

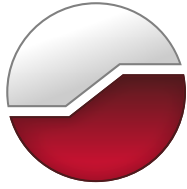


# GEMTEC

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**Environmental Impact Statement  
Proposed Zoning By-Law Amendment  
2431 Old Highway 17, Rockland  
United Counties of Prescott and Russell,  
Ontario**

GEMTEC Project: 104729.001



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Submitted to:

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**Environmental Impact Statement**  
**Proposed Zoning By-Law Amendment**  
**2431 Old Highway 17, Rockland**  
United Counties of Prescott and Russell, Ontario

June 10, 2026  
GEMTEC Project: 104729.001

## EXECUTIVE SUMMARY

GEMTEC Consulting Engineers and Scientists Limited (GEMTEC) was retained by Kayla Gallant (the proponent) to complete an Environmental Impact Statement (EIS) for the property located at 2431 Old Highway 17, in the United Counties of Prescott and Russell, Ontario. This EIS has been completed in support of a zoning by-law amendment to permit the use of ten commercial cabin rentals on the subject property. The EIS was prepared in accordance with all applicable federal, provincial, and municipal policies and guidelines.

In support of this EIS, a desktop review and a single-season field investigation were completed to assess the presence or absence of natural heritage features and Species at Risk (SAR) within the study area. The focus of the investigation was to characterize the natural and physical setting of the property and to confirm the presence or absence of natural heritage features and potential SAR habitat identified during the desktop review.

Following completion of the desktop review and field investigation, the following natural heritage features were identified within or adjacent to the study area: significant woodlands, fish habitat, and candidate significant wildlife habitat (SWH) for bat maternity colonies and woodland amphibian breeding habitat. No confirmed SWH was identified on-site. The following SAR were identified as having a potential to occur within the broader study area: lake sturgeon, American eel, eastern red bat, eastern small-footed myotis, hoary bat, little brown myotis, silver-haired bat, and tri-colored bat. All aquatic SAR are anticipated to be limited to the Ottawa River, located off-site. Black ash and butternut were observed on-site but do not occur within the proposed cabin area and will not be impacted by future land use.

Potential impacts to the natural heritage features are primarily associated with the potential loss of woodland habitat on-site. Impacts to significant woodlands, fish habitat, and SWH can be mitigated through the implementation of 15 m construction setback from the headwater drainage feature on-site.

To provide protection to SWH and potential SAR and their habitat on-site, reptile and amphibian exclusion fencing should be installed around all future construction areas prior to any development or site alteration to prevent the immigration of amphibians and other wildlife into the construction area. Should any PSO be discovered throughout the course of any development on-site, operations should stop and the species at risk biologist with the local MECP district should be contacted immediately for further direction. Furthermore, to ensure compliance with applicable legislation, all best management practices and adherence to vegetation clearing for birds and bats, outlined in Section 7 should be followed to ensure no negative impacts occur to natural heritage features on-site.

The proposed residential development complies with the natural heritage policies of the Provincial Planning Statement and the United Counties of Prescott and Russell Official Plan. No negative

impacts to identified natural heritage features or their ecological functions are anticipated as a result of the proposed development as long as all mitigation measures in Section 7 are enacted and best management practices followed.

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## **1.0 INTRODUCTION**

GEMTEC Consulting Engineers and Scientists Limited (GEMTEC) was retained by Kayla Gallant (the Proponent) to carry out an Environmental Impact Statement (EIS) for the property located at 2431 Old Highway 17, Rockland, in United Counties of Prescott and Russell, Ontario (hereafter referred to as “the subject property”). The site location is illustrated on Figure A.1 in Appendix A.

### **1.1 Purpose**

The proponent is seeking the environmental approvals to support a proposed zoning by-law amendment to permit the use of commercial cabin rentals on the subject property. Based on Section 5 of the United Counties of Prescott and Russell Official Plan (UCPR, 2022), an EIS is required showing that the proposed rezoning and future land use activities will not negatively impact any potential natural heritage features, which may be present within the study area. The study area is defined as the property boundary and the adjacent lands encompassing an area of 120 m beyond the property boundary. The subject property and the extents of the study area are illustrated on Figure A.2 in Appendix A.

### **1.2 Objective**

The 2024 Provincial Planning Statement (MMAH, 2024) issued under Section 3 of the Planning Act states that “development and site alteration shall not be permitted in: habitats of species at risk, significant woodlands, significant wetlands, significant areas of natural and scientific interest and significant wildlife habitat in Ecoregion 6E unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions.” Similarly, the 2024 Provincial Planning Statement dictates that ‘development and site alteration shall not be permitted in fish habitat except in accordance with provincial and federal requirements.’”

The objective of the work presented herein is to identify and evaluate the significance of any natural heritage features, as defined in the Provincial Planning Statement (MMAH, 2024), on the subject property and within the broader study area and assess the potential impacts from the proposed development on any natural heritage features identified and to recommend appropriate and defensible mitigation measures to ensure the long-term protection of any natural heritage features identified.

To meet these objectives, the EIS presented herein has been completed in accordance with the following provincial and municipal regulations, policies and guidelines:

- Provincial Planning Statement (MMAH, 2024);
- Species Conservation Act (Ontario, 2025);
- Fisheries Act (Canada, 1984);
- Conservation Authorities Act (Ontario, 1990);
- Natural Heritage Reference Manual (OMNR, 2010); and
- United Counties of Prescott and Russell Official Plan (UCPR, 2022).

### **1.3 Physical Setting**

The study area includes the approximately 10.44 ha subject property and the lands within 120 m of the property. The subject property is comprised of meadows, wetlands, and both coniferous and mixed forest. The subject property is bound to the north by Onesime Guibord Road and to the south by Old Highway 17. To the east the property is bound by an unaddressed vacant property, and to the west the property is bound by the rear lots of the subdivision along Sophie Street.

### **1.4 Land Use Context**

The subject property is situated within a larger peri-urban agricultural area. The existing land use designation from the United Counties of Prescott and Russell OP (UCPR A la Carte, Undated) is rural policy area.

## 2.0 METHODOLOGY

### 2.1 Desktop Review

A desktop information gathering exercise and a single site investigation were completed to aid in the scoping of field investigations and to gather information relating to natural heritage features that may be present on the subject project or within 1 km of the subject property. An additional component of the desktop review was to assess the potential presence of Species at Risk (SAR) to occur on the subject property or within the study boundary based on a review of publicly accessible occurrence records and a review of SAR habitat requirements and range maps.

Information regarding the potential presence of natural heritage features, SAR within the vicinity of the site was obtained from the following sources:

- Make a Map: Natural Heritage Areas (OMNRF, 2014a)
- Land Information Ontario (OMNRF, 2011);
- Ontario Geological Survey (OGS, 2019);
- Fisheries and Oceans Canada Species at Risk Maps (DFO, 2019);
- Natural Heritage Information Centre Biodiversity Explorer (OMNRF, 2013);
- Breeding Bird Atlas of Ontario (Cadman et al., 2007)
- Ontario Herpetofaunal Atlas (Oldham and Weller, 2000);
- Wildlife Values Area (OMNRF, 2020a);
- Wildlife Values Site (OMNRF, 2020b);
- Ontario Reptile and Amphibian Atlas (Ontario Nature, 2019);
- United Counties of Prescott Russell Official Plan (UCPR, 2020); and
- United Counties of Prescott Russell A la Carte (UCPR, undated);

### 2.2 Field Investigations

GEMTEC completed a series of field investigations to describe in general, the natural and physical setting of the subject property.

Field investigations completed in support of this EIS are outlined in Table 2.1 below. Photographs of site features taken during field investigations are provided in Appendix B.

**Table 2.1 Summary of Field Investigations**

Date	Time	Weather	Purpose
October 24, 2025	9:00 – 11:00	10°C, mostly cloudy (7/10 cloud cover), Beaufort 2, no precipitation	Ecological Land Classification, Protected Species in Ontario Screening

### 2.2.1 Ecological Land Classification

Vegetation communities on the subject property were delineated during the desktop review stage of this EIS using publicly available air photos and confirmed in the field throughout the 2025 field investigations, following the Ecological Land Classification (ELC) System for Northern Ontario (MNR, 2009). Vegetation communities were confirmed in the field by employing the random meander methodology while documenting dominant vegetation species within the various vegetation community forms.

## **3.0 EXISTING ENVIRONMENT**

### **3.1 Ecoregion**

The Study Area is situated in Ecoregion 6E-12 (Lake Simcoe-Rideau), extending from Lake Huron in the west to the Ottawa River in the east. The climate of Ecoregion 6E is categorized as humid, high to moderate temperate ecoclimate with a mean annual temperature range between 4.9°C to 7.8°C with annual precipitation ranging between 759 mm to 1,087 mm (Crins *et al.*, 2009).

The eastern portion of the Ecoregion, which the subject property is located, is underlain by glaciomarine deposits as a result of the brief post-glacial incursion of saltwater from the Champlain Sea along the St. Lawrence Valley. This Ecoregion falls with Rowe's (1972) Great Lakes-St. Lawrence Forest Region, including its Huron-Ontario and Upper St. Lawrence sections, and a small part of the Middle Ottawa Forest section (Crins *et al.*, 2009).

### **3.2 Landforms, Soils and Bedrock Geology**

The topography of the site is gently sloped from south to north. The site has a topographical high of 86 metres above sea level (mASL) along Old Highway 17 and a topographical low of 52 mASL located along Onesime Guibord Road. A steep slope with elevation ranging from 68 mASL down to 49 mASL, is present in the northern portion of the property and extending off-site to the Ottawa River. The steep slope begins approximately 100 m south from Onesime Guibord Road.

A single topographical landform, as mapped by Chapman and Putnam (1984) are described on-site; the clay plains of the Ottawa Valley Clay Plains physiographic region.

The Ontario Geological Survey (OGS, 2019) identified three surficial soil units on the subject property: till, Paleozoic bedrock, and fine-textured glaciomarine deposits. The majority of the property is comprised of till made up of stony, sandy silt to silty sand on Paleozoic terrain. The northern most portion of the site is occupied by Paleozoic bedrock. The eastern edge of the property is underlain by massive to well laminated fine-textured glaciomarine deposits, composed of silt and clay, minor sand and gravel.

Bedrock at the site, as described by OGS (2019) consists of the Ottawa Group, Simcoe Group and Shadowlake Formation consisting of limestone, dolostone, shale, arkose and sandstone.

### **3.3 Surface Water, Groundwater and Fish Habitat**

Surface water features identified as occurring within the study area are limited to the uppermost reach of an unnamed tributary to the Ottawa River and a headwater drainage feature. A review of MNR's Land Information Ontario wetland mapping identifies two unevaluated wetland features off-site but within the study area, classified as swamp communities. These features are located outside the property boundary but within the study area. The patch located to the east of the property is up gradient of the site and is approximately 90 m distant at the closest point, separated

by a dense vegetated buffer. Furthermore, the local wetland patch to the west of the property is mapped over a recent subdivision development. No provincially significant wetlands are present within the study area.

The subject property is located in the eastern portion the Grande Presqu'île - Oshawa Creek subwatershed (Quaternary-level), which encompasses an 36,356 ha area, as measured by Ontario Watershed Boundary Mapping. The subwatershed provides drainage for the surrounding agricultural fields and peri-urban development towards the Ottawa River. Land use throughout the watershed is a mosaic of urban, agricultural, and natural landscapes.

The tributary to the Ottawa River originates approximately 60 m west of the subject property, serving as a drainage conduit for the surrounding peri-urban landscape. The tributary briefly clips through the northeast corner of the property before running through a culvert under Onesime Guibord Road. The culvert was noted as deteriorated and containing barriers to fish passage upstream at both the inlet and outlet. During the field investigations, the tributary was observed as a partially naturalized channel, with sections of channelization (culvert). At the time of the site investigation the feature was observed to have interstitial flow with depths of up to 5 cm. Vegetation within and surrounding the tributary was comprised of mixed forested cover and is discussed in greater detail in Table 3.1 below.

In addition to the tributary of Ottawa River, a single HDF was identified within the study area. A channelized feature was observed running along the existing agricultural field, eventually meeting with the unnamed watercourse. The feature was noted as dry during the site investigation. Vegetation within and surrounding the drainage feature was comprised of mixed forested cover and is discussed in greater detail in Table 3.1 below.

A fisheries assessment was not conducted as part of this EIS. A desktop review of Land Information Ontario Aquatic Resource Area line and point mapping did not return any occurrence data for the surface water features within the study area. Schedule B of the UCPR official plan identifies the unnamed watercourse as fish habitat. Based on observations from the site investigation including lack of sufficient depths, permanency, and barriers to fish passage, it is GEMTEC's opinion that the headwater drainage feature does not provide permanent fish habitat. It is anticipated that headwater drainage feature is limited to contributions to baseflows of downstream fish habitat following the spring freshet and heavy precipitation events.

### **3.4 Vegetation Communities**

Vegetation communities on-site were confirmed by GEMTEC in 2025, following protocols utilized in the Southern Ontario Ecological Land Classification System (Lee *et al.*, 2008). Vegetation communities on-site are comprised of solely fresh to moist mixed forest. Table 3.1 below provides a summary of the vegetation community identified on-site.

