is one of the worlds' most common and widespread landbird species; however, has experienced very large population declines since the mid to late 1980's in Canada. Barn Swallows nest in man-made structures including barns, bridges, and culverts, and forage over open meadows and agricultural areas (MNR, 2021).

A review of the study area and adjacent lands suggests that suitable foraging habitat exists for Barn Swallows within the project limits; including open areas such as marsh or agricultural fields (perennial cover crop, annual row crop). Elemental occurrences of Barn Swallows were also identified by OBBA and NHIC.

No Barn Swallow, or their nests, were observed at any of the culvert locations during field investigations in 2024, and no impacts to the species are anticipated based on the proposed undertakings.

6.5.16 Canada Warbler (*Cadellina canadensis*) – Special Concern

The Canada Warbler is a migratory song bird that breeds in a range of deciduous and coniferous forest types, with preference to generally wet forest types. A well-developed shrub layer is also

characteristic of the habitat of this species. The nests of this species are typically located on or near the ground on mossy logs or roots, along stream banks, or on hummocks (MNR, 2020).

No individuals were observed during field investigations by Ainley Group in 2024; however, information provided by background documents suggests the possibility of Canada Warbler existing within the study limits. Wet forested areas located adjacent to the highway ROW provide potential habitat for the Canada Warbler; however, as works are not proposed to extend beyond the ROW, impacts to the Canada Warbler are not anticipated as a result of the undertaking.

6.5.17 Eastern Wood-Pewee (*Contopus virens*) – Special Concern

The Eastern Wood-Pewee is a migratory song bird that lives in the mid-canopy layer of deciduous and mixed forests. This species prefers the edges of forested areas or forest clearings, where an abundance of intermediate-age mature trees can be found with very little understory (MNR, 2020).

Information from NHIC suggests the potential for Eastern Wood-Pewee within the general study area; however, one individual was observed during the field investigations by Ainley Group in 2024. Forest edges adjacent to the highway ROW may provide potential habitat for the Eastern Wood Pewee; however, as works are not proposed to extend beyond the ROW, impacts to the Eastern Wood Pewee are not anticipated. Further, as a special concern species, neither the individuals nor their habitat are afforded protection under *SARO / SARA*.

6.5.18 Eastern Musk Turtle (*Sternotherus odoratus*) – Special Concern

This species inhabits slow moving rivers, marshes, lakes, and ponds that have muddy bottoms and emergent vegetation. The muddy bottoms are favored for winter hibernation burrows. (MNR, 2020).

No Eastern Musk Turtles were observed during the field investigations by Ainley Group in 2024; however, information provided by the ORRA suggests the potential for Eastern Musk Turtles to exist within the study area. As a special concern species, neither individuals nor their habitat is afforded protection under the *ESA*. Further, mitigation measures for threatened turtle species are similarly anticipated to provide protection for Eastern Musk Turtle. If Eastern Musk Turtle(s) are encountered during construction, then general avoidance measures should be implemented to ensure no harm or harassment to the encountered individual(s).

6.5.19 Rusty Blackbird (*Euphagus carolinus*) – Special Concern

The Rusty Blackbird is a medium-sized songbird (approx. 21-25 cm in size) and displays pale yellow eyes and a black bill (MNR, 2020). The species prefers being near coniferous forest with wetlands within the vicinity (MNR, 2020). During the winter this species can be found in wet woodlands and often forages in agricultural lands.

No individuals were observed during field investigations by Ainley Group in 2024; however, information provided by eBird suggests the possibility of Rusty Blackbird existing within the study limits. As works are not proposed to extend beyond the ROW, impacts to the Rusty Blackbird are

not anticipated as a result of the undertaking. Further, as a special concern species, neither individuals nor their habitat are afforded protection under *SARO / SARA*.

6.5.20 Snapping Turtle (*Chelydra serpentina*) – Special Concern

Information provided by the MNR (2020) suggests that Snapping Turtles prefer to spend the majority of their lives in shallow water where they can hide under soft mud and leaf litter. During the nesting season females travel overland in search of suitable nesting sites, which are typically sandy or gravelly areas. These turtles are known to often take advantage of man-made structures, such as road edges, for the purpose of nesting.

Element occurrences have been identified by NHIC (Make-A-Map) and ORAA. As a special concern species, neither individuals nor their habitat are afforded protection under the *ESA*. However, mitigation measures for threatened turtle species are similarly anticipated to provide protection for Snapping Turtle. If Snapping Turtle(s) are encountered during construction, then general avoidance measures should be implemented to ensure no harm or harassment to the encountered individual(s).

6.5.21 Wood Thrush (*Hylocichla mustelina*) – Special Concern

The Wood Thrush is a medium-sized songbird that is found in mature deciduous and mixed forest. This species is generally limited to moist stands with well-developed undergrowth and tall trees, with a preference towards large forest tracts (MNR, 2020).

No individuals were observed during field investigations by Ainley Group in 2024; however, information from background documents suggests potential for the species within the general project area. Deciduous and mixed forest communities adjacent to the ROW may provide potential habitat for Wood Thrush; however, as works are not proposed to extend beyond the ROW, impacts to the Wood Thrush are not anticipated.

6.5.22 Grasshopper Sparrow (*Ammodramus savannarum*) – Special Concern

The Grasshopper Sparrow is a grassland bird species known to nest in hayfields, pastures, alvars, prairies, and occasionally grain crops. The species will create a well-hidden cup shaped nest woven from grasses (MECP, 2019).

No individuals were observed during field investigations by Ainley Group in 2024; however, element occurrences of Grasshopper Sparrow have been identified within the study limits in background documents. Grassland areas (hayfields) located adjacent to the highway ROW provide potential habitat for the Grasshopper Sparrow; however, as works are not proposed to extend beyond the ROW, no impacts to the Grasshopper Sparrow are anticipated as a result of the undertaking. Further, as a special concern species, neither individuals nor their habitat are afforded protection under *SARO / SARA*.

6.5.23 Aquatic SAR

No aquatic SAR species were identified within the project limits.

7.0 GENERAL ASSESSMENT OF POTENTIAL IMPACTS OF THE PROJECT

The following sections provide details pertaining to a general assessment of potential impacts to the terrestrial environment within the Highway 7 – County Road 15 to County Road 26 project limits. The project is anticipated to include the following general components:

- Culvert and ditch cleanout;
- Culvert repair (culvert extension);
- Open cut replacement;
- New culvert installation;
- Resurfacing of 9.0 km of Highway 7;
- Addition of left turn lanes at Stockdale Road;
- Addition of a right turn lane at Maple Grove Road;
- Removal and reinstatement of concrete curb and gutter;
- Installation of two (2) traffic count stations;

7.1 Potential Impacts Associated with Culvert Cleanout, Culvert Repair, and Ditch Cleanout

Per **Table 1**, culvert cleanout, culvert repair, and ditch cleanout is proposed at the following locations:

- CV-0007-000964 – Cleanout
- CV-0007-005674 – Cleanout
- CV-0007-005675 – Cleanout
- CV-0007-005679 – Cleanout
- CV-0007-005678 – Cleanout
- CV-0007-005680 – Cleanout
- CV-0007-000965 – Cleanout
- CV-0007-005681 – Cleanout
- CV-0007-000966 – Cleanout
- CV-0007-000782 – Ditch Cleanout

- CV-0007-000967 – Ditch Cleanout
- CV-0007-005860 – Repair (Culvert Extension) and Ditch Cleanout
- CV-0007-000968 – Repair (Culvert Extension) and Ditch Cleanout
- CV-0007-000204 – Repair (Culvert Extension) and Ditch Cleanout
- CV-0007-005926 – Ditch Cleanout

The potential impacts associated with culvert cleanout, ditch cleanout, and repair are anticipated to be generally low.

It is anticipated that the culverts / ditches will be cleaned out via mechanical means, with associated machinery situated on the highway shoulders or within the highway ROW. There is a possibility that a small working area may be required at the culvert ends to facilitate the cleanout, to which there may be minor grading works and temporary removal of vegetation. Likewise, repair works are anticipated to require a small working area at the culvert ends to facilitate the culvert extension (2 m extension each end), to which there may be minor grading works and temporary removal of vegetation. No other vegetation clearing has been identified at these locations.

Habitat appearing suitable for Blanding's Turtles was not identified at any culverts proposed for cleanout, ditch cleanout, or repair.

Mitigation measures to limit potential impacts at these locations are further detailed in **Section 8.0**.

7.2 Potential Impacts Associated with Culvert Replacement / New Culvert Installation

Per **Table 1**, culvert replacement is proposed at the following locations:

- CV-0007-000782 – Open Cut Replacement
- CV-0007-000967 – Open Cut Replacement
- CV-0007-005926 – Open Cut Replacement
- CV-0007-005928 - New Culvert (24+332)

Impacts associated with the above noted work includes disturbance to the highway shoulder during excavation, grading activities, and vegetation removal associated with temporary widening (where required). Habitat appearing suitable for Blanding's Turtles was not identified at any culverts proposed for replacement.

Given that no SAR vegetation was encountered or identified within the highway ROW at these locations, impacts to the vegetative species are anticipated to be minor and temporary in nature. Vegetation clearing has not been identified at any culverts proposed for replacement; however, temporary disturbance to vegetation in the ROW may occur during construction activities.

Mitigation measures to limit potential impacts at these locations are further detailed in **Section 8.0**.

7.3 Potential Impacts Associated with Resurfacing, Addition of Left Turn Lanes at Stockdale Road, Addition of Right Turn Lane at Maple Grove Road, and Removal and Reinstatement of Concrete Curb and Gutter

Surface course paving is anticipated to be conducted for 9.0 km within the project limits. Design requirements include removal of asphalt pavement – partial depth. Left turn lanes are anticipated to be added at Stockdale Road, and a right turn lane is anticipated to be added at Maple Grove Road. Design requirements include excavation works and widening of the roadway. Removal of concrete curb and gutter is anticipated to be approximately 57 m within the project limits and reinstatement is anticipated to be approximately 62 m within the project limits. Potential impacts associated with these works include temporary disturbance to turtle nesting sites (gravel materials used in road base) that exist along the edge of the roadway and potential erosion and sedimentation impacts to downstream receivers from excavation activities. Mitigation measures to limit potential impacts at the shoulder rehabilitation locations are provided in **Section 8.0**.

7.4 Potential Impacts Associated with Traffic Count Stations

Installation of two (2) traffic count stations will be conducted during resurfacing activities and are not anticipated to cause any impacts in addition to the impacts listed in **Section 7.3** from the highway resurfacing works.

8.0 MITIGATION MEASURES

The below mitigation measures are recommended for incorporation into project deliverables (i.e. contract documents). These mitigation measures are to be respectively applied to limit impacts to the natural environment including the following threatened species that were noted to have potential to occur within the study limits following screening measures described above and as shown in **Table 4**. Specific reference to each species and culvert / resurfacing locations are provided in **Table 5**.

- Blanding's Turtle – Threatened

<u>Mitigation Measures</u>

Given that the works are interpreted to consist of culvert replacement / rehabilitation, and resurfacing and will be contained within the existing highway platform and ROW, potential impacts to the natural environment are anticipated to be minimal. However, to limit the potential for impacts, the following mitigation measures should be incorporated into the detail design in order to address the protection of the natural environment within the project area during construction.

- A trained person who is familiar with the identification of SAR turtles, birds, vegetation, and snakes should be on-site to perform a visual sweep / inspection of the construction zone prior to starting work on a daily basis between April 1 to the end of the construction season to ensure that SAR are not present and will not be impacted by equipment or worker activities.

- The turtle nesting season is identified as May 15th to September 30th. If works are to occur during the nesting season, temporary wildlife fencing should be installed (prior to May 15th) and maintained at the location exhibiting turtle nesting potential as listed in **Section 6.5.12**, and including:
    - Monaghan Twp. – Stn. 11+505 to 11+665 Lt – Nesting and Hibernation
    - Monaghan Twp. – Stn. 11+505 to 11+670 Rt – Nesting and Hibernation
    - Monaghan Twp. – Stn. 11+680 to 11+720 Lt – Nesting and Hibernation
    - Monaghan Twp. – Stn. 11+685 to 11+725 Rt – Nesting and Hibernation
- Stockpiled earth / granular materials in proximity to the areas identified as turtle habitat in **Section 6.5.12** should be covered with geotextile, or be placed behind an exclusionary barrier, between May 15th and June 30th to prevent turtle nesting.
- To avoid impacts to migratory breeding birds, vegetation removal if necessary, during culvert replacement / rehabilitation and resurfacing works should be avoided between April 15 and August 15 (migratory bird breeding and nesting period). If works are required within this timing window, then the area should be cleared of nests by a qualified avian biologist prior to the activity being undertaken.
- Further, to avoid impacts to bats, tree removal if necessary, during culvert replacement / rehabilitation, ditch cleanout, and resurfacing / reconstruction works, should be completed outside of the active season for bats (March 15 to November 30, in any calendar year).
- If a SAR is encountered during construction, all works in the immediate area must cease and the Contract Administrator should be contacted immediately for direction.
- Harassment to SAR and other wildlife should not occur during construction activities.
- Invasive and noxious vegetation, should be removed in accordance with *SP ENVR0011 – Requirements for Herbicide Spraying and Mechanical Cutting of Invasive and Noxious Vegetation Species*. Mechanical removal of the identified species is recommended within the study limits.
- An Environmentally Sensitive Area (ESA) designation should be applied to work areas adjacent to the PSWs within the project limits (as outlined in **Section 6.4.1**), to minimize the potential for impacts to occur.
- A detailed sediment and erosion control plan, which includes but is not limited to measures to limit sedimentation impacts associated with the proposed works, should be completed prior to construction.
- In an effort to protect the surrounding environment, erosion and sediment control measures should be inspected daily during heavy rain events to ensure they are working appropriately and should be repaired immediately if deficiencies are found.

9.0 CONCLUSIONS

The terrestrial assessment for this project included a background information review, field investigation to determine existing conditions and natural heritage features (including SAR), and assessment of potential impacts from the replacement / rehabilitation of culverts and resurfacing works within the Highway 7 – County Road 26 to County Road 15 study limits.

Natural heritage features were identified within proximity to the study area including potential habitat for SAR.

One (1) SAR, Blanding's Turtle, has the potential to be impacted within the project limits (described in **Section 6.5**). Potential impacts to this species and their core habitat are anticipated to be low provided appropriate mitigation measures are employed. Mitigation measures for the protection of these species are described in detail in **Section 8.0**.

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FIGURES

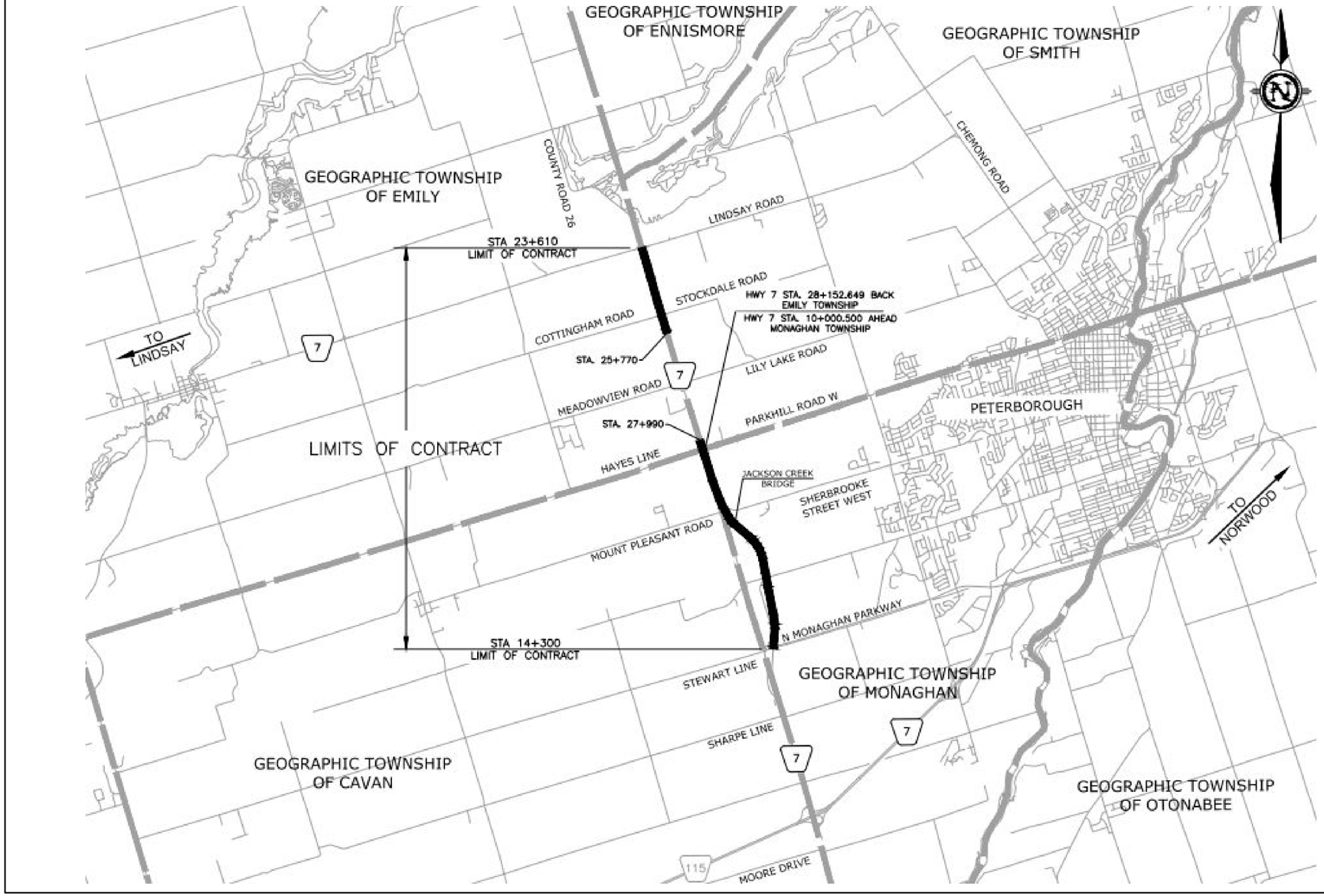
COUNTY ROAD 15 NORTH MONAGHAN PARKWAY TO COUNTY ROAD 26 (FOWLERS CORNERS)

N

Minley GROUP CONSULTING ENGINEERS PLANNERS

FIGURE 1

REGIONAL LOCATION PLAN



SOURCE: LAND INFORMATION ONTARIO (MNRF)

N.T.S

LEGEND

- STUDY AREA - 120 M
- CLEANOUT
- OPEN CUT REPLACEMENT
- REPAIR
- INTERMITTENT WATERCOURSE
- PERMANENT WATERCOURSE
- UNEVALUATED WETLAND
- EVALUATED WETLAND - OTHER
- EVALUATED WETLAND - PROVINCIAL
- TEMPORARY WILDLIFE FENCING

METRIC

DIMENSIONS ARE IN METRES
AND/OR MILLIMETRES
UNLESS OTHERWISE SHOWN

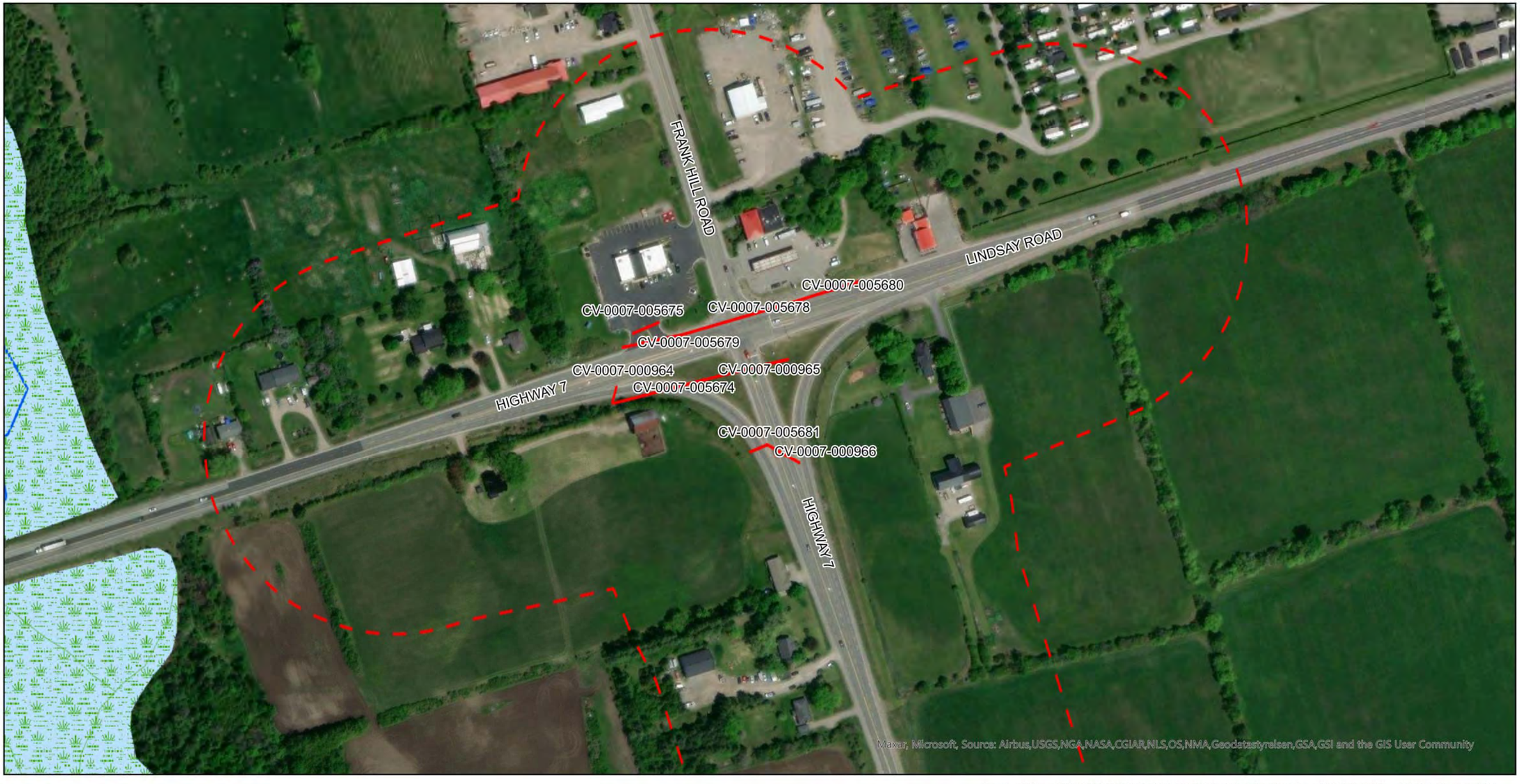
COUNTY ROAD 15 NORTH MONAGHAN PARKWAY
TO COUNTY ROAD 26 (FOWLER'S CORNERS)

N

Ainley GROUP CONSULTING ENGINEERS PLANNERS

FIGURE 2

NATURAL HERITAGE FEATURES



Source: Airbus,USGS,NGA,NASA,CGIAR,NLS,OS,NMA,Geodatastyrelsen,GSA,GSI and the GIS User Community

N.T.S

LEGEND

- STUDY AREA - 120 M
- CLEANOUT
- OPEN CUT REPLACEMENT
- REPAIR
- INTERMITTENT WATERCOURSE
- PERMANENT WATERCOURSE
- UNEVALUATED WETLAND
- EVALUATED WETLAND - OTHER
- EVALUATED WETLAND - PROVINCIAL
- TEMPORARY WILDLIFE FENCING

METRIC

DIMENSIONS ARE IN METRES
AND/OR MILLIMETRES
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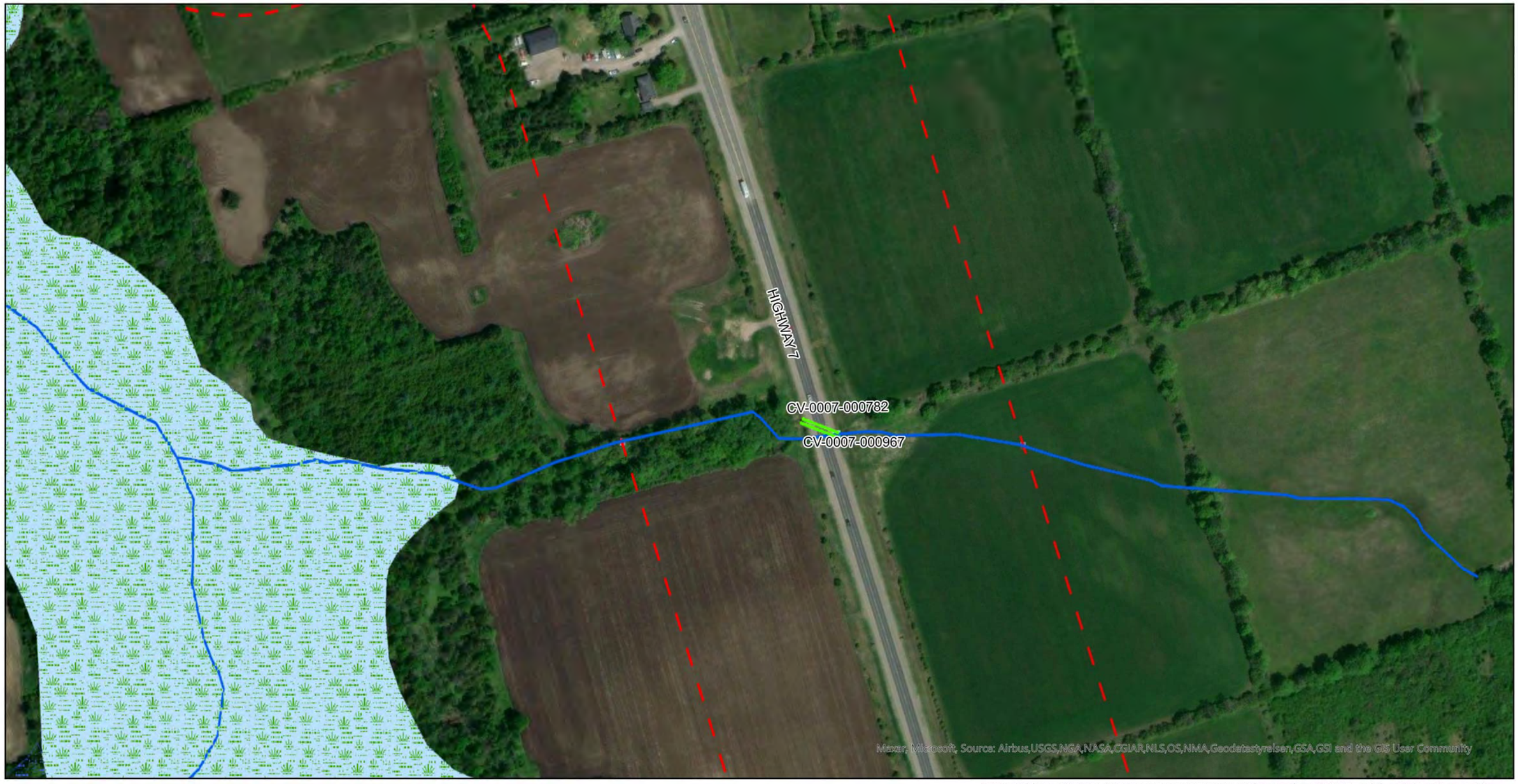
COUNTY ROAD 15 NORTH MONAGHAN PARKWAY
TO COUNTY ROAD 26 (FOWLER'S CORNERS)

N

Ainley GROUP CONSULTING ENGINEERS PLANNERS

FIGURE 3

NATURAL HERITAGE FEATURES



Source: Airbus,USGS,NGA,NASA,CGIAR,NLS,OS,NMA,Geodatastyrelsen,GSA,GSI and the GIS User Community

N.T.S

LEGEND

- STUDY AREA - 120 M
- CLEANOUT
- OPEN CUT REPLACEMENT
- REPAIR
- INTERMITTENT WATERCOURSE
- PERMANENT WATERCOURSE
- UNEVALUATED WETLAND
- EVALUATED WETLAND - OTHER
- EVALUATED WETLAND - PROVINCIAL
- TEMPORARY WILDLIFE FENCING

METRIC

DIMENSIONS ARE IN METRES
AND/OR MILLIMETRES
UNLESS OTHERWISE SHOWN

COUNTY ROAD 15 NORTH MONAGHAN PARKWAY
TO COUNTY ROAD 26 (FOWLER'S CORNERS)

N

Ainley GROUP CONSULTING ENGINEERS PLANNERS

FIGURE 4

NATURAL HERITAGE FEATURES

Source: Airbus,USGS,NGA,NASA,CGIAR,NLS,OS,NMA,Geodatastyrelsen,GSA,GSI and the GIS User Community

N.T.S

LEGEND

- STUDY AREA - 120 M
- CLEANOUT
- OPEN CUT REPLACEMENT
- REPAIR
- INTERMITTENT WATERCOURSE
- PERMANENT WATERCOURSE
- UNEVALUATED WETLAND
- EVALUATED WETLAND - OTHER
- EVALUATED WETLAND - PROVINCIAL
- TEMPORARY WILDLIFE FENCING

METRIC

DIMENSIONS ARE IN METRES
AND/OR MILLIMETRES
UNLESS OTHERWISE SHOWN

COUNTY ROAD 15 NORTH MONAGHAN PARKWAY
TO COUNTY ROAD 26 (FOWLER'S CORNERS)

N

Ainley GROUP CONSULTING ENGINEERS PLANNERS

FIGURE 5

NATURAL HERITAGE FEATURES

Source: Airbus,USGS,NGA,NASA,CGIAR,NLS,OS,NMA,Geodatastyrelsen,GSA,GSI and the GIS User Community

N.T.S

LEGEND

- STUDY AREA - 120 M
- CLEANOUT
- OPEN CUT REPLACEMENT
- REPAIR
- INTERMITTENT WATERCOURSE
- PERMANENT WATERCOURSE
- UNEVALUATED WETLAND
- EVALUATED WETLAND - OTHER
- EVALUATED WETLAND - PROVINCIAL
- TEMPORARY WILDLIFE FENCING

METRIC

DIMENSIONS ARE IN METRES
AND/OR MILLIMETRES
UNLESS OTHERWISE SHOWN

COUNTY ROAD 15 NORTH MONAGHAN PARKWAY
TO COUNTY ROAD 26 (FOWLER'S CORNERS)

N

Ainley GROUP CONSULTING ENGINEERS PLANNERS

FIGURE 6

NATURAL HERITAGE FEATURES

Source: Airbus,USGS,NGA,NASA,CGIAR,NLS,OS,NMA,Geodatastyrelsen,GSA,GSI and the GIS User Community

N.T.S

LEGEND

- STUDY AREA - 120 M
- CLEANOUT
- OPEN CUT REPLACEMENT
- REPAIR
- INTERMITTENT WATERCOURSE
- PERMANENT WATERCOURSE
- UNEVALUATED WETLAND
- EVALUATED WETLAND - OTHER
- EVALUATED WETLAND - PROVINCIAL
- TEMPORARY WILDLIFE FENCING

METRIC

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AND/OR MILLIMETRES
UNLESS OTHERWISE SHOWN

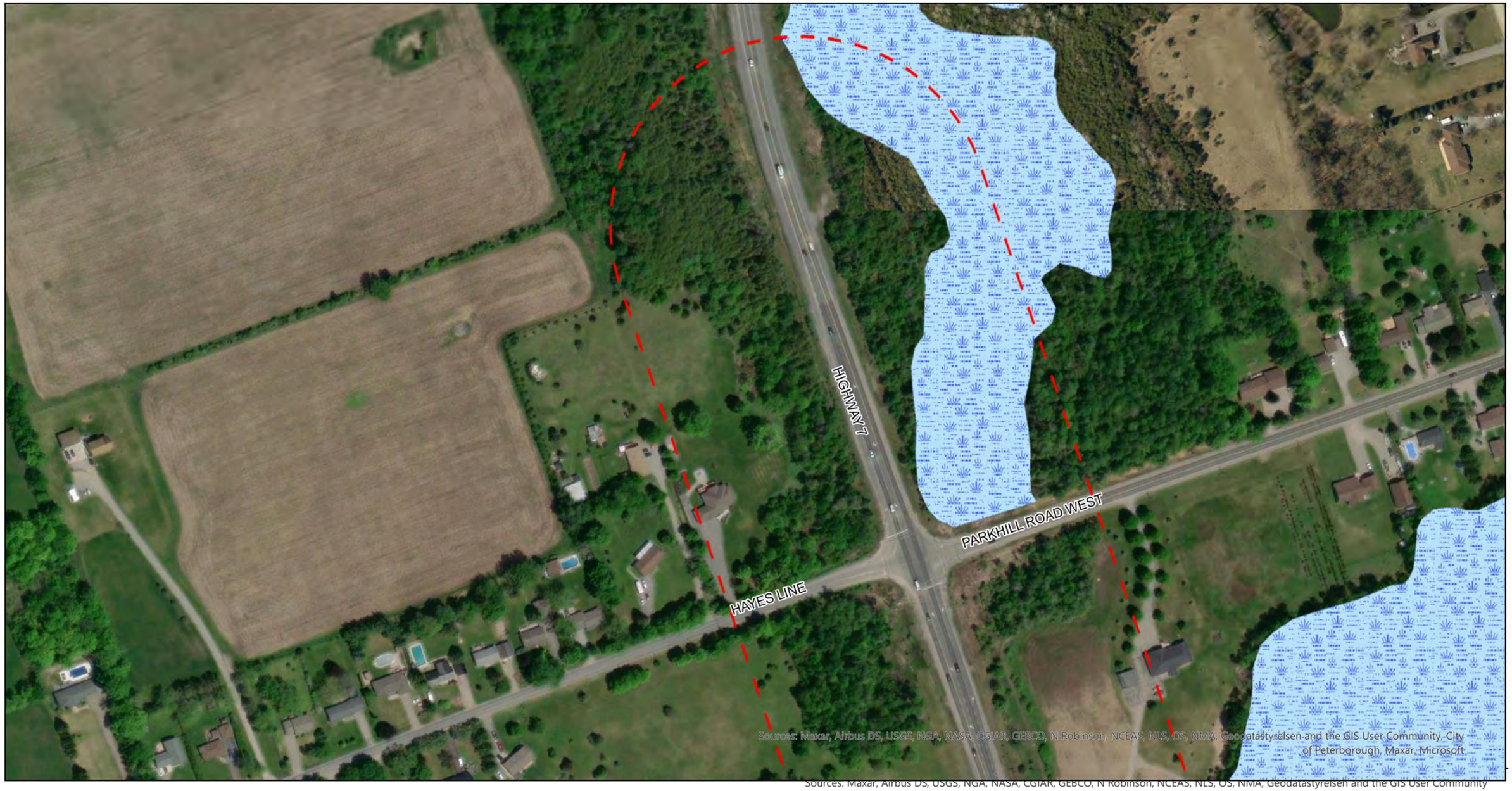
COUNTY ROAD 15 NORTH MONAGHAN PARKWAY
TO COUNTY ROAD 26 (FOWLER'S CORNERS)

N

Ainley GROUP CONSULTING ENGINEERS PLANNERS

FIGURE 7

NATURAL HERITAGE FEATURES



Sources: Maxar, Airbus DS, USGS, NGA, NASA, CGIAR, GEBCO, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen and the GIS User Community

N.T.S

LEGEND

- STUDY AREA - 120 M
- CLEANOUT
- OPEN CUT REPLACEMENT
- REPAIR
- INTERMITTENT WATERCOURSE
- PERMANENT WATERCOURSE
- UNEVALUATED WETLAND
- EVALUATED WETLAND - OTHER
- EVALUATED WETLAND - PROVINCIAL
- TEMPORARY WILDLIFE FENCING

METRIC

DIMENSIONS ARE IN METRES
AND/OR MILLIMETRES
UNLESS OTHERWISE SHOWN

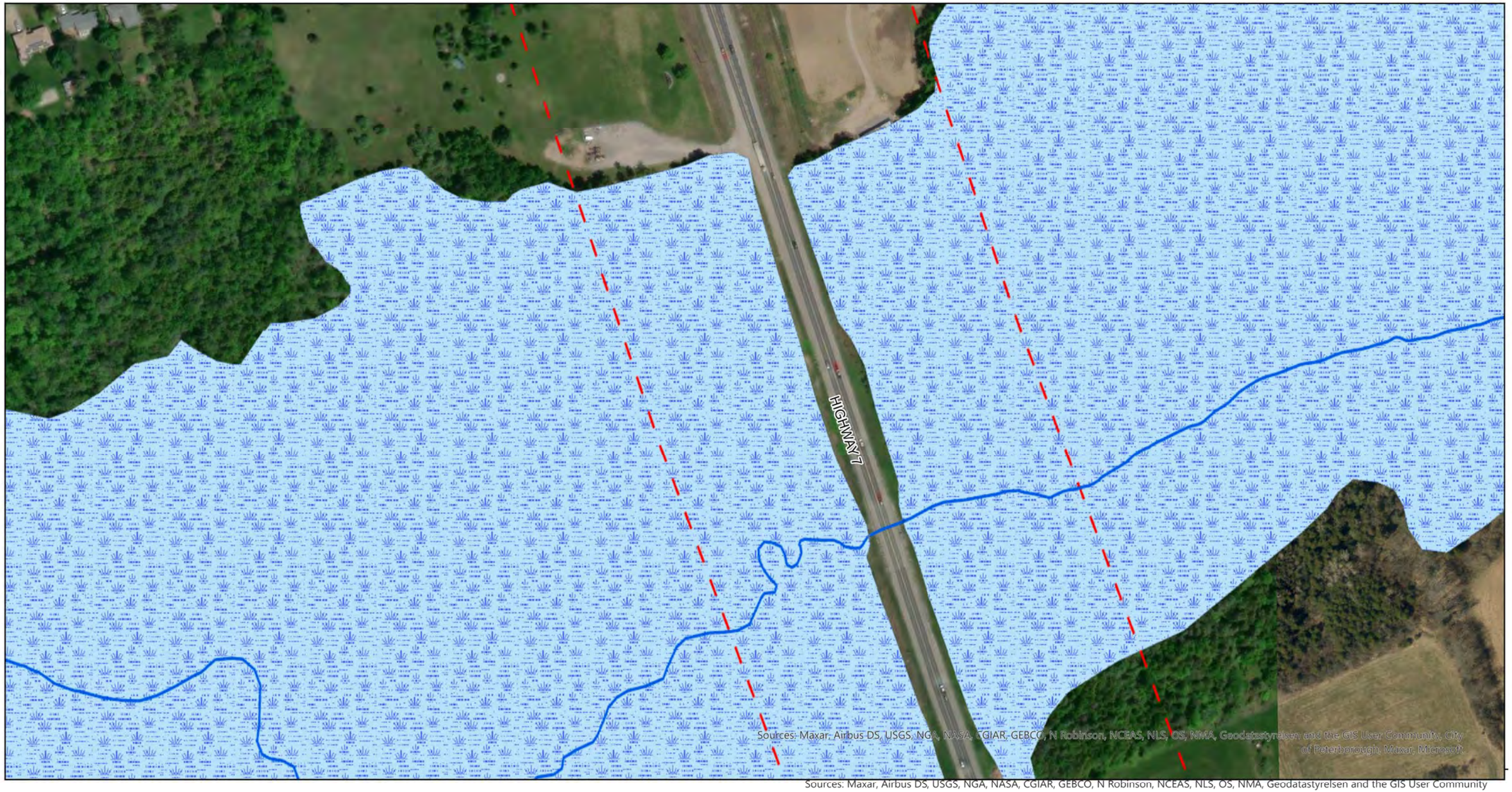
COUNTY ROAD 15 NORTH MONAGHAN PARKWAY
TO COUNTY ROAD 26 (FOWLER'S CORNERS)

N

Ainley GROUP CONSULTING ENGINEERS PLANNERS

FIGURE 8

NATURAL HERITAGE FEATURES



Sources: Maxar, Airbus DS, USGS, NGA, NASA, CGIAR, GEBCO, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen and the GIS User Community

N.T.S

LEGEND

- STUDY AREA - 120 M
- CLEANOUT
- OPEN CUT REPLACEMENT
- REPAIR
- INTERMITTENT WATERCOURSE
- PERMANENT WATERCOURSE
- UNEVALUATED WETLAND
- EVALUATED WETLAND - OTHER
- EVALUATED WETLAND - PROVINCIAL
- TEMPORARY WILDLIFE FENCING

METRIC

DIMENSIONS ARE IN METRES
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UNLESS OTHERWISE SHOWN

COUNTY ROAD 15 NORTH MONAGHAN PARKWAY
TO COUNTY ROAD 26 (FOWLER'S CORNERS)

N

Ainley GROUP CONSULTING ENGINEERS PLANNERS

FIGURE 9

NATURAL HERITAGE FEATURES

Sources: Maxar, Airbus DS, USGS, NGA, NASA, CGIAR, GEBCO, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen and the GIS User Community, City of Peterborough, Maxar, Microsoft

Sources: Maxar, Airbus DS, USGS, NGA, NASA, CGIAR, GEBCO, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen and the GIS User Community

