Golden Leaf Agrivoltaics Inc.

Site Investigation Report

Golden Leaf Agrivoltaics Project, Township of Drummond North Elmsley, Ontario

November 2026

Submitted by
Dillon Consulting Limited

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Attention: Jonathan Cheszes, President

Natural Heritage Assessment Site Investigation Report for Golden Leaf Agrivoltaics Project in the Township of Drummond – North Elmsley, Ontario

Dillon Consulting Limited (Dillon) is pleased to provide the draft Site Investigation Report for the Golden Leaf Agrivoltaics Project.

Sincerely,

Dillon Consulting Limited

DRAFT

David (Dave) Restivo, BSc. (Hons), EP
Partner

MM:rrk
Enclosure

Our file: 26-3072

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Acronyms, Abbreviations, Definitions

ANSI	Areas of Natural and Scientific Interest
COSEWIC	Committee on the Status of Endangered Wildlife in Canada
COSSARO	Committee on the Status of Species at Risk in Ontario
EIS	Environmental Impact Study
ELC	Ecological Land Classification (System)
END	Endangered
EOS	Evaluation of Significance
LIO	Land Information Ontario
MNR/MNRF	Ministry of Natural Resources (formerly Ministry of Natural Resources and Forestry)
MWac	Megawatts alternating current
NHA	Natural Heritage Assessment
NHIC	Natural Heritage Information Centre
O. Reg	Ontario Regulation
REA	Renewable Energy Approval
SAR	Species at Rick
SARA	Species at Risk Act
SC	Special Concern
SCA	Species Conservation Act
SCC	Species of Conservation Concern
SRank	Species Subnational Conservation Rank
SWH	Significant Wildlife Habitat
THR	Threatened

Executive Summary

Project Overview

Golden Leaf Agrivoltaics Inc. is proposing the Golden Leaf Agrivoltaics Project, a proposed Class 3 ground mounted solar facility with a maximum nameplate capacity of up to 13.2 Megawatts alternating current (MWac). The Project is proposed on private land in the Township of Drummond-North Elmsley, Ontario.

Regulatory Context and Purpose

Dillon Consulting Limited was retained to conduct a Natural Heritage Assessment (NHA) Site Investigation for the proposed project. This report has been prepared in accordance with Section 26 of Ontario Regulation (O. Reg.) 359/09 to support the project's Renewable Energy Approval (REA) application and adheres to the *Natural Heritage Assessment Guide for Renewable Energy Projects* (Third Edition, 2026).

Field investigations were executed between April 29 and June 29, 2026, encompassing the Site Investigation Area (Project Location and surrounding 50-metre (m) area). The objective of these site investigations was to verify the presence, boundaries, and characteristics of natural features identified during the initial Records Review, as well as to document any previously unrecorded features. The 2026 field program utilized Ecological Land Classification (ELC), natural feature delineation, and wildlife habitat mapping, supplemented by incidental observations of flora and fauna.

Based on the findings of the site investigation, candidate Significant Wildlife Habitat (SWH), potential Species at Risk (SAR) habitat, and other sensitive natural features were identified within 50 m of the Project Location. Comprehensive vegetation inventories, targeted wildlife surveys, and specialized aquatic assessments required to support the NHA Evaluation of Significance and the standalone Water Body Assessment reports are provided under separate cover.

Key Findings

Based on the results of the 2026 field program the following key observations were made:

- No wetland communities were identified within 50 m of the Project Location.
- One Species of Special Concern were observed during field surveys was the Eastern Wood-pewee (*Contopus virens*).
- Three Candidate SWH types were identified during surveys including:
  - Woodland Raptor Nesting Habitat;
  - Open Country Bird Breeding Habitat;
  - Special Concern and Rare Wildlife Species including candidate Species of Conservation Concern (SCC) habitat for Eastern Wood-pewee and SAR bats.
- In total, 13 distinctive vegetation communities were identified during the ELC surveys within the Study Area.
- No rare vegetation communities were identified within the Study Area.

Next Steps

The natural features and candidate SWH verified or identified during this Site Investigation will be carried forward to an Evaluation of Significance. Features determined to be provincially significant, or those treated as significant, will be subjected to an Environmental Impact Study (EIS) report. The EIS will evaluate potential negative environmental effects, propose appropriate mitigation measures, and establish post-construction monitoring frameworks to enable the long-term protection of the natural heritage features and their ecological functions.

1.0 Introduction

Golden Leaf Agrivoltaics Inc. (Golden Leaf Agrivoltaics) proposes to develop a Class 3 ground-mounted solar facility with a maximum nameplate capacity up to 13.2 Megawatts alternating current (MWac), which consists of solar panels and associated equipment and infrastructure located on private land in the Township of Drummond-North Elmsley, Ontario (the Project Location; Figure 1). Figures are provided in Appendix A.

The Project will require approval under *Ontario Regulation (O. Reg.) 359/09 - Renewable Energy Approval* (REA Regulation) under Section V.0.1 of the Ontario *Environmental Protection Act*. The REA process replaces previous requirements for several approvals under (among others) the *Environmental Assessment Act*, *Planning Act* and *Environmental Protection Act*. The *O. Reg. 359/09* requires that all renewable energy projects conduct a site investigation of natural heritage features (REA Sections 26).

This Natural Heritage Assessment (NHA) Site Investigations Report was prepared in partial fulfillment of the regulatory requirements for the REA process. Additional details regarding records review, significance of natural features, potential impacts and mitigation measures required to protect these features will be provided under separate covers, including the NHA Records Review, NHA Evaluation of Significance and NHA Environmental Impact Study Reports. These reports will have an attestation as outlined in the *O. Reg. 359/09* and *Natural Heritage Assessment Guide for Renewable Energy Projects* (Third Edition, 2026) and will provide for the protection of natural features within and adjacent to the Project Location.

Waterbodies, if applicable, will also be captured under a separate cover. Discussion of species at risk (SAR), fish habitat, water bodies and other information needs are included under separate cover(s) in compliance with the REA and other applicable provincial and federal legislation and regulations.

A list of REA checklist requirements per *O. Reg. 359/09* pertaining to the NHA Site Investigations Report are provided in Table 1.

Table 1: Checklist for Requirements under *Ontario Regulation 359/09*- NHA Site Investigation

Required Documentation	Location in Report
A site investigation in accordance with the Table in section 26 of *O. Reg. 359/09* was conducted, either by visiting the site or by an alternative investigation of the site, for the purpose of determining:	
(a) whether the results of the analysis summarized in the "records review" report are correct or require correction, and identifying any required corrections.	Table 9: *Summary of Amendments to the Records Review*
(b) whether any additional natural features exist, other than those that were identified in the "records review" report.	*Table 9: Summary of Amendments to the Records Review*
(c) the boundaries, located within 50 m of the Project Location of any natural feature that was identified in the records review or the site investigation.	Figures 3-5
(d) the distance from the Project Location to the boundaries determined under clause (c).	Figures 3-5
A report was prepared and submitted to the Ministry of Natural Resources that sets out the following:	
(a) A summary of any corrections to the "records review" report and the determinations made as a result of conducting the site investigation.	Table 9: *Summary of Amendments to the Records Review*
(b) Information establishing the type of each natural feature identified in the records review and in the site investigation.	Section 7.0 *Site Investigation Results*
(c) A map showing all boundaries required to be determined under Column 3 of the Table to subsection 26(1) of *O. Reg. 359/09*: i. The boundaries located within 50 m of the Project Location of any natural feature that was identified in the records review or the site investigation. ii. The location and type of each natural feature identified in relation to the Project Location. iii. All distances required to be determined under Column 3 of the Table to subsection 26(1) of O. Reg. 359/09.	Figures 4-5

Required Documentation	Location in Report
(d) A summary of methods used to make observations for the purposes of the site investigation.	Section 6.0 *Site Investigation Methodology*
(e) The name and qualifications of any person conducting the site investigation.	Section 6.5: *Name and Qualifications of Site Investigators*
(f) If investigation was conducted by visiting the site: i. The dates and times of the beginning and completion of the site investigation. ii. The duration of the site investigation. iii. The weather conditions during the site investigation. iv. Field notes kept by the person conducting the site investigation.	Section 7.1: *Site Investigation Dates, Times, Duration, and Weather Conditions* Appendix B
(g) If an alternative investigation of the site was conducted: i. The dates of the generation of the data used in the site investigation. ii. An explanation of why the person who conducted the alternative investigation determined that it was not reasonable to conduct the site investigation by visiting the site.	Section 7.1: *Site Investigation Dates, Times, Duration, and Weather Conditions* Appendix B

Additional information about the Project can be found in the *Construction Plan Report*, *Design and Operations Report* and the *Project Description Report*. Technical studies associated with the REA requirements have been completed. In addition to this report the draft REA submission package includes:

- Project Description Report;
- Archaeological Assessment Report(s);
  - Protected Properties/Cultural Heritage Self-Assessment;
  - Cultural Heritage Assessment Report (required if a potential heritage resource is identified).
- Construction Plan Report;
- Design and Operations Report:
  - Noise Assessment Report;
  - Stormwater Management and Erosion Control Plan;
  - Environmental Effects Monitoring Plan (EEMP);
  - Post Construction Monitoring Plan (potentially integrated into the EEMP);

  - Emergency Response and Communications Plan.
- Decommissioning Plan Report;
- Water Assessment Report and Water Body Report (if required);
- Natural Heritage Assessment Reports:
  - Records Review;
  - Evaluation of Significance;
  - Environmental Impact Study.
- Consultation Report;
- Supporting Documents.

2.0 The Proponent

Golden Leaf Agrivoltaics Inc. (Golden Leaf Agrivoltaics) is the proponent partnership between Compass Greenfield Development Inc. (Compass) and Algonquins of Pikwakanagan First Nation (AOPFN) responsible for the development and permitting of the Golden Leaf Agrivoltaics Project (the Project) renewable energy facility. Compass is a renewable and clean energy developer, investor and asset manager working across Canada. Compass advances greenfield development opportunities for solar and battery energy storage (Compass Greenfield, 2026). Dillon is the prime consultant for the preparation of this Site Investigation Report.

Compass is coordinating and managing the approvals process for the Project. The contact at Compass is:

Full Name of Company:	*Golden Leaf Agrivoltaics Inc.*
Prime Contact:	*Bhavin Mistry, Senior Manager, Development*
Address:	*192 Spadina Ave. Suite 506, Toronto, ON M5T 2C2*
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Dillon Consulting Limited (Dillon) has been retained by Golden Leaf Agrivoltaics to prepare this Site Investigation Report for the Project. The contact at Dillon is:

Full Name of Company:	*Dillon Consulting Limited*
Prime Contact:	*Dave Restivo, Partner*
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Email:	drestivo@dillon.ca

3.0 Project Location

The proposed Class 3 Solar Facility is to be located within the Township pf Drummond-North Elmsley, Ontario. The Project Location is generally bounded by Drummond Concession 1 to the north and Churchill Road to the east (Figure 1).

As defined under *O. Reg. 359/09*, the Project Location encompasses all land, buildings, and structures in, on, or over which the renewable energy facility is located (including temporary laydown areas and access roads). Figure 1 illustrates the general Project Location. Figure 2 delineates the precise Project Location boundaries alongside the 50 m Site Investigation Area.

4.0 Results of Records Review

A records review was completed, consistent with Section 25 of *O. Reg. 359/09*, for the Project Location (see Figure 2) using secondary source information. Section 25 of *O. Reg. 359/09* states a Natural Heritage Assessment (NHA) for a renewable energy facility includes a records review to search for and determine whether the project location is in or within 120 metres of:

1. A provincial park or conservation reserve; or,
2. A natural feature, which includes:

    i. Wetlands (coastal wetlands, northern wetlands, or southern wetlands),

    ii. Valleylands,

    iii. Significant wildlife habitat (SWH),

    iv. Woodlands,

    v. Areas of natural and scientific interest (ANSI) (life science), and,

    vi. Areas of natural and scientific interest (earth science) (reduced to 50 m for earth science ANSIs).

The results of the records review are included in Table 2, below.

Table 2: Summary of the Natural Heritage Assessment Records Re

Natural Feature ID	Source Information	Evaluation Status	Location Relative To Project			Carried Forward to Site Investigation
			Within Project Location and within adjacent lands within 50 m	Within 120 m	Within 300 m	
Provincial Parks and Conservation Reserves						
None identified within 120 m of the Project Location.						---
Areas of Natural and Scientific Interest						
None identified within 120 m of the Project Location.						---
Wetlands						
Local unevaluated wetlands	MNR Wetlands – Ontario GeoHub	Unevaluated	✓	✓	✓	✓
Woodlands						
Wooded areas (various)	MNR Wooded Areas – Ontario GeoHub	Unevaluated	✓	✓	✓	✓
Wildlife Habitat						
Seasonal Concentration Areas						
Waterfowl Stopover and Staging Areas (Terrestrial)	MNR Criteria Schedule for Ecoregion 6E	Unevaluated	Unknown	Unknown	Unknown	✓
Waterfowl Stopover and Staging Areas (Aquatic)	MNR Criteria Schedule for Ecoregion 6E	Unevaluated	---	---	---	---
Shorebird Migratory Stopover Area	MNR Criteria Schedule for Ecoregion 6E	Unevaluated	---	---	---	---
Raptor Wintering Area	MNRF Criteria Schedule for Ecoregion 6E	Unevaluated	Unknown	Unknown	Unknown	✓
Bat Hibernacula	MNR Criteria Schedule for Ecoregion 6E	Unevaluated	---	---	---	---
Bat Maternity Colonies	MNR Criteria Schedule for Ecoregion 6E	Unevaluated	Unknown	Unknown	Unknown	✓
Turtle Wintering Areas (includes Snapping Turtle)	MNR Criteria Schedule for Ecoregion 6E	Unevaluated	Unknown	Unknown	Unknown	✓
Reptile Hibernaculum (includes Eastern Ribbonsnake)	MNR Criteria Schedule for Ecoregion E	Unevaluated	Unknown	Unknown	Unknown	✓
Colonially – Nesting Bird Breeding Habitat (Bank and Cliff)	MNR Criteria Schedule for Ecoregion 6E	Unevaluated	---	---	---	---
Colonially – Nesting Bird Breeding Habitat (Tree/Shrubs)	MNR Criteria Schedule for Ecoregion 6E	Unevaluated	Unknown	Unknown	Unknown	✓

Natural Feature ID	Source Information	Evaluation Status	Location Relative To Project			Carried Forward to Site Investigation
			Within Project Location and within adjacent lands within 50 m	Within 120 m	Within 300 m	
Colonially – Nesting Bird Breeding Habitat (Ground)	MNR Criteria Schedule for Ecoregion 6E	Unevaluated	---	---	---	---
Migratory Butterfly Stopover Areas	MNR Criteria Schedule for Ecoregion 6E	Unevaluated	---	---	---	---
Landover Migratory Stopover Areas	MNR Criteria Schedule for Ecoregion 6E	Unevaluated	---	---	---	---
Deer Yarding Areas	MNR Wildlife Values Areas – Ontario GeoHub	Evaluated	---	---	---	---
Deer Wintering Areas	MNR Wildlife Values Areas- Ontario GeoHub	Evaluated	---	---	---	---
Rare Vegetation Communities						
Cliffs and Talus Slopes	MNR Criteria Schedule for Ecoregion 6E	Unevaluated	Unknown	Unknown	Unknown	✓
Sand Barren	MNR Criteria Schedule for Ecoregion 6E	Unevaluated	Unknown	Unknown	Unknown	✓
Alvar	MNR Criteria Schedule for Ecoregion 6E	Unevaluated	Unknown	Unknown	Unknown	✓
Old Growth Forest	MNR Criteria Schedule for Ecoregion 6E	Unevaluated	Unknown	Unknown	Unknown	✓
Sand Barren	MNR Criteria Schedule for Ecoregion 6E	Unevaluated	Unknown	Unknown	Unknown	✓
Savannah	MNR Criteria Schedule for Ecoregion 6E	Unevaluated	Unknown	Unknown	Unknown	✓
Tallgrass Prairie	MNR Criteria Schedule for Ecoregion 6E	Unevaluated	Unknown	Unknown	Unknown	✓
Specialized Wildlife Habitat						
Waterfowl Nesting Area	MNR Criteria Schedule for Ecoregion 6E	Unevaluated	Unknown	Unknown	Unknown	✓
Bald Eagle and Osprey Nesting, Foraging and Perching Habitat	MNR Criteria Schedule for Ecoregion 6E	Unevaluated	Unknown	Unknown	Unknown	✓
Woodland Raptor Nesting Habitat	MNR Criteria Schedule for Ecoregion 6E	Unevaluated	Unknown	Unknown	Unknown	✓
Turtle Nesting Areas	MNR Criteria Schedule for Ecoregion 6E	Unevaluated	Unknown	Unknown	Unknown	✓
Seeps and Springs	MNR Criteria Schedule for Ecoregion 6E	Unevaluated	Unknown	Unknown	Unknown	✓
Amphibian Breeding Habitat (Woodland)	MNR Criteria Schedule for Ecoregion 6E	Unevaluated	Unknown	Unknown	Unknown	✓
Amphibian Breeding Habitat (Wetland)	MNR Criteria Schedule for Ecoregion 6E	Unevaluated	---	---	---	---

Natural Feature ID	Source Information	Evaluation Status	Location Relative To Project			Carried Forward to Site Investigation
			Within Project Location and within adjacent lands within 50 m	Within 120 m	Within 300 m	
Woodland Area Sensitive Bird Breeding Habitat	MNR Criteria Schedule for Ecoregion 6E	Unevaluated	Unknown	Unknown	Unknown	✓
Habitat of Species of Conservation Concern						
Marsh Breeding Bird Habitat	MNR Criteria Schedule for Ecoregion 6E	---	---	---	---	---
Open Country Bird Breeding Habitat (includes Grasshopper Sparrow)	MNR Criteria Schedule for Ecoregion 6E	Unevaluated	Unknown	Unknown	Unknown	✓
Shrub/Early Successional Bird Breeding Habitat (includes Golden-winged Warbler)	MNR Criteria Schedule for Ecoregion 6E	Unevaluated	Unknown	Unknown	Unknown	✓
Special Concern and Rare Wildlife Species: 1. Barn Swallow 2. Chimney Swift 3. Common Nighthawk 4. Great-backed Gull 5. Eastern Wood-pewee 6. Wood Thrush 7. Eastern Musk Turtle 8. Monarch 9. Western Virginia White	NHIC, OBBA, DFO, OHA, OBA, iNaturalist	Unevaluated	Unknown	Unknown	Unknown	✓
Animal Movement Corridors						
Amphibian Movement Corridors	MNR Criteria Schedule for Ecoregion 6E	Unevaluated	---	---	---	---
Deer Movement Corridors	MNR Criteria Schedule for Ecoregion 6E	Unevaluated	---	---	---	---
Provincial Plan Areas						
The project does not fall within a provincial plan area.						---

5.0 Site Investigation Purpose

This Site Investigation Report was prepared to evaluate and verify the accuracy of the determinations made during the Records Review, utilizing the results of the 2026 field program. In compliance with Section 26 of *O. Reg. 359/09*, a physical investigation of the air, land, and water was conducted within the Site Investigation Area (Project Location and surrounding 50-m area) for the purpose of determining the following:

- Verification of Records Review: Whether the results of the analysis summarized in the Records Review Report prepared under subsection 25 (3) are correct or require correction and identifying any required corrections.
- Identification of Additional Features: Whether any additional natural features exist within the Site Investigation Area that were not identified in the Records Review Report.
- Delineation of Boundaries: The precise boundaries of natural features identified during the records review or the site investigation that are located within 50 m of the Project Location.
- Proximity Assessment: The physical distance from the Project Location to the boundaries of those natural features.

