

**NATURAL HERITAGE CONSTRAINTS ASSESSMENT**  
**Seymour Avenue Property, Town of Fort Erie**

Prepared for:

**FINA Construction Ltd.**

Prepared by:

**Colville Consulting Inc.**

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## **1.0 INTRODUCTION**

Colville Consulting Inc. was retained by FINA Construction Ltd. to prepare a Natural Heritage Constraints Assessment and Environmental Impact Study for the property located west of 1007 Seymour Avenue, in the Town of Fort Erie. This study is required by the Niagara Region to assess the extent of potential natural heritage features on the property, with the intent of guiding future development on the parcel. It is our understanding that a portion of the property has been designated as Significant Woodland in the Niagara Region Official Plan. As per the Niagara Region Official Plan Policy 7.B.1.11, development may be permitted within or adjacent to a significant woodland if it has been demonstrated that, over the long term, there will be no significant negative impact on the Core Natural Heritage System component or adjacent lands. A summary of our assessment is included below.

### **1.1 Subject Lands**

The Subject Property is located west of 1007 Seymour Avenue, in the Town of Fort Erie. The property measures approximately 0.17 ha in size and is generally flat. Any minor surface drainage on the property appears to drain from south to north, to the roadside ditching associated with Seymour Avenue. Buildings on the property are limited to an abandoned structure that may have been associated with the previous agricultural use of the lands. Currently the property is partially treed, with a deciduous woodland on the northern portion of the property, a vegetable garden to the south and a thicket to the west. Approximately 70 percent of the property is naturally vegetated.

Based on our review of available mapping for the Subject Property, it is our understanding that identified features on site consist of a portion of a Significant Woodland. Since the mapped extent of this woodland measures approximately 0.15ha in size, it is our understanding that the woodland on and adjacent to the Subject Property has been designated as significant due to the potential for rare species. No portion of the property has been identified as a natural heritage feature in the Town of Fort Erie Official Plan and no Environmental Conservation Overlay is present on the property.

Although not located on the property, a portion of the West Fort Erie Non-Provincially Significant Wetland Complex (Non-PSW) is located southwest of the Subject Property. Due to the proximity of this wetland, a small portion of the southwest corner of the property is identified as lands regulated by the Niagara Peninsula Conservation Authority (NPCA). The extent of these features on and adjacent to the property is illustrated in Figure 2.

### **1.2 Scope of Project**

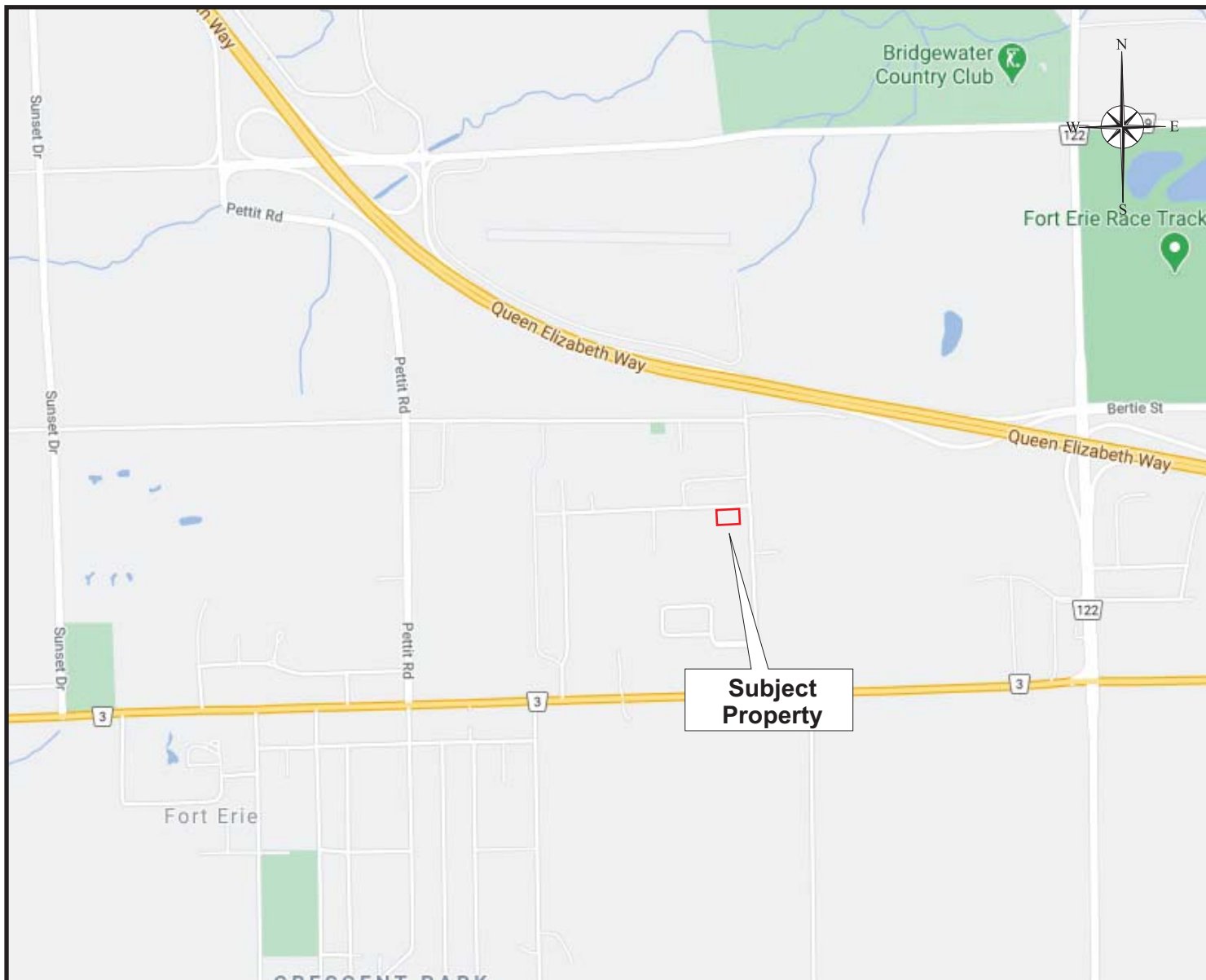
The intent of this project is to assess botanical species composition and wildlife use of the property, with the intent of verifying the extent of potential natural heritage features on and adjacent to the property. This project will also assess potential impacts the proposed project may have on natural heritage features on and adjacent to the property.