N.T.S

LEGEND

- STUDY AREA - 120 M
- CLEANOUT
- OPEN CUT REPLACEMENT
- REPAIR
- INTERMITTENT WATERCOURSE
- PERMANENT WATERCOURSE
- UNEVALUATED WETLAND
- EVALUATED WETLAND - OTHER
- EVALUATED WETLAND - PROVINCIAL
- TEMPORARY WILDLIFE FENCING

METRIC

DIMENSIONS ARE IN METRES
AND/OR MILLIMETRES
UNLESS OTHERWISE SHOWN

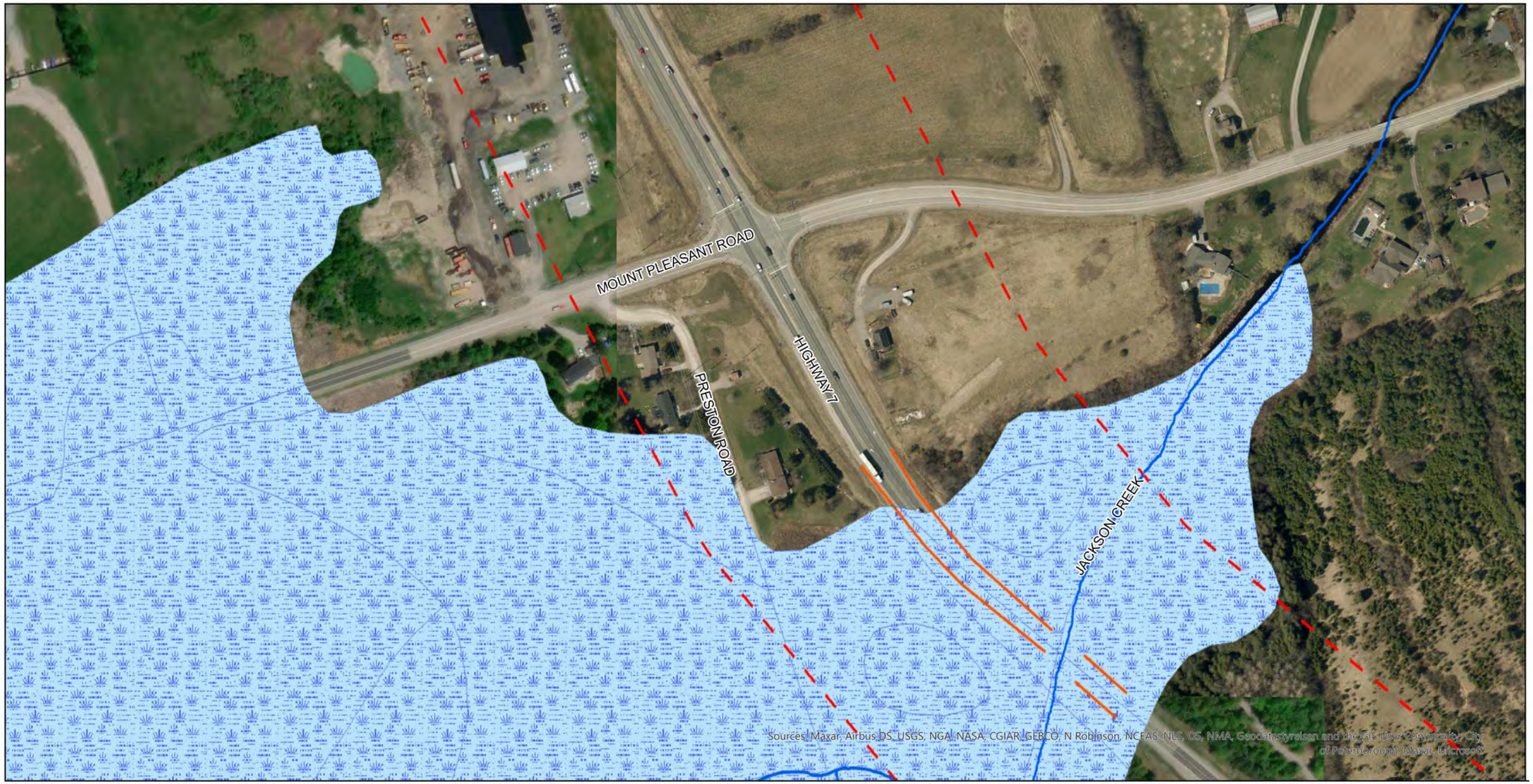
COUNTY ROAD 15 NORTH MONAGHAN PARKWAY
TO COUNTY ROAD 26 (FOWLER'S CORNERS)

N

Ainley GROUP CONSULTING ENGINEERS PLANNERS

FIGURE 10

NATURAL HERITAGE FEATURES



Sources: Maxar, Airbus DS, USGS, NGA, NASA, CGIAR, GEBCO, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen and the GIS User Community

N.T.S

LEGEND

- STUDY AREA - 120 M
- CLEANOUT
- OPEN CUT REPLACEMENT
- REPAIR
- INTERMITTENT WATERCOURSE
- PERMANENT WATERCOURSE
- UNEVALUATED WETLAND
- EVALUATED WETLAND - OTHER
- EVALUATED WETLAND - PROVINCIAL
- TEMPORARY WILDLIFE FENCING

METRIC

DIMENSIONS ARE IN METRES
AND/OR MILLIMETRES
UNLESS OTHERWISE SHOWN

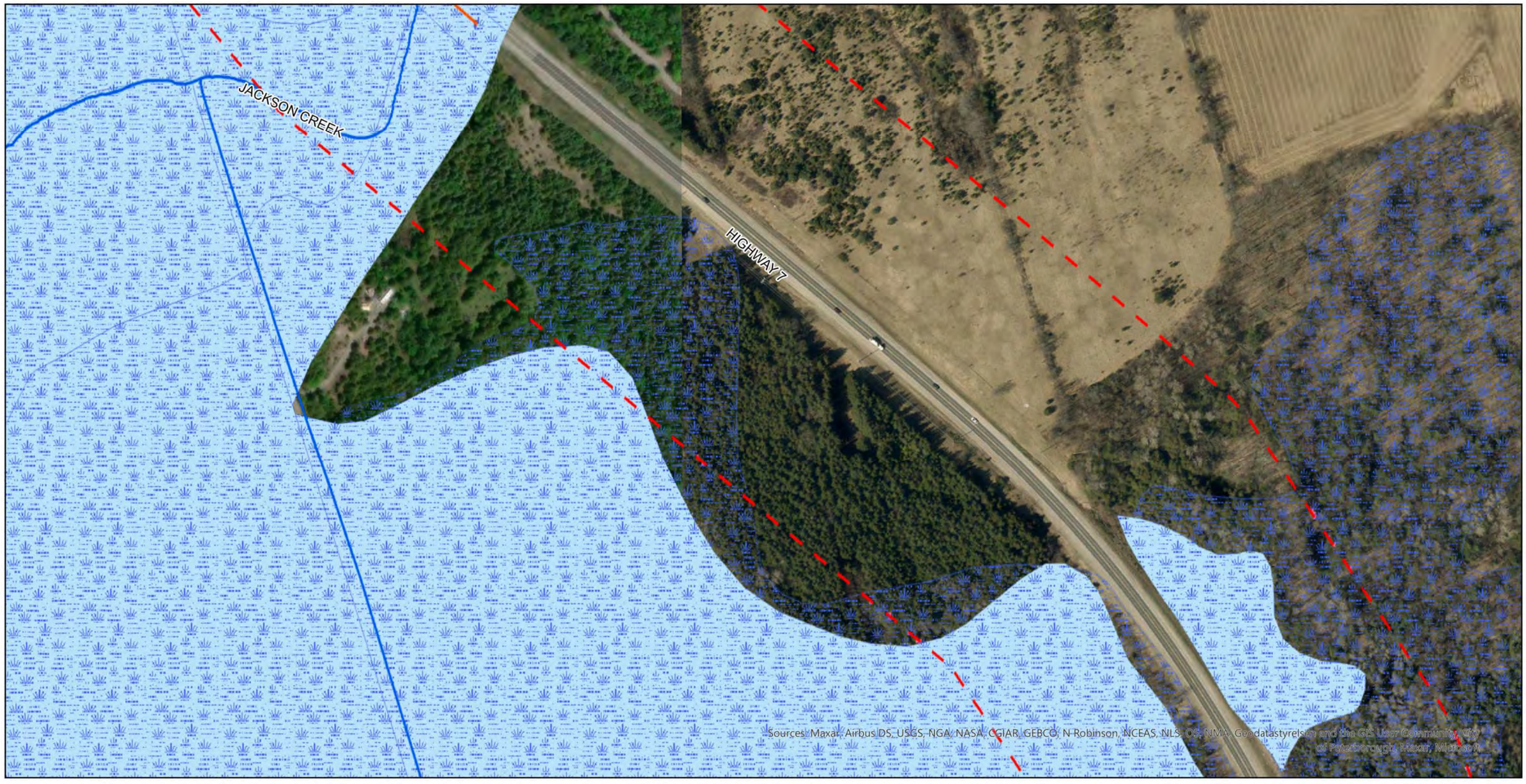
COUNTY ROAD 15 NORTH MONAGHAN PARKWAY
TO COUNTY ROAD 26 (FOWLER'S CORNERS)

N

Ainley GROUP CONSULTING ENGINEERS PLANNERS

FIGURE 11

NATURAL HERITAGE FEATURES



Sources: Maxar, Airbus DS, USGS, NGA, NASA, CGIAR, GEBCO, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen and the GIS User Community

N.T.S

LEGEND

- STUDY AREA - 120 M
- CLEANOUT
- OPEN CUT REPLACEMENT
- REPAIR
- INTERMITTENT WATERCOURSE
- PERMANENT WATERCOURSE
- UNEVALUATED WETLAND
- EVALUATED WETLAND - OTHER
- EVALUATED WETLAND - PROVINCIAL
- TEMPORARY WILDLIFE FENCING

METRIC

DIMENSIONS ARE IN METRES
AND/OR MILLIMETRES
UNLESS OTHERWISE SHOWN

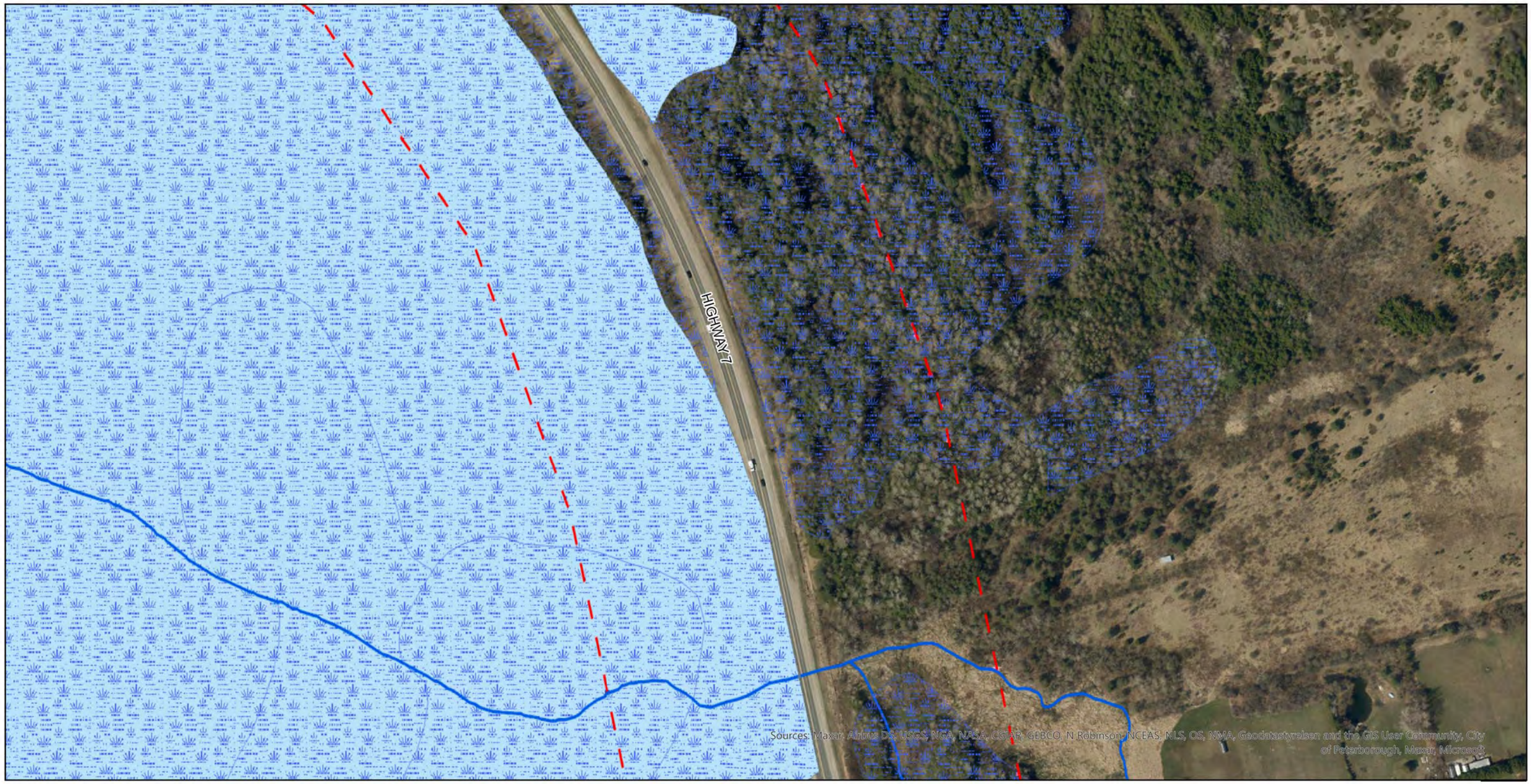
COUNTY ROAD 15 NORTH MONAGHAN PARKWAY
TO COUNTY ROAD 26 (FOWLER'S CORNERS)

N

Ainley GROUP CONSULTING ENGINEERS PLANNERS

FIGURE 12

NATURAL HERITAGE FEATURES



Sources: Maxar, Airbus DS, USGS, NGA, NASA, CGIAR, GEBCO, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen and the GIS User Community

N.T.S

LEGEND

- STUDY AREA - 120 M
- CLEANOUT
- OPEN CUT REPLACEMENT
- REPAIR
- INTERMITTENT WATERCOURSE
- PERMANENT WATERCOURSE
- UNEVALUATED WETLAND
- EVALUATED WETLAND - OTHER
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METRIC

DIMENSIONS ARE IN METRES
AND/OR MILLIMETRES
UNLESS OTHERWISE SHOWN

COUNTY ROAD 15 NORTH MONAGHAN PARKWAY
TO COUNTY ROAD 26 (FOWLER'S CORNERS)

N

Ainley GROUP CONSULTING ENGINEERS PLANNERS

FIGURE 13

NATURAL HERITAGE FEATURES

Sources: Maxar, Airbus DS, USGS, NGA, NASA, CGIAR, GEBCO, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen and the GIS User Community

N.T.S

LEGEND

- STUDY AREA - 120 M
- CLEANOUT
- OPEN CUT REPLACEMENT
- REPAIR
- INTERMITTENT WATERCOURSE
- PERMANENT WATERCOURSE
- UNEVALUATED WETLAND
- EVALUATED WETLAND - OTHER
- EVALUATED WETLAND - PROVINCIAL
- TEMPORARY WILDLIFE FENCING

METRIC

DIMENSIONS ARE IN METRES
AND/OR MILLIMETRES
UNLESS OTHERWISE SHOWN

COUNTY ROAD 15 NORTH MONAGHAN PARKWAY
TO COUNTY ROAD 26 (FOWLER'S CORNERS)

N

Ainley GROUP CONSULTING ENGINEERS PLANNERS

FIGURE 14

NATURAL HERITAGE FEATURES

Sources: Maxar, Airbus DS, USGS, NGA, NASA, CGIAR, GEBCO, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen and the GIS User Community

N.T.S

LEGEND

- STUDY AREA - 120 M
- CLEANOUT
- OPEN CUT REPLACEMENT
- REPAIR
- INTERMITTENT WATERCOURSE
- PERMANENT WATERCOURSE
- UNEVALUATED WETLAND
- EVALUATED WETLAND - OTHER
- EVALUATED WETLAND - PROVINCIAL
- TEMPORARY WILDLIFE FENCING

METRIC

DIMENSIONS ARE IN METRES
AND/OR MILLIMETRES
UNLESS OTHERWISE SHOWN

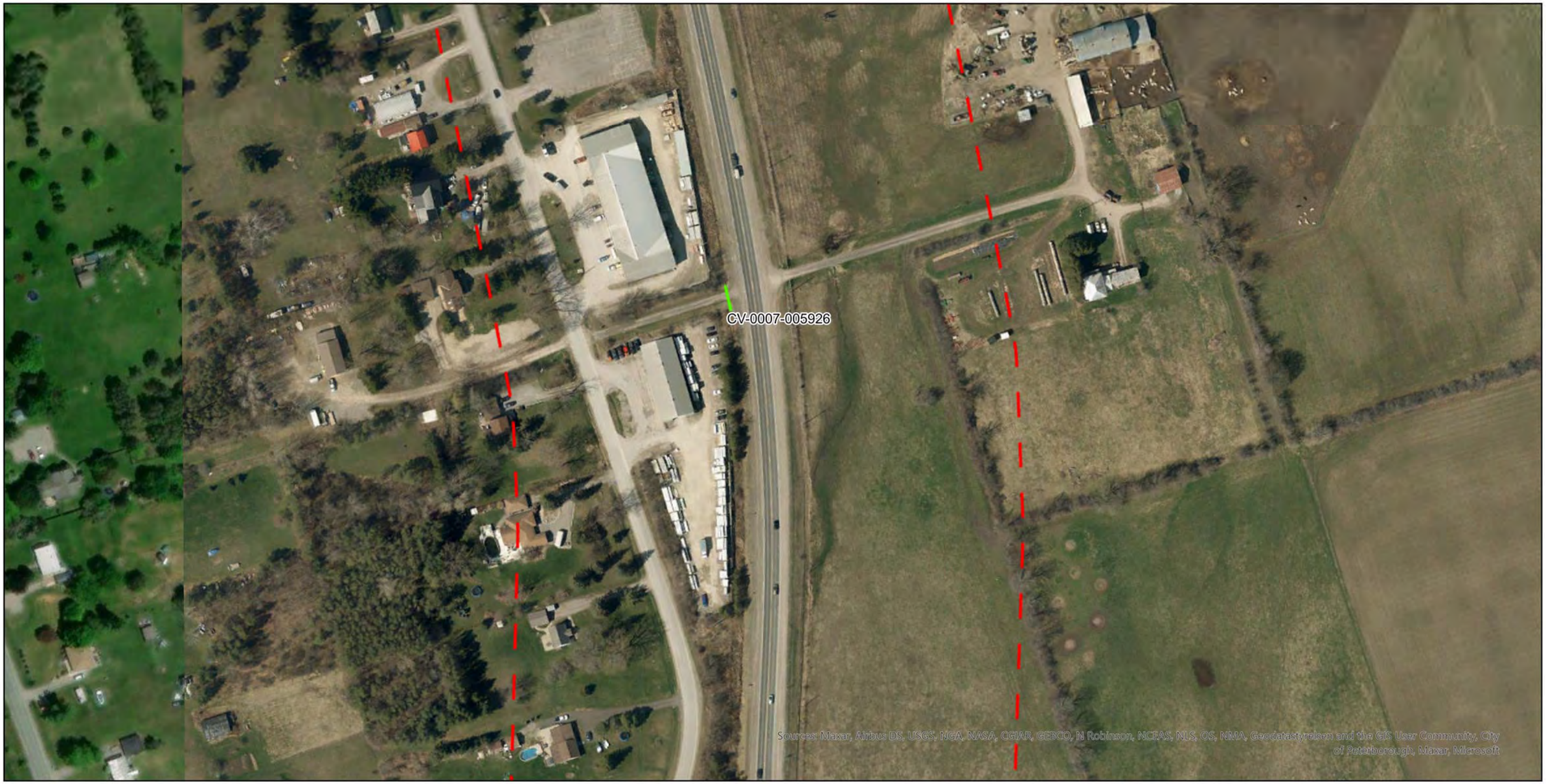
COUNTY ROAD 15 NORTH MONAGHAN PARKWAY
TO COUNTY ROAD 26 (FOWLER'S CORNERS)

N

Ainley GROUP CONSULTING ENGINEERS PLANNERS

FIGURE 15

NATURAL HERITAGE FEATURES



Sources: Maxar, Airbus DS, USGS, NGA, NASA, CGIAR, GEBCO, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen and the GIS User Community

N.T.S

LEGEND

- STUDY AREA - 120 M
- CLEANOUT
- OPEN CUT REPLACEMENT
- REPAIR
- INTERMITTENT WATERCOURSE
- PERMANENT WATERCOURSE
- UNEVALUATED WETLAND
- EVALUATED WETLAND - OTHER
- EVALUATED WETLAND - PROVINCIAL
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METRIC

DIMENSIONS ARE IN METRES
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UNLESS OTHERWISE SHOWN

COUNTY ROAD 15 NORTH MONAGHAN PARKWAY
TO COUNTY ROAD 26 (FOWLER'S CORNERS)

N

Ainley GROUP CONSULTING ENGINEERS PLANNERS

FIGURE 16

NATURAL HERITAGE FEATURES

Sources: Maxar, Airbus DS, USGS, NGA, NASA, CGIAR, GEBCO, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen and the GIS User Community

N.T.S

APPENDIX A
Photographic Log

Photo 1 – ELC Community Transportation (CVI_1) – June 21, 2024.

Photo 2 – ELC Community Perennial Cover Crop (OAGM2) – June 21, 2024.

Photo 3 – ELC Community Fencerow (TAGM5) – June 21, 2024.

Photo 4 – ELC Community Annual Row Crop (OAGM1) – June 21, 2024.

Photo 5 – ELC Community Perennial Cover Crop (OAGM2) – June 21, 2024.

Photo 6 – ELC Community Business Sector (CVC_1) – June 21, 2024.

Photo 7 – ELC Community Low-Density Residential (CVR_1) – June 21, 2024.

Photo 8 – ELC Community Open Pasture (OAGM4) – June 21, 2024.

Photo 9 – ELC Community Dry-Fresh Sugar Maple Deciduous Forest (FODM5-1) – June 21, 2024.

Photo 10 – ELC Community Pondweed Submerged Shallow Aquatic (SAS_1-1) – June 27, 2024.

Photo 11 – ELC Community Dry-Fresh White Cedar Coniferous Forest (FOCM2-2) – June 27, 2024.

Photo 12 – ELC Community Reed-canary Grass Graminoid Mineral Meadow Marsh (MAMM1-3) – June 27, 2024.

Photo 13 – ELC Community Bebb's Willow Mineral Deciduous Thicket Swamp (SWTM3-2) – June 27, 2024.

Photo 13 – ELC Community Dry - Fresh Poplar Deciduous Forest (FODM3-1) – June 27, 2024.

Photo 14 – ELC Community Cattail Mineral Shallow Marsh (MASM1-1) – June 27, 2024.

Photo 15 – ELC Community Dry-Fresh Coniferous Woodland (WOCM1) – June 27, 2024.

Photo 16 – ELC Community Dry-Fresh Scotch Pine Naturalized Coniferous Plantation (FOCM6-3) – June 27, 2024.

Photo 17 – ELC Community Green Lands (CGL) – June 27, 2024.

Photo 18 – Culvert CV-0007-000964 looking west – Nov 19, 2024.

Photo 19 – Culvert CV-0007-005674 looking south – Nov 19, 2024.

Photo 20 – Culvert CV-0007-000965 looking north – Nov 19, 2024.

Photo 21 – Culvert CV-0007-005675 looking south – Nov 19, 2024.

Photo 22 – Culvert CV-0007-005679 looking east – Nov 19, 2024.

Photo 23 – Culvert CV-0007-005678 looking north – Nov 19, 2024.

Photo 24 – Culvert CV-0007-005680 looking west – Nov 19, 2024.

Photo 25 – Culvert CV-0007-000967 looking east – June 21, 2024.

Photo 26 – Culvert CV-0007-000967 looking west – Nov 19, 2024.

Photo 27 – Culvert CV-0007-005681 looking north – Nov 19, 2024.

Photo 28 – Culvert CV-0007-000966 looking south – Nov 19, 2024.

Photo 29 – Culvert CV-0007-000782 looking west – June 21, 2024.

Photo 30 – Culvert CV-0007-000782 looking east – June 21, 2024.

Photo 31 –Stockdale Intersection facing east– June 21, 2024.

Photo 32 –Stockdale Intersection facing southbound lane– June 21, 2024.

Photo 33 –Stockdale Intersection facing southbound lane– June 21, 2024.

Photo 34 –Southbound lane from Stockdale intersection– June 21, 2024.

Photo 35 – Southbound lane from Stockdale intersection, end of North Area– June 21, 2024.

Photo 36 – Northbound, 400 m south from Stockdale Intersection– June 21, 2024.

Photo 37 – Northbound, south of Stockdale Intersection– June 21, 2024.

Photo 38 – Northbound lane view of Stockdale Intersection– June 21, 2024.

Photo 39 – Stockdale Intersection from the east – June 21, 2024.

Photo 40 – Northbound lane from Stockdale Intersection– June 21, 2024.

Photo 41 – Northbound lane surrounding property use from Stockdale Intersection– June 21, 2024.

APPENDIX B
Correspondence

Ontario

Ministry of Natural Resources and Forestry

Make-a-Map: Natural Heritage Areas

Hwy 7

Map created:5/14/2024

Notes:

Natural Heritage and ANSI

Legend

ANSI

- Earth Science Provincially Significant/sciences de la terre d'importance provinciale
- Earth Science Regionally Significant/sciences de la terre d'importance régionale
- Life Science Provincially Significant/sciences de la vie d'importance provinciale
- Life Science Regionally Significant/sciences de la vie d'importance régionale
- Natural Heritage System

5.3 0 2.63 5.3 Kilometres

Absence of a feature in the map does not mean they do not exist in this area.

This map should not be relied on as a precise indicator of routes or locations, nor as a guide to navigation. The Ontario Ministry of Natural Resources and Forestry(OMNRF) shall not be liable in any way for the use of, or reliance upon, this map or any information on this map.

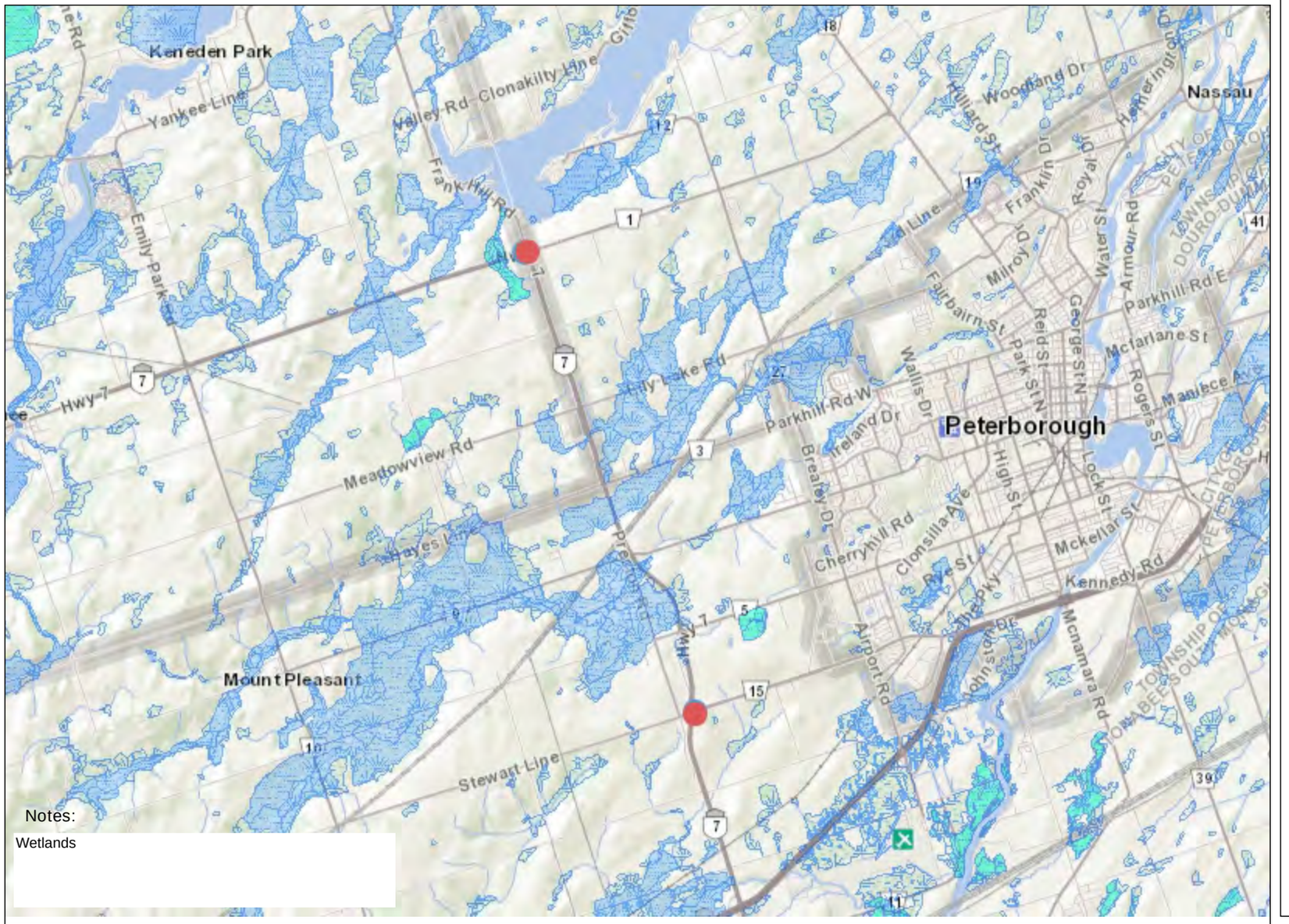
Ontario

Ministry of Natural Resources and Forestry

Make-a-Map: Natural Heritage Areas

Hwy 7

Map created:5/14/2024



Notes:

Wetlands

Legend

- Evaluated Wetland
- Provincially Significant/considérée d'importance provinciale
- Non-Provincially Significant/non considérée d'importance provinciale
- Unevaluated Wetland

5.3 0 2.63 5.3 Kilometres

Absence of a feature in the map does not mean they do not exist in this area.

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eBird

Change Region

Cavan Swamp Wildlife Area--Preston Rd

Peterborough, Ontario, Canada

HOTSPOT NAVIGATION

Bird List

Updated ~14 seconds ago

123	61	55
All Years	This Year	This Month

Last Observed | First Observed | High Count | Custom Time Period

	SPECIES NAME	COUNT	DATE	OBSERVER	LOCATION
1.	**Mourning Dove** *Zenaida macroura*	4	11 May 2024	Sara Anderson	Cavan Swamp Wildlife Area--Preston Rd
2.	**Killdeer** *Charadrius vociferus*	1	11 May 2024	Sara Anderson	Cavan Swamp Wildlife Area--Preston Rd
3.	**Green Heron** *Butorides virescens*	1	11 May 2024	Sara Anderson	Cavan Swamp Wildlife Area--Preston Rd
4.	**Pileated Woodpecker** *Dryocopus pileatus*	1	11 May 2024	Sara Anderson	Cavan Swamp Wildlife Area--Preston Rd
5.	**American Crow** *Corvus brachyrhynchos*	2	11 May 2024	Sara Anderson	Cavan Swamp Wildlife Area--Preston Rd
6.	**Black-capped Chickadee** *Poecile atricapillus*	3	11 May 2024	Sara Anderson	Cavan Swamp Wildlife Area--Preston Rd
7.	**House Wren** *Troglodytes aedon*	2	11 May 2024	Sara Anderson	Cavan Swamp Wildlife Area--Preston Rd
8.	**European Starling** * *Sturnus vulgaris*	6	11 May 2024	Sara Anderson	Cavan Swamp Wildlife Area--Preston Rd
9.	**Gray Catbird**	1	11 May 2024	Sara Anderson	Cavan Swamp Wildlife Area--Preston Rd

Dumetella carolinensis

10.	**American Robin** *Turdus migratorius*	6	11 May 2024	Sara Anderson	Cavan Swamp Wildlife Area--Preston Rd
11.	**American Goldfinch** *Spinus tristis*	1	11 May 2024	Sara Anderson	Cavan Swamp Wildlife Area--Preston Rd
12.	**Chipping Sparrow** *Spizella passerina*	1	11 May 2024	Sara Anderson	Cavan Swamp Wildlife Area--Preston Rd
13.	**White-throated Sparrow** *Zonotrichia albicollis*	1	11 May 2024	Sara Anderson	Cavan Swamp Wildlife Area--Preston Rd
14.	**Song Sparrow** *Melospiza melodia*	4	11 May 2024	Sara Anderson	Cavan Swamp Wildlife Area--Preston Rd
15.	**Swamp Sparrow** *Melospiza georgiana*	13	11 May 2024	Sara Anderson	Cavan Swamp Wildlife Area--Preston Rd
16.	**Red-winged Blackbird** *Agelaius phoeniceus*	19	11 May 2024	Sara Anderson	Cavan Swamp Wildlife Area--Preston Rd
17.	**Common Grackle** *Quiscalus quiscula*	7	11 May 2024	Sara Anderson	Cavan Swamp Wildlife Area--Preston Rd
18.	**Northern Waterthrush** *Parkesia noveboracensis*	4	11 May 2024	Sara Anderson	Cavan Swamp Wildlife Area--Preston Rd
19.	**Common Yellowthroat** *Geothlypis trichas*	2	11 May 2024	Sara Anderson	Cavan Swamp Wildlife Area--Preston Rd
20.	**Yellow Warbler** *Setophaga petechia*	6	11 May 2024	Sara Anderson	Cavan Swamp Wildlife Area--Preston Rd
21.	**Northern Cardinal** *Cardinalis cardinalis*	1	11 May 2024	Sara Anderson	Cavan Swamp Wildlife Area--Preston Rd
22.	**Rose-breasted Grosbeak** *Pheucticus ludovicianus*	1	11 May 2024	Sara Anderson	Cavan Swamp Wildlife Area--Preston Rd
23.	**Canada Goose** *Branta canadensis*	30	9 May 2024	Ken Fulsang	Cavan Swamp Wildlife Area--Preston Rd
24.	**Virginia Rail** *Rallus limicola*	3	9 May 2024	Ken Fulsang	Cavan Swamp Wildlife Area--Preston Rd

25.	**Sora** *Porzana carolina*	1	9 May 2024	Ken Fulsang	Cavan Swamp Wildlife Area--Preston Rd
26.	**American Bittern** *Botaurus lentiginosus*	1	9 May 2024	Ken Fulsang	Cavan Swamp Wildlife Area--Preston Rd
27.	**Belted Kingfisher** *Megaceryle alcyon*	1	9 May 2024	Ken Fulsang	Cavan Swamp Wildlife Area--Preston Rd
28.	**Yellow-bellied Sapsucker** *Sphyrapicus varius*	2	9 May 2024	Ken Fulsang	Cavan Swamp Wildlife Area--Preston Rd
29.	**Northern Flicker** *Colaptes auratus*	1	9 May 2024	Ken Fulsang	Cavan Swamp Wildlife Area--Preston Rd
30.	**Hermit Thrush** *Catharus guttatus*	1	9 May 2024	Ken Fulsang	Cavan Swamp Wildlife Area--Preston Rd
31.	**Brown-headed Cowbird** *Molothrus ater*	2	9 May 2024	Ken Fulsang	Cavan Swamp Wildlife Area--Preston Rd
32.	**Ovenbird** *Seiurus aurocapilla*	1	9 May 2024	Ken Fulsang	Cavan Swamp Wildlife Area--Preston Rd
33.	**Nashville Warbler** *Leiothlypis ruficapilla*	1	9 May 2024	Ken Fulsang	Cavan Swamp Wildlife Area--Preston Rd
34.	**American Redstart** *Setophaga ruticilla*	2	9 May 2024	Ken Fulsang	Cavan Swamp Wildlife Area--Preston Rd
35.	**Bay-breasted Warbler** *Setophaga castanea*	1	9 May 2024	Ken Fulsang	Cavan Swamp Wildlife Area--Preston Rd
36.	**Palm Warbler** *Setophaga palmarum*	1	9 May 2024	Ken Fulsang	Cavan Swamp Wildlife Area--Preston Rd
37.	**Mallard** *Anas platyrhynchos*	1	3 May 2024	Matthew Tobey	Cavan Swamp Wildlife Area--Preston Rd
38.	**Rock Pigeon** ✻ *Columba livia*	2	3 May 2024	Matthew Tobey	Cavan Swamp Wildlife Area--Preston Rd
39.	**Wilson's Snipe** *Gallinago delicata*	1	3 May 2024	Matthew Tobey	Cavan Swamp Wildlife Area--Preston Rd
40.	**Turkey Vulture** *Cathartes aura*	1	3 May 2024	Matthew Tobey	Cavan Swamp Wildlife Area--Preston Rd

41.	**Downy Woodpecker** *Dryobates pubescens*	1	3 May 2024	Matthew Tobey	Cavan Swamp Wildlife Area--Preston Rd
42.	**Hairy Woodpecker** *Dryobates villosus*	1	3 May 2024	Matthew Tobey	Cavan Swamp Wildlife Area--Preston Rd
43.	**Eastern Phoebe** *Sayornis phoebe*	1	3 May 2024	Matthew Tobey	Cavan Swamp Wildlife Area--Preston Rd
44.	**Blue Jay** *Cyanocitta cristata*	3	3 May 2024	Matthew Tobey	Cavan Swamp Wildlife Area--Preston Rd
45.	**Ruby-crowned Kinglet** *Corthylio calendula*	1	3 May 2024	Matthew Tobey	Cavan Swamp Wildlife Area--Preston Rd
46.	**White-breasted Nuthatch** *Sitta carolinensis*	1	3 May 2024	Matthew Tobey	Cavan Swamp Wildlife Area--Preston Rd
47.	**Brown Creeper** *Certhia americana*	1	3 May 2024	Matthew Tobey	Cavan Swamp Wildlife Area--Preston Rd
48.	**Winter Wren** *Troglodytes hiemalis*	1	3 May 2024	Matthew Tobey	Cavan Swamp Wildlife Area--Preston Rd
49.	**Rusty Blackbird** *Euphagus carolinus*	30	3 May 2024	Matthew Tobey	Cavan Swamp Wildlife Area--Preston Rd
50.	**Yellow-rumped Warbler** *Setophaga coronata*	12	3 May 2024	Matthew Tobey	Cavan Swamp Wildlife Area--Preston Rd
51.	**Wood Duck** *Aix sponsa*	1	1 May 2024	Sara Anderson	Cavan Swamp Wildlife Area--Preston Rd
52.	**Great Blue Heron** *Ardea herodias*	1	1 May 2024	Sara Anderson	Cavan Swamp Wildlife Area--Preston Rd
53.	**Broad-winged Hawk** *Buteo platypterus*	1	1 May 2024	Sara Anderson	Cavan Swamp Wildlife Area--Preston Rd
54.	**Dark-eyed Junco** *Junco hyemalis*	1	1 May 2024	Sara Anderson	Cavan Swamp Wildlife Area--Preston Rd
55.	**Field Sparrow** *Spizella pusilla*	1	1 May 2024	Mark Basterfield	Cavan Swamp Wildlife Area--Preston Rd

iNaturalist

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Observations

Filters

Show

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- [ ] Captive
- [x] Verifiable
- [ ] Research Grade
- [ ] Needs ID
- [ ] Threatened
- [ ] Introduced
- [ ] Popular
- [ ] Has Sounds
- [ ] Has Photos

Description / Tags blue, butterfly, etc.