Additionally, SAR listed under the federal SARA and the provincial SCA with the potential to interact with the Project Location or adjacent lands are being considered in direct consultation with the appropriate regulatory agencies. To maintain administrative and regulatory separation under the REA process, reporting and permitting documentation related to the protection of SAR are provided under separate cover.

6.0 Site Investigation Methodology

Based on analysis of the resources and records searched in the NHA Records Review Report, the determinations made with respect to natural features were the subject of multiple site investigations of the Project Location. These site investigations were also conducted to identify natural features not identified during the records review. Site investigations focused on those areas within the Project Location and surrounding 50 m (Adjacent Lands).

Table 3 outlines the method and/or procedure followed to determine the presence, absence and/or extent of a natural feature in the Site Investigation Area. An outline of these methods is provided in greater detail in Sections 6.1 to 6.4.

Table 3: Overview of Methods Employed During the Site Investigation of Natural Features

Feature	Source of Information/Data				
	Consultation/ Records Review	Ecological Land Classification	Wetland Delineation	Wildlife Habitat Mapping	Incidental Vegetation/ Wildlife Survey
Wetlands	✓	✓	✓	✓	
Woodlands	✓	✓		✓	
Wildlife Habitat	✓	✓	✓	✓	✓

6.1 Ecological Land Classification

During field investigations, vegetation was characterized using the Ecological Land Classification (ELC) System for Southern Ontario First Approximation (Lee *et al*., 1998) and Second Approximation (Lee *et al.* 2008). Where present, vegetation community boundaries were determined through the review of aerial photography, and then further refined through on-site field studies. Field studies involved identifying the dominant species for each vegetation cover type based on visual estimates of species abundances. The ELC system methodology recommends that a vegetation community be a minimum of 0.5 ha in size before it is defined. For the purposes of the NHA Site Investigation Report, ELC was completed to Vegetation Type.

Vegetation communities have been mapped on aerial photography according to ELC nomenclature to graphically represent the specific spatial pattern in the vegetation cover according to species composition, physiognomy, and physical site characteristics. ELC communities have been reported in Second Approximation as well as in First Approximation to allow for cross-referencing with the MNR's Ecoregion 6E Criteria Schedules (MNRF, 2015). ELC information was also used to identify treed communities. Areas of anthropogenic uses such as agriculture and urban land uses were also mapped to provide a complete account of existing conditions within the Project Location. Where site access was restricted, classification of vegetation communities was completed to the Ecosite level, using air photo interpretation and visual assessment using binoculars where possible.

Soil profiles for ELC involved the examination of hand auger soil profiles to a depth of generally 30 centimeters (cm). This allowed for the description of soil texture and site moisture characteristics which influence plant distributions and the resulting vegetation communities. Other physical traits such as topography and slope aspect were also noted within each community.

6.2 Wetland Boundary Delineation

Wetlands located within the Site Investigation Area (Project Location and the surrounding 50 m) must be delineated using the protocols outlined in the *Ontario Wetland Evaluation System (OWES) Southern Manual, Version 4* (MNRF, 2022). In accordance with O. Reg. 359/09, these delineation field surveys were completed by a qualified professional holding valid Ministry certification as an OWES Evaluator. As permitted under Section C4 of the *Natural Heritage Assessment Guide for Renewable Energy Projects (Third Edition, 2026)*, wetlands within the 50 m of the Project Location may be assumed provincially significant for the purposes of the project assessment, precluding the necessity of a full OWES evaluation.

Applicable wetland boundaries within the Site Investigation Area were delineated on accessible lands using a high-precision field GPS unit. In adherence to the *OWES Southern Manual*, boundary determinations were established based on the presence of wetland indicator species, specifically identifying the transition zone where the relative plant cover transitioned from greater than 50% hydrophytic (wetland) species to dominant upland vegetation. Verified wetlands were subsequently classified based on their dominant ecological vegetation form (e.g., swamp, marsh) and underlying substrate characteristics (i.e., organic or mineral).

No wetland communities were identified within 120 m of the Project Location in the NHA Record Review Report. However, this was ground-verified during the site investigations in tandem with ELC assessments.

6.3 Woodland Boundary Delineation

As detailed in the NHA Records Review Report, initial desktop analysis identified unevaluated woodlands within the Site Investigation Area. The objective of the woodland site investigation was to verify and precisely map the boundaries of these previously identified features, while assessing the area for any undocumented woodland communities.

The definition of "woodland" according to *O. Reg. 359/09* means land:

a) That is south and east of the Canadian Shield as shown on Figure 1 in the Provincial Policy Statement issued under section 3 of the Plannting Act and approved by the Lieutenant Govenor in Council by Order in Counsil No. 120/2005,
b) That has a per hectare at least
    i) 1,000 trees of any size,
    ii) 750 trees measuring over five centimetres in diameter, measured in accordance with subsection (7),
    iii) 500 trees measuring over 12 centimetres in diameter, measured in accordance with subsection (7). Or,
    iv) 250 trees measuring over 30 centimetres in diameter, measured in accordance with subsection (7) and,
c) That does not include a cultivated fruit or nut orchard or a plantation established for the purpose of producing Christmas trees. Woodlands were identified and characterized based on standard Ecological Land Classification (ELC) community definitions. In accordance with provincial NHA guidelines, the woodland boundaries were delineated in the field along the continuous canopy dripline. Woodlands bisected by paved roadways or separated by more than 20 m of non-woodland land cover were classified and treated as distinct, separate features. Woodland interior habitat was subsequently quantified by applying an internal 100 m buffer from the delineated feature edge and calculating the remaining core area. Detailed structural attributes, species composition, and ecological community data were captured concurrently during the ELC field assessments.

6.4 Wildlife Habitat Identification Survey

The potential presence of wildlife habitat within the Project Location and adjacent lands was evaluated using the criteria outlined in Sections 4 - 7 and Appendices M, N, and Q of the Significant Wildlife Habitat Technical Guide (MNR, 2000), and the associated Ecoregion 6E Criteria Schedules (MNRF, 2015). Field investigations within the Project Location and the surrounding 50-metre (m) Site Investigation Area focused on characterizing necessary habitat structures (e.g., tree cavities, raptor stick nests) and

assessing landscape attributes (e.g., habitat size, shape, and forest interior) required to support candidate SWH. Ecological Land Classification (ELC) community polygons were cross-referenced with the Ecoregion 6E schedules to identify candidate SWH. The specific evaluation criteria applied to each habitat type during the field program are detailed in Table 8 in Section 7.2.3.

6.4.1 Incidental Wildlife Surveys

Incidental observations of vegetation, birds, herpetofauna, mammal and invertebrate species were recorded during field studies to assist in the identification of wildlife habitat within the Site Investigation Area (Project Location and adjacent lands).

6.5 Name and Qualifications of Site Investigators

The names and qualifications of the site investigators that completed field studies on the subject property during the 2026 field program are outlined in Table 4 below. The site investigators listed below have been involved with the Project since the initiation of this work, have the necessary skills to conduct the required surveys for the site investigation and have been involved in renewable energy Projects.

Table 4: Names and Qualifications of Site Investigators

Name:	Mike Wolosinecky
Degrees and Professional Designations:	• B.E.Sc. (Hons), University of Waterloo, 2010. • Ecosystem Restoration Certificate, Niagara College Canada, 2012. • International Society of Arboriculture (ISA) Certified Arborist (member- Ontario Chapter).
Years of Experience:	• 15 years (over 21 renewable energy Projects).
Project Role:	• ELC. • Wildlife and Wildlife Habitat Surveys. • Botanical Survey. • Wetland Delineation. • Incidental Wildlife Observations.
Certifications:	• Butternut Health Assessor Certification (2019). • Ontario Wetland Evaluation System Certification (2017). • Ontario Amphibian and Reptile Survey and Handling Course, Scales Nature Centre, 2016. • Ecological Land Classification for Southern Ontario (2012). • ISA Certified Arborist.

Name:	Steve Greidanus
Degrees and Professional Designations:	• Ecosystem Management Technician Diploma. • Ecosystem Management Technology Advanced Diploma. • International Society of Arboriculture (ISA) Certified Arborist (member- Ontario Chapter). • Affiliated with Ontario Field Ornithologists, Ontario Field Botanists, Birds Canada, and Ontario Nature.
Years of Experience:	• 7 Years.
Project Role:	• ELC. • Wildlife and Wildlife Habitat Surveys. • Wetland Delineation. • Botanical Survey. • Incidental Wildlife Observations.
Certifications:	• ISA Certified Arborist.
Name:	**Charlotte Galloway**
Degrees and Professional Designations:	• M.Sc., Carleton University, 2026 • Graduate Certificate Environmental Management and Assessment, Algonquin College, 2023
Years of Experience:	• 2 Years.
Project Role:	• Wildlife and Wildlife Habitat Surveys. • Incidental Wildlife Observations.
Certifications:	• Ontario Reptile and Amphibian Course, Blazing Star Environmental, 2022
Name:	**Dave Praskey**
Degrees and Professional Designations:	• B.Sc., University of Guelph, 1990
Years of Experience:	• 24 years.
Project Role:	• Wildlife and Wildlife Habitat Surveys. • Incidental Wildlife Observations.
Certifications:	• RAQS Fisheries Compliance during Construction Specialist Certification, 2011 • CAN-CISEC, 2021

Name:	Molly Bradford
Degrees and Professional Designations:	• M.Sc., Environmental Science, Acadia University, 2022 • B.Sc., McMaster University, 2019
Years of Experience:	• 4 years.
Project Role:	• Wildlife and Wildlife Habitat Surveys. • Incidental Wildlife Observations.
Certifications:	• Ontario Reptile and Amphibian Course, Blazing Star Environmental, 2024

7.0 Site Investigation Results

This section details the findings of the physical site investigations conducted within the Site Investigation Area. In accordance with Section 26 of O. Reg. 359/09 and the *Natural Heritage Assessment Guide for Renewable Energy Projects* (Third Edition, 2026), the results presented herein serve to confirm, correct, or supplement the baseline environmental data established during the initial Records Review.

Field inventories executed between April 23 and June 30, 2026, verified the presence, boundaries, and biophysical characteristics of natural features and candidate habitats. The following subsections summarize the results of the ELC, wetland delineations, woodland boundary mapping, and candidate SWH screenings. Where field observations differed from desktop records, formal corrections to the NHA baseline are explicitly documented to establish a verified framework for subsequent evaluation.

Field notes from the site investigation work are included in Appendix B.

7.1 Site Investigation Dates, Times, Duration and Weather Conditions

Site investigations for the NHA Site Investigation Report were completed from April through June 2026 within the Project Location. The details of each site investigation completed in accordance with REA Section 26(3) are provided in Table 5 and should be read concurrently with Table 4. As outlined in *O. Reg.* 359/09, lands within 50 m of the Project Location must be assessed for natural features and resources. Where access was restricted, classification of vegetation communities was completed to the Ecosite level, using air photo interpretation and visual assessment with binoculars, where possible. Alternative site investigations occurred on the same dates as the surveys outlined below.

Table 5: Site Investigation Dates, Times, Duration and Weather Conditions

Date (2026)	Survey Type	Site Investigator	Start Time	Duration (hours)	Weather Conditions (Field Observations)		Weather Conditions (EC* Station)		
					Air Temp. (°C)	Wind (BF Scale) (Beaufort Scale)	Average Air (°C)Temp.(°C)	Wind Gust Max (km/hr) (Speed (km/h) /Direction(bearing)	Precipitation (mm)
April 23	Leaf off bat habitat assessment; spring botanical; and incidental observations;	M. Wolosinecky, D. Praskey	09:00	8.0	10	1	9.0	40	16.6
June 19	ELC, summer botanical and wetland assessment (delineation)	S. Greidanus	06:30	8.0	16	4	20	30	0.0
Total Duration of Field Work (staff hours)				16.0					

**Closest Environment Canada (EC) Weather Station is in Point Petre, Ontario, approximately 20 km south of the Project Location. All EC Data refers to daily values; N/A indicates the information was not available from an Environment Canada weather station from the date/time of field work.*

7.2 Natural Features

Based on the site investigation results, the presence of natural features is documented below. Figure 3 displays the results of the ELC survey on and within 50 m of the Project Location and is the basis for determining the type of natural feature present and its boundaries. Field notes are attached in Appendix B.

7.2.1 Ecological Land Classification Results

A total of 13 natural and anthropogenic vegetation communities were observed within the Project Location and surrounding 50 m. The location, type and boundaries of the various vegetation communities located within the Project Location and surrounding 50 m are delineated on Figure 3. Table 6 outlines the communities documented during the 2026 ELC surveys. The results of this work were used to further confirm the extent of natural features within the Project Location and surrounding 50 m.

Table 6: Ecological Land Classification

First Approximation		Second Approximation		Area (ha) Associated with Project (Project Location + 50 m)	Identifier on Figure 3	Vegetation
ELC Code	Classification	ELC Code	Classification			
CULTURAL/CONSTRUCTED						
N/A	N/A	OAGM1	Fallow Agricultural Field	1.95	7	Early stage of soybean or grain corn. See Photo 1 in Appendix C.
N/A	N/A	OAGM4	Open Pasture	37.61	8	The pasture contained timothy (*Phleum pratense*), Kentucky bluegrass (*Poa pratensis*), orchardgrass (*Dactylis glomerata*), bromegrass (*Bromus inermis*), and meadow fescue (*Festuca pratensis*). See Photo 2 in Appendix C.
N/A	N/A	TAGM4	Treed Pasture	0.45	9	The treed pasture contained Apple trees (*Malus sp.*) See Photo 3 in Appendix C.
N/A	N/A	TAGM5	Hedgerow	4.51	10	The hedgerows were dominated by Eastern White Pine (*Pinus strobus*). See Photo 4 in Appendix C.
N/A	N/A	CVI	Transportation	0.37	1	Drummond Concession 1
N/A	N/A	CVR-4	Rural Property	2.41	2	One community was identified in the Study Area, including a residential property.
NATURAL (UPLAND)						
Forest						
FOC2-2	White Cedar Coniferous Forest	FOCM2-2	Dry-Fresh White Cedar Coniferous Forest	0.42	3	The canopy contained Eastern White Cedar (*Thuja occidentalis*) with White Spruce (*Picea glauca*), Eastern Hemlock (*Tsuga canadensis*), and White Elm (*Ulmus americana*). The sub-canopy contained Eastern White Cedar, Eastern Hemlock, and rare Basswood (*Tilia americana*). The understory contained Balsam Fir (*Abies balsamea*), Eastern White Cedar, Bitternut Hickory (*Carya cordiformis*), and European Buckthorn. The ground layer contained abundant Sedge species (*Carex sp.*) with Wild Lily-of-the-Valley (*Maianthemum canadense*), Spinulose Wood Fern (*Dryopteris carthusiana*), and Broad-leaved Enchanter's Nightshade (*Circaea canadensis*). See Photo 5 in Appendix C.
FOC4-1	White Cedar Coniferous Forest	FOCM4-1	Fresh-Moist White Cedar Coniferous Forest	1.31	4	The canopy was dominated by Eastern White Cedar with rare Bitternut Hickory, White Ash (*Fraxinus americana*), and rare Northern Red Oak (*Quercus rubra*). The sub-canopy contained Eastern White Cedar with rare Bitternut Hickory, and Basswood. The understory contained abundant Eastern White Cedar with European Buckthorn, Eastern hop-hornbeam, and Basswood. The ground layer contained occasional Wood Fern species (*Dryopteris sp.*) with Wild Lily-of-the-Valley (*Maianthemum canadense ssp. canadense*), and Sugar Maple (*Acer saccharum*). See Photo 6 in Appendix C.

First Approximation		Second Approximation		Area (ha) Associated with Project (Project Location + 50 m)	Identifier on Figure 3	Vegetation
ELC Code	Classification	ELC Code	Classification			
Woodland						
CUW1	Mineral Cultural Woodland	WOD	Deciduous Woodland	2.22	12	The canopy contained rare European buckthorn. The sub-canopy contained abundant European buckthorn with abundant Glossy buckthorn (*Frangula alnus*), occasional Apple species (*Malus sp.*), and occasional hawthorn species (*Crataegus sp.*). The understory contained rare European buckthorn. The ground layer contained abundant Bluegrass species (*Poa sp.*) with abundant Common plantain (*Plantago major*), occasional Sulphur cinquefoil (*Potentilla recta*), and occasional Common yarrow (*Achillea millefolium*). See Photo 7 in Appendix C.
WODM4	White Ash Deciduous Woodland	WODM4-2	Dry-Fresh White Ash Deciduous Woodland	3.37	13	The canopy contained White Ash with Balsam Poplar (*Populus balsamifera*), and Northern Red Oak (*Quercus rubra*). The sub-canopy contained White Ash with Bitternut Hickory, and Basswood. The understory contained European Buckthorn with White Ash, White Elm (*Ulmus americana*), and Tatarian Honeysuckle. The ground layer contained Reed Canarygrass with Avens species (*Geum sp.*), Garlic Mustard (*Alliaria petiolata*), and Blue Cohosh (*Caulophyllum thalictroides*). See Photo 8 in Appendix C.
Thicket						
THD	Deciduous Thicket	THD	Deciduous Thicket	3.33	11	The vegetation was dominated by buckthorn (*Rhamnus sp.*), with occasional ash (*Fraxinus sp.*), apple and hawthorn. See Photo 9 in Appendix C.
Meadow						
CUM1	Cultural Meadow	MEMM3	Dry-Fresh Mixed Meadow	1.05	5	The meadow was dominated by goatsbeard (*Tragopogon sp.*), Hedge Bedstraw (*Galium album*), tall buttercup (*Ranunculus acris*), and an unidentified grass species (*Poaceae sp.*). See Photo 10 in Appendix C.
CUM1	Cultural Meadow	MEMM4	Fresh-Moist Mixed Meadow	0.23	6	The meadow was dominated by brome (*Bromus sp.*), Hedge Bedstraw, oxeye daisy (*Leucanthemum vulgare*), and vetch (*Vicia sp.*). See Photo 11 in Appendix C.