## **2.0 STUDY APPROACH**

### **2.1 Background Review**

Prior to the commencement of primary field inventories, a review of background material available for the Subject Lands and surrounding area was conducted. Some of the background information reviewed included:

- ♦ Niagara Region Core Natural Heritage Map (ROM 2008);



**Figure 1**  
**Location of Subject Property**

**Natural Heritage Constraints Assessment**  
**Seymour Avenue, Town of Fort Erie**

Prepared for: **Fina Construction Ltd.**

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## Legend

- Subject Lands
- Significant Woodlands
- Non-Provincially Significant Wetland Evaluated
- 30 Meter Wetland Buffer

## FIGURE 2

### Mapped Extent of Natural Heritage Designations and Features on the Subject Property

#### Natural Heritage Constraints Assessment Seymour Avenue, Town of Fort Erie

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- ◆ Ontario Ministry of Natural Resources and Forestry Species at Risk List for the Town of Fort Erie (MNRF 2018);
- ◆ Background data available from the NPCA and Ministry of Natural Resources and Forestry (MNRF);
- ◆ Historical air photos for the property and surrounding lands; and
- ◆ Town of Fort Erie Natural Areas Inventory (Dougan and Associates 2003).

## **2.2 Field Inventories**

As indicated above, it is our understanding that a portion of the property has been designated as Significant Woodland, with a portion of a Non-PSW located southwest of the property. In order to verify the extent of any natural heritage features on the property, the following field surveys were completed as part of this assessment:

- 1) Spring and early-summer botanical inventories of the property and adjacent lands;
- 2) Assessment and description vegetation communities on the property using the Ecological Land Classification System for Southern Ontario;
- 3) Breeding bird surveys on and adjacent to Subject Lands;
- 4) An assessment of potential bat maternity colony habitat on the property using methods outlined by MNRF; and
- 5) Document incidental wildlife observations during site visits, including any species of insects that may be considered locally rare or species at risk.

The methods employed for each of the above components are provided in the appropriate sections below.

## **3.0 STUDY FINDINGS**

### **3.1 Botanical Inventories and Vegetation Mapping**

Botanical inventories of the property were completed on May 26, June 26 and August 12, 2020. Vegetation communities (ELC units – following Lee et al. 1998) were mapped and described, and a vascular plant checklist was compiled. Species status was assessed for Ontario (Oldham and Brinker 2009) and the Niagara Region (Oldham 2010). Vegetation communities are described below and illustrated on Figure 3. A vascular plant checklist is provided in Appendix A. Photos of the properties are provided in Appendix B.

#### **3.1.1 Botanical Inventories**

A total of 49 plant species were documented on and adjacent to the Subject Lands during botanical inventories. None of the species observed are considered at risk provincially, or considered locally rare or uncommon.

#### **3.1.2 Vegetation Communities**

The relatively flat terrain and clay soils of this very small community support a Fresh-Moist Bur Oak Deciduous Forest Type (FOD9-3), with a small Buckthorn Deciduous Shrub Thicket Type (THDM2-6) along the road allowance to the west. The clay soils result in an imperfectly drained moisture regime that supports a variety plant species (Appendix A). An uneven canopy is formed by Bur Oak, with lesser amounts of Pin Oak, Silver Maple and Green Ash. The sub-canopy is dominated



### Legend

- Subject Property
- FOD9-3** Fresh-Moist Bur Oak Deciduous Forest Type
- THDM2-6** Buckthorn Deciduous Shrub Thicket Type

**FIGURE 3**  
**Extent of Vegetation Communities**  
**on the Subject Property**

**Natural Heritage Constraints Assessment**  
**Seymour Avenue, Town of Fort Erie**

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by large European Buckthorn, with a number of Green Ash present. The thin shrub layer is again dominated by European Buckthorn, with lesser amounts of Green Ash. The ground layer is sparsely vegetated resulting in notable areas of bare soil. Vegetation in the ground layer includes scattered Green Ash and small clusters of Asters (*Symphyotrichum sp*) followed by lesser amounts of Kentucky Bluegrass and sparse Fowl Mannagrass.

Since this property was previously cleared for farming and is regenerating, historical evidence of alteration is present throughout the property and reflected in the vegetation community. The abundance of European Buckthorn is typical of many regenerating farmed areas and disturbed sites. The increased abundance of European Buckthorn and Green Ash on the west side of the property and road allowance is also likely reflective of more recent maintenance activities in the area. The rear portion of the property is currently being used as a vegetable garden.

Many of the Green Ash present in this community are dead or showing signs of decline due to Emerald Ash Borer.

## 3.2 Wildlife and Wildlife Habitat

### 3.2.1 Breeding Bird Survey

Breeding bird surveys were conducted on June 01 and June 26, 2020 to inventory breeding birds on the Subject Property. Surveys were completed at least 15 days apart, under suitable weather conditions with little to no wind or precipitation. A thorough search of the Subject Property was completed during both surveys between dawn and no later than 10:00 am. All birds seen or heard calling were recorded and the highest breeding evidence per species was determined in accordance with the criteria of the Atlas of the Breeding Birds of Ontario (Cadman et al. 2007).

A total of 14 species of birds were observed or heard on or above the Subject Property and 4 additional species on adjacent lands (see Table 1). According to Ontario conservation status ranks (S-rank designations), with the exception European Starling (SNA), all recorded species are considered to be “secure” (S5 - common, widespread and abundant) or “apparently secure” (S4 - uncommon but not rare) in the province of Ontario. The recorded species are also considered to be very common to common permanent or summer residents in the Niagara Region, with the exception of the uncommon permanent resident Red-bellied Woodpecker (Niagara Natural Areas Inventory, 2010). It should be noted that this species was documented on the adjacent lands to the Subject Property.