**Table 3.1 Vegetation Communities On-site**

ELC Type	Description	Size (ha)
<p>Dry to Fresh White Pine – Sugar Maple Mixed Forest (FOMM2-2)</p>	<p>The majority of the property is occupied mixed forest community. The community was observed to vary in age, with older tree specimens located in the northern and eastern fringes of the community. The proposed cabins are present within the youngest portion of the community. No potential snags occur near the cabin structures.</p> <p>Canopy vegetation included a mix of white pine (<i>Pinus strobus</i>), sugar maple (<i>Acer saccharum</i>), eastern white cedar (<i>Thuja occidentalis</i>), American elm (<i>Ulmus americana</i>), white birch (<i>Betula papyrifera</i>), large tooth aspen (<i>Populus grandidentata</i>), trembling aspen (<i>Populus tremuloides</i>), and red oak (<i>Quercus rubra</i>). Coniferous and deciduous species were present in equal proportions, with some deciduous banding.</p> <p>The sub canopy was occupied by saplings of the above-named tree species, with speckled alder (<i>Alnus incana</i>), common buckthorn (<i>Rhamnus cathartica</i>), and Tartarian honeysuckle (<i>Lonicera tatarica</i>) along cleared edges and existing pathways.</p> <p>Ground cover vegetation within this community was observed to include wood fern (<i>Dryopteris</i> sp.), European woodland sedge (<i>Carex sylvatica</i>), wall lettuce (<i>Lactuca muralis</i>), black raspberry (<i>Rubus occidentalis</i>), and mountain aster (<i>Symphotrichum cordifolium</i>). It is noted a greater diversity of species is expected throughout the growing season. It is understood approximately 2000 white pine saplings were planted along the edge of the FOMM2-2 and the MEFM1 community.</p> <p>Black ash (<i>Fraxinus nigra</i>) trees were observed within this community along the existing head water drainage feature. Specimens observed were in poor to good health, with a diameter at breast height above 8 cm.</p>	<p>5.04</p>
<p>Dry to Fresh Forb Meadow (MEFM1)</p>	<p>The central portion of the subject property is occupied by an open meadow community. This community is understood to be a recently abandoned agriculture field. The field was intersected by existing cleared pathways as part of the historical agricultural use.</p> <p>Vegetation observed included was forb dominate, with observed species including horseweed (<i>Erigeron canadensis</i>), tall goldenrod (<i>Solidago altissima</i>), sulphur cinquefoil (<i>Potentilla recta</i>), common dandelion (<i>Taraxacum officinale</i>), field sagewort (<i>Artemisia campestris</i>), yellow foxtail (<i>Setaria pumila</i>), camphor inula (<i>Inula camphorata</i>) Queen Anne’s lace (<i>Daucus carota</i>), tall blue lettuce (<i>Lactuca biennis</i>), steeplebush (<i>Spiraea tomentosa</i>), and greater mullein (<i>Verbascum thapsus</i>).</p> <p>The southern portion of this community consists of a rural property inclusion. It is understood this portion is used as a wood workshop.</p>	<p>2.92</p>
<p>Dry to Fresh Poplar Deciduous Forest</p>	<p>The southern most portion of the property is occupied young forest community reflective of recent disturbance. It is understood this portion of the property was once used as a small apple orchard.</p>	<p>1.48</p>

ELC Type	Description	Size (ha)
(FODM3-1)	<p>Species observed included apple (<i>Malus domestica</i>), trembling aspen (<i>Populus tremuloides</i>), largetooth aspen (<i>Populus grandidentata</i>), white birch (<i>Betula papyrifera</i>), and common buckthorn (<i>Rhamnus cathartica</i>).</p> <p>Herbaceous vegetation observed included garlic mustard (<i>Alliaria petiolata</i>), purpleflowering raspberry (<i>Rubus odoratus</i>), black raspberry (<i>Rubus occidentalis</i>), coralberry (<i>Symphoricarpos orbiculatus</i>), and saplings of the above poplar and buckthorn species.</p> <p>A single butternut (<i>Juglans cinerea</i>) tree was observed within this community. It is noted as dying to dead at the time of the investigation.</p>	
Annual Row Crops (OAGM1)	A small portion of the property east of the main access road is occupied by annual row crop agriculture. Crops consisted of common vegetable species. It is understood the plot is subdivided into semi-private community garden lots.	1.00

### 3.5 Wildlife

During the completed field investigation within the Study Area, all terrestrial wildlife, including calls and sign, were recorded. These observations are summarized in Table C.1 in Appendix C.

## 4.0 NATURAL HERITAGE FEATURES

Natural heritage features are defined in the PPS as features and areas, including *significant wetlands*, *significant coastal wetlands*, *fish habitat*, *significant woodlands* south and east of the Canadian Shield, *significant valleylands* south and east of the Canadian shield, *significant habitats of endangered species and threatened species*, *significant wildlife habitat* and *significant areas of natural and scientific interest*, which are important for their environmental and social values as a legacy of the natural landscape of an area (MMAH 2024).

### 4.1 Provincially Significant and Local Wetlands

As described in the Natural Heritage Reference Manual (OMNR, 2010), wetlands are lands that are seasonally or permanently covered by shallow water, as well as lands where the water table is close to or at the surface. While *significant* in regard to wetlands means an area identified as provincially significant by the Ontario Ministry of Natural Resources and Forestry using evaluation procedures established by the Province, as amended from time to time.

As discussed in Section 3.3, local unevaluated wetlands have been identified off-site but within the study area. Part of these wetland mapping is noted to occur over recent development. Further the remaining off-site wetland mapping is up gradient of the property boundary and separated by a dense vegetated buffer. Given the distance between the identified local wetland mapping and the subject property, no impacts to wetlands are anticipated from the proposed re-zoning. No wetlands have been identified on-site.

### 4.2 Significant Woodlands

Significant woodlands are defined in the natural heritage reference manual (OMNR, 2010) as an area that is ecologically important in terms of features such as species composition, age of trees and stand history; functionally important due to its contribution to the broader landscape because of its location, size or due to the amount of forest cover in the planning area; or economically important due to site quality, species composition, or past management history.

At the local scale, significant woodlands are defined and designated by the local planning authority. Generally, most planning authorities have defined significant woodlands as any woodland that contains any of the four criteria listed in Section 7.2 of the natural heritage reference manual (OMNR, 2010), including: woodland size, ecological functions, uncommon characteristics and economic and social functional values.

Table C.2 in Appendix C, presents the screening rationale for significant woodlands applied in this EIS. For comparison of woodland criteria used in Table C.2, it is assumed that the woodland coverage within the planning area (United Counties of Prescott and Russell) is between 15% and 30% of the land area (UCPR, 2023), with estimates of current percentage cover at approximately 26%. Therefore, the minimum woodland size for determining significance is 20 ha or greater, based on the guidance outlined in the Natural Heritage Reference Manual (OMNR, 2010). A

measure of woodland cover on-site and within the greater study area through UCPR A La Carte identifies an approximate 16 ha area of woodlands. Despite not meeting the area requirement for significance, the woodlands on-site are part of a larger contiguous patch immediately adjacent to the Ottawa River shoreline. Further, despite not being included in the UCPR natural heritage system, the on-site woodlands and greater contiguous area meet with a linkage area approximately 250 m east of the subject property. Schedule B of the UCPR Official Plan identifies a 12.24 ha portion of these woodlands as significant. It is understood that a portion of the on-site woodlands have been used in the past for wood harvest. The portion identified as non-significant was observed to be made up of young white pine and sugar maple reflective of historical planting practices. A review of publicly available imagery indicates the non-significant mapped woodlands were clear cut circa 1990 and appear to have been in a state of successional rejuvenation since. The non-significant portion is further encircled by access paths, with a notable increase in diversity and age of tree specimens outside of the access paths. Significant woodlands are illustrated on Figure A.4 of Appendix A.

Impacts to significant woodlands from the proposed development are discussed in Section 6.

### **4.3 Significant Valleylands**

In Southern Ontario, conservation authorities have identified valleylands as part of their regulation mapping (i.e., floodplain mapping); however, where valleys lands have not been defined, their physical boundaries are generally determined as the ‘top-of-bank’ or ‘top-of-slope’ associated with a watercourse. For less well-defined valleys, the physical boundary may be defined by riparian vegetation, flooding hazard limits, ordinary high-water marks or the width of the stream meander belt (OMNR, 2010).

The South Nation Conservation Authority identifies regulated area mapping associated with the flood plain mapping of the Ottawa River extending onto the northern edge of the subject property. However, the existing Onesime Guibord Road is present between the property and the Ottawa River. No significant valley mapping has been identified on-site by the SNCA or the UCPR Official Plan. Based on the observed distance between the cabins and conservation authority regulated areas, no impacts are anticipated to occur to potential significant valleylands within the study area.

### **4.4 Significant Areas of Natural and Scientific Interest**

The MNRF identifies two types of areas of natural and scientific interest (ANSI) in Ontario: life sciences ANSIs typically represent significant segments of Ontario’s biodiversity and natural landscapes, while earth science ANSIs typically represent significant examples of bedrock, fossils or landforms in Ontario (OMNR, 2010).

No ANSI have been identified on-site or adjacent to the site during the desktop review or during site investigations.

## 4.5 Significant Wildlife Habitat

The natural heritage reference manual (OMNR, 2010), in combination with the significant wildlife habitat technical guide (OMNR, 2000) and the significant wildlife habitat ecoregion criterion schedules (OMNRF, 2015) were used to identify and evaluate the potential for significant wildlife habitat on-site. The significant wildlife habitat is broadly categorized as habitats of seasonal concentration of animals, rare vegetation communities, specialized habitats for wildlife, habitats of species of conservation concern and animal movement corridors. Table C.2, C.3, C.4, and C.5 in Appendix C, provide the screening rationale for each category of significant wildlife habitat, respectively.

### 4.5.1 Habitats of Seasonal Concentrations of Animals

Seasonal concentration areas are habitats where large numbers of species congregate at one particular time of the year. The Significant Wildlife Habitat Technical Guide (OMNR, 2000) and Significant Wildlife Habitat Ecoregion Criterion Schedules (OMNRF, 2015) identify 12 types of seasonal concentration habitats that may be considered significant wildlife habitat. These 12 types of seasonal habitat are presented in Table C.2 in Appendix C, including a brief description of the rationale as to why or why they are not assessed further in this EIS.

Following review of Table C.2 in Appendix C, one habitat of seasonal concentration of animals is present on-site or within the study area: candidate bat maternity colonies. This SWH type is discussed in detail in the subsection below.

#### 4.5.1.1 Candidate Bat Maternity Colony

Candidate bat maternity colony SWH was identified within suitable forested habitats on-site.

Bat maternity colony SWH is extremely rare in all Ontario landscapes, providing crucial habitat for the birthing, nursing, and weaning of bat pups by reproductive females of the following species: big brown bat (*Eptesicus fuscus*) and silver-haired bat (*Lasionycteris noctivagans*). Defining criteria for bat maternity colony SWH is the use of the forest ecosite or ecoelement by 10 or more big brown bats, or 5 or more adult female silver-haired bats.

Snag density surveys were not conducted as part of this EIS. As such, the presence of bat maternity colony SWH cannot be confirmed. However, based on the availability of suitable forest ecosites and the presence of semi-mature deciduous and mixed forest communities, candidate bat maternity colony habitat is assumed to be present. Impacts to candidate bat maternity colony habitat from the proposed re-zoning and subsequent land use are discussed in Section 6.

### 4.5.2 Rare Vegetation Communities

Rare vegetation communities in the province are described generally as those with an S1 to S3 ranking by the NHIC, and typically include communities such as sand barrens, alvars, old growth forests, savannahs and tallgrass prairies.

The vegetation communities identified on-site and described in Section 3.4 of this report are not ranked by the NHIC as S1, S2 or S3 and are therefore not considered to be rare vegetation communities.

#### **4.5.3 Specialized Habitats for Wildlife**

Specialized wildlife habitats are microhabitats that provide a critical resource to some groups of wildlife. The Significant Wildlife Habitat Technical Guide (OMNR, 2000) and Significant Wildlife Habitat Ecoregion Criterion Schedules (OMNRF, 2015) identify 10 specialized habitats that may constitute SWH, these 10 types of specialized wildlife habitats are evaluated in Table C.3 in Appendix C.

Following a review of Table C.3 in Appendix C, two specialized wildlife habitats have been identified on-site or within the study area: *candidate* bald eagle and osprey nesting, foraging, and perching habitat and *candidate* woodland amphibian breeding habitat. The SWH are discussed in detail in the subsections below.

##### **4.5.3.1 Candidate Bald Eagle and Osprey Nesting, Foraging and Perching Habitat**

Candidate bald eagle (*Haliaeetus leucocephalus*) and osprey (*Pandion haliaetus*) nesting, foraging, and perching habitat maybe present within mature forest stands adjacent to large waterbodies that support adequate fish populations. These species rely on undisturbed forested shorelines with large trees for nesting and perching, and require open water areas for foraging.

For osprey, the confirmed SWH includes the active nest and a 300 m radius surrounding the nest or the contiguous woodland stand in which it is located. For bald eagle, the confirmed SWH encompasses a 400–800 m radius around the active nest, with the extent of habitat determined by site lines from the nest to surrounding development, and the inclusion of perching and foraging areas.

A single field investigation was completed in support of this EIS, outside of the breeding bird season for Eastern Ontario, which typically spans mid-April to mid-July (OMNRF, 2015). Although the timing limited the ability to confirm nesting activity, visual screening for stick nests was conducted opportunistically during the site visit. No stick nests were observed within potentially suitable tree specimens, nor were any high quality nesting or perching trees observed within the area with the existing cabins spaces. As such, bald eagle and osprey nesting, foraging, and perching habitat is not considered to be present on-site or within the broader study area and it is not discussed or evaluated further in this EIS.

##### **4.5.3.2 Candidate Woodland Amphibian Breeding Habitat**

Candidate woodland amphibian breeding habitat was identified off-site within adjacent swamp communities, with the associated forested component extending onto the subject property.

Candidate woodland amphibian breeding habitat is considered in all forested ecosites located within 120 m of vernal pools, ponds, or wetlands greater than 500 m<sup>2</sup> that support breeding populations of amphibians such as eastern newt (*Notophthalmus viridescens*), blue-spotted salamander (*Ambystoma laterale*), spotted salamander (*Ambystoma maculatum*), gray tree frog (*Dryophytes versicolor*), spring peeper (*Pseudacris crucifer*), and wood frog (*Lithobates sylvaticus*). The forested component provides critical cover and migration corridors for amphibians moving between aquatic breeding sites and summer foraging habitat.