Categories

Rank

High

Low

Sort By

Date Added

Desc

Date Observed

(•) Any ( ) Exact Date YYYY-MM-DD ( ) Range Start End ( ) Months January February March April

More Filters

Person

Username or User ID

Project

Name or URL slug, e.g. m

Place

Place

Photo Licensing All

Reviewed

(•) Any ( ) Yes ( ) No

Date Added

(•) Any ( ) Exact Date YYYY-MM-DD ( ) Range Start End

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Species
Location
Go
Custom Boundary
1,110
observations
550
species
474
Identifiers
136
Observers
12 observations
©
Yellow-crowned Night Heron Nyctanassa violacea
9 observations
CC
Red-winged Blackbird Agelaius phoeniceus
9 observations
CC
Northern Leopard Frog Lithobates pipiens
9 observations
CC
European Frog-Bit Hydrocharis morsus-ranae
9 observations
CC
Common Eastern Bumble Bee Bombus impatiens
9 observations
CC
Purple Finch Haemorhous purpureus
8 observations
CC
Swamp Sparrow Melospiza georgiana
8 observations
CC
Northern Paper Wasp Polistes fuscatus
8 observations
CC
Black Ash Fraxinus nigra
8 observations
CC
Tamarack Larix laricina
8 observations
CC
Wood Frog Lithobates sylvaticus
7 observations
CC
Song Sparrow Melospiza melodia
7 observations
CC
Eastern Cottontail Sylvilagus floridanus
7 observations
CC
Central Mudminnow Umbra limi
7 observations
©
Purple Loosestrife Lythrum salicaria
6 observations
CC
Chipping Sparrow Spizella passerina
6 observations
CC
Spring Peeper Pseudacris crucifer
6 observations
CC
Red Admiral Vanessa atalanta
6 observations
CC
Red Clover Trifolium pratense
6 observations
©
Red Osier Dogwood Cornus sericea
6 observations
CC
Viceroy Limenitis archippus
6 observations
CC
Riverbank Grape Vitis riparia
6 observations
CC
Greater Fringed Gentian Gentianopsis crinita
5 observations

©
Common Grackle Quiscalus quiscula
5 observations
CC
Dickcissel Spiza americana
5 observations
CC
Painted Turtle Chrysemys picta
5 observations
CC
Spreading Dogbane Apocynum androsaemifolium
5 observations
©
Tufted Vetch Vicia cracca
5 observations
CC
Common Duckweed Lemna minor
5 observations
CC
Common Buckthorn Rhamnus cathartica
5 observations
CC
Chokecherry Prunus virginiana
5 observations
CC
Viper's-Bugloss Echium vulgare
5 observations
CC
Colt's-Foot Tussilago farfara
5 observations
CC
Alfalfa Medicago sativa
5 observations
©
Green Frog Lithobates clamitans
5 observations
CC
Swamp Aster Symphyotrichum puniceum
5 observations
CC
White Turtlehead Chelone glabra
5 observations
CC
Common Redpoll Acanthis flammea
5 observations
©
Pine Siskin Spinus pinus
4 observations
©
Eastern Phoebe Sayornis phoebe
4 observations
CC
Common Garter Snake Thamnophis sirtalis
4 observations
©
Western Honey Bee Apis mellifera
4 observations
CC
Bird's-foot Trefoil Lotus corniculatus
4 observations
CC
Box Elder Acer negundo
4 observations
CC
Common Jewelweed Impatiens capensis
4 observations
CC
Common Milkweed Asclepias syriaca
4 observations
CC
Common Toadflax Linaria vulgaris
4 observations
CC
Common Yarrow Achillea millefolium
4 observations
CC
Northern Whitecedar Thuja occidentalis
4 observations
CC
Basswood Tilia americana
4 observations

CC
Bittersweet Nightshade Solanum dulcamara
4 observations
CC
Common Reed Phragmites australis
4 observations
©
Sensitive Fern Onoclea sensibilis
4 observations
CC
Common Lilac Syringa vulgaris
4 observations
CC
White-faced Meadowhawk Sympetrum obtrusum
4 observations
CC
New England Aster Symphyotrichum novae-angliae
4 observations
CC
Big Bluestem Andropogon gerardi
4 observations
CC
Variegated Yellow Pond-Lily Nuphar variegata
4 observations
CC
Eastern Tent Caterpillar Moth Malacosoma americana
4 observations
CC
European Swallow-Wort Vincetoxicum rossicum
4 observations
CC
Sphinx Ladies' Tresses Spiranthes incurva
4 observations
CC
Hairy Woodpecker Dryobates villosus
3 observations
CC
Virginia Rail Rallus limicola
3 observations
CC
Ruffed Grouse Bonasa umbellus
3 observations
CC
Black-billed Cuckoo Coccyzus erythropthalmus
3 observations
CC
Turkey Vulture Cathartes aura
3 observations
CC
Green Heron Butorides virescens
3 observations
©
Canada Goose Branta canadensis
3 observations
CC
Black-and-white Warbler Mniotilta varia
3 observations
CC
Brown-headed Cowbird Molothrus ater
3 observations
©
American Robin Turdus migratorius
3 observations
CC
European Starling Sturnus vulgaris
3 observations
CC
Red-bellied Snake Storeria occipitomaculata
3 observations
CC
Virginia Opossum Didelphis virginiana
3 observations
CC
Eastern Chipmunk Tamias striatus
3 observations
CC
Shaggy Mane Coprinus comatus
3 observations
CC
Wild Cucumber Echinocystis lobata
3 observations

CC
Northern Blue Flag Iris versicolor
3 observations
©
Field Horsetail Equisetum arvense
3 observations
CC
Bald-faced Hornet Dolichovespula maculata
3 observations
CC
Chicory Cichorium intybus
3 observations
CC
American Elm Ulmus americana
3 observations
©
Common Ragweed Ambrosia artemisiifolia
3 observations
CC
Nannyberry Viburnum lentago
3 observations
CC
Bladder Campion Silene vulgaris
3 observations
CC
Red-spotted Admiral Limenitis arthemis
3 observations
CC
Northeastern Hammertail Efferia aestuans
3 observations
CC
Common Red Soldier Beetle Rhagonycha fulva
3 observations
CC0
Black-eyed Susan Rudbeckia hirta
3 observations
CC
Virgin's-Bower Clematis virginiana
3 observations
CC
Philadelphia Fleabane Erigeron philadelphicus
3 observations
CC
Wild Carrot Daucus carota
3 observations
CC
Tatarian Honeysuckle Lonicera tatarica
3 observations
CC
Intermediate Wood Fern Dryopteris intermedia
3 observations
CC
Wild Bergamot Monarda fistulosa
3 observations
CC
White Spruce Picea glauca
3 observations
©
Spotted Joe-Pye Weed Eutrochium maculatum
3 observations
CC
Common Aerial Yellowjacket Dolichovespula arenaria
3 observations
©
Jagged Ambush Bug Phymata americana
3 observations
©
White Meadowsweet Spiraea alba

NHIC Data

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OGF ID	Element Type	Common Name	Scientific Name	SRank	SARO Status	COSEWIC Status	ATLAS NAD83 IDENT	COMMENTS
1055901	SPECIES	Grasshopper Sparrow	Ammodramus savannarum	S4B	SC	SC	17QK0607	
1055901	SPECIES	Midland Painted Turtle	Chrysemys picta marginata	S4		SC	17QK0607	
1055901	SPECIES	Wood Thrush	Hylocichla mustelina	S4B	SC	THR	17QK0607	
1055901	SPECIES	Eastern Wood-pewee	Contopus virens	S4B	SC	SC	17QK0607	
1055901	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0607	
1055901	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	17QK0607	
1055900	SPECIES	Midland Painted Turtle	Chrysemys picta marginata	S4		SC	17QK0606	
1055900	SPECIES	Eastern Wood-pewee	Contopus virens	S4B	SC	SC	17QK0606	
1055900	SPECIES	Snapping Turtle	Chelydra serpentina	S4	SC	SC	17QK0606	
1055900	SPECIES	Blanding's Turtle	Emydoidea blandingii	S3	THR	END	17QK0606	
1055899	SPECIES	Midland Painted Turtle	Chrysemys picta marginata	S4		SC	17QK0605	
1055899	SPECIES	Snapping Turtle	Chelydra serpentina	S4	SC	SC	17QK0605	
1055899	SPECIES	Black Ash	Fraxinus nigra	S4	END	THR	17QK0605	
1055899	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0605	
1055899	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	17QK0605	
1055898	SPECIES	Midland Painted Turtle	Chrysemys picta marginata	S4		SC	17QK0604	
1055898	SPECIES	Snapping Turtle	Chelydra serpentina	S4	SC	SC	17QK0604	
1055898	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0604	
1055898	SPECIES	Ram's-head Lady's-slipper	Cypripedium arietinum	S3			17QK0604	

OGF ID	Element Type	Common Name	Scientific Name	SRank	SARO Status	COSEWIC Status	ATLAS NAD83 IDENT	COMMENTS
1055898	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	17QK0604	
1055897	SPECIES	Eastern Wood-pewee	Contopus virens	S4B	SC	SC	17QK0603	
1055897	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0603	
1055897	SPECIES	Barn Swallow	Hirundo rustica	S4B	SC	SC	17QK0603	
1055897	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	17QK0603	
1055896	SPECIES	Eastern Wood-pewee	Contopus virens	S4B	SC	SC	17QK0602	
1055896	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0602	
1055896	SPECIES	Barn Swallow	Hirundo rustica	S4B	SC	SC	17QK0602	
1055896	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	17QK0602	
1055911	SPECIES	Wood Thrush	Hylocichla mustelina	S4B	SC	THR	17QK0707	
1055911	SPECIES	Eastern Wood-pewee	Contopus virens	S4B	SC	SC	17QK0707	
1055911	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0707	
1055911	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	17QK0707	
1055909	SPECIES	Midland Painted Turtle	Chrysemys picta marginata	S4		SC	17QK0705	
1055909	SPECIES	Eastern Wood-pewee	Contopus virens	S4B	SC	SC	17QK0705	
1055909	SPECIES	Snapping Turtle	Chelydra serpentina	S4	SC	SC	17QK0705	
1055909	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0705	
1055908	SPECIES	Midland Painted Turtle	Chrysemys picta marginata	S4		SC	17QK0704	
1055908	SPECIES	Eastern Wood-pewee	Contopus virens	S4B	SC	SC	17QK0704	
1055908	SPECIES	Snapping Turtle	Chelydra serpentina	S4	SC	SC	17QK0704	
1055908	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0704	

OGF ID	Element Type	Common Name	Scientific Name	SRank	SARO Status	COSEWIC Status	ATLAS NAD83 IDENT	COMMENTS
1055907	SPECIES	Midland Painted Turtle	Chrysemys picta marginata	S4		SC	17QK0703	
1055907	SPECIES	Eastern Wood-pewee	Contopus virens	S4B	SC	SC	17QK0703	
1055907	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0703	
1055907	SPECIES	Barn Swallow	Hirundo rustica	S4B	SC	SC	17QK0703	
1055907	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	17QK0703	
1055906	SPECIES	Eastern Wood-pewee	Contopus virens	S4B	SC	SC	17QK0702	
1055906	SPECIES	Butternut	Juglans cinerea	S2?	END	END	17QK0702	
1055906	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0702	
1055906	SPECIES	Barn Swallow	Hirundo rustica	S4B	SC	SC	17QK0702	
1055906	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	17QK0702	
1055912	WILDLIFE CONCENTRATION AREA	Colonial Waterbird Nesting Area	Colonial Waterbird Nesting Area	SNR			17QK0708	
1055912	SPECIES	Blue-winged Teal	Spatula discors	S3B,S4M			17QK0708	
1055912	SPECIES	Grasshopper Sparrow	Ammodramus savannarum	S4B	SC	SC	17QK0708	
1055912	SPECIES	Midland Painted Turtle	Chrysemys picta marginata	S4		SC	17QK0708	
1055912	SPECIES	Wood Thrush	Hylocichla mustelina	S4B	SC	THR	17QK0708	
1055912	SPECIES	Eastern Wood-pewee	Contopus virens	S4B	SC	SC	17QK0708	
1055912	SPECIES	Snapping Turtle	Chelydra serpentina	S4	SC	SC	17QK0708	
1055912	SPECIES	Black Ash	Fraxinus nigra	S4	END	THR	17QK0708	
1055912	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0708	
1055912	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	17QK0708	
1055913	WILDLIFE CONCENTRATION AREA	Colonial Waterbird Nesting Area	Colonial Waterbird Nesting Area	SNR			17QK0709	

OGF ID	Element Type	Common Name	Scientific Name	SRank	SARO Status	COSEWIC Status	ATLAS NAD83 IDENT	COMMENTS
1055913	SPECIES	Blue-winged Teal	Spatula discors	S3B,S4M			17QK0709	
1055913	SPECIES	Grasshopper Sparrow	Ammodramus savannarum	S4B	SC	SC	17QK0709	
1055913	SPECIES	Midland Painted Turtle	Chrysemys picta marginata	S4		SC	17QK0709	
1055913	SPECIES	Wood Thrush	Hylocichla mustelina	S4B	SC	THR	17QK0709	
1055913	SPECIES	Eastern Wood-pewee	Contopus virens	S4B	SC	SC	17QK0709	
1055913	SPECIES	Snapping Turtle	Chelydra serpentina	S4	SC	SC	17QK0709	
1055913	SPECIES	Black Ash	Fraxinus nigra	S4	END	THR	17QK0709	
1055913	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0709	
1055913	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	17QK0709	
1056004	WILDLIFE CONCENTRATION AREA	Colonial Waterbird Nesting Area	Colonial Waterbird Nesting Area	SNR			17QK0710	
1056004	SPECIES	Midland Painted Turtle	Chrysemys picta marginata	S4		SC	17QK0710	
1056004	SPECIES	Wood Thrush	Hylocichla mustelina	S4B	SC	THR	17QK0710	
1056004	SPECIES	Eastern Wood-pewee	Contopus virens	S4B	SC	SC	17QK0710	
1056004	SPECIES	Snapping Turtle	Chelydra serpentina	S4	SC	SC	17QK0710	
1056004	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0710	
1056004	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	17QK0710	
1056005	WILDLIFE CONCENTRATION AREA	Colonial Waterbird Nesting Area	Colonial Waterbird Nesting Area	SNR			17QK0711	
1056005	SPECIES	Midland Painted Turtle	Chrysemys picta marginata	S4		SC	17QK0711	
1056005	SPECIES	Wood Thrush	Hylocichla mustelina	S4B	SC	THR	17QK0711	
1056005	SPECIES	Eastern Wood-pewee	Contopus virens	S4B	SC	SC	17QK0711	

OGF ID	Element Type	Common Name	Scientific Name	SRank	SARO Status	COSEWIC Status	ATLAS NAD83 IDENT	COMMENTS
1056005	SPECIES	Western Chorus Frog - Great Lakes - St. Lawrence - Canadian Shield population	Pseudacris maculata pop. 1	S4	NAR	THR	17QK0711	
1056005	SPECIES	Snapping Turtle	Chelydra serpentina	S4	SC	SC	17QK0711	
1056005	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0711	
1055902	WILDLIFE CONCENTRATION AREA	Colonial Waterbird Nesting Area	Colonial Waterbird Nesting Area	SNR			17QK0608	
1055902	WILDLIFE CONCENTRATION AREA	Mixed Wader Nesting Colony	Colonial Wading Bird Colony	SNR			17QK0608	
1055902	SPECIES	Blue-winged Teal	Spatula discors	S3B,S4M			17QK0608	
1055902	SPECIES	Grasshopper Sparrow	Ammodramus savannarum	S4B	SC	SC	17QK0608	
1055902	SPECIES	Midland Painted Turtle	Chrysemys picta marginata	S4		SC	17QK0608	
1055902	SPECIES	Wood Thrush	Hylocichla mustelina	S4B	SC	THR	17QK0608	
1055902	SPECIES	Eastern Wood-pewee	Contopus virens	S4B	SC	SC	17QK0608	
1055902	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0608	
1055902	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	17QK0608	
1055892	WILDLIFE CONCENTRATION AREA	Colonial Waterbird Nesting Area	Colonial Waterbird Nesting Area	SNR			17QK0508	
1055892	WILDLIFE CONCENTRATION AREA	Mixed Wader Nesting Colony	Colonial Wading Bird Colony	SNR			17QK0508	
1055892	SPECIES	Blue-winged Teal	Spatula discors	S3B,S4M			17QK0508	
1055892	SPECIES	Grasshopper Sparrow	Ammodramus savannarum	S4B	SC	SC	17QK0508	

OGF ID	Element Type	Common Name	Scientific Name	SRank	SARO Status	COSEWIC Status	ATLAS NAD83 IDENT	COMMENTS
1055892	SPECIES	Midland Painted Turtle	Chrysemys picta marginata	S4		SC	17QK0508	
1055892	SPECIES	Wood Thrush	Hylocichla mustelina	S4B	SC	THR	17QK0508	
1055892	SPECIES	Eastern Wood-pewee	Contopus virens	S4B	SC	SC	17QK0508	
1055892	SPECIES	Snapping Turtle	Chelydra serpentina	S4	SC	SC	17QK0508	
1055892	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0508	
1055892	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	17QK0508	
1055882	WILDLIFE CONCENTRATION AREA	Colonial Waterbird Nesting Area	Colonial Waterbird Nesting Area	SNR			17QK0408	
1055882	SPECIES	Midland Painted Turtle	Chrysemys picta marginata	S4		SC	17QK0408	
1055882	SPECIES	Eastern Wood-pewee	Contopus virens	S4B	SC	SC	17QK0408	
1055882	SPECIES	Snapping Turtle	Chelydra serpentina	S4	SC	SC	17QK0408	
1055882	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0408	
1055882	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	17QK0408	
1055903	WILDLIFE CONCENTRATION AREA	Colonial Waterbird Nesting Area	Colonial Waterbird Nesting Area	SNR			17QK0609	
1055903	SPECIES	Blue-winged Teal	Spatula discors	S3B,S4M			17QK0609	
1055903	SPECIES	Grasshopper Sparrow	Ammodramus savannarum	S4B	SC	SC	17QK0609	
1055903	SPECIES	Midland Painted Turtle	Chrysemys picta marginata	S4		SC	17QK0609	
1055903	SPECIES	Wood Thrush	Hylocichla mustelina	S4B	SC	THR	17QK0609	
1055903	SPECIES	Eastern Wood-pewee	Contopus virens	S4B	SC	SC	17QK0609	
1055903	SPECIES	Black Ash	Fraxinus nigra	S4	END	THR	17QK0609	
1055903	SPECIES	Wild Senna	Senna hebecarpa	S1			17QK0609	

OGF ID	Element Type	Common Name	Scientific Name	SRank	SARO Status	COSEWIC Status	ATLAS NAD83 IDENT	COMMENTS
1055903	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0609	
1055903	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	17QK0609	
1055893	WILDLIFE CONCENTRATION AREA	Colonial Waterbird Nesting Area	Colonial Waterbird Nesting Area	SNR			17QK0509	
1055893	SPECIES	Blue-winged Teal	Spatula discors	S3B,S4M			17QK0509	
1055893	SPECIES	Grasshopper Sparrow	Ammodramus savannarum	S4B	SC	SC	17QK0509	
1055893	SPECIES	Midland Painted Turtle	Chrysemys picta marginata	S4		SC	17QK0509	
1055893	SPECIES	Wood Thrush	Hylocichla mustelina	S4B	SC	THR	17QK0509	
1055893	SPECIES	Eastern Wood-pewee	Contopus virens	S4B	SC	SC	17QK0509	
1055893	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0509	
1055893	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	17QK0509	
1055883	WILDLIFE CONCENTRATION AREA	Colonial Waterbird Nesting Area	Colonial Waterbird Nesting Area	SNR			17QK0409	
1055883	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0409	
1055883	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	17QK0409	
1055873	WILDLIFE CONCENTRATION AREA	Colonial Waterbird Nesting Area	Colonial Waterbird Nesting Area	SNR			17QK0309	
1055873	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0309	
1055873	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	17QK0309	
1055873	SPECIES	Least Bittern	Ixobrychus exilis	S4B	THR	THR	17QK0309	
1055994	WILDLIFE CONCENTRATION AREA	Colonial Waterbird Nesting Area	Colonial Waterbird Nesting Area	SNR			17QK0610	
1055994	SPECIES	Grasshopper Sparrow	Ammodramus savannarum	S4B	SC	SC	17QK0610	

OGF ID	Element Type	Common Name	Scientific Name	SRank	SARO Status	COSEWIC Status	ATLAS NAD83 IDENT	COMMENTS
1055994	SPECIES	Wood Thrush	Hylocichla mustelina	S4B	SC	THR	17QK0610	
1055994	SPECIES	Eastern Wood-pewee	Contopus virens	S4B	SC	SC	17QK0610	
1055994	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0610	
1055994	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	17QK0610	
1055984	WILDLIFE CONCENTRATION AREA	Colonial Waterbird Nesting Area	Colonial Waterbird Nesting Area	SNR			17QK0510	
1055984	SPECIES	Grasshopper Sparrow	Ammodramus savannarum	S4B	SC	SC	17QK0510	
1055984	SPECIES	Wood Thrush	Hylocichla mustelina	S4B	SC	THR	17QK0510	
1055984	SPECIES	Eastern Wood-pewee	Contopus virens	S4B	SC	SC	17QK0510	
1055984	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0510	
1055984	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	17QK0510	
1055974	WILDLIFE CONCENTRATION AREA	Colonial Waterbird Nesting Area	Colonial Waterbird Nesting Area	SNR			17QK0410	
1055974	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0410	
1055974	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	17QK0410	
1055974	SPECIES	Least Bittern	Ixobrychus exilis	S4B	THR	THR	17QK0410	
1055964	WILDLIFE CONCENTRATION AREA	Colonial Waterbird Nesting Area	Colonial Waterbird Nesting Area	SNR			17QK0310	
1055964	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0310	
1055964	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	17QK0310	
1055964	SPECIES	Least Bittern	Ixobrychus exilis	S4B	THR	THR	17QK0310	
1055995	WILDLIFE CONCENTRATION AREA	Colonial Waterbird Nesting Area	Colonial Waterbird Nesting Area	SNR			17QK0611	

OGF ID	Element Type	Common Name	Scientific Name	SRank	SARO Status	COSEWIC Status	ATLAS NAD83 IDENT	COMMENTS
1055995	SPECIES	Eastern Wood-pewee	Contopus virens	S4B	SC	SC	17QK0611	
1055995	SPECIES	Western Chorus Frog - Great Lakes - St. Lawrence - Canadian Shield population	Pseudacris maculata pop. 1	S4	NAR	THR	17QK0611	
1055995	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0611	
1055985	WILDLIFE CONCENTRATION AREA	Colonial Waterbird Nesting Area	Colonial Waterbird Nesting Area	SNR			17QK0511	
1055985	SPECIES	Midland Painted Turtle	Chrysemys picta marginata	S4		SC	17QK0511	
1055985	SPECIES	Snapping Turtle	Chelydra serpentina	S4	SC	SC	17QK0511	
1055985	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	17QK0511	
1055975	WILDLIFE CONCENTRATION AREA	Colonial Waterbird Nesting Area	Colonial Waterbird Nesting Area	SNR			17QK0411	
1055975	SPECIES	Midland Painted Turtle	Chrysemys picta marginata	S4		SC	17QK0411	
1055975	SPECIES	Snapping Turtle	Chelydra serpentina	S4	SC	SC	17QK0411	
1055975	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	17QK0411	
1055975	SPECIES	Least Bittern	Ixobrychus exilis	S4B	THR	THR	17QK0411	
1055965	WILDLIFE CONCENTRATION AREA	Colonial Waterbird Nesting Area	Colonial Waterbird Nesting Area	SNR			17QK0311	
1055965	SPECIES	Midland Painted Turtle	Chrysemys picta marginata	S4		SC	17QK0311	
1055965	SPECIES	Snapping Turtle	Chelydra serpentina	S4	SC	SC	17QK0311	
1055965	SPECIES	Red-headed Woodpecker	Melanerpes erythrocephalus	S3	END	END	17QK0311	
1055965	SPECIES	Eastern	Sturnella	S4B,S3N	THR	THR	17QK0311	

OGF ID	Element Type	Common Name	Scientific Name	SRank	SARO Status	COSEWIC Status	ATLAS NAD83 IDENT	COMMENTS
		Meadowlark	magna					
1055965	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	17QK0311	
1055965	SPECIES	Least Bittern	Ixobrychus exilis	S4B	THR	THR	17QK0311	
1055886	SPECIES	Eastern Wood-pewee	Contopus virens	S4B	SC	SC	17QK0502	
1055886	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0502	
1055886	SPECIES	Barn Swallow	Hirundo rustica	S4B	SC	SC	17QK0502	
1055886	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	17QK0502	
1055876	SPECIES	Snapping Turtle	Chelydra serpentina	S4	SC	SC	17QK0402	
1055876	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0402	
1055876	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	17QK0402	
1055866	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0302	
1055866	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	17QK0302	
1055887	SPECIES	Midland Painted Turtle	Chrysemys picta marginata	S4		SC	17QK0503	
1055887	SPECIES	Canada Warbler	Cardellina canadensis	S5B	SC	SC	17QK0503	
1055887	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0503	
1055887	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	17QK0503	
1055877	SPECIES	Midland Painted Turtle	Chrysemys picta marginata	S4		SC	17QK0403	
1055877	SPECIES	Eastern Wood-pewee	Contopus virens	S4B	SC	SC	17QK0403	
1055877	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0403	
1055877	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	17QK0403	
1055867	SPECIES	Eastern Wood-pewee	Contopus virens	S4B	SC	SC	17QK0303	
1055867	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0303	

OGF ID	Element Type	Common Name	Scientific Name	SRank	SARO Status	COSEWIC Status	ATLAS NAD83 IDENT	COMMENTS
1055867	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	17QK0303	
1055888	SPECIES	Canada Warbler	Cardellina canadensis	S5B	SC	SC	17QK0504	
1055888	SPECIES	Snapping Turtle	Chelydra serpentina	S4	SC	SC	17QK0504	
1055888	SPECIES	Black Ash	Fraxinus nigra	S4	END	THR	17QK0504	
1055888	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0504	
1055888	SPECIES	Ram's-head Lady's-slipper	Cypripedium arietinum	S3			17QK0504	
1055888	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	17QK0504	
1055878	SPECIES	Eastern Wood-pewee	Contopus virens	S4B	SC	SC	17QK0404	
1055878	SPECIES	Snapping Turtle	Chelydra serpentina	S4	SC	SC	17QK0404	
1055878	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0404	
1055878	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	17QK0404	
1055868	SPECIES	Midland Painted Turtle	Chrysemys picta marginata	S4		SC	17QK0304	
1055868	SPECIES	Canada Warbler	Cardellina canadensis	S5B	SC	SC	17QK0304	
1055868	SPECIES	Snapping Turtle	Chelydra serpentina	S4	SC	SC	17QK0304	
1055868	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0304	
1055868	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	17QK0304	
1055889	SPECIES	Midland Painted Turtle	Chrysemys picta marginata	S4		SC	17QK0505	
1055889	SPECIES	Snapping Turtle	Chelydra serpentina	S4	SC	SC	17QK0505	
1055889	SPECIES	Black Ash	Fraxinus nigra	S4	END	THR	17QK0505	
1055889	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0505	
1055889	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	17QK0505	
1055879	SPECIES	Midland Painted Turtle	Chrysemys picta marginata	S4		SC	17QK0405	

OGF ID	Element Type	Common Name	Scientific Name	SRank	SARO Status	COSEWIC Status	ATLAS NAD83 IDENT	COMMENTS
1055879	SPECIES	Wood Thrush	Hylocichla mustelina	S4B	SC	THR	17QK0405	
1055879	SPECIES	Snapping Turtle	Chelydra serpentina	S4	SC	SC	17QK0405	
1055879	SPECIES	Red-headed Woodpecker	Melanerpes erythrocephalus	S3	END	END	17QK0405	
1055879	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0405	
1055879	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	17QK0405	
1055879	SPECIES	Least Bittern	Ixobrychus exilis	S4B	THR	THR	17QK0405	
1055869	SPECIES	Midland Painted Turtle	Chrysemys picta marginata	S4		SC	17QK0305	
1055869	SPECIES	Wood Thrush	Hylocichla mustelina	S4B	SC	THR	17QK0305	
1055869	SPECIES	Eastern Wood-pewee	Contopus virens	S4B	SC	SC	17QK0305	
1055869	SPECIES	Canada Warbler	Cardellina canadensis	S5B	SC	SC	17QK0305	
1055869	SPECIES	Snapping Turtle	Chelydra serpentina	S4	SC	SC	17QK0305	
1055869	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0305	
1055869	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	17QK0305	
1055869	SPECIES	Least Bittern	Ixobrychus exilis	S4B	THR	THR	17QK0305	
1055890	SPECIES	Midland Painted Turtle	Chrysemys picta marginata	S4		SC	17QK0506	
1055890	SPECIES	Snapping Turtle	Chelydra serpentina	S4	SC	SC	17QK0506	
1055890	SPECIES	Blanding's Turtle	Emydoidea blandingii	S3	THR	END	17QK0506	
1055890	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0506	
1055890	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	17QK0506	
1055880	SPECIES	Wood Thrush	Hylocichla mustelina	S4B	SC	THR	17QK0406	
1055880	SPECIES	Eastern Wood-pewee	Contopus virens	S4B	SC	SC	17QK0406	
1055880	SPECIES	Western Chorus Frog	Pseudacris maculata pop. 1	S4	NAR	THR	17QK0406	

OGF ID	Element Type	Common Name	Scientific Name	SRank	SARO Status	COSEWIC Status	ATLAS NAD83 IDENT	COMMENTS
		- Great Lakes - St. Lawrence - Canadian Shield population						
1055880	SPECIES	Snapping Turtle	Chelydra serpentina	S4	SC	SC	17QK0406	
1055880	SPECIES	Red-headed Woodpecker	Melanerpes erythrocephalus	S3	END	END	17QK0406	
1055880	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0406	
1055880	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	17QK0406	
1055870	SPECIES	Speckled Blister Lichen	Viridothelium virens	S3			17QK0306	
1055870	SPECIES	Wood Thrush	Hylocichla mustelina	S4B	SC	THR	17QK0306	
1055870	SPECIES	Eastern Wood-pewee	Contopus virens	S4B	SC	SC	17QK0306	
1055870	SPECIES	Canada Warbler	Cardellina canadensis	S5B	SC	SC	17QK0306	
1055870	SPECIES	Snapping Turtle	Chelydra serpentina	S4	SC	SC	17QK0306	
1055870	SPECIES	Black Ash	Fraxinus nigra	S4	END	THR	17QK0306	
1055870	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0306	
1055870	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	17QK0306	
1055891	WILDLIFE CONCENTRATION AREA	Colonial Waterbird Nesting Area	Colonial Waterbird Nesting Area	SNR			17QK0507	
1055891	SPECIES	Grasshopper Sparrow	Ammodramus savannarum	S4B	SC	SC	17QK0507	
1055891	SPECIES	Midland Painted Turtle	Chrysemys picta marginata	S4		SC	17QK0507	
1055891	SPECIES	Snapping Turtle	Chelydra serpentina	S4	SC	SC	17QK0507	
1055891	SPECIES	Blanding's Turtle	Emydoidea blandingii	S3	THR	END	17QK0507	
1055891	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0507	
1055891	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	17QK0507	

OGF ID	Element Type	Common Name	Scientific Name	SRank	SARO Status	COSEWIC Status	ATLAS NAD83 IDENT	COMMENTS
1055881	WILDLIFE CONCENTRATION AREA	Colonial Waterbird Nesting Area	Colonial Waterbird Nesting Area	SNR			17QK0407	
1055881	SPECIES	Wood Thrush	Hylocichla mustelina	S4B	SC	THR	17QK0407	
1055881	SPECIES	Eastern Wood-pewee	Contopus virens	S4B	SC	SC	17QK0407	
1055881	SPECIES	Western Chorus Frog - Great Lakes - St. Lawrence - Canadian Shield population	Pseudacris maculata pop. 1	S4	NAR	THR	17QK0407	
1055881	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0407	
1055881	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	17QK0407	
1055871	SPECIES	Wood Thrush	Hylocichla mustelina	S4B	SC	THR	17QK0307	
1055871	SPECIES	Canada Warbler	Cardellina canadensis	S5B	SC	SC	17QK0307	
1055871	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0307	
1055872	WILDLIFE CONCENTRATION AREA	Colonial Waterbird Nesting Area	Colonial Waterbird Nesting Area	SNR			17QK0308	
1055872	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0308	

Species list in taxonomic order for square 17QK00

All species

Number of rows of data displayed below: 20.

Species #	Common Name	# of Records	Earliest Yr	Latest Yr
1	Blanding's Turtle	5	2013	2019
3	Midland Painted Turtle	52	1974	2019
5	Red-eared Slider	1	2015	2015
6	Snapping Turtle	61	1974	2019
12	Eastern Gartersnake	18	1976	2019
15	Eastern Milksnake	3	2017	2017
22	Red-bellied Snake	4	1976	2018
24	Smooth Greensnake	1	2003	2003
25	American Bullfrog	5	1991	2010
28	Gray Treefrog	152	1995	2019
29	Green Frog	67	1976	2019
30	Mink Frog	18	1976	2019
31	Northern Leopard Frog	146	1976	2019
32	Pickerel Frog	1	2008	2008
33	Spring Peeper	179	1976	2019
34	Western Chorus Frog	23	1996	2010
35	Wood Frog	65	1976	2017
36	American Toad	18	1976	2019
40	Blue-spotted Salamander	4	2017	2018
44	Eastern Red-backed Salamander	2	1996	1996

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Species list in taxonomic order for square 17QK01

All species

Number of rows of data displayed below: 16.

Species #	Common Name	# of Records	Earliest Yr	Latest Yr
2	Eastern Musk Turtle	1	2006	2006
3	Midland Painted Turtle	37	1965	2018
6	Snapping Turtle	24	1965	2018
12	Eastern Gartersnake	9	1988	2019
15	Eastern Milksnake	1	2017	2017
22	Red-bellied Snake	9	1988	2019
25	American Bullfrog	1	1987	1987
28	Gray Treefrog	4	2013	2018
29	Green Frog	8	1987	2019
31	Northern Leopard Frog	9	1986	2018
33	Spring Peeper	16	1986	2018
34	Western Chorus Frog	10	2003	2019
35	Wood Frog	10	1986	2017
36	American Toad	8	1986	2018
40	Blue-spotted Salamander	4	2015	2018
44	Eastern Red-backed Salamander	3	2013	2018

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APPENDIX C
Vegetative Species list and Ecological Land Classifications

Appendix C - Vegetation List
Terrestrial Ecosystem Existing Conditions and Impact Assessment Report
Highway 7 - County Road 26 (Fowlers Corners) to County Road 15 (North Monaghan Parkway)

Scientific Name	Common Name	S Rank	N Rank	G Rank	Exotic Status	Coefficient of Conservatism	Coefficient of Wetness	CVI_1	OAGM2	TAGM5	OAGM1	CVC_1	CVR_1	OAGM4	FODM5-1	SAS_1-1	FOCM2-2	MAMM1-3	SWTM3-2	FODM3-1	MASM1-1	WOCM1	FOCM6-3	CGL
Abies balsamea	Balsam Fir	S5	N5	G5		5	-3													x				
Acer negundo	Manitoba Maple	S5	N5	G5		0	0			x		x	x											
Acer platanoides	Norway Maple	SNA	NNA	GNR	SE5		5					x	x											
Acer saccharinum	Silver Maple	S5	N5	G5		5	-3						x											
Acer saccharum	Sugar Maple	S5	N5	G5		4	3			x		x	x											x
Actaea pachypoda	White Baneberry	S5	N5	G5		6	5								x									
Alliaria petiolata	Garlic Mustard	SNA	NNA	GNR	SE5		0	x			x													
Ambrosia artemisiifolia	Common Ragweed	S5	N5	G5		0	3					x		x										
Amelanchier sp.	Serviceberry sp.	-	-	-	-	-	-																	
Apocynum androsaemifolium	Spreading Dogbane	S5	N5	G5		3	5	x																
Arctium minus	Common Burdock	SNA	NNA	GNR	SE5		3	x	x									x						
Tragopogon dubius	Yellow Goatsbeard	SNA	NNA	GNR	SE5		5	x																
Asclepias syriaca	Common Milkweed	S5	N5	G5		0	5	x						x										
Berberis vulgaris	Common Barberry	SNA	NNA	GNR	SE5		3						x											
Betula papyrifera	Paper Birch	S5	N5	G5		2	3						x							x				
Brasenia schreberi	Watershield	S5	N5	G5		7	-5									x								
Bromus inermis	Smooth Brome	SNA	NNA	G5T5	SE5		5	x	x			x		x										
Carduus nutans	Nodding Thistle	SNA	NNA	GNR	SE5		3					x												
Carex echinata	Star Sedge	S5	N5	G5		7	-5								x									
Catalpa speciosa	Northern Catalpa	SNA	NNA	G4?	SE1		3						x											
Cichorium intybus	Wild Chicory	SNA	NNA	GNR	SE5		5	x				x												
Circaea canadensis	Broad-leaved Enchanter's Nightshade	S5	N5	G5		2	3								x									
Cirsium pumilum	Pasture Thistle	S3	N3	G4G5		10	5								x									
Cirsium vulgare	Bull Thistle	SNA	NNA	GNR	SE5		3	x				x												
Cornus sericea	Red-osier Dogwood	S5	N5	G5		2	-3											x						
Daucus carota	Wild Carrot	SNA	NNA	GNR	SE5		5	x				x					x	x		x		x		
Endotropis alnifolia	Alder-leaved Buckthorn	S5	N5	G5		7	-5	x		x			x		x		x			x		x	x	
Equisetum pratense	Meadow Horsetail	S5	N5	G5		8	-3													x				
Erigeron annuus	Annual Fleabane	S5	N5	G5		0	3	x	x									x						
Fragaria virginiana	Wild Strawberry	S5	N5	G5		2	3					x								x				
Fraxinus americana	White Ash	S4	N5	G4		4	3			x					x								x	x
Fraxinus pennsylvanica	Red Ash	S4	N5	G4		3	-3						x						x					
Glycine max	Soybean	SNA	NNA	GNR	SE2		5				x													
Hydrocharis morsus-ranae	European Frog-bit	SNA	NNA	GNR	SE5		-5									x								
Hypericum canadense	Canada St. John's-Wort	S4?	N5	G5		8	-3	x																
Juniperus virginiana	Eastern Red Cedar	S5	N5	G5		4	3	x																
Lemna sp.	Duckweed	-	-	-	-	-	-									x								
Leucanthemum vulgare	Oxeye Daisy	SNA	NNA	GNR	SE5		5	x	x			x		x			x	x		x		x	x	
Lonicera tatarica	Tatarian Honeysuckle	SNA	NNA	GNR	SE5		3					x										x		
Lotus corniculatus	Garden Bird's-foot Trefoil	SNA	NNA	GNR	SE5		3	x				x	x	x										
Lythrum salicaria	Purple Loosestrife	SNA	NNA	G5	SE5		-5	x										x			x			
Maianthemum racemosum	Large False Solomon's Seal	S5	N5	G5T5		4	3								x									
Malus sp.	Apple sp.	-	-	-	-	-	-										x							
Medicago lupulina	Black Medick	SNA	NNA	GNR	SE5		3	x						x										
Medicago sativa	Alfalfa	SNA	NNA	GNR	SE5		5	x																
Nuphar advena	Large Yellow Pond-lily	S3	NNR	GNR		8	-5									x								
Ostrya virginiana	Eastern Hop-hornbeam	S5	N5	G5		4	3								x									
Parthenocissus quinquefolia	Virginia Creeper	S4?	N4?	G5		6	3			x		x									x	x		
Pastinaca sativa	Wild Parsnip	SNA	NNA	GNR	SE5		5	x	x															
Phalaris arundinacea	Reed Canarygrass	S5	N5	G5		0	-3	x	x	x		x						x	x			x		
Phleum pratense	Common Timothy	SNA	NNA	GNR	SE5		3		x															
Picea abies	Norway Spruce	SNA	NNA	G5	SE3		5					x	x											
Picea glauca	White Spruce	S5	N5	G5		6	3										x			x		x	x	
Picea pungens	Blue Spruce	SNA	NNA	G5	SE1		3						x											
Pilosella caespitosa	Meadow Hawkweed	SNA	NNA	GNR	SE5		5	x																
Pinus sylvestris	Scots Pine	SNA	NNA	GNR	SE5		3						x									x	x	
Plantago major	Common Plantain	SNA	NNR	G5	SE5		3					x												
Poaceae	Grasses	-	-	-		-	-					x	x	x	x						x	x	x	x
Podophyllum peltatum	May-apple	S5	N5	G5		5	3								x									
Populus balsamifera	Balsam Poplar	S5	NNR	G5		4	-3													x		x		
Populus deltoides	Eastern Cottonwood	S5	N5	G5		4	0						x											
Populus tremuloides	Trembling Aspen	S5	N5	G5		2	0													x				
Potamogeton natans	Floating-leaved Pondweed	S5	N5	G5		5	-5									x								
Prunus serotina	Black Cherry	S5	N5	G5		3	3								x									
Prunus virginiana	Chokecherry	S5	N5	G5		2	3			x														
Ranunculus acris	Common Buttercup	SNA	NNA	G5	SE5		0	x						x										x
Rhamnus cathartica	European Buckthorn	SNA	NNA	GNR	SE5		0	x		x			x		x		x			x		x	x	
Rhus typhina	Staghorn Sumac	S5	N5	G5		1	3	x				x	x											
Ribes cynosbati	Eastern Prickly Gooseberry	S5	N5	G5		4	3								x									
Robinia pseudoacacia	Black Locust	SNA	NNA	G5	SE5		3			x														
Rumex crispus	Curled Dock	SNA	NNA	GNR	SE5		0	x	x			x												
Salix alba	White Willow	SNA	NNA	G5	SE4		-3														x			
Salix bebbiana	Bebb's Willow	S5	N5	G5		4	-3												x		x			
Salix nigra	Black Willow	S4	N4	G5		6	-5											x	x		x			
Salix sp.	Willow sp.	-	-	-	-	-	-						x									x		
Sanguinaria canadensis	Bloodroot	S5	N5	G5		5	3								x									
Schoenoplectus tabernaemontani	Soft-stemmed Bulrush	S5	N5	G5		5	-5									x								
Scirpus atrovirens	Dark-green Bulrush	S5	N5	G5		3	-5											x						
Silene vulgaris	Bladder Campion	SNA	NNA	GNR	SE5		5					x												
Sinapis arvensis	Corn Mustard	SNA	NNA	GNR			5					x												
Solidago canadensis	Canada Goldenrod	S5	N5	G5		1	3	x									x	x						
Solidago flexicaulis	Zigzag Goldenrod	S5	N5	G5	-	6	3								x									
Solidago sp.	Goldenrod sp.	-	-	-	-	-	-		x	x		x	x	x	x					x	x	x	x	x
Sonchus arvensis	Field Sow-thistle	SNA	NNA	GNR	SE5		3					x												
Sonchus oleraceus	Common Sow-thistle	SNA	NNA	GNR	SE5		3	x				x												

