

PRELIMINARY ENVIRONMENTAL IMPACT STATEMENT



6688 Franktown Road, Richmond, Ontario

Project No.: CCO-25-1134

Prepared for: International Buddhist Progress Society of Ottawa - Carleton

Venerable Jen Chun Kuan

International Buddhist Progress Society of Ottawa - Carleton

6688 Franktown Road

Richmond, Ontario

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1.0 PROPERTY INFORMATION AND INTRODUCTION

Egis Canada Ltd. (Egis) was retained by the International Buddhist Progress Society Ottawa - Carleton (the Client) to prepare a Preliminary *Environmental Impact Statement* (EIS) for the proposed lot redevelopment at 6688 Franktown Rd in Richmond, Ontario, legally known as "PCL 19-1, SEC GB-3; PT LT 19, CON 3, PT 1, 4R7040; GOULBOURN". The subject property is located west of the Village of Richmond, with 259 metres (m) of frontage on the south side of Franktown Road, approximately 620 m west of Joy's Road. The total size of the subject property is 39.89 hectares (ha), but the proposed lot redevelopment will only occur within a 4.52 ha section on the north end of the property. The 4.52 ha disturbance footprint, in addition to a 120 m surrounding buffer area, is the focus of the EIS and is herein referred to as the study area.

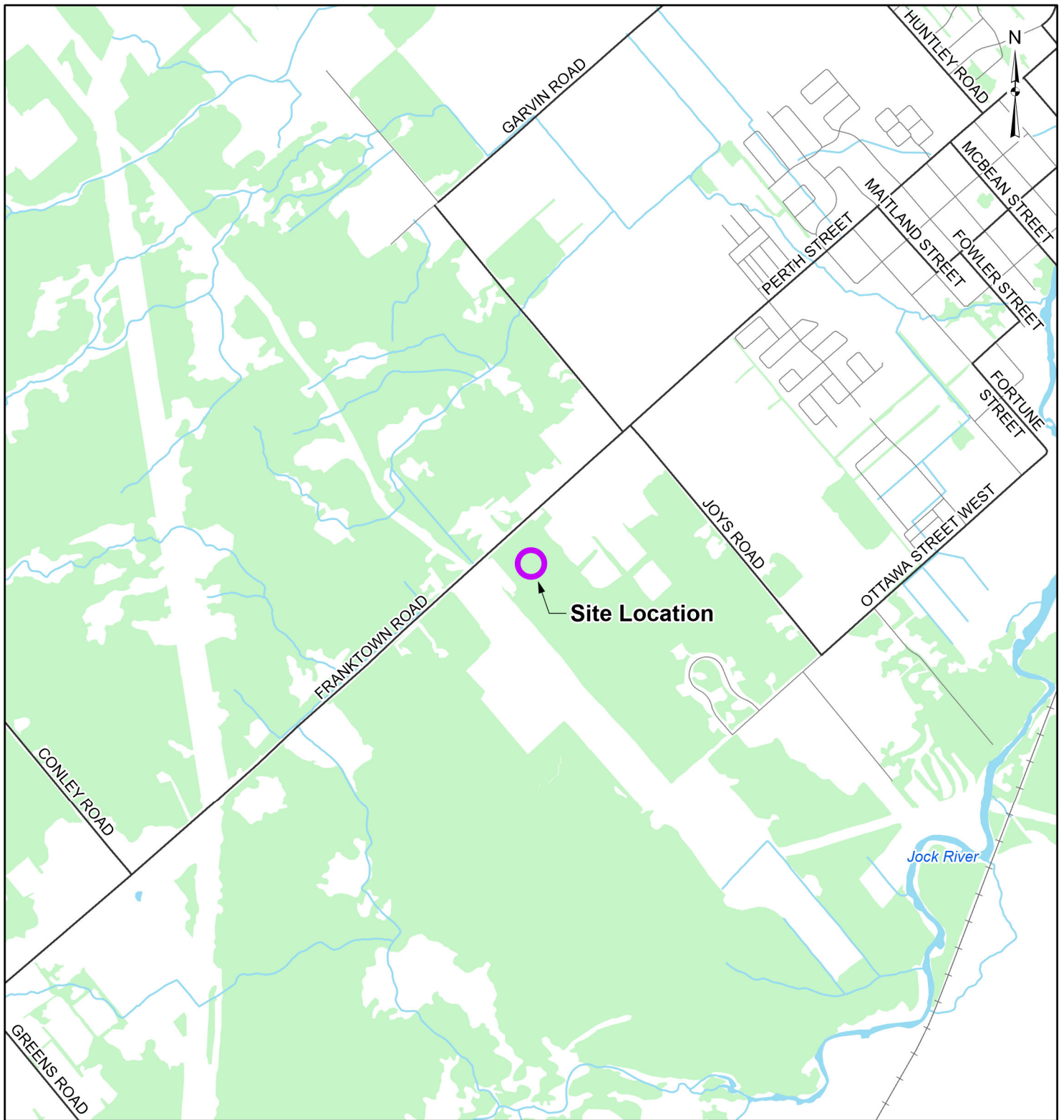
In March of 2019, an EIS was written by McIntosh Perry Consulting Engineers Ltd. (now Egis Canada Ltd.) and was submitted to Bing Professional Engineering Inc. for 6688 Franktown Road prior to the Phase 1 development of the property that involved the vegetation clearing and the construction of current buildings and infrastructure. Phase 2 development of the property involves reconfiguring and expanding on the development. This EIS intends to act as a revision to the original Phase 1 EIS, with updated Phase 2 construction plans, regulations, policies, and mitigation recommendations.

The City of Ottawa requires an EIS be carried out for the subject property, as it relates to the proposed development plans and their impact on the property's natural heritage features and ecological function. This EIS assesses the potential impacts that the development of a place of worship and associated infrastructure may have upon the existing woodlands, natural heritage features, including Significant Woodlands and species at risk (SAR) and their habitat. The potential for Significant Wildlife Habitat (SWH) and other features that form the City of Ottawa's natural heritage system has been considered in the development of this EIS. If identified, impacts on these natural heritage features within the study area because of the proposed development will be outlined, and, if applicable, mitigation measures for each will be provided.








The study area (**Figure 1; Appendix A, Photos 1 to 16**) includes a 4.52 ha area of proposed development that contains the Fo Guang Shan Buddhist Temple, parking lot, garden, children's play area, septic system, and outbuildings. The property is boarded by rural residential properties to the east and west, with Franktown Rd to the north and a 35-ha woodlot to the south. A small ephemeral wet depression is present on the property; in addition, unevaluated wetlands occur within 200 m, and Provincially Significant Wetlands (PSW) occur within 300 m of the property. The study area is within the municipality of the City of Ottawa and the Township of Goulbourn, Ontario, and within the Rideau Valley Conservation Authority (RVCA) district.

Note that this is a **Preliminary** EIS. Several additional surveys/studies have been recommended in this report. After the recommended surveys are concluded, the findings will be used to update the impact assessment and mitigation measures in this report, if required.

This EIS report was prepared in accordance with applicable policies and regulations described below in **Section 2.0**.




LEGEND

- | | | | |
|---|---------------|---|-------------|
|  | Site Location |  | Railroad |
|  | Local Road |  | Watercourse |
|  | Major Road |  | Waterbody |
| | |  | Wooded Area |

REFERENCE

GIS data provided by the Ontario Ministry of Natural Resources and Forestry, 2024.



CLIENT:		INTERNATIONAL BUDDHIST PROGRESS SOCIETY OF OTTAWA – CARLETON	
PROJECT:		6688 FRANKTOWN RD ENVIRONMENTAL IMPACT STATEMENT	
TITLE:		STUDY AREA KEY MAP	
 115 Walgreen Road, RR3, Carp, ON K0A1L0 Tel: 613-836-2184 Fax: 613-836-3742		PROJECT NO: CCO-25-1134	FIGURE:
		Date	Dec., 23, 2024
		GIS	AH
		Checked By	JL
		1	

2.0 LEGISLATION, POLICY, AND REGULATORY OVERVIEW

This report has been prepared to address policies and guidelines from legislation relevant to municipal development within the *City of Ottawa Official Plan*, as well as provincial policies including the *Provincial Planning Statement* (PPS), the *Conservation Authorities Act* and the *Endangered Species Act, 2007* (ESA). Additionally, the report also addresses federal policies, where applicable, related to the *Fisheries Act*, *Migratory Birds Convention Act, 1994* (MBCA), and the *Species at Risk Act* (SARA).

The policy documents discussed below were used to scope the field survey and impact assessments, assess the natural heritage features and functions of the study area, as well as to determine natural heritage constraints within the study area.

2.1 Municipal Policy

2.1.1 City of Ottawa Official Plan

Per the *City of Ottawa Official Plan*, the subject property was part of a Zoning By-law Amendment in 2007 (By-law No. 2007-385), which amended the former Township of Goulbourn Zoning By-law No. 40-99, now reflected in the City of Ottawa Zoning By-law 2008-250. The amendment changed the zoning category applicable to the front (northern) portion of the subject lands (approximately 22 ha) to site-specific Rural Institutional "RI[643r]" Zone. The RI[643r] Zone permits a place of worship, day nursery, accessory pagoda and accessory rooming house. The zoning category applicable to the rear (southern) portion of the subject lands (approximately 18 ha) is site-specific Rural Countryside "RU[644r]" Zone.

The proposed temple supports the City's policy intention. Policy 3.7.2.5(e) is particularly noteworthy as it expressly identifies a place of worship as a permitted use, subject to a zoning by-law amendment:

Pol. 3.7.2.5 A zoning by-law amendment will be required where any of the following uses are proposed in General Rural Areas: (e) "New institutional uses such as places of worship and school should ideally be located within a Village but may be considered in close proximity to a Village where Village land is insufficient or inappropriate. The expansion of existing institutional uses will be evaluated on their merits and by those matters included in policy 6 below."

A site-specific Zoning By-law Amendment was obtained specifically to accommodate the proposal.

2.2 Provincial Legislation and Policy

2.2.1 Provincial Planning Statement

The new Provincial Planning Statement (PPS) was approved by the lieutenant Governor in Council and came into effect on October 20, 2024. Decisions made by Planning Authorities shall be consistent with the policy statements issued under the *Planning Act*, such as the PPS, which includes policies on development and land use patterns,

resources and public health and safety. Section 4.1 of the PPS deals with Natural Heritage and requires natural heritage systems to be identified in various Ecoregions including Ecoregion 6E, which includes the study area.

2.2.2 Endangered Species Act

The ESA, 2007 protects habitat and individuals of wildlife species designated as threatened, endangered, or extirpated in Ontario. Provincial SAR are identified and assessed by the Committee on the Status of Species at Risk in Ontario (COSSARO).

The ESA protects species and their habitats by prohibiting anyone from killing, harming, harassing, or possessing protected species, as well as prohibiting any damage or destruction to the habitat of protected species. All listed species are provided with general habitat protection under the ESA aimed at protecting areas that species depend on to carry out their life processes, such as reproduction, rearing, hibernation, migration or feeding. Some species have had detailed habitat regulations passed that go beyond the general habitat protection to define specifically the extent and character of protected habitats.

2.2.3 Fish and Wildlife Conservation Act

The Ontario *Fish and Wildlife Conservation Act*, 1997 (FWCA) provides protection to many birds, mammals, reptiles, amphibians, and invertebrates. FWCA legislation prohibits hunting (killing, capturing, injuring, and harassing) and trapping of 'specially protected wildlife' as defined in *O. Reg. 699/98* of the Act. Birds that are not protected by the MBCA, such as raptors including Peregrine Falcon (*Falco peregrinus*), and bats that are not protected by SARA or the ESA may receive protection for individuals and their habitat (e.g., nests, roosts) under the FWCA.