A single field investigation was completed in support of this EIS and targeted amphibian surveys were outside of the scope of this EIS. As targeted amphibian breeding surveys were not conducted, the presence of breeding activity within the off-site wetlands could not be confirmed. However, given the proximity of mapped swamp communities and the presence of contiguous forest cover on-site, candidate woodland amphibian breeding habitat is considered to be present. Candidate woodland amphibian breeding habitat encompasses the entire FOMM2-2 community on-site.

Impacts to candidate woodland amphibian breeding habitat from the proposed re-zoning and subsequent land use are discussed in Section 6.

#### 4.5.4 Habitats of Species of Conservation Concern

Provincial rankings are used by the Natural Heritage Information Centre to set protection priorities for rare species, similar to those described in Section 4.5.2 above for vegetation communities. Provincial rankings (S-ranks), are not legal designations such as those used to define the various protection statuses of species at risk. They are only intended to consider factors within the political boundaries of Ontario that might influence a particular species abundance, distribution or population trend.

Based on the guidance provided in the Significant Wildlife Habitat Ecoregion Criterion Schedules (MNRF, 2015), when a plant or animal element occurrence is recorded for any species with an S-rank of S1 (extremely rare), S2 (very rare), S3 (rare to uncommon) or SH (historically present), the corresponding vegetation ecosite is considered to provide *candidate* habitat for species of conservation concern and further consideration within the EIS is warranted. Following the changes to species at risk policy with the implementation of the SCA, all species listed as special concern through the Committee on the Status of Species at Risk in Ontario (COSSARO) have been considered for the purposes of this assessment.

The Significant Wildlife Habitat Ecoregion Criterion Schedules (OMNRF, 2015) provides five general habitat types known to support a wide range of species of conservation concern in Ontario. The five general habitat types for Ecoregion 6E are provided in Table C.4 in Appendix C, including a brief rationale as to why they are or are not considered further in this EIS. Following review of Table C.4 in Appendix C, one habitat of species of conservation concern has been identified on-site; candidate habitats of special concern and rare wildlife species.

#### 4.5.4.1 Special Concern and Rare Wildlife Species SWH

Based on current NHIC occurrence records and the linking of candidate habitat to aquatic features within the broader study area, three fish species of special concern have been identified as having potential to occur: river redhorse (*Moxostoma carinatum*), silver lamprey (*Ichthyomyzon unicuspis*), and channel darter (*Percina copelandi*). No other species of special concern or rare wildlife species were identified on-site or within the broader study area.

##### **River Redhorse**

The river redhorse is a large-bodied sucker species with an S-rank of S3 and is listed as a species of special concern by COSSARO. It typically inhabits medium to large rivers with moderate to fast currents and clean gravel substrates. This species is anticipated to be limited to the Ottawa River, located off-site, and is not expected to be impacted by the proposed development.

##### **Silver Lamprey**

The silver lamprey is a parasitic fish species with an S-rank of S3 and is listed as a species of special concern by COSSARO. It requires clean, well-oxygenated rivers with gravel or sandy substrates for spawning. This species is also anticipated to be restricted to the Ottawa River and is not expected to be impacted by the proposed development.

##### **Channel Darter**

The channel darter is a small benthic fish species with an S-rank of S3 and is listed as a species of special concern by COSSARO. It is typically found in shallow riffle habitats of rivers and streams with clean gravel or sand substrates. This species is anticipated to occur only within the Ottawa River system, off-site, and is not expected to be impacted by the proposed development.

As none of the identified habitats of species of special concern and rare wildlife are expected to be impacted by the proposed development, habitats of species of special concern and rare wildlife are not discussed or evaluated further in this EIS.

#### 4.5.5 Animal Movement Corridors

Animal movement corridors are elongated areas used by wildlife to move from one habitat to another and allow for the seasonal migration of animals (OMNRF, 2015). The Significant Wildlife Habitat Ecoregion Criterion Schedules for Ecoregion 6E-11 (OMNRF, 2015) identifies two types of animal movement corridors: amphibian movement corridors and deer movement corridors. As per guidance presented by the MNRF (2015), animal movement corridors should only be identified as significant wildlife habitat when a *confirmed or candidate* significant wildlife habitat has been identified by the MNRF district office or by the regional planning authority.

Following review of Table C.5 in Appendix C, no animal movement corridors have been identified on-site.

#### **4.6 Natural Heritage System - United Counties of Prescott and Russell**

The UCPR has mapped a natural heritage system composed of linkage areas and regional core areas. Regional core areas are large areas of mostly natural cover that are intended to remain in a naturalized state for an extended period. They are essential natural areas that protect biodiversity by accommodating functional wildlife populations. Meanwhile, linkages are areas recognised for providing uninterrupted passage along existing natural and peri-urban landscapes between core areas and beyond. Based on a desktop review, no regional core or linkage areas occur on-site. A linkage area occurs approximately 250 m east of the property, with connectivity to on-site woodlands. However, given the distance of the proposed relatively low impact land use from the linkage area, no impacts are anticipated and regional natural heritage systems are not discussed further in this EIS.

#### **4.7 Fish Habitat**

The protection of fish and fish habitat is a federal responsibility and is administered by the Department of Fisheries and Oceans Canada (DFO). Fish habitat as defined in the Fisheries Act (Canada, 1985) means, “spawning grounds and nursery, rearing food supply and migration areas on which fish depend directly or indirectly in order to carry out their life processes.”

When development is unable to avoid resulting in the harmful alteration, disturbance or destruction of fish habitat from typical project impacts such as temperature change, sedimentation, infilling, reduction of nutrient and food supply, etc., an authorization under the Fisheries Act is required for the project to proceed.

A fisheries assessment was not conducted as part of this EIS; however, as discussed in Section 3.3, the unnamed watercourse clipping on-site is mapped as fish habitat on Schedule B of the UCPR Official Plan. The headwater drainage feature was dry at the time of the site investigation and is anticipated to be limited to indirect fish habitat.

Fish habitat is illustrated on Figure A.5 in relation to other site features. Impacts to fish habitat on-site are discussed in Section 6.

#### **4.8 Species at Risk**

The probability of occurrence for species at risk to occur on-site and within the broader study area was determined through the desktop review stage of this EIS, as described in Section 2.1, and through the single field investigation conducted as part of this EIS, outlined in Section 2.2.

Table C.7 in Appendix C, provides a summary of all Species at Risk that were considered to have the potential to occur on-site or within the broader study area. The table summarizes each species protection status under the provincial SCA (Ontario, 2025) and the federal SARA (Canada, 2002), their probability of occurrence and a brief rationale of that probability. For birds, their status under the MBCA is provided. Impacts to endangered or threatened protected species determined to

have a moderate or high potential to occur on-site or within the broader study area are discussed further in Section 6.

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## 5.0 PROPOSED PROJECT

The proposed project assessed for potential impacts on natural heritage features within the broader study area includes a zoning by-law amendment to permit the use of ten cabin rentals on the subject property.

The proposed development consists of ten low-impact camp spaces. Three spaces are currently in operation, with an additional seven spaces to be added. Two of the three existing spaces are currently occupied by finished small wooden cabins. The third space is prepared and in use with a temporary tent setup, it is expected that a permanent cabin will be built in this third prepared space. All three camp areas are located within previously cleared primarily clear and stabilized portions of the property, minimizing the need for additional vegetation removal or site alteration. A conceptual area for the location of the additional seven cabins has been illustrated on Figure A.4 in Appendix A. The proposed additional cabins are to be placed in such a way to minimize the need for additional vegetation removal or site alteration. Access to the cabin sites occurs from an existing access road fronting Old Highway 17. Existing parking is present on an existing unpaved and cleared space adjacent to the access road. No in-water work is proposed as part of future land use or to accommodate the finalized cabin structures. No septic systems are proposed. It is understood that each finalized cabin is to be equipped with a wood-burning stove for heating, and all cooking is conducted outdoors using propane or charcoal barbecues. Power is to be supplied via solar lines connected to existing on-site solar panels located in the outdoor workshop portion of the property.

The act of re-zoning the property parcel is not expected to result in any physical alteration to the subject property. However, the future land use activities anticipated to occur as a result of the commercial cabin rentals may include minor vegetation clearing and removal for erection of the remaining eight finalized cabin structures, and for continued maintenance around finalized structures. It is understood the cabins are built as assembly ready components at the on-site wood workshop and do not require heavy construction equipment or poured foundation. No large-scale excavation, grading, or infrastructure installation is anticipated. Any additional cabin sites or development on-site is to be evaluated under an amendment to this EIS, or under a new EIS.

Further, while separate from the current application, it is understood that the property owners have privately engaged with the SNCA to plant 2000 white pine saplings along the western edge of the identified headwater feature. It is anticipated that these plantings will provide long term ecological benefits, expanded upon in the subsections below.

## 6.0 IMPACT ASSESSMENT

Potential impacts to natural heritage features on-site and within the broader study area are assessed for direct, indirect and cumulative effects based on the proposed project outlined in Section 5. Natural heritage features identified in Section 4 of this report as present or likely to be present are discussed in the subsections below.

Potential effects to the natural environment of the site from the proposed development outlined in Section 5 include: habitat encroachment, a minor loss of non-significant and significant woodlands, minor vegetation removal, and long-term increases in human-wildlife interactions and disturbance.

### 6.1 Significant Woodlands

As discussed in Section 4.2, a 12.24 ha portion of the on-site woodlands are considered significant due to their ecological function.

Two of the existing campsites do not occur within significant woodlands, with one clipping in and out of the edge of significant woodland mapping. The cabin within the significant woodlands is a finished product and has been placed to avoid clearing of trees, maintaining riparian shrub and tree vegetation. A portion of the remaining cabin locations are proposed within the significant woodland, however it is understood that these will utilize existing clearings to minimize any additional vegetation removal. Selective clearing of young understory trees may be required to accommodate all proposed cabin structures, but will be minimized by altering the placement of the final cabin position within the conceptually illustrated areas. As described in Section 5, it is noted that 2000 white pine saplings have been planted through a SNCA program. The projected canopy cover is anticipated to provide visual and audible screening for wildlife and guests on-site, bolster movement options for wildlife to and from the property and add to the value of the existing significant woodland mapping.

Further potential impacts related to increased human presence are considered negligible given the nature of the proposed future land use; the occupation of ten low impact cabin developments within a larger rural agricultural area. It is understood the commercial cabin rental experience is to highlight the natural features of the subject property, reducing the likelihood for long term significant anthropogenic disturbance. Mitigation measures to minimize impacts to significant woodlands are discussed in Section 7.

### 6.2 Significant Wildlife Habitat

The potential presence of *candidate* significant wildlife habitat on-site and within the study area was evaluated in Section 4.5. As a result of this assessment, two significant wildlife habitats were determined to be present on-site or within the study area and within the impact footprint of the proposed project; *candidate* raptor wintering habitat, *candidate* bat maternity colony habitat and *candidate* woodland amphibian breeding habitat.

Potential impacts to each type of SWH are discussed in greater detail in the following subsections, while mitigation measures intended to prevent such impacts are presented in Section 7.

### 6.2.1 *Candidate* Bat Maternity Colonies

*Candidate* bat maternity colonies SWH has been identified within the forested habitats on-site (Ecosite: FODM3-1, FOMM2-2). Snag surveys were outside the scope of this EIS, as such snag density was not confirmed.

Potential impacts to *candidate* bat maternity colony SWH includes the potential clearing of tree cover as part of future landscaping and maintenance activities. It is understood that all the finalized cabin sites are to be located within existing open spaces in the canopy and any additional tree clearing as part of maintenance is to be kept to a minimum. The site currently occupied by a tent is not anticipated to require tree clearing to accommodate the permanent cabin structure. No suitable snag trees were observed within the vicinity of the cabin structures or proposed placement of eight additional finalized structures. Potential indirect impacts related to increased human presence are considered negligible given the nature of the proposed future land use, the occupation of ten low impact cabins within a larger rural agricultural area.

Mitigation measures to reduce impacts to *candidate* bat maternity colony SWH are provided in Section 7.

### 6.2.2 *Candidate* Woodland Amphibian Breeding Habitat

*Candidate* woodland amphibian breeding habitat was identified on-site within the off-site local unevaluated wetlands and extends 230 m into adjacent forested ecosites (FOMM2-2).

As no in-water work is proposed as part of the development, potential impacts to *candidate* woodland amphibian breeding SWH are anticipated to be associated with direct impacts to surrounding woodland habitat and increased road mortality, particularly during the breeding season.

Potential indirect impacts related to increased human presence are considered negligible given the nature of the proposed future land use, occupation of ten low impact cabin developments within a larger rural agricultural area.

Mitigation measures to protect *candidate* woodland amphibian breeding habitat and migrating amphibians are provided in Section 7.

## 6.3 Fish Habitat

According to the Provincial Planning Statement (MMAH, 2024), “development and site alteration shall not be permitted in fish habitat except in accordance with provincial and federal requirements.” Fish habitat as defined in the Fisheries Act (Canada, 1985) means “spawning

grounds and nursery, rearing, food supply and migration areas on which fish depend directly or indirectly in order to carry out their life processes.”

Under the Fisheries Act, protection is afforded to all fish and fish habitat, and any work that is conducted in or near waterbodies must avoid “the death of fish, other than by fishing” (Canada, 1985). Furthermore, the Fisheries Act states that work must avoid “the harmful alteration, disruption or destruction (HADD) of fish habitat” (Canada, 1985).

When activities are unable to avoid or mitigate harm to fish or fish habitat from typical project impacts such as temperature change, sedimentation, infilling, reduction of nutrient and food supply, etc., an authorization under Subsection 35 (2) of the Fisheries Act is required for the project to proceed without contravening the Act.

Direct fish habitat has been identified within the on-site watercourse. The headwater drainage feature is not considered to provide direct fish habitat and is limited to contributions to baseflows of downstream fish habitat. The commercial cabin developments and future land use includes a minor increase in impervious surface area via the placement of roofs within the subcanopy. However, the cabins are not placed on hardened foundation, with the underlying and surrounding ground surface continuing to be permeable natural surface mantle. Given the lack of anticipated change to surface water or ground water balances and the lack of anticipated increased sedimentation, fish habitat is not anticipated to be directly impacted by the cabins and future land use.