**Table 1: Results of breeding bird surveys on and adjacent to the Seymour Avenue Property.**

Species	S Rank	Niagara Status*	Subject Lands	Adjacent Lands	Highest Breeding Evidence**	Breeding Code***
American Goldfinch	S5B	C R		X	PO	S
American Robin	S5B	VC R	X	X	PR	A
Baltimore Oriole	S4B	C R	X		PO	S
Blue Jay	S5	VC P	X	X	PO	H
Brown-headed Cowbird	S4B	VC R	X		PO	
Common Grackle	S5B	VC R	X	X	CO	FY
Downy Woodpecker	S5	C P	X		PO	S
European Starling	SNA	VC P	X	X	PO	H
Gray Catbird	S4B	C R	X	X	PO	S
Great Crested Flycatcher	S4B	C R		X	PO	S

House Wren	S5B	C R	X	X	PO	S
Species	S Rank	Niagara Status*	Subject Lands	Adjacent Lands	Highest Breeding Evidence**	Breeding Code***
Mourning Dove	S5	VC R	X	X	PO	S
Northern Cardinal	S5	C P	X	X	PO	S
Northern Flicker	S4B	C R	X		PO	S
Red-bellied Woodpecker	S4	U P		X	PO	S
Red-winged Blackbird	S4	VC R	X	X	PO	S
Ring-billed Gull	S5B,S4N	VC R	X		OBS	X
Rose-breasted Grosbeak	S4B	C R		X	PO	S

\* VC – very common; C – common; U – uncommon; UR – Uncommon to rare; O – Occasional; R – Rare, P – permanent resident; R – summer resident; S – Straggler; DD-Data Deficient (Niagara Natural Areas Inventory, 2010).

\*\* OBS – observed, no evidence of breeding; PO – possible breeding; PR – probable breeding; CO – confirmed breeding

### 3.2.2 Wildlife Observations

Incidental wildlife observations, including signs, were recorded on April 17, May 26, June 1, June 26, August 12 and November 15, 2020. Species observed during these visits were limited to Grey Squirrel.

No vernal pools or areas of standing water are present on the property, and therefore no amphibian vocalization surveys were completed as part of this project.

### 3.2.3 Assessment of Potential Bat Roosting Habitat

During the summer, the Little Brown Myotis, Northern Myotis, Eastern Small-footed Myotis and Tri-coloured Bats are found in a variety of forested habitats, as well as abandoned buildings, barns and attics. In forested habitats, cavities in trees, loose bark, foliage and other cover objects are used for roosting. These species forage in a variety of habitats where flying insects and spiders are present, often in association with wetlands, ponds and streams. Overwintering typically occurs in caves.

An assessment of potential bat roosting habitat was conducted on April 17, 2020 using methods described in MNRF (2017). The site visit was intended to inventory any potential roosting habitat on the property. From our observations, no significant cavity trees were located on the Subject Property and any potential roosting habitat was limited to loose bark on dead Ash trees. As such, the Subject Lands do not appear to provide any significant roosting opportunities for bats.

## 4.0 ASSESSMENT OF SIGNIFICANT NATURAL HERITAGE FEATURES

### 4.1 Species at Risk Habitat

#### 4.1.1 Significant Habitat of Endangered and Threatened Species

No Endangered or Threatened species were observed on or adjacent to the Subject Lands during inventories and surveys. Additionally, our review of Natural Heritage Information Center (NHIC) data indicates that no Endangered or Threatened species are known to occur in the vicinity of these properties.

A species at risk screening conducted using known occurrence information in the Town of Fort Erie (MNRF 2018) indicates that potential habitat for Endangered or Threatened species on these properties is limited to loose and exfoliating bark that is present on dead ash trees, which could be providing potential roosting habitat for bats (see Appendix C). Since this type of habitat is not limited or unique in the Town of Fort

Erie, and it is our conclusion that significant habitat of Endangered or Threatened species is not present on the Subject Property.

#### **4.1.2 Species of Conservation Concern**

No Species of Conservation Concern were documented on or adjacent to the Subject Property. A review of available NHIC data indicates that Species of Conservation Concern previously documented in the vicinity of the properties are limited to Biennial Gaura (*Gaura biennis*) (S3). Although potential habitat for this species is present on the property, this species was not observed during botanical inventories.

Although not listed in the NHIC search, potential habitat for Eastern Wood-pewee is located on the Subject Property. Since this species was not documented during breeding bird surveys, it is our conclusion that this species is not utilizing potential habitat on these lands.

Based on the assessments completed, it is our conclusion that the Subject Property is not providing habitat for Species of Conservation Concern.

### **4.2 Significant Wildlife Habitat**

#### **4.2.1 Seasonal Concentration Areas of Animals**

The Significant Wildlife Habitat Criteria Schedules for Ecoregion 7E identifies 14 types of seasonal concentrations of animals that may be considered significant wildlife habitat. These include, but are not limited to:

- Waterfowl Stopover and Staging Areas (Aquatic and Terrestrial);
- Shorebird Migratory Stopover Area;
- Raptor Wintering Area;
- Bat Hibernacula;
- Bat Maternity Colonies;
- Turtle Wintering Areas;
- Reptile Hibernaculum;
- Colonially -Nesting Bird Breeding Habitat (Bank and Cliff);
- Colonially -Nesting Bird Breeding Habitat (Tree/Shrubs);
- Colonially -Nesting Bird Breeding Habitat (Ground);
- Migratory Butterfly Stopover Areas;
- Landbird Migratory Stopover Areas; and
- Deer Winter Congregation Areas.

Seasonal concentration areas are typically designated as significant wildlife habitat if an area supports a species at risk or a large population may be lost if the habitat is destroyed.

Habitat present on an adjacent to the properties is not known to support seasonal concentrations of animals and none of these functions were observed or documented during our inventories. An assessment of SWH is provided in Appendix D.

#### **4.2.2 Rare Vegetation Communities**

Rare vegetation communities often contain rare species, which depend on such habitats for their survival and cannot readily move to or find alternative habitats. Those areas that qualify as rare habitats are assigned an SRank of S1, S2 or S3 by the Natural Heritage Information Center.