2.3 Federal Legislation and Policy

2.3.1 Migratory Birds Convention Act

The MBCA, 1994 protects migratory birds and their nests (S.4). Published in Part 1 of the Canada Gazette on June 1, 2019, proposed updates to the MBCA Regulations were released. Proposed prohibitions under the Regulations are as follows:

Section 5 (1) – A person who does not hold a permit authorizing one or more of the following activities or who is not otherwise authorized by these Regulations to carry out that activity must not:

- a) *Capture, kill, take, injury or harass a migratory bird*
- b) *Destroy, take or disturb an egg; or*
- c) *Damage, destroy, remove, or disturb a nest, nest shelter, eider duck shelter or duck box*

Exemptions under the Regulations are as follows:

Section 5 (2) – However, the following may be damaged, destroyed, removed or disturbed without a permit:

- a) *A nest shelter, eider duck shelter or duck box that does not contain a live bird or viable egg*

- b) *A nest that was built by a species that does not appear in a Table to Schedule 1 if that nest does not contain a live bird or a viable egg; and*
- c) *A nest that was built by a species that appears in a Table to Schedule 1 if the following conditions are met:*
 - i. *The person who damages, destroys, removes or disturbs that nest provided written notice to the Minister a number of months beforehand that corresponds to the number of months set out in column 4 of the relevant Table to that schedule for the species, and*
 - ii. *The nest has not been used by migratory birds since the notice was received by the Minister.*

2.3.2 Fisheries Act

The *Fisheries Act*, 1985 protects fish and fish habitats (S. 34) within Canadian waters. Under the recently amended fish and fish habitat protection provisions of the *Fisheries Act*, any works, undertaking or activity of a project must incorporate measures to avoid causing the death of fish and the harmful alteration, disruption, or destruction (HADD) of fish habitat. To assist proponents with determining if their project will comply with the fish and fish habitat provisions, DFO has outlined several measures to protect fish and fish habitat as well as several standards and codes of practices (DFO, 2019). If it is determined that a project can't completely implement the measures to protect fish and fish habitat and if the standards and codes of practice don't apply or are considered non-applicable to the project, then it is recommended that the proponent request a review of the project by DFO. If it has been determined that a project can't avoid and/or mitigate impacts that will cause death of fish, a HADD to fish habitat and/or aquatic species at risk protected under the SARA, an Authorization under the *Fisheries Act* may be required (DFO, 2019).

2.4 Summary of Policy Implications

The policies summarized above provide the context within which the approval of the client's proposed redevelopment will be granted from a natural environment perspective. The corresponding opportunities and constraints established by these policies and supporting guidelines should be recognized and addressed through the development design, location and supporting documentation, including the identification of appropriate mitigation and compensation measures to offset potential negative impacts.

3.0 METHODOLOGY

3.1 Background Information

The fieldwork for the original EIS that was developed in 2019 took place in the summer of 2018. The information gathered from the October 29, 2024, field visit and desktop review for this EIS was compared to the 2019 EIS and updated accordingly.

The following background documentation and related information sources were reviewed to identify natural heritage features and constraints in the study area:

- Ontario's Natural Heritage Information Centre (NHIC) (Ministry of Natural Resources [MNR], 2024a);
- Land Information Ontario (LIO) (MNR, 2024);
- Fish ON-line (MNR, 2024c);
- Satellite imagery (Google Earth Pro, 2024);
- City of Ottawa Official plan (2022); and
- Rideau Valley Conservation Authority (RVCA) Mapping Tool (2024).

Natural heritage information gathered during the literature review was used to identify potentially significant natural heritage features in the study area.

A list of SAR—designated under the federal SARA and/or Ontario's ESA as endangered, threatened or special concern—with potential to occur in the study area was developed by reviewing the following sources:

- Ontario's NHIC;
- Fisheries and Oceans Canada (DFO) Species at Risk Mapping (DFO, 2023b);
- Atlas of Breeding Birds of Ontario (OBBA) (Cadman et al., 2007);
- eBird Canada (eBird, 2023);
- Ontario Reptile and Amphibian Atlas (Toronto Entomologists' Association, 2023a);
- Ontario Butterfly Atlas Online (Toronto Entomologists' Association, 2023b); and
- Atlas of the Mammals of Ontario (Dobbyn, 1994).

Some of the sources above provide data at a scale as large as 10 x 10 km. Therefore, results were screened to assess their relevance to the study area, and species were removed from consideration if no suitable habitat was observed in the study area.

3.2 Field Investigations

In support of the client's proposed development, Egis performed a single site visit on October 29, 2024, to identify and classify the existing site conditions (e.g., vegetation communities) and confirm any natural heritage features in the study area that were identified through the background review process.

Table 1 outlines activities carried out within the study area during the 2024 field investigations.

Table 1: Summary of Field Investigation Activities

Purpose of visit	Date	Start/End Time (24 hour)	Weather Conditions	Biologists
<ul style="list-style-type: none"> • Site reconnaissance • General/Significant Wildlife Habitat Assessment • Natural features identification • Butternut/Black Ash search • SAR Bat Maternity Roost Assessment • Stream Assessment • Ecological Land Classification 	October 29, 2024	09:00 - 11:30	Temperature: -1°C Wind (Beaufort scale): 1 Cloud Cover: 50% (partly cloudy) Precipitation: No 24/hr. Precipitation: No	J. Lewis and D. Rice

3.2.1 Ecological Land Classification and Vegetation

Initial characterization of existing vegetation communities was completed by interpreting available aerial imagery. Vegetation was identified, and communities were verified and assessed in the field within the study area following a meandering transect method. Community characterizations (ecosites and vegetation types) were based on the Ontario Ecological Land Classification (ELC) system (Lee *et. al.*, 2008).

The common names and scientific nomenclature of the species observed follow the provincial Ontario Species List—Vascular Plants. The provincial significance of vegetation communities and plant species was based on the rankings assigned by the NHIC.

3.2.2 General Wildlife Habitat Assessment

General wildlife habitat assessments were completed in the study area during the survey above. This assessment focused on the identification of wildlife habitat features, specifically SWH features, as outlined in the MNR's Criteria Schedules for Ecoregion 6E (Ministry of Natural Resources and Forestry [MNRF], 2015). When encountered, these features were identified, recorded, and assessed for significance. All wildlife species were observed by sight, sound and/or through distinctive signs (e.g., tracks, scat, etc.).

Wildlife habitat suitability assessments were also completed for ESA protected species that may occur in the area, including species identified in the NHIC database and Ontario wildlife atlases during the background data review process.

3.2.3 Significant Wildlife Habitat Assessment

To provide a comprehensive approach to identifying and evaluating SWH in the study area, significance has been determined based on guidance provided in the *Natural Heritage Reference Manual* (NHRM) (MNRF, 2010) and

criteria from the *Significant Wildlife Habitat Ecoregion 6E Criterion Schedule* (MNRF, 2015) with support from the *Significant Wildlife Habitat Technical Guide* (SWHTG) (MNRF, 2000) as appropriate. The NHRM divides wildlife habitat into four broad categories:

1. Habitats of seasonal concentrations of animals;
2. Rare vegetation communities or specialized habitats for wildlife;
3. Habitats of species of conservation concern (excluding endangered and threatened species); and
4. Animal movement corridors.

4.0 EXISTING ECOLOGICAL CONDITIONS AND STUDY AREA DESCRIPTION

4.1 Existing Land Use

At the time of the October 29, 2024, field investigation, the study area was observed to contain a 3.65 ha open area with the existing Buddhist Temple (**Photos 1 and 15**) and associated parking lot, a paved basketball court and playground, an open pine tree stand used for ceremonial purposes, septic system, and patches of manicured grass lawn. A single small storage structure is also present within the property. The study area is surrounded by rural properties that include forests and unevaluated wetlands, Provincially Significant Wetlands (PSW), agricultural fields, and a 0.8 ha unnamed pond.

4.2 Landforms, Soils and Geology

The geology of the 6E – 11 Smiths Falls Ecodistrict is influenced by the underlying Paleozoic dolomite and limestone bedrock, which is found throughout Smith Falls Ecodistrict 6E-11, except for the Frontenac Axis between Algonquin Park and the Adirondacks. The surficial geology of the study area is shown as being fine to medium-grained sand, which is calcareous and commonly fossiliferous in nature (Ontario Geological Survey 2019).

Regional physiography is characterized by medium acidic to neutral mineral material (95%) covering a rolling landscape, with several areas of bare bedrock outcroppings (Henson and Brodribb, 2005). The dominate substrate type are Gray Brown Luvisols and Melanic Brunisols.

4.3 Landscape Ecology

The study area is situated in the Smiths Falls Ecodistrict (6E-11) within the Lake Simcoe – Rideau Ecoregion. Over half of this Ecodistrict is covered by cropland and pastures (57%). Forest includes deciduous (16%), coniferous (5%) and mixed forests (9%), with large areas characterized by limestone and sandstone plains with ridges of siliceous igneous bedrock, shallow to deep deposits of siliceous sand and moderate to high lime loam, silt, and clay. Land use in 6E-11 is driven by agriculture. Other less significant land uses are settlement and associated infrastructure (5%) and protected areas (7%) (Henson and Brodribb, 2005).

The study area is located in the Upper St. Lawrence section of the Great Lakes-St. Lawrence Forest Region, where the forests, are characterized by sugar maple (*Acer saccharum*), American beech (*Fagus grandifolia*), red maple (*Acer rubrum*), yellow birch (*Betula alleghaniensis*), basswood (*Tilia americana*), white ash (*Fraxinus americana*), largetooth aspen (*Populus grandidentata*), red oak (*Quercus rubra*), and bur oak (*Quercus macrocarpa*). Other tree species occurring in the Upper St. Lawrence section include white oak (*Quercus alba*), green ash (*Fraxinus pennsylvanica*), rock elm (*Ulmus thomassi*), blue-beech (*Carpinus caroliniana*), and bitternut hickory (*Carya cordiformis*). Coniferous trees such as eastern hemlock (*Tsuga canadensis*), white spruce (*Picea glauca*), and balsam fir (*Abies balsamea*) occur frequently on shallow, acidic, or eroding materials. Eastern white pine (*Pinus*

strobilus), red pine (*Pinus resinosa*), black spruce (*Picea mariana*), and eastern white cedar (*Thuja occidentalis*) may be found where soil conditions are favorable (Rowe, 1972).

4.4 Groundwater, Surface Water and Fish Habitat

The study area is situated within the Rideau Valley watershed within the Jock River Subwatershed boundaries (Jock River Subwatershed Report, 2016) and lies within 2 km of the Jock River. In addition, the adjacent lands of the study area contain the Richmond Fen, a PSW (300 m from the property). Additional unevaluated wetlands are also found within 200 m of the property. The wetlands that surround the study area are of marsh, swamp, fen and unknown types. There is a small (250 m²) ephemeral wet depression with cattails present on the property. However, it was dry during the October 2024 field visit.

4.5 Natural Heritage Features

Using the provincial NHIC (2024a) and LIO (2024b) databases as well as the sources identified in **Section 3**, the following natural heritage features have been identified within 2 km the study area:

- Jock River (ARA, 2024);
- Woodland Areas (NHIC, 2024);
- Richmond Fen PSW (LIO, 2024); and
- Unevaluated wetlands (NHIC, 2024)

The forest to the south of the proposed redevelopment area is classified as Significant Woodland. The City of Ottawa's "Significant Woodlands Guidelines for Identification, Evaluation, and Impact Assessment" (2022) defines a Significant Woodland as:

- i. Any treed area meeting the definition of woodlands in the Forestry Act, R.S.O. 1990, c. F.26 or forest in the Ecological Land Classification for Southern Ontario; and
- ii. In the rural area, meeting any one of the criteria in the Natural Heritage Reference Manual, as assessed in a sub-watershed planning context and applied in accordance with Council-approved guidelines, where such guidelines exist; or
- iii. In the urban area, any area 0.8 hectares in size or larger, supporting woodland 60 years of age and older at the time of evaluation.

6688 Franktown Road is considered a rural area in which the "Natural Heritage Reference Manual – 2nd Edition" (2010) dictates the definition of Significant Woodland as:

Woodlands: Treed areas that provide environmental and economic benefits to both the private landowner and the general public, such as erosion prevention, hydrological and nutrient cycling, provision of clean air and the long-term storage of carbon, provision of wildlife habitat, outdoor recreational opportunities, and the sustainable harvest of a wide range of woodland products. Woodlands include treed areas, woodlots or forested areas and vary in their level of significance at the local, regional and provincial levels.

Significant: An area which 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.

Based on the above definitions, all forested vegetation communities within the study area (See **Section 4.6.1** below) and forested habitat to the south are classified as Significant Woodland (**Figure 2**) based off this definition. These vegetation communities are contiguous within the subject property and contain moderate to mature-aged stands of trees (based on visual observation, tree coring was not performed to age the trees), interior forest habitat, and are adjacent (or within) a surface water feature (i.e., wetland). The property is indicated in Schedule C11 as part of the City of Ottawa Natural Heritage System due to the Significant Woodlands present that requires an EIS be developed to conform with the City of Ottawa Council-approved guidelines found in the Environmental Impact Statement Guidelines (2023).

4.6 Vegetation Cover

A late-season vegetation survey was completed during the October 29, 2024, site visit. Due to the timing of the site visit, a comprehensive list of vegetation species on the property was not possible. Additional vegetation surveys will occur during the 2025 spring and summer SAR surveys. The following section outlines the existing vegetation communities within the study area. For a map of the vegetation communities present, refer to **Figure 2**. Photographs of the vegetation communities can be found in **Appendix A**. A complete listing of vegetation species observed within the study area during the 2024 field investigations is found in **Table 2** in **Section 4.6.2**.

