



GUIDING SOLUTIONS IN THE  
NATURAL ENVIRONMENT

# Scoped Environmental Impact Study 3610 and 3624 Hazel Street Ridgeway, Town of Fort Erie

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*Prepared For:*

**S.R. Niagara Investments Inc.**

*Prepared By:*

**Beacon Environmental Limited**

*Date:*     *Project:*

**December 2022     222298**

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# 1. Introduction

Beacon Environmental Limited (Beacon) was retained S.R. Niagara Investments Inc. to prepare a scoped Environmental Impact Study (EIS) in support of a development plan for adjoining properties located at 3610 and 3624 Hazel Street in the Town of Fort Erie. The location of the subject property is illustrated in **Figure 1**.

The subject property contains two existing residential dwellings and associated yards. The property abuts a woodland feature along the north property line, which is mapped as Environmental Conservation Area (ECA) in the Niagara Region Official Plan (2014). The Town of Fort Erie Official Plan does not identify any natural heritage features or environmental designations on the property.

The purpose of the EIS is to identify, delineate and evaluate natural features, assess the potential impacts of the proposed development on any features and functions, and recommend mitigation measures to avoid, minimize, or off-set impacts if required. This report primarily relies on the findings and recommendations of an EIS that was prepared for the property directly north of the subject property (Beacon 2022). This EIS has been scoped in accordance with Terms of Reference that were established through consultation with the Niagara Region staff. EIS Terms or Reference are included in **Appendix A**.

## 2. Policy Context

The following sections provides a summary of the provincial and municipal natural heritage policies for this assessment. No areas or features on the property are regulated by the Niagara Peninsula Conservation Authority.

### 2.1 *Endangered Species Act (2007)*

Ontario's *Endangered Species Act, 2007* (ESA) came into effect on June 30, 2008 and replaced the former 1971 Act. The ESA protects species listed as endangered and threatened by the Committee on the Status of Species at Risk in Ontario (COSSARO). Under the 2008 ESA over 200 species in Ontario are identified as extirpated, endangered, threatened, or of special concern.

The purpose of the ESA is:

- To identify species at risk based on the best available scientific information, including information obtained from community knowledge and aboriginal traditional knowledge;
- To protect species that are at risk and their habitats, and to promote the recovery of species that are at risk; and
- To promote stewardship activities to assist in the protection and recovery of species that is at risk.

Endangered or threatened species and their habitats receive protection under the regulations of the ESA. Specifically, Section 9 of the ESA prohibits the killing, harming, harassing, possession, collection, buying and selling of extirpated, endangered, and threatened species on the Species at Risk in Ontario (SARO) List; and Section 10 prohibits the damage or destruction of protected habitat of species listed as extirpated, endangered or threatened on the SARO List.

Authorization from MECP is required under the ESA for any works proposed within the habitat of a threatened or endangered species. Searches for these species require seasonal field work and, in some cases, even if the species are found to be present, certain exemptions or a permit process may be available.

## **2.2 Provincial Policy Statement (2020)**


The Provincial Policy Statement (PPS) (MMAH 2020) provides policy direction to municipalities on matters of provincial interest as they relate to land use planning and development. The PPS provides for appropriate land use planning and development while protecting Ontario's natural heritage. Development governed by the *Planning Act* must be consistent with the policy statements issued under the PPS. These are outlined in Section 2.1 - Natural Heritage, Section 2.2 – Water, and Section 3.1 - Natural Hazards of the PPS, and relevant sections from each are provided in the following pages.

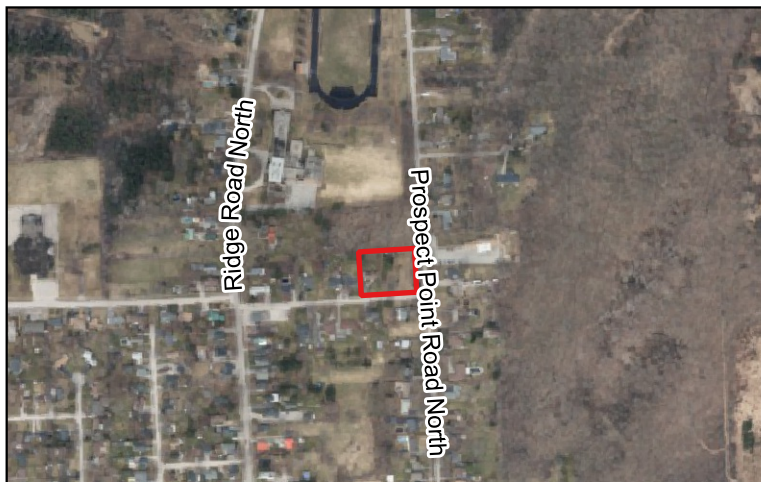
The PPS includes policies that speak to the identification and protection of natural heritage systems, as well as levels of protection for the various components that comprise such systems. The policies specific to natural heritage are found in Section 2.1 of the PPS and are provided in their entirety below:



- 2.1.1 *Natural features and areas shall be protected for the long term.*
- 2.1.2 *The diversity and connectivity of natural features in an area, and the long-term ecological function and biodiversity of natural heritage systems, should be maintained, restored or, where possible, improved, recognizing linkages between and among natural heritage features and areas, surface water features and ground water features.*
- 2.1.3 *Natural heritage systems shall be identified in Ecoregions 6E & 7E, recognizing that natural heritage systems will vary in size and form in settlement areas, rural areas, and prime agricultural areas.*
- 2.1.4. *Development and site alteration shall not be permitted in:*
  - a. *Significant wetlands in Ecoregions 5E, 6E and 7E; and*
  - b. *Significant coastal wetlands.*
- 2.1.5 *Development and site alteration shall not be permitted in:*
  - a. *Significant wetlands in the Canadian Shield north of Ecoregions 5E, 6E and 7E;*
  - b. *Significant woodlands in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Marys River);*
  - c. *Significant valleylands in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Marys River);*
  - d. *Significant wildlife habitat;*
  - e. *Significant areas of natural and scientific interest; and*
  - f. *Coastal wetlands in Ecoregions 5E, 6E and 7E that are not subject to policy 2.1.4(b).*





**Legend**  
 Subject Property



<b>Site Location</b>		<b>Figure 1</b>
3610-3624 Hazel Street EIS		
		Project: 222298 Last Revised: August 2022
Client: S.R. Niagara Investments		Prepared by: SZ Checked by: DW
	1:2,000	Inset Map: 1:10,000
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*unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions.*

*2.1.6 Development and site alteration shall not be permitted in fish habitat except in accordance with provincial and federal requirements.*

*2.1.7 Development and site alteration shall not be permitted in habitat of endangered species and threatened species, except in accordance with provincial and federal requirements.*

*2.1.8 Development and site alteration shall not be permitted on adjacent lands to the natural heritage features and areas identified in policies 2.1.4, 2.1.5 and 2.1.6 unless the ecological function of the adjacent lands has been evaluated and it has been demonstrated that there will be no negative impacts on the natural features or on their ecological functions.*

*2.1.9 Nothing in policy 2.1 is intended to limit the ability of agricultural uses to continue.*

## **2.3 Niagara Region Official Plan (2014)**

Section 7 of the Niagara Region Official Plan details the policies with respect to natural heritage. The Region's Core Natural Heritage System is shown on Schedule C, which consists of:

- Core Natural Areas, classified as either Environmental Protection Areas or Environmental Conservation Areas;
- Potential Natural Heritage Corridors connecting the Core Natural Areas;
- The Greenbelt Natural Heritage and Water Resources Systems; and
- Fish Habitat.

Environmental Protection Areas (EPA) include provincially significant wetlands; provincially significant Life Science Areas of Natural and Scientific Interest (ANSIs); and significant habitat of endangered and threatened species.

Environmental Conservation Areas (ECA) include significant woodlands; significant wildlife habitat; significant habitat of species of concern; regionally significant Life Science ANSIs; other evaluated wetlands; significant valleylands; savannahs and tallgrass prairies; and alvars; and publicly owned conservation lands.

Development is generally not permitted within EPA. Development may be permitted in ECA provided that it has been demonstrated that there will be no significant negative impact on the Core Natural Heritage System component or adjacent lands and the proposed development is not prohibited by other policies.

Portions of the subject property are identified as ECA in the Region's official plan.