The Significant Wildlife Habitat Criteria Schedules for Ecoregion 7E identifies 7 specialized habitats that may be considered significant wildlife habitat. They are:

- Cliffs and Talus Slopes;
- Sand Barren;
- Alvar;
- Old Growth Forest;
- Savannah;
- Tallgrass Prairie; and
- Other Rare Vegetation Communities.

No rare vegetation communities are present on or adjacent to the Subject Property.

#### **4.2.3 Specialized Habitats of Wildlife considered SWH**

Some wildlife species require large areas of suitable habitat for their long-term survival and many wildlife species require substantial areas of suitable habitat for successful breeding. Their populations are at risk of decline when habitat becomes fragmented or reduced in size

Specialized habitats for wildlife include:

- Waterfowl Nesting Area;
- Bald Eagle and Osprey Nesting, Foraging and Perching Habitat;
- Woodland Raptor Nesting Habitat;
- Turtle Nesting Areas;
- Seeps and Springs;
- Amphibian Breeding Habitat (Woodland);
- Amphibian Breeding Habitat (Wetlands); and
- Woodland Area-Sensitive Bird Breeding Habitat.

No specialized habitats for Wildlife are present on the Subject Property.

#### **4.2.4 Habitats of Species of Conservation Concern considered SWH**

Habitats of Species of Conservation Concern include wildlife species that are listed as Special Concern or rare, that are declining, or are featured species. Habitats of Species of Conservation Concern do not include habitats of Endangered or Threatened species as identified by the Endangered Species Act. The following habitats are considered candidate SWH:

- Marsh Breeding Bird Habitat;
- Open Country Bird Breeding Habitat;
- Shrub/Early Successional Bird Breeding Habitat;
- Terrestrial Crayfish; and
- Special Concern and Rare Wildlife Species.

The Subject Property is not providing habitat for Species of Conservation Concern.

#### **4.2.5 Migration Corridors**

The SWHTG defines animal movement corridors as elongated, naturally vegetated parts of the landscape used by animals to move from one habitat to another. To qualify as significant wildlife habitat, these corridors should be a critical link between habitats that are regularly used by wildlife.

As illustrated in Figure 4, the treed area on the Subject Property is surrounded by existing residential land uses. Since this property is isolated from any other natural areas, no portion of the Subject Property forms part of a migration corridor.

#### **4.3 Significant Wetlands**

No provincially significant wetlands (PSW's) are located on or adjacent to the property, however a portion of the West Fort Erie Non-Provincially Significant Wetland Complex is located southwest of the Subject Property. Since this wetland is located off site and on private property, no refinements were made to this wetland area. For the purposes of this assessment, a 30m buffer from the wetland has been included in Figure 4.

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

No Areas of Natural and Scientific Interest (ANSI) are located on or adjacent to the property.

#### **4.5 Significant Woodlands**

No significant woodlands are currently mapped on the Subject Lands. vegetation communities on these parcels consists primarily of buckthorn thicket, along with areas of manicured lawn and cultural meadow. No portion of the properties contains tree canopy sufficient to be considered woodland, which is consistent with current mapping for these lands.

During our review of background mapping available for this property, it was noted that a majority of the property is designated as Significant Woodland in the Niagara Region Official Plan (see Figure 2), however no portion of the property is designated as woodland in the Town of Fort Erie Official Plan. Our assessment indicates that the treed portion of this property and adjacent lands measures approximately 0.14ha in size and generally coincides with the FOD9-3 community on the property.

To be identified as significant, Policy 7.B.1.5 of the Niagara Region Official Plan states that a woodland must meet one or more of the following criteria:

- a) Contain Threatened or Endangered species or Species of Concern;
- b) In size, is equal to or greater than 2 hectares, if located inside Urban Areas;
- c) Contains interior woodland habitat at least 100 metres in from the woodland boundaries;
- d) Contains older growth forest and be 2 hectares or greater in area;
- 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
- f) Abut or be crossed by a watercourse or water body and be 2 or more hectares in area.

Based on our assessment, the treed area on the property does not satisfy any of the Niagara Region criteria to be considered a Significant Woodland (see Table 2 below). The refined extent of the Significant Woodland on and adjacent to the property is illustrated in Figure 4.



Table 2: Assessment of Significant Woodland Criteria.

Criteria	Representation in Woodland	Conclusion
Endangered or Threatened species or Species of Concern	No Endangered or Threatened species or Species of Concern present on property.	Criteria not satisfied
Size	Treed area measures approximately 0.12ha in size.	Criteria not satisfied
Interior Habitat	No portion of the treed area on or adjacent to the property more than 100m from edge.	Criteria not satisfied
Older Growth	Property in agricultural production in 1934. One Bur Oak tree visible on property in 1934, 1954 and 1965 air photos older than 100 years, but a single tree does not represent the age of the treed area.	Criteria not satisfied
Other Natural Heritage Features	No other natural heritage features present in on adjacent to the treed area.	Criteria not satisfied
Watercourses or Waterbodies	No watercourses or water bodies within 30m of property and treed area less than 2ha in size.	Criteria not satisfied

## 5.0 ENVIRONMENTAL POLICY

Although no natural heritage designations are currently assigned to these properties, the primary intent of this assessment is to determine if any portion of the Subject Lands meets the criteria to be considered a natural heritage feature. An assessment of the Subject Property in the context of policies of the Niagara Region Policy Plan and the Town of Fort Erie Official Plan is provide below.

### 5.1 Provincial Policy Statement

The Provincial Policy Statement (PPS) was issued under Section 3 of the Planning Act and came into effect on May 22, 1996. The PPS was updated in 1997 and more recently in 2020. It applies to all applications submitted after March 1, 2005, and states that decisions affecting planning matters “shall be consistent with” policy statements issued under the Act. This EIS has been prepared in compliance with Part V, Policy 2.1 of the PPS, which deals specifically with the long-term protection and management of natural heritage features and areas.

The intent of the PPS is to ensure that natural features and areas be protected for the long term. The PPS indicates that 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.

Natural heritage features and areas are defined in the PPS as those which are important for their environmental and social values as a legacy of the natural landscapes of an area and include: significant wetlands, significant coastal wetlands, fish habitat, significant woodlands south and east of the Canadian Shield, significant valleylands south and east of the Canadian Shield, significant habitat of endangered

species and threatened species, significant wildlife habitat and significant areas of natural and scientific interest.