It is noted that the existing cabin two is located immediately adjacent to the headwater drainage feature. As result of the proximity, indirect impacts to indirect fish habitat may include increased human encroachment resulting in compaction of soils and vegetation loss within the riparian zone.

Mitigation measures intended to protect fish and fish habitat from negative impacts are discussed in Section 7.

## **6.4 Species at Risk**

### **6.4.1 Species Conservation Act (Ontario, 2025)**

The SCA identifies endangered and threatened species under the Protected Species in Ontario (PSO) list that receive individual and habitat protections. Species of special concern and their habitat are not protected under the SCA. COSSARO maintains SAR designations and assessment for special concern, threatened and endangered species, but only those threatened and endangered species listed in the Protected Species in Ontario list receive protection under the SCA.

The SCA provides habitat definitions for specific species (e.g. black ash), for all other species whose habitat is not specifically outlined in the SCA, the following definition is used:

“habitat’ means:

- a) *In respect of an animal species:*
  - i. *A dwelling-place such as a den, nest or other similar place, that is occupied or habitually occupied by one or more members of a species for the purposes of breeding, rearing, staging, wintering or hibernating, and*
  - ii. *The area immediately around a dwelling place described in subclause (i) above that is essential for the purposes set out in that subclause*
- b) *In respect of a vascular plant species: the critical root zone surroundings a member of the species, and*
- c) *In respect of all other species: an area on which any member of a species directly depends in order to carry on its life processes”*

Endangered and threatened species identified in Table C.7 as having a moderate or high potential to occur on-site are discussed in the sub-sections below.

#### **6.4.1.1 Lake Sturgeon**

The lake sturgeon (*Acipenser fulvescens*) is a long-lived, bottom-dwelling fish species listed as threatened in Ontario under the Species Conservation Act (2025). It typically inhabits large rivers and lakes with soft substrates and moderate to fast currents and requires clean gravel or cobble beds for spawning.

No aquatic habitat suitable for this species is present within the subject property. The NHIC indicates the presence of lake sturgeon within 1 km of site. Any observations are more likely associated with the Ottawa River system and not within the unnamed watercourse or headwater drainage feature. Given the absence of suitable aquatic habitat on-site and the distance to the Ottawa River, lake sturgeon are not anticipated to be impacted by the proposed re-zoning and future land use.

#### **6.4.1.2 American Eel**

The American eel (*Anguilla rostrata*) is a migratory fish species listed as endangered in Ontario. It requires access to large rivers and lakes connected to the Atlantic Ocean for its complex life cycle, which includes spawning in the Sargasso Sea and migration through freshwater systems.

American eel were not observed on-site during the single field investigation, and no aquatic habitat suitable for this species is present within the subject property. The NHIC indicates the presence of American eel within the 1 km of site. Any observations are more likely to be associated with the Ottawa River system and not within the unnamed watercourse or headwater drainage feature. Given the absence of suitable aquatic habitat on-site and the distance to the Ottawa River, American eel are not anticipated to be impacted by the proposed re-zoning and future land use.

#### 6.4.1.3 Eastern Red Bat

Eastern red bat (*Lasiurus borealis*) are long distance migrants, travelling from the overwintering grounds in Mexico and the southern United States where they hibernate under leaf litter, with periods of torpor lasting several days (COSEWIC, 2023). In the summer the species makes long distance trips to summer ranges in the north, with the species showing high fidelity to small roosting areas (COSEWIC, 2023).

Based on the presence of suitable forested habitat within the study area, there is a potential for the eastern red bat to occur on the property, primarily for foraging or non-maternal roosting. Impacts to eastern red bat are primarily associated with habitat loss, encroachment, and increased wildlife-human interaction.

Mitigation measures intended to protect tri-colored bat from impacts of the proposed development are discussed in Section 7.

#### 6.4.1.4 Eastern Small-footed Myotis

Eastern Small-footed Myotis (*Myotis leibii*) primarily overwinter in caves and abandoned mines with low humidity and temperatures and stable microclimates (Humphrey, 2017). In comparison to other Ontario bat species, they are able to tolerate much colder temperatures, drier conditions and draftier locations for hibernating (Humphrey, 2017). During the spring and summer months, they utilize a variety of habitats for roosting, including under rocks or rock outcrops, in buildings, under bridges, or in caves, mines or hollow trees (Ontario, 2021a).

Based on the presence of suitable forested habitat within the study area, there is a potential for Eastern Small-footed Myotis to occur on the property, primarily for foraging or non-maternal roosting. Impacts to Eastern Small-footed Myotis are primarily associated with habitat loss, encroachment, and increased wildlife-human interaction.

Mitigation measures intended to protect Eastern Small-footed Myotis from impacts of the proposed development are discussed in Section 7.

#### 6.4.1.5 Hoary Bat

The hoary bat (*Lasiurus cinereus*) is a long distance migratory species, travelling from southern overwintering sites in the United States and Mexico, up to northern summer sites across Canada (COSEWIC, 2023). The species relies on forested habitats and clearing to carry out maternal roosting and foraging life processes (COSEWIC, 2023).

Based on the presence of suitable forested habitat within the study area, there is a potential for the hoary bat to occur on the property, primarily for foraging or non-maternal roosting. Impacts to hoary bat are primarily associated with habitat loss, encroachment, and increased wildlife-human interaction.

Mitigation measures intended to protect tri-colored bat from impacts of the proposed development are discussed in Section 7.

#### **6.4.1.6 Little Brown Myotis**

Little Brown Myotis (*Myotis lucifugus*) overwinter in caves and abandoned mines, they require highly humid conditions and temperatures that remain above the freezing mark (Ontario, 2021b). During the summer months, maternity colonies are often located in buildings or large-diameter trees. Little Brown Myotis roost in trees and buildings. Foraging occurs over water and along waterways, forest edges and in gaps in the forest. Open fields and clear-cuts are not typically utilized for foraging (COSEWIC, 2013).

Based on the presence of suitable forested habitat within the study area, there is a potential for there is a potential for Little Brown Myotis to occur on the property, primarily for foraging or non-maternal roosting. Impacts to Little Brown Myotis are primarily associated with habitat loss, encroachment, and increased wildlife-human interaction.

Mitigation measures intended to protect Little Brown Myotis from impacts of the proposed development are discussed in Section 7.

#### **6.4.1.7 Silver-haired Bat**

Silver-haired bat (*Lasionycteris noctivagans*) is a large-bodied insectivorous bat. The fur black to dark brown, often with silver or grey tips and is found across Canada in the summer months and during fall migration (COSEWIC, 2023).

The full extent of the Canadian range is not well known due to lack of survey efforts. The species is a long-distance migrant, travelling from overwintering sites in the southern United States and Mexico up to summer sites in Canada (COSEWIC, 2023). The species shows high fidelity to forested ecosystems with clearings, where summer maternal roosting and foraging occurs (COSEWIC, 2023).

Based on the presence of suitable forested habitat within the study area, there is a potential for the silver-haired bat to occur on the property, primarily for foraging or non-maternal roosting. Impacts silver-haired bat are primarily associated with habitat loss, encroachment, and increased wildlife-human interaction.

Mitigation measures intended to protect tri-colored bat from impacts of the proposed development are discussed in Section 7.

#### **6.4.1.8 Tri-colored Bat**

Tri-colored Bat (*Perimyotis subflavus*) overwinter in caves or mines, and have very rigid habitat requirements; they typically roosting the deepest parts where temperatures are the least variable,

and have the strongest correlation with humidity levels and warmer temperatures (COSEWIC, 2013). In the spring and summer, Tri-colored Bat utilize trees, rock crevices and buildings for maternity colonies. Foraging is mainly done over watercourses and streamside vegetation (COSEWIC, 2013).

Based on the presence of suitable forested habitat within the study area, there is a potential for the Tri-colored Bat to occur on the property, primarily for foraging or non-maternal roosting. Impacts to Tri-colored Bats are primarily associated with habitat loss, encroachment, and increased wildlife-human interaction.

Mitigation measures intended to protect tri-colored bat from impacts of the proposed development are discussed in Section 7.

#### **6.4.1.9 Black Ash**

Black ash (*Fraxinus nigra*) is a medium-sized tree that can reach heights of up to 27 m. It is distinguished by its compound leaves, typically made up of 9 stalkless, hairless leaflets, as well as its soft, corky bark.

The Canadian range for black ash extends from western Newfoundland to southeastern Manitoba (Ontario, 2023a). It is a shade-intolerant species that is typically found on moist to wet sites, including swamps, bogs and riparian areas.

A total of two young black ash trees were observed within along the headwater drainage feature within the forested habitat on-site (Ecosite: FOMM2-2). As per current guidance from the MECP and the SCA, black ash specimens require a 30 m construction setback. A black ash health assessment may be carried out to assess the candidacy of black ash specimen(s) for removal and potential compensation. A black ash inventory was not completed as part of this EIS. It is noted that no black ash occurs within proximity to the proposed cabin spaces. No black ash is anticipated to be impacted by the proposed re-zoning or future land use. As such, no impacts to black ash are anticipated from the proposed re-zoning or future land use activities.

Should any clearing be required to accommodate future cabin spaces, development, site alteration, maintenance, or access improvements, a targeted black ash and butternut survey shall be completed by a qualified professional prior to clearing. Where black ash are identified within or adjacent to the proposed clearing area, a health assessment, avoidance setback, and any required consultation, registration, permitting, or compensation measures shall be completed prior to construction or site alteration.

#### **6.4.1.10 Butternut**

Butternut (*Juglans cinerea*) is a relatively short lived, medium-sized tree that can reach heights of up to 30 m. It is easily distinguished by its compound leaves, made up of 11 to 17 leaflets, arranged in a feather-like pattern. Each leaflet is 9 to 15 centimetres in length. The bark is grey

and smooth on young trees, becoming more ridged with age. Butternut is a member of the walnut family and produces edible nuts in the fall.

The Canadian range for Butternut extends through southern Ontario into southern Quebec, and New Brunswick (COSEWIC, 2003). Butternut is a shade intolerant tree that is commonly found in riparian habitats, and sites in a regenerative state. Butternut can also be found on rich, moist, well-drained gravels, favouring those of limestone origin. Common associates of Butternut trees include: basswood, black cherry, beech, black walnut, elm, hickory, oak, red maple, sugar maple, yellow poplar, white ash and yellow birch.

A single butternut was observed on-site during the 2025 field investigations within suitable habitat of the deciduous forest community (Ecosite: FODM3-1). As per current guidance from the MECP and the SCA, butternut specimens require a 21 m construction setback. A butternut health assessment may be carried out to assess the candidacy of butternut specimen(s) for removal and potential compensation. A butternut inventory and health assessment was not completed as part of this EIS. It is noted the identified butternut is not in proximity to the cabin space and is not anticipated to be impacted. As such, no impacts to butternut are anticipated from the proposed re-zoning or future land use activities.

Should any clearing be required to accommodate future cabin spaces, development, site alteration, maintenance, or access improvements, a targeted butternut survey shall be completed by a qualified professional prior to clearing. Where butternut are identified within or adjacent to the proposed clearing area, a health assessment, avoidance setback, and any required consultation, registration, permitting, or compensation measures shall be completed prior to construction or site alteration.

#### **6.4.2 Species at Risk Act (Canada, 2002)**

SARA applies only to species listed on Schedule 1. Endangered and threatened species on Schedule 1 are protected automatically on federally owned lands. The Prohibitions of SARA do not apply to species of special concern. Under the general prohibitions of SARA, it is illegal to

- kill, harm, harass, capture, or take an individual of a species listed in Schedule 1 of SARA as endangered, threatened or extirpated;
- possess, collect, buy, sell or trade an individual of a species listed in Schedule 1 of SARA as endangered, threatened or extirpated; or
- damage or destroy the residence (e.g. nest or den) of one or more individuals of a species listed in Schedule 1 of SARA as endangered, threatened or extirpated, if a recovery strategy has recommended the reintroduction of that extirpated species.

These prohibitions apply to:

- all endangered, threatened and extirpated species listed in Schedule 1 of SARA when found on federal lands in a province, or lands under the authority of the Minister of the Environment or the Parks Canada Agency in a territory;
- all endangered, threatened and extirpated migratory birds listed in Schedule 1 of SARA and protected by the Migratory Birds Convention Act, 1994, anywhere they occur, including private lands, provincial lands and lands within a territory; or
- all endangered, threatened and extirpated aquatic species listed in Schedule 1 of SARA, anywhere they occur, including private lands, provincial lands and lands within a territory.

In addition to the general prohibitions, SARA outlines Critical Habitat for listed species through the development of a recovery strategy or action plan. Critical habitat for SARA Schedule 1 species is automatically protected on federally owned lands. On non-federal lands, the critical habitat protections extend automatically to aquatic species. Critical habitat for non-aquatic Schedule 1 species is not automatically protected on provincially or privately owned lands.

#### **6.4.2.1 Migratory Bird Schedule 1 Species**

No avian Schedule 1 threatened or endangered species have been identified as having a potential to occur on-site.

#### **6.4.2.2 Aquatic Schedule 1 Species**

No aquatic Schedule 1 threatened or endangered species have been identified as having a potential to occur on-site.

### **6.5 Cumulative Impacts**

Cumulative impacts to the natural environment at the site are anticipated to include a minor increase in habitat fragmentation, increased human presence, increased wildlife and human interaction and increased noise.

Cumulative impacts such as those listed above can be mitigated by implementing the recommended mitigation measures outlined in Section 7 below.

## **7.0 RECOMMENDED AVOIDANCE AND MITIGATION MEASURES**

The following avoidance and mitigation measures have been recommended by GEMTEC to minimize or eliminate potential environmental impacts identified in Section 6. As such, the following avoidance and mitigation measures should be enforced throughout the development through application of Site Plan Controls.