4.6.1 Ecological Land Classification

4.6.1.1 *Vegetation Community 1: Fresh – Moist Deciduous Forest Ecosite (FOD7)*

Vegetation Community 1 was classified through ELC as a Fresh – Moist Lowland Deciduous Forest Ecosite (FOD7) (**Photo 11**). This community was located at the north end of the property, adjacent to Franktown Road (**Figure 2**). The canopy of this community was dominated by poplar species, red maple, and green ash. Understory species included sensitive fern, marsh fern, alternate-leaved dogwood, and dwarf raspberry. These species are indicative of moist to wet soils.

4.6.1.2 *Vegetation Community 2: Fresh – Moist White Cedar – Hardwood Mixed Forest (FOMM7)*

Vegetation Community 2 was classified through ELC as a Fresh – Moist White Cedar – Hardwood Mixed Forest (FOMM7) (**Photo 3 and 6**). This community was located south of Vegetation Community 1 (**Figure 2**). This canopy in this community was dominated by eastern white cedar (*Thuja occidentalis*) and red maple (*Acer rubrum*). The understory was heavily vegetated.

4.6.1.3 *Vegetation Community 3: Dry White Pine – Red Pine Calcareous Bedrock Coniferous Forest (FOCS1-2)*

Vegetation Community 3 was classified through ELC as Dry White Pine – Red Pine Calcareous Bedrock Coniferous Forest (FOCS1-2) (**Photo 10**). This community is 0.25 ha area within the subject property directly north of the existing temple is open white pine forest with little to no understory or shrub layer.

4.6.1.4 *Vegetation Community 4: Fresh – Moist Forb Meadow (MEFM4)*

Vegetation Community 4 was classified through ELC as Fresh – Moist Forb Meadow (MEFM4) (**Photo 16**) that is approximately 0.25 ha in size. This community appears to be mowed regularly. Vegetation species will be updated when revisited in the summer for the SAR surveys.

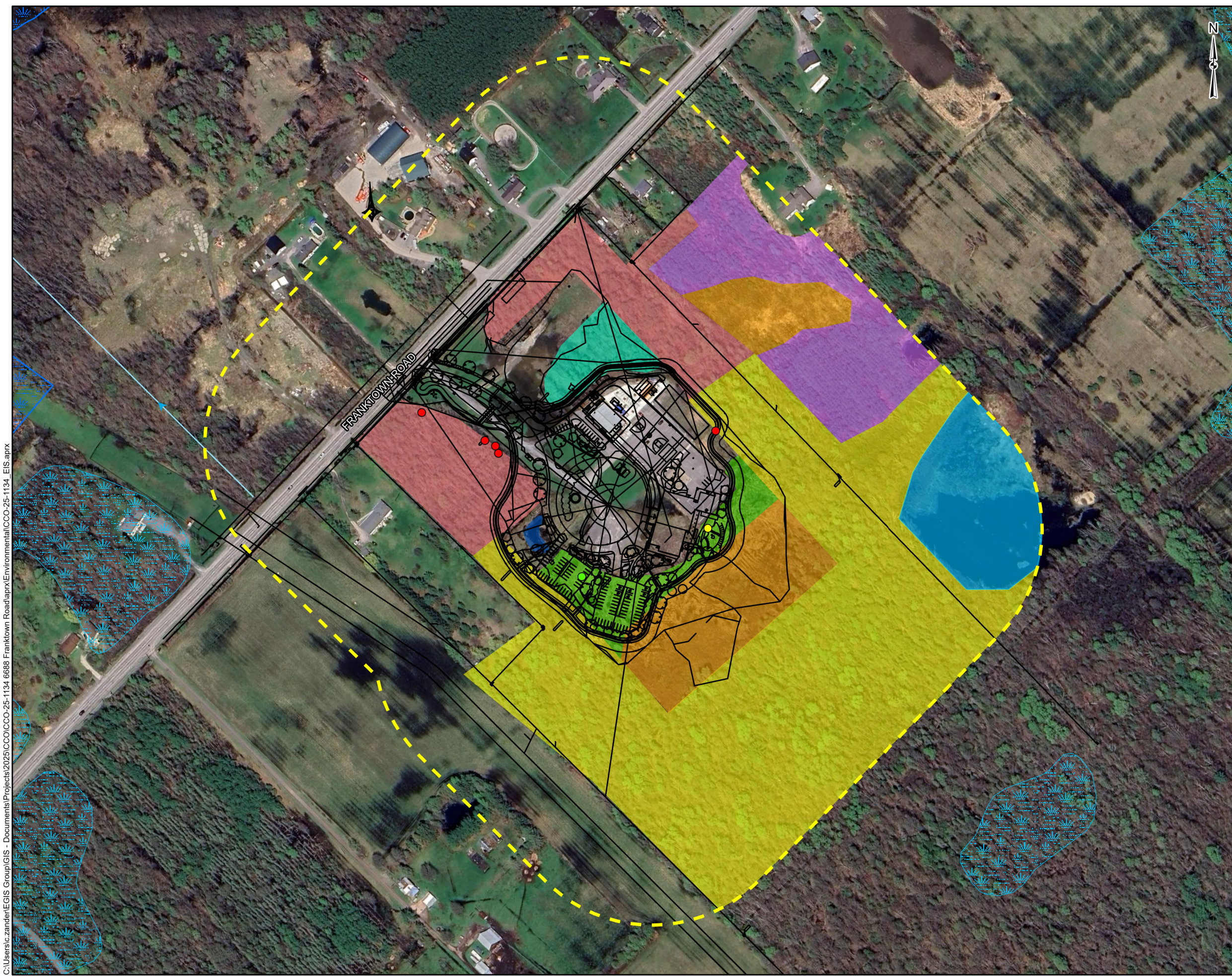
4.6.1.5 *Vegetation Community 5: Fresh – Coniferous Forest (FOC)*

Vegetation Community 5 was classified through ELC as Fresh – Coniferous Forest (FOC) which makes up a 1.10 ha area in the adjacent property within the study area that contains planted rows of coniferous trees. This community was derived through the desktop review.

4.6.1.6 *Vegetation Community 6: Buckthorn Deciduous Shrub Thicket (THDM2-6)*

Vegetation Community 6 was classified through ELC as Buckthorn Deciduous Shrub Thicket (THDM2-6) (**Photos 7-8**). Much of the lot redevelopment will expand into this vegetation community that is approximately 1.24 ha area. This early successional deciduous shrub thicket, that is composed of buckthorn, willow, and poplar. The vegetation present within this thicket indicates higher moisture levels due to the presence of some moisture-loving plants such as sedges, rushes, balsam poplar, and sphagnum moss. Additionally, 0.45 ha area that is on the adjacent property within the study area is present.

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LEGEND

- Study Area Boundary
- Proposed Construction Layout
- Bat Snag Tree
- Canada Thistle
- Coltsfoot
- Watercourse
- Unevaluated Wetland
- Provincially Significant Wetland


ELC Classification

- Vegetation Community 1: Fresh - Moist Decidious Forest (FOD7)
- Vegetation Community 2 - Fresh - Moist White Cedar - Hardwood Mixed Forest (FOMM7)
- Vegetation Community 3 - Dry White Pine - Red Pine Calcareous Bedrock Coniferous Forest (FOCS1-2)
- Vegetation Community 4 - Fresh - Moist Meadow (MEFM4)
- Vegetation Community 5 - FOC
- Vegetation Community 6 - Buckthorn Deciduous Shrub Thicket (THDM2-6)
- 0.8 ha Pond and Riparian Area
- Ephemeral Wet Depression

REFERENCE

GIS data provided by the Ontario Ministry of Natural Resources and Forestry, 2025.

100 50 0 100
Scale 1:3,000 Metres

CLIENT:	INTERNATIONAL BUDDHIST PROGRESS SOCIETY OF OTTAWA – CARLETON		
PROJECT:	6688 FRANKTOWN RD ENVIRONMENTAL IMPACT STATEMENT		
TITLE:	NATURAL HERITAGE FEATURES		
 115 Walgreen Road, RR3, Carp, ON K0A1L0 Tel: 613-836-2184 Fax: 613-836-3742	PROJECT NO: CCO-25-1134		FIGURE:
	Date	Jan., 24, 2025	2
	GIS	AH	
	Checked By	JL	

4.6.2 Vascular Flora

During the 2024 field visit, a total of 16 different vegetative species were observed, which are listed below in **Table 2**. No SAR vegetation species were observed during the 2024 site visit. This list will be updated after the spring and summer site visits that are recommended (see **Section 7.0**).

Table 2: Vegetation Species Observed within the Study Area			
Common Name	Scientific Name	Common Name	Scientific Name
basswood	<i>Tilia americana</i>	bog moss	<i>Sphagnum sp.</i>
Canada Thistle	<i>Cirsium arvense</i>	coltsfoot	<i>Tussilago farfara</i>
European Buckthorn	<i>Rhamnus cathartica</i>	dog-strangling vine	<i>Cynanchum rossicum</i>
goldenrod sp.	<i>Solidago sp.</i>	Philadelphia fleabane	<i>Erigeron philadelphicus</i>
red maple	<i>Acer rubrum</i>	red-osier dogwood	<i>Cornus stolonifera</i>
sedge sp.	<i>Typha sp.</i>	staghorn sumac	<i>Rhus typhina</i>
sugar maple	<i>Acer saccharum</i>	trembling aspen	<i>Populus tremuloides</i>
white birch	<i>Betula papyrifera</i>	white pine	<i>Pinus strobus</i>
white spruce	<i>Picea glauca</i>	willow sp.	<i>Salix sp.</i>

4.6.3 Invasive and Noxious Vegetation Species

Dog-strangling vine was observed within the study area, and this species is listed as 'Restricted' under the *Invasive Species Act* (2015) and is also considered a 'Noxious weed' under the *Weed Control Act* (1990). Additionally, coltsfoot, Canada thistle, and European buckthorn were observed and are also classified as 'Noxious Weeds' under the *Weed Control Act* (1990).

4.7 Habitat for Species at Risk

Background information obtained from the sources listed in **Section 3.0** of this report, indicated that SAR and their habitat are potentially present within the study area.

SAR habitat in the study area is outlined in **Table 3** based on background information sources and habitat availability. The status of each species under the provincial ESA and the federal SARA are also listed in **Table 3**. Additional protection afforded to species under the provincial FWCA and federal MBCA are noted as well.

Table 3: Potential SAR habitat within the Study Area

Common Name	Scientific Name	Provincial Status	Provincial Habitat Protection	Federal Status	Federal Protection of Individual and Residence outside of Federal lands	Other Applicable Legislation	Suitable Habitat Present Within General Study Area
Birds (suitable habitat for nesting or breeding only)							
Bank Swallow ^{2, 5}	<i>Riparia riparia</i>	Threatened	Yes	Threatened	Yes	MBCA	No. No suitable steep banks exist within the study area to support the life processes of this species.
Barn Swallow ^{2, 5}	<i>Hirundo rustica</i>	Special Concern	No	Threatened	Yes	MBCA	Yes, the existing buildings on the property are suitable; however, no evidence of nesting by this species was observed during the field visit.
Black Tern ^{1,2}	<i>Chilodonia niger</i>	Special Concern	No	No Status	No	MBCA	No, this species prefers to nest in shallow marshes. The subject property is greater than 300 m of the Richmond Fen PSW that may be suitable habitat for Black Tern.
Bobolink ^{1,2, 5}	<i>Dolichonyx oryzivorus</i>	Threatened	Yes	Threatened	Yes	MBCA	No. There is no suitable grassland/open meadow habitat present within the study area.
Canada Warbler ²	<i>Cardellina canadensis</i>	Special Concern	No	Threatened	Yes	MBCA	Yes. There is suitable mixed forest with a well-developed shrub layer that the species prefers to nest in present within the study area.