As indicated in Section 2.1.4, development and site alteration shall not be permitted in significant wetlands in Ecoregions 5E, 6E and 7E1 and within significant coastal wetlands.

Unless it can be demonstrated that there will be no negative impacts on the natural heritage features or their ecological functions, development and site alteration is not permitted in or adjacent to:

- ♦ significant woodlands and valleylands south and east of the Canadian Shield;
- ♦ significant wildlife habitat;
- ♦ significant fish habitat; and
- ♦ significant areas of natural and scientific interest.

Development and site alteration shall not be permitted on adjacent lands to the natural heritage features identified above, 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.

## **5.2 Niagara Region Official Plan**

Regional Policy Plan Amendment 187 was approved by the Ontario Municipal Board on April 16, 2008, and is an update to Section 7 (Environmental Policy) of the Regional Niagara Policy Plan (2007). This amendment generally conforms to Section 2.1 of the PPS.

Among other important environmental considerations, the policies address the Region's natural vegetation and wildlife, water resources, landforms, geology and soils, and core natural heritage features such as woodlands, wetlands and fish habitat. Those natural areas considered to be of provincial importance, as identified in the PPS, are identified in the Region's Core Natural Heritage System. The following components are identified in the Region's Core Natural Heritage System:

- a) Core Natural Areas which are classified as Environmental Protection Areas (EPA) and Environmental Conservation Areas (ECA);
- b) Potential Natural Heritage Corridors connecting the Core Natural Areas;
- c) Greenbelt Natural Heritage and Water Resources System; and
- d) Fish Habitat (this includes key hydrologic features).

The Niagara Region Official Plan indicates that Environmental Protection Areas (EPA) include: provincially significant wetlands; provincially significant Life Science 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



## Legend

- Subject Lands
- Significant Woodlands
- Non-Provincially Significant Wetland Evaluated
- 30 Metre Wetland Buffer

## FIGURE 4

### Revised Extent of Natural Heritage Features on the Subject Property

### Natural Heritage Constraints Assessment Seymour Avenue, Town of Fort Erie

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wetlands; significant valleylands; savannahs and tallgrass prairies; alvars; and publicly owned conservation lands.

During our review of background mapping, it was noted that a portion of the Subject Property has been designated as Significant Woodland. Our assessments confirmed that a treed area measuring approximately 0.12ha in size is located on the property, however this treed area does not satisfy any of the Niagara Region Official Plan criteria to be considered a Significant Woodland. As a result, no woodlands are located on or adjacent to the property. The refined extent of woodlands are illustrated in Figure 4.

Current MNRF mapping indicates that a portion of the West Fort Erie Non-Provincially Significant Wetland Complex is located southwest of the Subject Property. This area has also been designated as ECA in the Niagara Region Official Plan. The extent of this wetland areas was not refined as part of this project, however for the purposes of this assessment, a 30m buffer has been applied for illustration purposes. The extent of the wetland and associated buffer is illustrated in Figure 4.

### **5.3 Town of Fort Erie Official Plan**

Town of Fort Erie's environmental policies are contained within the Town of Fort Erie Official Plan (OP) and are intended to be complimentary to Provincial and Regional policies. Through the implementation of policies within the OP, the Town of Fort Erie intends to participate in the protection and conservation of natural heritage features in the Town.

Town of Fort Erie Natural Heritage Policies are contained within Section 8 of the Official Plan and includes policies specific to Environmental Protection Areas (EPA's) and Environmental Conservation Areas (ECA's). Similar to the Regional Official Plan, EPA's include features such as Significant Habitat of Threatened and Endangered Species and Provincially Significant Wetlands. Policies specific to EPA's are contained within Section 8.2 of the Official Plan and state that permitted uses within an EPA may include approved conservation activities, flood and erosion control, forestry, fish and wildlife management, passive recreational pursuits. Any development adjacent to an EPA must also demonstrate no impact to the ecological function of the natural heritage features.

Environmental Conservation Areas include Locally Significant Wetlands, Woodlands, and in some cases Valleylands, Meadows, corridors and linkages. Policies specific to ECA's are included in Section 8.3 and are intended to protect the integrity of natural heritage features, while providing some flexibility for development opportunities where possible.

Mapping Schedule C within the OP indicates that no natural heritage features are present on the Subject Property, however the wetland and woodland located southwest of the property have been designated a Locally Significant Wetland and Woodland Over 2ha in size. The extent of the wetland and woodland are illustrated in Figure 4.

### **5.4 Niagara Peninsula Conservation Authority**

The Niagara Peninsula Conservation Authority (NPCA) is responsible for the administration of Ontario Regulation 155/06, which provides the NPCA jurisdiction to regulate development activities within and adjacent to flood and erosion hazards, valleys, watercourses, and wetlands. The guiding principle of this regulation is to ensure any development works proposed within regulated areas will have no adverse impact on flooding, erosion, pollution, dynamic beaches, and the conservation of land.

No mapped NPCA regulated features are located on the property, however a portion of a Non-PSW is located southeast of the property. Due to the proximity of this wetland, the southwest corner of the property is included as NPCA regulated area, as this area is located within 30m of the wetland.



## **6.0 CONSTRAINTS ANALYSIS**

Based on this assessment, no significant natural heritage features are located on the property, however a portion of a Significant Woodland and Non-Provincially Significant Wetland are located southeast of the property. To assist with informing future development plans for the property, natural heritage constraints in the vicinity of the property have been assigned a High, Medium or Low constraint designation. These constraints have been established based on the presumed functions provided by each natural heritage feature, as well as policy implications. A discussion of each constraint level is provided below.

### **6.1 Areas of High Constraint**

As discussed above, the primary natural heritage features in the vicinity of the property are a portion of the West Fort Erie Non-Provincially Significant Wetland Complex and a Significant Woodland. For the purposes of this assessment, these features have been designated as Area of High Constraint (see Figure 5).

### **6.2 Areas of Medium Constraint**

For the purposes of this assessment, lands located within 15m of the non-PSW and woodland have been designated as an Area of Medium Constraint (see Figure 5). No areas of medium constraint are located on the Subject Property.