7.2.2 Woodlands

As detailed in the NHA Records Review Report, the desktop analysis identified woodlands within the Project Location and surrounding 120 m. The focus of the woodland investigation was to verify the boundaries of the woodland features in the Site Investigation Area and to determine if additional features were present. For the purposes of this Site Investigation Report, the term 'mapped woodland' aligns with the general definition of 'woodland' from O. Reg. 359/09.

The significance of woodland features identified in the Records Review and this Site Investigations Report will be further expanded upon in the Evaluation of Significant Report as outlined in the *Natural Heritage Assessment Guide for Renewable Energy Projects* (Third Edition, 2026).

The boundaries of all woodlands identified are shown on Figure 4 as well as their respective nearest distance to the defined Project Location boundary. The boundaries depicted on Figure 4 are the result of field investigations by qualified individuals (see Table 4) to delineate the dripline of woodlands applicable to the Project Location. A total of two woodlands have been identified within the Project Location and/or surrounding 50 m Site Investigation Area.

Woodlands observed within the Project Location include vegetation communities with <60% tree cover and low stem density, meeting the ELC designation of woodland (i.e. 35% to 60% tree cover) and not the designation of forest (>60% tree cover). These ELC defined woodlands (35% to 60% tree cover) are shown separately from those forest communities (>60% tree cover) on Figure 4 as ELC defined woodlands are not anticipated to be carried through to the evaluation of significance on the basis these communities will not meet the minimum standards for tree cover as defined in the *Natural Heritage Assessment Guide for Renewable Energy Projects* (Third Edition, 2026). Table 7 also outlines the attributes, composition and function of the woodlands within the Project Location and/or surrounding 50 m and confirms if the woodland was included in the records review or was identified as a result of site investigations. Amendments to the NHA Records Review are outlined in Section 8.0.

Table 7: Summary of Woodlands within the Project Location and Surrounding 50 m

Woodland ID	Identified During Records Review?	Attributes					Composition		Function			Minimum Distance to Project Location (m)
		Size (ha)*	Hectares within Project Location	Hectares within 50 m of Project Location	Interior Woodland** (ha)	Interior Habitat† (ha)	Woodland Diversity including Vegetative Communities and Species Present	Contains or is Adjacent to Sensitive Features	Contains or Adjacent to Known Natural Features, Fish Habitat, Source Water Protection Area	Linkage Function	Other	
A	Yes	0.89	0	0.034	0	0	This woodland area is composed of the following ELC communities: • Dry-Fresh White Cedar Coniferous Forest (FOCM2-2)	---	None observed	Woodland A is in the 50 m Site Investigation Area and is isolated from other features.	---	50
B	Yes	127.88	0.98	2.09	51.76	12.11	This woodland area is composed of the following ELC communities: • Deciduous Woodland (WOD) • White Ash Deciduous Woodland (WODM4-2) • Fresh-Moist White Cedar Coniferous Forest (FOCM4-1)	---	Swamp	Woodland B is a large woodland that contains a swamp greater than 120 m from the Project Location.	---	0

*Size refers to the total size of the woodland area (excluding areas that do not meet the woodland cover criteria of 60%).
**Interior woodland begins 100 m from the woodland edge and refers to total woodland interior.
† Interior habitat begins 200 m from the woodland edge.

7.2.3 Wildlife Habitat

The baseline assessment of potential wildlife habitat within the Site Investigation Area, established during the NHA Records Review, was augmented by physical site investigations completed during the 2026 field program. The field data collected were systematically evaluated against the criteria outlined in Sections 4 through 7 and Appendices M, N, and Q of the *Significant Wildlife Habitat Technical Guide* (MNR, 2000), alongside the *Significant Wildlife Habitat Ecoregion 6E Criterion Schedules* (MNRF, 2015).

Ecological Land Classification (ELC) community polygons (delineated to the second approximation) were utilized as the primary vehicle to identify candidate Significant Wildlife Habitat (SWH). Based on these community profiles and the specific biophysical attributes of the landscape, candidate SWH was identified within the Site Investigation Area. Table 8 outlines the specific wildlife habitat categories applicable to Ecoregion 6E, evaluates their relevance to the project, describes their exact boundaries, and cross-references their geographic locations as mapped on Figures 6A – 6D.

Species of Conservation Concern (SCC) were identified according to the definition provided in the *Significant Wildlife Habitat Technical Guide* (MNR, 2000). Candidate SCC with the potential to occur in the general area of the Project Location are discussed in Table 8 below and details provided in Appendix D. Where applicable, these species are assessed concurrently within their corresponding Ecoregion 6E habitat matrices or integrated into the Special Concern and Rare Wildlife Species sub-sections. As defined under provincial frameworks, SCC include:

- Species designated as nationally Endangered or Threatened by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) that do not possess a species-specific habitat regulation under Ontario law;
- Species classified as provincially Special Concern by the Committee on the Status of Species at Risk in Ontario (COSSARO), or tracked as rare elements by the Natural Heritage Information Centre (NHIC); and/or,
- Species assigned a provincial Conservation Status Rank (SRank) of S1 (Critically Imperiled), S2 (Imperiled), or S3 (Vulnerable).

To maintain legal and administrative separation within the Renewable Energy Approval (REA) process, reporting and authorization documentation relating to Endangered or Threatened species protected under parallel provincial frameworks are provided to the appropriate regulatory agency under separate cover.

Table 8: Candidate Wildlife Habitat in the Project Location and Surrounding 50 m

Wildlife Habitat	Definition of Habitat	Habitat Composition: Attributes, Condition and Function	Location		Status				Rationale for Status	Minimum Distance to the Project Location (m)
			Within Project Location	Within 50 m of Project Location	Absent	Candidate	Confirmed	Generalized Candidate Significant Wildlife Habitat		
Seasonal Concentration Areas										
Waterfowl Stopover and Staging Areas (Terrestrial)	Fields with sheet water from spring melt and run-off which provide invertebrate foraging habitat for migrating waterfowl. Can be found in any Meadow (ME) (or CUM communities in the ELC first approximation codes) that are maintained through anthropogenic disturbances (i.e., planting or agriculture, clearing, recreation, soil movement, grazing or mowing). Agricultural fields with waste grains are commonly used by waterfowl, these are not considered SWH.	Candidate habitat does not exist within the Site Investigation Area.	---	---	✓	✓	---	---	The Project Location does not contain meadows that collect sheet water from the spring melt and runoff.	N/A
Waterfowl Stopover and Staging Areas (Aquatic)	Ponds, marshes, lakes, bays, coastal inlets and watercourses used during migration can be significant wildlife habitat for local and migrant waterfowl populations during migration. Sewage treatment ponds and storm water ponds do not qualify as a significant wildlife habitat; however, a reservoir managed as a large wetland or pond/lake does qualify. These habitats have an abundant food supply (mostly aquatic invertebrates and vegetation in shallow water). Can be found in the following community types: Shallow Marsh (MAS), Shallow Aquatic (SA), and Deciduous Swamp (SWD).	Candidate habitat does not exist within the Site Investigation Area.	---	---	✓	---	---	---	The Project Location does not contain large sized waterbodies, ponds, marshes, lakes, bays, coastal inlets that would provide Waterfowl Stopover and Staging Areas.	N/A
Shorebird Migratory Stopover and Staging Area	Shorelines of lakes, rivers and wetlands, including beach areas, bars and seasonally flooded, muddy and un-vegetated shoreline habitats. Great Lakes coastal shorelines, including groynes and other forms of armour rock lakeshores, are extremely important for migratory shorebirds in May to mid-June and early July to October. Sewage treatment ponds and storm water ponds do not qualify as a significant wildlife habitat. Can be found within the following ELC habitat types: Meadow Marsh (MAM), Sand Dune (SD), Beach Bar (BB).	Candidate habitat does not exist within the Site Investigation Area.	---	---	✓	---	---	---	The Project Location does not contain shorelines of lakes, including beach areas, bars and seasonally flooded, muddy and un-vegetated shoreline habitat that would provide shorebird habitat.	N/A

Wildlife Habitat	Definition of Habitat	Habitat Composition: Attributes, Condition and Function	Location		Status				Rationale for Status	Minimum Distance to the Project Location (m)
			Within Project Location	Within 50 m of Project Location	Absent	Candidate	Confirmed	Generalized Candidate Significant Wildlife Habitat		
Raptor Wintering Area	The habitat provides a combination of fields and woodlands that provide roosting, foraging and resting habitats for wintering raptors. Least disturbed sites, idle/fallow or lightly grazed field/meadow habitats >15 ha with adjacent woodlands may be considered candidate significant wildlife habitat. Habitat includes any Forest (FO), in addition to one of the following Community Types: Meadow (ME), Thicket (TH), Savannah (SV), Woodland (WO) (<60% cover). Raptor wintering sites need to be >20 ha.	Candidate habitat does not exist within the Site Investigation Area.	---	---	✓	---	---	---	The field and woodland combination of habitat is not present and does not meet the size criteria of >15 ha.	N/A
Bat Hibernacula	Hibernacula may be found in abandoned mines, underground foundations, karsts, or one of the following ELC communities: Crevice (CCR) or Cave (CCA). SWH does not include buildings. The locations of bat hibernacula are relatively poorly known.	Candidate habitat does not exist within the Site Investigation Area.	---	---	✓	---	---	---	The Project Location does not contain habitat (such as abandoned mines, underground foundations, karsts, crevices or caves) that would support bat hibernacula.	N/A
Bat Maternity Colonies	Maternity colonies can be found in tree cavities, vegetation and often in buildings; however, buildings are not considered significant wildlife habitat. Maternity roosts are not found in caves and mines in Ontario. This habitat is associated with any of the following Community Types: Deciduous Forest (FOD), Mixed Forest (FOM), that have ≥10/ha wildlife trees ≥25 cm diameter at breast height (dbh). Female bats prefer wildlife tree (snags) in early stages of decay, class 1-3 or class 1 or 2.	Candidate habitat does not exist within the Site Investigation Area.	---	---	✓	---	---	---	Based on bat snag density surveys conducted within the forest communities within the Project Location, bat snag density was determined to be less than 10 snags per hectare (see Appendix B for calculations).	N/A
Turtle Wintering Areas (includes Snapping Turtle, Midland Painted Turtle, Northern Map Turtle)	For most turtles, wintering areas are in the same general areas as their core habitat. Over-wintering sites are permanent water bodies, large wetlands, and bogs and fens with adequate dissolved oxygen. Water has to be deep enough not to freeze and have soft mud substrates. These habitats are found in the following Community Types: Swamp (SW), Marsh (MA), Open Water (OA), Shallow Water (SA), Open Fen (FEO), Open Bog (BOO). Species of Conservation Concern: • Common Snapping Turtle • Northern Map Turtle • Eastern Musk Turtle	Candidate habitat does not exist within the Site Investigation Area	---	---	✓	---	---	---	The Site Investigation Area does not contain any wetlands with suitable depth to provide turtle wintering areas.	N/A

Wildlife Habitat	Definition of Habitat	Habitat Composition: Attributes, Condition and Function	Location		Status				Rationale for Status	Minimum Distance to the Project Location (m)
			Within Project Location	Within 50 m of Project Location	Absent	Candidate	Confirmed	Generalized Candidate Significant Wildlife Habitat		
Reptile Hibernaculum (includes Eastern Ribbonsnake and Common Five-lined Skink)	Hibernation occurs in sites located below frost lines in burrows, rock crevices, broken and fissured rock, wetlands such as conifer or shrub swamps and swales, poor fens, or depressions in bedrock terrain with sparse trees or shrubs with sphagnum moss or sedge hummock ground cover. Wetlands can also be important over-wintering habitat in conifer or shrub swamps and swales, poor fens, or depressions in bedrock terrain with sparse trees or shrubs with sphagnum moss or sedge hummock ground cover. Hibernacula can be found in any ecosite in central Ontario other than very wet ones. The following Community Types may be directly related to snake hibernacula: Talus (TA), Rock Barren (RB), Crevice (CCR), Cave (CCA), and Alvar (RBOA1, RBSA1, RBTA1). Species of Conservation Concern: • Eastern Ribbonsnake • Five-lined Skink	Candidate habitat does not exist within the Site Investigation Area	---	---	✓	---	---	---	The Site Investigation Area does not contain habitat (such as swamps or cracked bedrock) that would support reptile hibernacula.	N/A
Colonially Nesting Bird Breeding Habitat (Bank and Cliff)	Any site or area with eroding banks, sandy hills, borrow pits, steep slopes, sand piles, cliff faces, bridge abutments, silos, or barns found in any of the following Community Types: Meadow (ME), Thicket (TH), Savannah (SV), Bluff (BL), Cliff (CL). This does not include man-made structures (bridges or buildings), licensed/permitted mineral aggregate operation, or recently (within the last 2 years) disturbed soil areas, such as berms, embankments, and soil or aggregate stockpiles.	Candidate habitat does not exist within the Site Investigation Area.	---	---	✓	---	---	---	The Site Investigation Area does not contain habitat (such as banks, sand hills, borrow pits, steep slopes, sand piles, cliff faces, bridges, silos, or barns) that would support colonially nesting bird breeding habitat (bank and cliff).	N/A
Colonially Nesting Bird Breeding Habitat (Trees & Shrubs)	Nests in live or dead standing trees in wetlands, lakes, islands and peninsulas. Shrubs and occasionally emergent vegetation may also be used. Most nests in trees are 11 to 15 m from ground, near the top of tree. This habitat can be found in any of the following community types: Mixed Swamp (SWM); Deciduous Swamp (SWD), Coniferous Swamp (SWC).	Candidate habitat does not exist within the Site Investigation Area.	---	---	✓	---	---	---	The Site Investigation Area does not contain swamp habitat.	N/A

Wildlife Habitat	Definition of Habitat	Habitat Composition: Attributes, Condition and Function	Location		Status				Rationale for Status	Minimum Distance to the Project Location (m)
			Within Project Location	Within 50 m of Project Location	Absent	Candidate	Confirmed	Generalized Candidate Significant Wildlife Habitat		
Colonially Nesting Bird Breeding Habitat (Ground)	Nesting colonies of gulls and terns on islands or peninsulas associated with open water or in marshy areas. Brewer's Blackbird colonies are found loosely on the ground in low bushes in close proximity to streams and irrigation ditches within farmlands. Any rocky island or peninsula within a lake or large river, in close proximity to watercourses in open fields or pastures with scattered trees or shrubs found in any of the following Community Types: Meadow Marsh (MAM), Shallow Marsh (MAS), Meadow (ME), Thicket (TH), Savannah (SV).	Candidate habitat does not exist within the Site Investigation Area.	---	---	✓	---	---	---	There were no islands or peninsulas associated with open water or in marshy areas within the Project Location. Habitat for gulls and terns is therefore not applicable to the Project. There is thicket and meadow communities Site Investigation Area, however, none of these are located in close proximity to watercourses.	N/A
Deer Yarding Areas	Deer winter congregation areas are areas deer move to in response to the onset of winter snow and cold. Woodlots will typically be ≥100 ha in size and comprised of FOC, FOM, FOD, SWC, SWM, and SWD. Deer management is an MNR responsibility.	Candidate habitat does not exist within the Site Investigation Area.	---	---	✓	---	---	---	Planning authorities are advised to rely on MNR advice for locations and significance of Deer Yarding Areas. MNR is responsible for the management of deer habitat in Ontario. No Deer Yarding Areas previously evaluated as significant were identified by MNR in the Site Investigation Area.	N/A
Rare Vegetation Communities										
Cliffs and Talus Slopes	A cliff is vertical to near vertical bedrock that is greater than 3 m in height. A talus slope is rock rubble at the base of a cliff made up of coarse rocky debris. Talus Slopes are associated with the following ELC communities: TAO (Open Talus), TAS (Shrub Talus), TAT (Treed Talus). Cliff Slopes are associated with the following ELC communities: CLO (Open Cliff), CLS (Shrub Cliff), CLT (Treed Cliff).	Candidate habitat does not exist within the Site Investigation Area.	---	---	✓	---	---	---	ELC studies did not identify talus or cliff slopes within the Site Investigation Area.	N/A
Sand Barren	Sand Barrens typically are exposed sand, generally sparsely vegetated and caused by lack of moisture, periodic fires, and erosion, having little or no soil and the underlying rock protrudes through the surface. These communities are usually located within other types of natural habitat such as forest or savannah. Vegetation can vary from patch and barren to tree covered but less than 60%.	Candidate habitat does not exist within the Site Investigation Area.	---	---	✓	---	---	---	ELC studies did not identify sand barren within the Site Investigation Area.	N/A

Wildlife Habitat	Definition of Habitat	Habitat Composition: Attributes, Condition and Function	Location		Status				Rationale for Status	Minimum Distance to the Project Location (m)
			Within Project Location	Within 50 m of Project Location	Absent	Candidate	Confirmed	Generalized Candidate Significant Wildlife Habitat		
Alvar	An Alvar is typically a level, mostly unfractured calcareous bedrock feature with a mosaic of rock pavements and bedrock overlain by a thin veneer of soil. The hydrology of Alvars is complex, with alternating periods of inundation and drought. This habitat may be associated with any of the following ELC communities: RBOA1, RBSA1, RBTA1, FOCM1, FOCM2, MEMR1, SVD, SVC, SVM, WODR1 that are >0.5 ha in size. Where these communities occur, they have been identified as candidate alvar communities and will be carried forward into the *NHA Evaluation of Significance.* Provincially Rare Vegetation Communities of Special Concern listed in Appendix M of the SWHTG: RBOA1-1, RBSA1-1, RBTA1-5 Alvar Indicator Species: Crawe's Sedge — Small Skullcap Philadelphia Panic grass — False Pennyroyal Flat-stemmed Spike rush	Candidate habitat does not exist within the Site Investigation Area.	---	---	✓	---	---	---	ELC studies did not identify alvar within the Site Investigation Area.	N/A
Old Growth Forest	Old Growth Forests are characterized by heavy mortality or turnover of over-storey trees resulting in a mosaic of gaps that encourage development of a multi-layered canopy and an abundance of snags and downed woody debris. Stands ≥30 ha with at least 10 ha interior assuming 100 m buffer at edge of forest, and are associated with the following Community Types: FOD (Deciduous Forest), FOM (Mixed Forest), FOC (Coniferous Forest). The stand will have experienced no recognizable forestry activities. Forests with a wide range of tree sizes, uneven canopy and canopy gaps, abundant fallen logs in varying states of decomposition, trees in older age classes (often 50-140 years).	Candidate habitat does not exist within the Site Investigation Area.	---	---	✓	---	---	---	The forest (FO) communities did not contain 50-140 year old trees or possess other characteristics of an old growth forest. ELC studies did not identify old growth forest within the Site Investigation Area.	N/A
Tallgrass Prairie	A tallgrass prairie has ground cover dominated by prairie grasses. An open tallgrass prairie habitat has less than 25% tree cover. This habitat is associated with the following communities: MEGM, MEFM, and MEMM1 & MEMM2. These communities must be restored or natural.	Candidate habitat does not exist within the Site Investigation Area.	---	---	✓	---	---	---	ELC studies did not identify tallgrass prairie within the Site Investigation Area.	N/A