Table 3: Potential SAR habitat within the Study Area

Common Name	Scientific Name	Provincial Status	Provincial Habitat Protection	Federal Status	Federal Protection of Individual and Residence outside of Federal lands	Other Applicable Legislation	Suitable Habitat Present Within General Study Area
Chimney Swift ⁵	<i>Chaetura pelagica</i>	Threatened	Yes	Threatened	Yes	MBCA	No. There is no suitable habitat present within the study area.
Common Nighthawk ⁵	<i>Chordeiles minor</i>	Special Concern	No	Threatened	Yes	MBCA	Yes. Common Nighthawk breed in a wide variety of open habitats where bare ground is available for nesting. Nesting habitats include clear cuts, burns, rock outcrops, rocky areas, sandy coastal habitats, and flat gravel rooftops. Nests are built on the ground in well-drained areas near shade. During the 2024 site visit, it was observed to contain gravel areas that may be suitable for Common Nighthawk to nest in.
Eastern Meadowlark ^{2, 5}	<i>Sturnella magna</i>	Threatened	Yes	Threatened	Yes	MBCA	No. There is no suitable grassland/open meadow habitat present within the study area.
Eastern Wood-pewee ²	<i>Contopus virens</i>	Special Concern	No	Special Concern	Yes	MBCA	Yes. Species may be found within the general study area since it is surrounded by forested habitats (FOMM5-2). Eastern Wood-pewee

Table 3: Potential SAR habitat within the Study Area

Common Name	Scientific Name	Provincial Status	Provincial Habitat Protection	Federal Status	Federal Protection of Individual and Residence outside of Federal lands	Other Applicable Legislation	Suitable Habitat Present Within General Study Area
							prefers mid-canopy deciduous-mixed type forests.
Golden-Winged Warbler ²	<i>Vermivora chrysoptera</i>	Special Concern	No	Threatened	Yes	MBCA	Yes. Individuals prefer early successional forests with less dense cover. Early successional forest habitat exists within the study area and may be suitable for breeding.
Least Bittern ²	<i>Ixobrychus exilis</i>	Threatened	Yes	Threatened	Yes	MBCA	No. Least Bittern are found in a variety of wetland habitats but prefer cattail marshes with open pools and channels. The subject property is greater than 300 m of any potentially suitable habitat (Richmond Fen PSW).
Olive-Sided Flycatcher ²	<i>Contopus cooperi</i>	Special Concern	No	Special Concern	No	MBCA	Yes. There is potentially suitable habitat present within the study area though the study property is located at the southern edge of the species range (and therefore it is often absent from suitable habitat). Olive-sided Flycatcher prefer to nest in forest openings and edges, such as those that have been previously logged or burned. Individuals also prefer to nest

Table 3: Potential SAR habitat within the Study Area

Common Name	Scientific Name	Provincial Status	Provincial Habitat Protection	Federal Status	Federal Protection of Individual and Residence outside of Federal lands	Other Applicable Legislation	Suitable Habitat Present Within General Study Area
							within white and black spruce, jack pine and balsam fir.
Peregrine Falcon ²	<i>Falco peregrinus anatum/tundrius</i>	Special Concern	No	Special Concern	No	FWCA	No. There is no suitable habitat present within the study area. Species prefer cliff ledges 50 to 200 m in height for nesting, and in urban centres, tall buildings or bridges. Species may be encountered during spring and fall migration but are not anticipated to be dependent on habitat within the study area.
Red-Headed Woodpecker ^{1,2}	<i>Melanerpes erythrocephalus</i>	Endangered	Yes	Endangered	Yes	FWCA	Yes. Red-headed Woodpecker are habitat generalists, who prefer open woodlands and forest edges. This species has declined significantly in Ontario in recent years and is often absent from apparently suitable habitat across much of its range in the province. Individuals nest in deciduous trees that have some degree of decay; during the site visit, there were multiple large snag trees observed in

Table 3: Potential SAR habitat within the Study Area

Common Name	Scientific Name	Provincial Status	Provincial Habitat Protection	Federal Status	Federal Protection of Individual and Residence outside of Federal lands	Other Applicable Legislation	Suitable Habitat Present Within General Study Area
							the study area that may be utilized by individuals.
Eastern Whip-poor-will ²	<i>Antrastomus vociferus</i>	Threatened	Yes	Threatened	Yes	MBCA	Yes. There is available open understory of the mixed forest habitat present within the study area that is suitable.
Wood Thrush ^{1, 2, 5}	<i>Hylocichla mustelina</i>	Special Concern	No	Threatened	Yes	MBCA	Yes. Species may be found within the general study area forested habitats (FOD7 and FOMM7) that surround the subject property.
Yellow Rail ^{1, 2}	<i>Coturnicops noveboracensis</i>	Special Concern	No	Special Concern	No	MBCA	No. The species prefers marsh wetlands that contain reeds and sedges. The proposed disturbance boundary is 300 m from the Richmond Fen PSW and 200 m from other unevaluated wetlands, so no suitable habitat exists within the study area.
Mammals							
Eastern Small-Footed Myotis ⁶	<i>Myotis leibii</i>	Endangered	Yes	No status	No	FWCA	No. This species prefers to utilize rocky outcroppings, rock barrens or cliff and talus slopes. As these features

Table 3: Potential SAR habitat within the Study Area

Common Name	Scientific Name	Provincial Status	Provincial Habitat Protection	Federal Status	Federal Protection of Individual and Residence outside of Federal lands	Other Applicable Legislation	Suitable Habitat Present Within General Study Area
							do not exist within the general study area this species is not anticipated to be present within the general study area.
Little Brown Myotis ⁶	<i>Myotis lucifugus</i>	Endangered	Yes	Endangered	No	FWCA	Yes. Suitable habitat may be present within the forest community (FOMM5-2) that surrounds the subject property. No targeted surveys were completed as part of the 2024 field investigation.
Northern Myotis ⁶	<i>Myotis septentrionalis</i>	Endangered	Yes	Endangered	No	FWCA	Yes. Suitable habitat may be present within the forest community (FOD7 and FOMM7)) that surrounds the subject property. No targeted surveys were completed as part of the 2024 field investigation. These species may use a wider range of treed habitats than the Little Brown Myotis as it is typically less dependent on large snag trees as maternity colony sites.
Tri-colored Bat ⁶	<i>Perimyotis subflavus</i>	Endangered	Yes	Endangered	No	FWCA	
Hoary Bat ⁶	<i>Lasiurus cinereus</i>	Endangered (pending)	Not at this time	Endangered (pending)	No	GR	Yes, forested habitat within the study area provides suitable conditions for

Table 3: Potential SAR habitat within the Study Area

Table 3: Potential SAR habitat within the Study Area							
Common Name	Scientific Name	Provincial Status	Provincial Habitat Protection	Federal Status	Federal Protection of Individual and Residence outside of Federal lands	Other Applicable Legislation	Suitable Habitat Present Within General Study Area
Silver-haired Bat ⁶	<i>Lasionycteris noctivagans</i>	Endangered (pending)	Not at this time	Endangered (pending)	No	GR	these “tree bat” species. Unlike other SAR bats these species are not dependant on features such as cavities in large trees or snags and may be found utilizing a wider range of forested habitat types. NOTE: These species have been recently assessed by COSSARO (provincial) and COSEWIC (Federal) as Endangered with their uplisting to the ESA and SARA pending (likely by January 2025).
Eastern Red Bat ⁶	<i>Lasiurus borealis</i>	Endangered (pending)	Not at this time	Endangered (pending)	No	GR	
Insects							
Bogbean Buckmoth ¹	<i>Hemileuca sp.</i>	Endangered	Yes	Endangered	No	FWCA	No. this species is dependent on calcium-rich fens and is only documented in two (2) wetlands in southeastern Ontario, one (1) of them being the Richmond Fen PSW. However, the Richmond Fen PSW is 300 m away from the disturbance boundary and is not within the study area.
Monarch ⁴	<i>Danaus plexippus</i>	Special Concern	No	Endangered	No	FWCA	No. There are limited wildflowers on the subject property. Additionally, no

Table 3: Potential SAR habitat within the Study Area

Common Name	Scientific Name	Provincial Status	Provincial Habitat Protection	Federal Status	Federal Protection of Individual and Residence outside of Federal lands	Other Applicable Legislation	Suitable Habitat Present Within General Study Area
							Monarch's or their larval host species (i.e., common milkweed) was also not observed during the 2024 field investigation.
Herptiles							
Eastern Milksnake ^{1,3,5}	<i>Lampropeltis triangulum triangulum</i>	No Status	No	Special Concern	No	FWCA	No. The Eastern Milksnake prefer rocky terrain for sunbathing. Suitable habitat does not occur within the study area.
Blanding's Turtle (Great Lakes/St. Lawrence population) ^{1,3,5}	<i>Emydoidea blandingii</i>	Threatened	Yes	Endangered	No	FWCA	Yes. Category 3 habitat is present within the study area. The 0.8 ha pond on the neighboring property is considered Category 2 habitat and is approximately 110 m from the property boundary. Additionally, it is 200 m from unevaluated wetlands. Blanding's Turtles are known to inhabit shallow lakes, slow-moving creeks and wetlands that contain soft organic substrates. The study area is less than 1 km north of an NHIC

Table 3: Potential SAR habitat within the Study Area

Common Name	Scientific Name	Provincial Status	Provincial Habitat Protection	Federal Status	Federal Protection of Individual and Residence outside of Federal lands	Other Applicable Legislation	Suitable Habitat Present Within General Study Area
							Blanding's Turtle occurrence (NHIC 18VR3203).
Eastern Musk Turtle ³	<i>Sternotherus odoratus</i>	Special Concern	No	Special Concern	No	FWCA	No. Though the Eastern Musk Turtle may be found within the general study area, this species is typically restricted to larger bodies of water (i.e., lakes and rivers) in Ontario, which provide stable conditions for the species to overwinter.
Midland Painted Turtle ^{1,3}	<i>Chrysemys picta marginata</i>	No Status	No	Special Concern	No	FWCA	Yes. Midland Painted Turtle inhabit slow moving, relatively shallow and well-vegetated wetlands including swamps, marshes, ponds, fens, bogs, lakes, rivers, and creeks with abundant basking sites and organic substrate. The study area contains a section of a pond on neighboring property, about 110 m from the proposed disturbance area. Additionally, it is 300 m from the Richmond Fen PSW and 200 m from other unevaluated wetlands.

Table 3: Potential SAR habitat within the Study Area

Common Name	Scientific Name	Provincial Status	Provincial Habitat Protection	Federal Status	Federal Protection of Individual and Residence outside of Federal lands	Other Applicable Legislation	Suitable Habitat Present Within General Study Area
Northern Map Turtle ³	<i>Graptemys geographica</i>	Special Concern	No	Special Concern	No	FWCA	No. Though the Northern Map Turtle may be found within the general study area, this species is typically restricted to larger bodies of water (i.e., lakes and rivers) in Ontario, which provide stable conditions for the species to overwinter.
Common Snapping Turtle ^{1,3,5}	<i>Chelydra serpentina</i>	Special Concern	No	Special Concern	No	FWCA	Yes. Common Snapping Turtle are known to inhabit a wide range of wetland habitats including ponds, streams, rivers, and shallow bays with slow moving water. The study area contains a section of a pond on neighbouring property, about 110 m from the proposed disturbance area. Additionally, it is 300 m from the Richmond Fen PSW and 200 m from other unevaluated wetlands. The study area is less than 1 km of an NHIC Snapping Turtle occurrence (NHIC 18VR3203).
Western Chorus Frog (Great	<i>Pseudacris maculata</i>	No Status	No	Threatened	Yes	FWCA	Yes. Western Chorus Frogs are a lowland terrestrial species that are

Table 3: Potential SAR habitat within the Study Area

Common Name	Scientific Name	Provincial Status	Provincial Habitat Protection	Federal Status	Federal Protection of Individual and Residence outside of Federal lands	Other Applicable Legislation	Suitable Habitat Present Within General Study Area
Lakes – St. Lawrence – Canadian Shield population) ^{1,3}							found in marshes, meadows, and forest habitat near water. Breeding ponds are small, shallow wetlands that usually dry out in the late summer and contain no fish (e.g., predators). Adults forage in upland habitat generally within 250 to 300 m of the breeding pond and overwinter under rocks, leaf litter, loose soil, or old animal burrows. The subject property contains ephemeral pools that have potential to contain breeding Western Chorus Frogs.
Fish							
American Eel ¹	<i>Ligumia nasuta</i>	Special Concern	No	Special Concern	No	N/A	No. American Eel is a migratory species that does not spawn within Canada, and inhabits almost all freshwater habitats, estuaries and coastal waters in Canada where it overwinters. American Eel prefers waters that are at least 10 m deep in both lotic and lentic waters with varying types of bottom substrates.

Table 3: Potential SAR habitat within the Study Area

Common Name	Scientific Name	Provincial Status	Provincial Habitat Protection	Federal Status	Federal Protection of Individual and Residence outside of Federal lands	Other Applicable Legislation	Suitable Habitat Present Within General Study Area
							However, the waters need to provide connectivity to the Atlantic Ocean.
Vegetation							
Black Ash ⁶	<i>Fraxinus nigra</i>	Endangered	No	No Status	No	N/A	No. Despite the presence of suitable habitat within the study area, the species was not observed within or directly adjacent to the subject property discussed in this report during the 2024 field investigation.
Butternut ⁶	<i>Juglans cinerea</i>	Endangered	Yes	Endangered	Yes	N/A	No. Despite the presence of suitable habitat within the study area the species, was not observed within or directly adjacent to the subject property discussed in this report during the 2024 field investigation.