## 2.4 Town of Fort Erie Official Plan (2011)

Section 8 of the Town's Official Plan outlines natural heritage protection policies in applicable to the development proposal. Natural Heritage Features are shown on Schedule A as EPA and ECA. EPAs include Provincially Significant Wetlands (PSWs), ANSIs, the habitat of threatened and endangered species and species of special concern and natural hazard areas, including dune protection areas. ECAs include, significant natural areas, locally significant wetlands, as well as other woodlands and meadows. Schedule C depicts the Natural Heritage features in more detail showing PSWss, identified ANSIs, Locally Significant Wetlands, Environmentally Sensitive Areas, Significant Natural Areas, Woodlands >2ha, and Corridors. Schedule C1 identifies Fish Habitat and Stream Corridors and Natural Hazard Areas including Valleylands and Dune Protection Areas.

Policy 8.2(I) states the development is not permitted in EPA, and Policy 8.2(IV) states that an EIS is required in support of proposed development on lands that lie adjacent to EPA. Policy 8.3(III) states that development within an ECA is permitted if supported by the findings of an EIS. Policy 8.3(V) states that upon the submission of a development proposal, the degree of protection and conservation afforded to the natural features and ecological functions of these areas in large part depends on the area's classification.

No EPA or ECA is identified on the property in the Town's Official Plan.

## 3. Methodology

### 3.1 Background Review

Background information was gathered and reviewed at the outset of the project. This involved consideration of the following documents or information sources relevant to the subject property:

- Provincial Policy Statement;
- Niagara Region Official Plan;
- Town of Fort Erie Official Plan;
- Current and historic aerial imagery;
- Provincially Tracked Species Layer from Land Information Ontario (LIO);
- Ontario Breeding Bird Atlas;
- Ontario Reptile and Amphibian Atlas;
- Natural Heritage Information Centre (NHIC) Data via the Make-A-Map application;
- Species at risk range maps <https://www.ontario.ca/environment-and-energy/species-risk-ontario-list>;
- High Resolution aerial photography of the property;
- Natural and physical feature layers from LIO—these geospatial layers include wetlands (provincially significant and un-evaluated wetlands), and watercourses with thermal regime;
- Scoped Environmental Impact Study - The Enclave (formerly 546 Ridge Road), Town of Fort Erie (Beacon 2022a); and
- Arborist Report and Tree Saving Plan – The Enclave, Fort Erie (Beacon 2022b).



## 3.2 Field Investigations

The subject property contains two residential dwellings with associated yards. A woodland feature abuts the northern property limit. In 2020, Beacon undertook seasonal field investigations to document the vegetation resources and wildlife habitat associated with the ECA woodland located along the northern property limit as part of an EIS for “The Enclave” development property, a vacant parcel formerly part of 546 Ridge Road, located directly north of the subject property. This report primarily relies on the field investigations that were undertaken for the “The Enclave” EIS (Beacon 2022). Seasonal surveys on the adjacent lands included a floral inventory, vegetation community classification, and breeding bird surveys, and a bat habitat assessment. Incidental wildlife observations were also noted. A summary of the seasonal field visits and survey dates is presented in **Table 1**. More detailed survey descriptions are provided in the subsections that follow.

**Table 1. Summary of 2020 Field Investigations of Adjacent Lands**

Field Investigation	Dates
Breeding Bird Surveys	June 3 and 17, 2020
Ecological Land Classification and Flora	November 19, 2019; April 8, May 22, June 26, August 12, and September 23, 2020
Bat Habitat Assessment	June 2020

### 3.2.1 Vegetation

Vegetation communities on and adjacent to the subject property were mapped and described following the protocols of the Ecological Land Classification (ELC) system for Southern Ontario (Lee *et al.* 1998). This involved delineating vegetation communities on aerial photos of the property and recording pertinent information on the community structure and composition.

A three season (spring, summer, fall) vegetation survey was conducted for the adjacent property to the north. A list was compiled of all flora species observed.

### 3.2.2 Wildlife Habitat

#### 3.2.2.1 Breeding Bird Surveys

Two breeding bird surveys were conducted for the adjacent property to the north in the mornings of June 3 and 17, 2020 with start times of 0700, and 0615 hrs. respectively, while the temperature was within 5° C of normal, it was not raining, nor excessively windy. The breeding bird community was surveyed using a roving type survey, in which all parts of the subject property were walked to within 50 m and all birds heard or observed and showing some inclination toward breeding were recorded as breeding species. All birds heard and seen were recorded in the location observed on an aerial photograph of the site.

### 3.2.2.2 Bat Habitat Assessment

Several bat species are listed as endangered in Ontario, including Eastern Small-footed Myotis (*Myotis leibii*), Little Brown Myotis (*Myotis lucifugus*), Northern Myotis (*Myotis septentrionalis*), and Tri-colored Bat (*Perimyotis subflavus*). These species over-winter in caves and mines. Maternal roosts are often associated with cavity trees and sometimes old buildings (e.g. attics).

The *Survey Protocol for Species at Risk Bats within Treed Habitats Little Brown Myotis, Northern Myotis & Tri-Colored Bat* (MNR 2017) was followed to determine if the adjacent woodland is maternity roost habitat for Endangered bats, which included a survey for potential maternity roost trees and acoustic monitoring (see Beacon 2022).

## 4. Existing Conditions

### 4.1 Vegetation communities

The subject property supports two existing residential dwellings and associated lawn and several planted trees.

A woodland classified as a Dry-Fresh Sugar Maple Deciduous Forest (FOD5-1) is located along the north side of the subject property (**Figure 2**). This feature consists of mid-aged to mature Sugar Maple (*Acer saccharum*) in association with Black Walnut (*Juglans nigra*), Norway Maple (*Acer platanoides*), and Black Cherry (*Prunus serotina*). The understory consists of Choke Cherry (*Prunus virginiana*) and Sugar Maple (*Acer saccharum*). Ground covers include Garlic Mustard (*Alliaria petiolata*), Yellow Trout Lily (*Erythronium americana*), False Solomon's Seal (*Maianthemum racemosum*), and Virginia Waterleaf (*Hydrophyllum virginianum*).

### 4.2 Flora

A total of 59 species of vascular plants were identified within the adjacent woodland, the majority (83%) of which are native to Ontario. A plant list is included in **Appendix B**. Two regionally rare native species were identified, including False Mermaidweed (*Floerkea proserpinacoides*) and One-seed Burr Cucumber (*Sicyos angulatus*). The locations of the species are illustrated in **Figure 2**. A single Honey Locust tree (*Gleditsia triancthos*) was observed on the property, which is ranked S2 (Imperilled) in Ontario; however, this tree was apparently planted as it is located along the woodland edge with other planted trees such as Norway Spruce (*Picea abies*).

### 4.3 Breeding Birds

A total of 17 species of breeding birds were recorded on the adjacent property to the north and one species noted as foraging (**Appendix C**).





**Legend**

- Subject Property
- Ecological Communities

Code	Forest Communities
FOD5-1	FOD5-1: Dry - Fresh Sugar Maple Deciduous Forest
Code	Anthropogenic Communities
ANT	ANT: Anthropogenic

**Existing Conditions**

**Figure 2**

3610-3624 Hazel Street EIS



Project: 222298  
Last Revised: September 2022

Client: S.R. Niagara Investments

Prepared by: SZ  
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The majority of breeding records were common species regularly found in urbanizing areas including the following species in descending order, in which two or more pairs were recorded: American Robin (*Turdus migratorius*), Common Grackle (*Quiscalus quiscula*), European Starling (*Sturnus vulgaris*), House Sparrow (*Passer domesticus*), Northern Cardinal (*Cardinalis cardinalis*) and House Wren (*Troglodytes aedon*).

A number of woodland species were recorded and include Red-bellied Woodpecker (*Melanerpes carolinus*), Great-crested Flycatcher (*Myiarchus crinitus*), Black-capped Chickadee (*Poecile atricapillus*), Red-eyed Vireo (*Vireo olivaceus*) and Mourning Warbler (*Geothlypis philadelphia*).

Area-sensitive birds are those that require larger tracts of suitable habitat in which to breed or are those that have a higher breeding success in larger areas of suitable habitat. No such species were present. No species ranked as S1 through S3 (Critically Imperiled through Vulnerable) by the province, or species protected under the ESA were encountered. A number of Chimney Swift (*Chaetura pelagica*) were recorded as foraging over the subject property during the second breeding bird survey. These birds are protected under the ESA and exploit anthropogenic chimney structures in which to construct their nests.

#### **4.4 SAR Bats**

Based on the acoustic monitoring that was completed for the woodland adjacent to the property (Beacon 2022a), only five (5) Little Brown Myotis calls were recorded during the entire 15-night period that the detectors were deployed. This number is extremely low and suggests that it is very unlikely that the woodland is being utilized by Little Brown Myotis for maternity roosting. If maternity roosts were present, then it would be expected that many more Little Brown Myotis calls, particularly around sunset, would be detected throughout the entire monitoring period.

#### **4.5 Other wildlife**

A single Red-back Salamander (*Plethodon cinereus*) was found within the woodland. No snakes or other amphibians were observed.