Wildlife Habitat	Definition of Habitat	Habitat Composition: Attributes, Condition and Function	Location		Status				Rationale for Status	Minimum Distance to the Project Location (m)
			Within Project Location	Within 50 m of Project Location	Absent	Candidate	Confirmed	Generalized Candidate Significant Wildlife Habitat		
Savannah	A Savannah is a tallgrass prairie habitat that has tree cover between 25-60%, and is associated with the following ELC communities: TPS1 (Dry-Fresh Tallgrass Mixed Savannah Ecosite), TPS2 (Fresh-Moist Tallgrass Deciduous Savannah Ecosite), TPW1 (Dry-Fresh Black Oak Tallgrass Deciduous Woodland Ecosite), TPW2 (Fresh-Moist Tallgrass Deciduous Woodland Ecosite), CUS2 (Bedrock Cultural Savannah Ecosite). These communities must be restored or natural and must not be dominated by exotic or introduced species (<50% vegetative cover exotics).	Candidate habitat does not exist within the Site Investigation Area.	---	---	✓	---	---	---	ELC studies did not identify savannah within the Site Investigation Area.	N/A
Other Rare Vegetation Communities	Provincially Rare S1, S2 and S3 vegetation communities are listed in Appendix M of the SWHTG. Any ELC Ecosite Code that has a possible ELC Vegetation Type that is Provincially Rare is Candidate SWH. Rare Vegetation Communities may include beaches, fens, forest, marsh, barrens, dunes and swamps.	Candidate habitat does not exist within the Site Investigation Area.	---	---	✓	---	---	---	ELC studies did not identify Red Spruce forest community within the Site Investigation Area.	N/A
Specialized Habitat for Wildlife										
Waterfowl Nesting Area	Upland habitats of any kind located adjacent to a wetland. The upland areas should be at least 120 m wide so predators have difficulty finding nests. The extent of the habitat extends 120 m from a wetland >0.5 ha or any small wetland within 120 m of a cluster of 3 or more smaller wetlands (<0.5 ha) within 120 m of each other where waterfowl nesting occurs. Wood ducks and hooded mergansers utilize large diameter trees (>40 cm dbh) in woodlands for cavity nest sites.	N/A	✓	✓		✓	---	---	Clusters of wetlands were not observed within the Site Investigation Area.	N/A
Bald Eagle and Osprey Nesting, Foraging and Perching Habitat	Nests are associated with lakes, ponds, rivers or wetlands along forested shorelines, islands or on structures over water. Osprey nests are usually at the top of a tree whereas Bald Eagle nests are typically in super canopy trees in a notch within the tree's canopy. Nests located on man-made structures are not included as significant wildlife habitat. Forest (FO), or Swamp (SW) that are immediately adjacent to rivers, lakes, ponds, and wetlands should be considered.	Candidate habitat does not exist within the Site Investigation Area.	---	---	✓	---	---	---	No Bald Eagle or Osprey nests were observed at the Site Investigation Area.	N/A

Wildlife Habitat	Definition of Habitat	Habitat Composition: Attributes, Condition and Function		Location		Status				Rationale for Status	Minimum Distance to the Project Location (m)
				Within Project Location	Within 50 m of Project Location	Absent	Candidate	Confirmed	Generalized Candidate Significant Wildlife Habitat		
Woodland Raptor Nesting Habitat	Stick nests found in a variety of intermediate-aged to mature conifer, deciduous or mixed forests within tops or crotches of trees. Species such as Cooper's Hawk nest along forest edges sometimes on peninsulas or small off-shore islands. In disturbed sites, nests may be used again or a new nest will be in close proximity to the old nest. Can be found in the following ELC communities: Forest (FO), Treed Swamp (SW), Coniferous Plantation (CUP3/TAGM1) that are >30 ha with >10 ha or interior habitat (interior habitat having a 200 m buffer of surrounding woodland and/or forest.	ID WRNH	ELC* FOCM4-1	✓	✓	---	✓	---	---	The forest (FO) communities that occur Site Investigation Area are >30 ha and include interior woodland habitat >10 ha and will be considered as Candidate Significant Wildlife Habitat. See Figure 6A.	Candidate habitat within the Project Location
Turtle Nesting Areas (includes Snapping Turtle, Midland Painted Turtle, and Northern Map Turtle)	For an area to function as a turtle nesting area, it must provide sand and gravel that turtles are able to dig in and are located in open, sunny areas. Nesting areas on the sides of municipal or provincial road embankments and shoulders are not significant wildlife habitat. Sand and gravel beaches adjacent to undisturbed shallow weedy areas of marshes, lakes and rivers are most frequently used. Exposed mineral soil (sand or gravel) areas <100 m from or within the following Community Types: Mineral or Organic Meadow Marsh (MAM or MAO), Shallow Marsh (MAS), Shallow Aquatic (SA), Open Bog (BOO), Open Fen (FEO). Species of Conservation Concern: • Northern Map Turtle • Common Snapping Turtle • Eastern Musk Turtle	Candidate habitat does not exist within Site Investigation Area.		---	---	✓	---	---	---	No watercourses or marshes are identified within the Site Investigation Area. As such, potential SWH for turtle nesting areas is not present.	N/A
Seeps and Springs	Seeps and springs are areas where ground water comes to the surface, often in forested headwater areas. Any forested area (with <25% meadow, field, or pasture) within the headwaters of a stream or river system may have seeps or springs. Presence of a site with 2 or more seeps/springs should be considered SWH.	Candidate habitat does not exist within Site Investigation Area.		---	---	✓	---	---	---	Seeps or springs were not observed in forested habitats. The treed areas did not contain headwaters of streams or rivers and indicators of seeps/springs (e.g., vegetation, staining, etc.) were not observed. The Site Investigation Area does not contain seeps and springs.	N/A

Wildlife Habitat	Definition of Habitat	Habitat Composition: Attributes, Condition and Function	Location		Status				Rationale for Status	Minimum Distance to the Project Location (m)
			Within Project Location	Within 50 m of Project Location	Absent	Candidate	Confirmed	Generalized Candidate Significant Wildlife Habitat		
Amphibian Breeding Habitat (Wetland) (includes Western Chorus Frog)	Wetlands and pools isolated from woodlands with presence of shrubs, logs available for calling, foraging and escape/concealment from predators. Bullfrogs require permanent water bodies with and abundance of emergent vegetation. Swamp (SW), Marsh (MA), Fen (FE), Bog (BO), Open Water (OA), Shallow Aquatic (SA), including vernal pools, that are >500 m² or 25 m in diameter, and located >120 m from woodlands. Species of Conservation Concern: • Western Chorus Frog.	Candidate habitat does not exist within the Site Investigation Area.	---	---	✓	---	---	---	No isolated wetlands were observed in the Site Investigation Area.	N/A
Amphibian Breeding Habitat (Woodland)	The presence of a wetland, lake or pond within or adjacent to (within 120 m) a woodland that contains permanent ponds or contains water in most years until mid-July are most likely to be used as breeding habitat. Species of Conservation Concern: • Western Chorus Frog	Candidate habitat does not exist within the Site Investigation Area.	---	---	✓	---	---	---	No wetland communities are located within 120 m of a woodland within the Project Location and the 50 m Site Investigation Area. Woodland B contains a swamp located greater than 120 m from the Project Location. Amphibian surveys were conducted and resulted in not meeting the criteria for number of amphibians heard calling.	N/A
Woodland Area-Sensitive Bird Breeding Habitat	Habitats where interior forest breeding birds are breeding, typically large mature (>60 yrs old woodlots greater than 30 ha.	Candidate habitat does not exist within the Project Location or 50 m Site Investigation Area.	---	---	✓	---	---	---	Large forests greater than 30 ha are not found in the Site Investigation Area.	N/A
Habitat of Species of Conservation Concern										
Marsh Breeding Bird Habitat	This habitat includes all wetlands as long as there is shallow water with emergent aquatic vegetation present. For Green Heron, habitat is at the edge of water such as sluggish streams, ponds and marshes sheltered by shrubs and trees. Less frequently it may be found in upland shrubs or forest a considerable distance from water. The following ELC communities should be considered: Meadow Marsh (MAM), Shallow Aquatic (SA), Open Bog (BOO), Open Fen (FEO), or for Green Heron: SW (Swamp), MA (Marsh) and Meadow (ME).	Candidate habitat does not exist within the Project Location or 50 m Site Investigation Area.	---	---	✓	---	---	---	Marsh communities are not found Site Investigation Area and as such is not considered Candidate Significant Wildlife Habitat.	N/A

Wildlife Habitat	Definition of Habitat	Habitat Composition: Attributes, Condition and Function		Location		Status				Rationale for Status	Minimum Distance to the Project Location (m)
				Within Project Location	Within 50 m of Project Location	Absent	Candidate	Confirmed	Generalized Candidate Significant Wildlife Habitat		
Open Country Bird Breeding Habitat (includes Grasshopper Sparrow)	Large grassland areas (including natural and cultural fields and meadows) are important to support grassland breeding bird species. Grassland areas > 30 ha, and do not include Class 1 or Class 2 agricultural lands. Habitat does not include fields with row-cropping or intensive hay or livestock pasturing in the last 5 years. This habitat can be found in Meadows (ME). Species of Conservation Concern: • Grasshopper Sparrow	ID OCBBH	ELC* MEMM3, MEMM4	✓	✓	---	✓	---	---	The Site Investigation Area contains large grassland communities of 30 ha or greater Site Investigation Area. See Figure 6B.	Candidate Habitat within the Project Location
Shrub/Early Successional Bird Breeding Habitat (includes Golden-winged Warbler)	Oldfield areas succeeding to shrub and thicket habitats >30 ha, that are not Class 1 or Class 2 agricultural lands, with no row-cropping or intensive hay or livestock pasturing in the last 5 years. This habitat can be found in Thickets (TH; or CUT1 as per the first approximation ELC community code) and Woodland (WOC and RBT; or CUW2 as per first approximation ELC community code).	Candidate habitat does not exist within the Project Location or 50 m Site Investigation Area.		---	---	✓	---	---	---	Large thicket (TH) and rock barren (RBT) communities were not present in the Site Investigation Area.	N/A
Terrestrial Crayfish	Terrestrial Crayfish are only found within SW Ontario in Canada and their habitats are very rare. Chimney or Digger Crayfish; (*Fallicambarus fodiens*) Devil Crayfish or Meadow Crayfish; (Cambarus Diogenes). This habitat can be found in MAM, MAS, SWT, SWD, SWM ecosites and CUM1 with inclusions of the above meadow marsh or swamp ecosites.	Candidate habitat does not exist within the Project Location or 50 m Site Investigation Area.		---	---	✓	---	---	---	The Site Investigation Area does not contain wetland communities.	N/A
Special Concern and Rare Wildlife Species											
Barn Swallow	The Barn Swallow prefers farmlands or rural areas; cliffs, caves, rock niches; buildings or other man-made structures for nesting; open country near body of water.	Candidate habitat does not exist within the Site Investigation Area		---	---	✓	---	---	---	Farm buildings and man-made structures were not observed within the Project Location and the Site Investigation Area	N/A
Chimney Swift	Commonly found in urban areas near buildings and man-made structures with vertical faces, of which are used as surfaces for nest-building. Nests and roosts are most common in chimneys with preference for larger chimneys with open tops. This species will also nest and roost in hollow trees and crevices of rock cliffs. Nesting and roosting sites are situated near areas of water with an abundance of insects for feeding.	Candidate habitat does not exist within the Site Investigation Area.		---	---	✓	---	---	---	Man-made structures with large chimneys with open tops were not observed Site Investigation Area.	N/A

Wildlife Habitat	Definition of Habitat	Habitat Composition: Attributes, Condition and Function		Location		Status				Rationale for Status	Minimum Distance to the Project Location (m)
				Within Project Location	Within 50 m of Project Location	Absent	Candidate	Confirmed	Generalized Candidate Significant Wildlife Habitat		
Eastern Wood-pewee	Open, deciduous, mixed or coniferous forest; predominated by oak with little understory; forest clearing, edges; farm woodlots, parks.	ID	ELC*	✓	✓	---	✓	---	---	Forest habitat is present in the Site Investigation Area and may provide suitable habitat for Eastern Wood-pewee. See Figure 6C.	Candidate Habitat within the Project Location
		EWP	FOCM2-2, FOCM4-1								
Wood Thrush	Commonly found in undisturbed moist mature deciduous or mixed forest with deciduous sapling growth; near pond or swamp; hardwood forest edges; must have some trees higher than 12 m.	Candidate habitat does not exist within the Site Investigation Area		---	---	✓	✓	---	---	Mature deciduous and coniferous forests are not identified in the Site Investigation Area.	N/A
Great Black-backed Gull	Isolated predator fee sites like islands, piers, landfills, beaches and rocky shores along the Great Lakes particularly eastern Lake Ontario and the St. Lawrence River.	Candidate habitat does not exist within the Site Investigation Area.		---	---	✓	---	---	---	Islands, beaches and rocky shorelines were not observed Site Investigation Area.	N/A
Eastern Musk Turtle	The Eastern Musk Turtle is aquatic, except when laying eggs and prefers 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.	Candidate habitat does not exist within the Site Investigation Area.		---	---	✓	---	---	---	Limited suitable habitat meeting the criteria required for Eastern Musk Turtle was identified within the Site Investigation Area.	N/A
West Virginia White	West Virginia White are commonly found in moist deciduous woodlands containing toothwort.	Candidate habitat does not exist within the Project Location of 50 m Site Investigation Area.		---	---	✓	---	---	---	Moist deciduous woodlands are not identified Site Investigation Area.	N/A
Habitat for SCC (SAR) Bats	The hoary bat, eastern red bat, and silver-haired bat are migratory "tree bats" that rely heavily on forest foliage and tree cavities for summer roosting and forage near open water and forest edges. Move to southern United States/Mexico during winter. Species rely on a combination of forested landscapes, open water for foraging, and underground cavities like caves or mines for winter hibernation, though each shows distinct preferences for summer roosts and hunting environments. Species prefers mature deciduous or mixed forests. Species: • Hoary Bat • Eastern Red Bat	ID	ELC*	✓	✓	---	✓	---	---	Deciduous forest habitat is present in the Project Location and will be considered Candidate Significant Wildlife Habitat for SCC (SAR) Bats. See Figure 6D.	0
		BAT1	FOCM4-1 WODM4-2								

Wildlife Habitat	Definition of Habitat	Habitat Composition: Attributes, Condition and Function		Location		Status				Rationale for Status	Minimum Distance to the Project Location (m)
				Within Project Location	Within 50 m of Project Location	Absent	Candidate	Confirmed	Generalized Candidate Significant Wildlife Habitat		
	• Silver-haired Bat • Little Brown Myotis • Northern Myotis • Eastern Small-footed Myotis Tricolored Bat										
Animal Movement Corridors											
Amphibians Movement Corridors	Corridors are determined based on the identification of significant breeding habitat for amphibians. Movement corridors between breeding habitat and summer habitat must be determined when amphibian wetland breeding habitat is confirmed as significant wildlife habitat.	Candidate habitat does not exist within the Site Investigation Area.		---	---	✓	---	---	---	Significant amphibian breeding habitats have not been confirmed and therefore Amphibian Movement Corridors cannot be verified within the Site Investigation Area.	N/A
Deer Movement Corridor	Movement corridors must be determined when deer wintering habitat is confirmed as significant wildlife habitat. Corridors may be found in all forested ecosites. Corridors typically follow riparian areas, woodlots, and areas of physical geography (ravines or ridges). Corridors that lead to a deer wintering yard should be unbroken by roads and residential areas, and should be at least 200 m wide with games <20 m, and, if following riparian area, with at least 15 m of vegetation on both sides of waterway.	Candidate habitat does not exist within the Site Investigation Area.		---	---	✓	---	---	---	MNR did not identify significant deer wintering areas in or within 50 m of the Site Investigation Area, thus deer movement corridors are not located within the Site Investigation Area.	N/A

** Refer to Table 6 for Ecosystem Land Classification (ELC) Attributes Condition, Function and Vegetation Composition.*

Of the wildlife habitat reviewed during the site investigation work, the following habitats have been determined to be Candidate Significant Wildlife Habitat:

Seasonal Concentration of Animals:

None

Specialized Habitat for Wildlife:

- Woodland Raptor Nesting Habitat.

Habitat of Species of Conservation Concern:

- Open Country Bird Breeding Habitat.

Special Concern and Rare Wildlife Species:

- Eastern Wood-pewee.

7.3 Species at Risk Bats

The SAR listed under the federal *Species at Risk Act*, 2002, and provincial *Species Conservation Act*, 2025, with the potential to interact with the Project Location and/or adjacent lands, are being considered in consultation with the appropriate agency. Reporting related to the identification, assessment, mitigation and protection of these SAR and their habitat is being provided to the appropriate agency under separate cover. This reporting format meets the NHA requirements, as set out in *O. Reg. 359/09*, and is consistent with the direction provided by the Ministry of the Environment, Conservation and Parks (MECP)/MNR.

8.0 Summary of Amendments to Records Review

Based on the results of the 2026 field program, the presence, boundaries, and spatial extent of the natural features identified during the desktop assessment were evaluated and refined. A comparison between the preliminary data compiled during the Records Review and the empirical observations recorded during the physical site investigation indicates that amendments are required to accurately document the natural features existing within the Site Investigation Area.

These amendments apply to the location, size and extent of woodland features and the addition of candidate significant wildlife habitat. These amendments have been made to the mapping prepared during the records review. A summary of these corrections, delineating the baseline Records Review findings against the site investigation results as required under Section 26 of *O. Reg 359/09*, is provided in Table 9.