For the purpose of this report, a setback is defined as the minimum required distance between any structure, development or disturbance and a specified line. A buffer is defined as the area located between a natural heritage feature and the prescribed setback. For the purpose of the following subsections, buffers should be located between natural heritage features and lands subject to development or alteration, be permanently vegetated by native or non-invasive, self sustaining vegetation and protect the natural heritage feature against the impact of the adjacent land use.

Vegetated buffers, particularly buffers that are vegetated with a mix of grassy herbaceous vegetation and shrubby or woody vegetation are most effective in mitigating impacts associated with anthropogenic activities in adjacent lands (Beacon, 2012). In the subsections below, where possible, literature references for studies used as the basis of the recommended buffer widths are provided.

### **7.1 Significant Woodlands**

Woodland removal will be managed and minimized through municipal site plan control, which will regulate building placement, access, grading, and vegetation retention for the proposed commercial developments. It is understood that lot layouts will be finalized during individual site plan application. Based on the current development concept, impacts to woodlands are anticipated to be minimal and primarily limited to potential minor selective clearing of understory vegetation associated with final cabin placement and ongoing site maintenance.

As discussed in Section 6.1 above, any interaction with the identified significant woodlands is expected to be confined to edge areas adjacent to the proposed development footprint, with minimal tree removal and no anticipated loss of contiguous canopy cover. No broad interior woodland disturbance is anticipated. Where minor effects occur, they are expected to be limited to localized edge disturbance and selective understory clearing and are not anticipated to measurably reduce the overall ecological function or connectivity of the significant woodland.

To help maintain and enhance the ecological functions currently provided by the identified significant woodlands, existing edge trees and vegetation should be retained wherever feasible, and any minor disturbed areas should be stabilized through supplemental native tree and shrub plantings as appropriate. In addition, the approximately 2,000 white pine saplings planted through the SNCA program along the headwater drainage feature will contribute to long-term canopy

development, improved edge buffering, and enhanced wildlife movement opportunities within this portion of the site.

## **7.2 Fish Habitat**

No negative impacts on the integrity of fish habitat on-site is anticipated as a result of the proposed development if all mitigation measures recommended below area enacted and best management practices followed. Fish habitat can be protected against potential impacts of the proposed development through the implementation of a construction setback.

A minimum 15 m setback from the headwater drainage feature is recommended and is illustrated on Figure A.6 of Appendix A. The recommended 15 m setback provides sufficient protection for mitigating water quality impacts and human disturbances.

As described in Section 6.3, one of the existing cabins occurs within the 15 m setback. The cabin is present within an already clear area, with very little tree clearing completed to accommodate the structure. No further clearing is anticipated within the 15 m setback. All remaining finalized cabins will be placed outside of the 15 m setback. Further, it is noted that as part of unrelated private engagement, the property owner has engaged with SNCA to replant approximately 2000 trees on the south side of the drainage feature. The mature forested hedgerow is anticipated to provide a sufficient vegetated buffer for the headwater drainage feature.

It is recommended that should any modifications occur to cabin two, consideration should be given to moving the structure outside of the 15 m setback.

## **7.3 Significant Wildlife Habitat**

The 15 m setback presented above for the protection of fish habitat on-site are sufficient to protect *candidate* SWH identified on-site.

To further protect herptiles species of special concern within the study area, exclusion fencing should be installed around the entirety of any construction or maintenance areas prior to activities commencing to prohibit the movement of turtles and amphibians into work areas. Exclusion fencing should follow guidelines established in *Species at Risk Branch Best Practices Technical Note – Reptile and Amphibian Exclusion Fencing* (OMNRF, 2013b).

Additional mitigation measures, timing windows, and best practices to protect SWH and associated species are provided in Section 7.5 below.

## **7.4 Species at Risk**

Based on the findings of the impact assessment in Section 6, the proposed project is not anticipated to result in direct adverse effects to protected species or protected habitat as defined under the Act. As such, registration of project activities in the Species Conservation Registry is

not anticipated to be required at this time. Should project design, construction methods, or applicable regulations change, the need for registration or permitting would be re-evaluated.

General mitigation measures anticipated for the protection of species at risk include;

Vegetation removal should occur outside of the combined wildlife active season, of March 15 – November 30, of any given year, for the protection of bats, turtles, and birds.

All construction staff working on-site should be provided SAR training to identify species at risk which a potential to occur on-site including SAR bats. Training will also outline the stop work procedures and MECP reporting/consultation prior to resuming work.

During construction if any PSO is identified on-site, all work should stop and a qualified professional and the MECP should be contacted for next steps. SAR sightings should be reported to the MECP and the NHIC.

Following construction completion, property owners will be provided with or access to information and awareness packages for SAR that have the potential to occur on the property. Information and awareness packages will include information on species identification, life-history, and habitat use for all species at risk with a potential to occur on-site, including PSO bats. Information packages will also include contact/reporting options to the MECP and NHIC is species are encountered.

Species specific mitigation measures anticipated to be implemented are discussed in the subsections below.

#### **7.4.1 Eastern Red Bat, Eastern Small-footed Myotis, Hoary Bat, Little Brown Myotis, Silver-haired Bat, and Tri-Colored Bat**

As no critical habitat (i.e. overwintering caves or crevasses, or maternity roosts) were identified on-site, in accordance with MECP best management practices, to protect roosting and foraging bats, tree removal where required shall take place outside of the spring and summer active season (typically March 15 to November 30), when bats are more likely to be using forest habitat. If vegetation clearing cannot avoid the active season, then consultation with the MECP is needed to determine whether the project will require a registration.

To further protect bat species during vegetation removal, trees and vegetation (during the appropriate timing window) should be cleared in stages, working from the outer edge, in towards the centre, in order to provide wildlife in the forest time to migrate out. As the proposed sites are already in use/prepared, any additional clearing is anticipated to be limited to minor selective pruning or removal of small individual trees not occupied for breeding, rearing, staging, or wintering. Based on MECP guidance selective small scale tree removal is not likely to negatively impact SAR bats or SAR bat habitat.

In GEMTECs experience on similar development applications and consultation with the MECP for projects and properties of similar size and scale, the above mitigation/avoidance measures are sufficient to ensure no negative impacts to SAR bats. In eastern Ontario habitat is not a limiting factor, as such the MECP recommends the use of avoidance timing window for clearing of trees (greater than 10 cm in diameter) in order to avoid impacts to SAR bat species. As long as timing windows can be adhered to, the project will not impact SAR bats, and it is GEMTECs opinion that no further consultation with the MECP is required.

Should any components of the proposed project require tree clearing between March 15 and November 30, further consultation with the MECP is required.

#### **7.4.2 Black Ash and Butternut**

Black ash and butternut were identified on-site during the field investigation; however, the identified specimens are not located within the proposed cabin areas and are not anticipated to be impacted by the proposed re-zoning, current cabin layout, or anticipated low-impact commercial cabin use. As such, no direct impacts to black ash or butternut are currently anticipated.

However, any future clearing required to accommodate cabin spaces, development, site alteration, maintenance, access improvements, or any other vegetation removal shall require a targeted black ash and butternut survey completed by a qualified professional prior to clearing. Where black ash or butternut are identified within or adjacent to the proposed clearing area, the appropriate species-specific health assessment, avoidance setback, and any required consultation, registration, permitting, or compensation measures shall be completed prior to construction, clearing, or site alteration.

#### **7.5 Wildlife**

The following avoidance and mitigation measures are provided in effort to minimize impacts to on-site and off-site wildlife:

- Vegetation removal if required should occur outside of March 15 - November 30 to avoid the key breeding bird period and bat summer active season. The timing windows provides protection of migratory birds, roosting bats and avoids contravention of the Migratory Bird Convention Act and Species Conservation Act.
- If vegetation clearing activities must take place during the aforementioned timing window than an avian nest sweep shall be conducted by a qualified professional. The vegetation removal window permitted by any given avian nest sweep is valid for 48 hours from the time of the exercise.
- To minimize impacts on the natural, forested area surrounding the proposed development, outdoor lighting within the development should be limited. To minimize light pollution following construction, the use of bright, external lighting (e.g. flood lights) should be

avoided. Development plans should incorporate dark night lighting in order to minimize light pollution.

- Cover all stock piled material with a geotextile to prevent turtles from nesting in the material between May 1 and August 1 of any year.
- Should any species at risk be discovered throughout the course of the proposed works, the species at risk biologist with the local MECP district shall be contacted immediately and operations ceased to avoid any negative impacts to species at risk or their habitat until further direction is provided by the MECP.

## **7.6 Best Practice Measures for Mitigation of Cumulative Impacts**

The following best practice measures are provided for the mitigation of cumulative impacts resulting from any general construction, landscaping, and development activities;

- To protect trees identified to be retained during future activities, the Critical Root Zone (CRZ) should be identified and fenced. The CRZ is defined as 10 cm from the base of the tree for every centimetre in diameter of the tree trunk measured at breast height.
- In accordance with Section 5.5.6.2 of the County OP, vegetation on-site is to remain in as natural a state as possible outside of the proposed development area.
- Maintain as much permeable surface as possible in future development plans to minimize the generation of stormwater runoff.
- Silt fencing should be installed along all setbacks to provide visual demarcation of the setbacks and to prevent machinery encroachment and sediment transport.
- Erosion and sediment control measures should be maintained until all disturbed ground has been permanently stabilized.

In effort to offset the effect of vegetation clearing, consideration should be given to landscape planting with native tree species indicative of the Great Lakes – St. Lawrence Forest Region, such as White Cedar, White Spruce, Red Maple, and Red Oak.

A Tree Protection Plan (TPP) has not been indicated as required by the approval authority for the zoning amendment. As noted above, the proponent has engaged with the SNCA separately from the proposed development and has completed a substantial planting program of white pine along the western property boundary. Further, the cabin sites have been prepped with minimal clearing and will be upkept primarily via pruning. Given this, it is GEMTECs opinion that the proposed development will have a negligible impact on tree retention, and a TPP is not required.

## 8.0 CONCLUSIONS

The proposed project supported by this EIS is a zoning by-law amendment to permit the use of commercial cabin rentals on the approximately 10.44 ha property located at 2431 Old Highway 17 in Rockland, Ontario. The site currently has three low-impact camp spaces, two of which are currently occupied by existing finalized small wooden cabins, and one by a temporary tent setup. An additional eight finalized cabins are proposed. All existing and proposed camp areas are to be located within existing clearings and stabilized portions of the property.

Based on the results of the impact analysis, impacts to the natural environment are anticipated to be minimal. Provided that the mitigation measures recommended in Section 7 are implemented as proposed, no significant residual negative impacts are anticipated from the proposed commercial cabin use.

Following review of the information pertaining to the natural heritage features of the site, the following general conclusions are provided by GEMTEC in regard to the Environmental Impact Statement.

- No significant negative impacts to natural heritage features identified on-site, including significant woodlands, provincially significant and local unevaluated wetlands, fish habitat, or significant wildlife habitat, are anticipated from future commercial tourism operations.
- The proposed project complies with the natural heritage policies of the Provincial Planning Statement.
- The proposed development complies with the natural heritage policies of the United Counties of Prescott and Russell Official Plan.

## 9.0 LIMITATION OF LIABILITY

This report and the work referred to within it have been undertaken by GEMTEC Consulting Engineers and Scientists Limited (GEMTEC), and prepared for Kayla Gallant and is intended for the exclusive use of Kayla Gallant. This report may not be relied upon by any other person or entity without the express written consent of GEMTEC and Kayla Gallant. Nothing in this report is intended to provide a legal opinion.

The investigation undertaken by GEMTEC with respect to this report and any conclusions or recommendations made in this report reflect the best judgements of GEMTEC based on the site conditions observed during the investigations undertaken at the date(s) identified in the report and on the information available at the time the report was prepared.

This report has been prepared for the application noted and it is based, in part, on visual observations made at the site, all as described in the report. Unless otherwise stated, the findings contained in this report cannot be extrapolated or extended to previous or future site conditions, or portions of the site that were unavailable for direct investigation.

Should new information become available during future work or other studies, GEMTEC should be requested to review the information and, if necessary, re-assess the conclusions presented herein.

We trust this report provides sufficient information for your present purposes. If you have any questions concerning this report, please do not hesitate to contact our office.