### **6.3 Areas of Low Constraint**

Although no primary assessments of the woodland and non-PSW were completed as part of this project, lands located between 15m and 30m from the woodland and wetland are considered to be Areas of Low Constraint (see Figure 5). A small portion of the southwest corner of the property is located within this Area of Low Constraint.

Please note that the woodland north of the Seymour Avenue has also been designated as an Area of High Constraint, however since Seymour Avenue occurs between the Subject Property and the woodland, this woodland was not considered to be a constraint to development on the property.

## **7.0 IMPACT ASSESSMENT**

Our assessment indicates that a portion of the property contains a small pocket of Bur Oak deciduous forest, which measures approximately 0.14ha in size. This woodland community does not meet any of the Niagara Region criteria to be considered Significant Woodland based on this assessment. As a result, no significant natural heritage features are located on the property.

As illustrated in Figure 4, the southwest corner of the Subject Property is located within 30m of the wetland and woodland southeast of the property. Based on the proposed location of the townhouses, no structural development will occur within this area, however it is anticipated that most of the vegetation will be removed to facilitate construction and establish a rear yard. Since the lands south of the property are currently mowed up to the edge of the woodland, establishment of mowed lawn on this portion of the property will have no impact on the woodland and wetland south of the property.

Based on this assessment, the proposed development will have no impact on natural heritage features in the vicinity of the property.





## Legend

- Subject Property
- Area of High Constraint
- Area of Medium Constraint
- Area of Low Constraint

**FIGURE 5**  
**Extent of Natural Heritage Constraints**  
**on the Subject Property**

**Natural Heritage Constraints Assessment**  
**Seymour Avenue, Town of Fort Erie**

Prepared for: **Fina Construction Ltd.**

Prepared by:

**COLVILLE**   
CONSULTING INC.

February 2022

File: C20017

## 8.0 CONCLUSIONS AND RECOMMENDATIONS

Colville Consulting Inc. was retained by Fina Construction to complete a characterization of natural heritage features on and adjacent to the Seymour Avenue property. Background mapping available for the property indicated that a portion of the property has been designated as Significant Woodland by the Niagara Region. Our assessments indicate that vegetation on the property consists primarily of Bur Oak forest and Buckthorn thicket, however these vegetation communities are too small and low functioning to be considered Significant Woodland.

From our assessment, it is our conclusion that no natural heritage features are located on this parcel, and therefore no portion of the Subject Property contains a feature consistent with EPA or ECA. Accordingly, it is our conclusion that no natural heritage constraints to development are located on the property. Although a woodland and wetland are located southeast of the property, no portion of the proposed project will impact the functions of these features.

Despite not containing any natural heritage features, it is recommended that the following mitigation measures be considered when planning and constructing on the property.

- The removal of trees and vegetation should be timed to minimize impacts on any wildlife species. It is recommended that tree removal be completed prior to March 15 or after October 31 to minimize impacts to wildlife that may be utilizing the thicket and meadow on the properties.
- Adequate sediment and erosion controls should be installed prior to any construction or site alteration works on the Subject Lands to prevent sediment from being mobilized and leaving the work area.

Respectfully submitted by:



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Ian Barrett, M.Sc.  
Colville Consulting Inc.

## 9.0 LITERATURE CITED

- Cadman, M. D., D. A. Sutherland, G. G. Beck, D. Lepage and A. R. Couturier (eds.). 2007. Atlas of the Breeding Birds of Ontario, 2001-2005. Bird Studies Canada, Environment Canada, Ontario Field Ornithologists, Ontario Ministry of Natural Resources, and Ontario Nature, Toronto, xxii + 706 pp.
- Lee, H.T., W.D. Bakowsky, J.L. Riley, J. Bowles, M. Puddister, P. Uhlig and S. McMurray. 1998. Ecological Community Classification for Southern Ontario: First Approximation and Its Application. Ontario Ministry of Natural Resources, Southcentral Science Section, Science Development and Transfer Branch. SCSS Field Guide FG-02.
- Oldham, M.J. and S.R. Brinker. 2009. Rare Vascular Plants of Ontario, Fourth Edition. Ontario Ministry of Natural Resources, Peterborough, Ontario. 188 pp.
- Oldham, M.J. 2010. Checklist of the Vascular Plants of Niagara Regional Municipality Ontario. Section 9.0 in Niagara Region Natural Areas Inventory, Volume 2. Niagara Peninsula Conservation Authority. 428pp.
- Ontario Ministry of Natural Resources and Forestry. 2015. Significant Wildlife Habitat Criteria Schedules For Ecoregion 7E. 40pp.
- Ontario Ministry of Natural Resources. 2010. Natural Heritage Reference Manual for natural heritage policies of the Provincial Policy Statement, 2005. Second Edition. Toronto, ON: Queen's Printer for Ontario. 248 pp.
- Ontario Ministry of Natural Resources and Forestry. 2017. Survey Protocol for Species at Risk Bats within Treed Habitats - Little Brown Myotis, Northern Myotis & Tri-Colored Bat. Ontario Ministry of Natural Resources and Forestry Guelph District. 13pp.
- Ontario Ministry of Natural Resources and Forestry. 2018. Town of Fort Erie Species at Risk. Guelph, ON: Ontario Ministry of Natural Resources, Guelph District. 3 pp.
- Regional Municipality of Niagara. 2008. Niagara Region Core Natural Heritage Map.
- Regional Municipality of Niagara. 2015. Niagara Region Official Plan. Regional Municipality of Niagara. Schedule C.
- Town of Fort Erie. 2011. Town of Fort Erie Official Plan (Office Consolidated Version: October 29, 2018). 448pp.

## **Appendix A**

### List of Botanical Species

Botanical List for Seymore Ave Property, Fort Erie, ON. Conducted on May 26, June 26 and August 12, 2020.