Appendix C - Vegetation List
Terrestrial Ecosystem Existing Conditions and Impact Assessment Report
Highway 7 - County Road 26 (Fowlers Corners) to County Road 15 (North Monaghan Parkway)

Scientific Name	Common Name	S Rank	N Rank	G Rank	Exotic Status	Coefficient of Conservatism	Coefficient of Wetness	CVI_1	OAGM2	TAGM5	OAGM1	CVC_1	CVR_1	OAGM4	FODM5-1	SAS_1-1	FOCM2-2	MAMM1-3	SWTM3-2	FODM3-1	MASM1-1	WOCM1	FOCM6-3	CGL
Syringa vulgaris	Common Lilac	SNA	NNA	GNR	SE5		5			x			x											
Taraxacum officinale	Common Dandelion	SNA	N5	G5	SE5		3	x				x												
Thuja occidentalis	Eastern White Cedar	S5	N5	G5		4	-3	x				x	x				x		x	x		x		
Tilia americana	Basswood	S5	N5	G5		4	3			x					x					x				x
Toxicodendron radicans	Poison Ivy	S5	N5	G5		2	0	x		x														
Trifolium pratense	Red Clover	SNA	NNA	GNR	SE5		3	x	x				x	x										
Trifolium repens	White Clover	SNA	NNA	GNR	SE5		3					x	x											x
Trillium erectum	Red Trillium	S5	N5	G5		6	3								x									
Tussilago farfara	Coltsfoot	SNA	NNA	GNR	SE5		3										x							
Typha angustifolia	Narrow-leaved Cattail	SNA	N5	G5	SE5		-5	x	x							x					x			
Typha latifolia	Broad-leaved Cattail	S5	N5	G5		1	-5	x										x	x		x			
Ulmus americana	White Elm	S5	N5	G4		3	-3			x							x			x	x	x	x	
Verbascum thapsus	Common Mullein	SNA	NNA	GNR	SE5		5	x						x										
Viburnum opulus var. americanum	Highbush Cranberry	S5	N5	G5T5		5	-3			x									x					
Vicia cracca	Tufted Vetch	SNA	NNA	GNR	SE5		5	x	x			x												
Vicia sativa	Common Vetch	SNA	NNA	GNR	SE5		3					x												
Vincetoxicum rossicum	European Swallowwort	SNA	NNA	GNR	SE5		5	x																
Vitis riparia	Riverbank Grape	S5	N5	G5		0	0			x		x		x			x		x	x		x		
Zea mays	Corn	SNA	NNA	GNR	SE1		5				x													

LEGEND

- STUDY AREA - 120 M
- CULVERT LOCATIONS
- ECOLOGICAL LAND CLASSIFICATION
- INTERMITTENT WATERCOURSE
- PERMANENT WATERCOURSE
- UNEVALUATED WETLAND
- EVALUATED WETLAND - OTHER
- EVALUATED WETLAND - PROVINCIAL

- CVI_1 - TRANSPORTATION
- OAGM2 - PERENNIAL COVER CROP
- TAGM5 - FENCEROW
- CVC_1 - BUSINESS SECTOR
- CVR_1 - LOW-DENSITY RESIDENTIAL

METRIC

DIMENSIONS ARE IN METRES
AND/OR MILLIMETRES
UNLESS OTHERWISE SHOWN

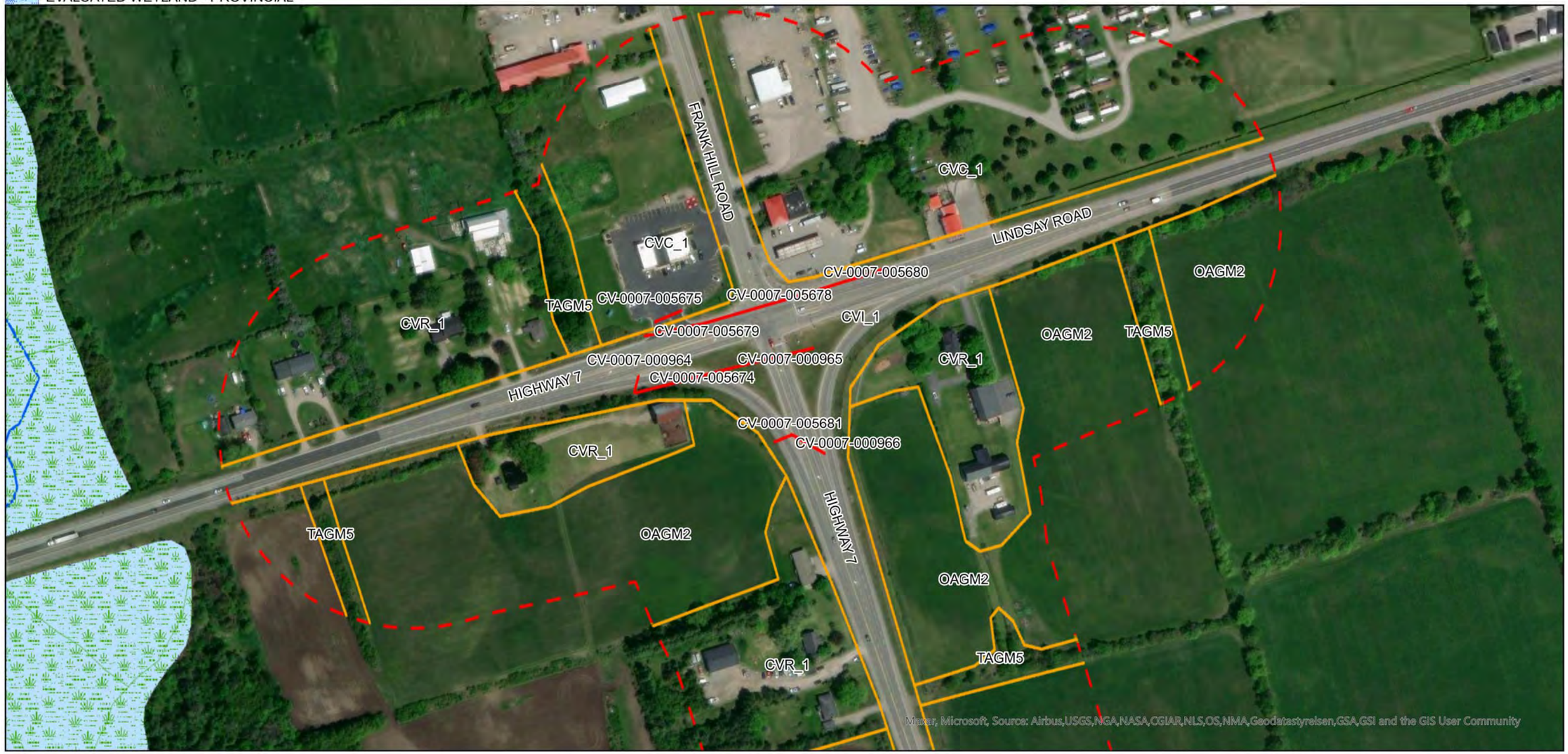
COUNTY ROAD 15 NORTH MONAGHAN PARKWAY
TO COUNTY ROAD 26 (FOWLER'S CORNERS)

N

Ainley GROUP CONSULTING ENGINEERS PLANNERS

SHEET 1

EXISTING CONDITIONS



Source: Airbus,USGS,NGA,NASA,CGIAR,NLS,OS,NMA,Geodatastyrelsen,GSA,GSI and the GIS User Community

N.T.S

LEGEND

- STUDY AREA - 120 M
- CULVERT LOCATIONS
- ECOLOGICAL LAND CLASSIFICATION
- INTERMITTENT WATERCOURSE
- PERMANENT WATERCOURSE
- UNEVALUATED WETLAND
- EVALUATED WETLAND - OTHER
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- CVI_1 - TRANSPORTATION
- OAGM2 - PERENNIAL COVER CROP
- TAGM5 - FENCEROW
- CVC_1 - BUSINESS SECTOR
- CVR_1 - LOW-DENSITY RESIDENTIAL
- OAGM1 - ANNUAL ROW CROP

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COUNTY ROAD 15 NORTH MONAGHAN PARKWAY
TO COUNTY ROAD 26 (FOWLER'S CORNERS)

N

Ainley GROUP CONSULTING ENGINEERS PLANNERS

SHEET 2

EXISTING CONDITIONS

Source: Airbus,USGS,NGA,NASA,CGIAR,NLS,OS,NMA,Geodatastyrelsen,GSA,GSI and the GIS User Community

N.T.S

LEGEND

- STUDY AREA - 120 M
- ECOLOGICAL LAND CLASSIFICATION
- INTERMITTENT WATERCOURSE
- PERMANENT WATERCOURSE
- UNEVALUATED WETLAND
- EVALUATED WETLAND - OTHER
- EVALUATED WETLAND - PROVINCIAL

- CVI_1 - TRANSPORTATION
- OAGM2 - PERENNIAL COVER CROP
- TAGM5 - FENCEROW
- CVR_1 - LOW-DENSITY RESIDENTIAL
- OAGM1 - ANNUAL ROW CROP

METRIC

DIMENSIONS ARE IN METRES
AND/OR MILLIMETRES
UNLESS OTHERWISE SHOWN

COUNTY ROAD 15 NORTH MONAGHAN PARKWAY
TO COUNTY ROAD 26 (FOWLER'S CORNERS)

N

Ainley GROUP CONSULTING ENGINEERS PLANNERS

SHEET 3

EXISTING CONDITIONS

Source: Airbus,USGS,NGA,NASA,CGIAR,NLS,OS,NMA,Geodatastyrelsen,GSA,GSI and the GIS User Community

N.T.S

LEGEND

- STUDY AREA - 120 M
- CULVERT LOCATIONS
- ECOLOGICAL LAND CLASSIFICATION
- INTERMITTENT WATERCOURSE
- PERMANENT WATERCOURSE
- UNEVALUATED WETLAND
- EVALUATED WETLAND - OTHER
- EVALUATED WETLAND - PROVINCIAL

- CVI_1 - TRANSPORTATION
- OAGM2 - PERENNIAL COVER CROP
- TAGM5 - FENCEROW
- CVR_1 - LOW-DENSITY RESIDENTIAL
- OAGM1 - ANNUAL ROW CROP
- OAGM4 - OPEN PASTURE
- CVC_1 - BUSINESS SECTOR

- FODM5-1 - DRY-FRESH SUGAR MAPLE DECIDUOUS FOREST

METRIC

DIMENSIONS ARE IN METRES AND/OR MILLIMETRES UNLESS OTHERWISE SHOWN

COUNTY ROAD 15 NORTH MONAGHAN PARKWAY TO COUNTY ROAD 26 (FOWLER'S CORNERS)

N

Ainley GROUP CONSULTING ENGINEERS PLANNERS

SHEET 4

EXISTING CONDITIONS

Sources: Maxar, Airbus DS, USGS, NGA, NASA, CGIAR, GEBCO, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen and the GIS User Community

N.T.S

LEGEND

- STUDY AREA - 120 M
- ECOLOGICAL LAND CLASSIFICATION
- INTERMITTENT WATERCOURSE
- PERMANENT WATERCOURSE
- UNEVALUATED WETLAND
- EVALUATED WETLAND - OTHER
- EVALUATED WETLAND - PROVINCIAL

- CVI_1 - TRANSPORTATION
- OAGM2 - PERENNIAL COVER CROP
- TAGM5 - FENCEROW
- CVR_1 - LOW-DENSITY RESIDENTIAL
- OAGM1 - ANNUAL ROW CROP
- OAGM4 - OPEN PASTURE
- CVC_1 - BUSINESS SECTOR
- FODM5-1 - DRY-FRESH SUGAR MAPLE DECIDUOUS FOREST

METRIC

DIMENSIONS ARE IN METRES AND/OR MILLIMETRES UNLESS OTHERWISE SHOWN

COUNTY ROAD 15 NORTH MONAGHAN PARKWAY TO COUNTY ROAD 26 (FOWLER'S CORNERS)

N

Ainley GROUP CONSULTING ENGINEERS PLANNERS

SHEET 5

EXISTING CONDITIONS

Source: Airbus,USGS,NGA,NASA,CGIAR,NLS,OS,NMA,Geodatastyrelsen,GSA,GSI and the GIS User Community

N.T.S

LEGEND

- STUDY AREA - 120 M
- ECOLOGICAL LAND CLASSIFICATION
- INTERMITTENT WATERCOURSE
- PERMANENT WATERCOURSE
- UNEVALUATED WETLAND
- EVALUATED WETLAND - OTHER
- EVALUATED WETLAND - PROVINCIAL

CVI_1 - TRANSPORTATION
CVR_1 - LOW-DENSITY RESIDENTIAL
CVC_1 - BUSINESS SECTOR
FODM3-1 - DRY-FRESH POPLAR DECIDUOUS FOREST
SWTM3-2 - BEBB'S WILLOW MINERAL DECIDUOUS THICKET SWAMP
FOCM2-2 - DRY-FRESH WHITE CEDAR CONIFEROUS FOREST
MASM1-1 - CATTAIL MINERAL SHALLOW MARSH

METRIC

DIMENSIONS ARE IN METRES AND/OR MILLIMETRES UNLESS OTHERWISE SHOWN

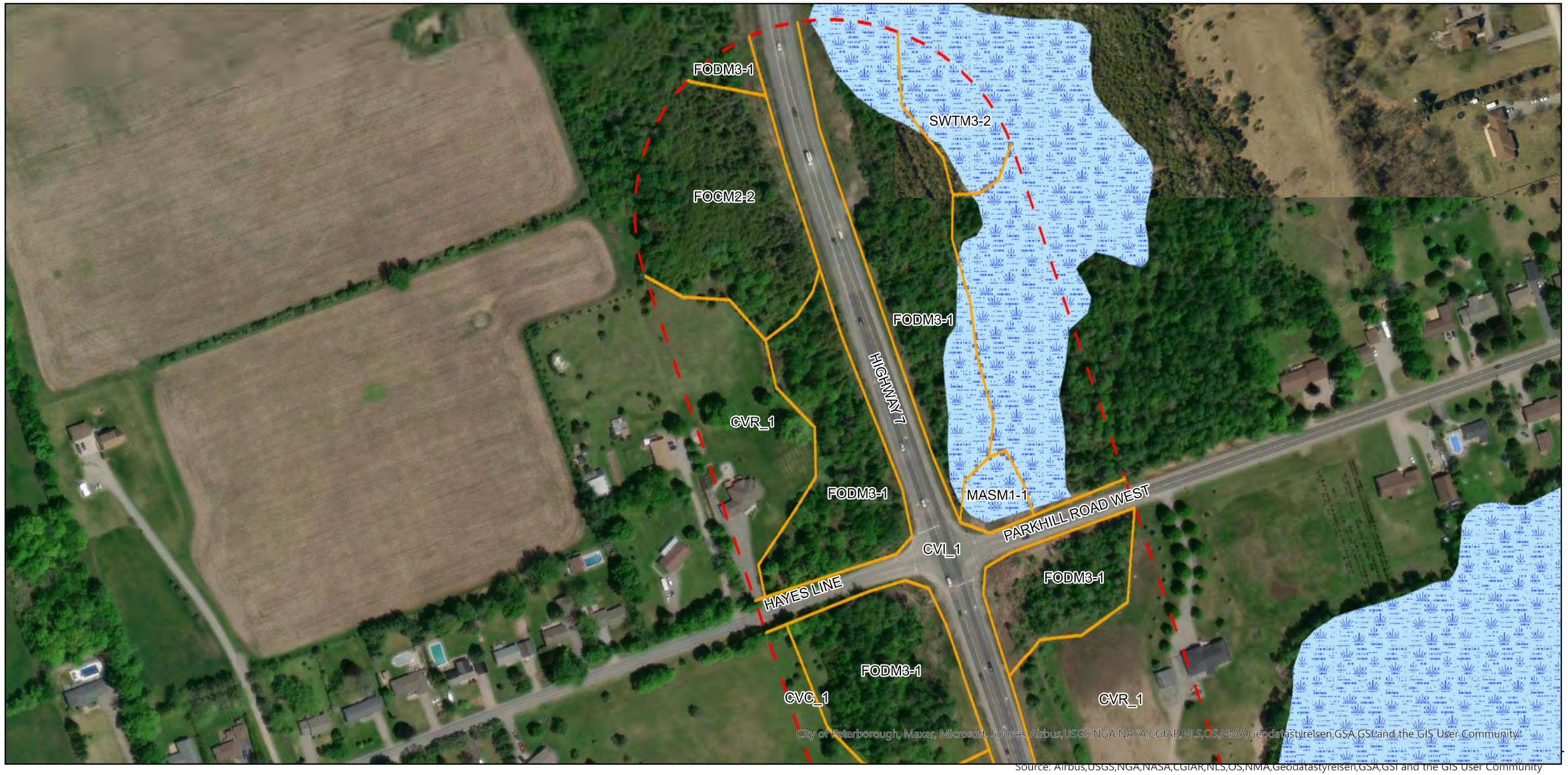
COUNTY ROAD 15 NORTH MONAGHAN PARKWAY TO COUNTY ROAD 26 (FOWLER'S CORNERS)

N

Ainley GROUP CONSULTING ENGINEERS PLANNERS

SHEET 6

EXISTING CONDITIONS



Source: Airbus,USGS,NGA,NASA,CGIAR,NLS,OS,NMA,Geodatastyrelsen,GSA,GSI and the GIS User Community

N.T.S

LEGEND

- STUDY AREA - 120 M
- ECOLOGICAL LAND CLASSIFICATION
- INTERMITTENT WATERCOURSE
- PERMANENT WATERCOURSE
- UNEVALUATED WETLAND
- EVALUATED WETLAND - OTHER
- EVALUATED WETLAND - PROVINCIAL

CVI_1 - TRANSPORTATION
CVR_1 - LOW-DENSITY RESIDENTIAL
CVC_1 - BUSINESS SECTOR
FODM3-1 - DRY-FRESH POPLAR
DECIDUOUS FOREST

METRIC

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AND/OR MILLIMETRES
UNLESS OTHERWISE SHOWN

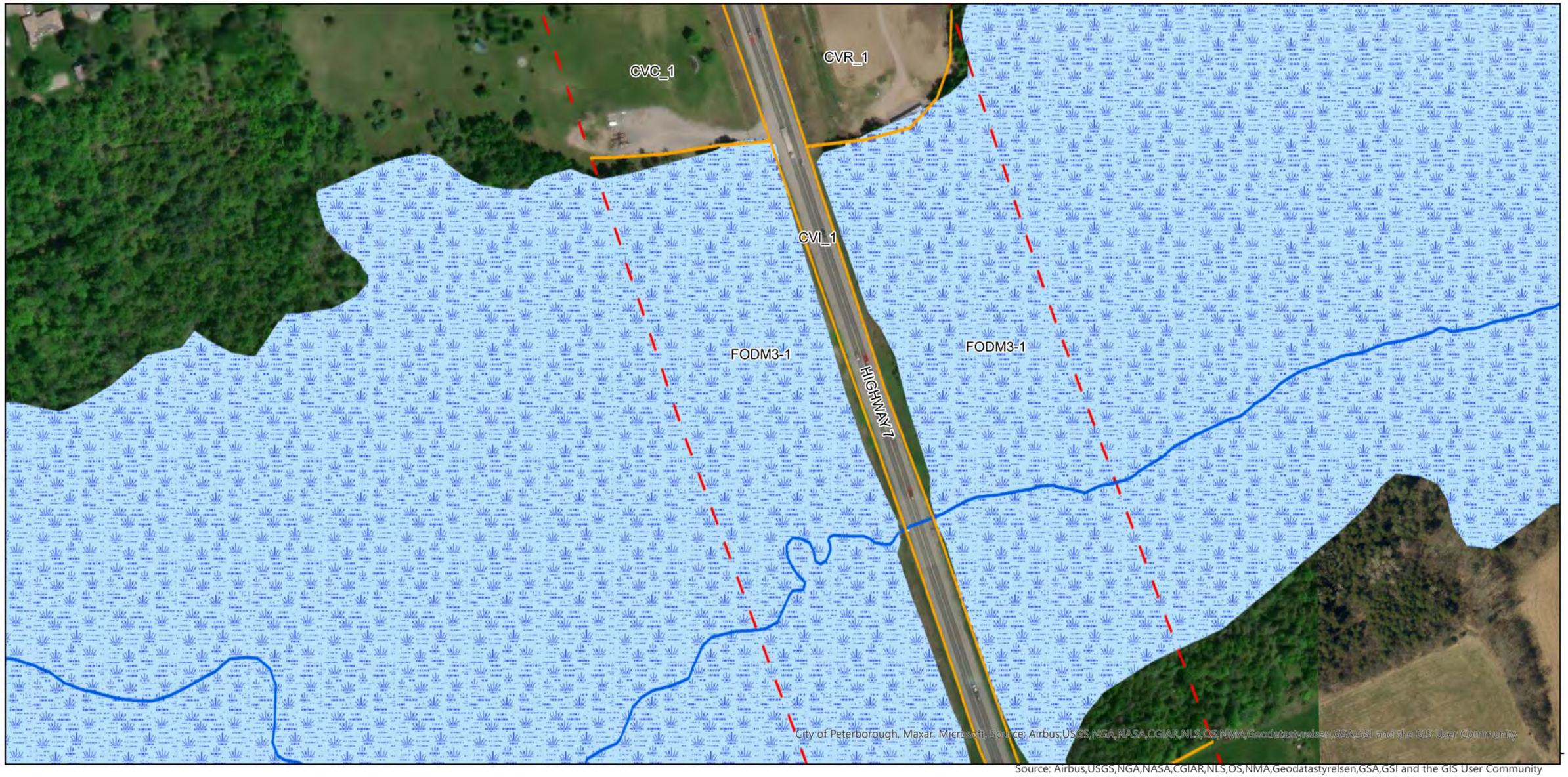
COUNTY ROAD 15 NORTH MONAGHAN PARKWAY
TO COUNTY ROAD 26 (FOWLER'S CORNERS)

N

Ainley GROUP CONSULTING ENGINEERS PLANNERS

SHEET 7

EXISTING CONDITIONS



Source: Airbus,USGS,NGA,NASA,CGIAR,NLS,OS,NMA,Geodatastyrelsen,GSA,GSI and the GIS User Community

N.T.S

LEGEND

- STUDY AREA - 120 M
- ECOLOGICAL LAND CLASSIFICATION
- INTERMITTENT WATERCOURSE
- PERMANENT WATERCOURSE
- UNEVALUATED WETLAND
- EVALUATED WETLAND - OTHER
- EVALUATED WETLAND - PROVINCIAL

- CVI_1 - TRANSPORTATION
- OAGM2 - PERENNIAL COVER CROP
- CVC_1 - BUSINESS SECTOR
- TAGM5 - FENCEROW
- FODM3-1 - DRY-FRESH POPLAR
- DECIDUOUS FOREST

METRIC

DIMENSIONS ARE IN METRES
AND/OR MILLIMETRES
UNLESS OTHERWISE SHOWN

COUNTY ROAD 15 NORTH MONAGHAN PARKWAY
TO COUNTY ROAD 26 (FOWLER'S CORNERS)

N

Ainley GROUP CONSULTING ENGINEERS PLANNERS

SHEET 8

EXISTING CONDITIONS

Source: Airbus,USGS,NGA,NASA,CGIAR,NLS,OS,NMA,Geodatastyrelsen,GSA,GSI and the GIS User Community

N.T.S

LEGEND

- STUDY AREA - 120 M
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- INTERMITTENT WATERCOURSE
- PERMANENT WATERCOURSE
- UNEVALUATED WETLAND
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- EVALUATED WETLAND - PROVINCIAL

CVI_1 - TRANSPORTATION
OAGM2 - PERENNIAL COVER CROP
CVC_1 - BUSINESS SECTOR
TAGM5 - FENCEROW
CVR_1 - LOW DENSITY RESIDENTIAL
FODM3-1 - DRY-FRESH POPLAR DECIDUOUS FOREST
SWTM3-2 - BEBB'S WILLOW MINERAL DECIDUOUS THICKET SWAMP
SAS_1-1 - PONDWEED SUBMERGED SHALLOW AQUATIC
FOCM2-2 - DRY-FRESH WHITE CEDAR CONIFEROUS FOREST
WOCM1 - DRY-FRESH CONIFEROUS WOODLAND
MASM1-1 - CATTAIL MINERAL SHALLOW MARSH

METRIC

DIMENSIONS ARE IN METRES AND/OR MILLIMETRES UNLESS OTHERWISE SHOWN

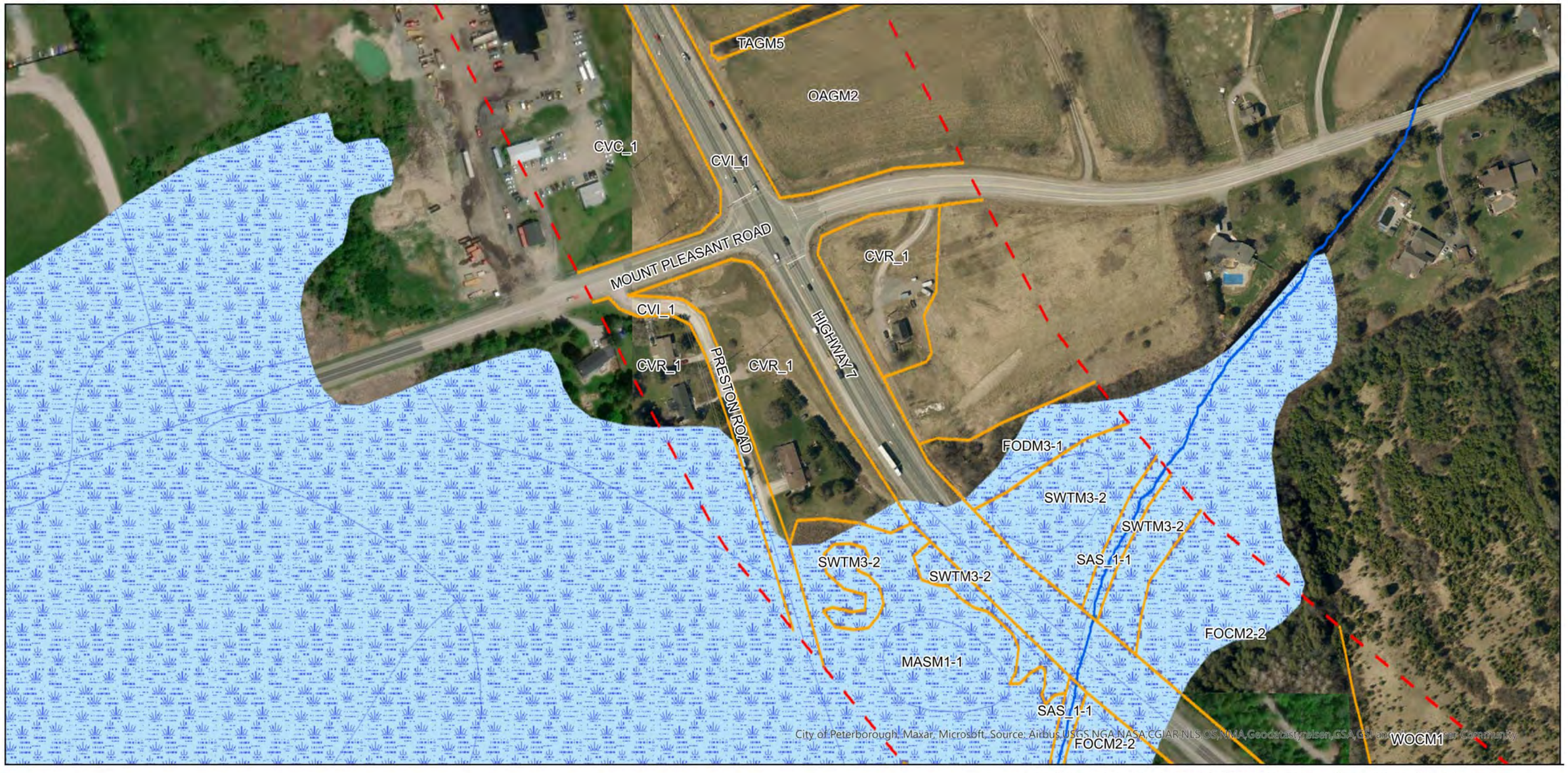
COUNTY ROAD 15 NORTH MONAGHAN PARKWAY TO COUNTY ROAD 26 (FOWLER'S CORNERS)

N

Ainley GROUP CONSULTING ENGINEERS PLANNERS

SHEET 9

EXISTING CONDITIONS



Source: Airbus,USGS,NGA,NASA,CGIAR,NLS,OS,NMA,Geodatastyrelsen,GSA,GSI and the GIS User Community

N.T.S

LEGEND

- STUDY AREA - 120 M
- ECOLOGICAL LAND CLASSIFICATION
- INTERMITTENT WATERCOURSE
- PERMANENT WATERCOURSE
- UNEVALUATED WETLAND
- EVALUATED WETLAND - OTHER
- EVALUATED WETLAND - PROVINCIAL

CVI_1 - TRANSPORTATION
FODM3-1 - DRY-FRESH POPLAR DECIDUOUS FOREST
MASM1-1 - CATTAIL MINERAL SHALLOW MARSH
FOCM2-2 - DRY-FRESH WHITE CEDAR CONIFEROUS FOREST
SAS_1-1 - PONDWEED SUBMERGED SHALLOW AQUATIC
SWTM3-2 - BEBB'S WILLOW MINERAL DECIDUOUS THICKET SWAMP
WOCM1 - DRY-FRESH CONIFEROUS WOODLAND
OAGM2 - PERENNIAL COVER CROP

METRIC

DIMENSIONS ARE IN METRES
AND/OR MILLIMETRES
UNLESS OTHERWISE SHOWN

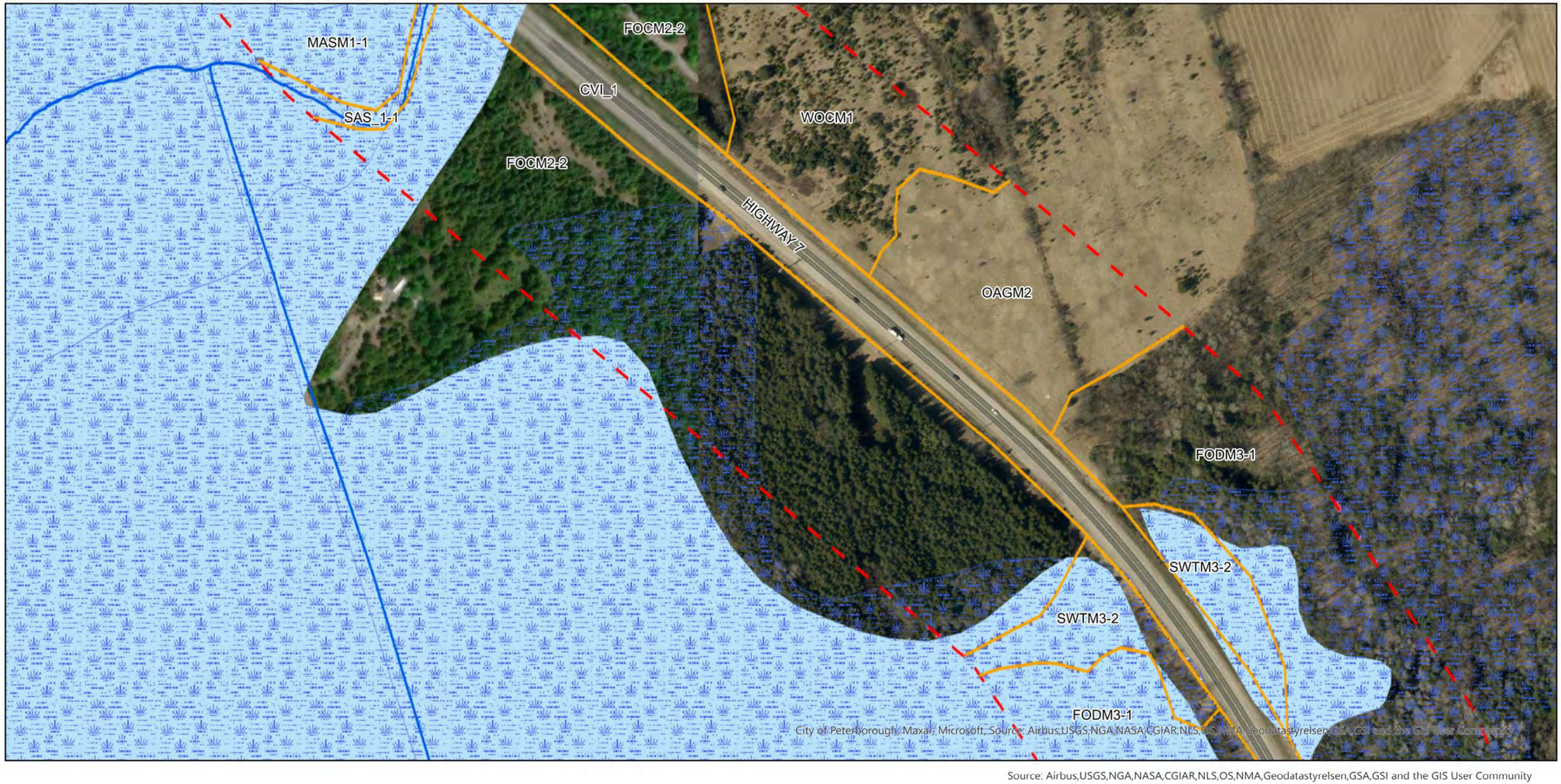
COUNTY ROAD 15 NORTH MONAGHAN PARKWAY
TO COUNTY ROAD 26 (FOWLER'S CORNERS)

N

Minley GROUP CONSULTING ENGINEERS PLANNERS

SHEET 10

EXISTING CONDITIONS



Source: Airbus,USGS,NGA,NASA,CGIAR,NLS,OS,NMA,Geodatastyrelsen,GSA,GSI and the GIS User Community

N.T.S

LEGEND

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- INTERMITTENT WATERCOURSE
- PERMANENT WATERCOURSE
- UNEVALUATED WETLAND
- EVALUATED WETLAND - OTHER
- EVALUATED WETLAND - PROVINCIAL

CVI_1 - TRANSPORTATION

FODM3-1 - DRY-FRESH POPLAR DECIDUOUS FOREST

MASM1-1 - CATTAIL MINERAL SHALLOW MARSH

FOCM2-2 - DRY-FRESH WHITE CEDAR CONIFEROUS FOREST

SWTM3-2 - BEBB'S WILLOW MINERAL DECIDUOUS THICKET SWAMP

MAMM1-3 - REED-CANARY GRASS GRAMINOID MINERAL MEADOW MARSH

METRIC

DIMENSIONS ARE IN METRES AND/OR MILLIMETRES UNLESS OTHERWISE SHOWN

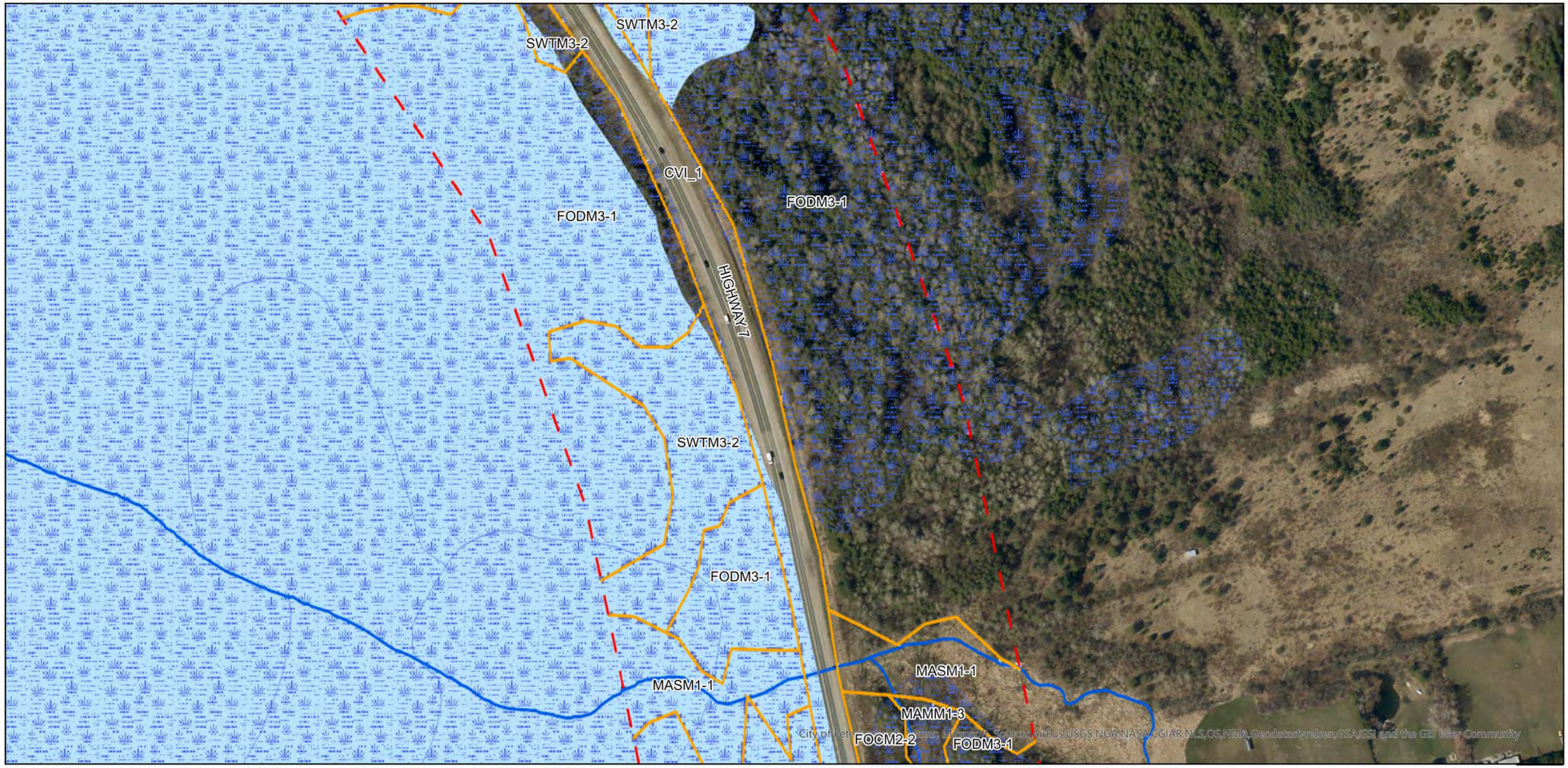
COUNTY ROAD 15 NORTH MONAGHAN PARKWAY TO COUNTY ROAD 26 (FOWLER'S CORNERS)

N

Ainley GROUP CONSULTING ENGINEERS PLANNERS

SHEET 11

EXISTING CONDITIONS



Source: Airbus,USGS,NGA,NASA,CGIAR,NLS,OS,NMA,Geodatastyrelsen,GSA,GSI and the GIS User Community

N.T.S

LEGEND

- STUDY AREA - 120 M
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- INTERMITTENT WATERCOURSE
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MASM1-1 - CATTAIL MINERAL SHALLOW MARSH
FOCM2-2 - DRY-FRESH WHITE CEDAR CONIFEROUS FOREST
MAMM1-3 - REED-CANARY GRASS GRAMINOID MINERAL MEADOW MARSH
CVC_1 - BUSINESS SECTOR
CVR_1 - LOW-DENSITY RESIDENTIAL
TAGM5 - FENCEROW
OAGM1 - ANNUAL ROW CROP