During the acoustic monitoring for SAR bats, several non-SAR bats were recorded including Big Brown Bat and Silver-haired Bat.

No other wildlife observations were noted.

## **5. Summary of Natural Heritage Features and Constraints**

Based on information collected through the background review and field investigations, features on/adjacent to the subject property were identified/evaluated for significance according to criteria and



guidance provided in the Niagara Region Official Plan and provincial guidelines, including the Significant Wildlife Habitat Technical Guide (OMNR 2000) and the Significant Wildlife Habitat (SWH) Criteria Schedules for Ecoregion 7E (MNR 2015).

## 5.1 Habitat for Threatened and Endangered Species

A total of five (5) Little Brown Myotis calls were recorded during the 15-night acoustic monitoring session for endangered bats on the adjacent property to the north. This very small number of calls indicates that the species is in the area, but suggests that the species is not utilizing the woodland for maternity roosting.

Chimney Swift, a threatened bird species, was recorded as a “flyover” (not breeding) during breeding bird surveys of the adjacent property to the north. This species tends to be found in and around urban settlements where they nest and roost (rest or sleep) in chimneys and other similar anthropogenic structures. The chimney on the existing house is capped and, therefore, would not be accessible to Chimney Swift.

No other potential habitat for threatened or endangered species was found on the subject property. A screen for habitat of threatened or endangered species is included in **Appendix D**.

## 5.2 Provincially Significant Wetlands

There are no PSWs (or other wetlands) on or adjacent to the subject property.

## 5.3 Areas of Natural and Scientific Interest

There are no ANSIs on or adjacent to the subject property.

## 5.4 Significant Valleylands

There are no valleylands on or adjacent to the subject property.

## 5.5 Significant Wildlife Habitat

According to the Significant Wildlife Habitat Technical Guidelines (MNR 2000), there are four main categories of Significant Wildlife Habitat (SWH):

- Seasonal Concentration Areas of Animals;
- Rare Vegetation Communities or Specialized Habitat for Wildlife;
- Habitat for Species of Conservation Concern; and

- Animal Movement Corridors.

Within each of these categories, there are multiple types of SWH, each intended to capture a specialized type of habitat that may or may not be captured by other existing feature-based categories (e.g., significant wetlands, significant woodlands). The Significant Wildlife Habitat Criteria Schedules for Ecoregion 7E (MNRF 2015) were used as a preliminary screening for SWH on the property. A full SWH screening table is included in **Appendix C**.

Based on this screening, the adjacent woodland potentially supports bat maternity roost habitat for non-SAR bats, notably Big Brown Bat; however, the acoustic monitoring data suggests that the number of female Big Brown Bats potentially utilizing the woodland for roosting is below the threshold for SWH (Beacon 2022a).

## 5.6 Significant Woodlands

An assessment of the off-site woodland to the north was completed in order to confirm significance in the context of applicable natural heritage policies.

According to Policy 7.B.1.5 of the Regional Official Plan, to be identified as significant, a woodland must meet one or more of the following criteria:

- Contain threatened or endangered species or species of concern;
- In size, be equal to or greater than:
  - 2 hectares, if located within or overlapping Urban Area Boundaries;
  - 4 hectares, if located outside Urban Areas and north of the Niagara Escarpment;
  - 10 hectares, if located outside Urban Areas and south of the Escarpment;
- Contain interior woodland habitat at least 100 metres in from the woodland boundaries;
- Contain older growth forest and be 2 hectares or greater in area;
- Overlap or contain one or more of the other significant natural heritage features listed in Policies 7.B.1.3 or 7.B.1.4; or
- Abut or be crossed by a watercourse or water body and be 2 or more hectares in area.

**Table 2. Policy Conformity Assessment**

Criteria	EIS findings	Criteria met?
a) Contain threatened or endangered species or species of concern;	No habitat for threatened or endangered species or species of concern was identified.	No
b) In size, be equal to or greater than: <ul style="list-style-type: none"> <li>• 2 hectares, if located within or overlapping Urban Area Boundaries;</li> <li>• 4 hectares, if located outside Urban Areas and north of the Niagara Escarpment;</li> <li>• 10 hectares, if located outside Urban Areas and south of the Escarpment;</li> </ul>	The woodland is less than 2 ha.	No

Criteria	EIS findings	Criteria met?
c) Contain interior woodland habitat at least 100 metres in from the woodland boundaries;	The woodland is approximately 60 m in total width	No
d) Contain older growth forest and be 2 hectares or greater in area;	The woodland is largely secondary growth and is less than 2 ha.	No
e) Overlap or contain one or more of the other significant natural heritage features listed in Policies 7.B.1.3 or 7.B.1.4; or	The woodland does not contain or overlap other significant features.	No
f) Abut or be crossed by a watercourse or water body and be 2 or more hectares in area.	There are no watercourses or waterbodies associated with the woodland.	No

## 5.7 Fish Habitat

There is no fish habitat (e.g. watercourses, ponds) on or adjacent to the subject property.

## 5.8 Summary

In summary, no significant natural heritage features were identified on or adjacent to the subject property.

# 6. Proposed Development

The proposed development for the subject property involves the creation of six lots, which will support the existing dwelling to be retained, four new single detached dwellings, and two semi-detached units. The proposed development is illustrated conceptually in **Figure 3**.

# 7. Impact Assessment and Proposed Mitigation

## 7.1 Impact Assessment

The proposed development will result in the removal of trees from the existing residential yard. There is also potential for impact to trees along the woodland edge at the north end of the property. As discussed in Section 5, while the woodland is identified as ECA in the Reg'n's Official Plan, it does not meet the criteria for designation as significant woodland or SWH.

Several large Sugar Maple trees were documented along the northern property boundary (**Figure 3**), which were identified for removal due to poor health or structural condition (Beacon 2022b). In addition, two mature Sugar Maple trees in relatively good condition were documented near the northwest corner





**Legend**

- Subject Property
- Ecological Communities
- Proposed Development
- Trees to be Preserved
- Trees to be Removed

Code	Forest Communities
FOD5-1	FOD5-1: Dry - Fresh Sugar Maple Deciduous Forest
Code	Other Communities
ANT	ANT: Anthropogenic

**Proposed Development**

**Figure 3**

3624 and 3610 Hazel Street Ft. Erie EIS



Project: 222298  
Last Revised: November 2022

Client: S.R. Niagara Investments

Prepared by: SZ  
Checked by: DW



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of the property, which are recommended for preservation (Beacon 2022b) (**Figure 3**). It is anticipated that these trees two can be preserved as they are located north of the existing residence which will be retained.

## 7.2 Mitigation Recommendations

The proposed development will not result in any impacts on significant natural heritage features; however, there are a number of mitigation measures that are recommended to ensure the proposed development will minimize impacts on existing vegetation and wildlife habitat.

- To avoid impacts on breeding birds and potentially roosting non-SAR bats, vegetation removals should be conducted between October 1 and March 31;
- The arborist report for the adjacent property (Beacon 2022b) identifies a “Tree Preservation Area” directly north of the subject property. To protect trees along the northern edge of the proposed development, tree protection zones should be established around trees located along the property line, notably trees 27 and 28 illustrated in **Figure 3**. It is recommended that trees be protected by installing tree protection hoarding at the limit of the TPZ as illustrated in **Figure 3**. Recommended hoarding consists of 1.2 m high plastic mesh affixed to paige wire fencing supported by metal t-bar posts spaced a minimum of 2.4 m apart. Erosion and sediment control fencing (silt fence) fitted with orange plastic mesh fence may double as tree protection fencing; and
- If any wildlife is encountered during site preparation or construction, the wildlife should be allowed to retreat, or a qualified professional should be contacted to ensure appropriate handling and relocation.

## 8. Policy Conformity

A summary of provincial and municipal environmental protection and planning policies and regulations applicable to the subject property were discussed in **Section 2**. An evaluation of how the proposed re-development complies with the applicable environmental policies and legislation is summarized below in **Table 1**.