Scientific Name	Common Name	SRank	COSEWIC	COSSARO	GRank	NRank	Exotic Status	Coeff.Con.	Coeff.Wet.	Notes
<i>Acer rubrum</i>	Red Maple	S5			G5	N5		4	0	
<i>Acer saccharinum</i>	Silver Maple	S5			G5	N5		5	-3	
<i>Agrimonia gryposepala</i>	Hooked Agrimony	S5			G5	N5		2	3	
<i>Alliaria petiolata</i>	Garlic Mustard	SNA			GNR	NNA	SE5		0	
<i>Brassica sp</i>	Mustard sp	SNA								
<i>Carex laxiflora</i>	Loose-flowered Sedge	S5			G5	N5		5	0	
<i>Carex sp</i>	Sedge sp									
<i>Centaurea sp</i>	Knapweed sp	SNA								
<i>Circaea canadensis</i>	Broad-leaved Enchanter's Nightshade	S5			G5	N5		2	3	
<i>Cornus racemosa</i>	Grey Dogwood	S5			G5	N5		2	0	
<i>Cornus sericea</i>	Red-osier Dogwood	S5			G5	N5		2	-3	
<i>Crataegus sp</i>	Hawthorn sp									
<i>Epilobium sp</i>	Willowherb sp									
<i>Fragaria virginiana</i>	Wild Strawberry	S5			G5	N5		2	3	
<i>Fraxinus pennsylvanica</i>	Red Ash	S4			G5	N5		3	-3	
<i>Geum canadense</i>	Canada Avens	S5			G5	N5		3	0	
<i>Glyceria striata</i>	Fowl Mannagrass	S5			G5	N5		3	-5	
<i>Hypericum perforatum</i>	Common St. John's-wort	SNA			GNR	NNA	SE5		5	
<i>Impatiens capensis</i>	Spotted Jewelweed	S5			G5	N5		4	-3	
<i>Juncus tenuis</i>	Path Rush	S5			G5	N5		0	0	
<i>Leersia oryzoides</i>	Rice Cutgrass	S5			G5	N5		3	-5	
<i>Ligustrum vulgare</i>	European Privet	SNA			GNR	NNA	SE5		3	
<i>Lonicera tatarica</i>	Tatarian Honeysuckle	SNA			GNR	NNA	SE5		3	
<i>Lythrum salicaria</i>	Purple Loosestrife	SNA			G5	NNA	SE5		-5	
<i>Malus baccata</i>	Siberian Crabapple	SNA			GNR	NNA	SE1		5	
<i>Moss sp</i>	Moss sp									
<i>Oxalis sp</i>	Wood-sorrel sp									
<i>Persicaria virginiana</i>	Virginia Smartweed	S4			G5	N4		6	0	
<i>Plantago major</i>	Common Plantain	SNA			G5	NNA	SE5		3	
<i>Poa pratensis</i>	Kentucky Bluegrass	S5			G5	N5		0	3	
<i>Potentilla simplex</i>	Old-field Cinquefoil	S5			G5	N5		3	3	
<i>Prunella vulgaris</i>	Common Self-heal	S5			G5	N5		0	0	
<i>Prunus virginiana var. virginiana</i>	Chokecherry	S5			G5T5	N5		2	3	
<i>Quercus macrocarpa</i>	Bur Oak	S5			G5	N5		5	3	
<i>Quercus palustris</i>	Swamp Pin Oak	S4			G5	N4		9	-3	
<i>Ranunculus acris</i>	Common Buttercup	SNA			G5	NNA	SE5		0	
<i>Rhamnus cathartica</i>	European Buckthorn	SNA			GNR	NNA	SE5		0	
<i>Rhus typhina</i>	Staghorn Sumac	S5			G5	N5		1	3	
<i>Ribes sp</i>	Currant sp									
<i>Rosa multiflora</i>	Multiflora Rose	SNA			GNR	NNA	SE5		3	
<i>Rumex crispus</i>	Curled Dock	SNA			GNR	NNA	SE5		0	
<i>Solidago canadensis</i>	Canada Goldenrod	S5			G5	N5		1	3	
<i>Solidago rugosa</i>	Rough-stemmed Goldenrod	S5			G5	N5		4	0	
<i>Symphyotrichum sp</i>	Aster sp									
<i>Symphyotrichum urophyllum</i>	Arrow-leaved Aster	S4			G4G5	N4		6	5	
<i>Taraxacum officinale</i>	Common Dandelion	SNA			G5	N5	SE5		3	
<i>Typha angustifolia</i>	Narrow-leaved Cattail	SNA			G5	N5	SE5		-5	
<i>Ulmus americana</i>	White Elm	S5			G4	N5		3	-3	
<i>Vitis riparia</i>	Riverbank Grape	S5			G5	N5		0	0	

Legend

CoeCons. - Coefficient of Conservatism. Scores for each species range from 0 (low conservatism) to 10 (high conservatism).  
A conservatism value of 0 indicates species is widespread. A value of 8, 9 or 10 indicates that a species is a habitat specialist.



Scientific Name	Common Name	SRank	COSEWIC	COSSARO	GRank	NRank	Exotic Status	Coeff.Con.	Coeff.Wet.	Notes
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CoeWet. - Coefficient of Wetness

5 - Almost always occur in upland areas

4, 3, 2 - Usually occur in upland areas

1, 0, -1 - Found equally in upland and wetland areas

-2, -3, -4 Usually occur in wetlands

-5 Almost always occur in wetlands

GRank - Global Rank G1 — Critically Imperiled, G2 — Imperiled, G3 — Vulnerable, G4 — Apparently Secure, G5 — Secure

COSEWIC - Committee on the Status of Endangered Wildlife in Canada

COSSARO - Committee on the Status of Species at Risk in Ontario

SRank - Subnational Rank

S1 — Critically Imperiled - Critically imperiled in the province because of extreme rarity, (often 5 or fewer occurrences)

S2 — Imperiled - Imperiled in the province because of rarity due to very restricted range, very few populations (often 20 or fewer)

S3 — Vulnerable - Vulnerable in the province due to a restricted range, relatively few populations (often 80 or fewer)

S4 — Apparently Secure - Uncommon but not rare

S5 — Secure - Common, widespread, and abundant in the province

SE — Exotic

Lrank - Local Rank

R - Rare, U - Uncommon

## **Appendix B**

### Site Photos



Photo 1. Example of vegetation conditions in the THDM2-6 and FOD9-3 communities on the property. Photo from Seymour Avenue facing south east.