METRIC

DIMENSIONS ARE IN METRES AND/OR MILLIMETRES UNLESS OTHERWISE SHOWN

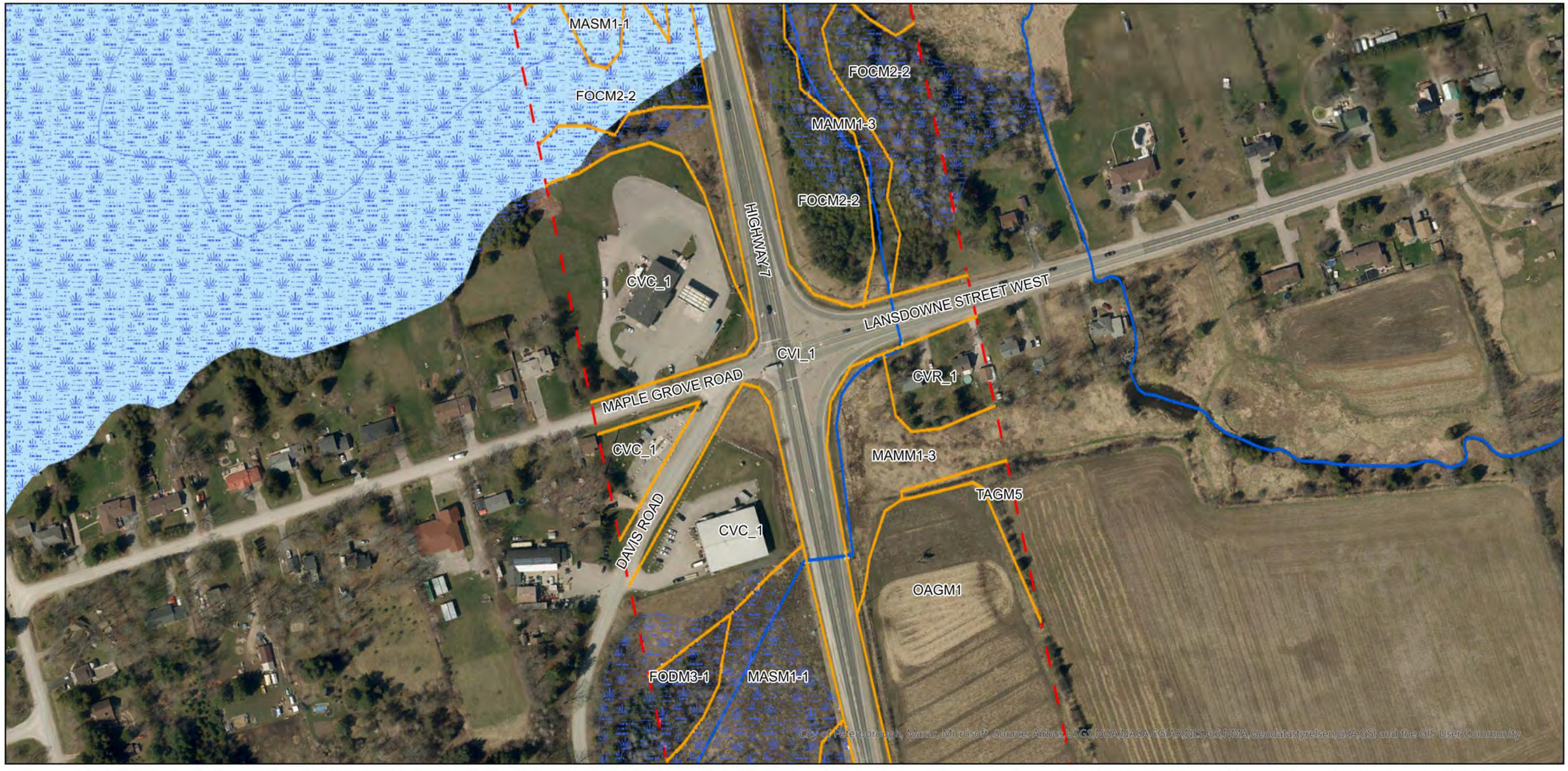
COUNTY ROAD 15 NORTH MONAGHAN PARKWAY TO COUNTY ROAD 26 (FOWLER'S CORNERS)

N

Minley GROUP CONSULTING ENGINEERS PLANNERS

SHEET 12

EXISTING CONDITIONS



Source: Airbus,USGS,NGA,NASA,CGIAR,NLS,OS,NMA,Geodatastyrelsen,GSA,GSI and the GIS User Community

N.T.S

LEGEND

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- INTERMITTENT WATERCOURSE
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CVI_1 - TRANSPORTATION
FODM3-1 - DRY-FRESH POPLAR DECIDUOUS FOREST
MASM1-1 - CATTAIL MINERAL SHALLOW MARSH
FOCM6-3 - DRY-FRESH SCOTCH PINE NATURALIZED CONIFEROUS PLANTATION
OAGM2 - PERENNIAL COVER CROP
CVR_1 - LOW-DENSITY RESIDENTIAL
TAGM5 - FENCEROW
OAGM1 - ANNUAL ROW CROP

METRIC

DIMENSIONS ARE IN METRES AND/OR MILLIMETRES UNLESS OTHERWISE SHOWN

COUNTY ROAD 15 NORTH MONAGHAN PARKWAY TO COUNTY ROAD 26 (FOWLER'S CORNERS)

N

Ainley GROUP CONSULTING ENGINEERS PLANNERS

SHEET 13

EXISTING CONDITIONS

Source: Airbus,USGS,NGA,NASA,CGIAR,NLS,OS,NMA,Geodatastyrelsen,GSA,GSI and the GIS User Community

N.T.S

LEGEND

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- CULVERT LOCATIONS
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- PERMANENT WATERCOURSE
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- EVALUATED WETLAND - PROVINCIAL

CVI_1 - TRANSPORTATION
CVC_1 - BUSINESS SECTOR
MAMM1-3 - REED-CANARY GRASS
GRAMINOID
MINERAL MEADOW MARSH
FOCM6-3 - DRY-FRESH SCOTCH PINE
NATURALIZED CONIFEROUS PLANTATION

OAGM2 - PERENNIAL COVER CROP
CVR_1 - LOW-DENSITY RESIDENTIAL
TAGM5 - FENCEROW
OAGM1 - ANNUAL ROW CROP

METRIC

DIMENSIONS ARE IN METRES
AND/OR MILLIMETRES
UNLESS OTHERWISE SHOWN

COUNTY ROAD 15 NORTH MONAGHAN PARKWAY
TO COUNTY ROAD 26 (FOWLER'S CORNERS)

N

Ainley GROUP CONSULTING ENGINEERS PLANNERS

SHEET 14

EXISTING CONDITIONS

Source: Airbus,USGS,NGA,NASA,CGIAR,NLS,OS,NMA,Geodatastyrelsen,GSA,GSI and the GIS User Community

N.T.S

LEGEND

- STUDY AREA - 120 M
- ECOLOGICAL LAND CLASSIFICATION
- INTERMITTENT WATERCOURSE
- PERMANENT WATERCOURSE
- UNEVALUATED WETLAND
- EVALUATED WETLAND - OTHER
- EVALUATED WETLAND - PROVINCIAL

- CVI_1 - TRANSPORTATION
- CVC_1 - BUSINESS SECTOR
- CVR_1 - LOW-DENSITY RESIDENTIAL
- OAGM2 - PERENNIAL COVER CROP

METRIC

DIMENSIONS ARE IN METRES
AND/OR MILLIMETRES
UNLESS OTHERWISE SHOWN

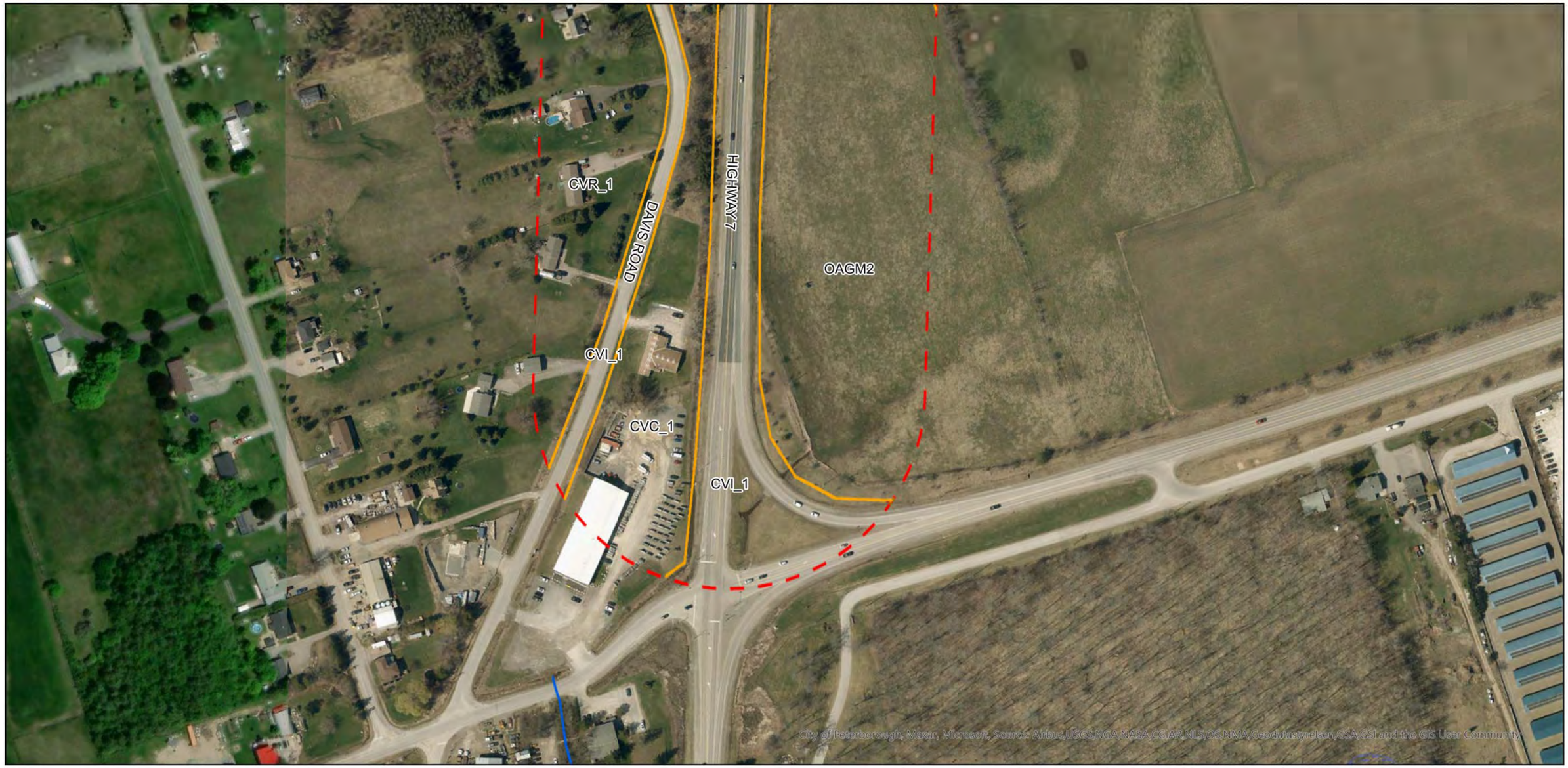
COUNTY ROAD 15 NORTH MONAGHAN PARKWAY
TO COUNTY ROAD 26 (FOWLER'S CORNERS)

N

Ainley GROUP CONSULTING ENGINEERS PLANNERS

SHEET 15

EXISTING CONDITIONS



Source: Airbus,USGS,NGA,NASA,CGIAR,NLS,OS,NMA,Geodatastyrelsen,GSA,GSI and the GIS User Community

N.T.S

APPENDIX D
European Common Reed Locations

Highway 7 Invasive Vegetation

		m	Lt./Rt.	m	Lt./Rt.	m^2
Sta. from	**Sta. to**	**Offset From**		**Offset To.**		**Area**
Monaghan Township						
13+825	13+925	9	Rt.	16	Rt.	700
Total Area						700

APPENDIX E
Migratory and Breeding Bird Summary

Appendix E: Bird Survey Species Summary
Terrestrial Ecosystem Existing Conditions and Impact Assessment Report
Highway 7 - County Road 26 (Fowlers Corners) to County Road 15 (North Monaghan Parkway)

Common Name	Scientific Name	Maximum Count*	Comment
Field Sparrow	*Spizella pusilla*	1	
Song Sparrow	*Melospiza melodia*	1	
American Goldfinch	*Spinus tristis*	1	
Northern Cardinal	*Cardinalis cardinalis*	1	
Common Yellowthroat	*Geothlypis trichas*	1	
Blue Jay	*Cyanocitta cristata*	1	
American Crow	*Corvus brachyrhynchos*	1	
American Robin	*Turdus migratorius*	1	
Eastern Wood-Pewee	*Contopus virens*	1	
Savannah Sparrow	*Passerculus sandwichensis*	1	
Chipping Sparrow	*Spizella passerina*	1	

*Field Observations

NatureCounts

Atlas Data Summary

Select a type of data summary: Provincial Summaries | Regional Summaries | **Species Lists** | Participant Statistics

Select a province and/or a region, or enter a 7-digit square number to view a species list with the highest breeding code reported to date. Click on a column name to sort.

Ontario | All regions | 17TQK00 | Go

Sort Order	Species	Max. Br. evid.	Squares
193	Canada Goose	AE	1
229	Trumpeter Swan	AE	1
296	Wood Duck	FY	1
311	Blue-winged Teal	T	1
355	Mallard	FY	1
412	Green-winged Teal	H	1
549	Hooded Merganser	H	1
814	Wild Turkey	FY	1
817	Ruffed Grouse	FY	1
1054	Rock Pigeon	AE	1
1330	Mourning Dove	NE	1
1790	Yellow-billed Cuckoo	S	1

Sort Order	Species	Max. Br. evid.	Squares
1795	Black-billed Cuckoo	T	1
2662	Ruby-throated Hummingbird	T	1
2972	Virginia Rail	FY	1
3051	Sora	A	1
3061	Common Gallinule	S	1
3304	Killdeer	FY	1
3460	American Woodcock	NE	1
3492	Wilson's Snipe	D	1
3510	Spotted Sandpiper	D	1
4551	American Bittern	T	1
4554	Least Bittern	FY	1
4629	Green Heron	T	1
4674	Great Blue Heron	H	1
4700	Turkey Vulture	H	1
4710	Osprey	H	1
4931	Sharp-shinned Hawk	H	1
4944	Cooper's Hawk	S	1
4974	Northern Harrier	D	1
5078	Broad-winged Hawk	FY	1
5098	Red-tailed Hawk	T	1
5339	Eastern Screech-Owl	S	1
5363	Great Horned Owl	S	1

Sort Order	Species	Max. Br. evid.	Squares
6067	Belted Kingfisher	CF	1
6510	Yellow-bellied Sapsucker	FY	1
6529	Red-headed Woodpecker	FY	1
6555	Red-bellied Woodpecker	FY	1
6640	Downy Woodpecker	FY	1
6652	Hairy Woodpecker	NY	1
6806	Pileated Woodpecker	T	1
6864	Northern Flicker	FY	1
6940	American Kestrel	FY	1
6961	Merlin	FY	1
9546	Eastern Wood-Pewee	T	1
9561	Alder Flycatcher	FY	1
9562	Willow Flycatcher	T	1
9568	Least Flycatcher	S	1
9589	Eastern Phoebe	NB	1
9764	Great Crested Flycatcher	T	1
9830	Eastern Kingbird	CF	1
10644	Blue-headed Vireo	T	1
10657	Warbling Vireo	T	1
10664	Red-eyed Vireo	T	1
11677	Blue Jay	FY	1

Sort Order	Species	Max. Br. evid.	Squares
11804	American Crow	CF	1
11851	Common Raven	AE	1
12018	Black-capped Chickadee	AE	1
12860	Tree Swallow	NY	1
12894	Northern Rough-winged Swallow	S	1
12939	Barn Swallow	FY	1
12999	Cliff Swallow	NB	1
14242	Golden-crowned Kinglet	S	1
14264	White-breasted Nuthatch	T	1
14281	Red-breasted Nuthatch	FY	1
14312	Brown Creeper	T	1
14394	Northern House Wren	NY	1
14434	Winter Wren	T	1
14451	Marsh Wren	T	1
14670	European Starling	CF	1
14797	Gray Catbird	CF	1
14811	Brown Thrasher	A	1
14852	Eastern Bluebird	NE	1
14951	Veery	CF	1
14956	Swainson's Thrush	S	1
14960	Hermit Thrush	T	1

Sort Order	Species	Max. Br. evid.	Squares
14965	Wood Thrush	T	1
15070	American Robin	NY	1
15833	Cedar Waxwing	FY	1
16628	House Sparrow	AE	1
17065	House Finch	T	1
17068	Purple Finch	FY	1
17228	American Goldfinch	FY	1
17390	Grasshopper Sparrow	T	1
17401	Chipping Sparrow	FY	1
17402	Clay-colored Sparrow	T	1
17405	Field Sparrow	T	1
17505	White-throated Sparrow	FY	1
17519	Vesper Sparrow	A	1
17534	Savannah Sparrow	CF	1
17550	Song Sparrow	CF	1
17564	Swamp Sparrow	CF	1
17597	Eastern Towhee	S	1
17680	Bobolink	T	1
17682	Eastern Meadowlark	CF	1
17798	Baltimore Oriole	FY	1
17807	Red-winged Blackbird	CF	1
17825	Brown-headed Cowbird	FY	1
17835	Common Grackle	CF	1

Sort Order	Species	Max. Br. evid.	Squares
17885	Ovenbird	T	1
17889	Northern Waterthrush	T	1
17893	Golden-winged Warbler	S	1
17899	Black-and-white Warbler	CF	1
17913	Nashville Warbler	T	1
17931	Mourning Warbler	T	1
17947	Common Yellowthroat	CF	1
17968	American Redstart	D	1
17989	Magnolia Warbler	S	1
17994	Blackburnian Warbler	H	1
17997	Yellow Warbler	CF	1
18006	Chestnut-sided Warbler	T	1
18023	Pine Warbler	S	1
18025	Yellow-rumped Warbler	T	1
18066	Black-throated Green Warbler	FY	1
18133	Canada Warbler	CF	1
18179	Scarlet Tanager	S	1
18222	Northern Cardinal	FY	1
18238	Rose-breasted Grosbeak	FY	1
18272	Indigo Bunting	T	1

Total: 119 breeding species

Note: the statistics and species lists presented on this page are based on accepted records (including records pending review) with breeding evidence.

BIRDS CANADA
OISEAUX CANADA

Birds Canada
P.O. Box 160
115 Front Street
Port Rowan ON N0E 1M0
Phone: 519-586-3531
Toll-free: 1-888-448-2473
Email:
hello@birdscanada.org

Birds Canada (Ontario Office)
P.O. Box 160
115 Front Street
Port Rowan ON N0E 1M0
Phone: 519-586-3531 ext. 123
Toll-free: 1-888-448-2473 ext. 123
Email:
atlas@birdsontario.org

SUBMIT	EXPLORE	MY DATA	ABOUT	ACCOUNT
Submit data	Coverage map	View data forms	Project Partners	Sign In
Enter nest records	Atlas Data Summary	Atlas square resources	Contact	Sign Up
Special surveys	Summarize nest records		Terms and Conditions	
Mobile App	Atlas Maps		About NatureCounts	
	Species Maps			
	State of Canada's Birds Report			
	Download data			
	NatureCounts Projects			

NatureCounts is a program of Birds Canada, a national organization dedicated to bird conservation

Canadian co-partner of
un partenaire canadien de
BirdLife INTERNATIONAL

NatureCounts

Atlas Data Summary

Select a type of data summary: Provincial Summaries | Regional Summaries | **Species Lists** | Participant Statistics

Select a province and/or a region, or enter a 7-digit square number to view a species list with the highest breeding code reported to date. Click on a column name to sort.

Ontario | All regions | 17TQK01 | Go

Sort Order	Species	Max. Br. evid.	Squares
193	Canada Goose	NE	1
296	Wood Duck	FY	1
311	Blue-winged Teal	H	1
355	Mallard	NE	1
814	Wild Turkey	D	1
817	Ruffed Grouse	D	1
1054	Rock Pigeon	H	1
1330	Mourning Dove	NY	1
1790	Yellow-billed Cuckoo	H	1
1795	Black-billed Cuckoo	S	1
1796	Yellow-billed/Black-billed Cuckoo	H	1

Sort Order	Species	Max. Br. evid.	Squares
2662	Ruby-throated Hummingbird	AE	1
2972	Virginia Rail	FY	1
3061	Common Gallinule	S	1
3083	American Coot	H	1
3304	Killdeer	S	1
3460	American Woodcock	NU	1
3492	Wilson's Snipe	S	1
3510	Spotted Sandpiper	S	1
4039	Common Loon	NE	1
4551	American Bittern	T	1
4554	Least Bittern	H	1
4629	Green Heron	FY	1
4700	Turkey Vulture	V	1
4710	Osprey	NY	1
4974	Northern Harrier	H	1
5078	Broad-winged Hawk	S	1
5098	Red-tailed Hawk	AE	1
5339	Eastern Screech-Owl	FY	1
5363	Great Horned Owl	NY	1
5523	Long-eared Owl	FY	1
6067	Belted Kingfisher	CF	1
6510	Yellow-bellied Sapsucker	N	1

Sort Order	Species	Max. Br. evid.	Squares
6555	Red-bellied Woodpecker	S	1
6640	Downy Woodpecker	T	1
6652	Hairy Woodpecker	CF	1
6806	Pileated Woodpecker	S	1
6864	Northern Flicker	T	1
6940	American Kestrel	P	1
6961	Merlin	P	1
9546	Eastern Wood-Pewee	S	1
9561	Alder Flycatcher	T	1
9562	Willow Flycatcher	T	1
9568	Least Flycatcher	S	1
9589	Eastern Phoebe	T	1
9764	Great Crested Flycatcher	T	1
9830	Eastern Kingbird	CF	1
10638	Yellow-throated Vireo	T	1
10657	Warbling Vireo	T	1
10664	Red-eyed Vireo	T	1
11677	Blue Jay	CF	1
11804	American Crow	FY	1
11851	Common Raven	NB	1
12018	Black-capped Chickadee	FY	1
12860	Tree Swallow	NY	1

Sort Order	Species	Max. Br. evid.	Squares
12939	Barn Swallow	S	1
14264	White-breasted Nuthatch	S	1
14394	Northern House Wren	NY	1
14434	Winter Wren	T	1
14451	Marsh Wren	T	1
14670	European Starling	NY	1
14797	Gray Catbird	A	1
14811	Brown Thrasher	S	1
14951	Veery	T	1
14965	Wood Thrush	S	1
15070	American Robin	NY	1
15833	Cedar Waxwing	FY	1
16628	House Sparrow	AE	1
17065	House Finch	NE	1
17068	Purple Finch	T	1
17215	Pine Siskin	S	1
17228	American Goldfinch	A	1
17390	Grasshopper Sparrow	S	1
17401	Chipping Sparrow	T	1
17405	Field Sparrow	S	1
17505	White-throated Sparrow	T	1
17519	Vesper Sparrow	S	1

Sort Order	Species	Max. Br. evid.	Squares
17534	Savannah Sparrow	CF	1
17550	Song Sparrow	CF	1
17564	Swamp Sparrow	FY	1
17680	Bobolink	D	1
17682	Eastern Meadowlark	CF	1
17798	Baltimore Oriole	T	1
17807	Red-winged Blackbird	FY	1
17825	Brown-headed Cowbird	NE	1
17835	Common Grackle	NY	1
17885	Ovenbird	S	1
17889	Northern Waterthrush	FY	1
17899	Black-and-white Warbler	S	1
17913	Nashville Warbler	S	1
17931	Mourning Warbler	A	1
17947	Common Yellowthroat	DD	1
17968	American Redstart	T	1
17997	Yellow Warbler	T	1
18006	Chestnut-sided Warbler	A	1
18023	Pine Warbler	S	1
18066	Black-throated Green Warbler	S	1
18179	Scarlet Tanager	T	1
18222	Northern Cardinal	T	1

Sort Order	Species	Max. Br. evid.	Squares
18238	Rose-breasted Grosbeak	T	1
18272	Indigo Bunting	A	1

Total: 101 breeding species

Note: the statistics and species lists presented on this page are based on accepted records (including records pending review) with breeding evidence.

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Email:
atlas@birdsontario.org

Mobile App

Summarize nest records
Atlas Maps
Species Maps
State of Canada's Birds Report
Download data
NatureCounts Projects

About NatureCounts

NatureCounts is a program of Birds Canada, a national organization dedicated to bird conservation

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un partenaire canadien de

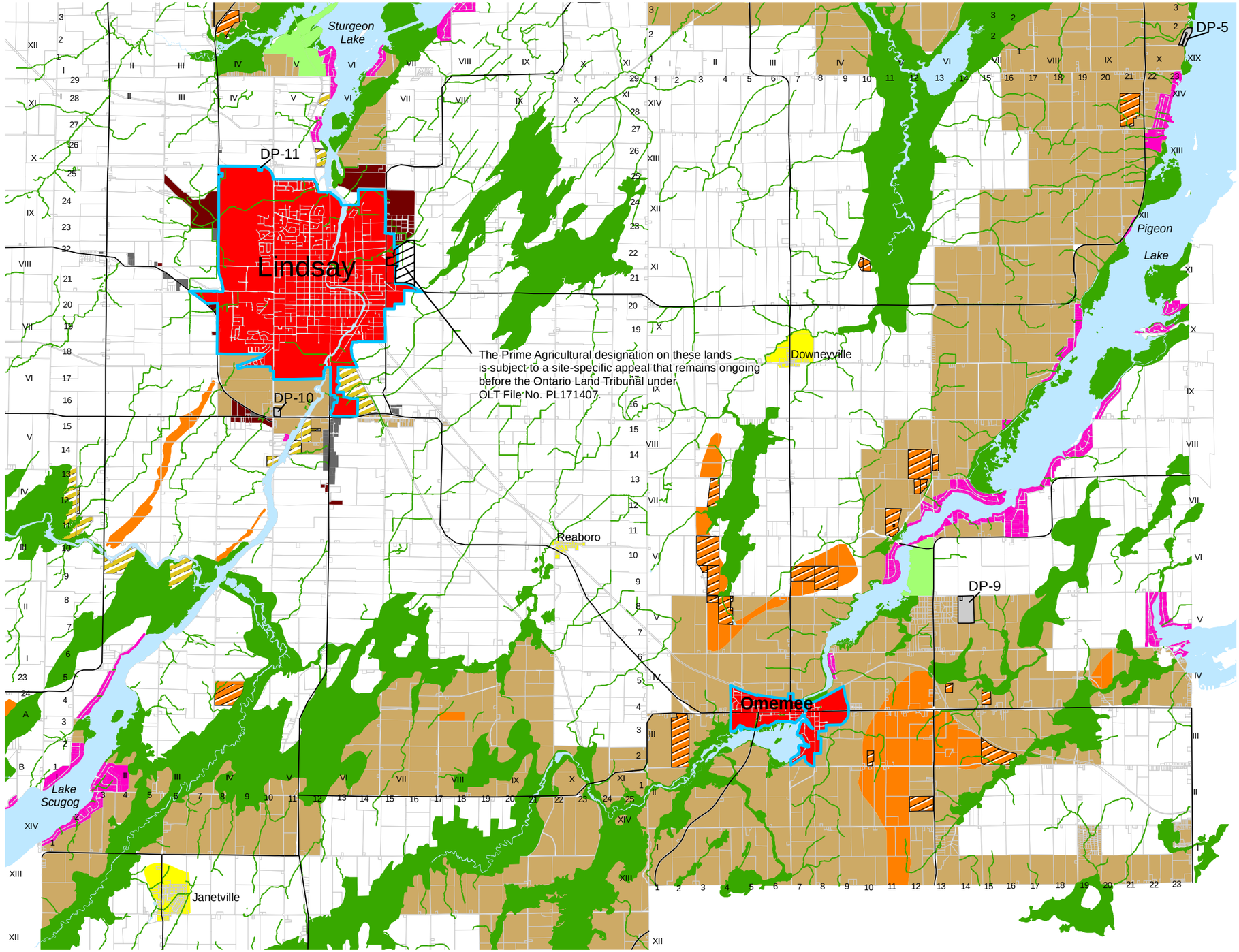
APPENDIX F
Natural Heritage Features

City of Kawartha Lakes

Official Plan

Schedule A-3

February 25, 2022 - Draft
(Geographic Townships of Ops and Emily)



Land Use Designations

- Prime Agricultural
- Rural
- Environmental Protection
- Urban Settlement Boundary
- Hamlet Settlement Area
- Waterfront
- Highway Commercial
- Tourist Commercial
- Industrial
- Aggregate
- Open Space
- Sand and Gravel Resource
- Development Plan Area
- Abandoned Mine Constraint
- Urban Settlement Boundary
- Lake Simcoe Source Water Protection Boundary
- SP-1 (Specific Lake Policy Area)

N

0 0.5 1 2 3 4 5
Kilometers

City of Kawartha Lakes
Catch the Kawartha spirit

City of Kawartha Lakes

Official Plan

Schedule B-3

March 17, 2011
(Geographic Townships of Ops and Emily)

B-5

B-2

B-1

Lindsay
OP

Sturgeon Lake

Pigeon Lake

Downeyville

Reaboro

Omemee

Lake Scugog

Janetville

Natural Heritage Features

- ANSI
- Locally Significant Wetlands
- Provincially Significant Wetlands
- Unevaluated Wetlands
- Waterbodies
- Significant Woodlands
- Significant Wildlife Habitat
- Petroleum Well

N

0 0.5 1 2 3 4 5
Kilometers

City of Kawartha Lakes
Catch the Kawartha spirit

Oak Ridges
Moraine OPA

N

March 17, 2011

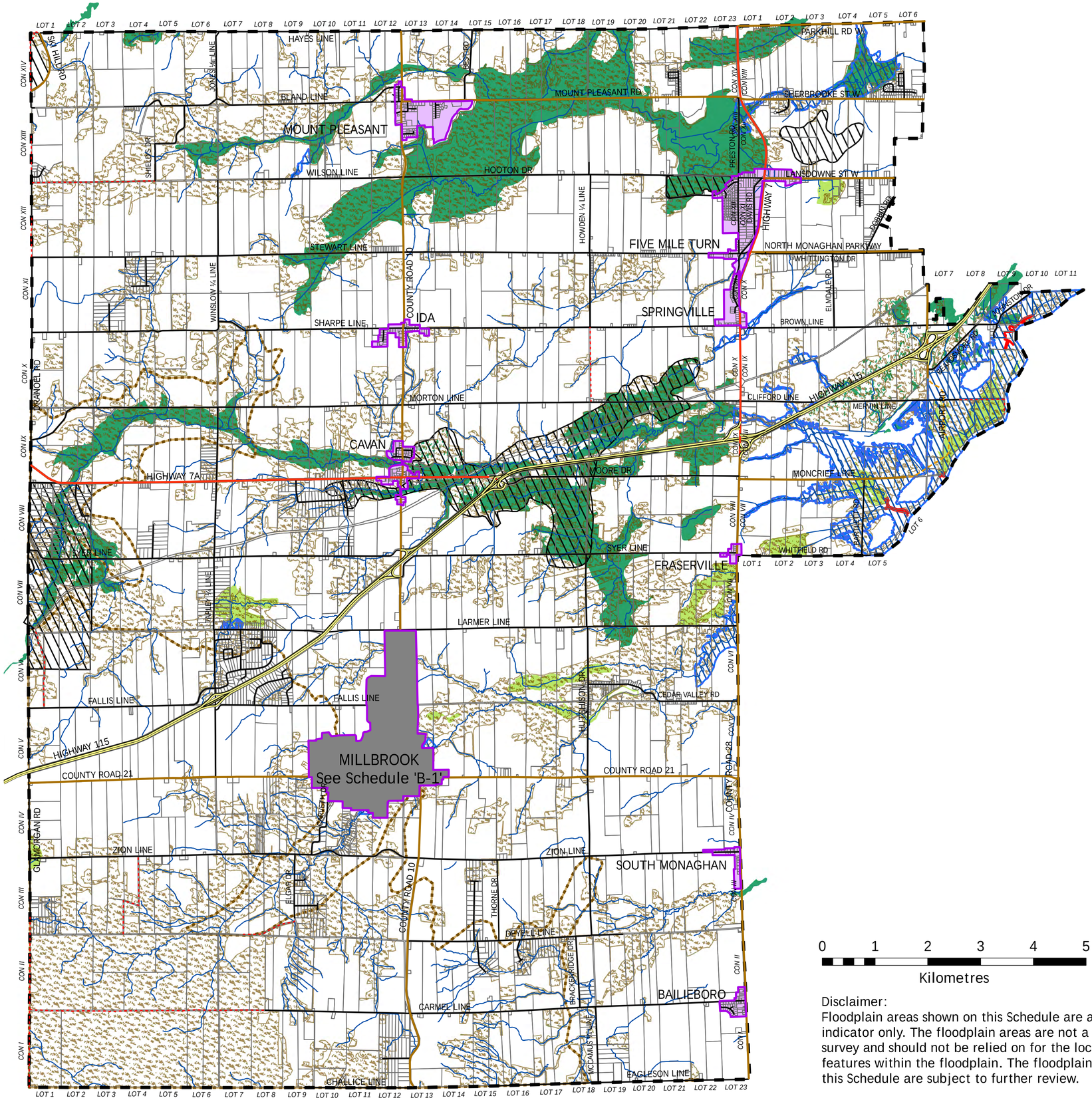
Bedrock Resource
Constraint Overlay
1 to 8m
High Potential (less than 1m)

This Schedule is under appeal. See Appendix K

City of Kawartha Lakes
Official Plan Schedule H
Bedrock Resource Constraint Overlay

City of KAWARTHA LAKES
Catch the Kawartha spirit

Township of Cavan Monaghan
Official Plan - Schedule 'B'
Natural Heritage System and Environmental Constraints



Legend

Settlement Areas
- Settlement Areas
- Hamlet
- Millbrook Urban Settlement Area

Natural Features
- Watercourse
- Oak Ridges Moraine Boundary
- ANSI
- Fish Spawning Area
- Floodplain Area
- Significant Woodland
- Other Wetland
- Provincially Significant Wetland

Transportation
- Freeway
- King's Highway
- County Road
- Proposed Arterial Road
- Township Road
- Private Road

0 1 2 3 4 5

Kilometres

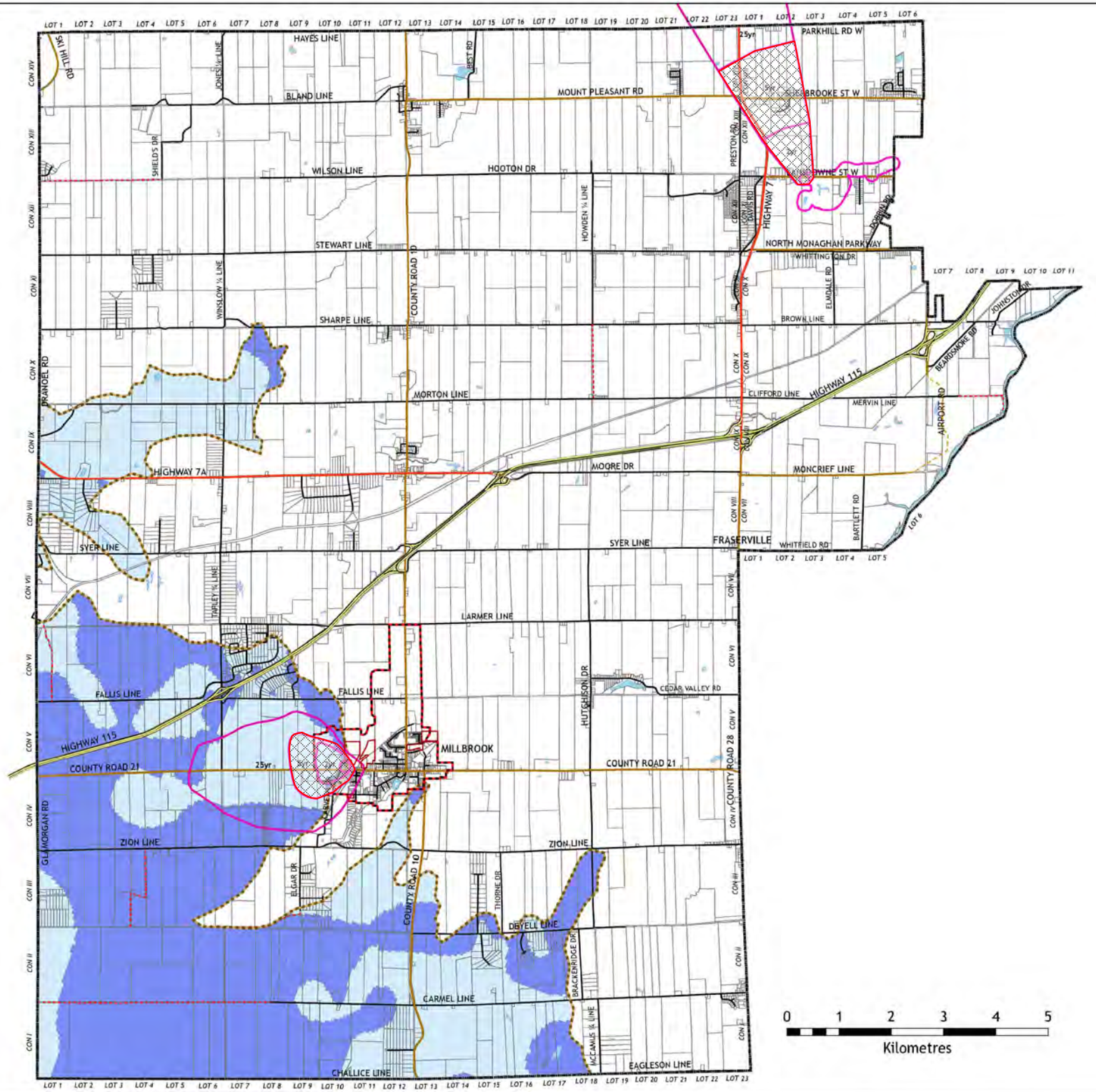
N W E S

Disclaimer:
Floodplain areas shown on this Schedule are a general indicator only. The floodplain areas are not a legal plan of survey and should not be relied on for the location of features within the floodplain. The floodplain areas on this Schedule are subject to further review.

Consolidated February 6, 2015

TOWNSHIP OF CAVAN MONAGHAN
Have it all. Right here.

Township of Cavan Monaghan
Official Plan - Schedule 'D'
Oak Ridges Moraine
Aquifer Vulnerability



Legend

- Township Boundary
- Millbrook Urban Settlement Area
- Oak Ridges Moraine Boundary
- Wellhead Protection Area

Aquifer Vulnerability

- High Aquifer Vulnerability Area
- Low Aquifer Vulnerability Area

Transportation

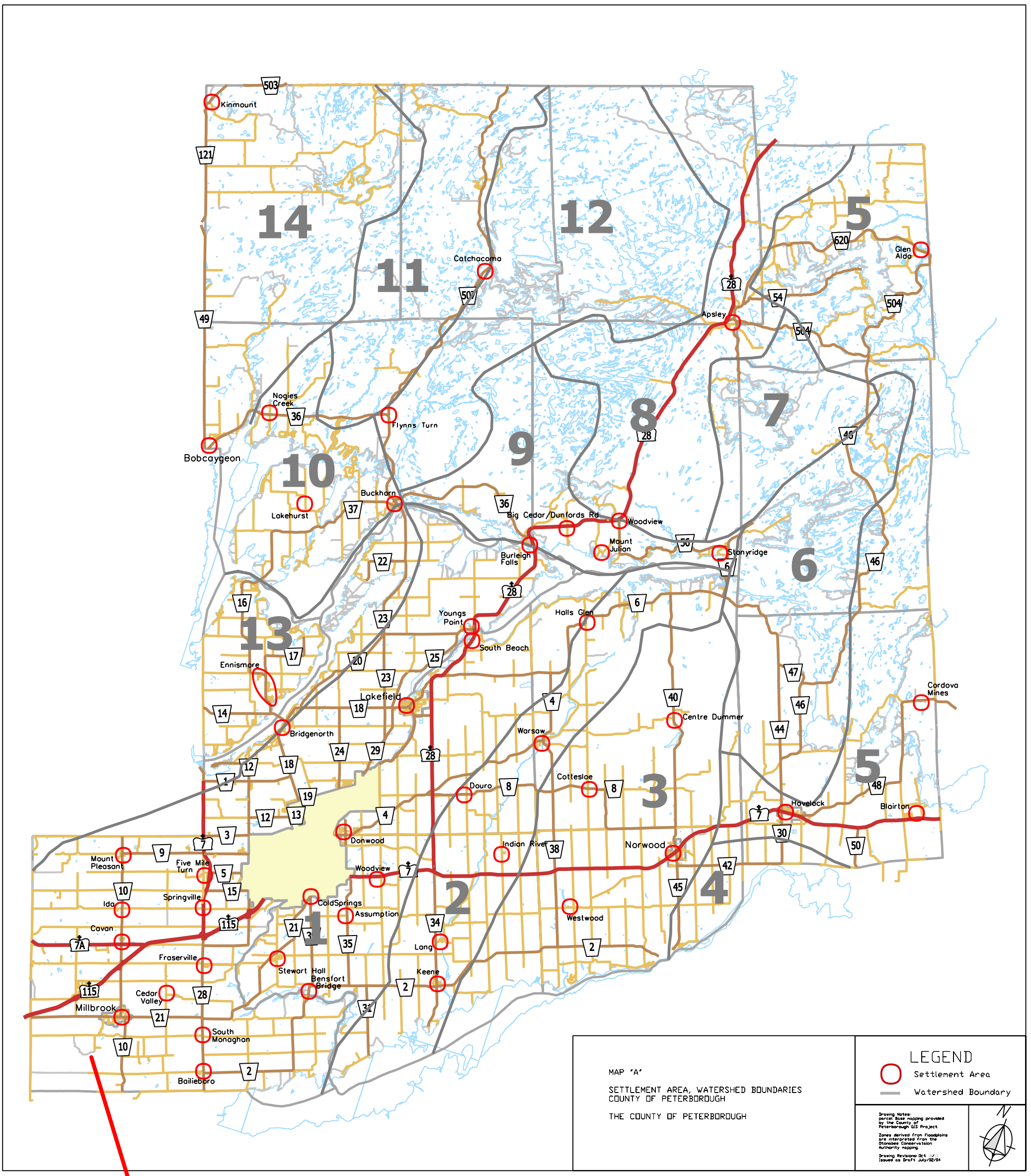
- Freeway
- King's Highway
- County Road
- Proposed Arterial Road
- Township Road
- Private Road

- Vulnerable Area

Amended by OPA No. 4, December 2017

Consolidated February 6, 2015

Township of Cavan Monaghan
Have it all. Right here.