This table was assembled from various sources of background information. The following information sources were consulted to compile background information:

- 1 – Land Information Ontario (NHIC database, MNRF 2020b);
- 2 – Ontario Breeding Birds Atlas (OBBA) (Bird Studies Canada et al., 2008);
- 3 – Ontario Reptile and Amphibian Atlas (ORAA) (Ontario Nature., 2020);
- 4 – Ontario Butterfly Atlas (OBA) (Toronto Entomologists Association, 2020)
- 5 – iNaturalist (2024)
- 6 – General Range (GR)

Suitable habitat for the following species was potentially present within the study area (i.e., within 120 m), based on desktop review information and the field investigation on October 29, 2024:

- **Birds:**
 - Barn Swallow, Canada Warbler, Common Nighthawk, Eastern Wood-pewee, Golden-Winged Warbler, Olive-Sided Flycatcher, Red-Headed Woodpecker, Eastern Whip-poor-will, and Wood Thrush.
- **Mammals:**
 - Little Brown Myotis, Northern Myotis, and Tri-colored Bat.
- **Herptiles:**
 - Blanding's Turtle, Midland Painted Turtle, Common Snapping Turtle, and Western Chorus Frog.

All other SAR identified through the desktop review were ruled out due to the study area not appearing suitable for their life processes; as such, these species are not discussed further.

4.7.1 Birds

Based on desktop review and the October 29, 2024, field investigation, potential suitable habitat for several SAR birds is potentially present on or in the adjacent habitats to the subject property. The subject property is surrounded by Fresh – Moist Deciduous Forest (FOD7) and Fresh – Moist White Cedar – Hardwood Mixed Forest (FOMM7) with open gravel areas, and early successional willow/poplar thickets that may provide suitable habitat for Barn Swallow, Canada Warbler, Common Nighthawk, Golden-Winged Warbler, Olive-Sided Flycatcher, Red-Headed Woodpecker, Eastern Wood-Pewee, Eastern Whip-poor-will, and Wood Thrush.

Barn Swallow, Canada Warbler, Common Nighthawk, Eastern Wood-pewee, Golden-Winged Warbler, Olive-Sided Flycatcher, and Wood thrush are listed as 'Special Concern' under the ESA. Therefore, habitat for these species is not afforded protection under the ESA. However, individuals of all these species, their eggs, nests, and fledglings are protected under the MBCA.

Red-Headed Woodpecker is listed as 'Endangered' under the ESA and is therefor afforded habitat protection under the ESA. Red-Headed Woodpecker's are habitat generalist that can be found in a variety of habitats such as, open woodlands and forest edges, and disturbed areas such as cemeteries, parks, golf courses, sparsely treed pastures, and agricultural areas. Individuals prefer dead limbs or snags for nesting purposes. During the 2024 field visit, several deciduous snags were observed immediately adjacent to the subject property that are in various stages of decay (**Photos 3, 5, and 11**), which may be suitable for Red-headed Woodpecker to nest in.

Eastern Whip-poor-will is listed as 'Threatened' under the ESA and is therefor afforded habitat protection (as of December 2024). However, this species is scheduled to be reclassified as 'Special Concern' in January of 2025, meaning its habitat will no longer be protected under the ESA. Suitable habitat exists within the study area in the form of open and forested areas, such as savannahs, open woodlands or openings in more mature, deciduous, coniferous and mixed forests.

Additional surveys for birds will be completed during the growing season in 2025.

4.7.2 Bats

Little Brown Myotis, Northern Myotis and Tri-colored Bat are SAR bats that share similar habitat preferences during their active season and are described together. They are aerial insectivores that use mature trees as summer and maternity roosting habitat (COSEWIC, 2013; MNRF, 2017). They have been observed using trees as small as 10 cm diameter at breast height (DBH), but typically exhibiting early stages of decay, with cavities (usually >10 m high), loose bark, and/or leaves within forested habitats for maternity roosting purposes. Additionally, these species are known to use anthropogenic structures (e.g., houses, barns) for roosting as well (COSEWIC, 2013).

There are multiple suitable SAR bat snag trees present (**Photos 3, 5, and 11**) in the adjacent forests of the subject property that are outside of the disturbance boundary. Individuals should be anticipated to be potentially present within the study area due to the proximity of suitable habitat. These three (3) species are all listed as endangered under the ESA and the SARA and are therefore afforded habitat protection.

Additionally, the Eastern Red Bat (*Lasiurus borealis*), Hoary Bat (*Lasiurus cinereus*), Silver-haired Bat (*Lasionycteris noctivagans*), and big brown bat (*Eptesicus fuscus*) are species that may also utilize the woodlands adjacent of the study area for roosting. Currently the above bats are not currently listed under the ESA or SARA. Eastern Red Bat, Hoary Bat and Silver-haired Bat are anticipated to be uplisted both federally and provincially as endangered due to documented population declines.

The 2019 EIS that was developed for this property did not consider the habitat within the study area to be suitable for all bat species except for Northern Myotis. However, during the October 2024 field investigation, it was determined that the forest within the study area did have suitable snags and forest for tree roosting bat species listed above.

4.7.3 Herptiles

4.7.3.1 Turtles

Potentially suitable habitat for Blanding's Turtle, Common Snapping Turtle and Midland Painted Turtle are found in the study area due to the 0.8 ha pond on the adjacent property within 120 m, in addition to being within 300 m proximity to Richmond Fen PSW and 200 m proximity to various unevaluated wetlands.

The Blanding's Turtle is designated as 'Threatened' under the ESA and 'Endangered' under the SARA and receives habitat protection. Elemental occurrences are recorded in most of the 1 km by 1 km grid squares surrounding the subject property (18VR3202) which indicates Blanding's Turtle presence around the study area. Based on the *General Habitat Description for the Blanding's Turtle (Emydoidea blandingii)* by the MECP (2013), Category 2 habitat for Blanding's Turtle is available in any connected wetland and waterbody complex extending up to 2 km from the Blanding's Turtle occurrences as well as 30 m around these suitable wetlands/waterbodies. Category 3 Blanding's Turtle habitat is any area from 30 m to 250 m around Category 2 habitat. The unevaluated wetlands

that are within 200 m in addition to the 0.8 ha pond within the study area are considered Category 2 habitat. Because the proposed development footprint is within 250 m from the Category 2 habitat, Category 3 Blanding's Turtle habitat is present within the survey area which affects ~3.05 ha of the proposed disturbance area (see **Figure 3**).

Snapping Turtle and Midland Painted Turtle are also anticipated to be present in 0.8 ha pond or unevaluated wetlands and associated wetland habitat that surrounds the study area.

The 2019 EIS that was developed for this property did not consider the habitat within the study area to be suitable for all turtle species. However, during the desktop review it was indicated that the presence of the 0.8 ha wetland within the study area appears to be suitable habitat for pond dwelling turtles listed above.

4.7.3.2 Western Chorus Frog (*Great Lakes – St. Lawrence Population*)

Western Chorus Frogs are a lowland terrestrial species that are found in marshes, meadows, and forest habitat near water. Breeding ponds are small, shallow wetlands that usually dry out in the late summer and contain no fish (e.g., predators). Adults forage in upland habitat generally within 250 to 300 m of the breeding pond and overwinter under rocks, leaf litter, loose soil, or old animal burrows. However, Western Chorus Frog has 'No Status' under the ESA and therefore does not receive habitat protection and will not be discussed further.

4.8 Wildlife and Significant Wildlife Habitat

The study area is located in the Smiths Falls (6E-11) Ecodistrict of the Lake Simcoe - Rideau (6E) Ecoregion within the Mixedwood plains Ecozone (Ecological Stratification Working Group, 1996). Characteristic wildlife of the Ecoregion includes but not limited to white-tailed deer (*Odocoileus virginianus*), northern raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), woodchuck (*Marmota monax*), wood duck (*Aix sponsa*), great blue heron (*Ardea Herodias*), Wilson's snipe (*Gallinago delicata*), field sparrow (*Spizella pusilla*), grasshopper sparrow (*Ammodramus savannarum*), Eastern Meadowlark (*Sturnella magna*), hairy woodpecker (*Leuconotopicus villosus*), wood thrush (*Hylocichla mustelina*), scarlet tanager (*Piranga olivacea*), rose-breasted grosbeak (*Pheucticus ludovicianus*), Red-spotted Newt (*Notophthalmus viridescens*), American Bullfrog (*Lithobates catesbeianus*), Northern Leopard Frog (*Lithobates pipiens*), Spring Peeper (*Pseudacris crucifer*), Common Snapping Turtle (*Chelydra serpentina*), Eastern Garter Snake (*Thamnophis sirtalis*), and Common Watersnake (*Nerodia sipedon*).

4.8.1 Migratory and Non-migratory Birds

The following section outlines migratory and non-migratory birds that were observed within the subject property. **Table 4** lists the species observed, heard, and/or recorded during the October 2024 field investigation. Note that the timing of the field investigation was too late in the season to get an accurate representation of the migratory birds present within the study area. A more comprehensive bird survey will be conducted during the 2025 site visits which will gain a truer sense of breeding birds present.

Table 4: Wildlife Species Observed Within and Adjacent to the Study Area

Common Name	Scientific Name	Resident/ Visitor	Evidence	Applicable Legislative Protection
Birds				
American Crow	<i>Corvus brachyrhynchos</i>	Resident	Visual observation	None
American Goldfinch	<i>Spinus tristis</i>	Resident	Auditory observation	MBCA
American Pipit	<i>Anthus rubescens</i>	Migratory	Visual observation	MBCA
American Tree Sparrow	<i>Spizelloides arborea</i>	Migratory	Visual observation	MBCA
Black-Capped Chickadee	<i>Poecile atricapillus</i>	Resident	Auditory observation	MBCA
Blue Jay	<i>Cyanocitta cristata</i>	Resident	Visual observation	FWCA
Common Raven	<i>Corvus corax</i>	Resident	Visual observation	FWCA
Dark-Eyed Junco	<i>Junco hyemalis</i>	Resident	Visual observation	MBCA
Fox Sparrow	<i>Passerella iliaca</i>	Migratory	Visual observation	MBCA
Pileated Woodpecker	<i>Dryocopus pileatus</i>	Resident	Visual observation	MBCA

4.8.2 Significant Wildlife Habitat

The study area was examined under the Significant Wildlife Habitat Technical Guide (MNRF, 2000) and its supporting document Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E (MNRF, 2015) to determine if SWH is present within the existing study area. **Table 5** outlines the various SWH categories and rationale on their designation within the study area.

The PPS defines, with respect to Natural Heritage features (Section 2.1.5 of OPP), that “development and site alteration shall not be permitted in... significant wetlands, significant wildlife habitat, significant areas of natural and scientific interest, and coastal wetlands...unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions.”

Table 5: Significant Wildlife Habitat within the Study Area

Specialized Wildlife Habitat Category	Candidate Significant Wildlife Habitat (Y/N)	Confirmed Significant Wildlife Habitat (Y/N)
Seasonal Concentration Areas of Animals		
Waterfowl Stopover and Staging Areas (Terrestrial)	No	No

Table 5: Significant Wildlife Habitat within the Study Area

Specialized Wildlife Habitat Category	Candidate Significant Wildlife Habitat (Y/N)	Confirmed Significant Wildlife Habitat (Y/N)
Waterfowl Stopover and Staging Areas (Aquatic)	No	No
Shorebird Migratory Stopover Area	No	No
Raptor Wintering Area	No	No
Bat Hibernacula	No	No
Bat Maternity Colonies	Yes	No
Bat Migratory Stopover Area	No	No
Turtle Wintering Area	Yes	No
Reptile Hibernaculum	No	No
Colonially-Nesting Bird Breeding Habitat (Bank and Cliff)	No	No
Colonially-Nesting Bird Breeding Habitat (Tree/Shrubs)	No	No
Colonially-Nesting Bird Breeding Habitat (Ground)	No	No
Migratory Butterfly Stopover Areas	No	No
Landbird Migratory Stopover Areas	No	No
Deer Yarding Areas	No	No
Deer Winter Congregation Area	No	No
Rare Vegetation Communities or Specialized Habitat for Wildlife		
Cliff and Talus Slopes	No	No
Sand Barren	No	No
Alvar	No	No
Old Growth Forest	No	No
Tallgrass Prairie	No	No
Savannah	No	No
Specialized Habitat for Wildlife		
Waterfowl Nesting Area	No	No
Bald Eagle and Osprey Nesting, Foraging, and Perching Habitat	No	No

Table 5: Significant Wildlife Habitat within the Study Area		
Specialized Wildlife Habitat Category	Candidate Significant Wildlife Habitat (Y/N)	Confirmed Significant Wildlife Habitat (Y/N)
Woodland Raptor Nesting Habitat	No	No
Turtle Nesting Area	No	No
Seeps and Springs	No	No
Mineral Lick	No	No
Amphibian Breeding Habitat (Woodland)	Yes	No
Amphibian Breeding Habitat (Wetlands)	Yes	No
Woodland Area-Sensitive Bird Breeding Habitat	No	No
Habitat for Species of Conservation Concern (Not including Endangered or Threatened Species)		
Marsh Bird Breeding Habitat	No	No
Open Country Bird Breeding Habitat	No	No
Shrub/Early Successional Bird Breeding Habitat	No	No
Terrestrial Crayfish	No	No
Special Concern and Rare Wildlife Species	Yes	No
Animal Movement Corridors		
Amphibian Movement Corridors	No	No
Deer Movement Corridors	No	No
Exceptions for Ecoregion 6E		
Eco-district 6E-14 – Mast Producing Areas	No	No
Eco-district 6E-17 – Lek	No	No

Based on the *Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E* (MNRF, 2015), Candidate SWH was determined to be present within the study area (i.e., within 120 m) for five (5) categories: Bat Maternity Colonies, Turtle Wintering Area, Amphibian Breeding Habitat (Woodland), Amphibian Breeding Habitat (Wetlands), and Special Concern and Rare Wildlife Species.