Table 9: Amendments to the Natural Heritage Assessment Records Review

Natural Feature ID	Identified During Records Review?	Amendment to Records Review Required?	Source of Information for Amendment	Change in Distance Relative to Project Location?	Summary of Amendments
Woodlands					
Woodland A	Yes	No	Site Investigation	No	
Woodland B	Yes	No	Site Investigation	No	
Wildlife Habitat					
Seasonal Concentration Area of Animals					
Waterfowl Stopover and Staging Areas (Terrestrial)	No	No	Site Investigation	Yes	Candidate habitat does not exist within the Site Investigation Area.
Waterfowl Stopover and Staging Areas (Aquatic)	No	No	Site Investigation	N/A	Candidate habitat does not exist within the Site Investigation Area.
Shorebird Migratory Stopover Area	No	No	Site Investigation	N/A	Candidate habitat does not exist within the Site Investigation Area.
Raptor Wintering Area	No	No	Site Investigation	N/A	Candidate habitat does not exist within the Site Investigation Area.
Bat Hibernacula	No	No	Site Investigation	N/A	Candidate habitat does not exist within the Site Investigation Area.
Bat Maternity Colonies	No	No	Site Investigation	N/A	Candidate habitat does not exist within the Site Investigation Area.
Turtle Wintering Areas (includes Snapping Turtle)	No	No	Site Investigation	N/A	Candidate habitat does not exist within the Site Investigation Area.
Reptile Hibernaculum (includes Eastern Ribbonsnake)	No	No	Site Investigation	N/A	Candidate habitat does not exist within the Site Investigation Area.
Colonially – Nesting Bird Breeding Habitat (Bank and Cliff)	No	No	Site Investigation	N/A	Candidate habitat does not exist within the Site Investigation Area.
Colonially – Nesting Bird Breeding Habitat (Tree/Shrubs)	No	No	Site Investigation	N/A	Candidate habitat does not exist within the Site Investigation Area.
Colonially – Nesting Bird Breeding Habitat (Ground)	No	No	Site Investigation	N/A	Candidate habitat does not exist within the Site Investigation Area.
Migratory Butterfly Stopover Areas	No	No	Site Investigation	N/A	Candidate habitat does not exist within the Site Investigation Area.

Natural Feature ID	Identified During Records Review?	Amendment to Records Review Required?	Source of Information for Amendment	Change in Distance Relative to Project Location?	Summary of Amendments
Landover Migratory Stopover Areas	No	No	Site Investigation	N/A	Candidate habitat does not exist within the Site Investigation Area.
Deer Yarding Areas	No	No	Site Investigation	N/A	Candidate habitat does not exist within the Site Investigation Area.
Deer Wintering Areas	No	No	Site Investigation	N/A	Candidate habitat does not exist within the Site Investigation Area.
Rare Vegetation Communities					
Cliffs and Talus Slopes	No	No	Site Investigation	N/A	Candidate habitat does not exist within the Site Investigation Area.
Sand Barren	No	No	Site Investigation	N/A	Candidate habitat does not exist within the Site Investigation Area.
Alvar	No	No	Site Investigation	N/A	Candidate habitat does not exist within the Site Investigation Area.
Old Growth Forest	No	No	Site Investigation	N/A	Candidate habitat does not exist within the Site Investigation Area.
Sand Barren	No	No	Site Investigation	N/A	Candidate habitat does not exist within the Site Investigation Area.
Savannah	No	No	Site Investigation	N/A	Candidate habitat does not exist within the Site Investigation Area.
Tallgrass Prairie	No	No	Site Investigation	N/A	Candidate habitat does not exist within the Site Investigation Area.
Specialized Wildlife Habitat					
Waterfowl Nesting Area	No	No	Site Investigation	N/A	Candidate habitat does not exist within the Site Investigation Area.
Bald Eagle and Osprey Nesting, Foraging and Perching Habitat	No	No	Site Investigation	N/A	Candidate habitat does not exist within the Site Investigation Area.
Woodland Raptor Nesting Habitat	No	Yes	Site Investigation	N/A	Addition of Candidate Woodland Raptor Nesting Habitat.
Turtle Nesting Areas	No	No	Site Investigation	N/A	Candidate habitat does not exist within the Site Investigation Area.
Seeps and Springs	No	No	Site Investigation	N/A	Candidate habitat does not exist within the Site Investigation Area.
Amphibian Breeding Habitat (Woodland)	No	No	Site Investigation	N/A	Candidate habitat does not exist within the Site Investigation Area.
Amphibian Breeding Habitat (Wetland)	No	No	Site Investigation	N/A	Candidate habitat does not exist within the Site Investigation Area.
Woodland Area Sensitive Bird Breeding Habitat	No	No	Site Investigation	No	Candidate habitat does not exist within the Site Investigation Area.
Habitat of Species of Conservation Concern					

Natural Feature ID	Identified During Records Review?	Amendment to Records Review Required?	Source of Information for Amendment	Change in Distance Relative to Project Location?	Summary of Amendments
Marsh Breeding Bird Habitat	No	No	Site Investigation	N/A	Candidate habitat does not exist within the Site Investigation Area.
Open Country Bird Breeding Habitat (includes Grasshopper Sparrow, Bobolink and Eastern Meadowlark)	No	Yes	Site Investigation	Yes	Addition of Candidate Open Country Bird Breeding Habitat (Grasshopper Sparrow, Bobolink and Eastern Meadowlark).
Shrub/Early Successional Bird Breeding Habitat (includes Golden-winged Warbler)	No	No	Site Investigation	N/A	Candidate habitat does not exist within the Site Investigation Area.
Special Concern and Rare Wildlife Species: 1. Eastern Wood-pewee	No	Yes	Site Investigation	Yes	Addition of Candidate Significant Wildlife Habitat for Eastern Wood-pewee.
SCC (SAR) Bats	No	Yes	Site Investigation	Yes	Addition of Candidate Significant Wildlife Habitat / Habitat for SCC (SAR) Bats.
Animal Movement Corridors					
Amphibian Movement Corridors	No	No	Site Investigation	N/A	Candidate habitat does not exist within the Site Investigation Area.
Deer Movement Corridors	No	No	Site Investigation	N/A	Candidate habitat does not exist within the Site Investigation Area.

9.0 Conclusion

This NHA Site Investigation Report has been prepared in accordance with Section 26 and the Table to subsection 26(1) of *O. Reg. 359/09* under the *Environmental Protection Act*, adhering to the *Natural Heritage Assessment Guide for Renewable Energy Projects (Third Edition, 2026)*. Field investigations conducted in 2026 verified the baseline conditions and boundaries of natural features within the Site Investigation Area, comprising the Project Location and the surrounding 50-metre setback area for this Class 3 solar facility.

Candidate natural heritage features confirmed during field surveys will be evaluated for significance in accordance with Section 27 of *O. Reg. 359/09* in the subsequent NHA Evaluation of Significance Report. Where significant features (or features treated as significant) are located within the Project Location or the surrounding 50-metre setback, an Environmental Impact Study (EIS) will be prepared under Section 38 to identify potential negative environmental effects and set out required avoidance, mitigation, and monitoring measures.

This report incorporates the requisite Qualified Person (QP) attestation and will form part of the complete REA application package submitted to MECP.

10.0 References

Cadman, M.D., D.A. Sutherland, G.G. Beck, D. Lepage and A.R. Couturier (eds.). 2007. Atlas of the Breeding Birds of Ontario, *2001–2005*. Bird Studies Canada, Environment Canada, Ontario Field Ornithologists, Ontario Ministry of Natural Resources, and Ontario Nature, Toronto, ON. xxii + 706.

Chapman and Putnam. 1984. Physiography of Southern Ontario; Ontario Geological Survey, Map P.2715. Scale 1: 600 000.

County of Lanark. 2026. County of Lanark Official Plan. Available from: https://lanarkcounty.civicweb.net/document/181731/

Crins, Willia J., Paul A. Gray, Peter W.C. Uhlig, and Monique C. Wester. 2009. The Ecosystems of Ontario, Part I: Ecozones and Ecoregions. Ontario Ministry of Natural Resources, Peterborough Ontario, Inventory, Monitoring and Assessment, SIB TER IMA TR- 01, 71pp.

Environment Canada. General nesting periods of migratory birds. Available from: https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds/general-nesting-periods/nesting-periods.html.

Environment Canada. Species at Risk Public Registry. Available from: http://www.sararegistry.gc.ca.

Fisheries Act, 2019. (S.C., 2019, c. 14). https://laws-lois.justice.gc.ca/eng/AnnualStatutes/2019_14/

Fisheries and Oceans Canada. Aquatic species at risk map. Available from: https://www.dfo-mpo.gc.ca/species-especes/sara-lep/map-carte/index-eng.html

Flora Ontario – Integrated Botanical Information System (FOIBIS). 2005. University of Guelph, Canada. Available from https://www.uoguelph.ca/foibis/

Lee, H. 2008. Draft ecological land classification for Southern Ontario. London, Ontario: Ontario Ministry of Natural Resources.

Lee, H.T., W.D. Bakowsky, J. Riley, J. Bowles, M. Puddister, P. Uhlig and S. McMurray. 1998. Ecological Land Classification for Southern Ontario: First Approximation and Its Application. Ontario Ministry of Natural Resources, Southcentral Science Section, Science Development and Transfer Branch. SCSS Field Guide FG-02.

Migratory Birds Convention Act, 1994. (S.C. 1994, c. 22). https://laws-lois.justice.gc.ca/eng/acts/m-7.01/

Newmaster, S.G., A. Lehela, M.J. Oldham, P.W.C. Uhlig and S. McMuray. 1998. Ontario Plant List. Ontario Forest Research Institute, Sault Ste. Marie, Ontario, Forest Research Information Paper No. 123. 650 pp. + appendices.

Oldham, M.J., W.D. Bakowsky, and D.A. Sutherland. 1995. Floristic quality assessment system for southern Ontario. Natural Heritage Information Centre, Ontario Ministry of Natural Resources, Peterborough, Ontario. 23pgs.

Ontario Breeding Bird Atlas. 2021. Instructions for General Atlassing. Available from: https://birdsontario.b-cdn.net/wp-content/uploads/Instructions-for-General-Atlassing-2021-04-07-download.pdf

Ontario Geological Survey. 1991. Bedrock geology of Ontario, southern sheet; Ontario Geological Survey,
Map 2544, scale 1: 1 000 000.

Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA). 2023. AgMaps Geographic Information Portal. https://www.ontario.ca/page/how-use-agmaps.

Ontario Ministry of Municipal Affairs and Housing (MMAH). 2024. Provincial Planning Statement.

Ontario Ministry of Natural Resources and Forestry (MNRF). 2000. SWH Technical Guide. 151 pgs.

Ontario Ministry of Natural Resources and Forestry (MNRF). 2010. Natural Heritage Reference Manual for Policies of the Provincial Policy Statement, Second Edition. March 18, 2010. 369 pgs. + Appendix.

Ontario Ministry of Natural Resources and Forestry (MNRF). 2015. SWH Criteria Schedules for Ecoregion 6E.

Ontario Ministry of Natural Resources and Forestry (MNRF). 2025. Natural Heritage Information Centre Database. http://nhic.mnr.gov.on.ca/.

Ontario Ministry of Natural Resources and Forestry (MNRF). 2025. Geospatial Ontario. http://www.mnr.gov.on.ca/en/Business/GEO/index.html.

Ontario Nature. 2025. Ontario Reptile and Amphibian Atlas. Available from: https://www.ontarioinsects.org/herp/

Rideau Valley Conservation Authority. 2026. Rideau Valley Conservation Screening GIS Viewer. Available from: https://gis.rvca.ca/html5/?viewer=rvcageoportal

Species at Risk Act, 2002. (S.C. 2002, c. 29). https://laws.justice.gc.ca/eng/acts/s-15.3/

Toronto Entomologist Association. 2025. Ontario Butterfly Atlas. Available from: https://www.ontarioinsects.org/atlas/

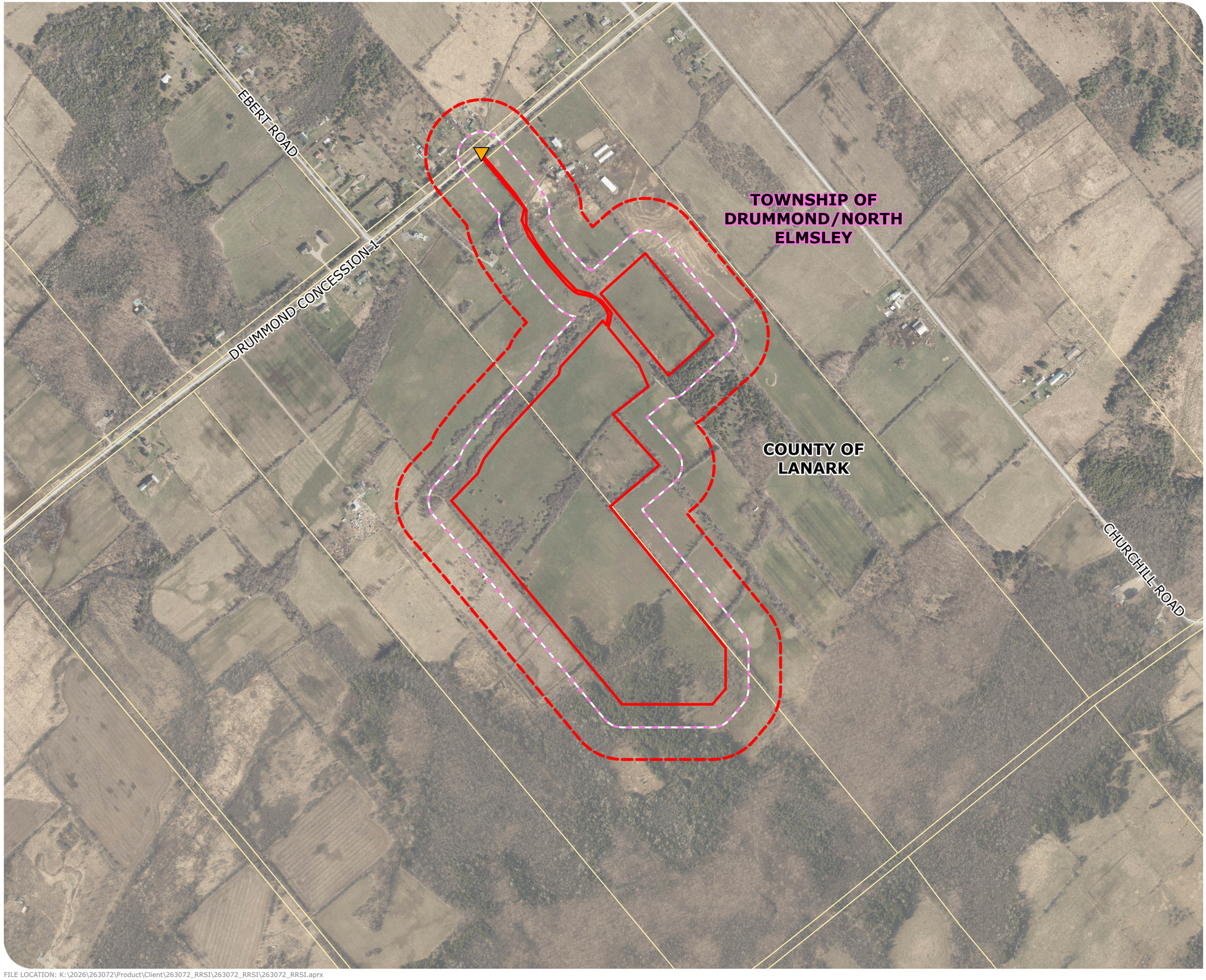
Species Conservation Act, 2025. (S.O. 2025, C-10). https://www.ontario.ca/laws/statute/25s04b

Toronto Entomologist Association. 2025. Ontario Butterfly Atlas. Available from: https://www.ontarioinsects.org/atlas/

Township of Drummond/North Elmsley. 2024. Township of Drummond/North Elmsley Official Plan. Available from: https://www.dnetownship.ca/component/edocman/official-plan/viewdocument/79?Itemid=0

Appendix A

Figures



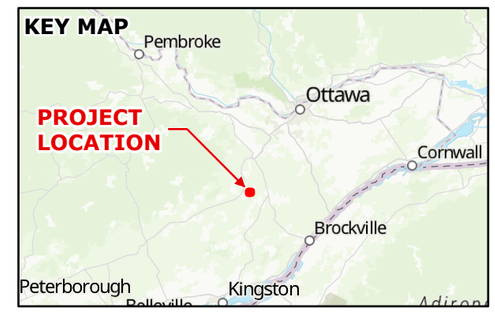
GOLDEN LEAF AGRIVOLTAICS PROJECT

SITE INVESTIGATION REPORT

PROJECT LOCATION

FIGURE 1

- Project Location
- Study Area (120 m)
- 50 m Site Investigation Area
- Point of Common Coupling
- Local Road
- Lot/Concession