Sincerely,



Luca Fiorindi, B.A., G.Cert.  
Junior Biologist



Taylor Warrington  
Biologist

## 10.0 REFERENCES

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## **APPENDIX A**

Report Figures

Figure A.1 – Site Location

Figure A.2 – Site Layout

Figure A.3 – Vegetation Communities

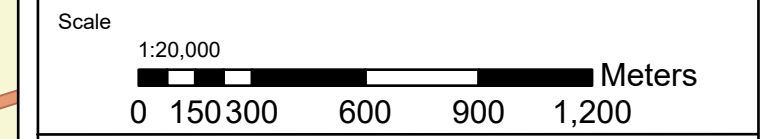
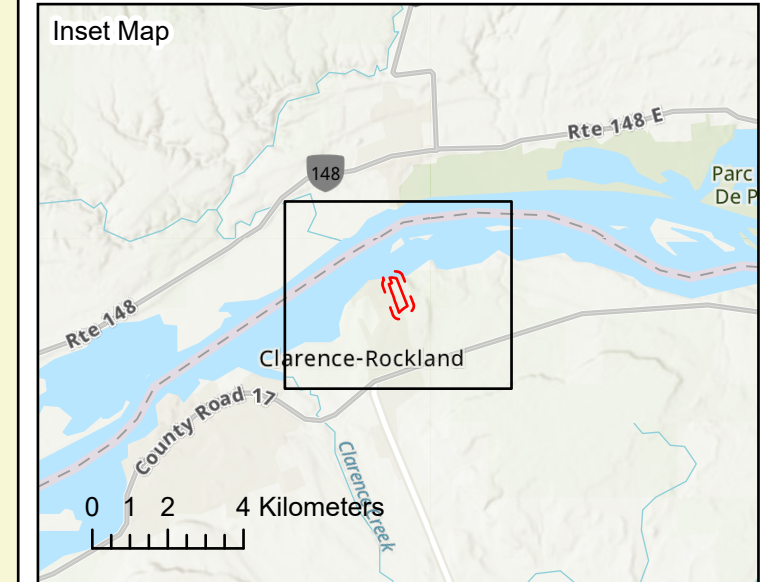
Figure A.4 – Natural Heritage Features and  
Proposed Development

Figure A.5 – Mitigation Measures



**Legend**

- Study Area
- Property Boundary



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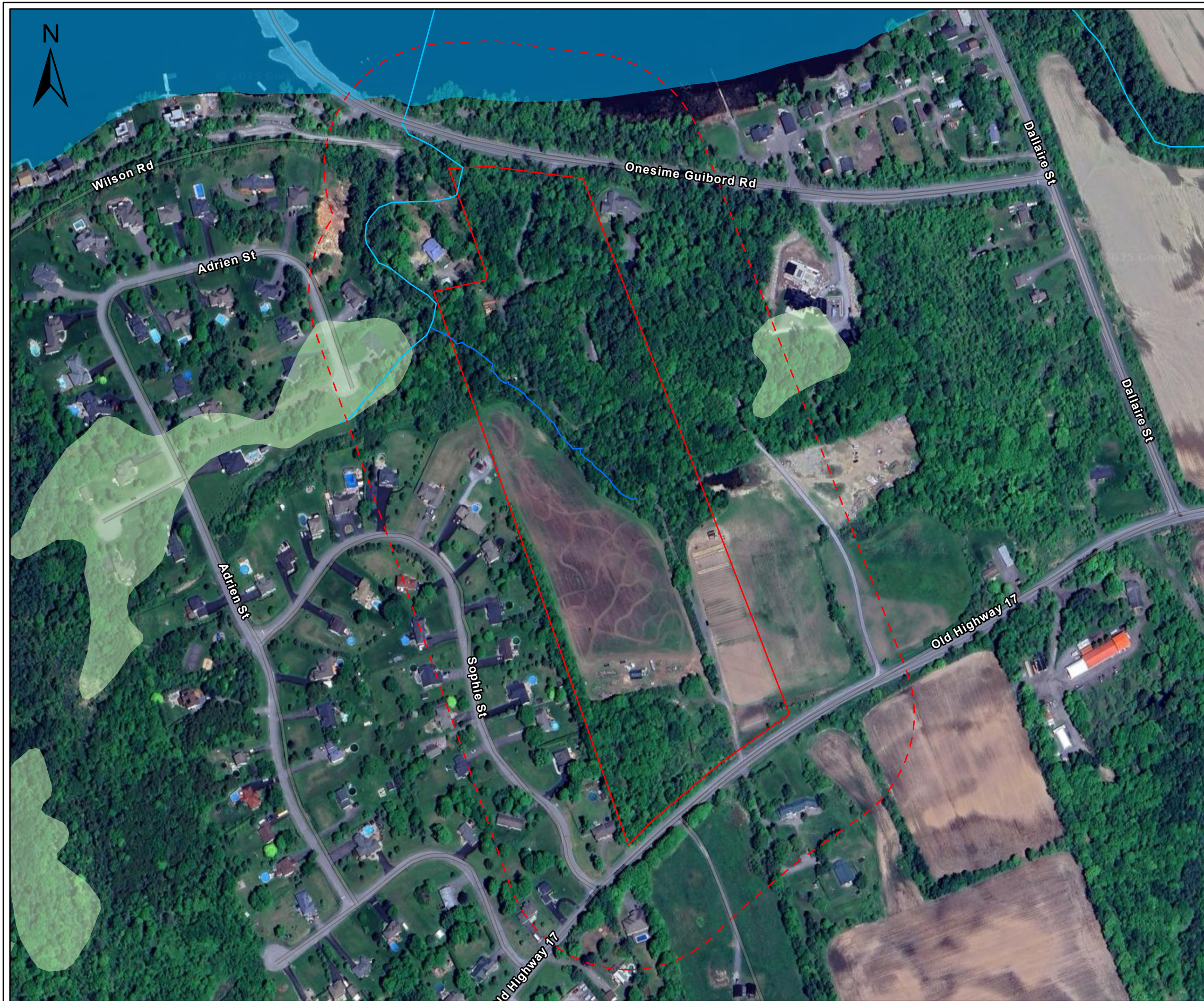
Client: <b>Consilio Planning Services</b>	Project: 104729.001
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Location  
**2431 Old Highway 17, Rockland  
 United Counties of Prescott and Russell, Ontario**

Drwn By: LF	Chkd By: TW	<b>Site Location</b>
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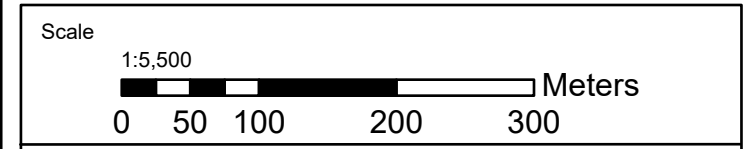
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 Service Layer Credits: World Street Map: Province of Ontario, Esri Canada, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, NRCan, Parks Canada  
 World Topographic Map: Province of Ontario, Esri Canada, Esri, TomTom, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA, NRCan, Parks Canada



**Legend**

- Study Area
- Property Boundary
- Local Wetlands
- Headwater Drainage Feature
- Watercourse
- Waterbody



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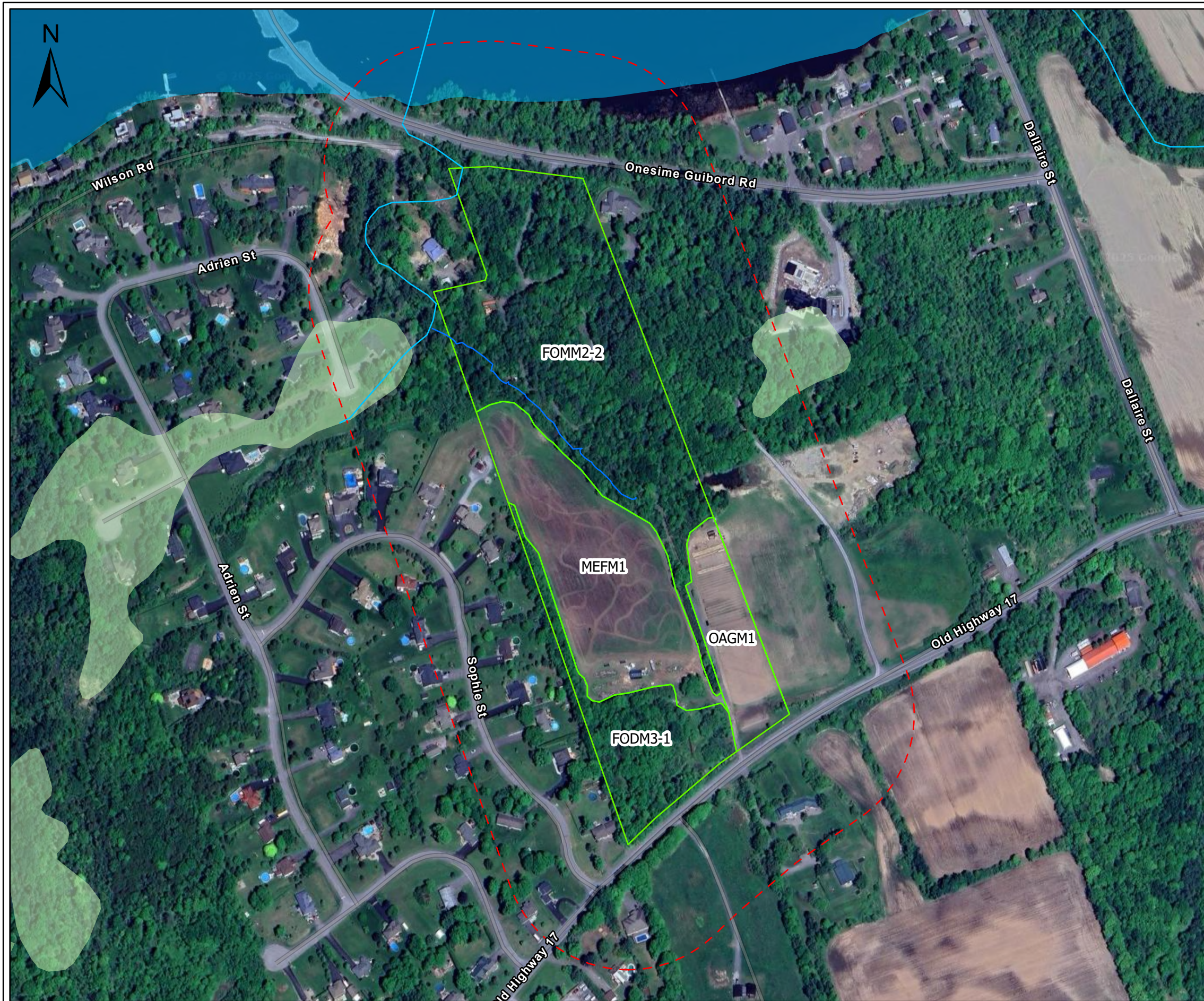
Client: <b>Consilio Planning Services</b>	Project: 104729.001
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Location  
**2431 Old Highway 17, Rockland  
United Counties of Prescott and Russell, Ontario**

Drwn By: LF	Chkd By: TW	<b>Site Layout</b>
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Date: October 2025	Rev. 0	<b>Figure: A.2</b>
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**Legend**

- Study Area
- Property Boundary
- Local Wetlands
- Headwater Drainage Feature
- Watercourse
- Waterbody
- Ecological Land Classification

FOMM2-2 - Dry to Fresh White Pine Sugar Maple Mixedwood Forest  
 FODM3-1 - Dry to Fresh Poplar Deciduous Forest  
 MEFM1 - Dry to Fresh Forb Meadow  
 OAGM1 - Annual Row Crop

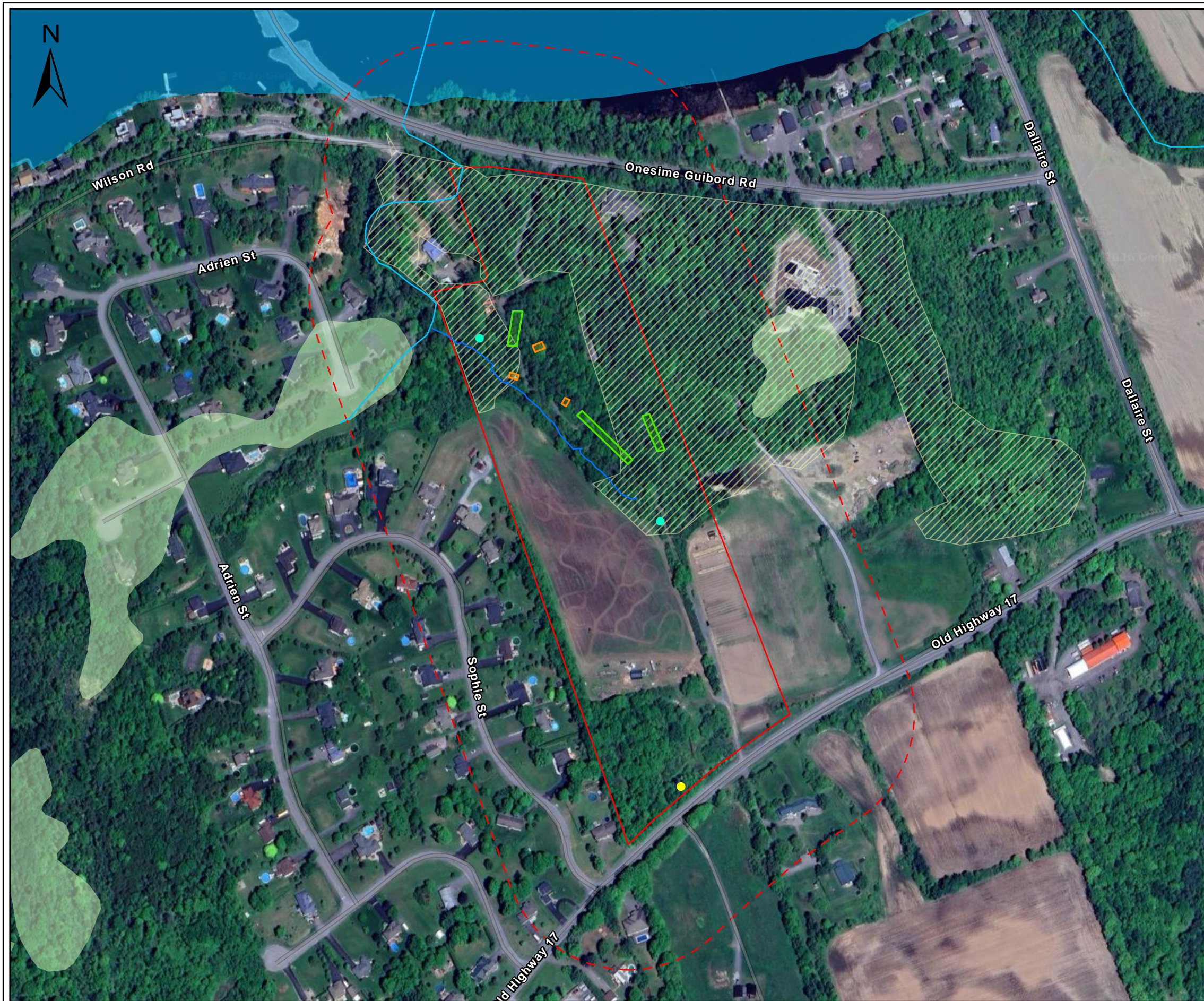
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Scale  
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Client: <b>Consilio Planning Services</b>	Project: 104729.001	
Location 2431 Old Highway 17, Rockland United Counties of Prescott and Russell, Ontario		
Drwn By: LF	Chkd By: TW	<b>Ecological Land Classification</b>
Date: October 2025	Rev. 0	<b>Figure: A.3</b>
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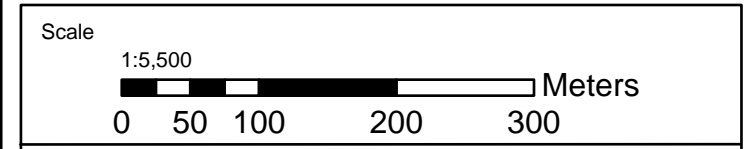