The *Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E* (MNRF, 2015) defines candidate Bat Maternity Colonies as the following:

- Maternity colonies can be found in tree cavities, vegetation and often in (buildings are not considered to be SWH).
- Maternity roosts are not found in caves and mines in Ontario.
- Maternity colonies located in Mature deciduous or mixed forest stands, with >10/ha large diameter (>25cm dbh) wildlife trees.
- Female bats prefer wildlife tree (snags) in early stages of decay, class 1-3 or class 1 or 2.
- Silver-haired Bats prefer older mixed or deciduous forest and form maternity colonies in tree cavities and small hollows. Older forest areas with at least 21 snags/ha are preferred.

Candidate Bat Maternity Colonies are present within the study area due to the large diameter wildlife trees present with varying decay classes within a mature mixed forest stand that is approximately 40 ha in size.

The Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E (MNRF, 2015) defines candidate Turtle Wintering Areas as the following:

- For most turtles, wintering areas are in the same general area as their core habitat. Water has to be deep enough not to freeze and have soft mud substrates.
- Over-wintering sites are permanent water bodies, large wetlands, and bogs or fens with adequate Dissolved Oxygen.
- Man-made ponds such as sewage lagoons or storm water ponds should not be considered SWH.

Candidate Turtle Wintering Areas are present within the study area due to the 0.8 ha pond that exists in the neighbouring property. Due to its location on adjacent private property, it was not assessed during the October 2024 site visit. However, based on satellite imagery, it is suitable to have a depth that is conducive to turtle over-wintering.

The Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E (MNRF, 2015) defines candidate Amphibian Breeding Habitat (Woodland) as the following:

- Presence of a wetland, pond or woodland pool (including vernal pools) >500 m² (about 25m diameter) within or adjacent (within 120 m) to a woodland (no minimum size). Some small wetlands may not be mapped and may be important breeding pools for amphibians.
- Woodlands with permanent ponds or those containing water in most years until mid-July are more likely to be used as breeding habitat.

In addition, the *Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E* (MNRF, 2015) defines candidate Amphibian Breeding Habitat (Wetlands) as the following:

- Wetlands >500 m² (about 25m diameter), supporting high species diversity are significant; some small or ephemeral habitats may not be identified on MNR mapping and could be important amphibian breeding habitats.
- Presence of shrubs and logs increase significance of pond for some amphibian species because of available structure for calling, foraging, escape and concealment from predators.
- Bullfrogs require permanent water bodies with abundant emergent vegetation.

Candidate Amphibian Breeding Habitat (Woodland and Wetlands) exist within the study area due proximity to a permanent 0.8 ha pond that is ~100 m away from the disturbance footprint within a woodland.

The *Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E* (MNRF, 2015) defines candidate Special Concern and Rare Wildlife Species Habitat as the following:

- When an elemental occurrence is identified within a 1 or 10 km grid for a Special Concern or provincially rare species; linking candidate habitat on the site needs to be completed to ELC Ecosites

Candidate Special Concern and Rare Wildlife Species habitat is potentially present within the study area based on background information and suitable habitat. There is suitable habitat for Barn Swallow, Canada Warbler, Common Nighthawk, Eastern Wood-Pewee, Eastern Whip-poor-will, Golden-winged Warbler, Olive-sided Flycatcher, Red-headed Woodpecker, Wood Thrush, Midland Painted Turtle, Northern Map Turtle, Snapping Turtle, and Western Chorus Frog within the woodland and wetlands that surround the subject property.

5.0 DESCRIPTION OF THE PROPOSED PROJECT

The proposed redevelopment within the study area involves the following:

- Expanding the development footprint from a 2.77 ha disturbance footprint to a 4.52 ha footprint with minimal tree removal as most of the area that will be expanded into is early successional shrubland and forb meadow, however some tree removal is anticipated;
- Construction of a 0.19 ha single-story place of worship with a forecourt and a rear courtyard;
- Installing a Gazebo on the southeast corner of the disturbance boundary;
- Installing a fenced in children's play area with sand pit;
- Moving the basketball court location;
- Improved septic system by expanding the existing septic bed in the northeast corner of the property;
- Reconfiguring the laneway through the property with landscaping and tree planting along the new entrance road and installing a rock garden;
- Developing a 0.34 ha parking lot on the southwest corner of the property; and
- Construction multiple service and access lanes within the lot.

6.0 IMPACT ASSESSMENT

The following section outlines and assesses any potential impacts that are expected as a result of the proposed development based on review of available background information and the results of the October 29, 2024, field investigation. Recommendations for mitigation measures to avoid these impacts are outlined in **Section 7.0** of this report.

6.1 Natural Heritage System Components

The proposed development area is located directly adjacent to Franktown Road (south of Franktown Road). Individual tree removal is anticipated as part of the proposed works; however, it is unlikely to impact the Significant Woodland present south of the existing disturbance area (**Figure 2**). The location of the proposed development will also protect the integrity and contiguous nature of the remaining Significant Woodland; however, a Tree Conservation Report is recommended to fully assess the conservation value of the trees anticipated to be removed. This will be completed during the growing season in 2025.

Unevaluated wetlands and a PSW (Richmond Fen), is also located to the southwest of the subject property. Given that both areas are located greater than 200 m from the area of proposed development, impacts are not anticipated to wetland habitat as a result of the proposed development.

6.2 Landforms, Soils and Geology

The subject property contains minimal landform types according to (Ontario Geological Survey, 2011). Regulation limits (*O. Reg. 153/06*) are located within the study area. No other significant landforms or geology were noted within the study area based on the 2024 field investigation or based on background information.

6.3 Groundwater, Surface Water and Fish Habitat

The ephemeral wet depression is not within the disturbance area and was dry during the fall 2024 site visit and is not considered fish habitat. No significant groundwater resources or surface water features were identified within the disturbance area during the fall 2024 field investigation, and it is not anticipated that the proposed development will negatively impact the 0.8 ha pond to the east or the Unevaluated wetlands and PSW (Richmond Fen) present within 200 m of the proposed disturbance area as it is well outside of the development area.

6.4 Vegetation Cover

The proposed construction plan does require some impacts to vegetation and vegetation communities that are present within the study area. Approximately 1.38 ha of Fresh – Moist Meadow (MEFM4) and Buckthorn Deciduous Shrub Thicket (THDM2-6) will be impacted by the proposed development plans. Some individual trees are anticipated to be removed for the lot redevelopment works. A Tree Conservation Report is recommended and will be completed in 2025 to assess which individual trees are going to be removed and their conservation value. Additionally, no rare, significant, or SAR vegetation (i.e., Butternut) was identified within the study area.

One (1) species listed as 'Restricted' under the *Invasive Species Act* (2015) and considered a 'Noxious Weed' under the *Weed Control Act* (1990) (dog-strangling vine) was noted during the field investigation. Additionally, three (3) other 'Noxious Weeds' were documented all within the disturbance boundary. To prevent further degradation and colonization by noxious or invasive species (based on the colonization of the property by invasive plant species), it is advised during development that workers follow the Clean Equipment Protocol for Industry (Halloran, Anderson, and Tassie, 2013).

6.5 Habitat for Species at Risk

Given proposed project works in an area already altered (mowed lawn and parking lots) around an existing structure it is not anticipated that the proposed project works will have a significant impact on SAR or their habitat. The following sections outline discussions on specific species and groups of species at risk.

6.5.1 Vegetation

Although suitable habitat for Butternuts is available in the study area, none were identified within the study area. No impacts to this species are anticipated to occur as part of the development. However, if a Butternut is observed prior to construction (i.e., sprouts from the time of the submission of this report and the beginning of proposed development works), it will require a Butternut Health Assessment (BHA) to determine whether the Butternut(s) are retainable for the recovery of the species.

6.5.2 Birds

Migratory birds may be encountered nesting in vegetation present within the study area during development activities. Timing windows allow vegetation removal activities to avoid periods when birds are actively nesting. As such, any required removal of vegetation should be completed prior to or after the core bird breeding window for this region (April 15 – September 15, of any year), to ensure migratory birds or their nests are not adversely impacted.

If vegetation removal will be required prior to September 15 but later than April 15, a visual inspection of the areas to be cleared should be conducted by a qualified avian specialist prior to disturbance to ensure that no birds are using the area for the purposes of nesting. If migratory bird breeding and/or nesting activity is encountered at any time of year within the study areas, an appropriate setback distance should be maintained from the nest/nesting birds. Works should not continue in the location of the nest until after it has been determined by an avian specialist that the young have fledged and vacated the nest and work areas.

Due to their status as 'Endangered and Threatened', habitat for the Red-Headed Woodpecker and Eastern Whip-poor-will is protected (at this time) under the ESA. The Red-Headed Woodpecker prefers a variety of forested habitats while the Eastern Whip-poor-will prefers open forest consisting of mature deciduous trees. Habitat for these species is available in the Fresh – Moist Deciduous Forest (FOD7) and Fresh – Moist White Cedar – Hardwood Mixed Forest (FOMM7) present throughout the study area. The proposed development is anticipated to remove some individual trees, but will mostly include shrubs, grasses and forbs for vegetation clearing to

accommodate the new footprint of the lot redevelopment. However, it is anticipated that conducting clearing outside of the breeding bird window would minimize impacts to individual SAR or migratory birds that may be in the immediate proximity to the disturbance area. Targeted surveys for SAR birds with a focus on the 'Endangered' Red-Headed Woodpecker and Eastern Whip-poor-will are recommended. As mentioned in **Section 4.7.1**, Eastern Whip-poor-will is scheduled to be downlisted as 'Special Concern' under the ESA and may lose its habitat protection prior to the recommended SAR surveys. If this is the case, the avian SAR surveys will be adjusted accordingly.

Due to their status of 'Special Concern', habitat for the Olive-sided Flycatcher, Barn Swallow, Canada Warbler, Eastern Wood-pewee, Golden-Winged Warbler, Common Nighthawk, and Wood Thrush is not protected under the ESA.

Further recommendations for mitigation measures to avoid harm to individual birds and their habitat will be discussed in **Section 7.3** in accordance with the MBCA and the ESA.

6.5.3 Bats

During the October 29, 2024, field investigation, the study area was searched for potential specialized habitat suitable for SAR bats such as snag trees which may be used as maternity roosts. Five (5) snag trees were observed within the study area (**Figure 2**), although none of them occurred within the footprint of the proposed lot redevelopment (**Photos 5 and 11**). These trees can act as significant habitat for the life processes of SAR bats such as the Little Brown Myotis. In addition, the mixed and deciduous forest within the study area was observed to be suitable roosting and maternity habitat for SAR species such as the Tri-colored Bat and the Northern Myotis.

Three (3) additional bat species (Hoary Bat, Silver-haired Bat, and Eastern Red Bat) have been recently assessed by COSSARO (provincial) and COSEWIC (Federal) as Endangered with their uplisting to the ESA and SARA pending (likely in January 2025).

It is recommended that vegetation clearing take place outside of the active season for SAR bats within this region (April 1 – September 30, of any year). In addition, targeted surveys for SAR bat species are recommended within the subject property as part of the scope of this project.