MAP "A"

SETTLEMENT AREA, WATERSHED BOUNDARIES
COUNTY OF PETERBOROUGH

THE COUNTY OF PETERBOROUGH

LEGEND

Settlement Area

Watershed Boundary

Drawing Notes:
parcel Base mapping provided by the County of Peterborough GIS Project.

Zones derived from floodplains are interpreted from the Otonabee Conservation Authority mapping.

Drawing Revisions: Oct 2/03
Issued as Draft July/02/04

Oak Ridges Moraine Boundary - See Schedule '1' to OPA No. 1 attached

See Section 6.2.2.11 a), iv)

MODIFICATION NO ____2____ UNDER SECTION __17__ OF THE PLANNING ACT.

Deferred under Section 17(39)(6) of the Planning Act as per Part II of the attached decision

See Section 6.2.2.11 a), ii)

See Section 7.28

See Section 6.2.6.4 a), i)

See Section 7.28

See Section 7.28

Lakefield Urban Area
See Schedule A1-1

See Section 6.2.10.4 a), i)

See Section 6.2.2.11 a), iii)

MODIFICATION NO ____2____ UNDER SECTION __17__ OF THE PLANNING ACT.

See Section 6.2.17.4 a), i)

Bridgenorth Urban Area
See Schedule A1-2

See Section 6.2.12.4 a), i)

See Section 7.28

See Section 6.2.1.8 a), i)

See Section 6.2.2.11 a), i)

LEGEND

Urban Component

- Growth Centre (Lakefield & Bridgenorth)
- Native Reserve (Curve Lake)

Rural Component

- ANSI – Provincial Hatch
- ANSI – Regional Hatch
- Environmental Constraint Area
- Estate Residential
- Extractive Industrial
  - Aggregate Resources Area
- Hamlet
- Highway Commercial
- Prime Agricultural
- Provincially Significant Wetland
- Recreation Commercial
- Recreation – Open Space
- Lakeshore Residential
- Rural
- Rural Industrial
- Rural Settlement Area
- Seasonal Residential
- Trailer Park
- Urban Fringe Area
- Waste Management Area

SCHEDULE "A1"

LAND USE PLAN - RURAL COMPONENT
SMITH & ENNISMORE WARDS

THE CORPORATION OF
THE MUNICIPALITY OF
SMITH-ENNISMORE-LAKEFIELD

KILOMETRES
1.0 km 0 1.0 2.0 3.0 4.0 5.0 km

MILES
0.5 mile 0 1.0 2.0 3.0 4.0 miles

Drawing Notes:
Parcel Base mapping provided by the County of Peterborough GIS Project.

Drawing Revisions:
Issued as Draft Jun/25/08

N

APPENDIX G
Field Forms

Wildlife

Weather information is recorded on the **Wildlife** data card. Such information can be useful for helping to interpret records or results.

Temperature: Record of approximate ambient temperature (°C) during the field survey.

Cloud: Record, in tenths, the proportion of the sky covered by clouds.

Wind: Record the Beaufort Scale number according to Table 20

Table 20. Beaufort Wind Scale (adapted from Whittow 1984).

0	Calm	smoke rises vertically
1	Light Air	smoke drifts, but wind vanes do not
2	Light Breeze	wind felt on face, leaves rustle
3	Gentle Breeze	leaves and small twigs in constant motion; light flags extended
4	Moderate Breeze	wind raises dust and loose paper; small branches move
5	Fresh Breeze	small trees in leaf begin to sway
6	Strong Breeze	large branches in motion; whistling in phone wires; umbrella use difficult
7	Near Gale	whole trees in motion; inconvenience felt when walking against wind
8	Gale	twigs break off trees; progress impeded
9	Strong Gale	slight structural damage – roofing shingles, TV antennae
10	Storm	trees uprooted; considerable structural damage

Precipitation: Brief statement of precipitation, e.g ., none, steady rain, fog.

Conditions: Brief statement of conditions, surveyor mood, etc., which might affect the survey; a text field of 50 characters.

Indicate the presence of **Potential Wildlife Habitat** by checking the appropriate box of features that are present within the polygon.

Wildlife: All wildlife sightings and signs should be recorded while in the polygon. Record each sighting by **type** (TY) (B = bird, H = herpetofauna, etc.) and by **species** (SP. CODE). Use four-letter codes, provided in the database, for recording species.

Evidence Codes: (EV) should be used to record the type of observation. If possible, give an indication of the estimated number of individuals, pairs or signs for each wildlife species.

ELC COMMUNITY DESCRIPTION & CLASSIFICATION

SITE: 20577-25 | POLYGON: 1

SURVEYOR(S): DD KF | DATE: Jun 21/24 | UTME

START | END | UTMZ | UTMN

POLYGON DESCRIPTION

SYSTEM	SUBSTRATE	TOPOGRAPHIC FEATURE	HISTORY	PLANT FORM	COMMUNITY
☑ TERRESTRIAL ☐ WETLAND ☐ AQUATIC	☐ ORGANIC ☐ MINERAL SOIL ☐ PARENT MIN ☐ ACIDIC BEDRK ☐ BASIC BEDRK ☐ CARB. BEDRK	☐ LACUSTRINE ☐ RIVERINE ☐ BOTTOMLAND ☐ TERRACE ☐ VALLEY SLOPE ☐ TABLELAND ☐ ROLL. UPLAND ☐ CLIFF ☐ TALUS ☐ CREVICE / CAVE ☐ ALVAR ☐ ROCKLAND ☐ BEACH / BAR ☐ SAND DUNE ☐ BLUFF	☐ NATURAL ☑ CULTURAL	☐ PLANKTON ☐ SUBMERGED ☐ FLOATING-LVD ☐ GRAMINOID ☐ FORB ☐ LICHEN ☐ BRYOPHYTE ☐ DECIDUOUS ☐ CONIFEROUS ☐ MIXED	☐ LAKE ☐ POND ☐ RIVER ☐ STREAM ☐ MARSH ☐ SWAMP ☐ FEN ☐ BOG ☐ BARREN ☐ MEADOW ☐ PRAIRIE ☐ THICKET ☐ SAVANNAH ☐ WOODLAND ☐ FOREST ☐ PLANTATION

SITE

☐ OPEN WATER
☐ SHALLOW WATER
☐ SURFICIAL DEP.
☐ BEDROCK

COVER

☑ OPEN
☐ SHRUB
☐ TREED

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>> MUCH GREATER THAN; > GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY			
2	SUB-CANOPY			
3	UNDERSTOREY	3	2	Buckthorn = Sit Sumac
4	GRD. LAYER	4	4	Grasses > Goldenrod

HT CODES: 1 = >25 m 2 = 10<HT<25 m 3 = 2<HT<10 m 4 = 1<HT<2 m 5 = 0.5<HT<1 m 6 = 0.2<HT<0.5 m 7 = HT<0.2 m

CVR CODES 0= NONE 1= 0% < CVR < 10% 2= 10 < CVR < 25% 3= 25 < CVR < 60% 4= CVR > 60%

STAND COMPOSITION:					BA:
SIZE CLASS ANALYSIS:	< 10	10 - 24	25 - 50	> 50	
STANDING 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

COMM. AGE	PIONEER	YOUNG	MID-AGE	MATURE	OLD GROWTH

SOIL ANALYSIS:

TEXTURE:	DEPTH TO MOTTLES / GLEY	g =	G=
MOISTURE:	DEPTH OF ORGANICS:		(cm)
HOMOGENEOUS / VARIABLE	DEPTH TO BEDROCK:		(cm)

COMMUNITYCLASSIFICATION:

COMMUNITY CLASS:	CODE:
COMMUNITY SERIES:	CODE:
ECOSITE:	CODE:
VEGETATION TYPE:	CODE:
INCLUSION	CODE:
COMPLEX	CODE:

Notes:

Transportation

ELC
STAND & SOIL CHARACTERISTICS

SITE:
POLYGON:
DATE:
SURVEYOR(S):

TREE TALLY BY SPECIES:

PRISM FACTOR [ ]

SPECIES	TALLY 1	TALLY 2	TALLY 3	TALLY 4	TOTAL	RELATIVE AVERAGE
TOTAL						100
BASAL AREA (BA)						MEAN
DEAD						

STAND COMPOSITION:

SOIL ASSESSMENT:	1	2	3	4
TEXTURE				
DEPTH TO MOTTLES:	g=	g=	g=	g=
DEPTH TO GLEY:	G=	G=	G=	G=
DEPTH OF ORGANICS				
DEPTH TO BEDROCK				
MOISTURE REGIME				

SOIL PROFILE

COMMUNITY PROFILE DIAGRAM

NOTES:

ELC
PLANT SPECIES LIST

SITE: 20577-25
POLYGON: 1
DATE: Jun 21/24
SURVEYOR(S): DD KF

LAYERS: 1 = CANOPY > 10m 2 = SUB-CANOPY 3 = UNDERSTOREY 4 = GROUND (GRD.) LAYER
ABUNDANCE CODES: R = RARE O = OCCASIONAL A = ABUNDANT D = DOMINANT

SPECIES CODE	LAYER 1	2	3	4	COLL.
BF trefoil				O	
R. Clover				O	
W. Parsnip				A	
QAL				D	
Chicory	O			O	
RC Grass	A			A	
C. Dandelion				O	
Bull Thistle				O	
T Vetch				O	
Sow Thistle				O	
W. Mustard				O	
NL cattail				O	
P. Loosestrife				O	
S. Brome	A			A	
Goldenrod sp	A			A	
C. Milkweed				O	
Buttercup				O	
Y. Hawkweed				O	
C. Buckthorn			O		
C. Dock				O	
Oxeye Daisy				O	
A. Fleabane				O	
Goatsbeard				O	
SH Sumac			O		
Alfalfa				O	
B Medick				O	
BL cattail				O	

SPECIES CODE	LAYER 1	2	3	4	COLL.
R. Cedar			O		
C. Mullein				O	
DS Vine				O	
Spreading Dogbane				O	
W. Cedar			O		
C. St. John's Wort				O	
P. Ivy				O	
C. Burdock				O	
C. Goldenrod				O	
Aster sp				O	

Wildlife

Weather information is recorded on the **Wildlife** data card. Such information can be useful for helping to interpret records or results.

Temperature: Record of approximate ambient temperature (°C) during the field survey.

Cloud: Record, in tenths, the proportion of the sky covered by clouds.

Wind: Record the Beaufort Scale number according to Table 20

Table 20. Beaufort Wind Scale (adapted from Whittow 1984).

0	Calm	smoke rises vertically
1	Light Air	smoke drifts, but wind vanes do not
2	Light Breeze	wind felt on face, leaves rustle
3	Gentle Breeze	leaves and small twigs in constant motion; light flags extended
4	Moderate Breeze	wind raises dust and loose paper; small branches move
5	Fresh Breeze	small trees in leaf begin to sway
6	Strong Breeze	large branches in motion; whistling in phone wires; umbrella use difficult
7	Near Gale	whole trees in motion; inconvenience felt when walking against wind
8	Gale	twigs break off trees; progress impeded
9	Strong Gale	slight structural damage – roofing shingles, TV antennae
10	Storm	trees uprooted; considerable structural damage

Precipitation: Brief statement of precipitation, e.g ., none, steady rain, fog.

Conditions: Brief statement of conditions, surveyor mood, etc., which might affect the survey; a text field of 50 characters.

Indicate the presence of **Potential Wildlife Habitat** by checking the appropriate box of features that are present within the polygon.

Wildlife: **All wildlife sightings and signs should be recorded while in the polygon. Record each sighting by type (TY) (B = bird, H = herpetofauna, etc.) and by species (SP. CODE). Use four-letter codes, provided in the database, for recording species.**

Evidence Codes: (EV) should be used to record the type of observation. If possible, give an indication of the estimated number of individuals, pairs or signs for each wildlife species.

ELC COMMUNITY DESCRIPTION & CLASSIFICATION

SITE: 20577-25 | POLYGON: 2

SURVEYOR(S): DD KF | DATE: Jun 21/24 | UTME

START | END | UTMZ | UTMN

POLYGON DESCRIPTION

SYSTEM	SUBSTRATE	TOPOGRAPHIC FEATURE	HISTORY	PLANT FORM	COMMUNITY
☐ TERRESTRIAL ☐ WETLAND ☐ AQUATIC	☐ ORGANIC ☐ MINERAL SOIL ☐ PARENT MIN ☐ ACIDIC BEDRK ☐ BASIC BEDRK ☐ CARB. BEDRK	☐ LACUSTRINE ☐ RIVERINE ☐ BOTTOMLAND ☐ TERRACE ☐ VALLEY SLOPE ☐ TABLELAND ☐ ROLL. UPLAND ☐ CLIFF ☐ TALUS ☐ CREVICE / CAVE ☐ ALVAR ☐ ROCKLAND ☐ BEACH / BAR ☐ SAND DUNE ☐ BLUFF	☐ NATURAL ☑ CULTURAL	☐ PLANKTON ☐ SUBMERGED ☐ FLOATING-LVD ☑ GRAMINOID ☐ FORB ☐ LICHEN ☐ BRYOPHYTE ☐ DECIDUOUS ☐ CONIFEROUS ☐ MIXED	☐ LAKE ☐ POND ☐ RIVER ☐ STREAM ☐ MARSH ☐ SWAMP ☐ FEN ☐ BOG ☐ BARREN ☑ MEADOW ☐ PRAIRIE ☐ THICKET ☐ SAVANNAH ☐ WOODLAND ☐ FOREST ☐ PLANTATION

SITE	COVER
☐ OPEN WATER ☐ SHALLOW WATER ☐ SURFICIAL DEP. ☐ BEDROCK	☑ OPEN ☐ SHRUB ☐ TREED

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>> MUCH GREATER THAN; > GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY			
2	SUB-CANOPY			
3	UNDERSTOREY			
4	GRD. LAYER	6	4	RC Grass = S Brome

HT CODES: 1 = >25 m 2 = 10<HT≤25 m 3 = 2<HT≤10 m 4 = 1<HT≤2 m 5 = 0.5<HT≤1 m 6 = 0.2<HT≤0.5 m 7 = HT≤0.2 m

CVR CODES 0= NONE 1= 0% < CVR ≤ 10% 2= 10 < CVR ≤ 25% 3= 25 < CVR ≤ 60% 4= CVR > 60%

STAND COMPOSITION:	BA:

SIZE CLASS ANALYSIS:		< 10		10 - 24		25 - 50		> 50
STANDING 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

COMM. AGE		PIONEER		YOUNG		MID-AGE		MATURE		OLD GROWTH

SOIL ANALYSIS:

TEXTURE:	DEPTH TO MOTTLES / GLEY	g =	G=
MOISTURE:	DEPTH OF ORGANICS:		(cm)
HOMOGENEOUS / VARIABLE	DEPTH TO BEDROCK:		(cm)

COMMUNITYCLASSIFICATION:

COMMUNITY CLASS:	CODE:
COMMUNITY SERIES:	CODE:
ECOSITE:	CODE:
VEGETATION TYPE:	CODE:
INCLUSION	CODE:
COMPLEX	CODE:

Notes: Perennial Cover Crop

ELC STAND & SOIL CHARACTERISTICS	SITE:
	POLYGON:
	DATE:
	SURVEYOR(S):

TREE TALLY BY SPECIES:

PRISM FACTOR ☐

SPECIES	TALLY 1	TALLY 2	TALLY 3	TALLY 4	TOTAL	RELATIVE AVERAGE
TOTAL						100
BASAL AREA (BA)						MEAN
DEAD						

STAND COMPOSITION:

SOIL ASSESSMENT:	1	2	3	4
TEXTURE				
DEPTH TO MOTTLES:	g=	g=	g=	g=
DEPTH TO GLEY:	G=	G=	G=	G=
DEPTH OF ORGANICS				
DEPTH TO BEDROCK				
MOISTURE REGIME				

SOIL PROFILE

COMMUNITY PROFILE DIAGRAM

NOTES:

ELC PLANT SPECIES LIST	SITE: 20577-25
	POLYGON: 2
	DATE: Jun 21/24
	SURVEYOR(S): DD KF

LAYERS: 1 = CANOPY > 10m 2 = SUB-CANOPY 3 = UNDERSTOREY 4 = GROUND (GRD.) LAYER

ABUNDANCE CODES: R = RARE O = OCCASIONAL A = ABUNDANT D = DOMINANT

SPECIES CODE	LAYER 1	2	3	4	COLL.
Timothy				D	
S. Brome	A			A	
RC Grass	A			A	
Goldenrod sp.				O	
W. Parsnip				O	

SPECIES CODE	LAYER 1	2	3	4	COLL.

Page ..... of .....

Wildlife

Weather information is recorded on the **Wildlife** data card. Such information can be useful for helping to interpret records or results.

Temperature: Record of approximate ambient temperature (°C) during the field survey.

Cloud: Record, in tenths, the proportion of the sky covered by clouds.

Wind: Record the Beaufort Scale number according to Table 20

Table 20. Beaufort Wind Scale (adapted from Whittow 1984).

0	Calm	smoke rises vertically
1	Light Air	smoke drifts, but wind vanes do not
2	Light Breeze	wind felt on face, leaves rustle
3	Gentle Breeze	leaves and small twigs in constant motion; light flags extended
4	Moderate Breeze	wind raises dust and loose paper; small branches move
5	Fresh Breeze	small trees in leaf begin to sway
6	Strong Breeze	large branches in motion; whistling in phone wires; umbrella use difficult
7	Near Gale	whole trees in motion; inconvenience felt when walking against wind
8	Gale	twigs break off trees; progress impeded
9	Strong Gale	slight structural damage – roofing shingles, TV antennae
10	Storm	trees uprooted; considerable structural damage

Precipitation: Brief statement of precipitation, e.g ., none, steady rain, fog.

Conditions: Brief statement of conditions, surveyor mood, etc., which might affect the survey; a text field of 50 characters.

Indicate the presence of **Potential Wildlife Habitat** by checking the appropriate box of features that are present within the polygon.

Wildlife: **All wildlife sightings and signs should be recorded while in the polygon. Record each sighting by type (TY) (B = bird, H = herpetofauna, etc.) and by species (SP. CODE). Use four-letter codes, provided in the database, for recording species.**

Evidence Codes: (EV) should be used to record the type of observation. If possible, give an indication of the estimated number of individuals, pairs or signs for each wildlife species.

ELC COMMUNITY DESCRIPTION & CLASSIFICATION

SITE: 20577-25 | POLYGON: 3

SURVEYOR(S): DD KF | DATE: Jun 21/24 | UTME

START | END | UTMZ | UTMN

POLYGON DESCRIPTION

SYSTEM	SUBSTRATE	TOPOGRAPHIC FEATURE	HISTORY	PLANT FORM	COMMUNITY
☑ TERRESTRIAL ☐ WETLAND ☐ AQUATIC	☐ ORGANIC ☐ MINERAL SOIL ☐ PARENT MIN ☐ ACIDIC BEDRK ☐ BASIC BEDRK ☐ CARB. BEDRK	☐ LACUSTRINE ☐ RIVERINE ☐ BOTTOMLAND ☐ TERRACE ☐ VALLEY SLOPE ☐ TABLELAND ☐ ROLL. UPLAND ☐ CLIFF ☐ TALUS ☐ CREVICE / CAVE ☐ ALVAR ☐ ROCKLAND ☐ BEACH / BAR ☐ SAND DUNE ☐ BLUFF	☐ NATURAL ☐ CULTURAL	☐ PLANKTON ☐ SUBMERGED ☐ FLOATING-LVD ☐ GRAMINOID ☐ FORB ☐ LICHEN ☐ BRYOPHYTE ☐ DECIDUOUS ☐ CONIFEROUS ☐ MIXED	☐ LAKE ☐ POND ☐ RIVER ☐ STREAM ☐ MARSH ☐ SWAMP ☐ FEN ☐ BOG ☐ BARREN ☐ MEADOW ☐ PRAIRIE ☐ THICKET ☐ SAVANNAH ☐ WOODLAND ☐ FOREST ☐ PLANTATION

SITE	COVER
☐ OPEN WATER ☐ SHALLOW WATER ☐ SURFICIAL DEP. ☐ BEDROCK	☐ OPEN ☐ SHRUB ☑ TREED

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>> MUCH GREATER THAN; > GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	2	4	B. Locust = Man. Maple
2	SUB-CANOPY			
3	UNDERSTOREY	3	4	C. Buckthorn >>
4	GRD. LAYER	4	2	Goldenrod = RC Grass

HT CODES: 1 = >25 m 2 = 10<HT ≤ 25 m 3 = 2<HT ≤ 10 m 4 = 1<HT ≤ 2 m 5 = 0.5<HT ≤ 1 m 6 = 0.2<HT ≤ 0.5 m 7 = HT ≤ 0.2 m

CVR CODES: 0= NONE 1= 0% < CVR ≤ 10% 2= 10 < CVR ≤ 25% 3= 25 < CVR ≤ 50% 4= CVR > 60%

STAND COMPOSITION: | BA:

	< 10	10 - 24	25 - 50	> 50
SIZE CLASS ANALYSIS:				
STANDING 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

COMM. AGE	PIONEER	YOUNG	MID-AGE	MATURE	OLD GROWTH

SOIL ANALYSIS:

TEXTURE:	DEPTH TO MOTTLES / GLEY	g =	G=
MOISTURE:	DEPTH OF ORGANICS:		(cm)
HOMOGENEOUS / VARIABLE	DEPTH TO BEDROCK:		(cm)

COMMUNITYCLASSIFICATION:

COMMUNITY CLASS:	CODE:
COMMUNITY SERIES:	CODE:
ECOSITE:	CODE:
VEGETATION TYPE:	CODE:
INCLUSION	CODE:
COMPLEX	CODE:

Notes:

Fencerow

ELC STAND & SOIL CHARACTERISTICS	SITE:
	POLYGON:
	DATE:
	SURVEYOR(S):

TREE TALLY BY SPECIES:

PRISM FACTOR ☐

SPECIES	TALLY 1	TALLY 2	TALLY 3	TALLY 4	TOTAL	RELATIVE AVERAGE
TOTAL						100
BASAL AREA (BA)						MEAN
DEAD						

STAND COMPOSITION:

SOIL ASSESSMENT:	1	2	3	4
TEXTURE				
DEPTH TO MOTTLES:	g=	g=	g=	g=
DEPTH TO GLEY:	G=	G=	G=	G=
DEPTH OF ORGANICS				
DEPTH TO BEDROCK				
MOISTURE REGIME				

SOIL PROFILE

COMMUNITY PROFILE DIAGRAM

NOTES:

ELC PLANT SPECIES LIST	SITE: 20577-25
	POLYGON: 3
	DATE: Jun 21/24
	SURVEYOR(S): DD KF

LAYERS: 1 = CANOPY > 10m 2 = SUB-CANOPY 3 = UNDERSTOREY 4 = GROUND (GRD.) LAYER

ABUNDANCE CODES: R = RARE O = OCCASIONAL A = ABUNDANT D = DOMINANT

SPECIES CODE	LAYER 1	2	3	4	COLL.
RB Grape				O	
V. Creeper				O	
A. Elm	O				
C. Buckthorn			D		
Goldenrod sp.				O	
Man Maple	A				
P. Ivy				O	
RC grass				O	
G. Mustard				O	
W. Ash	O				
Basswood	O				
Am Cranberry			O		
Chokecherry			O		
BL Locust	A				
A Basswood	O				
C. Lilac			O		
S. Maple	O				
W. Pine	O				

SPECIES CODE	LAYER 1	2	3	4	COLL.

Wildlife

Weather information is recorded on the **Wildlife** data card. Such information can be useful for helping to interpret records or results.

Temperature: Record of approximate ambient temperature (°C) during the field survey.

Cloud: Record, in tenths, the proportion of the sky covered by clouds.

Wind: Record the Beaufort Scale number according to Table 20

Table 20. Beaufort Wind Scale (adapted from Whittow 1984).

0	Calm	smoke rises vertically
1	Light Air	smoke drifts, but wind vanes do not
2	Light Breeze	wind felt on face, leaves rustle
3	Gentle Breeze	leaves and small twigs in constant motion; light flags extended
4	Moderate Breeze	wind raises dust and loose paper; small branches move
5	Fresh Breeze	small trees in leaf begin to sway
6	Strong Breeze	large branches in motion; whistling in phone wires; umbrella use difficult
7	Near Gale	whole trees in motion; inconvenience felt when walking against wind
8	Gale	twigs break off trees; progress impeded
9	Strong Gale	slight structural damage – roofing shingles, TV antennae
10	Storm	trees uprooted; considerable structural damage

Precipitation: Brief statement of precipitation, e.g ., none, steady rain, fog.

Conditions: Brief statement of conditions, surveyor mood, etc., which might affect the survey; a text field of 50 characters.

Indicate the presence of **Potential Wildlife Habitat** by checking the appropriate box of features that are present within the polygon.

Wildlife: All wildlife sightings and signs should be recorded while in the polygon. Record each sighting by **type** (TY) (B = bird, H = herpetofauna, etc.) and by **species** (SP. CODE). Use four-letter codes, provided in the database, for recording species.

Evidence Codes: (EV) should be used to record the type of observation. If possible, give an indication of the estimated number of individuals, pairs or signs for each wildlife species.

ELC COMMUNITY DESCRIPTION & CLASSIFICATION

SITE: 20577-25 | POLYGON: 4

SURVEYOR(S): DD KF | DATE: Jun 21/24 | UTME

START | END | UTMZ | UTMN

POLYGON DESCRIPTION

SYSTEM	SUBSTRATE	TOPOGRAPHIC FEATURE	HISTORY	PLANT FORM	COMMUNITY
☑ TERRESTRIAL ☐ WETLAND ☐ AQUATIC	☐ ORGANIC ☐ MINERAL SOIL ☐ PARENT MIN ☐ ACIDIC BEDRK ☐ BASIC BEDRK ☐ CARB. BEDRK	☐ LACUSTRINE ☐ RIVERINE ☐ BOTTOMLAND ☐ TERRACE ☐ VALLEY SLOPE ☐ TABLELAND ☐ ROLL. UPLAND ☐ CLIFF ☐ TALUS ☐ CREVICE / CAVE ☐ ALVAR ☐ ROCKLAND ☐ BEACH / BAR ☐ SAND DUNE ☐ BLUFF	☐ NATURAL ☑ CULTURAL	☐ PLANKTON ☐ SUBMERGED ☐ FLOATING-LVD ☐ GRAMINOID ☐ FORB ☐ LICHEN ☐ BRYOPHYTE ☐ DECIDUOUS ☐ CONIFEROUS ☐ MIXED	☐ LAKE ☐ POND ☐ RIVER ☐ STREAM ☐ MARSH ☐ SWAMP ☐ FEN ☐ BOG ☐ BARREN ☐ MEADOW ☐ PRAIRIE ☐ THICKET ☐ SAVANNAH ☐ WOODLAND ☐ FOREST ☐ PLANTATION

SITE	COVER
☐ OPEN WATER ☐ SHALLOW WATER ☐ SURFICIAL DEP. ☐ BEDROCK	☑ OPEN ☐ SHRUB ☐ TREED

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>> MUCH GREATER THAN; > GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY			
2	SUB-CANOPY			
3	UNDERSTOREY			
4	GRD. LAYER	3/4	7	Soybean = Corn

HT CODES: 1 = >25 m 2 = 10<HT<25 m 3 = 2<HT<10 m 4 = 1<HT<2 m 5 = 0.5<HT<1 m 6 = 0.2<HT<0.5 m 7 = HT<0.2 m

CVR CODES 0= NONE 1= 0% < CVR < 10% 2= 10 < CVR < 25% 3= 25 < CVR < 60% 4= CVR > 60%

STAND COMPOSITION:	BA:

	< 10	10 - 24	25 - 50	> 50
SIZE CLASS ANALYSIS:				
STANDING SNAGS:				
DEADFALL / LOGS:				

ABUNDANCE CODES: N = NONE R = RARE O = OCCASIONAL A = ABUNDANT

COMM. AGE	PIONEER	YOUNG	MID-AGE	MATURE	OLD GROWTH

SOIL ANALYSIS:

TEXTURE:	DEPTH TO MOTTLES / GLEY	g =	G=
MOISTURE:	DEPTH OF ORGANICS:		(cm)
HOMOGENEOUS / VARIABLE	DEPTH TO BEDROCK:		(cm)

COMMUNITYCLASSIFICATION:

COMMUNITY CLASS:	CODE:
COMMUNITY SERIES:	CODE:
ECOSITE:	CODE:
VEGETATION TYPE:	CODE:
INCLUSION	CODE:
COMPLEX	CODE:

Notes:

Annual Row Crop

ELC STAND & SOIL CHARACTERISTICS	
	SITE:
	POLYGON:
	DATE:
	SURVEYOR(S):

TREE TALLY BY SPECIES:

PRISM FACTOR

SPECIES	TALLY 1	TALLY 2	TALLY 3	TALLY 4	TOTAL	RELATIVE AVERAGE
TOTAL						100
BASAL AREA (BA)						MEAN
DEAD						

STAND COMPOSITION:

SOIL ASSESSMENT:	1	2	3	4
TEXTURE				
DEPTH TO MOTTLES:	g=	g=	g=	g=
DEPTH TO GLEY:	G=	G=	G=	G=
DEPTH OF ORGANICS				
DEPTH TO BEDROCK				
MOISTURE REGIME				

SOIL PROFILE

COMMUNITY PROFILE DIAGRAM

NOTES:

ELC PLANT SPECIES LIST	
	SITE: 20577-25
	POLYGON: 4
	DATE: Jun 21/24
	SURVEYOR(S): DD KF

LAYERS: 1 = CANOPY > 10m 2 = SUB-CANOPY 3 = UNDERSTOREY 4 = GROUND (GRD.) LAYER
ABUNDANCE CODES: R = RARE O = OCCASIONAL A = ABUNDANT D = DOMINANT

SPECIES CODE	LAYER 1	LAYER 2	LAYER 3	LAYER 4	COLL.	SPECIES CODE	LAYER 1	LAYER 2	LAYER 3	LAYER 4	COLL.
Soybean	D										
Corn	D										

Wildlife

Weather information is recorded on the **Wildlife** data card. Such information can be useful for helping to interpret records or results.

Temperature: Record of approximate ambient temperature (°C) during the field survey.

Cloud: Record, in tenths, the proportion of the sky covered by clouds.

Wind: Record the Beaufort Scale number according to Table 20

Table 20. Beaufort Wind Scale (adapted from Whittow 1984).

0	Calm	smoke rises vertically
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3	Gentle Breeze	leaves and small twigs in constant motion; light flags extended
4	Moderate Breeze	wind raises dust and loose paper; small branches move
5	Fresh Breeze	small trees in leaf begin to sway
6	Strong Breeze	large branches in motion; whistling in phone wires; umbrella use difficult
7	Near Gale	whole trees in motion; inconvenience felt when walking against wind
8	Gale	twigs break off trees; progress impeded
9	Strong Gale	slight structural damage – roofing shingles, TV antennae
10	Storm	trees uprooted; considerable structural damage

Precipitation: Brief statement of precipitation, e.g ., none, steady rain, fog.

Conditions: Brief statement of conditions, surveyor mood, etc., which might affect the survey; a text field of 50 characters.

Indicate the presence of **Potential Wildlife Habitat** by checking the appropriate box of features that are present within the polygon.

Wildlife: All wildlife sightings and signs should be recorded while in the polygon. Record each sighting by **type** (TY) (B = bird, H = herpetofauna, etc.) and by **species** (SP. CODE). Use four-letter codes, provided in the database, for recording species.

Evidence Codes: (EV) should be used to record the type of observation. If possible, give an indication of the estimated number of individuals, pairs or signs for each wildlife species.

ELC COMMUNITY DESCRIPTION & CLASSIFICATION

SITE: 20577-25 | POLYGON: 5

SURVEYOR(S): DD KF | DATE: June 21/24 | UTME

START | END | UTMZ | UTMN

POLYGON DESCRIPTION

SYSTEM	SUBSTRATE	TOPOGRAPHIC FEATURE	HISTORY	PLANT FORM	COMMUNITY
☐ TERRESTRIAL ☐ WETLAND ☐ AQUATIC	☐ ORGANIC ☐ MINERAL SOIL ☐ PARENT MIN ☐ ACIDIC BEDRK ☐ BASIC BEDRK ☐ CARB. BEDRK	☐ LACUSTRINE ☐ RIVERINE ☐ BOTTOMLAND ☐ TERRACE ☐ VALLEY SLOPE ☐ TABLELAND ☐ ROLL. UPLAND ☐ CLIFF ☐ TALUS ☐ CREVICE / CAVE ☐ ALVAR ☐ ROCKLAND ☐ BEACH / BAR ☐ SAND DUNE ☐ BLUFF	☑ NATURAL ☐ CULTURAL	☐ PLANKTON ☐ SUBMERGED ☐ FLOATING-LVD ☐ GRAMINOID ☐ FORB ☐ LICHEN ☐ BRYOPHYTE ☐ DECIDUOUS ☐ CONIFEROUS ☐ MIXED	☐ LAKE ☐ POND ☐ RIVER ☐ STREAM ☐ MARSH ☐ SWAMP ☐ FEN ☐ BOG ☐ BARREN ☐ MEADOW ☐ PRAIRIE ☐ THICKET ☐ SAVANNAH ☐ WOODLAND ☐ FOREST ☐ PLANTATION
SITE ☐ OPEN WATER ☐ SHALLOW WATER ☐ SURFICIAL DEP. ☐ BEDROCK			**COVER** ☑ OPEN ☐ SHRUB ☐ TREED		

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>> MUCH GREATER THAN; > GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY			
2	SUB-CANOPY			
3	UNDERSTOREY			
4	GRD. LAYER	4/5	4	B Clover = Daisy = Goldenrod

HT CODES: 1 = >25 m 2 = 10<HT≤25 m 3 = 2<HT≤10 m 4 = 1<HT≤2 m 5 = 0.5<HT≤1 m 6 = 0.2<HT≤0.5 m 7 = HT<0.2 m

CVR CODES: 0= NONE 1= 0% < CVR ≤ 10% 2= 10 < CVR ≤ 25% 3= 25 < CVR ≤ 60% 4= CVR > 60%

STAND COMPOSITION: | BA:

SIZE CLASS ANALYSIS:	☐ < 10	☐ 10 - 24	☐ 25 - 50	☐ > 50
STANDING 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

COMM. AGE	☐ PIONEER	☐ YOUNG	☐ MID-AGE	☐ MATURE	☐ OLD GROWTH

SOIL ANALYSIS:

TEXTURE:	DEPTH TO MOTTLES / GLEY	g =	G=
MOISTURE:	DEPTH OF ORGANICS:		(cm)
HOMOGENEOUS / VARIABLE	DEPTH TO BEDROCK:		(cm)

COMMUNITYCLASSIFICATION:

COMMUNITY CLASS:	CODE:
COMMUNITY SERIES:	CODE:
ECOSITE:	CODE:
VEGETATION TYPE:	CODE:
INCLUSION	CODE:
COMPLEX	CODE:

Notes:

Perennial Cover Crop

ELC STAND & SOIL CHARACTERISTICS	SITE:
	POLYGON:
	DATE:
	SURVEYOR(S):

TREE TALLY BY SPECIES:

PRISM FACTOR ☐

SPECIES	TALLY 1	TALLY 2	TALLY 3	TALLY 4	TOTAL	RELATIVE AVERAGE
TOTAL						100
BASAL AREA (BA)						MEAN
DEAD						

STAND COMPOSITION:

SOIL ASSESSMENT:	1	2	3	4
TEXTURE				
DEPTH TO MOTTLES:	g=	g=	g=	g=
DEPTH TO GLEY:	G=	G=	G=	G=
DEPTH OF ORGANICS				
DEPTH TO BEDROCK				
MOISTURE REGIME				

SOIL PROFILE

COMMUNITY PROFILE DIAGRAM

NOTES:

ELC PLANT SPECIES LIST	SITE: 20577-25
	POLYGON: 5
	DATE: Jun 21/24
	SURVEYOR(S): DD KF

LAYERS: 1 = CANOPY > 10m 2 = SUB-CANOPY 3 = UNDERSTOREY 4 = GROUND (GRD.) LAYER

ABUNDANCE CODES: R = RARE O = OCCASIONAL A = ABUNDANT D = DOMINANT

SPECIES CODE	LAYER 1	2	3	4	COLL.
C. Burdock				6	
Goldenrod sp.	R			A	
Oxeye daisy	R			A	
W. Parsnip				O	
T. Vetch				O	
RC grass				O	
NL cattail				O	
A. Fleabane				O	
C. Dock				O	
R. Clover	R			A	

SPECIES CODE	LAYER 1	2	3	4	COLL.

Wildlife

Weather information is recorded on the **Wildlife** data card. Such information can be useful for helping to interpret records or results.

Temperature: Record of approximate ambient temperature (°C) during the field survey.

Cloud: Record, in tenths, the proportion of the sky covered by clouds.

Wind: Record the Beaufort Scale number according to Table 20

Table 20. Beaufort Wind Scale (adapted from Whittow 1984).

0	Calm	smoke rises vertically
1	Light Air	smoke drifts, but wind vanes do not
2	Light Breeze	wind felt on face, leaves rustle
3	Gentle Breeze	leaves and small twigs in constant motion; light flags extended
4	Moderate Breeze	wind raises dust and loose paper; small branches move
5	Fresh Breeze	small trees in leaf begin to sway
6	Strong Breeze	large branches in motion; whistling in phone wires; umbrella use difficult
7	Near Gale	whole trees in motion; inconvenience felt when walking against wind
8	Gale	twigs break off trees; progress impeded
9	Strong Gale	slight structural damage – roofing shingles, TV antennae
10	Storm	trees uprooted; considerable structural damage

Precipitation: Brief statement of precipitation, e.g ., none, steady rain, fog.

Conditions: Brief statement of conditions, surveyor mood, etc., which might affect the survey; a text field of 50 characters.

Indicate the presence of **Potential Wildlife Habitat** by checking the appropriate box of features that are present within the polygon.

Wildlife: All wildlife sightings and signs should be recorded while in the polygon. Record each sighting by **type** (TY) (B = bird, H = herpetofauna, etc.) and by **species** (SP. CODE). Use four-letter codes, provided in the database, for recording species.

Evidence Codes: (EV) should be used to record the type of observation. If possible, give an indication of the estimated number of individuals, pairs or signs for each wildlife species.