**Legend**

- Study Area
- Property Boundary
- Local Wetlands
- Headwater Drainage Feature
- Watercourse
- Waterbody
- Butternut
- Black Ash
- Significant Woodlands (UCPR Official Plan - Schedule B)

**Campsite Location**

- Existing Cabin Area
- Proposed Cabin Area



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Location  
**2431 Old Highway 17, Rockland  
United Counties of Prescott and Russell, Ontario**

Drwn By: LF	Chkd By: TW	Natural Heritage Features and Proposed Development
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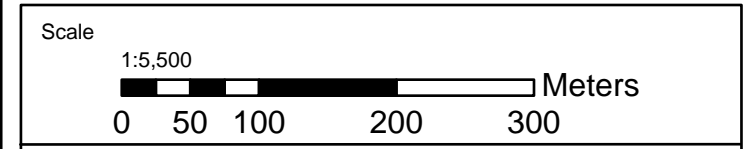


**Legend**

- Study Area
- Property Boundary
- Local Wetlands
- Headwater Drainage Feature
- Watercourse
- Waterbody
- Black Ash (30 m Setback)
- Butternut (21 m Setback)
- Significant Woodlands (UCPR Official Plan - Schedule B)
- Headwater Drainage Feature 15 m Setback

**Campsite Location**

- Existing Cabin Area
- Proposed Cabin Area



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Location  
**2431 Old Highway 17, Rockland  
United Counties of Prescott and Russell, Ontario**

Drwn By: LF	Chkd By: TW	<b>Mitigation Measures</b>
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Date: May 2026	Rev. 1	<b>Figure: A.5</b>
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## **APPENDIX B**

Site Photographs



Site Photograph 1 – Dry to Fresh White Pine –  
Sugar Maple Mixedwood Forest (FOMM2-2)



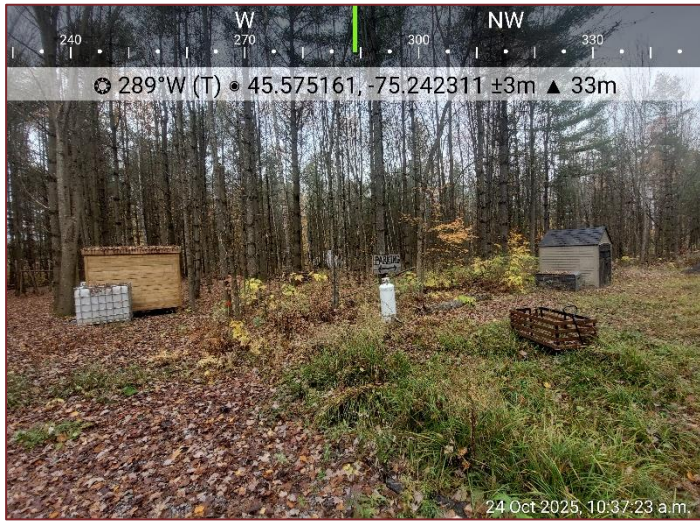
Site Photograph 2 – Dry to Fresh White Pine –  
Sugar Maple Mixedwood Forest (FOMM2-2)



Site Photograph 3 – Dry to Fresh White Pine –  
Sugar Maple Mixedwood Forest (FOMM2-2)



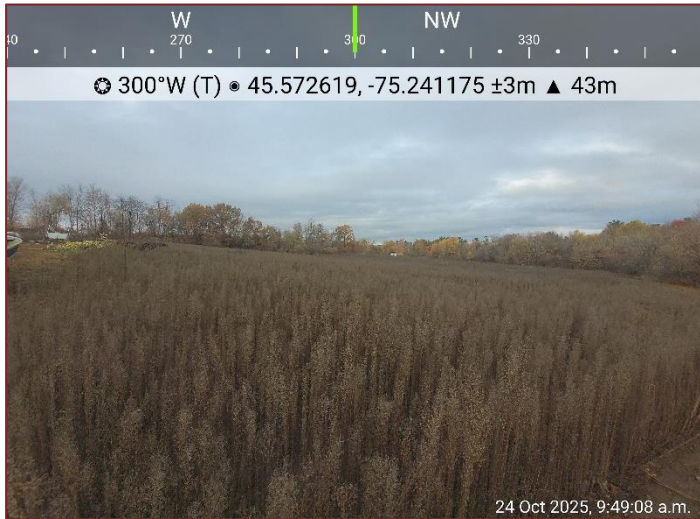
Site Photograph 4 – Dry to Fresh White Pine –  
Sugar Maple Mixedwood Forest (FOMM2-2)



Site Photograph 5 – Dry to Fresh White Pine – Sugar Maple Mixedwood Forest (FOMM2-2)



Site Photograph 6 – Dry to Fresh Poplar Deciduous Forest (FODM3-1)



Site Photograph 7 – Dry to Fresh Forb Meadow (MEFM1)



Site Photograph 8 – Open Agriculture (OAGM1)



Site Photograph 9 – Unnamed Watercourse



Site Photograph 10 – Unnamed Watercourse Culvert Inlet



Site Photograph 11 – Unnamed Watercourse Culvert Outlet



Site Photograph 12 – Headwater Drainage Feature



## **APPENDIX C**

Report Summary Tables

**TABLE C.1  
SUMMARY OF WILDLIFE OBSERVED ON-SITE AND ADJCENT TO SITE**

Common Name	Scientific Name	S-Rank	Evidence
<b>Avian Species</b>			
American crow	<i>Corvus brachyrhynchos</i>	S5	Heard calling
American goldfinch	<i>Spinus tristis</i>	S5	Heard calling
American tree sparrow	<i>Spizelloides arborea</i>	S5	Heard calling
Black-capped chickadee	<i>Poecile atricapillus</i>	S5	Heard calling
Blue jay	<i>Cyanocitta cristata</i>	S5	Heard calling
Golden-crowned kinglet	<i>Regulus satrapa</i>	S5	Heard calling
Song sparrow	<i>Melospiza melodia</i>	S5	Heard calling
White-crowned sparrow	<i>Zonotrichia leucophrys</i>	S5B,S3N	Heard calling
<b>Mammalian Species</b>			
Eastern gray squirrel	<i>Sciurus carolinensis</i>	S5	Observed on-site

**Notes:**

Subnational Conservation Status Ranks:

S1 - Critically Imperilled, at very high risk of extirpation, very few populations or occurrences or very steep population decline

S2 - Imperilled, at high risk of extirpation, few populations or occurrences or steep population decline

S3 - Vulnerable, at moderate risk of extirpation, relatively few populations or occurrences, recent and widespread population decline

S4 - Apparently Secure, at a family low risk of extirpation, many populations or occurrences, some concern for local population decline

S5 - Secure, at very low or no risk of extirpation, abundant populations or occurrences, little to no concern for population decline

Qualifiers:

S#B - Conservation status refers to the breeding population of the species

S#N - Conservation status refers to the non-breeding population of the species

S#M - Migrant species, conservation status refers to the aggregating transient population of the species

**TABLE C.2  
SCREENING RATIONALE FOR HABITATS OF SEASONAL CONCENTRATION AREAS**

<b>Wildlife Habitat</b>	<b>Further Considered in EIS</b>	<b>Rationale</b>
Waterfowl Stopover and Staging Areas	No	No suitable terrestrial or wetland habitat on-site or within the study area to support waterfowl stopover SWH. No waterfowl stopover areas are mapped within the greater study area by the NHIC.
Shorebird Migratory Stopover Area	No	No suitable habitat within the study area to support shorebird migratory concentration areas. No shorebird migratory concentration areas are mapped on-site by the NHIC. Shorebird stopover sites are typically well-known and have a long history of use.
Raptor Wintering Area	No	The site does not provide a suitable combination of forest and field habitats.
Bat Hibernacula	No	Cave and crevice habitat is not present on-site or within the study area.
Bat Maternity Colonies	Yes	The forested habitats on-site may support candidate SWH for bat maternity colonies.
Turtle Wintering Area	No	No suitable aquatic habitat within the study area to support turtle wintering habitat.
Reptile Hibernaculum	No	No structures such as large rock piles, bedrock outcrops, cervices or other karstic features have been identified on-site.
Colonial Bird Nesting Habitat	No	No suitable habitat located on-site or within the study area to support colonial bird nesting.
Migratory Butterfly Stopover Area	No	The site is not located within 5 km of Lake Ontario and therefore does not meet the defining criteria.
Landbird Migratory Stopover Area	No	The site is not located within 5 km of Lake Ontario and therefore does not meet the defining criteria.
Deer Yarding Areas and Winter Congregation Areas	No	No suitable stands of forested habitat present on-site, furthermore, as outlined in the Significant Wildlife Habitat Criteria Schedules (OMNRF, 2015) winter deer yards and deer management are an MNRF responsibility. Based on review of publically available data on Land Information Ontario Geo-hub, no Stratum I or Stratum II deer yards has been identified on-site or within the broader study area.

**TABLE C.3  
SCREENING RATIONALE FOR SPECIALIZED WILDLIFE HABITATS**

<b>Specialized Wildlife Habitat</b>	<b>Further Considered in EIS</b>	<b>Rationale</b>
Waterfowl Nesting Area	No	No suitable wetland habitat within the study area to support SWH presence.
Bald Eagle and Osprey Nesting, Foraging and Perching Habitat	Yes	The property contains suitable stands of mature trees and is close proximity to the Ottawa River. Nesting sites for these species are uncommon in Ecoregion 6E (MNRF, 2012).
Woodland Nesting Raptor Habitat	No	No suitable areas of contiguous habitat within the study area.
Turtle Nesting Habitat	No	No suitable sandy, sunny areas adjacent to appropriate ELC code habitats or water features to support turtle nesting habitat.
Seeps and Springs	No	No seeps or springs are present on-site.
Woodland Amphibian Breeding Habitat	Yes	The local wetlands off-site and woodlands on-site may provide suitable habitat to support candidate woodland amphibian breeding SWH.
Wetland Amphibian Breeding Habitat	No	No wetland habitat on-site to support wetland amphibian breeding SWH.
Woodland Area-Sensitive Bird Breeding Habitat	No	Woodland area-sensitive birds require interior forest habitat located >200 m from the forest edge in large (>30 ha) forest stands. No woodland habitat present within the study area.

**TABLE C.4  
SCREENING RATIONALE FOR HABITAT FOR SPECIES OF CONSERVATION CONCERN**

General Habitats of Species of Conservation Concern	Further Considered in EIS	Rationale
Marsh Breeding Bird Habitat	No	No suitable wetland habitat on-site to support marsh breeding bird habitat.
Open Country Breeding Bird Habitat	No	Suitable open country breeding bird habitat consists of large grassland areas (includes natural and cultural fields and meadows) >30 ha. The meadow habitat on-site does not meet the area threshold requirements (< 5 ha).
Shrub/Early Successional Breeding Bird Habitat	No	Candidate early successional breeding bird habitat typically includes fallow fields transitioning to early successional forest habitats that are > 10 ha but have not been actively used for farming. The potentially suitable shrub habitat on-site does not meet the area threshold requirements (< 5 ha).
Terrestrial Crayfish Habitat	No	Terrestrial crayfish are only found within southwestern Ontario (MNR, 2012).
Special Concern and Rare Wildlife Species	Yes	Occurrence data from the NHIC indicates the following species of special concern as potentially present within 1 km of site; river redbreast, silver lamprey, and channel darter. No species of special concern were observed within the study area during the field investigation.

**TABLE C.5  
SCREENING RATIONALE FOR ANIMAL MOVEMENT CORRIDORS**

<b>General Habitats of Species of Conservation Concern</b>	<b>Further Considered in EIS</b>	<b>Rationale</b>
Amphibian Movement Corridor	No	No wetland amphibian breeding habitat present on-site.
Deer Movement Corridor	No	No stratum I or II winter deer yards have been identified on-site by the OMNRF.