**Table 3. Policy Conformity Assessment**

Applicable Policy / Legislation	Policy Intent	EIS Findings & Recommendations
<b>Provincial Policy Statement (2020)</b>		
<b>1. Habitat for Threatened and Endangered Species</b>	The PPS does not permit development or site alteration in habitat for threatened and endangered species except in accordance with provincial and federal requirements.	Several (5) Little Brown Myotis calls were recorded from the adjacent woodland; however, the limited number of calls suggests that the woodland is not utilized for maternity roosting. No other threatened or

Applicable Policy / Legislation	Policy Intent	EIS Findings & Recommendations
		endangered species were identified on the property.
2. <b>Significant Wetlands</b>	<p>The PPS does not permit development or site alteration in Significant Wetlands, except for conservation, wildlife management and stewardship purposes.</p> <p>The PPS allows for development or site alteration on lands adjacent to Significant Wetlands if it can be demonstrated that such activities will not adversely impact upon the feature and its functions.</p>	No wetlands were identified on or adjacent to the property.
3. <b>Significant Woodlands</b>	The PPS does not permit development or site alteration in Significant Woodlands unless it can be demonstrated through an EIS that there will be no negative impacts.	The property abuts a small woodland which does not meet the Regional OP criteria for significance.
4. <b>Significant Valleylands</b>	The PPS allows for development or site alteration in Significant Valleylands if it can be demonstrated through an EIS that there will be no negative impacts.	No valleylands were identified on or adjacent to the property.
5. <b>Significant Wildlife Habitat</b>	The PPS allows for development or site alteration in SWH if it can be demonstrated through an EIS that there will be no negative impacts.	No significant wildlife habitat was identified on or adjacent to the subject property.
6. <b>Significant Areas of Natural and Scientific Interest (ANSI)</b>	The PPS allows for development or site alteration in Significant ANSIs if it can be demonstrated through an EIS that there will be no negative impacts.	No ANSIs were identified on or adjacent to the subject property.
7. <b>Fish Habitat</b>	Development and site alteration are not permitted in fish habitat except in accordance with provincial and federal requirements.	No fish habitat was identified on or adjacent to the subject property.
<b>Ontario Endangered Species Act (2007)</b>	Provides legal protection to endangered and threatened species and their habitats	Same as 1. Above.
<b>Region of Niagara Official Plan</b>	<p>The Core Natural Heritage System of Niagara Region consists of:</p> <ul style="list-style-type: none"> <li>• Core Natural Areas, classified as either Environmental Protection Areas or Environmental Conservation Areas;</li> <li>• Potential Natural Heritage Corridors connecting the Core Natural Areas;</li> <li>• The Greenbelt Natural Heritage System; and</li> <li>• Fish Habitat.</li> </ul> <p>No development is permitted within EPA features. Development may be</p>	The property is located adjacent to an area identified as ECA in the Region's Official Plan. The ECA designation overlaps with a small woodlot on the north side of the property. The EIS confirmed that the woodland does not qualify as ECA. Development is not proposed within the woodlot area.

Applicable Policy / Legislation	Policy Intent	EIS Findings & Recommendations
	<p>permitted within ECA lands if it has been demonstrated that, over the long term, there will be no significant negative impact on the Core Natural Heritage System component.</p> <p>Development and site alteration may be permitted within fish habitat and on adjacent lands if it will result in no net loss of the productive capacity of fish habitat as determined by the Department of Fisheries and Oceans. A 30 m buffer from the top of bank of critical fish habitat is typically required, however, a minimum 15 m buffer may be acceptable if it is demonstrated that there will be no impacts on fish habitat.</p> <p>Where development or site alteration is approved in or adjacent to the Core Natural Heritage System new lots thus created shall not extend into either the area to be retained in a natural state as part of the Core Natural Heritage System or the buffer zone identified through an Environmental Impact Study.</p>	
<p><b>Town of Fort Erie Official Plan</b></p>	<p>Polices are consistent with the Region of Niagara Official Plan (see above)</p>	<p>No ECA or EPA features have been identified on or adjacent to the subject property.</p>

## 9. Conclusion

This EIS has been prepared for a proposed residential development for a property located at 3610 & 3624 Hazel Street in the Town of Fort Erie. The EIS describes the natural heritage features and ecological functions associated with the property and adjacent lands, assesses the potential direct and indirect impacts of the proposed development on these features, and functions, and recommends mitigation measures.

The subject property contains two existing detached dwellings and associated lawn. A woodland feature is located along the north side of the subject property. The proposed development consists of six new lots east of the existing dwelling at 3624 Hazel to be retained. The other dwelling at 3610 Hazel Street will be removed. In all, four single family and two semi-detached dwelling lots will be developed.

The proposed development could potentially impact trees along the edge of the woodland to the north. The woodland is not significant by provincial or regional standards; however, it does provide habitat for breeding birds and potentially non-endangered bats (e.g. Big Brown Bat); therefore, the EIS recommends that vegetation clearing be conducted from late fall to early spring (October 1 to March

31) to avoid the active nesting season for birds and the roosting period for bats. The EIS also recommends tree preservation considerations along the northern property limit.

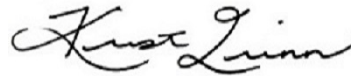
As no significant natural heritage features will be impacted by the development, it is the conclusion of this EIS that the proposed development is in conformity with provincial and municipal natural heritage policies.

Prepared by:  
**Beacon Environmental**



Dan Westerhof, B.Sc., M.E.S.  
Senior Terrestrial Ecologist,  
ISA Certified Arborist (ON-1536A)

Reviewed by:  
**Beacon Environmental**



Kristi Quinn, B.E.S., Cert. Env. Assessment  
Principal, Senior Environmental Planner



## 10. References

- Beacon Environmental Limited (Beacon). 2020a.  
Scoped Environmental Impact Study - The Enclave (formerly 546 Ridge Road), Town of Fort Erie. November 2022.
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Survey Protocol for Species at Risk Bats within Treed Habitats Little Brown Myotis, Northern Myotis & Tri-Colored Bat.
- Ontario Ministry of Municipal Affairs and Housing (MMAH). 2020.  
Provincial Policy Statement. Toronto, Ontario.
- Regional Municipality of Niagara. 2014.  
Niagara Region Official Plan.
- Town of Fort Erie. 2011.  
Town of Fort Erie Official Plan. Niagara Region Approval November 18, 2011. Office Consolidated Version: September 1, 2021.

# Appendix A

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## EIS Terms of Reference

September 8, 2022

BEL 222298

Adam Boudens  
Senior Environmental Planner/Ecologist  
Niagara Region  
1815 Sir Isaac Brock Way  
Thorold, ON L2V 4T7

**Re: Proposed Terms of Reference for Scoped Environmental Impact Study (EIS), 3610 and 3624 Hazel Street, Ridgeway, Fort Erie**

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Dear Mr. Boudens:

Beacon Environmental Limited (Beacon) has prepared the following Terms of Reference (TOR) for a Scoped Environmental Impact Study (EIS) in support of a proposed development at 3624 and 3610 Hazel Street in Ridgeway, Town of Fort Erie (**Figure 1**).

The subject property supports existing residential development. The property is located adjacent to a woodland that is currently mapped as Environmental Conservation Area (ECA) in the Region's Official Plan (2014). The woodlot abutting the property is approximately 0.5 ha. No natural heritage features or designations have been identified on the property in the Town of Fort Erie Official Plan (2011).

The purpose of the EIS is to identify, delineate, and evaluate the natural features on/adjacent to the property, assess impacts of the proposed development, and recommend mitigation measures to avoid, minimize, or off-set impacts.

## **Background Review**

Beacon will review background information sources and policy documents related to the subject property including, but not limited to:

- Provincial Policy Statement (2020);
- Town of Fort Erie Official Plan (2011);
- Niagara Region Official Plan (2014);
- Natural Heritage Information Centre (NHIC) data;
- NPCA watershed information;
- Wildlife atlases;
- Natural and physical feature layers from LIO—these geospatial layers include wetlands (provincially significant and un-evaluated wetlands), and watercourses with thermal regime; and
- Significant Wildlife Habitat (SWH) Criteria Schedules for Ecoregion 7E (MNRF 2015).

## Field Investigations

Field investigations were undertaken in 2020 to document the vegetation and wildlife habitat associated with the adjacent woodland as part of an EIS for 546 Ridge Road. The information collected for the woodland at 546 Ridge Road will be used to evaluate the ecological function, significance, and sensitivity of the feature. As part of the EIS for 546 Ridge Road, Beacon completed vegetation surveys, breeding bird surveys, bat surveys, and informal surveys for snakes in 2020.

## EIS Report

The EIS report will characterize the subject property and adjacent lands based on the findings of the background review and field investigations completed for 546 Ridge Road, assess the function and significance of natural heritage features on/adjacent to the subject property, describe the proposed development, evaluate impacts of the proposed development, recommend mitigation and enhancement opportunities to avoid, minimize, or off-set impacts, and assess conformity with provincial and municipal policies and regulations. The EIS will be prepared according to the following outline:

Introduction – This section of the report will include introductory remarks regarding the purpose and scope of the study, a general description of the site and the site location, and a brief description of the proposed development.

Policy Context – The report will include a summary of applicable provincial, municipal and conservation authority natural heritage policies and legislation, and their relevance to the property, including the Provincial Policy Statement (2020), the Niagara Region Official Plan (2014), and the Town of Fort Erie Official Plan (2011).