ELC COMMUNITY DESCRIPTION & CLASSIFICATION

SITE: 20577-25 | POLYGON: 6

SURVEYOR(S): DD KF | DATE: Jun 21/24 | UTME

START | END | UTMZ | UTMN

POLYGON DESCRIPTION

SYSTEM	SUBSTRATE	TOPOGRAPHIC FEATURE	HISTORY	PLANT FORM	COMMUNITY
☑ TERRESTRIAL ☐ WETLAND ☐ AQUATIC	☐ ORGANIC ☐ MINERAL SOIL ☐ PARENT MIN ☐ ACIDIC BEDRK ☐ BASIC BEDRK ☐ CARB. BEDRK	☐ LACUSTRINE ☐ RIVERINE ☐ BOTTOMLAND ☐ TERRACE ☐ VALLEY SLOPE ☐ TABLELAND ☐ ROLL. UPLAND ☐ CLIFF ☐ TALUS ☐ CREVICE / CAVE ☐ ALVAR ☐ ROCKLAND ☐ BEACH / BAR ☐ SAND DUNE ☐ BLUFF	☐ NATURAL ☑ CULTURAL	☐ PLANKTON ☐ SUBMERGED ☐ FLOATING-LVD ☐ GRAMINOID ☐ FORB ☐ LICHEN ☐ BRYOPHYTE ☐ DECIDUOUS ☐ CONIFEROUS ☐ MIXED	☐ LAKE ☐ POND ☐ RIVER ☐ STREAM ☐ MARSH ☐ SWAMP ☐ FEN ☐ BOG ☐ BARREN ☐ MEADOW ☐ PRAIRIE ☐ THICKET ☐ SAVANNAH ☐ WOODLAND ☐ FOREST ☐ PLANTATION

SITE	COVER
☐ OPEN WATER ☐ SHALLOW WATER ☐ SURFICIAL DEP. ☐ BEDROCK	☑ OPEN ☐ SHRUB ☐ TREED

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>> MUCH GREATER THAN; > GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	2	1	Man Maple
2	SUB-CANOPY			
3	UNDERSTOREY	3	2	SH Summ C = T. Honeysuckle
4	GRD. LAYER	7	4	Grasses 77

HT CODES: 1 = >25 m 2 = 10<HT<25 m 3 = 2<HT<10 m 4 = 1<HT<2 m 5 = 0.5<HT<1 m 6 = 0.2<HT<0.5 m 7 = HT<0.2 m

CVR CODES 0= NONE 1= 0% < CVR < 10% 2= 10 < CVR < 25% 3= 25 < CVR < 60% 4= CVR > 60%

STAND COMPOSITION:	BA:

SIZE CLASS ANALYSIS:	< 10	10 - 24	25 - 50	> 50
STANDING 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

COMM. AGE	PIONEER	YOUNG	MID-AGE	MATURE	OLD GROWTH

SOIL ANALYSIS:

TEXTURE:	DEPTH TO MOTTLES / GLEY	g =	G=
MOISTURE:	DEPTH OF ORGANICS:		(cm)
HOMOGENEOUS / VARIABLE	DEPTH TO BEDROCK:		(cm)

COMMUNITYCLASSIFICATION:

COMMUNITY CLASS:	CODE:
COMMUNITY SERIES:	CODE:
ECOSITE:	CODE:
VEGETATION TYPE:	CODE:
INCLUSION	CODE:
COMPLEX	CODE:

Notes:

Commercial

ELC STAND & SOIL CHARACTERISTICS	SITE:
	POLYGON:
	DATE:
	SURVEYOR(S):

TREE TALLY BY SPECIES:

PRISM FACTOR [ ]

SPECIES	TALLY 1	TALLY 2	TALLY 3	TALLY 4	TOTAL	RELATIVE AVERAGE
TOTAL						100
BASAL AREA (BA)						MEAN
DEAD						

STAND COMPOSITION:

SOIL ASSESSMENT:	1	2	3	4
TEXTURE				
DEPTH TO MOTTLES:	g=	g=	g=	g=
DEPTH TO GLEY:	G=	G=	G=	G=
DEPTH OF ORGANICS				
DEPTH TO BEDROCK				
MOISTURE REGIME				

SOIL PROFILE

COMMUNITY PROFILE DIAGRAM

NOTES:

ELC PLANT SPECIES LIST	SITE: 20577-25
	POLYGON: 6
	DATE: Jun 21/24
	SURVEYOR(S): DD KF

LAYERS: 1 = CANOPY > 10m 2 = SUB-CANOPY 3 = UNDERSTOREY 4 = GROUND (GRD.) LAYER

ABUNDANCE CODES: R = RARE O = OCCASIONAL A = ABUNDANT D = DOMINANT

SPECIES CODE	LAYER 1	2	3	4	COLL.
Grasses				D	
C. Dandelion				A	
BF Trefoil				A	
Chickory				D	
Oxeye Daisy				O	
S. Brome				O	
B. Thistle				O	
S. Thistle				O	
V. Creeper				O	
W. Mustard				O	
Nodding Thistle				O	
QAL				O	
Goldenrod sp				O	
Ragweed				O	
RB Grape				O	
Man Maple	A				
Catnip				O	
C. Plantain				O	
W. Clover				O	
T Vetch				O	
S. Maple	O				
SH Sumac			O		
C. Dock				O	
N. Spruce	O				
N. Maple	O				
Creeping Thistle				O	

SPECIES CODE	LAYER 1	2	3	4	COLL.
T. Honeysuckle			O		
W. Cedar	O				
RC Grass				O	
Bladder Campoine				O	
C. Vetch				O	
W. Strawberry				O	
EC Reed				O	

Wildlife

Weather information is recorded on the **Wildlife** data card. Such information can be useful for helping to interpret records or results.

Temperature: Record of approximate ambient temperature (°C) during the field survey.

Cloud: Record, in tenths, the proportion of the sky covered by clouds.

Wind: Record the Beaufort Scale number according to Table 20

Table 20. Beaufort Wind Scale (adapted from Whittow 1984).

0	Calm	smoke rises vertically
1	Light Air	smoke drifts, but wind vanes do not
2	Light Breeze	wind felt on face, leaves rustle
3	Gentle Breeze	leaves and small twigs in constant motion; light flags extended
4	Moderate Breeze	wind raises dust and loose paper; small branches move
5	Fresh Breeze	small trees in leaf begin to sway
6	Strong Breeze	large branches in motion; whistling in phone wires; umbrella use difficult
7	Near Gale	whole trees in motion; inconvenience felt when walking against wind
8	Gale	twigs break off trees; progress impeded
9	Strong Gale	slight structural damage – roofing shingles, TV antennae
10	Storm	trees uprooted; considerable structural damage

Precipitation: Brief statement of precipitation, e.g ., none, steady rain, fog.

Conditions: Brief statement of conditions, surveyor mood, etc., which might affect the survey; a text field of 50 characters.

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Evidence Codes: (EV) should be used to record the type of observation. If possible, give an indication of the estimated number of individuals, pairs or signs for each wildlife species.

ELC COMMUNITY DESCRIPTION & CLASSIFICATION

SITE: 20577-25 | POLYGON: 7

SURVEYOR(S): DD KF | DATE: Jan 21/24 | UTME

START | END | UTMZ | UTMN

POLYGON DESCRIPTION

SYSTEM	SUBSTRATE	TOPOGRAPHIC FEATURE	HISTORY	PLANT FORM	COMMUNITY
☑ TERRESTRIAL ☐ WETLAND ☐ AQUATIC	☐ ORGANIC ☐ MINERAL SOIL ☐ PARENT MIN ☐ ACIDIC BEDRK ☐ BASIC BEDRK ☐ CARB. BEDRK	☐ LACUSTRINE ☐ RIVERINE ☐ BOTTOMLAND ☐ TERRACE ☐ VALLEY SLOPE ☐ TABLELAND ☐ ROLL. UPLAND ☐ CLIFF ☐ TALUS ☐ CREVICE / CAVE ☐ ALVAR ☐ ROCKLAND ☐ BEACH / BAR ☐ SAND DUNE ☐ BLUFF	☐ NATURAL ☑ CULTURAL	☐ PLANKTON ☐ SUBMERGED ☐ FLOATING-LVD ☐ GRAMINOID ☐ FORB ☐ LICHEN ☐ BRYOPHYTE ☐ DECIDUOUS ☐ CONIFEROUS ☐ MIXED	☐ LAKE ☐ POND ☐ RIVER ☐ STREAM ☐ MARSH ☐ SWAMP ☐ FEN ☐ BOG ☐ BARREN ☐ MEADOW ☐ PRAIRIE ☐ THICKET ☐ SAVANNAH ☐ WOODLAND ☐ FOREST ☐ PLANTATION
SITE ☐ OPEN WATER ☐ SHALLOW WATER ☐ SURFICIAL DEP. ☐ BEDROCK			**COVER** ☑ OPEN ☐ SHRUB ☐ TREED		

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>> MUCH GREATER THAN; > GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	2	1	S Maple >>
2	SUB-CANOPY			
3	UNDERSTOREY			
4	GRD. LAYER	1	4	Grasses >>

HT CODES: 1 = >25 m 2 = 10<HT<25 m 3 = 2<HT<10 m 4 = 1<HT<2 m 5 = 0.5<HT<1 m 6 = 0.2<HT<0.5 m 7 = HT<0.2 m

CVR CODES 0= NONE 1= 0% < CVR < 10% 2= 10 < CVR < 25% 3= 25 < CVR < 60% 4= CVR > 60%

STAND COMPOSITION:		BA:

SIZE CLASS ANALYSIS:	< 10	10 - 24	25 - 50	> 50
STANDING 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

COMM. AGE	PIONEER	YOUNG	MID-AGE	MATURE	OLD GROWTH

SOIL ANALYSIS:

TEXTURE:	DEPTH TO MOTTLES / GLEY	g =	G=
MOISTURE:	DEPTH OF ORGANICS:		(cm)
HOMOGENEOUS / VARIABLE	DEPTH TO BEDROCK:		(cm)

COMMUNITYCLASSIFICATION:

COMMUNITY CLASS:	CODE:
COMMUNITY SERIES:	CODE:
ECOSITE:	CODE:
VEGETATION TYPE:	CODE:
INCLUSION	CODE:
COMPLEX	CODE:

Notes:

Residential

ELC	
STAND & SOIL CHARACTERISTICS	SITE:
	POLYGON:
	DATE:
	SURVEYOR(S):

TREE TALLY BY SPECIES:

PRISM FACTOR

SPECIES	TALLY 1	TALLY 2	TALLY 3	TALLY 4	TOTAL	RELATIVE AVERAGE
TOTAL						100
BASAL AREA (BA)						MEAN
DEAD						

STAND COMPOSITION:

SOIL ASSESSMENT:	1	2	3	4
TEXTURE				
DEPTH TO MOTTLES:	g=	g=	g=	g=
DEPTH TO GLEY:	G=	G=	G=	G=
DEPTH OF ORGANICS				
DEPTH TO BEDROCK				
MOISTURE REGIME				

SOIL PROFILE

COMMUNITY PROFILE DIAGRAM

NOTES:

ELC	
PLANT SPECIES LIST	SITE: 20577-25
	POLYGON: 7
	DATE: Jun 21/24
	SURVEYOR(S): DD KF

LAYERS: 1 = CANOPY > 10m 2 = SUB-CANOPY 3 = UNDERSTOREY 4 = GROUND (GRD.) LAYER

ABUNDANCE CODES: R = RARE O = OCCASIONAL A = ABUNDANT D = DOMINANT

SPECIES CODE	LAYER 1	LAYER 2	LAYER 3	LAYER 4	COLL.	SPECIES CODE	LAYER 1	LAYER 2	LAYER 3	LAYER 4	COLL.
Grasses				A							
R. Clover				O							
S. Maple	A										
Cigar Tree	O										
C. Lilac			O								
W. Cedar	O										
St Sumac			O								
C. Buckthorn			O								
Man Maple	O										
N. Spruce	O										
W. Clover				A							
BF Trefoil				O							
Goldenrod				O							
Willow sp.	O										
Blue Spruce	O										
Silv. Maple	O										
Scots Pine	O										
N. Maple	O										
Spirea sp.				O							
R. Ash	O										
W. Birch	O										
E. Cottonwood	O										
Barberry			O								

Wildlife

Weather information is recorded on the Wildlife data card. Such information can be useful for helping to interpret records or results.

Temperature: Record of approximate ambient temperature (°C) during the field survey.

Cloud: Record, in tenths, the proportion of the sky covered by clouds.

Wind: Record the Beaufort Scale number according to Table 20

Table 20. Beaufort Wind Scale (adapted from Whittow 1984).

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5	Fresh Breeze	small trees in leaf begin to sway
6	Strong Breeze	large branches in motion; whistling in phone wires; umbrella use difficult
7	Near Gale	whole trees in motion; inconvenience felt when walking against wind
8	Gale	twigs break off trees; progress impeded
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Precipitation: Brief statement of precipitation, e.g ., none, steady rain, fog.

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ELC
COMMUNITY DESCRIPTION & CLASSIFICATION

SITE: 20577-25		POLYGON: 8	
SURVEYOR(S) DD KF	DATE Jun 21/24		UTME
START	END	UTMZ	UTMN:

POLYGON DESCRIPTION

SYSTEM	SUBSTRATE	TOPOGRAPHIC FEATURE	HISTORY	PLANT FORM	COMMUNITY
☒ TERRESTRIAL ☐ WETLAND ☐ AQUATIC	☐ ORGANIC ☐ MINERAL SOIL ☐ PARENT MIN ☐ ACIDIC BEDRK ☐ BASIC BEDRK ☐ CARB. BEDRK	☐ LACUSTRINE ☐ RIVERINE ☐ BOTTOMLAND ☐ TERRACE ☐ VALLEY SLOPE ☐ TABLELAND ☐ ROLL. UPLAND ☐ CLIFF ☐ TALUS ☐ CREVICE / CAVE ☐ ALVAR ☐ ROCKLAND ☐ BEACH / BAR ☐ SAND DUNE ☐ BLUFF	☐ NATURAL ☒ CULTURAL	☐ PLANKTON ☐ SUBMERGED ☐ FLOATING-LVD ☒ GRAMINOID ☐ FORB ☐ LICHEN ☐ BRYOPHYTE ☐ DECIDUOUS ☐ CONIFEROUS ☐ MIXED	☐ LAKE ☐ POND ☐ RIVER ☐ STREAM ☐ MARSH ☐ SWAMP ☐ FEN ☐ BOG ☐ BARREN ☒ MEADOW ☐ PRAIRIE ☐ THICKET ☐ SAVANNAH ☐ WOODLAND ☐ FOREST ☐ PLANTATION
SITE			**COVER**		
☐ OPEN WATER ☐ SHALLOW WATER ☐ SURFICIAL DEP. ☐ BEDROCK			☒ OPEN ☐ SHRUB ☐ TREED		

STAND DESCRIPTION:

LAYER		HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>> MUCH GREATER THAN; > GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY			
2	SUB-CANOPY			
3	UNDERSTOREY			
4	GRD. LAYER	6	4	Grasses > Oxeye Daisy = Clovers

HT CODES: 1 = >25 m 2 = 10<HT≤25 m 3 = 2<HT≤10 m 4 = 1<HT≤2 m 5 = 0.5<HT≤1 m 6 = 0.2<HT≤0.5 m 7 = HT<0.2 m

CVR CODES 0= NONE 1= 0% < CVR ≤ 10% 2= 10 < CVR ≤ 25% 3= 25 < CVR ≤ 60% 4= CVR > 60%

STAND COMPOSITION:								BA:
SIZE CLASS ANALYSIS:		< 10		10 - 24		25 - 50		> 50
STANDING 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

COMM. AGE.		PIONEER		YOUNG		MID-AGE		MATURE		OLD GROWTH

SOIL ANALYSIS:

TEXTURE:	DEPTH TO MOTTLES / GLEY	g =	G=
MOISTURE:	DEPTH OF ORGANICS:		(cm)
HOMOGENEOUS / VARIABLE	DEPTH TO BEDROCK:		(cm)

COMMUNITYCLASSIFICATION:

COMMUNITY CLASS:		CODE:
COMMUNITY SERIES:		CODE:
ECOSITE:		CODE:
VEGETATION TYPE:		CODE:
INCLUSION		CODE:
COMPLEX		CODE:

Notes:

Pasture

ELC
STAND & SOIL CHARACTERISTICS

SITE:
POLYGON:
DATE:
SURVEYOR(S):

TREE TALLY BY SPECIES:

PRISM FACTOR ☐

SPECIES	TALLY 1	TALLY 2	TALLY 3	TALLY 4	TOTAL	RELATIVE AVERAGE
TOTAL						100
BASAL AREA (BA)						MEAN
DEAD						

STAND COMPOSITION:

SOIL ASSESSMENT:	1	2	3	4
TEXTURE				
DEPTH TO MOTTLES:	g=	g=	g=	g=
DEPTH TO GLEY:	G=	G=	G=	G=
DEPTH OF ORGANICS				
DEPTH TO BEDROCK				
MOISTURE REGIME				

SOIL PROFILE

COMMUNITY PROFILE DIAGRAM

NOTES:

ELC
PLANT SPECIES LIST

SITE: 20577-25
POLYGON: 8
DATE: June 21 /24
SURVEYOR(S): DD KF

LAYERS: 1 = CANOPY > 10m 2 = SUB-CANOPY 3 = UNDERSTOREY 4 = GROUND (GRD.) LAYER
ABUNDANCE CODES: R = RARE O = OCCASIONAL A = ABUNDANT D = DOMINANT

SPECIES CODE	LAYER 1	2	3	4	COLL.
L. Milfoil				O	
C. Mullein				O	
S. Brome				O	
Buttercup				O	
Orange Daisy				A	
R. Clover				O	
BF Trefoil				O	
RB Grasses				O	
Goldenrod				O	
Hieracium spp.				O	
W. Clover				A	
Grasses				A	
Black Medick				O	

SPECIES CODE	LAYER 1	2	3	4	COLL.

Wildlife

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6	Strong Breeze	large branches in motion; whistling in phone wires; umbrella use difficult
7	Near Gale	whole trees in motion; inconvenience felt when walking against wind
8	Gale	twigs break off trees; progress impeded
9	Strong Gale	slight structural damage – roofing shingles, TV antennae
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Precipitation: Brief statement of precipitation, e.g ., none, steady rain, fog.

Conditions: Brief statement of conditions, surveyor mood, etc., which might affect the survey; a text field of 50 characters.

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Wildlife: All wildlife sightings and signs should be recorded while in the polygon. Record each sighting by type (TY) (B = bird, H = herpetofauna, etc.) and by species (SP. CODE). Use four-letter codes, provided in the database, for recording species.

Evidence Codes: (EV) should be used to record the type of observation. If possible, give an indication of the estimated number of individuals, pairs or signs for each wildlife species.

ELC COMMUNITY DESCRIPTION & CLASSIFICATION

SITE: 20577-25 POLYGON: 9

SURVEYOR(S): DD KF DATE: Jun 21/24 UTME

START: END: UTMZ: UTMN:

POLYGON DESCRIPTION

SYSTEM	SUBSTRATE	TOPOGRAPHIC FEATURE	HISTORY	PLANT FORM	COMMUNITY
☑ TERRESTRIAL ☐ WETLAND ☐ AQUATIC	☐ ORGANIC ☐ MINERAL SOIL ☐ PARENT MIN ☐ ACIDIC BEDRK ☐ BASIC BEDRK ☐ CARB. BEDRK	☐ LACUSTRINE ☐ RIVERINE ☐ BOTTOMLAND ☐ TERRACE ☐ VALLEY SLOPE ☐ TABLELAND ☐ ROLL. UPLAND ☐ CLIFF ☐ TALUS ☐ CREVICE / CAVE ☐ ALVAR ☐ ROCKLAND ☐ BEACH / BAR ☐ SAND DUNE ☐ BLUFF	☑ NATURAL ☐ CULTURAL	☐ PLANKTON ☐ SUBMERGED ☐ FLOATING-LVD ☐ GRAMINOID ☐ FORB ☐ LICHEN ☐ BRYOPHYTE ☑ DECIDUOUS ☐ CONIFEROUS ☐ MIXED	☐ LAKE ☐ POND ☐ RIVER ☑ STREAM ☐ MARSH ☐ SWAMP ☐ FEN ☐ BOG ☐ BARREN ☐ MEADOW ☐ PRAIRIE ☐ THICKET ☐ SAVANNAH ☐ WOODLAND ☑ FOREST ☐ PLANTATION
SITE ☐ OPEN WATER ☐ SHALLOW WATER ☐ SURFICIAL DEP. ☐ BEDROCK			**COVER** ☐ OPEN ☐ SHRUB ☑ TREED		

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>> MUCH GREATER THAN; > GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	2	4	S. Maple >>
2	SUB-CANOPY			
3	UNDERSTOREY	3	1	C. Buckthorn >>
4	GRD. LAYER	5/6	2	Grasses > Fig Fern Goldenrod

HT CODES: 1 = >25 m 2 = 10<HT≤25 m 3 = 2<HT≤10 m 4 = 1<HT≤2 m 5 = 0.5<HT≤1 m 6 = 0.2<HT≤0.5 m 7 = HT≤0.2 m

CVR CODES 0= NONE 1= 0% < CVR ≤ 10% 2= 10 < CVR ≤ 25% 3= 25 < CVR ≤ 60% 4= CVR > 60%

STAND COMPOSITION: BA:

SIZE CLASS ANALYSIS:		< 10		10 - 24		25 - 50	> 50
STANDING 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

COMM. AGE.		PIONEER		YOUNG		MID-AGE		MATURE	OLD GROWTH

SOIL ANALYSIS:

TEXTURE:	DEPTH TO MOTTLES / GLEY	g =	G=
MOISTURE:	DEPTH OF ORGANICS:		(cm)
HOMOGENEOUS / VARIABLE	DEPTH TO BEDROCK:		(cm)

COMMUNITY CLASSIFICATION:

COMMUNITY CLASS:		CODE:
COMMUNITY SERIES:		CODE:
ECOSITE:		CODE:
VEGETATION TYPE:		CODE:
INCLUSION		CODE:
COMPLEX		CODE:

Notes:

ELC
STAND & SOIL CHARACTERISTICS

SITE:
POLYGON:
DATE:
SURVEYOR(S):

TREE TALLY BY SPECIES:

PRISM FACTOR [ ]

SPECIES	TALLY 1	TALLY 2	TALLY 3	TALLY 4	TOTAL	RELATIVE AVERAGE
TOTAL						100
BASAL AREA (BA)						MEAN
DEAD						

STAND COMPOSITION:

SOIL ASSESSMENT:	1	2	3	4
TEXTURE				
DEPTH TO MOTTLES:	g=	g=	g=	g=
DEPTH TO GLEY:	G=	G=	G=	G=
DEPTH OF ORGANICS				
DEPTH TO BEDROCK				
MOISTURE REGIME				

SOIL PROFILE

COMMUNITY PROFILE DIAGRAM

NOTES:

ELC
PLANT SPECIES LIST

SITE: 20577-25
POLYGON: 9
DATE: June 21/24
SURVEYOR(S): DD KF

LAYERS: 1 = CANOPY > 10m 2 = SUB-CANOPY 3 = UNDERSTOREY 4 = GROUND (GRD.) LAYER
ABUNDANCE CODES: R = RARE O = OCCASIONAL A = ABUNDANT D = DOMINANT

SPECIES CODE	LAYER 1	2	3	4	COLL.
S. Maple	A				
W. Ash	O				
Basswood	O				
C. Buckthorn			O		
P. Gooseberry			O		
Ironwood	O				
E Solomons Seal				O	
Goldenrod				O	
Big Tag Goldenrod				A	
Bloodroot				O	
Mayapple				O	
Star sedge				O	
Pasture Thistle				O	
Bl. Cherry	O				
Bl enchanters NS				O	
R. Trillium				O	
Grasses				A	
W. Baneberry			O		

SPECIES CODE	LAYER 1	2	3	4	COLL.

Wildlife

Weather information is recorded on the **Wildlife** data card. Such information can be useful for helping to interpret records or results.

Temperature: Record of approximate ambient temperature (°C) during the field survey.

Cloud: Record, in tenths, the proportion of the sky covered by clouds.

Wind: Record the Beaufort Scale number according to Table 20

Table 20. Beaufort Wind Scale (adapted from Whittow 1984).

0	Calm	smoke rises vertically
1	Light Air	smoke drifts, but wind vanes do not
2	Light Breeze	wind felt on face, leaves rustle
3	Gentle Breeze	leaves and small twigs in constant motion; light flags extended
4	Moderate Breeze	wind raises dust and loose paper; small branches move
5	Fresh Breeze	small trees in leaf begin to sway
6	Strong Breeze	large branches in motion; whistling in phone wires; umbrella use difficult
7	Near Gale	whole trees in motion; inconvenience felt when walking against wind
8	Gale	twigs break off trees; progress impeded
9	Strong Gale	slight structural damage – roofing shingles, TV antennae
10	Storm	trees uprooted; considerable structural damage

Precipitation: Brief statement of precipitation, e.g ., none, steady rain, fog.

Conditions: Brief statement of conditions, surveyor mood, etc., which might affect the survey; a text field of 50 characters.

Indicate the presence of **Potential Wildlife Habitat** by checking the appropriate box of features that are present within the polygon.

Wildlife: **All wildlife sightings and signs should be recorded while in the polygon. Record each sighting by type (TY) (B = bird, H = herpetofauna, etc.) and by species (SP. CODE). Use four-letter codes, provided in the database, for recording species.**

Evidence Codes: (EV) should be used to record the type of observation. If possible, give an indication of the estimated number of individuals, pairs or signs for each wildlife species.

ELC COMMUNITY DESCRIPTION & CLASSIFICATION

SITE: 20577-25 POLYGON: 10

SURVEYOR(S): DD KF DATE: Jun 27/24

START: END: UTME: UTMZ: UTMN:

POLYGON DESCRIPTION

SYSTEM	SUBSTRATE	TOPOGRAPHIC FEATURE	HISTORY	PLANT FORM	COMMUNITY
☐ TERRESTRIAL ☐ WETLAND ☑ AQUATIC	☐ ORGANIC ☐ MINERAL SOIL ☐ PARENT MIN ☐ ACIDIC BEDRK ☐ BASIC BEDRK ☐ CARB. BEDRK	☐ LACUSTRINE ☐ RIVERINE ☐ BOTTOMLAND ☐ TERRACE ☐ VALLEY SLOPE ☐ TABLELAND ☐ ROLL. UPLAND ☐ CLIFF ☐ TALUS ☐ CREVICE / CAVE ☐ ALVAR ☐ ROCKLAND ☐ BEACH / BAR ☐ SAND DUNE ☐ BLUFF	☑ NATURAL ☐ CULTURAL	☐ PLANKTON ☐ SUBMERGED ☐ FLOATING-LVD ☐ GRAMINOID ☐ FORB ☐ LICHEN ☐ BRYOPHYTE ☐ DECIDUOUS ☐ CONIFEROUS ☐ MIXED	☐ LAKE ☐ POND ☐ RIVER ☐ STREAM ☐ MARSH ☐ SWAMP ☐ FEN ☐ BOG ☐ BARREN ☐ MEADOW ☐ PRAIRIE ☐ THICKET ☐ SAVANNAH ☐ WOODLAND ☐ FOREST ☐ PLANTATION

SITE	COVER
☑ OPEN WATER ☐ SHALLOW WATER ☐ SURFICIAL DEP. ☐ BEDROCK	☑ OPEN ☐ SHRUB ☐ TREED

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>> MUCH GREATER THAN; > GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY			
2	SUB-CANOPY			
3	UNDERSTOREY			
4	GRD. LAYER			Floating leaf pondweed = F. Frostrt

HT CODES: 1 = >25 m 2 = 10<HT< 25 m 3 = 2<HT< 10 m 4 = 1<HT< 2 m 5 = 0.5<HT< 1 m 6 = 0.2<HT< 0.5 m 7 = HT< 0.2 m

CVR CODES 0= NONE 1= 0% < CVR < 10% 2= 10 < CVR < 25% 3= 25 < CVR < 60% 4= CVR > 60%

STAND COMPOSITION:		BA:

SIZE CLASS ANALYSIS:	< 10	10 - 24	25 - 50	> 50
STANDING 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

COMM. AGE	PIONEER	YOUNG	MID-AGE	MATURE	OLD GROWTH

SOIL ANALYSIS:

TEXTURE:	DEPTH TO MOTTLES / GLEY	g =	G=
MOISTURE:	DEPTH OF ORGANICS:		(cm)
HOMOGENEOUS / VARIABLE	DEPTH TO BEDROCK:		(cm)

COMMUNITYCLASSIFICATION:

COMMUNITY CLASS:		CODE:
COMMUNITY SERIES:		CODE:
ECOSITE:		CODE:
VEGETATION TYPE:		CODE:
INCLUSION		CODE:
COMPLEX		CODE:

Notes: Open Water (Submerged Aquatic)

ELC STAND & SOIL CHARACTERISTICS	SITE:
	POLYGON:
	DATE:
	SURVEYOR(S):

TREE TALLY BY SPECIES:

PRISM FACTOR [ ]

SPECIES	TALLY 1	TALLY 2	TALLY 3	TALLY 4	TOTAL	RELATIVE AVERAGE
TOTAL						100
BASAL AREA (BA)						MEAN
DEAD						

STAND COMPOSITION:

SOIL ASSESSMENT:	1	2	3	4
TEXTURE				
DEPTH TO MOTTLES:	g=	g=	g=	g=
DEPTH TO GLEY:	G=	G=	G=	G=
DEPTH OF ORGANICS				
DEPTH TO BEDROCK				
MOISTURE REGIME				

SOIL PROFILE

COMMUNITY PROFILE DIAGRAM

NOTES:

ELC PLANT SPECIES LIST	SITE: 20577-25
	POLYGON: 10
	DATE: June 27/24
	SURVEYOR(S): DD KF

LAYERS: 1 = CANOPY > 10m 2 = SUB-CANOPY 3 = UNDERSTOREY 4 = GROUND (GRD.) LAYER

ABUNDANCE CODES: R = RARE O = OCCASIONAL A = ABUNDANT D = DOMINANT

SPECIES CODE	LAYER 1	2	3	4	COLL.	SPECIES CODE	LAYER 1	2	3	4	COLL.
NL cattail											
Duckweed											
E-Frogbit											
Watershield											
Yellow Pond-lily											
Soft-stem Bulrush											
Floating leaf pondweed											

Page ..... of .....

Wildlife

Weather information is recorded on the **Wildlife** data card. Such information can be useful for helping to interpret records or results.

Temperature: Record of approximate ambient temperature (°C) during the field survey.

Cloud: Record, in tenths, the proportion of the sky covered by clouds.

Wind: Record the Beaufort Scale number according to Table 20

Table 20. Beaufort Wind Scale (adapted from Whittow 1984).

0	Calm	smoke rises vertically
1	Light Air	smoke drifts, but wind vanes do not
2	Light Breeze	wind felt on face, leaves rustle
3	Gentle Breeze	leaves and small twigs in constant motion; light flags extended
4	Moderate Breeze	wind raises dust and loose paper; small branches move
5	Fresh Breeze	small trees in leaf begin to sway
6	Strong Breeze	large branches in motion; whistling in phone wires; umbrella use difficult
7	Near Gale	whole trees in motion; inconvenience felt when walking against wind
8	Gale	twigs break off trees; progress impeded
9	Strong Gale	slight structural damage – roofing shingles, TV antennae
10	Storm	trees uprooted; considerable structural damage

Precipitation: Brief statement of precipitation, e.g ., none, steady rain, fog.

Conditions: Brief statement of conditions, surveyor mood, etc., which might affect the survey; a text field of 50 characters.

Indicate the presence of **Potential Wildlife Habitat** by checking the appropriate box of features that are present within the polygon.

Wildlife: **All wildlife sightings** and signs should be recorded while in the polygon. Record each sighting by **type** (TY) (B = bird, H = herpetofauna, etc.) and by **species** (SP. CODE). Use four-letter codes, provided in the database, for recording species.

Evidence Codes: (EV) should be used to record the type of observation. If possible, give an indication of the estimated number of individuals, pairs or signs for each wildlife species.

ELC COMMUNITY DESCRIPTION & CLASSIFICATION

SITE: 20577-25		POLYGON: 11	
SURVEYOR(S): DD KF	DATE: June 27/24		UTME
START	END	UTMZ	UTMN

POLYGON DESCRIPTION

SYSTEM	SUBSTRATE	TOPOGRAPHIC FEATURE	HISTORY	PLANT FORM	COMMUNITY
☑ TERRESTRIAL	☐ ORGANIC	☐ LACUSTRINE	☑ NATURAL	☐ PLANKTON	☐ LAKE
☐ WETLAND	☐ MINERAL SOIL	☐ RIVERINE	☐ CULTURAL	☐ SUBMERGED	☐ POND
☐ AQUATIC	☐ PARENT MIN	☐ BOTTOMLAND		☐ FLOATING-LVD	☐ RIVER
	☐ ACIDIC BEDRK	☐ TERRACE		☐ GRAMINOID	☐ STREAM
SITE	☐ BASIC BEDRK	☐ VALLEY SLOPE	**COVER**	☐ FORB	☐ MARSH
☐ OPEN WATER	☐ CARB. BEDRK	☐ TABLELAND	☐ OPEN	☐ LICHEN	☐ SWAMP
☐ SHALLOW WATER		☐ ROLL. UPLAND	☐ SHRUB	☐ BRYOPHYTE	☐ FEN
☐ SURFICIAL DEP.		☐ CLIFF	☑ TREED	☐ DECIDUOUS	☐ BOG
☐ BEDROCK		☐ TALUS		☐ CONIFEROUS	☐ BARREN
		☐ CREVICE / CAVE		☐ MIXED	☐ MEADOW
		☐ ALVAR			☐ PRAIRIE
		☐ ROCKLAND			☐ THICKET
		☐ BEACH / BAR			☐ SAVANNAH
		☐ SAND DUNE			☐ WOODLAND
		☐ BLUFF			☑ FOREST
					☐ PLANTATION

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>> MUCH GREATER THAN; > GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	2	4	W Cedar > W Spruce
2	SUB-CANOPY	3	3	C Buckthorn
3	UNDERSTOREY			
4	GRD. LAYER	5	2	Goldenrod

HT CODES: 1 = >25 m 2 = 10<HT< 25 m 3 = 2<HT< 10 m 4 = 1<HT< 2 m 5 = 0.5<HT< 1 m 6 = 0.2<HT< 0.5 m 7 = HT<0.2 m

CVR CODES: 0= NONE 1= 0% < CVR ≤ 10% 2= 10 < CVR ≤ 25% 3= 25 < CVR ≤ 60% 4= CVR > 60%

STAND COMPOSITION:								BA:	
SIZE CLASS ANALYSIS:		< 10		10 - 24		25 - 50		> 50	
STANDING 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

COMM. AGE		PIONEER		YOUNG		MID-AGE		MATURE		OLD GROWTH

SOIL ANALYSIS:

TEXTURE:	DEPTH TO MOTTLES / GLEY	g =	G=
MOISTURE:	DEPTH OF ORGANICS:		(cm)
HOMOGENEOUS / VARIABLE	DEPTH TO BEDROCK:		(cm)

COMMUNITYCLASSIFICATION:

COMMUNITY CLASS:	CODE:
COMMUNITY SERIES:	CODE:
ECOSITE:	CODE:
VEGETATION TYPE:	CODE:
INCLUSION	CODE:
COMPLEX	CODE:

Notes: W Cedar Forest

ELC STAND & SOIL CHARACTERISTICS	SITE:
	POLYGON:
	DATE:
	SURVEYOR(S):

TREE TALLY BY SPECIES:

PRISM FACTOR ☐

SPECIES	TALLY 1	TALLY 2	TALLY 3	TALLY 4	TOTAL	RELATIVE AVERAGE
TOTAL						100
BASAL AREA (BA)						MEAN
DEAD						

STAND COMPOSITION:

SOIL ASSESSMENT:	1	2	3	4
TEXTURE				
DEPTH TO MOTTLES:	g=	g=	g=	g=
DEPTH TO GLEY:	G=	G=	G=	G=
DEPTH OF ORGANICS				
DEPTH TO BEDROCK				
MOISTURE REGIME				

SOIL PROFILE

COMMUNITY PROFILE DIAGRAM

NOTES:

ELC PLANT SPECIES LIST	SITE: 20577-25
	POLYGON: 11
	DATE: June 27/24
	SURVEYOR(S): DD KF

LAYERS: 1 = CANOPY > 10m 2 = SUB-CANOPY 3 = UNDERSTOREY 4 = GROUND (GRD.) LAYER

ABUNDANCE CODES: R = RARE O = OCCASIONAL A = ABUNDANT D = DOMINANT

SPECIES CODE	LAYER 1	2	3	4	COLL.
W. Cedar	A				
A. Elm	O				
C. Buckthorn		A			
C. Goldenrod				A	
Malus sp.	O				
~~T. Aspen~~					
QAL				O	
RB Grape		O			
Coltsfoot				O	
Oxeye Daisy				O	
W. Spruce	A				

SPECIES CODE	LAYER 1	2	3	4	COLL.

Wildlife

Weather information is recorded on the **Wildlife** data card. Such information can be useful for helping to interpret records or results.

Temperature: Record of approximate ambient temperature (°C) during the field survey.

Cloud: Record, in tenths, the proportion of the sky covered by clouds.

Wind: Record the Beaufort Scale number according to Table 20

Table 20. Beaufort Wind Scale (adapted from Whittow 1984).

0	Calm	smoke rises vertically
1	Light Air	smoke drifts, but wind vanes do not
2	Light Breeze	wind felt on face, leaves rustle
3	Gentle Breeze	leaves and small twigs in constant motion; light flags extended
4	Moderate Breeze	wind raises dust and loose paper; small branches move
5	Fresh Breeze	small trees in leaf begin to sway
6	Strong Breeze	large branches in motion; whistling in phone wires; umbrella use difficult
7	Near Gale	whole trees in motion; inconvenience felt when walking against wind
8	Gale	twigs break off trees; progress impeded
9	Strong Gale	slight structural damage – roofing shingles, TV antennae
10	Storm	trees uprooted; considerable structural damage

Precipitation: Brief statement of precipitation, e.g ., none, steady rain, fog.

Conditions: Brief statement of conditions, surveyor mood, etc., which might affect the survey; a text field of 50 characters.

Indicate the presence of **Potential Wildlife Habitat** by checking the appropriate box of features that are present within the polygon.

Wildlife: **All wildlife sightings** and signs should be recorded while in the polygon. Record each sighting by **type** (TY) (B = bird, H = herpetofauna, etc.) and by **species** (SP. CODE). Use four-letter codes, provided in the database, for recording species.

Evidence Codes: (EV) should be used to record the type of observation. If possible, give an indication of the estimated number of individuals, pairs or signs for each wildlife species.

ELC COMMUNITY DESCRIPTION & CLASSIFICATION

SITE: 20577-25 | POLYGON: 12

SURVEYOR(S): DD KF | DATE: June 27/24 | UTME

START | END | UTMZ | UTMN

POLYGON DESCRIPTION

SYSTEM	SUBSTRATE	TOPOGRAPHIC FEATURE	HISTORY	PLANT FORM	COMMUNITY
☐ TERRESTRIAL ☐ WETLAND ☐ AQUATIC	☐ ORGANIC ☐ MINERAL SOIL ☐ PARENT MIN ☐ ACIDIC BEDRK ☐ BASIC BEDRK ☐ CARB. BEDRK	☐ LACUSTRINE ☐ RIVERINE ☐ BOTTOMLAND ☐ TERRACE ☐ VALLEY SLOPE ☐ TABLELAND ☐ ROLL. UPLAND ☐ CLIFF ☐ TALUS ☐ CREVICE / CAVE ☐ ALVAR ☐ ROCKLAND ☐ BEACH / BAR ☐ SAND DUNE ☐ BLUFF	☑ NATURAL ☐ CULTURAL	☐ PLANKTON ☐ SUBMERGED ☐ FLOATING-LVD ☐ GRAMINOID ☐ FORB ☐ LICHEN ☐ BRYOPHYTE ☐ DECIDUOUS ☐ CONIFEROUS ☐ MIXED	☐ LAKE ☐ POND ☐ RIVER ☐ STREAM ☑ MARSH ☐ SWAMP ☐ FEN ☐ BOG ☐ BARREN ☑ MEADOW ☐ PRAIRIE ☐ THICKET ☐ SAVANNAH ☐ WOODLAND ☐ FOREST ☐ PLANTATION
SITE ☐ OPEN WATER ☐ SHALLOW WATER ☐ SURFICIAL DEP. ☐ BEDROCK			**COVER** ☑ OPEN ☑ SHRUB ☐ TREED		

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>> MUCH GREATER THAN; > GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY		—	
2	SUB-CANOPY		—	
3	UNDERSTOREY		—	
4	GRD. LAYER	4	4	RC Grass 27

HT CODES: 1 = >25 m 2 = 10<HT<25 m 3 = 2<HT<10 m 4 = 1<HT<2 m 5 = 0.5<HT<1 m 6 = 0.2<HT<0.5 m 7 = HT<0.2 m

CVR CODES: 0= NONE 1= 0% < CVR < 10% 2= 10 < CVR < 25% 3= 25 < CVR < 60% 4= CVR > 60%

STAND COMPOSITION:				BA:
SIZE CLASS ANALYSIS:	< 10	10 - 24	25 - 50	> 50
STANDING 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

COMM. AGE:		PIONEER		YOUNG		MID-AGE		MATURE		OLD GROWTH

SOIL ANALYSIS:

TEXTURE:	DEPTH TO MOTTLES / GLEY	g =	G=
MOISTURE:	DEPTH OF ORGANICS:		(cm)
HOMOGENEOUS / VARIABLE	DEPTH TO BEDROCK:		(cm)

COMMUNITYCLASSIFICATION:

COMMUNITY CLASS:	CODE:
COMMUNITY SERIES:	CODE:
ECOSITE:	CODE:
VEGETATION TYPE:	CODE:
INCLUSION	CODE:
COMPLEX	CODE:

Notes:

RC Grass Meadow Marsh

ELC STAND & SOIL CHARACTERISTICS	SITE:
	POLYGON:
	DATE:
	SURVEYOR(S):

TREE TALLY BY SPECIES:

PRISM FACTOR ☐

SPECIES	TALLY 1	TALLY 2	TALLY 3	TALLY 4	TOTAL	RELATIVE AVERAGE
TOTAL						100
BASAL AREA (BA)						MEAN
DEAD						

STAND COMPOSITION:

SOIL ASSESSMENT:	1	2	3	4
TEXTURE				
DEPTH TO MOTTLES:	g=	g=	g=	g=
DEPTH TO GLEY:	G=	G=	G=	G=
DEPTH OF ORGANICS				
DEPTH TO BEDROCK				
MOISTURE REGIME				

SOIL PROFILE

COMMUNITY PROFILE DIAGRAM

NOTES:

ELC PLANT SPECIES LIST	SITE: 2057-25
	POLYGON: 12
	DATE: June 27/24
	SURVEYOR(S): DD KF

LAYERS: 1 = CANOPY > 10m 2 = SUB-CANOPY 3 = UNDERSTOREY 4 = GROUND (GRD.) LAYER

ABUNDANCE CODES: R = RARE O = OCCASIONAL A = ABUNDANT D = DOMINANT

SPECIES CODE	LAYER 1	2	3	4	COLL.
RC Grass				A	
C. Goldenrod				O	
Oxeye Daisy				O	
C. Burdock				O	
[illegible]					
[illegible]					
BL cattail				O	
QAL				O	
Black Willow			O		
RO Dogwood			O		
P. Loosestrife				O	
Meadow Horsetail				O	
Green Bulrush				O	
Bebbs Willow					

SPECIES CODE	LAYER 1	2	3	4	COLL.