SCALE 1:8,000

0 100 200 400 m

N W E S

MAP DRAWING INFORMATION:
DATA PROVIDED BY MNR

MAP CREATED BY: AEE
MAP CHECKED BY: MB
MAP PROJECTION: NAD 1983 UTM Zone 18N

PROJECT: 26-3072

STATUS: DRAFT

DATE: 2026-11-02

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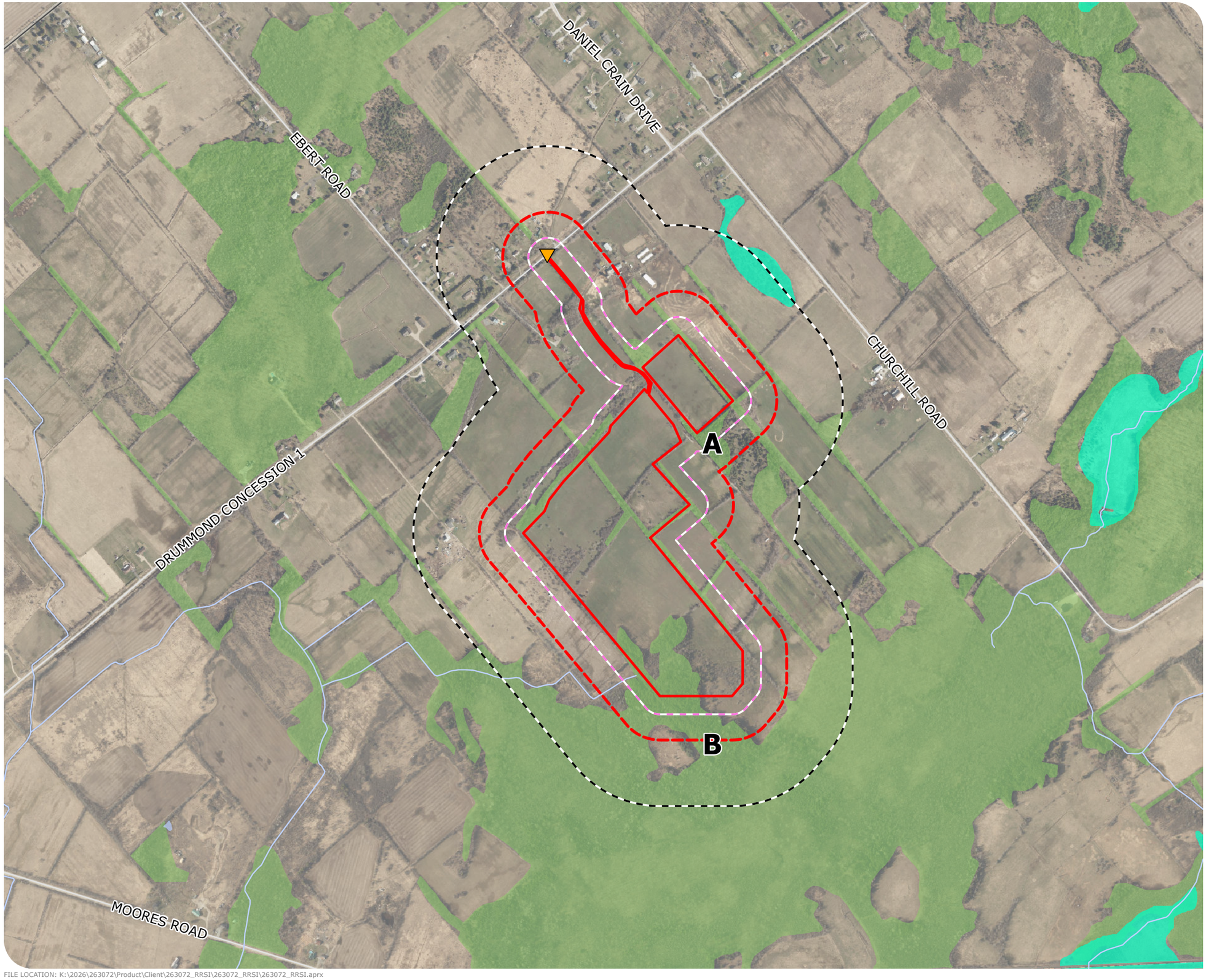


GOLDEN LEAF AGRIVOLTAICS PROJECT

SITE INVESTIGATION REPORT

NATURAL HERITAGE FEATURES

FIGURE 2

- Project Location
- 50 m Site Investigation Area
- Study Area (120 m)
- Study Area (300 m)
- Point of Common Coupling
- Major Road
- Local Road
- Watercourse
- Water Body
- Unevaluated Wetland
- Wooded Area

SCALE 1:10,000

0 125 250 500 m

N W E S

MAP DRAWING INFORMATION:DATA PROVIDED BY MNR

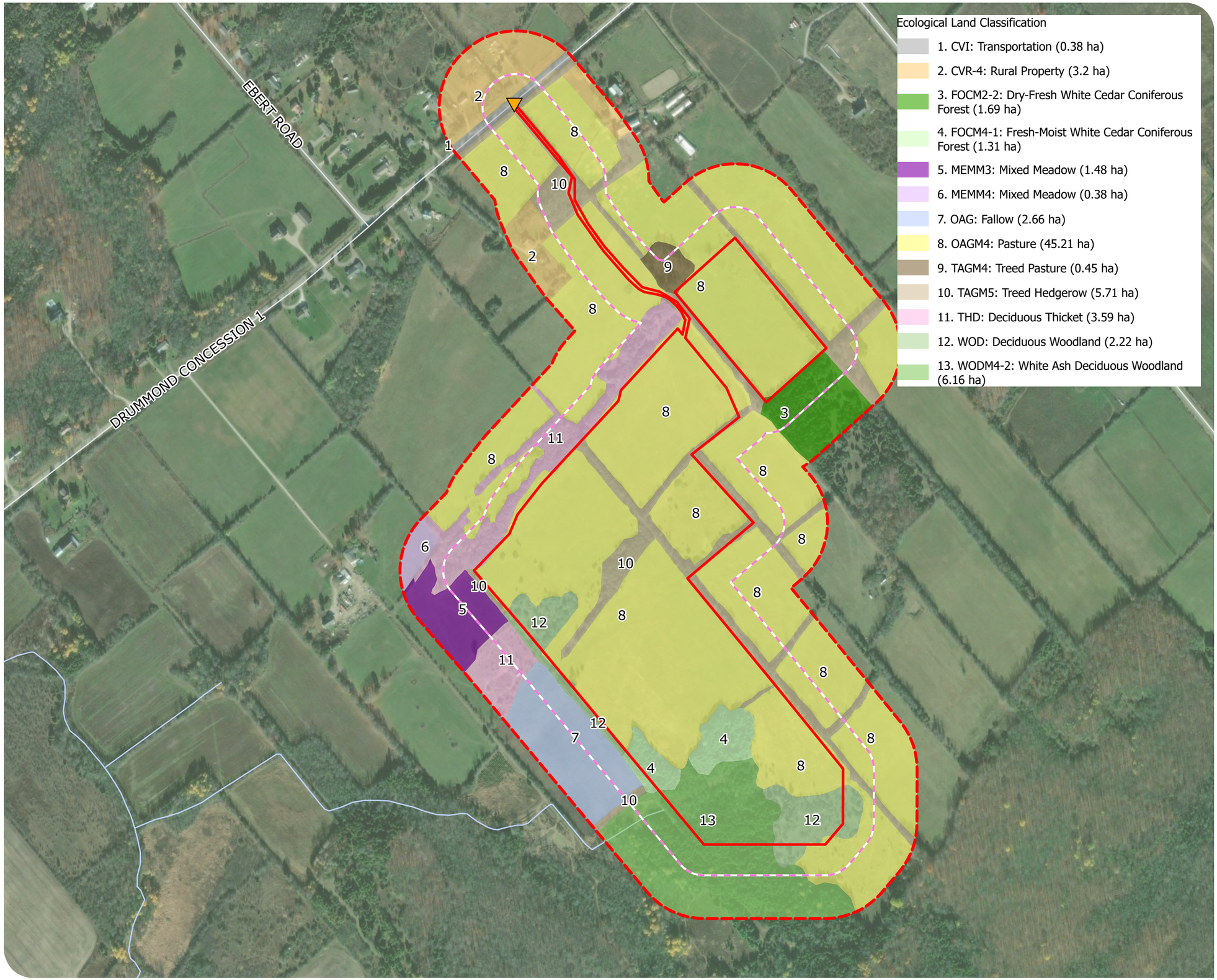
MAP CREATED BY: AEE
MAP CHECKED BY: MB
MAP PROJECTION: NAD 1983 UTM Zone 18N

PROJECT: 26-3072

STATUS: DRAFT

DATE: 2026-10-30

FILE LOCATION: K:\2026\263072\Product\Client\263072_RRSI\263072_RRSI\263072_RRSI.aprx



GOLDEN LEAF AGRIVOLTAICS PROJECT

SITE INVESTIGATION REPORT

ECOLOGICAL LAND CLASSIFICATION

FIGURE 3

- Project Location
- 50 m Site Investigation Area
- Study Area (120 m)
- Point of Common Coupling
- Local Road
- Watercourse
- Water Body

SCALE 1:6,000

0 75 150 300 m

N W E S

MAP DRAWING INFORMATION:
DATA PROVIDED BY MNR

MAP CREATED BY: AEE
MAP CHECKED BY: MB
MAP PROJECTION: NAD 1983 UTM Zone 18N

PROJECT: 26-3072

STATUS: DRAFT

DATE: 2026-10-30

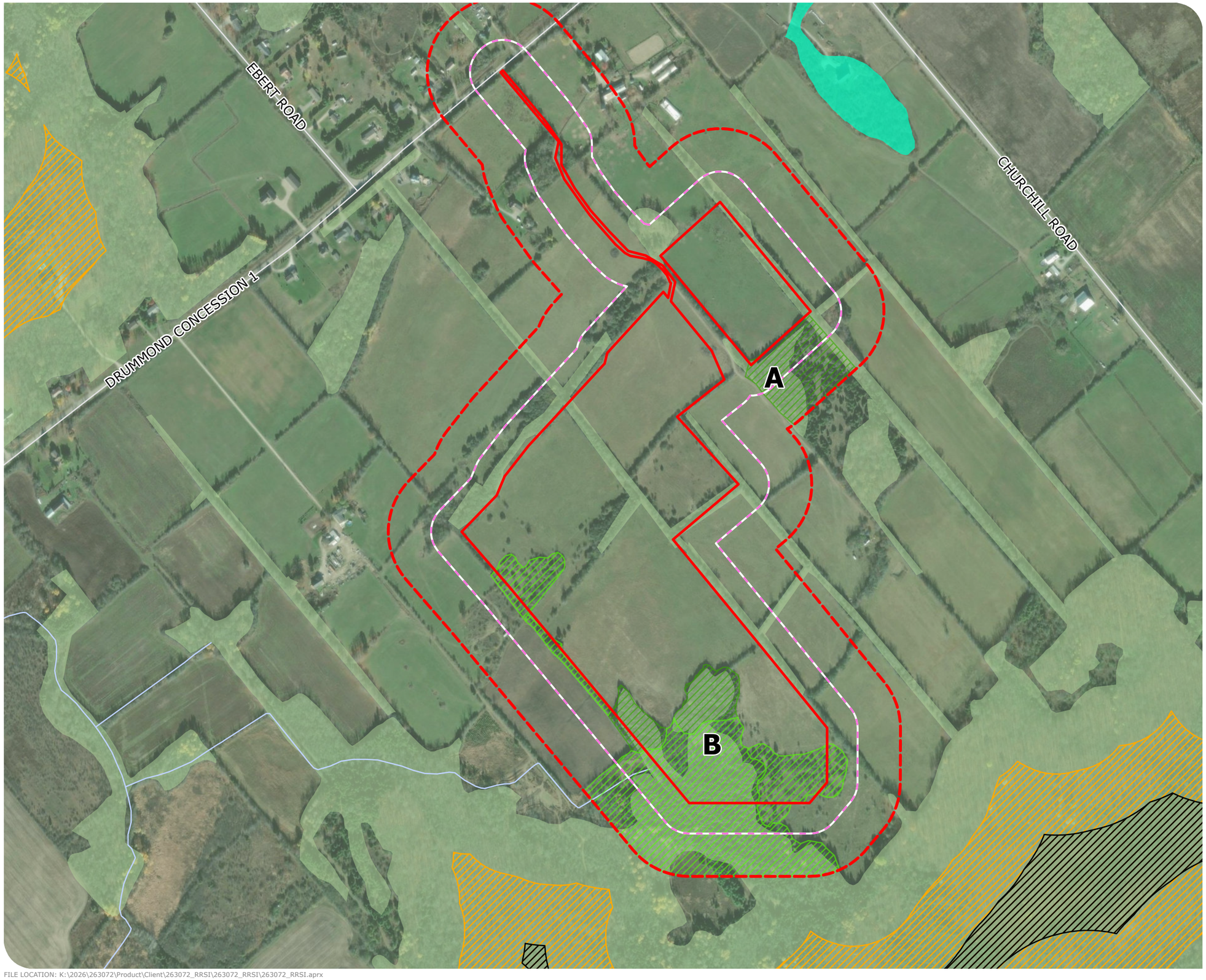
FILE LOCATION: K:\2026\263072\Product\Client\263072_RRSI\263072_RRSI\263072_RRSI.aprx

GOLDEN LEAF AGRIVOLTAICS PROJECT

SITE INVESTIGATION REPORT

WOODLANDS

FIGURE 4



- Project Location
- 50 m Site Investigation Area
- Study Area (120 m)
- Local Road
- Watercourse
- Water Body
- Unevaluated Wetland
- Woodland (MNR, 2026)
- Dillon Delineated Woodland-Defined as Forest Under ELC (>60% cover)
- Dillon Delineated Woodland Under ELC (35-60% cover)
- Interior Woodlad (100 m from Edge)
- Interior Woodlad (200 m from Edge)

SCALE 1:6,000

0 75 150 300 m

N W E S

MAP DRAWING INFORMATION:
DATA PROVIDED BY MNR

MAP CREATED BY: AEE
MAP CHECKED BY: MB
MAP PROJECTION: NAD 1983 UTM Zone 18N

PROJECT: 26-3072
STATUS: DRAFT
DATE: 2026-10-30

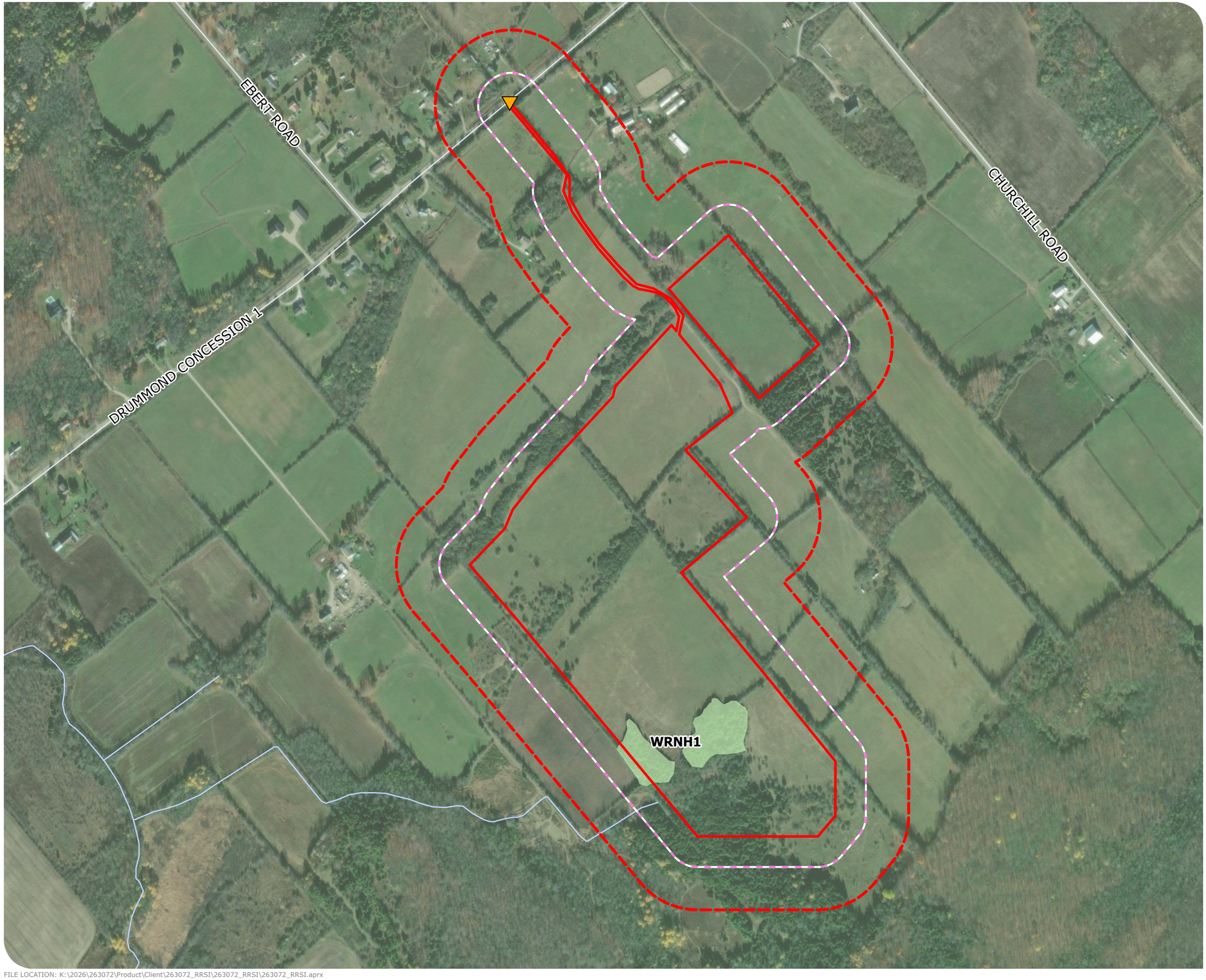
FILE LOCATION: K:\2026\263072\Product\Client\263072_RRSI\263072_RRSI\263072_RRSI.aprx

GOLDEN LEAF AGRIVOLTAICS PROJECT

SITE INVESTIGATION REPORT

CANDIDATE WOODLAND RAPTOR NESTING HABITAT

FIGURE 5A



- Project Location
- 50 m Site Investigation Area
- Study Area (120 m)
- Local Road
- Watercourse
- Candidate Woodland Raptor Nesting Habitat