Methodology – This section of the report will include a description of the methods used to characterize the site's natural heritage features and functions. A list of background information sources consulted as well as details of all field work and assessments will be included.

Characterization of Existing Conditions – The report will provide a detailed description of existing conditions based on the results of the background review and field investigations. Existing natural heritage features on the subject property, including wildlife habitat, vegetation communities, and flora will be described.

Summary of Natural Features – the significance of natural heritage features identified on/adjacent to the subject property will be evaluated as detailed above.

Description of Proposed Development – This section of the report will provide a description and location of the proposed development, including lot layout, roads, grading, and servicing.

Impact Assessment and Mitigation – This section will evaluate potential direct and indirect impacts of the proposed development on the natural heritage and hydrological features. Where appropriate, mitigation recommendations will be provided to prevent, minimize, or off-set impacts to natural heritage features.

Policy Conformity - The proposed development will be assessed to confirm conformity with applicable provincial and municipal policies and regulations.

Recommendations and Conclusion – The report will conclude with a review of net impacts of the proposed development on the natural heritage system and indicate whether the proposed development complies with applicable plans, policies and regulations.

## Closing

We trust that our proposed approach to completing the Scoped EIS outlined in this letter is consistent with the Region's EIS Guidelines (2018) and scoping requirements.

Should have any questions or require clarification, please do not hesitate to contact the undersigned.

Prepared by:  
**Beacon Environmental**



Dan Westerhof, B.Sc., M.E.S.  
Senior Terrestrial Ecologist,  
ISA Certified Arborist (ON-1536A)


Reviewed by:  
**Beacon Environmental**

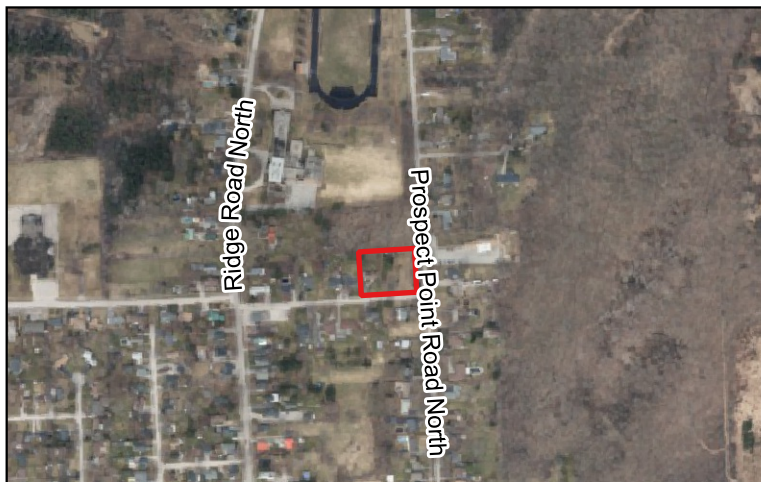




Ken Ursic, B.Sc., M.Sc.  
Principal, Senior Ecologist





**Legend**  
 Subject Property



<b>Site Location</b>		<b>Figure 1</b>
3610-3624 Hazel Street EIS		
		Project: 222298 Last Revised: August 2022
Client: S.R. Niagara Investments		Prepared by: SZ Checked by: DW
	1:2,000	Inset Map: 1:10,000
Contains information licensed under the Open Government License— Ontario Orthoimagery Baselayer: FBS Niagara Region (2018)		

# Appendix B

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## Vascular Plant Species List (Adjacent Land)

# Appendix B

## Vascular Plant Species List (Adjacent Lands)

Scientific Name	Common Name	SARO	SRank	Niagara
<i>Acer platanoides</i>	Norway Maple		SE5	IX
<i>Acer saccharum</i>	Sugar Maple		S5	X
<i>Acer x freemanii</i>	( <i>Acer rubrum</i> X <i>Acer saccharinum</i> )		SNA	hyb
<i>Aesculus hippocastanum</i>	Horse Chestnut		SE2	IU
<i>Alliaria petiolata</i>	Garlic Mustard		SE5	IC
<i>Allium schoenoprasum</i>	Wild Chives		S4	IR
<i>Arisaema triphyllum</i>	Jack-in-the-pulpit		S5	C
<i>Athyrium filix-femina</i>	Common Lady Fern		S5	C
<i>Carex blanda</i>	Woodland Sedge		S5	C
<i>Carex gracillima</i>	Graceful Sedge		S5	C
<i>Carex rosea</i>	Rosy Sedge		S5	C
<i>Carya ovata</i>	Shagbark Hickory		S5	C
<i>Circaea canadensis</i>	Broad-leaved Enchanter's Nightshade		S5	C
<i>Claytonia virginica</i>	Eastern Spring Beauty		S5	C
<i>Convallaria majalis</i>	European Lily-of-the-valley		SE5	IU
<i>Dryopteris carthusiana</i>	Spinulose Wood Fern		S5	C
<i>Erigeron philadelphicus</i>	Philadelphia Fleabane		S5	C
<i>Erythronium americanum</i>	Yellow Trout-lily		S5	C
<i>Euonymus obovatus</i>	Running Strawberry-bush		S4	C
<i>Floerkea proserpinacoides</i>	False Mermaidweed		S4	R
<i>Fraxinus pennsylvanica</i>	Red Ash		S4	C
<i>Galium aparine</i>	Common Bedstraw		S5	C
<i>Geranium robertianum</i>	Herb-Robert		S5	C
<i>Gleditsia triacanthos</i>	Honey Locust		S2?	R
<i>Glyceria striata</i>	Fowl Mannagrass		S5	C
<i>Hesperis matronalis</i>	Dame's Rocket		SE5	IX
<i>Hydrophyllum virginianum</i>	Virginia Waterleaf		S5	C
<i>Impatiens capensis</i>	Spotted Jewelweed		S5	C
<i>Juglans nigra</i>	Black Walnut		S4?	C
<i>Ligustrum vulgare</i>	European Privet		SE5	IC
<i>Lonicera tatarica</i>	Tatarian Honeysuckle		SE5	IC
<i>Maianthemum racemosum</i>	Large False Solomon's Seal		S5	C
<i>Matteuccia struthiopteris</i>	Ostrich Fern		S5	C
<i>Onoclea sensibilis</i>	Sensitive Fern		S5	C



Scientific Name	Common Name	SARO	SRank	Niagara
<i>Parthenocissus vitacea</i>	Thicket Creeper		S5	C
<i>Picea abies</i>	Norway Spruce		SE3	IC
<i>Pilea pumila</i>	Dwarf Clearweed		S5	C
<i>Plantago rugelii</i>	Rugel's Plantain		S5	C
<i>Poa palustris</i>	Fowl Bluegrass		S5	C
<i>Poa pratensis</i>	Kentucky Bluegrass		S5	IC
<i>Polygonatum pubescens</i>	Hairy Solomon's Seal		S5	C
<i>Prunus serotina</i>	Black Cherry		S5	C
<i>Prunus virginiana</i>	Chokecherry		S5	C
<i>Rubus idaeus ssp. strigosus</i>	North American Red Raspberry		S5	C
<i>Rubus occidentalis</i>	Black Raspberry		S5	C
<i>Sanguinaria canadensis</i>	Bloodroot		S5	C
<i>Sanicula marilandica</i>	Maryland Sanicle		S5	C
<i>Scilla siberica</i>	Siberian Squill		SE2	IR
<i>Sicyos angulatus</i>	One-seed Burr Cucumber		S4S5	R
<i>Smilax herbacea</i>	Herbaceous Carrionflower		S4?	C
<i>Solidago altissima</i>	Tall Goldenrod		S5	C
<i>Symphotrichum lanceolatum</i>	Panicked Aster		S5	C
<i>Taraxacum officinale</i>	Common Dandelion		SE5	IC
<i>Tilia americana</i>	Basswood		S5	C
<i>Trillium erectum</i>	Red Trillium		S5	C
<i>Trillium grandiflorum</i>	White Trillium		S5	C
<i>Viburnum acerifolium</i>	Maple-leaved Viburnum		S5	C
<i>Viola pubescens</i>	Yellow Violet		S5	C
<i>Vitis riparia</i>	Riverbank Grape		S5	C

# Appendix C

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## Breeding Bird Species List (Adjacent Lands)