6.5.4 Turtles

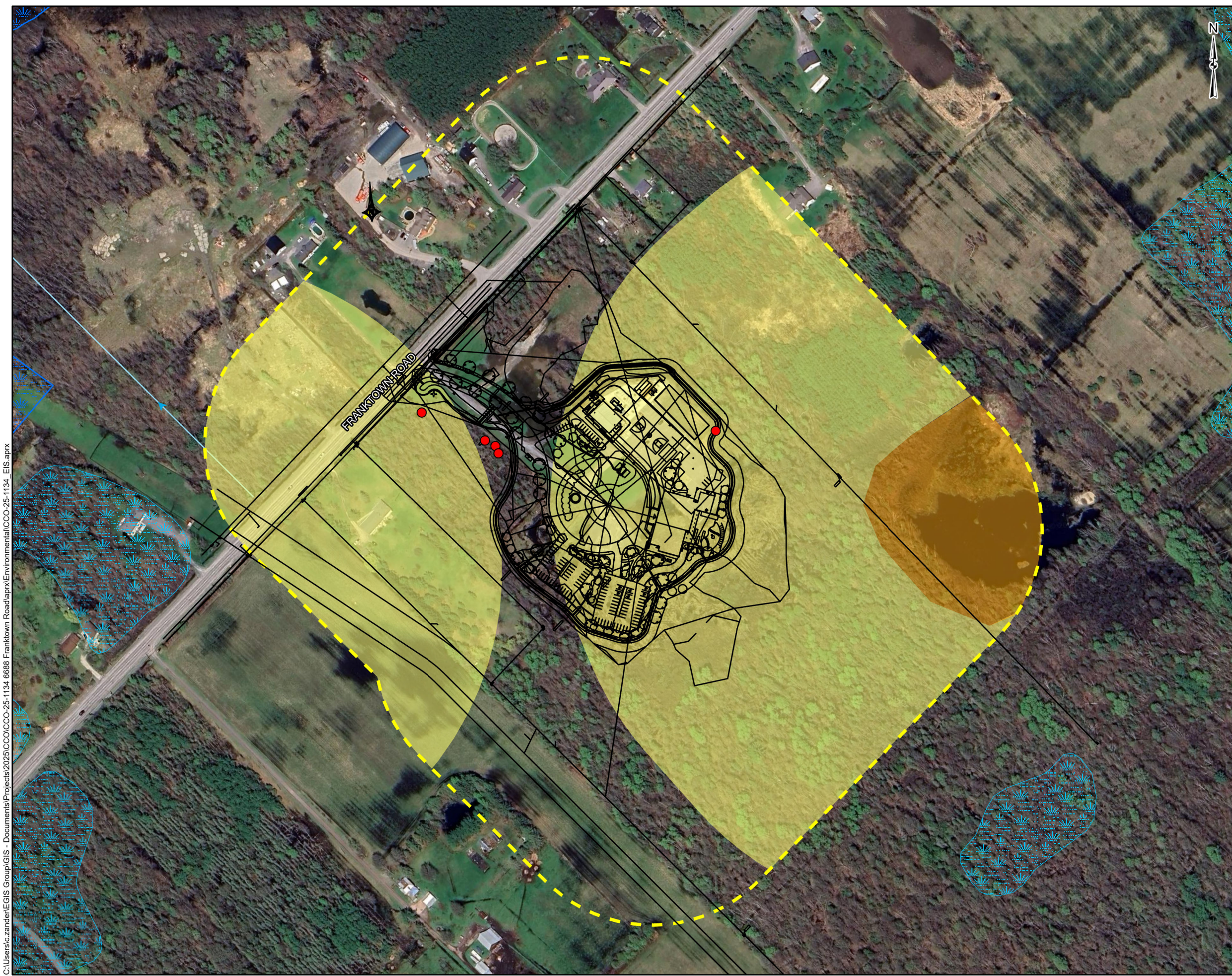
Migratory habitat for Blanding's Turtles is available through the proposed disturbance area in the form of Category 3 Blanding's Turtle habitat. Category 3 habitat is considered to have the highest tolerance to alteration and acts as a travel corridor for the species between wetlands. In addition, Category 2 habitat may be present within the study area due to the 0.8 ha pond present (see **Figure 3**), though this area is well outside of the footprint of planned lot redevelopment. The 0.8 ha pond may also contain other SAR turtles (i.e., Common Snapping Turtle and Midland Painted Turtle). No areas which provide specialized habitat (i.e., hibernacula, nesting sites, etc.) are known to occur within the disturbance area in association with the proposed development. Given the occurrence of the Blanding's Turtle within 2 km and the presence of unevaluated wetlands and Richmond

Fen PSW within 300 m of the study area, the immediate disturbance area appears suitable for use as a travel corridor during the active season.

Though the proposed development will impact the use of the immediate area for turtle species, it is not anticipated to impact the function of the larger landscape. In addition, it is not anticipated that individual turtles will be impacted by the proposed works, providing construction activities take place outside of the turtle nesting season (May 1 to July 15). However, it is recommended that any contractor be made aware of the potential to encounter turtles (regardless of occurrence probability) at this location during the active period for turtles. Recommended mitigation measures to avoid impacting SAR turtles will be discussed in **Section 7.3**.

Effective mitigation measures are further outlined in **Section 7.0** below.

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LEGEND

- Study Area Boundary
- Proposed Construction Layout
- Watercourse
- Unevaluated Wetland
- Provincially Significant Wetland
- Bat Snag Tree

SAR

- Category 2 Blanding's Turtle Habitat
- Category 3 Blanding's Turtle Habitat
- Blanding's Turtle Record in NHIC Database (1km²)

REFERENCE

GIS data provided by the Ontario Ministry of Natural Resources and Forestry, 2025.

100 50 0 100
Scale 1:3,000 Metres

CLIENT: INTERNATIONAL BUDDHIST PROGRESS SOCIETY OF OTTAWA – CARLETON		
PROJECT: 6688 FRANKTOWN RD ENVIRONMENTAL IMPACT STATEMENT		
TITLE: CATEGORY 2 & 3 BLANDING'S TURTLE HABITAT		
 115 Walgreen Road, RR3, Carp, ON K0A1L0 Tel: 613-836-2184 Fax: 613-836-3742	PROJECT NO: CCO-25-1134	FIGURE:
	Date Jan., 24, 2025	3
	GIS CZ	
	Checked By JL	

6.6 Wildlife and Significant Wildlife Habitat

6.6.1 Migratory and Non-migratory Birds

During the October 29, 2024, field investigation, a total of seven (7) migratory bird species were observed. This is a low species count compared to what would likely be present during the breeding season (April 1 – September 15). Any future development (i.e., clearing of vegetation) may have negative impacts for migratory birds as there is some vegetation clearing that is anticipated in the proposed work plan. The conservative core nesting period for birds within the study area is approximately April 1 to September 15 (i.e., the period when most birds are anticipated to be actively nesting). Provided that the appropriate mitigation measures are implemented during development, such as timing of vegetation clearing outside of the core nesting period (see **Section 7.0**),

6.6.2 Significant Wildlife Habitat

Five (5) Candidate Significant Wildlife Habitat listed in the 'Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E (2015) exist within the study area:

- **Amphibian Breeding Habitat (Wetland)**
 - Amphibian Breeding Habitat (Wetland) is not anticipated to be affected from the works as the 0.8 ha pond (**Figure 2**) is greater than 100 m away from the disturbance boundary with a large tree stand buffer.
- **Amphibian Breeding Habitat (Woodland)**
 - Amphibian Breeding Habitat (Woodland) may be impacted due to the potential removal of individual trees within the disturbance boundary that is within 120 m to the 0.8 ha pond. However, if individual tree removal does occur, it is unlikely to have a significant impact to the SWH as the size, functionality, and connectivity of the woodlot will not be affected.
- **Turtle Overwintering Areas**
 - Turtle Overwintering Areas is not anticipated to be affected from the works as the 0.8 ha pond (**Figure 2**) is greater than 100 m away from the disturbance boundary with a large tree stand buffer.
- **Special Concern and Rare Wildlife Species**
 - Through the desktop review, elemental occurrences of SAR have been identified and listed in **Section 4.8.2**. The works have the highest potential to impact the species that would utilize the forb meadow (MEFM4) and Buckthorn thicket (THDM2-6) habitat that is anticipated to be impacted most severely from the proposed works (Golden-Winged Warbler and Common Nighthawk). SAR surveys are recommended to assess for presence of SAR within the study area. See **Section 7.3** and **Section 7.4** for mitigation recommendations.
- **Bat Maternity Colonies**
 - Bat Maternity Colonies have the potential to be impacted as individual trees may require removal as part of the redevelopment. The October 29, 2024, field investigation identified five (5) candidate bat maternity tree snags along the perimeter of the proposed disturbance boundary (**Figure 2**). SAR bat surveys are recommended to assess the presence of SAR bats and if the candidate maternity snag

trees that were previously identified are utilized by SAR bats. See **Section 7.3** and **Section 7.4** for mitigation recommendations.

Candidate Amphibian Breeding Habitat (Wetland), Amphibian Breeding Habitat (Woodland), Special Concern and Rare Wildlife Species, Overwintering Turtle Habitat, and Bat Maternity are present throughout the study area. Provided the appropriate mitigation measures are followed (**Section 7**), it is not anticipated that the proposed development will negatively impact individual SWHs. However, additional SAR surveys for herptiles, bats, and birds are recommended as part of the overall scope of this project to confirm the presence of SAR within the habitats that are within the study area.

7.0 GENERAL RECOMMENDATIONS

To minimize or eliminate environmental impacts and to help achieve ecological and environmental improvements from the proposed construction and development, the following mitigation measures are recommended at this time.

7.1 Groundwater, Surface Water, and Fish Habitat

The proposed lot redevelopment is not expected to negatively impact surface water, groundwater and fish habitat within the study area. The proposed plans do not directly overlap with the 240 m² ephemeral wet depression (dry during the October site visit) that is present within the subject property. However, it is still standard practice to erect sediment barriers around the ephemeral depression to limit sediment that may enter the water from construction activities and surface run off.

7.2 Vegetation Cover

To mitigate the cumulative and long-term impacts to the study area and adjacent areas, the following principles should be implemented during the proposed development.

- To prevent the introduction or spread of invasive, noxious, or otherwise undesirable vegetation species, the *Clean Equipment Protocol for Industry* (Halloran, Anderson, and Tassie, 2013) should be followed. This includes mitigation such as:
 - Work shall occur in a manner to prevent the spread of invasive species and noxious vegetation to, from and within the Working Area;
 - Soil from areas impacted by invasive species shall not be stockpiled for reuse;
 - Debris, including earth clods and invasive and noxious vegetation material attached to the outside surfaces of equipment, is prohibited from entering the Working Area. Equipment coming on-site shall be inspected as close to the site entrance as possible for debris. If present, debris shall be completely removed prior to the equipment proceeding to the Working Area and shall be collected and managed by disposal to a licensed waste disposal site as non-hazardous solid industrial waste prior to the equipment proceeding to the working area;
 - Equipment shall also be inspected for debris prior to leaving the Working Area. Any debris shall be removed and managed as specified above and in a manner that prevents equipment from coming into further contact with standing, sprayed or cut invasive or noxious vegetation.
- Herbicides will not be used unless to control noxious and/or invasive plants such as common buckthorn;
- It is recommended that only locally appropriate native species be used for landscaping within the subject property. This would contribute to re-establishing native plants within the wider landscape and potentially have a positive impact for biodiversity (i.e., using native species for pollinators such as Monarchs and bees). Disturbed areas should be replanted with locally grown native species. Use of non-native plant material should be discouraged.

There is potential for individual tree removal within the disturbance area. A Tree Conservation Report is recommended and will be completed in 2025 in order to fully assess the impact potential from the proposed works.

7.3 Habitat for Species at Risk

Due to the potential of encountering SAR birds or turtles within the study area, the following mitigation measures are recommended:

- **SAR Birds:** Due to the likelihood of migratory birds during project works vegetation clearing should occur outside of the bird nesting window of April 1 to September 15 of any year to avoid contravention of the ESA for species that may be present;
- If any SAR are observed during construction, all work within the work area shall cease and the local MECP management biologist will be contacted (Ottawa District Office: 613-521-3450);
- **Avoidance:** To avoid potential impacts to SAR, construction activities should, if possible, be completed between November 1 - March 31 of any year. If works are undertaken between April 1 and October 31, additional mitigation is recommended:
 - **SAR Awareness Training:** This training shall be provided for the Contractor and all staff working on site. All employees involved in construction activities should be trained in the identification and life cycles of SAR that may be present on the work site which includes Barn Swallow, Canada Warbler, Common Nighthawk, Red-headed Woodpecker, Golden-winged Warbler, Olive-sided Flycatcher, Eastern Whip-poor-will, Wood Thrush, Blanding's Turtle, Little Brown Myotis, Northern Myotis, Tri-colored Bat, Hoary Bat, Silver-haired Bat, Eastern Red Bat, and Western Chorus Frog;
 - **Daily Site Inspections for SAR:** For the duration of the project works, the Contractor shall perform a thorough sweep of the construction zone before works are to begin to encourage any SAR on-site to move away. Site inspections shall be undertaken throughout the workday to determine if SAR are present within the work area. The following mitigation measures are required if SAR enter the site and to prevent adverse impacts to the SAR.
- During the active season for turtles (April 1 to October 31), a thorough sweep of the construction zone should be conducted before works are to begin to encourage any SAR on-site to move away:
 - If turtle eggs are encountered or unearthed during the construction activities, all operations must immediately stop within 5 m of the turtle eggs;
 - If a turtle is encountered that has already begun to nest (i.e., digging and/or sitting in a nest pit), construction activities should stop within 10 m of the turtle, and the turtle be allowed to finish nesting and leave the area of its own accord,
 - All exposed soils and/or stockpiled topsoil, sand, and gravel must be encircled with temporary turtle fencing or completely covered with geotextile to prevent turtles from accessing and nesting in the materials from May 1 to July 15 of any year.