Wildlife

Weather information is recorded on the **Wildlife** data card. Such information can be useful for helping to interpret records or results.

Temperature: Record of approximate ambient temperature (°C) during the field survey.

Cloud: Record, in tenths, the proportion of the sky covered by clouds.

Wind: Record the Beaufort Scale number according to Table 20

Table 20. Beaufort Wind Scale (adapted from Whittow 1984).

0	Calm	smoke rises vertically
1	Light Air	smoke drifts, but wind vanes do not
2	Light Breeze	wind felt on face, leaves rustle
3	Gentle Breeze	leaves and small twigs in constant motion; light flags extended
4	Moderate Breeze	wind raises dust and loose paper; small branches move
5	Fresh Breeze	small trees in leaf begin to sway
6	Strong Breeze	large branches in motion; whistling in phone wires; umbrella use difficult
7	Near Gale	whole trees in motion; inconvenience felt when walking against wind
8	Gale	twigs break off trees; progress impeded
9	Strong Gale	slight structural damage – roofing shingles, TV antennae
10	Storm	trees uprooted; considerable structural damage

Precipitation: Brief statement of precipitation, e.g ., none, steady rain, fog.

Conditions: Brief statement of conditions, surveyor mood, etc., which might affect the survey; a text field of 50 characters.

Indicate the presence of **Potential Wildlife Habitat** by checking the appropriate box of features that are present within the polygon.

Wildlife: All wildlife sightings and signs should be recorded while in the polygon. Record each sighting by **type** (TY) (B = bird, H = herpetofauna, etc.) and by **species** (SP. CODE). Use four-letter codes, provided in the database, for recording species.

Evidence Codes: (EV) should be used to record the type of observation. If possible, give an indication of the estimated number of individuals, pairs or signs for each wildlife species.

ELC COMMUNITY DESCRIPTION & CLASSIFICATION

SITE: 20577-25 | POLYGON: 13

SURVEYOR(S): DD KF | DATE: June 27/24 | UTME

START | END | UTMZ | UTMN

POLYGON DESCRIPTION

SYSTEM	SUBSTRATE	TOPOGRAPHIC FEATURE	HISTORY	PLANT FORM	COMMUNITY
☐ TERRESTRIAL ☑ WETLAND ☐ AQUATIC	☐ ORGANIC ☐ MINERAL SOIL ☐ PARENT MIN ☐ ACIDIC BEDRK ☐ BASIC BEDRK ☐ CARB. BEDRK	☐ LACUSTRINE ☐ RIVERINE ☐ BOTTOMLAND ☐ TERRACE ☐ VALLEY SLOPE ☐ TABLELAND ☐ ROLL. UPLAND ☐ CLIFF ☐ TALUS ☐ CREVICE / CAVE ☐ ALVAR ☑ ROCKLAND ☐ BEACH / BAR ☐ SAND DUNE ☐ BLUFF	☑ NATURAL ☐ CULTURAL	☐ PLANKTON ☐ SUBMERGED ☐ FLOATING-LVD ☐ GRAMINOID ☐ FORB ☐ LICHEN ☐ BRYOPHYTE ☐ DECIDUOUS ☐ CONIFEROUS ☐ MIXED	☐ LAKE ☐ POND ☐ RIVER ☐ STREAM ☐ MARSH ☑ SWAMP ☐ FEN ☐ BOG ☐ BARREN ☐ MEADOW ☐ PRAIRIE ☑ THICKET ☐ SAVANNAH ☐ WOODLAND ☐ FOREST ☐ PLANTATION

SITE	COVER
☐ OPEN WATER ☐ SHALLOW WATER ☐ SURFICIAL DEP. ☐ BEDROCK	☐ OPEN ☑ SHRUB ☐ TREED

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>> MUCH GREATER THAN; > GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	5	3	Bebb's Willow > Bl. Willow
2	SUB-CANOPY	–	–	
3	UNDERSTOREY	–	–	
4	GRD. LAYER	4	4	RC Grass?? > P. Loosestrife

HT CODES: 1 = >25 m 2 = 10<HT≤25 m 3 = 2<HT≤10 m 4 = 1<HT≤2 m 5 = 0.5<HT≤1 m 6 = 0.2<HT≤0.5 m 7 = HT≤0.2 m

CVR CODES: 0= NONE 1= 0% < CVR ≤ 10% 2= 10 < CVR ≤ 25% 3= 25 < CVR ≤ 60% 4= CVR > 60%

STAND COMPOSITION:	BA:

	< 10	10 - 24	25 - 50	> 50
SIZE CLASS ANALYSIS:				
STANDING SNAGS:				
DEADFALL / LOGS:				

ABUNDANCE CODES: N = NONE R = RARE O = OCCASIONAL A = ABUNDANT

COMM. AGE	PIONEER	YOUNG	MID-AGE	MATURE	OLD GROWTH

SOIL ANALYSIS:

TEXTURE:	DEPTH TO MOTTLES / GLEY	g =	G=
MOISTURE:	DEPTH OF ORGANICS:		(cm)
HOMOGENEOUS / VARIABLE	DEPTH TO BEDROCK:		(cm)

COMMUNITYCLASSIFICATION:

COMMUNITY CLASS:	CODE:
COMMUNITY SERIES:	CODE:
ECOSITE:	CODE:
VEGETATION TYPE:	CODE:
INCLUSION	CODE:
COMPLEX	CODE:

Notes: Willow Thicket Swamp

ELC STAND & SOIL CHARACTERISTICS	SITE:
	POLYGON:
	DATE:
	SURVEYOR(S):

TREE TALLY BY SPECIES:

PRISM FACTOR [ ]

SPECIES	TALLY 1	TALLY 2	TALLY 3	TALLY 4	TOTAL	RELATIVE AVERAGE
TOTAL						100
BASAL AREA (BA)						MEAN
DEAD						

STAND COMPOSITION:

SOIL ASSESSMENT:	1	2	3	4
TEXTURE				
DEPTH TO MOTTLES:	g=	g=	g=	g=
DEPTH TO GLEY:	G=	G=	G=	G=
DEPTH OF ORGANICS				
DEPTH TO BEDROCK				
MOISTURE REGIME				

SOIL PROFILE

COMMUNITY PROFILE DIAGRAM

NOTES:

ELC PLANT SPECIES LIST	SITE: 20577-25
	POLYGON: 13
	DATE: June 27/24
	SURVEYOR(S): DDKF

LAYERS: 1 = CANOPY > 10m 2 = SUB-CANOPY 3 = UNDERSTOREY 4 = GROUND (GRD.) LAYER

ABUNDANCE CODES: R = RARE O = OCCASIONAL A = ABUNDANT D = DOMINANT

SPECIES CODE	LAYER 1	2	3	4	COLL.
Bebbs Willow	A				
Black Willow	A				
RC grass				A	
BL cattail				O	
Highbush Cranberry				O	
W. Cedar	O				
RB Grape				O	
R. Ash	O				
P. Loosestrife				A	

SPECIES CODE	LAYER 1	2	3	4	COLL.

Wildlife

Weather information is recorded on the Wildlife data card. Such information can be useful for helping to interpret records or results.

Temperature: Record of approximate ambient temperature (°C) during the field survey.

Cloud: Record, in tenths, the proportion of the sky covered by clouds.

Wind: Record the Beaufort Scale number according to Table 20

Table 20. Beaufort Wind Scale (adapted from Whittow 1984).

0	Calm	smoke rises vertically
1	Light Air	smoke drifts, but wind vanes do not
2	Light Breeze	wind felt on face, leaves rustle
3	Gentle Breeze	leaves and small twigs in constant motion; light flags extended
4	Moderate Breeze	wind raises dust and loose paper; small branches move
5	Fresh Breeze	small trees in leaf begin to sway
6	Strong Breeze	large branches in motion; whistling in phone wires; umbrella use difficult
7	Near Gale	whole trees in motion; inconvenience felt when walking against wind
8	Gale	twigs break off trees; progress impeded
9	Strong Gale	slight structural damage – roofing shingles, TV antennae
10	Storm	trees uprooted; considerable structural damage

Precipitation: Brief statement of precipitation, e.g ., none, steady rain, fog.

Conditions: Brief statement of conditions, surveyor mood, etc., which might affect the survey; a text field of 50 characters.

Indicate the presence of Potential Wildlife Habitat by checking the appropriate box of features that are present within the polygon.

Wildlife: All wildlife sightings and signs should be recorded while in the polygon. Record each sighting by type (TY) (B = bird, H = herpetofauna, etc.) and by species (SP. CODE). Use four-letter codes, provided in the database, for recording species.

Evidence Codes: (EV) should be used to record the type of observation. If possible, give an indication of the estimated number of individuals, pairs or signs for each wildlife species.

ELC COMMUNITY DESCRIPTION & CLASSIFICATION

SITE: 20577-25 POLYGON: 14

SURVEYOR(S): DO KF DATE: June 27/24

START: END: UTMZ: UTME: UTMN:

POLYGON DESCRIPTION

SYSTEM	SUBSTRATE	TOPOGRAPHIC FEATURE	HISTORY	PLANT FORM	COMMUNITY
☑ TERRESTRIAL	☐ ORGANIC	☐ LACUSTRINE	☑ NATURAL	☐ PLANKTON	☐ LAKE
☐ WETLAND	☐ MINERAL SOIL	☐ RIVERINE	☐ CULTURAL	☐ SUBMERGED	☐ POND
☐ AQUATIC	☐ PARENT MIN	☐ BOTTOMLAND		☐ FLOATING-LVD	☐ RIVER
	☐ ACIDIC BEDRK	☐ TERRACE		☐ GRAMINOID	☐ STREAM
	☐ BASIC BEDRK	☐ VALLEY SLOPE		☐ FORB	☐ MARSH
	☐ CARB. BEDRK	☐ TABLELAND		☐ LICHEN	☐ SWAMP
		☐ ROLL. UPLAND		☐ BRYOPHYTE	☐ FEN
		☐ CLIFF		☑ DECIDUOUS	☐ BOG
		☐ TALUS		☐ CONIFEROUS	☐ BARREN
		☐ CREVICE / CAVE		☐ MIXED	☐ MEADOW
		☐ ALVAR			☐ PRAIRIE
		☐ ROCKLAND			☐ THICKET
		☐ BEACH / BAR			☐ SAVANNAH
		☐ SAND DUNE			☐ WOODLAND
		☐ BLUFF			☑ FOREST
					☐ PLANTATION

SITE	COVER
☐ OPEN WATER	☐ OPEN
☐ SHALLOW WATER	☐ SHRUB
☐ SURFICIAL DEP.	☑ TREED
☐ BEDROCK	

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>> MUCH GREATER THAN; > GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	2	4	T. Aspen > B. Poplar
2	SUB-CANOPY	4	3	L. Buckthorn - RB Complex
3	UNDERSTOREY			
4	GRD. LAYER	5	3	Goldenrod sp.

HT CODES: 1 = >25 m 2 = 10<HT< 25 m 3 = 2<HT< 10 m 4 = 1<HT≤ 2 m 5 = 0.5<HT 1 m 6 = 0.2<HT< 0.5 m 7 = HT<0.2 m

CVR CODES 0= NONE 1= 0% < CVR ≤ 10% 2= 10 < CVR ≤ 25% 3= 25 < CVR ≤ 50% 4= CVR > 50%

STAND COMPOSITION:	BA:

SIZE CLASS ANALYSIS:	< 10	10 - 24	25 - 50	> 50
STANDING 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

COMM. AGE:	PIONEER	YOUNG	MID-AGE	MATURE	OLD GROWTH

SOIL ANALYSIS:

TEXTURE:	DEPTH TO MOTTLES / GLEY	g =	G=
MOISTURE:	DEPTH OF ORGANICS:		(cm)
HOMOGENEOUS / VARIABLE	DEPTH TO BEDROCK:		(cm)

COMMUNITYCLASSIFICATION:

	CODE:
COMMUNITY CLASS:	
COMMUNITY SERIES:	
ECOSITE:	
VEGETATION TYPE:	
INCLUSION	
COMPLEX	

Notes:

T. Aspen Forest

ELC STAND & SOIL CHARACTERISTICS	SITE:
	POLYGON:
	DATE:
	SURVEYOR(S):

TREE TALLY BY SPECIES:

PRISM FACTOR ☐

SPECIES	TALLY 1	TALLY 2	TALLY 3	TALLY 4	TOTAL	RELATIVE AVERAGE
TOTAL						100
BASAL AREA (BA)						MEAN
DEAD						

STAND COMPOSITION:

SOIL ASSESSMENT:	1	2	3	4
TEXTURE				
DEPTH TO MOTTLES:	g=	g=	g=	g=
DEPTH TO GLEY:	G=	G=	G=	G=
DEPTH OF ORGANICS				
DEPTH TO BEDROCK				
MOISTURE REGIME				

SOIL PROFILE

COMMUNITY PROFILE DIAGRAM

NOTES:

ELC PLANT SPECIES LIST	SITE: 20577-25
	POLYGON: 14
	DATE: June 27/24
	SURVEYOR(S): DD KF

LAYERS: 1 = CANOPY > 10m 2 = SUB-CANOPY 3 = UNDERSTOREY 4 = GROUND (GRD.) LAYER

ABUNDANCE CODES: R = RARE O = OCCASIONAL A = ABUNDANT D = DOMINANT

SPECIES CODE	LAYER 1	2	3	4	COLL.
T. Aspen	A				
Basswood	O				
A. Elm	O				
Balsam Poplar	A				
W. Cedar	O				
C. Buckthorn		A			
Goldenrod				A	
Daisy				O	
Fleabane					
Okeye Daisy				O	
W. Strawberry				O	
BAL				O	
RB Grape		A			
W. Birch	O				
Balsam Fir	O				
W Spruce	O				

SPECIES CODE	LAYER 1	2	3	4	COLL.

Wildlife

Weather information is recorded on the **Wildlife** data card. Such information can be useful for helping to interpret records or results.

Temperature: Record of approximate ambient temperature (°C) during the field survey.

Cloud: Record, in tenths, the proportion of the sky covered by clouds.

Wind: Record the Beaufort Scale number according to Table 20

Table 20. Beaufort Wind Scale (adapted from Whittow 1984).

0	Calm	smoke rises vertically
1	Light Air	smoke drifts, but wind vanes do not
2	Light Breeze	wind felt on face, leaves rustle
3	Gentle Breeze	leaves and small twigs in constant motion; light flags extended
4	Moderate Breeze	wind raises dust and loose paper; small branches move
5	Fresh Breeze	small trees in leaf begin to sway
6	Strong Breeze	large branches in motion; whistling in phone wires; umbrella use difficult
7	Near Gale	whole trees in motion; inconvenience felt when walking against wind
8	Gale	twigs break off trees; progress impeded
9	Strong Gale	slight structural damage – roofing shingles, TV antennae
10	Storm	trees uprooted; considerable structural damage

Precipitation: Brief statement of precipitation, e.g ., none, steady rain, fog.

Conditions: Brief statement of conditions, surveyor mood, etc., which might affect the survey; a text field of 50 characters.

Indicate the presence of **Potential Wildlife Habitat** by checking the appropriate box of features that are present within the polygon.

Wildlife: All wildlife sightings and signs should be recorded while in the polygon. Record each sighting by **type** (TY) (B = bird, H = herpetofauna, etc.) and by **species** (SP. CODE). Use four-letter codes, provided in the database, for recording species.

Evidence Codes: (EV) should be used to record the type of observation. If possible, give an indication of the estimated number of individuals, pairs or signs for each wildlife species.

ELC COMMUNITY DESCRIPTION & CLASSIFICATION

SITE: 20577-25 POLYGON: 15

SURVEYOR(S): DDKF DATE: June 27/24

START: END: UTMZ: UTME: UTMN:

POLYGON DESCRIPTION

SYSTEM	SUBSTRATE	TOPOGRAPHIC FEATURE	HISTORY	PLANT FORM	COMMUNITY
☐ TERRESTRIAL ☐ WETLAND ☐ AQUATIC	☐ ORGANIC ☐ MINERAL SOIL ☐ PARENT MIN ☐ ACIDIC BEDRK ☐ BASIC BEDRK ☐ CARB. BEDRK	☐ LACUSTRINE ☐ RIVERINE ☐ BOTTOMLAND ☐ TERRACE ☐ VALLEY SLOPE ☐ TABLELAND ☐ ROLL. UPLAND ☐ CLIFF ☐ TALUS ☐ CREVICE / CAVE ☐ ALVAR ☐ ROCKLAND ☐ BEACH / BAR ☐ SAND DUNE ☐ BLUFF	☑ NATURAL ☐ CULTURAL	☐ PLANKTON ☐ SUBMERGED ☐ FLOATING-LVD ☐ GRAMINOID ☐ FORB ☐ LICHEN ☐ BRYOPHYTE ☐ DECIDUOUS ☐ CONIFEROUS ☐ MIXED	☐ LAKE ☐ POND ☐ RIVER ☐ STREAM ☑ MARSH ☐ SWAMP ☐ FEN ☐ BOG ☐ BARREN ☐ MEADOW ☐ PRAIRIE ☐ THICKET ☐ SAVANNAH ☐ WOODLAND ☐ FOREST ☐ PLANTATION
SITE ☐ OPEN WATER ☐ SHALLOW WATER ☐ SURFICIAL DEP. ☐ BEDROCK			**COVER** ☑ OPEN ☐ SHRUB ☐ TREED		

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>> MUCH GREATER THAN; > GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	4	4	NL cattail >> = EL cattail
2	SUB-CANOPY	3	2	Willow
3	UNDERSTOREY		–	
4	GRD. LAYER	5	2	Grasses

HT CODES: 1 = >25 m 2 = 10<HT<25 m 3 = 2<HT<10 m 4 = 1<HT<2 m 5 = 0.5<HT<1 m 6 = 0.2<HT<0.5 m 7 = HT<0.2 m

CVR CODES 0= NONE 1= 0% < CVR < 10% 2= 10 < CVR < 25% 3= 25 < CVR < 60% 4= CVR > 60%

STAND COMPOSITION:		BA:

SIZE CLASS ANALYSIS:		< 10		10 - 24		25 - 50		> 50
STANDING 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

COMM. AGE:		PIONEER		YOUNG		MID-AGE		MATURE		OLD GROWTH

SOIL ANALYSIS:

TEXTURE:	DEPTH TO MOTTLES / GLEY	g =	G=
MOISTURE:	DEPTH OF ORGANICS:		(cm)
HOMOGENEOUS / VARIABLE	DEPTH TO BEDROCK:		(cm)

COMMUNITYCLASSIFICATION:

COMMUNITY CLASS:	CODE:
COMMUNITY SERIES:	CODE:
ECOSITE:	CODE:
VEGETATION TYPE:	CODE:
INCLUSION	CODE:
COMPLEX	CODE:

Notes: Cattail Marsh

ELC STAND & SOIL CHARACTERISTICS	SITE:
	POLYGON:
	DATE:
	SURVEYOR(S):

TREE TALLY BY SPECIES:

PRISM FACTOR [ ]

SPECIES	TALLY 1	TALLY 2	TALLY 3	TALLY 4	TOTAL	RELATIVE AVERAGE
TOTAL						100
BASAL AREA (BA)						MEAN
DEAD						

STAND COMPOSITION:

SOIL ASSESSMENT:	1	2	3	4
TEXTURE				
DEPTH TO MOTTLES:	g=	g=	g=	g=
DEPTH TO GLEY:	G=	G=	G=	G=
DEPTH OF ORGANICS				
DEPTH TO BEDROCK				
MOISTURE REGIME				

SOIL PROFILE

COMMUNITY PROFILE DIAGRAM

NOTES:

ELC PLANT SPECIES LIST	SITE: 20577-25
	POLYGON: 15
	DATE: June 27/24
	SURVEYOR(S): DD KP

LAYERS: 1 = CANOPY > 10m 2 = SUB-CANOPY 3 = UNDERSTOREY 4 = GROUND (GRD.) LAYER

ABUNDANCE CODES: R = RARE O = OCCASIONAL A = ABUNDANT D = DOMINANT

SPECIES CODE	LAYER 1	2	3	4	COLL.
NL cattail	A				
Bebbs Willow		A			
Goldenrod				O	
A Elm	O				
Bl. Willow		A			
V. Creeper				O	
P. Loosestrife				O	
Grasses				A	
Asters				O	
N. Willow		A			
BL cattail	A				

SPECIES CODE	LAYER 1	2	3	4	COLL.

Wildlife

Weather information is recorded on the **Wildlife** data card. Such information can be useful for helping to interpret records or results.

Temperature: Record of approximate ambient temperature (°C) during the field survey.

Cloud: Record, in tenths, the proportion of the sky covered by clouds.

Wind: Record the Beaufort Scale number according to Table 20

Table 20. Beaufort Wind Scale (adapted from Whittow 1984).

0	Calm	smoke rises vertically
1	Light Air	smoke drifts, but wind vanes do not
2	Light Breeze	wind felt on face, leaves rustle
3	Gentle Breeze	leaves and small twigs in constant motion; light flags extended
4	Moderate Breeze	wind raises dust and loose paper; small branches move
5	Fresh Breeze	small trees in leaf begin to sway
6	Strong Breeze	large branches in motion; whistling in phone wires; umbrella use difficult
7	Near Gale	whole trees in motion; inconvenience felt when walking against wind
8	Gale	twigs break off trees; progress impeded
9	Strong Gale	slight structural damage – roofing shingles, TV antennae
10	Storm	trees uprooted; considerable structural damage

Precipitation: Brief statement of precipitation, e.g ., none, steady rain, fog.

Conditions: Brief statement of conditions, surveyor mood, etc., which might affect the survey; a text field of 50 characters.

Indicate the presence of **Potential Wildlife Habitat** by checking the appropriate box of features that are present within the polygon.

Wildlife: **All wildlife sightings** and signs should be recorded while in the polygon. Record each sighting by **type** (TY) (B = bird, H = herpetofauna, etc.) and by **species** (SP. CODE). Use four-letter codes, provided in the database, for recording species.

Evidence Codes: (EV) should be used to record the type of observation. If possible, give an indication of the estimated number of individuals, pairs or signs for each wildlife species.

ELC COMMUNITY DESCRIPTION & CLASSIFICATION

SITE: 20577-25 | POLYGON: 16

SURVEYOR(S): DDKF | DATE: June 27/24 | UTME

START | END | UTMZ | UTMN

POLYGON DESCRIPTION

SYSTEM	SUBSTRATE	TOPOGRAPHIC FEATURE	HISTORY	PLANT FORM	COMMUNITY
☑ TERRESTRIAL ☐ WETLAND ☐ AQUATIC	☐ ORGANIC ☐ MINERAL SOIL ☐ PARENT MIN ☐ ACIDIC BEDRK ☐ BASIC BEDRK ☐ CARB. BEDRK	☐ LACUSTRINE ☐ RIVERINE ☐ BOTTOMLAND ☐ TERRACE ☐ VALLEY SLOPE ☐ TABLELAND ☐ ROLL. UPLAND ☐ CLIFF ☐ TALUS ☐ CREVICE / CAVE ☐ ALVAR ☐ ROCKLAND ☐ BEACH / BAR ☐ SAND DUNE ☐ BLUFF	☑ NATURAL ☐ CULTURAL	☐ PLANKTON ☐ SUBMERGED ☐ FLOATING-LVD ☐ GRAMINOID ☐ FORB ☐ LICHEN ☐ BRYOPHYTE ☐ DECIDUOUS ☑ CONIFEROUS ☐ MIXED	☐ LAKE ☐ POND ☐ RIVER ☐ STREAM ☐ MARSH ☐ SWAMP ☐ FEN ☐ BOG ☐ BARREN ☐ MEADOW ☐ PRAIRIE ☐ THICKET ☐ SAVANNAH ☑ WOODLAND ☐ FOREST ☐ PLANTATION

SITE	COVER
☐ OPEN WATER ☐ SHALLOW WATER ☑ SURFICIAL DEP. ☐ BEDROCK	☐ OPEN ☐ SHRUB ☑ TREED

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>> MUCH GREATER THAN; > GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	2	3	S. Pine > W. Spruce
2	SUB-CANOPY	3	2	S. Pine = W. Cedar
3	UNDERSTOREY			
4	GRD. LAYER	5	4	Grasses = Goldenrod

HT CODES: 1 = >25 m 2 = 10<HT<25 m 3 = 2<HT<10 m 4 = 1<HT<2 m 5 = 0.5<HT<1 m 6 = 0.2<HT<0.5 m 7 = HT<0.2 m

CVR CODES 0= NONE 1= 0% < CVR < 10% 2= 10 < CVR < 25% 3= 25 < CVR < 60% 4= CVR > 60%

STAND COMPOSITION:	BA:

SIZE CLASS ANALYSIS:		< 10		10 - 24		25 - 50	> 50
STANDING 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

COMM. AGE		PIONEER		YOUNG		MID-AGE		MATURE	OLD GROWTH

SOIL ANALYSIS:

TEXTURE:	DEPTH TO MOTTLES / GLEY	g =	G=
MOISTURE:	DEPTH OF ORGANICS:		(cm)
HOMOGENEOUS / VARIABLE	DEPTH TO BEDROCK:		(cm)

COMMUNITYCLASSIFICATION:

COMMUNITY CLASS:	CODE:
COMMUNITY SERIES:	CODE:
ECOSITE:	CODE:
VEGETATION TYPE:	CODE:
INCLUSION	CODE:
COMPLEX	CODE:

Notes:

Coniferous Woodland

ELC STAND & SOIL CHARACTERISTICS	SITE:
	POLYGON:
	DATE:
	SURVEYOR(S):

TREE TALLY BY SPECIES:

PRISM FACTOR ☐

SPECIES	TALLY 1	TALLY 2	TALLY 3	TALLY 4	TOTAL	RELATIVE AVERAGE
TOTAL						100
BASAL AREA (BA)						MEAN
DEAD						

STAND COMPOSITION:

SOIL ASSESSMENT:	1	2	3	4
TEXTURE				
DEPTH TO MOTTLES:	g=	g=	g=	g=
DEPTH TO GLEY:	G=	G=	G=	G=
DEPTH OF ORGANICS				
DEPTH TO BEDROCK				
MOISTURE REGIME				

SOIL PROFILE

COMMUNITY PROFILE DIAGRAM

NOTES:

ELC PLANT SPECIES LIST	SITE: 20577-25
	POLYGON: 16
	DATE: June 27/24
	SURVEYOR(S): ~~DD~~ KF

LAYERS: 1 = CANOPY > 10m 2 = SUB-CANOPY 3 = UNDERSTOREY 4 = GROUND (GRD.) LAYER

ABUNDANCE CODES: R = RARE O = OCCASIONAL A = ABUNDANT D = DOMINANT

SPECIES CODE	LAYER 1	2	3	4	COLL.
W. Cedar		A			
QAL				O	
Goldenrod				A	
Scots Pine	A	A			
C. Buckthorn		O			
RC Grass				A	
W. Spruce	A				
RB Grape		O			
V Creeper				O	
Oxeye Daisy				O	
A. Elm	O				
T. Honeysuckle		O			
Willow sp.	O				
Grasses				A	
B. Poplar	O				

SPECIES CODE	LAYER 1	2	3	4	COLL.

Page ..... of .....

Field Sparrow

Wildlife

Weather information is recorded on the **Wildlife** data card. Such information can be useful for helping to interpret records or results.

Temperature: Record of approximate ambient temperature (°C) during the field survey.

Cloud: Record, in tenths, the proportion of the sky covered by clouds.

Wind: Record the Beaufort Scale number according to Table 20

Table 20. Beaufort Wind Scale (adapted from Whittow 1984).

0	Calm	smoke rises vertically
1	Light Air	smoke drifts, but wind vanes do not
2	Light Breeze	wind felt on face, leaves rustle
3	Gentle Breeze	leaves and small twigs in constant motion; light flags extended
4	Moderate Breeze	wind raises dust and loose paper; small branches move
5	Fresh Breeze	small trees in leaf begin to sway
6	Strong Breeze	large branches in motion; whistling in phone wires; umbrella use difficult
7	Near Gale	whole trees in motion; inconvenience felt when walking against wind
8	Gale	twigs break off trees; progress impeded
9	Strong Gale	slight structural damage – roofing shingles, TV antennae
10	Storm	trees uprooted; considerable structural damage

Precipitation: Brief statement of precipitation, e.g ., none, steady rain, fog.

Conditions: Brief statement of conditions, surveyor mood, etc., which might affect the survey; a text field of 50 characters.

Indicate the presence of **Potential Wildlife Habitat** by checking the appropriate box of features that are present within the polygon.

Wildlife: All wildlife sightings and signs should be recorded while in the polygon. Record each sighting by **type** (TY) (B = bird, H = herpetofauna, etc.) and by **species** (SP. CODE). Use four-letter codes, provided in the database, for recording species.

Evidence Codes: (EV) should be used to record the type of observation. If possible, give an indication of the estimated number of individuals, pairs or signs for each wildlife species.

ELC COMMUNITY DESCRIPTION & CLASSIFICATION

SITE: 20577-25 | POLYGON: 17

SURVEYOR(S): DD KF | DATE: June 27/24 | UTME

START | END | UTMZ | UTMN:

POLYGON DESCRIPTION

SYSTEM	SUBSTRATE	TOPOGRAPHIC FEATURE	HISTORY	PLANT FORM	COMMUNITY
☑ TERRESTRIAL ☐ WETLAND ☐ AQUATIC	☐ ORGANIC ☐ MINERAL SOIL ☐ PARENT MIN ☐ ACIDIC BEDRK ☐ BASIC BEDRK ☐ CARB. BEDRK	☐ LACUSTRINE ☐ RIVERINE ☐ BOTTOMLAND ☐ TERRACE ☐ VALLEY SLOPE ☐ TABLELAND ☐ ROLL. UPLAND ☐ CLIFF ☐ TALUS ☐ CREVICE / CAVE ☐ ALVAR ☐ ROCKLAND ☐ BEACH / BAR ☐ SAND DUNE ☐ BLUFF	☐ NATURAL ☑ CULTURAL	☐ PLANKTON ☐ SUBMERGED ☐ FLOATING-LVD ☐ GRAMINOID ☐ FORB ☐ LICHEN ☐ BRYOPHYTE ☐ DECIDUOUS ☐ CONIFEROUS ☐ MIXED	☐ LAKE ☐ POND ☐ RIVER ☐ STREAM ☐ MARSH ☐ SWAMP ☐ FEN ☐ BOG ☐ BARREN ☐ MEADOW ☐ PRAIRIE ☐ THICKET ☐ SAVANNAH ☐ WOODLAND ☐ FOREST ☑ PLANTATION
SITE ☐ OPEN WATER ☐ SHALLOW WATER ☑ SURFICIAL DEP. ☐ BEDROCK			**COVER** ☐ OPEN ☐ SHRUB ☑ TREED		

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>> MUCH GREATER THAN; > GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	2	4	Scots Pine >>
2	SUB-CANOPY	3	3	C. Buckthorn >> W. Ash
3	UNDERSTOREY	6	2	C. Buckthorn
4	GRD. LAYER	6	1	Goldenrod

HT CODES: 1 = >25 m 2 = 10<HT ≤ 25 m 3 = 2<HT ≤ 10 m 4 = 1<HT ≤ 2 m 5 = 0.5<HT ≤ 1 m 6 = 0.2<HT ≤ 0.5 m 7 = HT<0.2 m

CVR CODES: 0= NONE 1= 0% < CVR ≤ 10% 2= 10 < CVR ≤ 25% 3= 25 < CVR ≤ 60% 4= CVR > 60%

STAND COMPOSITION:	BA:

SIZE CLASS ANALYSIS:	< 10	10 - 24	25 - 50	> 50
STANDING 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

COMM. AGE	PIONEER	YOUNG	MID-AGE	MATURE	OLD GROWTH

SOIL ANALYSIS:

TEXTURE:	DEPTH TO MOTTLES / GLEY	g =	G=
MOISTURE:	DEPTH OF ORGANICS:		(cm)
HOMOGENEOUS / VARIABLE	DEPTH TO BEDROCK:		(cm)

COMMUNITYCLASSIFICATION:

COMMUNITY CLASS:	CODE:
COMMUNITY SERIES:	CODE:
ECOSITE:	CODE:
VEGETATION TYPE:	CODE:
INCLUSION	CODE:
COMPLEX	CODE:

Notes:

Naturalized Plantation

ELC STAND & SOIL CHARACTERISTICS	SITE:
	POLYGON:
	DATE:
	SURVEYOR(S):

TREE TALLY BY SPECIES:

PRISM FACTOR ☐

SPECIES	TALLY 1	TALLY 2	TALLY 3	TALLY 4	TOTAL	RELATIVE AVERAGE
TOTAL						100
BASAL AREA (BA)						MEAN
DEAD						

STAND COMPOSITION:

SOIL ASSESSMENT:	1	2	3	4
TEXTURE				
DEPTH TO MOTTLES:	g=	g=	g=	g=
DEPTH TO GLEY:	G=	G=	G=	G=
DEPTH OF ORGANICS				
DEPTH TO BEDROCK				
MOISTURE REGIME				

SOIL PROFILE

COMMUNITY PROFILE DIAGRAM

NOTES:

ELC PLANT SPECIES LIST	SITE: 20577-25
	POLYGON: 17
	DATE: June 27/24
	SURVEYOR(S): DD KF

LAYERS: 1 = CANOPY > 10m 2 = SUB-CANOPY 3 = UNDERSTOREY 4 = GROUND (GRD.) LAYER

ABUNDANCE CODES: R = RARE O = OCCASIONAL A = ABUNDANT D = DOMINANT

SPECIES CODE	LAYER 1	2	3	4	COLL.
Cotoneaster				A	
Scots Pine	A				
W. Spruce	O				
Creep Daisy				O	
Grasses				O	
Buckthorn		A	A		
W. Ash		A			
Serviceberry				O	
A Elm	O				

SPECIES CODE	LAYER 1	2	3	4	COLL.

Wildlife

Weather information is recorded on the **Wildlife** data card. Such information can be useful for helping to interpret records or results.

Temperature: Record of approximate ambient temperature (°C) during the field survey.

Cloud: Record, in tenths, the proportion of the sky covered by clouds.

Wind: Record the Beaufort Scale number according to Table 20

Table 20. Beaufort Wind Scale (adapted from Whittow 1984).

0	Calm	smoke rises vertically
1	Light Air	smoke drifts, but wind vanes do not
2	Light Breeze	wind felt on face, leaves rustle
3	Gentle Breeze	leaves and small twigs in constant motion; light flags extended
4	Moderate Breeze	wind raises dust and loose paper; small branches move
5	Fresh Breeze	small trees in leaf begin to sway
6	Strong Breeze	large branches in motion; whistling in phone wires; umbrella use difficult
7	Near Gale	whole trees in motion; inconvenience felt when walking against wind
8	Gale	twigs break off trees; progress impeded
9	Strong Gale	slight structural damage – roofing shingles, TV antennae
10	Storm	trees uprooted; considerable structural damage

Precipitation: Brief statement of precipitation, e.g ., none, steady rain, fog.

Conditions: Brief statement of conditions, surveyor mood, etc., which might affect the survey; a text field of 50 characters.

Indicate the presence of **Potential Wildlife Habitat** by checking the appropriate box of features that are present within the polygon.

Wildlife: **All wildlife sightings** and signs should be recorded while in the polygon. Record each sighting by **type** (TY) (B = bird, H = herpetofauna, etc.) and by **species** (SP. CODE). Use four-letter codes, provided in the database, for recording species.

Evidence Codes: (EV) should be used to record the type of observation. If possible, give an indication of the estimated number of individuals, pairs or signs for each wildlife species.

ELC COMMUNITY DESCRIPTION & CLASSIFICATION	SITE: 20577-25		POLYGON: 18	
	SURVEYOR(S): DD KF	DATE: Jun 27/28		UTME
	START	END	UTMZ	UTMN

POLYGON DESCRIPTION

SYSTEM	SUBSTRATE	TOPOGRAPHIC FEATURE	HISTORY	PLANT FORM	COMMUNITY
☐ TERRESTRIAL ☐ WETLAND ☐ AQUATIC	☐ ORGANIC ☐ MINERAL SOIL ☐ PARENT MIN ☐ ACIDIC BEDRK ☐ BASIC BEDRK ☐ CARB. BEDRK	☐ LACUSTRINE ☐ RIVERINE ☐ BOTTOMLAND ☐ TERRACE ☐ VALLEY SLOPE ☐ TABLELAND ☐ ROLL. UPLAND ☐ CLIFF ☐ TALUS ☐ CREVICE / CAVE ☐ ALVAR ☐ ROCKLAND ☐ BEACH / BAR ☐ SAND DUNE ☐ BLUFF	☐ NATURAL ☐ CULTURAL	☐ PLANKTON ☐ SUBMERGED ☐ FLOATING-LVD ☐ GRAMINOID ☐ FORB ☐ LICHEN ☐ BRYOPHYTE ☐ DECIDUOUS ☐ CONIFEROUS ☐ MIXED	☐ LAKE ☐ POND ☐ RIVER ☐ STREAM ☐ MARSH ☐ SWAMP ☐ FEN ☐ BOG ☐ BARREN ☐ MEADOW ☐ PRAIRIE ☐ THICKET ☐ SAVANNAH ☐ WOODLAND ☐ FOREST ☐ PLANTATION
SITE ☐ OPEN WATER ☐ SHALLOW WATER ☐ SURFICIAL DEP. ☐ BEDROCK			**COVER** ☐ OPEN ☐ SHRUB ☐ TREED		

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>> MUCH GREATER THAN; > GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	1	1	Basswood = S. Maple
2	SUB-CANOPY		—	
3	UNDERSTOREY		—	
4	GRD. LAYER	7	4	Grasses >>

HT CODES: 1 = >25 m 2 = 10<HT< 25 m 3 = 2<HT< 10 m 4 = 1<HT< 2 m 5 = 0.5<HT< 1 m 6 = 0.2<HT< 0.5 m 7 = HT< 0.2 m

CVR CODES: 0 = NONE 1 = 0% < CVR ≤ 10% 2 = 10 < CVR ≤ 25% 3 = 25 < CVR ≤ 60% 4 = CVR > 60%

STAND COMPOSITION:		BA:

SIZE CLASS ANALYSIS:	< 10	10 - 24	25 - 50	> 50
STANDING 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

COMM. AGE	PIONEER	YOUNG	MID-AGE	MATURE	OLD GROWTH

SOIL ANALYSIS:

TEXTURE:	DEPTH TO MOTTLES / GLEY	g =	G=
MOISTURE:	DEPTH OF ORGANICS:		(cm)
HOMOGENEOUS / VARIABLE	DEPTH TO BEDROCK:		(cm)

COMMUNITYCLASSIFICATION:

COMMUNITY CLASS:	CODE:
COMMUNITY SERIES:	CODE:
ECOSITE:	CODE:
VEGETATION TYPE:	CODE:
INCLUSION	CODE:
COMPLEX	CODE:

Notes: Cemetary

ELC STAND & SOIL CHARACTERISTICS	SITE:
	POLYGON:
	DATE:
	SURVEYOR(S):

TREE TALLY BY SPECIES:

PRISM FACTOR ☐

SPECIES	TALLY 1	TALLY 2	TALLY 3	TALLY 4	TOTAL	RELATIVE AVERAGE
TOTAL						100
BASAL AREA (BA)						MEAN
DEAD						

STAND COMPOSITION:

SOIL ASSESSMENT:	1	2	3	4
TEXTURE				
DEPTH TO MOTTLES:	g=	g=	g=	g=
DEPTH TO GLEY:	G=	G=	G=	G=
DEPTH OF ORGANICS				
DEPTH TO BEDROCK				
MOISTURE REGIME				

SOIL PROFILE

COMMUNITY PROFILE DIAGRAM

NOTES:

ELC PLANT SPECIES LIST	SITE: 20577-25
	POLYGON: 18
	DATE: June 27/24
	SURVEYOR(S): DD KF

LAYERS: 1 = CANOPY > 10m 2 = SUB-CANOPY 3 = UNDERSTOREY 4 = GROUND (GRD.) LAYER

ABUNDANCE CODES: R = RARE O = OCCASIONAL A = ABUNDANT D = DOMINANT

SPECIES CODE	LAYER 1	2	3	4	COLL.
W. Ash	O				
Basswood	A				
Grasses				A	
Sugar Maple	A				
W. Clover				O	
Buttercup				O	
Goldenrod				O	

SPECIES CODE	LAYER 1	2	3	4	COLL.