# Appendix C

## Breeding Bird Species List for Adjacent Lands

Common Name	Scientific Name	Status			Number of Pairs/Territories
		COSEWIC <sup>1</sup>	COSARO <sup>2</sup>	S-RANK <sup>3</sup>	
Chimney Swift	<i>Chaetura pelagica</i>	Threatened	Threatened	S4	3 - foraging only
Red-bellied Woodpecker	<i>Melanerpes carolinus</i>			S4	1
Great Crested Flycatcher	<i>Myiarchus crinitus</i>			S4	1
Blue Jay	<i>Cyanocitta cristata</i>			S5	1
American Crow	<i>Corvus brachyrhynchos</i>			S5	1
Black-capped Chickadee	<i>Poecile atricapillus</i>			S5	1
House Wren	<i>Troglodytes aedon</i>			S5	2
Carolina Wren	<i>Thryothorus ludovicianus</i>			S4	1
American Robin	<i>Turdus migratorius</i>			S5	3
Gray Catbird	<i>Dumetella carolinensis</i>			S4	1
Cedar Waxwing	<i>Bombycilla cedrorum</i>			S5	1
European Starling	<i>Sturnus vulgaris</i>			SNA	2
Red-eyed Vireo	<i>Vireo olivaceus</i>			S5	1
Mourning Warbler	<i>Geothlypis philadelphia</i>			S4	1
Northern Cardinal	<i>Cardinalis cardinalis</i>			S5	2
Common Grackle	<i>Quiscalus quiscula</i>			S5	2
American Goldfinch	<i>Spinus tristis</i>			S5	1
House Sparrow	<i>Passer domesticus</i>			SNA	2

<sup>1</sup>Committee on the Status of Endangered Wildlife in Canada

<sup>2</sup>Committee on the Status of Species at Risk in Ontario

<sup>3</sup>Provincial Status: S4 = Apparently Secure, S5=Secure, SNA = Status not applicable (exotic/non-native)

# Appendix D

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## Species at Risk Screening

## Appendix D

### SAR Screening

Taxonomy	Species	ESA Status	Preferred Habitat <sup>1, 2</sup>	EIS Findings
Birds	Acadian Flycatcher <i>Empidonax virescens</i>	END	In Ontario, the Acadian Flycatcher primarily lives in the warmer climate of southern Ontario's Carolinian forests. It needs large, undisturbed forests, often more than 40 hectares in size. It is typically found in mature, shady forests with ravines, or in forested swamps with lots of maple and beech trees. The nest is placed near the tip of a lower limb on a tree, and is loosely woven, with strands of plant material hanging down.	Not recorded during breeding bird surveys of adjacent lands. No suitable habitat on subject property.
Birds	Bank Swallow <i>Riparia riparia</i>	THR	Bank Swallows nest in burrows in natural and human-made settings where there are vertical faces in silt and sand deposits. Many nests are on banks of rivers and lakes, but they are also found in active sand and gravel pits or former ones where the banks remain suitable. The birds breed in colonies ranging from several to a few thousand pairs.	No suitable habitat
Birds	Barn Owl <i>Tyto alba</i>	END	In southern Ontario, this adaptable owl nests and roosts in barns and abandoned buildings. It may also use natural cavities in trees or holes in cliff faces, as it did before the arrival of Europeans in North America. It lives year round at its nest site and hunts for rodents over orchards, and grasslands such as farmlands, fallow fields and meadows.	No suitable habitat
Birds	Barn Swallow <i>Hirundo rustica</i>	THR	Barn Swallows often live in close association with humans, building their cup-shaped mud nests almost exclusively on human-made structures such as open barns, under bridges and in culverts. The species is attracted to open structures that include ledges where they can build their nests, which are often re-used from year to year. They prefer unpainted, rough-cut wood, since the mud does not adhere as well to smooth surfaces.	No suitable habitat
Birds	Bobolink <i>Dolichonyx oryzivorus</i>	THR	Historically, Bobolinks lived in North American tallgrass prairie and other open meadows. With the clearing of native prairies, Bobolinks moved to living in hayfields. Bobolinks often build their small nests on the ground in dense grasses. Both parents usually tend to their young, sometimes with a third Bobolink helping.	No suitable habitat
Birds	Cerulean Warbler <i>Dendroica cerulea</i>	THR	Cerulean Warblers spend their summers (breeding seasons) in mature, deciduous forests with large, tall trees and an open under storey. In late summer, they begin their long migration to wintering grounds in the Andes Mountains in South America.	Not recorded during breeding bird surveys of adjacent lands. No suitable habitat on subject property.
Birds	Chimney Swift <i>Chaetura pelagica</i>	THR	Before European settlement Chimney Swifts mainly nested on cave walls and in hollow trees or tree cavities in old growth forests. Today, they are more likely to be found in and around urban settlements where they nest and roost (rest or sleep) in chimneys and other manmade structures. They also tend to stay close to water as this is where the flying insects they eat congregate.	Recorded as "flyover" (not breeding) on adjacent property. The subject property contains an existing residence with a chimney, which is capped, thus making it unsuitable for this species.
Birds	Eastern Meadowlark <i>Sturnella magna</i>	THR	Eastern Meadowlarks breed primarily in moderately tall grasslands, such as pastures and hayfields, but are also found in alfalfa fields, weedy borders of croplands, roadsides, orchards, airports, shrubby overgrown fields, or other open areas. Small trees, shrubs or fence posts are used as elevated song perches.	No suitable habitat
Birds	Eastern Whip-poor-will <i>Caprimulgus vociferus</i>	THR	The Eastern Whip-poor-will is usually found in areas with a mix of open and forested areas, such as savannahs, open woodlands or openings in more mature, deciduous, coniferous and mixed forests. It forages in these open areas and uses forested areas for roosting (resting and sleeping) and nesting. It lays its eggs directly on the forest floor, where its colouring means it will easily remain undetected by visual predators.	No suitable habitat.
Birds	Eastern Wood-Pewee <i>Contopus virens</i>	SC	The Eastern Wood-pewee lives in the mid-canopy layer of forest clearings and edges of deciduous and mixed forests. It is most abundant in intermediate-age mature forest stands with little understory vegetation.	Not recorded during breeding bird surveys of adjacent woodland. No suitable habitat on subject property.
Birds	Grasshopper Sparrow	SC	It lives in open grassland areas with well-drained, sandy soil. It will also nest in hayfields and pasture, as well as alvars, prairies and occasionally grain crops such as barley. It prefers areas that are sparsely vegetated. Its nests are well-hidden in the field and woven from grasses in a small cup-like shape.	No suitable habitat