SCALE 1:6,000

0 75 150 300 m

N
W E
S

MAP DRAWING INFORMATION:
DATA PROVIDED BY MNR

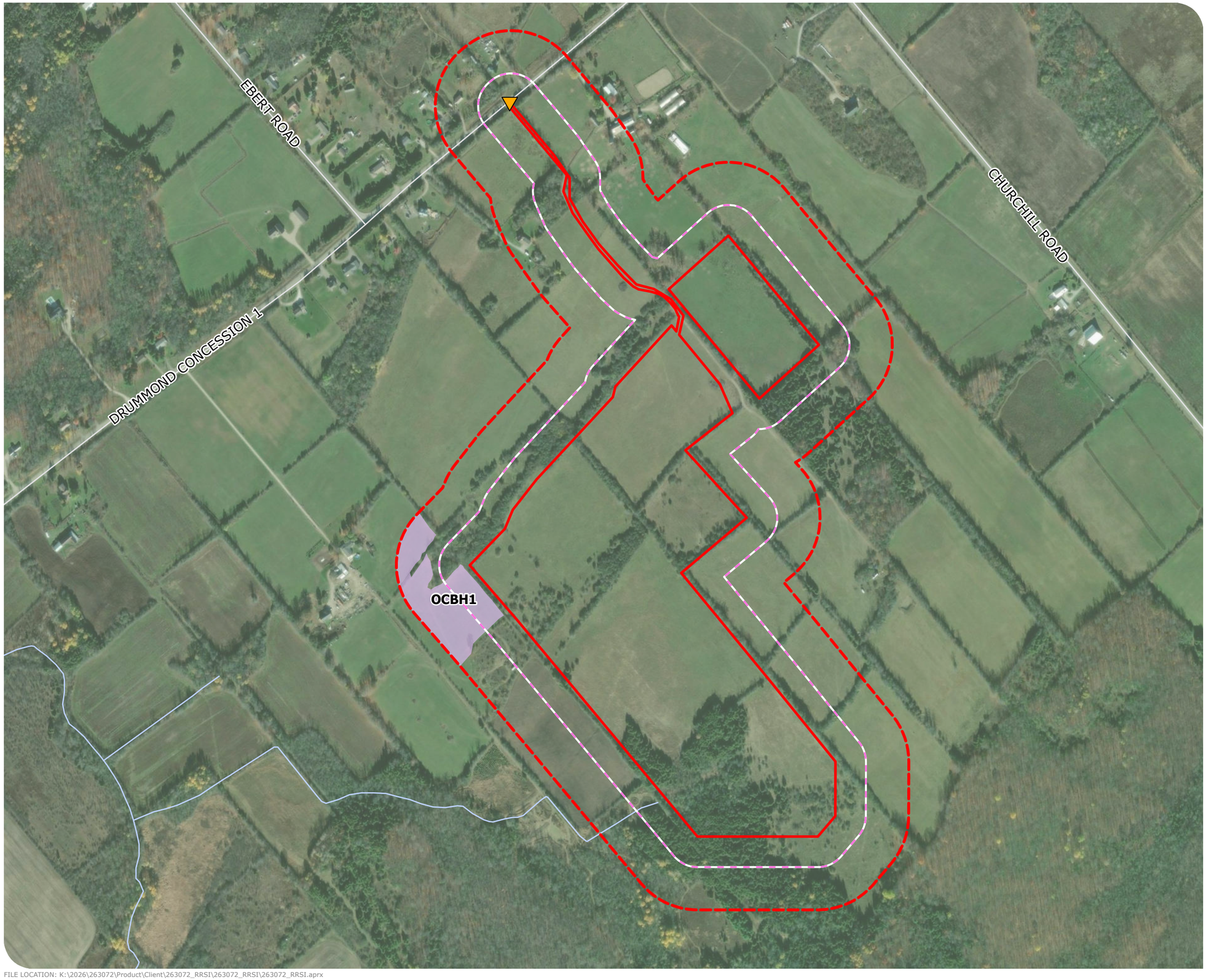
MAP CREATED BY: AEE
MAP CHECKED BY: MB
MAP PROJECTION: NAD 1983 UTM Zone 18N

PROJECT: 26-3072

STATUS: DRAFT

DATE: 2026-10-30

FILE LOCATION: K:\2026\263072\Product\Client\263072_RRSI\263072_RRSI\263072_RRSI.aprx



GOLDEN LEAF AGRIVOLTAICS PROJECT

SITE INVESTIGATION REPORT

CANDIDATE OPEN COUNTRY BIRD BREEDING HABITAT (INCLUDES GRASSHOPPER SPARROW, BOBOLINK AND EASTERN MEADOWLARK)

FIGURE 5B

- Project Location
- 50 m Site Investigation Area
- Study Area (120 m)
- Local Road
- Watercourse
- Candidate Open Country Bird Breeding Habitat (includes Grasshopper Sparrow, Bobolink and Eastern Meadowlark)

SCALE 1:6,000

0 75 150 300 m

N W E S

MAP DRAWING INFORMATION:
DATA PROVIDED BY MNR

MAP CREATED BY: AEE
MAP CHECKED BY: MB
MAP PROJECTION: NAD 1983 UTM Zone 18N

PROJECT: 26-3072

STATUS: DRAFT

DATE: 2026-11-03

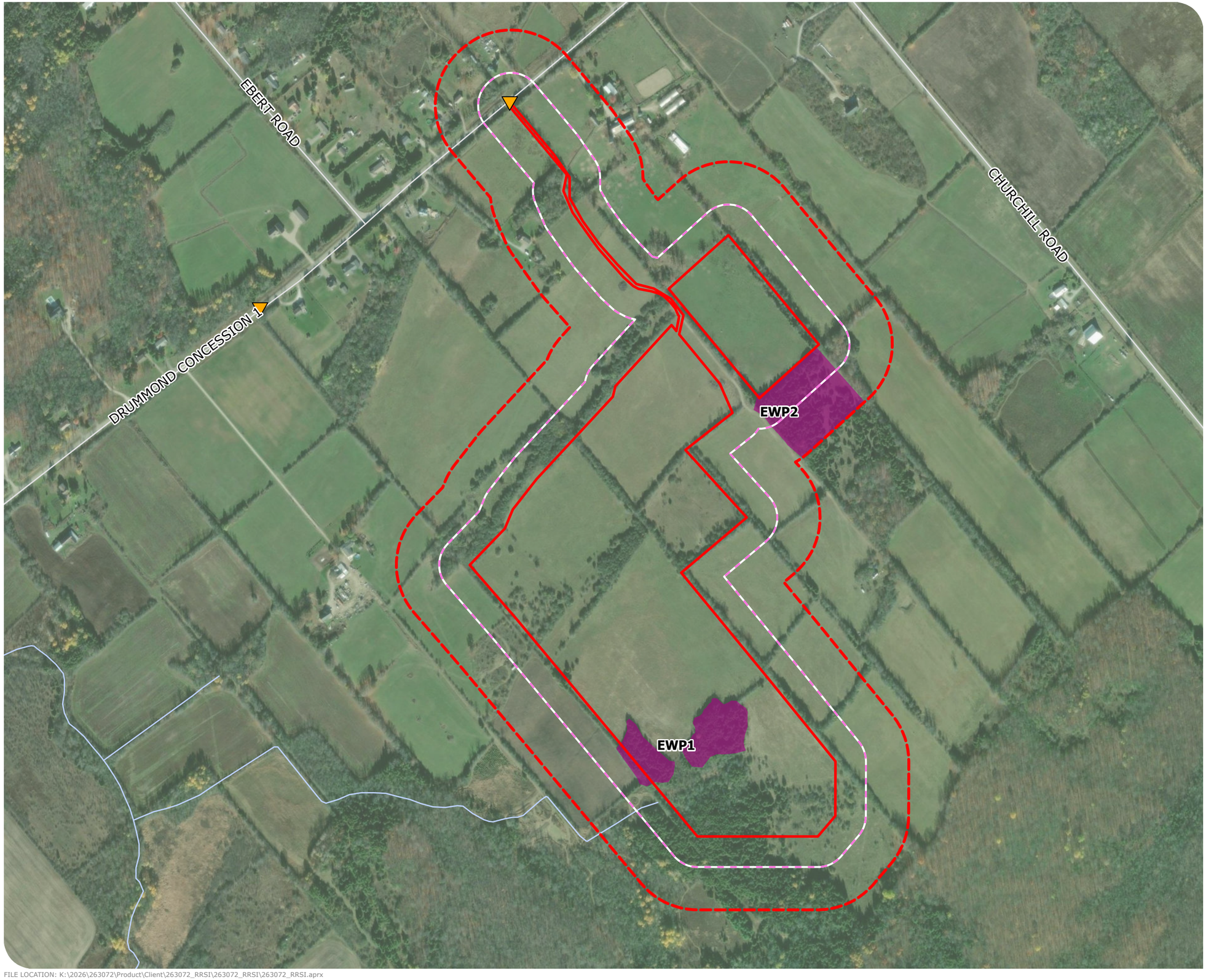
FILE LOCATION: K:\2026\263072\Product\Client\263072_RRSI\263072_RRSI\263072_RRSI.aprx

GOLDEN LEAF AGRIVOLTAICS PROJECT

SITE INVESTIGATION REPORT

CANDIDATE SPECIAL CONCERN AND RARE SPECIES - EASTERN WOOD-PEWEE

FIGURE 5C



- Project Location
- 50 m Site Investigation Area
- Study Area (120 m)
- Point of Common Coupling
- Local Road
- Watercourse
- Water Body
- Candidate Special Concern and Rare Species - Eastern Wood-pewee

SCALE 1:6,000

0 75 150 300 m

N W E S

MAP DRAWING INFORMATION:
DATA PROVIDED BY MNR

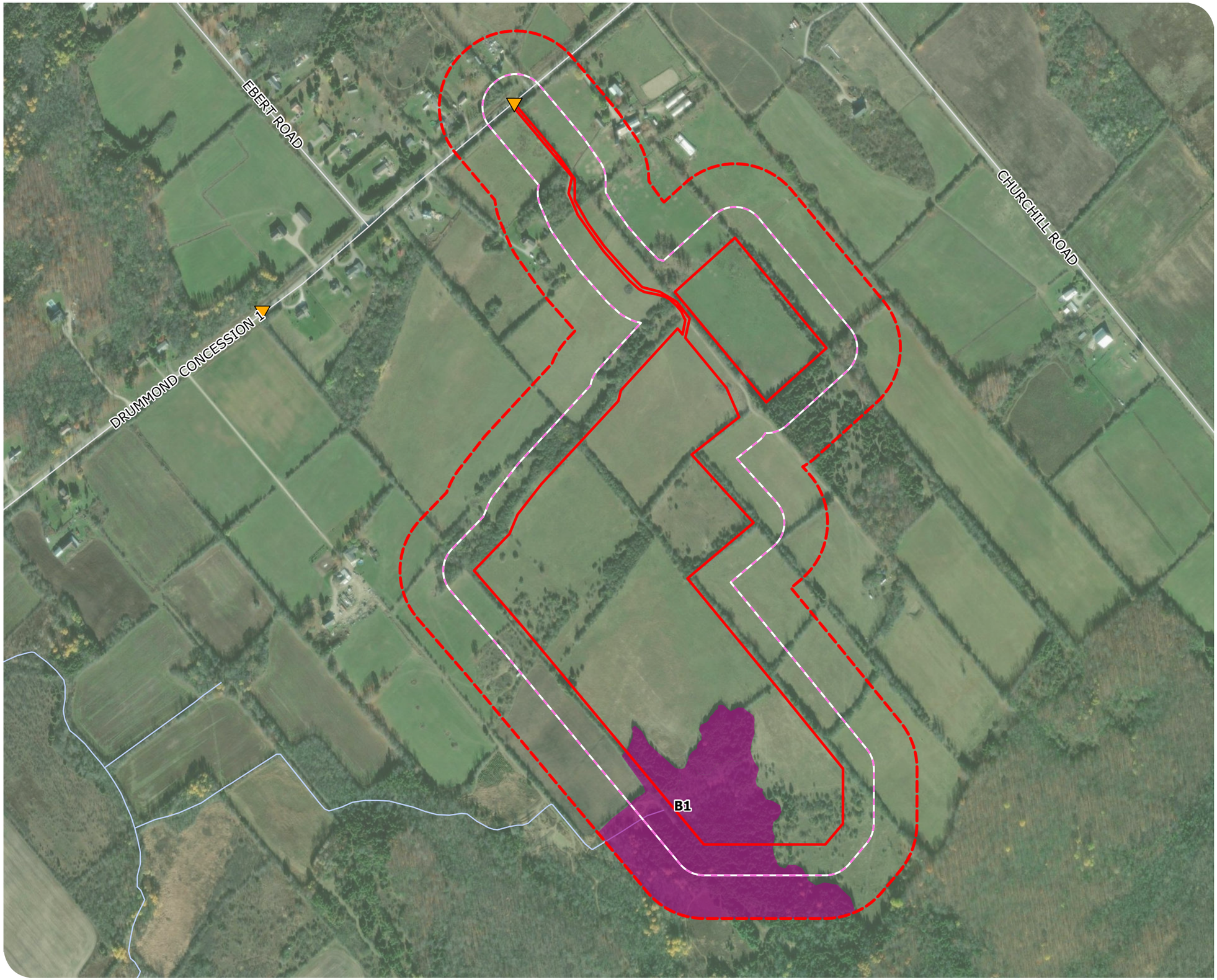
MAP CREATED BY: AEE
MAP CHECKED BY: MB
MAP PROJECTION: NAD 1983 UTM Zone 18N

PROJECT: 26-3072

STATUS: DRAFT

DATE: 2026-10-30

FILE LOCATION: K:\2026\263072\Product\Client\263072_RRSI\263072_RRSI\263072_RRSI.aprx



GOLDEN LEAF AGRIVOLTAICS PROJECT

SITE INVESTIGATION REPORT

CANDIDATE SPECIAL CONCERN AND RARE SPECIES - SAR BATS

FIGURE 5D

- Project Location
- 50 m Site Investigation Area
- Study Area (120 m)
- Point of Common Coupling
- Local Road
- Watercourse
- Water Body
- Candidate Special Concern and Rare Species - SAR Bats

SCALE 1:6,000

0 75 150 300 m

N W E S

MAP DRAWING INFORMATION:
DATA PROVIDED BY MNR

MAP CREATED BY: AEE
MAP CHECKED BY: MB
MAP PROJECTION: NAD 1983 UTM Zone 18N

PROJECT: 26-3072

STATUS: DRAFT

DATE: 2026-11-06

FILE LOCATION: K:\2026\263072\Product\Client\263072_RRSI\263072_RRSI\263072_RRSI.aprx

Appendix B

Field Notes

Golden Leaf Bat Habitat Assessment April 23, 2026

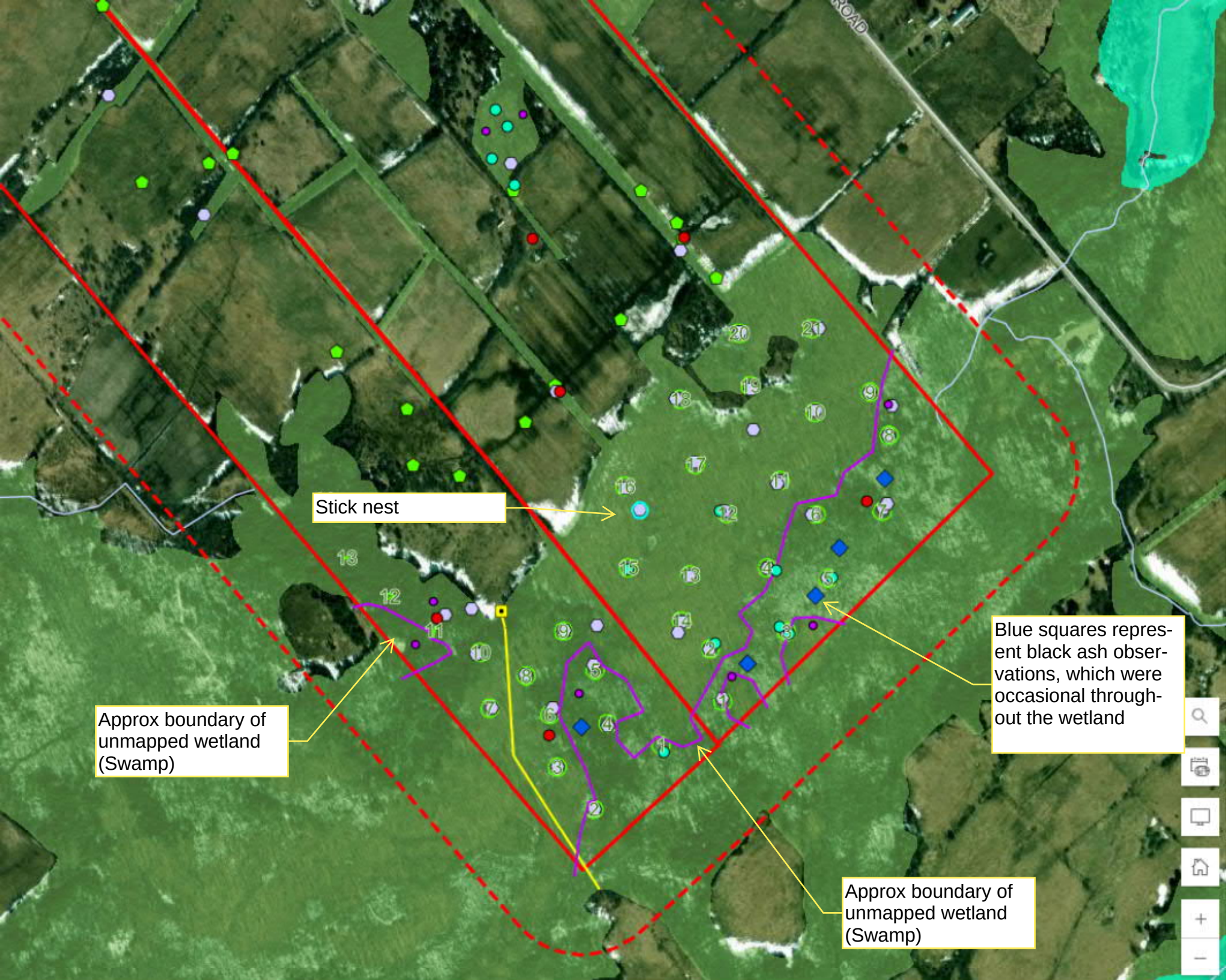
- Plot 1- 1 snag
- Plot 2- no snags
- Plot 3- 2 snags
- Plot 4- 1 snag
- Plot 5- 1 snag
- Plot 6- no snags
- Plot 7- no snags
- Plot 8- no snags
- Plot 9- no snags
- Plot 10- no snags
- Plot 11- no snags
- Plot 12- 1 snag
- Plot 13- no snags
- Plot 14- no snags
- Plot 15- no snags
- Plot 16- no snags
- Plot 17- no snags
- Plot 18- no snags
- Plot 19- no snags
- Plot 20- no snags
- Plot 21- no snags

Each plot is 12.6 m radius circular plot or 0.05 ha.

21 x 0.05 ha= 1.05 ha= area

Snag density= number of snags/area

Snag density= 6/1.05 ha= 5.71


Stick nest
Blue squares represent black ash observations, which were occasional throughout the wetland
Approx boundary of unmapped wetland (Swamp)
Approx boundary of unmapped wetland (Swamp)

263072 Golden Leaf June 11 26

on site @ 1:15 PM
to look @ water feature

photos (web maps not saving - taking screen shot of my location and then taking 4+ photos

N, E, S, W + extras if required

Site ID / Photo Title:
Pond

WF1
WF2
WF3
WF4
WF5
WF6
WF7
WF8
WF9
Culvert
WF10

system - dry throughout as observed on June 11 *

Scale: 1 square = _____

Rite in the Rain

263072 Green leaf. June 1 '26

- water feature ephemeral
- no fish habitat features per se (however there are cyprinids in 2 onsite dug ponds that are generally isolated.)

blue section (line on webmap) appears to be used as wildlife path to the west

- entire system dry June 1 '26, no fish hab features, blue line more defined - likely channelized - "surface water conveyance" - ephemeral system!