**TABLE C.6  
SCREENING RATIONALE FOR POTENTIAL SPECIES AT RISK ON-SITE OR WITHIN STUDY AREA**

Species	SCA Status (PSO Listing)	COSSARO Status	MBCA	SARA Schedule 1 Status	Habitat Use	Probability of Occurrence On-Site and in Study Area	Rationale
<b>Avian</b>							
Bank Swallow	Not Protected	THR	Yes	THR	Colonial nester, burrows in eroding silt, to sand banks, sand pit walls, etc.	Low	Suitable habitat not present on-site or within study area. No occurrence records for species within 1 km of site. Species was not observed during site investigations.
Barn Swallow	Not Protected	SC	Yes	THR	Nests in barns and other semi-open structures. Forages over open fields and meadows.	Low	Suitable anthropogenic structures within the study area. The NHIC database indicates occurrence records for species within 1 km of site. Species was not observed during site investigations.
Bobolink	Not Protected	THR	Yes	THR	Nests in dense tall grass fields and meadows, low tolerance for woody vegetation.	Low	No suitable grassland habitat within the study area. No occurrence records for species within 1 km of site. Species was not observed during site investigations.
Canada Warbler	Not Protected	SC	Yes	THR	Prefers wet forests with dense shrub layers	Low	No suitable wet forest habitat on-site to support species. No occurrence records for species within 1 km of site. Species was not observed during site investigations.
Cerulean Warbler	Not Protected	THR	Yes	END	Prefers mature deciduous forest habitat.	Low	Suitable woodland habitat may be present on-site. No occurrence records for species within 1 km of site. Species was not observed during site investigations.
Chimney Swift	Not Protected	THR	Yes	THR	Nests in traditional-style open brick chimneys.	Low	No suitable nesting structures on-site or within broader study area.
Common Nighthawk	Not Protected	SC	Yes	SC	Nests in a variety of open sites: beaches, fields and grave rooftops.	Low	Suitable open habitat conditions on-site to support species presence. No occurrence records for species within 1 km of site. Species was not observed during site investigations.
Eastern Meadowlark	Not Protected	THR	Yes	THR	Nests and forages in dense tall grass fields and meadows, higher tolerance to woody vegetation.	Low	No suitable grassland habitat within the study area. No occurrence records for species within 1 km of site. Species was not observed during site investigations.
Eastern Whip-poor-will	Not Protected	SC	Yes	THR	Nests on the ground in open deciduous or mixed woodlands with little underbrush, and bedrock outcrops.	Low	Suitable woodland habitat may be present on-site. No occurrence records for species within 1 km of site. Species was not observed during site investigations.
Eastern Wood-Pewee	Not Protected	SC	Yes	SC	Woodland species, often found near clearings and edge habitat.	Low	Suitable woodland habitat may be present on-site. No occurrence records for species within 1 km of site. Species was not observed during site investigations.
Evening Grosbeak	Not Protected	SC	Yes	SC	Nests in trees or large shrubs, preference to large coniferous forests, will use deciduous. Overwinters in Ottawa.	Low	Suitable woodland habitat may be present on-site. No occurrence records for species within 1 km of site. Species was not observed during site investigations.
Golden Eagle	END	END	No	Not Listed	Nests on remote, bedrock cliffs, overlooking large burns, lakes or tundras	Low	Suitable nesting habitat does not occur on-site.
Golden-winged Warbler	Not Protected	SC	Yes	THR	Ground nesting, edge species. Breeds in successional scrub habitats surrounded by forests.	Low	No suitable habitat on-site to support the species. No occurrence records for species within 1 km of site. Species was not observed during site investigations.
Grasshopper Sparrow	Not Protected	SC	Yes	SC	Ground-nesting grassland species. Prefers fields with low sparse vegetation on sand, alvars or poor soils.	Low	No suitable grassland habitat within the study area. No occurrence records for species within 1 km of site. Species was not observed during site investigations.
Henslow's Sparrow	Not Protected	END	Yes	END	Prefers open, moist, tallgrass fields.	Low	No suitable grassland habitat within the study area. No occurrence records for species within 1 km of site. Species was not observed during site investigations.
Least Bittern	Not Protected	THR	Yes	THR	Prefers marshes, shrub swamps, usually near cattails	Low	No suitable marsh habitat present on-site. No occurrence records for species within 1 km of site. Species was not observed during site investigations.
Lesser Yellowlegs	THR	THR	Yes	Not Listed	Ottawa Migrant. Breeding is limited to Alaska and northern Canada. During winter and migration uses coastal salt marshes, estuaries and ponds, lakes, freshwater wetlands, anthropogenic wetlands.	Low	No suitable wetland or aquatic habitat within the study area. No occurrence records for species within 1 km of site. Species was not observed during site investigations.
Loggerhead Shrike	Not Protected	END	Yes	END	Prefers grazed pastures with short grass and scattered shrubs, especially hawthorn.	Low	No suitable grassland habitat within the study area. No occurrence records for species within 1 km of site. Species was not observed during site investigations.
Olive-sided Flycatcher	Not Protected	SC	Yes	SC	Forest edge species, forages in open areas from high vantage points in trees.	Low	Suitable woodland habitat may be present on-site. No occurrence records for species within 1 km of site. Species was not observed during site investigations.
Peregrine Falcon	Not Protected	SC	No	Not Listed	Nests on cliffs near water and on more anthropogenic structures such as tall buildings, bridges, and smokestacks.	Low	Suitable nesting habitat does not occur on-site. Site lacks suitable high topography component.
Red-headed Woodpecker	Not Protected	END	Yes	END	Prefers open deciduous woodlands, particularly those dominated by oak and beech.	Low	Suitable woodland habitat may be present on-site. No occurrence records for species within 1 km of site. Species was not observed during site investigations.
Rusty Blackbird	Not Protected	SC	No	SC	Wet wooded or shrubby areas (nests at edges of Boreal wetlands)	Low	No suitable habitat on-site to support the species. No occurrence records for species within 1 km of site. Species was not observed during site investigations.
Short-eared Owl	THR	THR	No	SC	Ground nester, prefers open habitats, fields and marshes.	Low	No suitable open field habitat present on-site. No occurrence record for species within 1 km of site. Species was not observed during site investigations.
Wood Thrush	Not Protected	SC	Yes	SC	Prefers deciduous or mixed woodlands.	Low	Suitable woodland habitat may be present on-site. No occurrence records for species within 1 km of site. Species was not observed during site investigations.
<b>Mammalian</b>							
Eastern Red Bat	END	END	N/A	Not Listed	Roosts in tree foliage; overwinters in leaf litter. Do not roost in anthropogenic structures.	Moderate	Potentially suitable forested habitat on-site to support species presence.
Eastern small-footed Myotis	END	END	N/A	Not Listed	Roosts in rock crevices, barns and sheds. Overwinters in abandoned mines. Summer habitats are poorly understood in Ontario, elsewhere prefers to roost in open, sunny rocky habitat and occasionally in buildings (Humphrey, 2017).	Moderate	Potentially suitable forested habitat on-site to support species presence.
Hoary Bat	END	END	N/A	Not Listed	Roosts in tree foliage; overwinters in leaf litter. Do not roost in anthropogenic structures.	Moderate	Potentially suitable forested habitat on-site to support species presence.
Little Brown Myotis	END	END	N/A	END	Maternal colonies known to use buildings, may also roost in trees during summer. Affinity towards anthropogenic structures for summer roosting habitat and exhibit high site fidelity (Environment Canada, 2015).	Moderate	Potentially suitable forested habitat on-site to support species presence.
Northern myotis (Northern Long-eared Bat)	END	END	N/A	END	Occurs throughout eastern North America in associated with Boreal forests. Roosts mainly in trees, occasionally anthropogenic structures during summer (Environment Canada, 2015). Overwinters in caves and abandoned mines.	Low	Species affinity is for Boreal forests and rarely roosts in anthropogenic structures.
Silver-haired Bat	END	END	N/A	Not Listed	Roosts in tree foliage. Overwinters in in mines, rock crevices, trees, and snags. May use anthropogenic structures for roosting.	Moderate	Potentially suitable forested habitat on-site to support species presence.
Tri-colored Bat	END	END	N/A	END	Roosts in trees, rock crevices and occasionally buildings during summer. Overwinters in caves and mines.	Moderate	Potentially suitable forested habitat on-site to support species presence.

**TABLE C.6  
SCREENING RATIONALE FOR POTENTIAL SPECIES AT RISK ON-SITE OR WITHIN STUDY AREA**

Species	SCA Status (PSO Listing)	COSSARO Status	MBCA	SARA Schedule 1 Status	Habitat Use	Probability of Occurrence On-Site and in Study Area	Rationale
<b>Reptilian</b>							
Blanding's Turtle	THR	THR	N/A	END	Inhabits quiet lakes, streams and wetlands with abundant emergent vegetation. Frequently occurs in adjacent upland forests.	Low	Suitable aquatic habitat within the greater study area. No occurrence records for species within 1 km of site.
Eastern Musk Turtle	Not Protected	SC	N/A	SC	Wetlands. Highly aquatic habitats.	Low	Suitable aquatic habitat within the greater study area. No occurrence records for species within 1 km of site.
Eastern Ribbonsnake	Not Protected	SC	N/A	SC	Marshy edges of wetlands and watercourses.	Low	Suitable aquatic habitat within the greater study area. No occurrence records for species within 1 km of site.
Northern Map Turtle	Not Protected	SC	N/A	SC	Highly aquatic species, found only in lakes and large rivers.	Low	Suitable aquatic habitat within the greater study area. No occurrence records for species within 1 km of site.
Snapping Turtle	Not Protected	SC	N/A	SC	Highly aquatic species, found in a wide variety of wetlands, water bodies and watercourses.	Low	Suitable aquatic habitat within the greater study area. No occurrence records for species within 1 km of site.
Spotted Turtle	END	END	N/A	END	Secretive wetland species.	Low	Suitable aquatic habitat within the greater study area. No occurrence records for species within 1 km of site.
Wood Turtle	END	END	N/A	THR	Primarily terrestrial forest species. Associated with clear, gravelly streams.	Low	Suitable aquatic habitat within the greater study area. No occurrence records for species within 1 km of site.
<b>Plants</b>							
American Ginseng	THR	THR	N/A	END	Rich, moist, relatively mature deciduous forests.	Low	Species was not observed during site investigation. No occurrence data for species within study area. Suitable habitat not present within the study area.
Black Ash	END	END	N/A	Not Listed	Predominantly a wetland species, found in swamps, floodplains and fens.	High	Two specimens observed on-site. Both young and unhealthy trees. No black ash within proposed cabin footprints.
Butternut	END	END	N/A	END	Inhabits a wide range of habitats including upland and lowland deciduous and mixed forests.	High	Species was observed on-site. Specimen located outside of area of interest, dying to dead.
<b>Lichens</b>							
Pale-bellied Frost Lichen	END	END	N/A	END	Grows on the bark of hardwood trees such as white ash, black walnut, American elm and ironwood. Can also be found growing on fence posts and boulders.	Low	Species believed to be extirpated from the study area.
<b>Fish</b>							
American Eel	END	END	N/A	Not listed	Primarily nocturnal, hiding in soft substrate or submerged vegetation during the day.	Moderate	Suitable aquatic habitat present off-site but within the study area. NHIC indicates occurrence record for species within 1 km of site.
Bridle Shiner	Not Protected	SC	N/A	SC	Prefers clear water with abundant vegetation over silty or sandy vegetation	Low	Suitable aquatic habitat present off-site but within the study area. NHIC indicates occurrence record for species within 1 km of site.
Cutlip Minnow	END	THR	NA	SC	Prefers clear, slow-moving rivers and creeks with rocky or gravel substrates. Males build gravel nests under banks, logs, or near large rocks.	Low	No suitable aquatic habitat present on-site to support species presence
Channel Darter	Not Protected	SC	N/A	SC	Prefers clear water with abundant vegetation over silty or sandy vegetation	Low	No suitable aquatic habitat present on-site to support species presence
Lake Sturgeon	END	END	N/A	Not Listed	Large lakes and rivers. Forages in cool water, 4-9m deep over soft substrates. Spawns in shallower, fast-flowing areas over rocks or gravel.	Moderate	Suitable aquatic habitat present off-site but within the study area. NHIC indicates occurrence record for species within 1 km of site.
Northern Brook Lamprey	Not Protected	SC	N/A	SC	Prefers shallow areas with warm water. Larvae burrows in soft substrate for up to 7 years.	Low	Suitable aquatic habitat present within the greater study area. No occurrence data for species within 1 km of site.
Northern Sunfish	Not Protected	SC	N/A	SC	Inhabits clear, warm, slow-moving streams and shallow lakes with abundant aquatic vegetation and sand or gravel substrates.	Low	Suitable aquatic habitat present within the greater study area. No occurrence data for species within 1 km of site.
River Redhorse	Not Protected	SC	N/A	SC	Prefers fast-flowing, clear rivers over rocky substrate	Moderate	Suitable aquatic habitat present off-site but within the study area. NHIC indicates occurrence record for species within 1 km of site.
Silver Lamprey	Not Protected	SC	N/A	SC	Larvae live 4-7 years in burrows, preference to soft substrate.	Moderate	Suitable aquatic habitat present off-site but within the study area. NHIC indicates occurrence record for species within 1 km of site.
<b>Insects</b>							
American Bumble bee	Not Protected	SC	N/A	SC	Inhabits open grasslands, meadows, and agricultural areas. Nests underground in abandoned rodent burrows and forages on a variety of flowering plants.	Low	Suitable foraging habitat present on-site. Species not observed during the field investigation. No occurrence record for species within 1 km of site.
Bogbean Buckmoth	END	END	N/A	END	Preferred food plant is bog bean, present in a variety of wetlands including bogs, swamps and fens.	Low	No suitable wetland habitat within the study area. Preferred food species not observed. Species not observed during site investigations.
Gypsy Cuckoo Bumble Bee	END	END	N/A	END	Inhabits a wide range of habitats: open meadows, agricultural and urban areas, boreal forests and woodlands.	Low	Currently the only known population is in Pinery Provincial Park.
Monarch Butterfly	Not Protected	SC	N/A	END	Caterpillars require milkweed plants confined to meadow and open areas. Adult butterflies use more diverse habitat with a variety of wildflowers	Low	Suitable foraging habitat present on-site. Milkweed observed during the field investigations. No occurrence record for species within 1 km of site.
Mottled Duskywing	END	END	N/A	END	Larval food plant (New Jersey Tea) found in sandy areas and alvars.	Low	Sandy areas and alvars not present in the study area.
Nine-spotted Lady Beetle	END	END	N/A	END	Habitat generalist	Low	No recent occurrence reports in the area, thought to be locally extirpated
Rapids Clubtail	THR	THR	N/A	END	Inhabits large, clear rivers with fast-moving water and rocky or gravelly substrates. Larvae develop in riffle sections among submerged rocks and debris.	Low	No suitable riparian habitat on-site. Suitable habitat limited to off-site Ottawa River.
Rusty-patched Bumble Bee	END	END	N/A	END	Habitat generalist	Low	Currently the only known population is in Pinery Provincial Park.
Transverse Lady Beetle	END	END	N/A	SC	Habitat generalist	Low	No new records of Transverse Lady Beetle in Ontario, species thought to be absent in former habitats.
West Virginia White Butterfly	Not Protected	SC	N/A	Not Listed	Requires mature moist deciduous woods with larval host plant toothwort.	Low	No suitable habitat within the study area.
Yellow-banded Bumble Bee	Not Protected	SC	N/A	SC	Habitat generalist; mixed woodlands, variety of open habitat	Low	Suitable foraging habitat present on-site. Species not observed during the field investigation. No occurrence record for species within 1 km of site.

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