Taxonomy	Species	ESA Status	Preferred Habitat <sup>1, 2</sup>	EIS Findings
Birds	Henslow's Sparrow <i>Ammodramus henslowii</i>	END	In Ontario, the Henslow's Sparrow lives in open fields with tall grasses, flowering plants, and a few scattered shrubs. It has also been found in abandoned farm fields, pastures, and wet meadows. It tends to avoid fields that have been grazed or are crowded with trees and shrubs. It prefers extensive, dense, tall grasslands where it can more easily conceal its small ground nest.	No suitable habitat.
Birds	Least Bittern <i>Ixobrychus exilis</i>	THR	In Ontario, the Least Bittern is found in a variety of wetland habitats, but strongly prefers cattail marshes with a mix of open pools and channels. This bird builds its nest above the marsh water in stands of dense vegetation, hidden among the cattails. The nests are almost always built near open water, which is needed for foraging. This species eats mostly frogs, small fish, and aquatic insects.	No suitable habitat
Birds	Wood Thrush <i>Hylocichla mustelina</i>	SC	The Wood Thrush lives in mature deciduous and mixed (conifer-deciduous) forests. They seek moist stands of trees with well-developed undergrowth and tall trees for singing perches. These birds prefer large forests, but will also use smaller stands of trees. They build their nests in living saplings, trees or shrubs, usually in sugar maple or American beech.	Not recorded during breeding bird surveys of adjacent woodland. No suitable habitat on subject property.
Birds	Yellow-breasted Chat <i>Icteria virens</i>	END	The Yellow-breasted Chat lives in thickets and scrub, especially locations where clearings have become overgrown. These birds spend their winters in coastal marshes.	No suitable habitat
Mammals	Eastern Small-footed Myotis (Bat) <i>Myotis leibii</i>	END	In the spring and summer, eastern small-footed bats will roost in a variety of habitats, including in or under rocks, in rock outcrops, in buildings, under bridges, or in caves, mines, or hollow trees. These bats often change their roosting locations every day. At night, they hunt for insects to eat, including beetles, mosquitos, moths, and flies. In the winter, these bats hibernate, most often in caves and abandoned mines. They seem to choose colder and drier sites than similar bats and will return to the same spot each year.	Acoustic monitoring indicates no roosting within woodland.
Mammals	Little Brown Myotis (Bat) <i>Myotis lucifugus</i>	END	Little brown bats hibernate from October or November to March or April, most often in caves or abandoned mines that are humid and remain above freezing. This species can typically be associated with any community where suitable roosting habitat is available. (i.e. cavity trees, buildings, etc.).	Acoustic monitoring indicates no roosting within woodland.
Mammals	Northern Myotis (Bat) <i>Myotis septentrionalis</i>	END	Northern Myotis bats are associated with boreal forests, choosing to roost under loose bark and in the cavities of trees. These bats hibernate from October or November to March or April, most often in caves or abandoned mines.	Acoustic monitoring of woodland indicates no roosting within woodland.
Mammals	Tricoloured Bat <i>Perimyotis subflavus</i>	END	Tricoloured Bat inhabits a variety of forested communities, and will roost older forests and barns (or other structures). Foraging habitats include areas over water and streams. They hibernate in cave where they typically roost independently rather than in groups.	Acoustic monitoring of woodland indicates no roosting within woodland.
Plants	American Columbo <i>Frasera carolinensis</i>	END	American Columbo grows primarily in open deciduous forests, and to a lesser extent along open forest edges and dense shrub thickets in Ontario. It is most commonly found in dry upland woods, but in parts of its range it has been found in grasslands, moist woods and swampy habitats.	Not identified during vegetation surveys of adjacent property. No suitable habitat on subject property.
Plants	American Ginseng <i>Panax quinquefolius</i>	END	In Ontario, American Ginseng typically grows in rich, moist, but well-drained, and relatively mature, deciduous woods dominated by Sugar Maple ( <i>Acer saccharum</i> ), White Ash ( <i>Fraxinus americana</i> ) and American Basswood ( <i>Tilia americana</i> ).  It usually grows in deep, nutrient rich soil over limestone or marble bedrock.	Not identified during vegetation surveys of adjacent property. No suitable habitat on subject property.
Plants	Butternut <i>Juglans cinerea</i>	END	In Ontario, Butternut usually grows alone or in small groups in deciduous forests. It prefers moist, well-drained soil and is often found along streams. It is also found on well-drained gravel sites and rarely on dry rocky soil. This species does not do well in the shade, and often grows in sunny openings and near forest edges.	Not identified during vegetation surveys of adjacent property. No suitable habitat on subject property.
Plants	Cherry Birch <i>Betula lenta</i>	END	The Cherry Birch is a medium-sized deciduous tree that grows up to 20 metres tall. The leaves are oval-shaped with a finely toothed edge and a slender tip. In Ontario, the Cherry Birch is found on moist, well-drained clay loam soil over limestone bedrock with White Oak, Red Oak, Eastern Hemlock, Sugar Maple and other deciduous trees.	Not identified during vegetation surveys of adjacent property. No suitable habitat on subject property.
Plants	Cucumber Tree <i>Magnolia acuminata</i>	END		Not identified during vegetation surveys of adjacent property. No suitable habitat on subject property.
Plants	Eastern Flowering Dogwood <i>Cornus florida</i>	END	Eastern Flowering Dogwood grows under taller trees in mid-age to mature deciduous or mixed forests. It most commonly grows on floodplains, slopes, bluffs and in ravines, and is also sometimes found along roadsides and fencerows.	Not identified during vegetation surveys of adjacent property. No suitable habitat on subject property.

Taxonomy	Species	ESA Status	Preferred Habitat <sup>1, 2</sup>	EIS Findings
Plants	Red Mulberry <i>Morus rubra</i>	END	In Ontario, Red Mulberry grows in moist, forested habitats and on both sandy and limestone-based loamy soils. It is often found in areas where the forest canopy is quite open and allows lots of sunlight to reach the forest floor, but it will tolerate some shade.	Not identified during vegetation surveys of adjacent property. No suitable habitat on subject property.
Plants	Round-leaved Greenbrier <i>Smilax rotundifolia</i>	THR	In Ontario, Round-leaved greenbrier is found mainly in the warmer climate of the Carolinian Forest. It prefers open moist to wet woodlands, often growing on sandy soil.	Not identified during vegetation surveys of adjacent property. No suitable habitat on subject property.
Plants	Swamp Rose-mallow <i>Hibiscus moscheutos</i>	SC	In Ontario, Swamp Rose-mallow is restricted to shoreline marshes, in the Carolinian and Great Lakes - St. Lawrence forest regions, associated with lakes Erie, Ontario or St. Clair. Swamp Rose-mallow is most commonly found in deep-water cattail marshes and in meadow marshes. It reaches its greatest numbers in dyked wetlands, where competition from other plants is controlled and the open habitat is maintained by periodic flooding. It is also found in open wet woods, thickets, spoil banks, and drainage ditches.	No suitable habitat.
Plants	Virginia Mallow <i>Sida hermaphrodita</i>	END	Virginia mallow grows in riparian habitats that are flooded in most years. It benefits from this moist environment and is usually found in sunny or partly shaded areas with sandy soils. Loose sandy or rocky soils of scoured riversides and floodplains, and disturbed areas along roadsides and railroad banks are its preferred habitats.	Not suitable habitat
Plants	White Wood Aster <i>Eurybia divaricata</i>	THR	White wood aster is a perennial plant that usually grows 30 to 90 centimetres tall. Its leaves are deeply and irregularly serrated: the lower leaves are heart-shaped while the upper leaves are elongated. White wood aster grows in open, dry deciduous forests that are dominated by Sugar maple and American beech trees. It is often found mixed in with other asters. The plant does best in well-drained soils and it may prefer a low level of disturbance, as it has been found to grow along trails. It does well in partial to full shade.	Not identified during vegetation surveys of adjacent property. No suitable habitat on subject property.
Reptiles	Blanding's Turtle <i>Emydoidea blandingii</i>	THR	Blanding's Turtles live in shallow water, usually in large wetlands and shallow lakes with lots of water plants. It is not unusual, though, to find them hundreds of metres from the nearest water body, especially while they are searching for a mate or traveling to a nesting site. Blanding's Turtles hibernate in the mud at the bottom of permanent water bodies from late October until the end of April.	No suitable habitat.
Reptiles	Eastern Hog-nosed Snake <i>Heterodon platirhinos</i>	THR	The Eastern Hog-nosed Snake specializes in hunting and eating toads, and usually only occurs where toads can be found. Eastern Hog-nosed Snakes prefer sandy, well-drained habitats such as beaches and dry forests where they can lay their eggs and hibernate. They use their up-turned snout to dig burrows below the frost line in the sand where eggs are deposited.	Habitat not suitable.
Reptiles	Snapping turtle <i>Chelydra serpentina</i>	SC	Snapping Turtles spend most of their lives in water. They prefer shallow waters so they can hide under the soft mud and leaf litter, with only their noses exposed to the surface to breathe. During the nesting season, from early to mid summer, females travel overland in search of a suitable nesting site, usually gravelly or sandy areas along streams. Snapping Turtles often take advantage of man-made structures for nest sites, including roads (especially gravel shoulders), dams and aggregate pits.	No suitable habitat.

# Appendix E

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## Significant Wildlife Habitat Assessment



# Appendix E

## Significant Wildlife Habitat Assessment

Significant Wildlife Habitat Type	Habitat Description	Habitat Assessment
<b>Seasonal Concentration Areas of Animals</b>		
Waterfowl Stopover and Staging Areas (Terrestrial)	Fields with sheet water or fields utilized by Tundra Swans during Spring (mid March to May). Fields flooding during spring melt and run-off provide important invertebrate foraging habitat for migrating waterfowl. Agricultural fields with waste grains are commonly used by waterfowl, these are not considered SWH unless used by Tundra Swans in the Long Point, Rondeau, Lk. St. Clair, Grand Bend and Pt. Pelee areas.	<b>No</b> Suitable habitat was not observed within the subject property
Waterfowl Stopover and Staging Areas (Aquatic)	Ponds, marshes, lakes, bays, costal inlets and watercourses that are used as stopover areas during migration. These habitat typically have an abundant food supply (mostly aquatic invertebrates and vegetation in shallow water).	<b>No</b> Suitable habitat was not observed within the subject property
Shorebird Migratory Stopover Area	Shorelines of lakes, rivers and wetlands, including beach areas, bars and seasonally flooded, muddy and un-vegetated shoreline habitats. Great Lakes coastal shorelines, including groynes and other forms of armour rock lakeshores, are extremely important for migratory shorebirds in May to mid-June and early July to October. Sewage treatment ponds and storm water ponds do not qualify as a SWH	<b>No</b> Suitable habitat was not observed within the subject property
Raptor Winter Area	A combination of fields and woodlands that provide roosting, foraging and resting habitat for wintering raptors. These sites need to be larger than 20 ha in size, of which at least 15 ha needs to be comprised of idle/fallow or lightly grazed field/meadow.	<b>No</b> Suitable habitat was not observed within the subject property
Bat Hibernacula	Hibernacula may be found in caves, mine shafts, underground foundations and karsts.	<b>No</b> Suitable habitat was not observed within the subject property