ABRP June 12 26
Onsite 5:30 eGC

- trail site birds -
Song sparrow
chest nut sided warbler
Am goldfinch
Yell warbler
common yellow throat
cotton tail

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Survey was on Wednesday May 27 (not May 26)

Wallis, Leanne <lwallis@dillon.ca>

26-3072 Golden Leaf - May 26 SEO & ABH Surveys

Galloway, Charlotte <cgalloway@dillon.ca> Fri, May 29, 2026 at 1:59 PM
To: Ashley Smith <asmith@dillon.ca>, Leanne Wallis <lwallis@dillon.ca>, Dave Restivo <drestivo@dillon.ca>
Cc: Steven Greidanus <sgreidanus@dillon.ca>

Hello everyone,

Steve and I completed the first round of SEO and ABH surveys at the 26-3072 Golden Leaf project on Wednesday May 26.

SEO Surveys

We had no observations for SEO, but did have observations for other SAR birds (below). Surveys where all completed by 8:50 PM.

SEO1 - BOBO, EAME
SEO2 - BOBO
SEO3 - BOBO
SEO4 - EAWP

ABH Surveys

We heard SPPE, GRTF, WOFG, and GRFG calling, and had visual observations of WOFG, LEFT, and GRFG. No frogs were heard or observed at AMP3 or AMP4. Surveys were completed by 10:50 PM.

Other Notes

Steve and I did run into livestock (horses and sheep) in some of the fields we needed to survey in. The animals did not approch us and we kept our distance.

There was also three large dogs and a trailer living area on the property that future visiting field staff should be aware of. The dogs were friendly with us, but were startling when they approached us after dark. The trailer area is just North of AMP6 and looked actively used when we were on site.

Best,
Charlotte

--

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www.dillon.ca

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Wallis, Leanne <lwallis@dillon.ca>

SEO Survey June 17, 2026

Galloway, Charlotte <cgalloway@dillon.ca> Thu, Jun 18, 2026 at 2:56 PM
To: Leanne Wallis <lwallis@dillon.ca>
Cc: David Praskey <dpraskey@dillon.ca>

Hello Leanne,

No owls were observed during the SEO surveys conducted at 26-3072 Golden Leaf Solar on June 17, 2026.

Incidental observations noted Bobolinks, Eastern Meadowlarks, and Eastern Wood-Pewee in the surrounding areas. Bobolinks and Pewee's were heard during surveys and Meadowlarks between surveys.

We did have some close encounters with the horses and sheep on the property that should be passes along to others visiting the property.

1. The sheep had been moved to one of the fields near where the cars are parked. We had to walk through the flock to reach our next survey point. The sheep left us alone and actively avoided us.
2. At SEO point #2 one of the horses in the field approached us and was actively coming up to us. He did not hurt us, but did want to be very close. He left us alone as soon as we started walking to survey point #3

best,
Charlotte

--

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Wallis, Leanne <lwallis@dillon.ca>

Golden Leaf SEO & Amphib Survey June 22 Observations

Galloway, Charlotte <cgalloway@dillon.ca> Thu, Jun 25, 2026 at 9:15 AM
To: Leanne Wallis <lwallis@dillon.ca>
Cc: Dave Restivo <drestivo@dillon.ca>, Molly Bradford <mbradford@dillon.ca>

Hello Leanne,

Sorry for the delay in sending these results. No Short-eared owls were observed during the surveys at Golden Leay (26-3072) on Monday June 22. See below for all survey details and other notes about the surveys

Sunset: 8:55

SEO #1
Start: 8:09, End: 8:12
Temp: 18C, Wind: 5 Km/h S, Cloud cover 90%
OBS: RWBL, BCCH, **BOBO,** AMRO, **EAME,** SVSP, SNSP, CAGO

SEO #2
Start: 8:24, End: 8:27
Temp: 18C, Wind: 5 Km/h SW, Cloud cover 90%
OBS: **BOBO**, AMRO, REVI, SNSP, BCCH

SEO #3
Start: 8:38, End: 8:41
Temp: 18C, Wind: 4 Km/h SW, Cloud cover 85%
OBS: COGR, **EAWP**, **BOBO**, BLJA, SNSP, SVSP, AMRO, CEDW, AMCR

SEO #4
Start: 8:53, End: 8:56
Temp: 17C, Wind: 3 Km/h SW, Cloud cover 70%
OBS: GCFL, AMRO, **EAWP**, SVSP, EAKB

Other

- The horse approached Molly and I again at SEO survey point #2. A hazard report was filed.
- We heard one Barred owl on our way out of the Woodlot in the South section of the property after completing AMPH point #3 in the SE corner of the property.

Best,
Charlotte
--

DILLON

— PROUDLY CANADIAN SINCE 1946 —

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cgalloway@dillon.ca
www.dillon.ca

Appendix C

Photo Plate

Photo 1 OAGM1 Annual Row Crops	
Photo 2 OAGM4 Open Pasture	

Photo 3 TAGM4 Treed Pasture	
Photo 4 TAGM5 Hedgerow	

Photo 5 FOCM2-2 Dry-Fresh White Cedar Coniferous Forest	
Photo 6 FOCM4-1 Fresh-Moist Cedar Coniferous Forest	

Photo 7 WOD Deciduous Woodland	
Photo 8 WODM4-2 Dry-Fresh White Ash Deciduous Woodland	

Photo 9 THD Deciduous Thicket	
Photo 10 MEMM3 Dry-Fresh Mixed Meadow	

Photo 11 MEMM4 Fresh-Moist Mixed Meadow	

Appendix D

Species of Conservation Concern (Species at Risk) List

Table 1. Species of Conservation Concern (Species at Risk) Screened for their Potential to Occur within or near the Project Location

Scientific Name Common Name	SARA Status[1]	SCA Status[2]	SRank[3]	Information Source[4]	Regulated Habitat	Habitat Requirements[2,5]
BIRDS						
Hirundo rustica	Barn Swallow	THR	---	S4B	OBBA	FALSE	Farmlands or rural areas; cliffs, caves, rock niches; buildings or other man-made structures for nesting; open country near body of water.
Chlidonias niger	Black Tern	---	END	S3B	OBBA	FALSE	Wetlands, coastal or inland marshes; large cattail marshes, marshy edges of rivers, lakes or ponds, wet open fens, wet meadows; returns to same area to nest each year in loose colonies; must have shallow (0.5 to 1 m deep) water and areas of open water near nests; requires marshes >20 ha in size; feeds over adjacent grasslands for insects; also feeds on fish, crayfish and frogs.
Dolichonyx oryzivorus	Bobolink	THR	---	S4B	OBBA, NHIC	FALSE	Large, open expansive grasslands with dense ground cover; hayfields, meadows or fallow fields; marshes; requires tracts of grassland >50 ha.
Aythya valisineria	Canvasback	---	---	S1B, S4N	CBC	FALSE	Large marshes for nesting; prefer deep, permanent water- bodies for feeding and courtship.
Chaetura pelagica	Chimney Swift	THR	---	S4B, S4N	OBBA	FALSE	Commonly found in urban areas near buildings and man-made structures with vertical faces, of which are used as surfaces for nest-building. Nests and roosts are most common in chimneys with preference for larger chimneys with open tops. This species will also nest and roost in hollow trees and crevices of rock cliffs. Nesting and roosting sites are situated near areas of water with an abundance of insects for feeding.
Chordeiles minor	Common Nighthawk	SC	---	S4B	OBBA	FALSE	Open ground; clearings in dense forests; ploughed fields; gravel beaches or barren areas with rocky soils; open woodlands; flat gravel roofs.
Sturnella magna	Eastern Meadowlark	THR	---	S4B	OBBA, NHIC	FALSE	open, grassy meadows, farmland, pastures, hayfields or grasslands with elevated singing perches; cultivated land and weedy areas with trees; old orchards with adjacent, open grassy areas >10 ha in size.
Contopus virens	Eastern Wood-pewee	SC	---	S4B	OBBA, NHIC	FALSE	Open, deciduous, mixed or coniferous forest; predominated by oak with little understory; forest clearing, edges; farm woodlots, parks.
Coccothraustes vespertinus	Evening Grosbeak	SC	---	S4	CBC	FALSE	Coniferous or mixed forests; deciduous tree stands; parks, orchards.
Aquila chrysaetos	Golden Eagle	---	END	S2B	CBC	FALSE	Wild, arid plateaus, deeply cut by streams and canyons or sparsely treed slopes and rock crags.
Ammodramus savannarum	Grasshopper Sparrow	SC	---	S4B	OBBA	FALSE	Well-drained grassland or prairie with low cover of grasses, taller weeds on sandy soil; hayfields or weedy fallow fields; uplands with ground vegetation of various densities; perches for singing; requires tracts of grassland > 10 ha.
Larus marinus	Great Black-backed Gull	---	---	S2B	CBC	FALSE	Isolated predator fee sites like islands, piers, landfills, beaches and rocky shores along the Great Lakes particularly eastern Lake Ontario and the St. Lawrence River.

Scientific Name	Common Name	SARA Status[1]	SCA Status[2]	SRank[3]	Information Source[4]	Regulated Habitat	Habitat Requirements[2,5]
Clangula hyemalis	Long-tailed Duck	---	---	S3B	CBC	FALSE	Winter visitor in the open deep waters of the Great Lakes, particularly Lake Ontario.
Podiceps grisegena	Red-necked Grebe	---	---	S3B, S4N	CBC	FALSE	permanent freshwater lakes with a fringe of aquatic emergent vegetation; marshes, impoundments or sewage lagoons with > 4 ha of open water; protected marshy areas or bays in larger lakes; nest greatly affected by wave action of boats and other human disturbances.
Buteo lagopus	Rough-legged Hawk	---	---	S1B, S4N	CBC	FALSE	Open country like farmlands, marshes and grasslands.
Hylocichla mustelina	Wood Thrush	THR	---	S4B	OBBA, NHIC	FALSE	Carolinian and Great Lakes-St. Lawrence Forest zones; undisturbed moist mature deciduous or mixed forest with deciduous sapling growth; near pond or swamp; hardwood forest edges; must have some trees higher than 12 m.
INSECTS							
Hemileuca sp. 1	Bogbean Buckmoth	END	END	S1	MNRF Reg. Habitat	TRUE	Open, calcium rich fens, located in southeastern Ontario.
Danaus plexippus	Monarch	END	---	S2N, S4B	OBA	FALSE	Monarch is commonly found in meadow habitats, abandoned farmland and roadsides where milkweed and wildflowers (such as goldenrods, asters and purple loosestrife) are abundant
Erynnis martialis	Mottled Duskywing	END	END	S2	OBA	FALSE	The mottled duskywing tends to live in dry habitats with sparse vegetation. These include open barrens, sandy patches among woodlands, and alvars. In Ontario, the mottled duskywing will only deposit their eggs on two closely related plants: New Jersey Tea and Prairie Redroot.
Gomphus quadricolor	Rapids Clubtail	END	THR	S1	OOA, MNRF Reg.Habitat	TRUE	In Canada, this species is known to occur on two river systems in Ontario: the Mississippi and the Humber River. Characteristics of these occurrence sites include medium to large streams and rivers, typically with clear and cool waters, gravel and cobble riffles, and projecting boulders interspersed with mud pools. Channel widths range from 20 to 50 m, with July water temperatures ranging from 21.6 to 23.3°C, and mean annual discharge rates of 2.5 to 31.4 m3/s. Rapids Clubtail is documented as extirpated from two other locations in Ontario: the Thames and the Credit River; however, in 2005, potential sites were identified at the Ausable, Sydenham and Grand Rivers.
Pieris virginiensis	West Virginia White	---	---	S3	OBA	FALSE	Moist deciduous woodlands containing toothwort.
HERPTILES							
Emydoidea blandingii	Blanding's Turtle	THR	THR	S3	OHA, NHIC	FALSE	Shallow water marshes, bogs, ponds or swamps, or coves in larger lakes with soft, muddy bottoms and aquatic vegetation; basks on logs, stumps, or banks; surrounding natural habitat is important in summer as they frequently move from aquatic habitat to terrestrial habitats; hibernates in bogs; not readily observed.
Plestiodon fasciatus pop. *2*	Common Five-lined Skink (Southern Shield population)	SC	---	S3	OHA	FALSE	Underneath rocks on open bedrock in forests.

Scientific Name	Common Name	SARA Status[1]	SCA Status[2]	SRank[3]	Information Source[4]	Regulated Habitat	Habitat Requirements[2,5]
Sternotherus odoratus	Eastern Musk Turtle	SC	---	S3	OHA	FALSE	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.
Thamnophis sauritus	Eastern Ribbonsnake (Great Lakes population)	SC	---	S4	OHA	FALSE	Sunny grassy areas with low dense vegetation near bodies of shallow permanent quiet water; wet meadows, grassy marshes or sphagnum bogs; borders of ponds, lakes or streams; hibernates in groups.
Anaxyrus fowleri	Fowler's Toad	END	END	S2	MNRF Reg. Habitat	TRUE	Sandy shorelines, dunes and beaches along the northern shore of Lake Erie, specifically in the Niagara, Norfolk and Elgin regions.
Pantherophis spiloides pop. *1*	Gray Ratsnake (Frontenac Axis population)	THR	THR	S3	OHA, MNRF Reg. Habitat	TRUE	Deciduous forests, rocky outcrops, wetlands and shorelines.
Graptemys geographica	Northern Map Turtle	SC	---	S3	OHA	FALSE	This species is found in rivers and lakeshores, with a preference for slow moving currents, muddy bottoms, and abundant aquatic vegetation. Through spring and summer, it needs suitable basking sites on emergent rocks and fallen trees, with an unobstructed view from which it can drop immediately into the water if startled. Northern Map Turtle require high-quality water that supports the female's mollusc prey. In winter, individuals hibernate on the bottom of deep, slow-moving sections of river.
Chelydra serpentina	Snapping Turtle	SC	---	S3	OHA, NHIC	FALSE	Permanent, semi-permanent fresh water; marshes, swamps or bogs; 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 ~28 ha.
Pseudacris triseriata pop. 1	Western Chorus Frog (Great Lakes / St. Lawrence - Canadian Shield Population)	THR	---	S3	OHA, NHIC	FALSE	Forest openings around woodland ponds, damp meadows, marshes, bottomland swamps, and temporary ponds in open country, and urban areas.
MAMMALS							
Lasiurus borealis	Eastern Red Bat	---	END	S4	MWH	FALSE	Roosts in leafy trees such as elm and maple but also may use conifers; forage habitat includes over streams, near lights and along field and forest edges; migrates south in winter; prefers to feed over wetlands or open fields; a solitary species.
Myotis leibii	Eastern Small-footed Myotis	---	END	S2S3	MWH	FALSE	Roosts in caves, mine shafts, crevices or buildings that are in or near woodland; hibernates in cold dry caves or mines; maternity colonies in caves or buildings; hunts in forests.
Urocyon cinereoargenteus	Gray Fox	THR	THR	S1	MWH	FALSE	Hardwood forests with a mix of fields and woods; swamps; wooded, brushy or rocky habitats; woodland farmland edge; old fields with thickets; dens in hollow log or tree; individual has numerous winter dens throughout its range which is > 40 ha.

Scientific Name	Common Name	SARA Status[1]	SCA Status[2]	SRank[3]	Information Source[4]	Regulated Habitat	Habitat Requirements[2,5]
Lasiurus cinereus	Hoary Bat	---	END	S4	MWH	FALSE	Roosts in trees with dense leaf foliage, forest edges or hedgerows; also, in city parks; do not use caves; feeds over water or open areas; migrates south in winter; a solitary species, only forming groups while hunting.
Myotis lucifugus	Little Brown Myotis	END	END	S4	MWH	FALSE	Uses caves, quarries, tunnels, hollow trees or buildings for roosting; winters in humid caves; maternity sites in dark warm areas such as attics and barns; feeds primarily in wetlands, forest edges.
Myotis septentrionalis	Northern Myotis	END	END	S3	MWH	FALSE	Hibernates during winter in mines or caves; during summer males roost alone and females form maternity colonies of up to 60 adults; roosts in houses, manmade structures but prefers hollow trees or under loose bark; hunts within forests, below canopy.
Lasionycteris noctivagans	Silver-haired Bat	---	END	S4	MWH	FALSE	Prefers temperate, hardwoods with ponds or streams nearby; roosts in tree foliage or hollow snags, buildings or caves; somewhat solitary except for small maternity colonies usually found in hollow trees; found in forested areas near watercourses; migrates south in winter.
Pipistrellus subflavus	Tri-colored Bat	END	END	S3?	MWH	FALSE	Can be found in a variety of forested habitats. They form day roosts and maternity colonies in older forest and occasionally in barns or other structures and overwinter in caves. They forage over water and along streams in the forest.
BOTANICAL							
Fraxinus nigra	Black Ash	---	END	S4	Dillon	FALSE	Occurs in swamps, floodplains, and fens.
Juglans cinerea	Butternut	END	END	S2?	Dillon	FALSE	Usually grows alone or in small groups in deciduous forests. It prefers moist, well-drained soil and is often found along streams. It is also found on well-drained gravel sites and rarely on dry rocky soil. This species does not do well in the shade and often grows in sunny openings and near forest edges.
Platanthera leucophaea	Eastern Prairie Fringed Orchid	END	END	S2	MNRF Reg. Habitat	TRUE	Occurs in wetlands, fens, swamps, and tallgrass prairies with full sun.
Potamogeton x odgenii	Ogden's Pondweed	END	END	SH	MNRF Reg. Habitat	TRUE	Found in clear, slow-moving streams, beaver ponds and lakes. It often grows with other species of narrow-leaved pondweeds.
Physconia subpallida	Pale-bellied Frost Lichen	END	END	S3	MNRF Reg. Habitat	TRUE	Grows on the bark of hardwood trees such as White ash, Black walnut, and American elm. It can also be found growing on fence posts and boulders. Pale-bellied frost lichen also grows on Hop Hornbeam trunks at a height of 0.5 to 2 metres in wooded areas.

1 – Status identified by the Committee on the Status of Endangered Wildlife in Canada under the federal SARA, 2002; 2 – Protected Species in Ontario List under the provincial SCA, 2025; 3 – Ontario SRank; S5 = secure; S4= apparently secure; S3 = vulnerable; S2 = imperiled; S1 = critically imperiled; SX = Extirpated; SH = Possibly Extirpated; SNA = non-native or exotic species to Ontario; 4 – NHIC = MNRF Natural Heritage Information Centre, MNRF Reg. Habitat = MNRF Regulated Habitat (O. Reg. 242/08), OBBA = Ontario Breeding Bird Atlas, MWH = Digital Distribution Maps of the Mammals of the Western Hemisphere, version 3.0, OHA = Ontario Herpetofaunal Atlas, OBA = Ontario Butterfly Atlas, CBC = Christmas Bird Count, Dillon = internal Dillon species information; 5 – MNRF Significant Wildlife Technical Guide - Appendix G (2000).

DILLON