- Because of the deciduous and mixed forest present within the study area (**Figure 2**), there is suitable habitat for SAR bats. It is recommended that vegetation clearing take place outside of the active season for SAR bats within this region (April 1 – September 30);
- Vegetation clearing should take place outside of the core bird breeding window for this region (April 15 – September 15, of any year). If vegetation clearing must take place prior to September 15 or after April 15, a qualified avian biologist must perform a sweep of the proposed development area and prior to construction to ensure no species are nesting there.

7.4 Wildlife and Significant Wildlife Habitat

To mitigate the cumulative and long-term impacts to the study area and adjacent areas, the following mitigation measures for wildlife should be implemented during the proposed redevelopment.

- In accordance with the MBCA, any required removal of vegetation should be completed prior to or after the bird nesting period of April 1 to September 15 of any given year to ensure migratory birds or their nests are not adversely impacted. In the event that vegetation removal will be required prior to September 15, but later than April 1, a visual inspection of the areas to be cleared should be conducted by a qualified avian specialist before disturbance to ensure that no birds are using the area for the purposes of nesting. Note: The *Canadian Wildlife Service does not support relying on inspections for migratory bird nests in such habitats due to the difficulty of locating all nests and risk to birds*; therefore, it is always a better option to clear vegetation outside of the breeding bird period. If migratory bird breeding and/or nesting activity is encountered at any time of year within the study area, an appropriate setback distance should be maintained from the nest/nesting birds. Works should not continue in the location of the nest until after it has been determined by an avian specialist that the young have fledged and vacated the nest and work areas. This is recommended in order to prevent negative impacts to migratory birds and other bird species, their nests, and eggs, which are protected under the MBCA or the FWCA.

8.0 SUMMARY AND RECOMMENDED SURVEYS

This EIS supports the proposed redevelopment on the property at 6688 Franktown Road, near the Town of Richmond, Ontario, legally known "PCL 19-1, SEC GB-3; PT LT 19, CON 3, PT 1, 4R7040; Goulbourn" in the Geographic Township of Goulbourn, given the condition that recommended additional studies take place prior to project works, and the mitigation measures recommended in this report are followed prior to and during construction. The design of the development should incorporate considerations that will help mitigate or offset impacts to habitat for birds, mammals, and SAR reptiles.

In order to fully understand the potential threats that the proposed development will pose on species and their habitats within the study area and adjacent lands, additional studies are recommended as part of the overall project scope. This should include but are not limited to the following:

- Evening SAR bat surveys and Eastern Whip-poor-will surveys;
- Daytime SAR bird surveys for Red-headed Woodpecker, Canada Warbler, Barn Swallow, Common Nighthawk, Eastern Wood-pewee, Golden-winged Warbler, Olive-sided Flycatcher, and Wood Thrush; and
- SAR turtle/habitat surveys.

In addition, any indicator species of Confirmed Significant Wildlife Habitat present within the study area as discussed in **Section 4.8.2** should be surveyed for in-tandem to the above-mentioned SAR surveys. A Tree Conservation Report will be completed in 2025.

Should any of species listed in **Section 4.7**, or any other SAR be found to have confirmed habitat within the areas proposed to be developed, additional consultation and authorization from the MECP may be required in order to proceed with planned project works. In addition, in such a case, potential approvals under the ESA and habitat compensation may be required.

9.0 LIMITATIONS

The investigation undertaken by Egis with respect to this report and any conclusions or recommendations made in this report reflect Egis' judgment based on the site conditions observed at the time of the site inspection on the date set out in this report and on information available at the time of the preparation of this report. The first field visit occurred outside of the activity window for all potential SAR that may be present within the study area. The recommendations provided may be altered or adjusted based on the results of the SAR surveys recommended.

This report has been prepared for specific application to this site, and it is based, in part, upon visual observation of the site and field investigation during a specific time interval, as described in this report. Unless otherwise stated, the findings cannot be extended to previous or future site conditions, or portions of the site which were unavailable for direct investigation.

If site conditions or applicable standards change or if any additional information becomes available at a future date, modifications to the findings, conclusions, and recommendations in this report may be necessary.

10.0 REFERENCES

Bird Studies Canada, Environment Canada's Canadian Wildlife Service, Ontario Nature, Ontario Field Ornithologists, and Ontario Ministry of Natural Resources (OBBA). 2006. *Atlas Data Summary*. Ontario Breeding Bird Atlas (OBBA) Website. 31 January 2008. <http://www.birdsontario.org/atlas/index.jsp>. Accessed December 2024.

City of Ottawa. 2022. *Official Plan*.

City of Ottawa. 2023. *Environmental Impact Study Guidelines*.

City of Ottawa. 2022. *Significant Woodlands Guidelines for Identification, Evaluation, and Impact Assessment*.

Crins, W.J., P.A. Gray, P.W.C. Uhlig, and M.C. Wester. 2009. *The Ecosystems of Ontario, Part 1: Ecozones and Ecoregions*. Inventory, Monitoring and Assessment Section. Science and Information Branch. Ontario Ministry of Natural Resources. Ontario, Canada: Queen's Printer for Ontario. 87p.

Conservation Authorities Act. R.S.O. 1990, c. 27. Current version 10 June 2024

COSEWIC. 2013c. COSEWIC assessment and status report on the Little Brown Myotis *lucifugus*, Northern Myotis *septentrionalis* and Tri-colored Bat *Perimyotis subflavus* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. xxiv + 93 pp.

eBird. 2022. *Explore Species*. eBird. <https://ebird.org/map>. Accessed December 2024.

Ecological Stratification Working Group. 1996. *A National Ecological Framework for Canada*. Agriculture and Agri-Food Canada, Research Branch, Centre for Land and Biological Resources Research, and Environment Canada. State of the Environment Directorate; Ecozone Analysis Branch, Ottawa/Hull.

Endangered Species Act. 2007. S.O. 2007, c. 6.

McIntosh Perry. 2019. *Environmental Impact Statement 6688 Franktown Road, Ottawa, ON*.

Fisheries Act. R.S.C. 1985. C F-14.

Fish and Wildlife Conservation Act. 1997. S.O. 1997, c. 41.

Fisheries and Oceans Canada (DFO). 2024. *Aquatic Species at Risk Map*. Fisheries and Oceans Canada. <https://www.dfo-mpo.gc.ca/species-especes/sara-lep/map-carte/index-eng.html>. Accessed December 2024.

Halloran, J., Anderson, H., and Tassie, D. 2013. *Clean Equipment Protocol for Industry*. Peterborough: Peterborough Stewardship Council and Ontario Invasive Plant Council. 20 p.

Invasive Species Act. 2015. S.O. 2015, c. 22 – Bill 37.

Lee, H.T., W.D. Bakowsky, J. Riley, J. Bowles, M. Puddister, P. Uhlig, and S. McMurray. 1998. *Ecological Land*

Classification for Southern Ontario: First Approximation and its Application. Ontario Ministry of Natural Resources, South Central Science Section, Science Development and Transfer Branch. SCSS Field Guide FG-02.

Maxar Technologies. 2024. *Google Earth Image*. Google Earth Pro. <http://www.earth.google.com>. Accessed December 2024.

Migratory Birds Convention Act. 1994. S.C. 1994, c. 22. Current version 3 December 2024.

Ministry of Environment, Conservation and Parks (MECP). 2021. Reptile and amphibian exclusion fencing. King's Printer of Ontario. <https://www.ontario.ca/page/reptile-and-amphibian-exclusion-fencing>. Accessed December 2024.

Ministry of the Environment, Conservation and Parks (MECP). 2013. *General Habitat Description for the Blanding's Turtle (Emydoidea blandingii)*. Toronto: Queen's Printer of Ontario. 7 p.

Ministry of Natural Resources (MNR). 2000. *Significant Wildlife Habitat Technical Guide*. Toronto: Queen's Printer of Ontario. 151 p.

Ministry of Natural Resources (MNR). 2010. *Natural Heritage Reference Manual for Natural Heritage Policies of the Provincial Policy Statement, 2005*. Second Edition. Toronto. Queen's Printer of Ontario. 248 pp.

Ministry of Natural Resources and Forestry (MNRF). 2015. *Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E*. Toronto: Queen's Printer of Ontario. 38 p.

Ministry of Natural Resources (MNR). 2024a. *Make A Map: Natural Heritage Areas*. Ministry of Natural Resources and Forestry.

http://www.gisapplication.lrc.gov.on.ca/mamnh/Index.html?site=MNR_NHLUPS_NaturalHeritage&viewer=NaturalHeritage&locale=en-US. Queen's Printer for Ontario. Accessed December 2024.

MNR. 2024b. *Land Information Ontario metadata tool*. <https://www.ontario.ca/page/land-information-ontario>. Queen's Printer of Ontario. Accessed December 2024.

MNR. 2024c. *Fish ON-Line*. Queen's Printer of Ontario. <https://www.gisapplication.lrc.gov.on.ca/FishONLine/Index.html?site=FishONLine&viewer=FishONLine&locale=en-US>. Accessed December 2024.

Ontario Ministry of Natural Resources (MNR). 2010. *Natural Heritage Reference Manual for Natural Heritage Policies of the Provincial Policy Statement*. 2nd Edition

Ministry of Natural Resources and Forestry (MNRF). 2014. *Significant Wildlife Habitat Mitigation Support Tool*. Queen's Printer of Ontario. 533 p. Accessed December 2024.

Ontario Geological Survey. 2010. *Surficial geology of Southern Ontario*. Ontario Geological Survey. http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=pub&id=MRD128-REV. Accessed December 2024.

Ontario Nature. 2022. *Ontario Reptile and Amphibian Atlas: A citizen science project to map the distribution of Ontario's reptiles and amphibians*. Ontario Nature. <http://www.ontarionature.org/atlas>. Accessed 3 December 2024.

Rideau Valley Conservation Authority. RVCA Geoportal. Accessed December, 2024.

Rideau Valley Conservation Authority. 2016. *Jock River Subwatershed Report*.

Species at Risk Act. 2002. S.C. 2002, c. 29.

Toronto Entomologists' Association. 2024. *Ontario Butterfly Atlas*. Toronto Entomologists' Association. <https://www.ontarioinsects.org/atlas/>. Accessed December 2024.

Weed Control Act. 1990. R.S.O. 1990, c. W.5.

Wester, M.C., B.L. Henson, W.J. Crins, P.W.C. Uhlig and P.A. Gray. 2018. *The Ecosystems of Ontario, Part 2: Ecodistricts*. Ontario Ministry of Natural Resources and Forestry, Science and Research Branch, Peterborough, ON. Science and Research Technical Report TR-26. 474 p.

APPENDIX A: STUDY AREA PHOTOGRAPHS



Photo 1: Existing conditions at the entrance to the property, facing southeast. October 29, 2024



Photo 2: Existing conditions of the mowed lawn, and wet early successional shrubland behind. October 29, 2024



Photo 3: Existing conditions of the Dry – Fresh Poplar Mixed Forest (FOMM5-2) that surround the property. October 29, 2024.



Photo 4: Existing conditions of a small shed on the southwest edge of the property. October 29, 2024.



Photo 5: One of the bat snag trees that is found within the Dry – Fresh Poplar Mixed Forest (FOMM5-2) within the study area. October 29, 2024.



Photo 6: A ephemeral wet depression with emergent vegetation on the on the southwest side of the property. October 29, 2024.



Photo 7: Existing conditions of the Buckthorn Deciduous Shrub Thicket (THDM2-6). October 29, 2024.



Photo 8: Existing conditions of the Buckthorn Deciduous Shrub Thicket (THDM2-6). October 29, 2024.



Photo 9: Existing conditions of the parking lot and children's play area on the property. October 29, 2024.



Photo 10: Existing conditions of the Dry White Pine – Red Pine Calcareous Bedrock Coniferous Forest (FOCS1-2) used for ceremonial purposes. October 29, 2024.



Photo 11: Existing conditions of the Vegetation Community 1: Fresh – Moist Deciduous Forest Ecosite (FOD7) in addition to potentially suitable SAR bat maternity roosting tree within the study area. October 29, 2024.



Photo 12: A migratory American Pipit observed on the property. October 29, 2024.



Photo 13: Invasive coltsfoot on the property. October 29, 2024.



Photo 14: Invasive Canada thistle on the property. October 29, 2024.



Photo 15: Existing conditions of the garden beds and outbuildings on the property. October 29, 2024.



Photo 16: Existing conditions of the Fresh – Moist Forb Meadow (MEFM4) on the property. October 29, 2024.

APPENDIX B: SITE PLANS