Significant Wildlife Habitat Type	Habitat Description	Habitat Assessment
Bat Maternity Colonies	Maternity colonies can be found in tree cavities, vegetation and buildings. Deciduous and mixed forest communities with greater than 10/ha of larger diameter (> 25 cm dbh) wildlife trees.	<b>No</b> A potential roost for Big Brown Bat occurs in the woodlot, but acoustic data suggests the SWH threshold of 10 big brown bats is not met.
Turtle Winter Areas	Over-wintering sites for turtles are typically in the same area as their core habitat. Waterbodies have to be deep enough to not freeze and have soft mud substrates.	<b>No</b> Suitable habitat was not observed within the subject property
Snake Hibernaculum	Snakes hibernate in sites located below frost lines in burrows, rock crevices and other natural locations. Rock piles, slopes, stones fences and crumbling foundations can also be used by hibernating snakes. Areas of broken and fissures rocks can also provide access to sites below the frost line.	<b>No</b> Suitable habitat was not observed within the subject property
Colonially - Nesting Bird Breeding Habitat (Bank and Cliff)	Any site or areas with exposed soil banks, undisturbed or naturally eroding that is not a licensed/permited aggregate area.	<b>No</b> Suitable habitat not observed within the subject property
Colonially - Nesting Bird Breeding Habitat (Tree/Shrubs)	Nests in live or dead standing trees in wetlands, lakes, islands and peninsulas. Shrubs and occasionally emergent vegetation may also be used.	<b>No</b> Suitable habitat not observed within the subject property
Colonially - Nesting Bird Breeding Habitat (Ground)	Nesting colonies of gulls and terns occur on rocky islands or peninsulas within a lake or larger river	<b>No</b> Suitable habitat was not observed within the subject property
Migratory Butterfly Stopover Areas	Cultural meadow, savannah and thicket communities that are within 5 km of Lake Ontario, at least 10 ha in size and contain a combination of field and forest habitat	<b>No</b> Suitable habitat was not observed within the subject property
Landbird Migratory Stopover Areas	Woodlands that are at least 10 ha in size and within 5 km of lake Ontario.	<b>No</b> Suitable habitat not observed within the subject property
Deer Yarding Areas	Deer yarding areas or winter concentration within a mixed or coniferous forest and swamp communities.	<b>No</b> Suitable habitat not observed within the subject property

Significant Wildlife Habitat Type	Habitat Description	Habitat Assessment
Deer Winter congregation Areas	Deer movement in winter months within eco-region 6E are not constrained by snow depth, however they still congregate in suitable woodlands. These woodlands will typically be larger than 100 ha in size, however woodlands smaller than 100 ha may be considered significant based on MNR assessments.	<b>No</b> Suitable habitat was not observed within the subject property
<b>Rare Vegetation Communities</b>		
Cliffs and Talus Slops	A cliff is a vertical to near vertical bedrock that is greater than 3 m in height. A talus slope is rock rubble at the base of a cliff made up of coarse rocky debris.	<b>No</b> Cliffs or tallus slopes were not observed within the subject property
Sand Barren	Sand barrens typically are exposed sand, generally sparsely vegetated and caused by lack of moisture, periodic fires and erosion. They have little to no soil and the underlying rock protrudes through the surface. Usually located within other types of natural habitat such as forest or savannah.	<b>No</b> Sand barren was not observed within the subject property
Alvar	Alvar is typically a level, mostly unfractured calcareous bedrock feature with a mosaic of rock pavements and bedrock overlain by a thin veneer of soil.	<b>No</b> Alvar was not observed within the subject property
Old Growth Forest	Old growth forests are characterized by heavy mortality or turnover of over story trees resulting in a mosaic of gaps that encourage development of a multi-layered canopy and an abundance of snags and downed woody debris. Stands must be 30 ha or greater in size with a minimum of 10 ha of interior habitat (interior habitat determined with a 100 m buffer).	<b>No</b> Old growth forest was not observed within the subject property
Savannah	Savannah is a tallgrass prairie habitat that has tree cover between 20 - 60%.	<b>No</b> Savannah habitat was not observed within the subject property
Tallgrass Prairie	Tallgrass Prairie has ground cover that is dominated by prairie grasses. An open tallgrass prairie has less than 25% tree cover.	<b>No</b> Tallgrass Prairie was not observed within the subject property
Other Rare Vegetation Communities	Rare vegetation communities may include beaches, fens, forests, marsh, barrens, dunes and swamps, as identified in Appendix M of the Significant Wildlife Habitat Technical Guide.	<b>No</b> Rare vegetation communities were not observed within the subject property



Significant Wildlife Habitat Type	Habitat Description	Habitat Assessment
<b>Specialized Habitat for Wildlife</b>		
Waterfowl Nesting Area	Waterfowl nesting areas are upland areas adjacent to marsh, shallow aquatic and swamp habitat. In order to be considered significant these features must extend 120 m from of a wetland in order to deter predators	<b>No</b> Suitable habitat not observed within the subject property
Bald Eagle and Osprey Nesting, Foraging and Perching Habitat	Nests for these species are associated with lakes, ponds, rivers or wetlands along forested shorelines, islands or on structures over water. Osprey nests are usually at the top of a tree, while Bald Eagle nets are typically in super canopy trees.	<b>No</b> No Bald Eagle or Osprey nests were observed within the subject property
Woodland Raptor Nesting Habitat	Woodland raptor habitat can be found in all natural or conifer plantation woodland/forest stands that are greater than 30 ha in size with more than 10 ha of interior forest habitat (interior habitat determined with a 200 m buffer).	<b>No</b> Suitable habitat was not observed within the subject property
Turtle Nesting Areas	Ideal nesting habitat for turtles are close to water and away from roads and sites that are less prone to loos of eggs by predation. These areas are often associated with exposed mineral soil (sand or gravel) areas within 100 m of a marsh, shallow aquatic, bog or fen habitat.	<b>No</b> Suitable habitatwas not observed within the subject property
Seeps and Springs	Seeps/springs are areas where ground water comes to the surface. Often they are found within headwater areas within forested habitats.	<b>No</b> Seeps/springs were not observed within the subject property
Amphibian Breeding Habitat (Woodland)	This type of habitat is associated with the presence of a wetland, lake or pond that is within or adjacent (within 120m) of a woodland. Woodlands with permanent ponds or those contain water until mid-July are more likely to be used as breeding habitat.	<b>No</b> Suitable habitat was not observed within the subject property
Amphibian Breeding Habitat (Wetlands)	Wetlands and pools that are greater than 500 m <sup>2</sup> and are isolated from woodlands (greater than 120 m)	<b>No</b> Suitable habitat was not observed on the subject property.
<b>Habitat for Species of Conservation Concern (Not including Endangered or Threatened Species)</b>		

Significant Wildlife Habitat Type	Habitat Description	Habitat Assessment
Marsh Bird Breeding Habitat	This type of habitat occurs in wetlands with shallow water and emergent aquatic vegetation present	<b>No</b> Suitable habitat was not observed within the subject property
Woodland Area-Sensitive Bird Breeding Habitat	Habitats where interior forest breeding birds are breeding. These forests are typically larger mature forest stands or woodlands that are greater than 30 ha in size (interior habitat determined with a 200 m buffer).	<b>No</b> Suitable habitat was not observed within the subject property
Open Country Bird Breeding Habitat	This type of habitat occurs in larger grassland areas (including natural and cultural fields and meadows) that are greater than 30 ha in size. Grasslands that are being actively used for farming (i.e. row cropping, intensive hay, livestock pasturing in the last 5 years) typically do not provide ideal habitat for open country bird species.	<b>No</b> Suitable habitat was not observed within the subject property
Shrub/Early Successional Bird Breeding Habitat	This type of habitat occurs in large field areas succeeding to shrub and thicket habitats that are greater than 10 ha in size.	<b>No</b> Suitable habitat was not observed within the subject property
Terrestrial Crayfish	This type of habitat occurs in meadows and edge of shallow marshes.	<b>No</b> Suitable habitat not observed within the subject property
Special Concern and Rare Wildlife Species	This type of habitat occurs wherever special concern and provincially rare (S1, S2, S3 and SH) plant and animal species occur.	<b>No</b> No special concern or rare wildlife were identified on the property.
<b>Animal Movement Corridors</b>		
Amphibian Movement Corridors	This habitat consists of movement corridors between breeding habitat and summer habitat. Corridors may be found in all ecosystems associated with water.	<b>No</b> Suitable habitat was not observed within the subject property