Photo 2. Example of vegetation conditions in the FOD9-3 community on the property.





Photo 3. Example of vegetation conditions in the FOD9-3 community on the property.



Photo 4. Example of vegetation conditions in the THDM2-6 community on the western portion of the property and adjacent road allowance.





Photo 5. Example of vegetation conditions in the THDM2-6 community on the western portion of the property and adjacent road allowance.



Photo 6. Example of vegetation conditions in the vegetable garden at the rear of the property.



## **Appendix C**

### Species at Risk Screening

Fort Erie				
<div> <div>Species At Risk Designations</div> <div> <div>ENDANGERED</div> <div>THREATENED</div> <div>SPECIAL CONCERN</div> <div>EXTIRPATED</div> </div> </div>				
AMPHIBIANS	ESA Protection	Key Habitats Used By Species	Subject Property	
Fowler's Toad ( <i>Anaxyrus fowleri</i> )	Known to Occur	Species Protection and Habitat Regulation	generally found in sand dunes and lakeshore habitats; found in shallow areas of permanent water bodies; only occurs on the shores of Lake Erie	Potential breeding habitat not present on property.
BIRDS	ESA Protection	Key Habitats Used By Species	Subject Property	
Acadian Flycatcher ( <i>Empidonax virens</i> )	Known to Occur	Species and General Habitat Protection	generally requires large areas of mature, undisturbed forest; avoids the forest edge; often found in well wooded swamps and ravines	Suitable breeding habitat not present on property. Not observed during breeding bird surveys.
Bank Swallow ( <i>Riparia riparia</i> )	Suspected to Occur	Species and General Habitat Protection	prefers farmland; lake/river shorelines; wooded clearings; urban populated areas; rocky cliffs; and wetlands. They nest inside or outside buildings; under bridges and in road culverts; on rock faces and in caves etc.	Suitable breeding habitat not present on property. Not observed during breeding bird surveys.
Barn Swallow ( <i>Hirundo rustica</i> )	Known to Occur	Species and General Habitat Protection	prefers farmland; lake/river shorelines; wooded clearings; urban populated areas; rocky cliffs; and wetlands. They nest inside or outside buildings; under bridges and in road culverts; on rock faces and in caves etc.	Suitable breeding habitat not present on property. Not observed during breeding bird surveys.
Bobolink ( <i>Dolichonyx oryzivorus</i> )	Known to Occur	Species and General Habitat Protection	generally prefers open grasslands and hay fields. In migration and in winter uses freshwater marshes and grasslands	Suitable breeding habitat not present on property. Not observed during breeding bird surveys.
Cerulean Warbler ( <i>Setophaga cerulea</i> ; formerly <i>Dendroica cerulea</i> )	Suspected to Occur	Species and General Habitat Protection	generally found in mature deciduous forests with an open understory; also nests in older, second-growth deciduous forests.	Suitable breeding habitat not present on property. Not observed during breeding bird surveys.
Chimney Swift ( <i>Chaetura pelagica</i> )	Known to Occur	Species and General Habitat Protection	historically found in deciduous and coniferous, usually wet forest types, all with a welldeveloped, dense shrub layer; now most are found in urban areas in large uncapped chimneys	Suitable breeding habitat not present on property. Not observed during breeding bird surveys.
Common Nighthawk ( <i>Chordeiles minor</i> )	Known to Occur	N/A	generally prefer open, vegetation-free habitats, including dunes, beaches, recently harvested forests, burnt-over areas, logged areas, rocky outcrops, rocky barrens, grasslands, pastures, peat bogs, marshes, lakeshores, and river banks. This species also inhabits mixed and coniferous forests. Can also be found in urban areas (nest on flat roof-tops)	Suitable breeding habitat not present on property.
Eastern Meadowlark ( <i>Sturnella Magna</i> )	Known to Occur	Species and General Habitat Protection	generally prefers grassy pastures, meadows and hay fields. Nests are always on the ground and usually hidden in or under grass clumps.	Suitable breeding habitat not present on property. Not observed during breeding bird surveys.
Eastern Wood-Pewee ( <i>Contopus virens</i> )	Known to Occur	N/A	Associated with deciduous and mixed forests. Within mature and intermediate age stands it prefers areas with little understory vegetation as well as forest clearings and edges.	Typical breeding habitat not present on property. Not observed during breeding bird surveys.
King Rail ( <i>Rallus elegans</i> )	Known to Occur	Species and General Habitat Protection	generally this species requires large marshes with open shallow water that merges with shrubby areas	Suitable breeding habitat not present on property. Not observed during breeding bird surveys.
Northern Bobwhite ( <i>Colinus virginianus</i> )	Historically Known to Occur	Species and General Habitat Protection	generally inhabits a variety of edge andgrassland type - habitats including nonintensively farmed agricultural lands.	Suitable breeding habitat not present on property. Not observed during breeding bird surveys.
Prothonotary Warbler ( <i>Protonotaria citrea</i> )	Known to Occur	Species and General Habitat Protection	generally found in the dead trees of flooded woodlands or deciduous swamp forests; Carolinian zone	Suitable breeding habitat not present on property. Not observed during breeding bird surveys.

Red-Headed Woodpecker ( <i>Melanerpes erythrocephalus</i> )	Known to Occur	N/A	Generally prefer open oak and beech forests, grasslands, forest edges, orchards, pastures, riparian forests, roadsides, urban parks, golf courses, cemeteries, as well as along beaver ponds and brooks	Typical breeding habitat not present on property. Not observed during breeding bird surveys.
Short-eared Owl ( <i>Asio flammeus</i> )	Known to Occur	N/A	Generally prefers a wide variety of open habitats, including grasslands, peat bogs, marshes, sand-sage concentrations, old pastures and agricultural fields	Suitable breeding habitat not present on property. Not observed during breeding bird surveys.
Wood Thrush ( <i>Hylocichla mustelina</i> )	Known to Occur	N/A	Nests mainly in second-growth and mature deciduous and mixed forests, with saplings and well-developed understory layers. Prefers large forest mosaics, but may also nest in small forest fragments.	Typical breeding habitat not present on property. Not observed during breeding bird surveys.
Yellow-breasted Chat ( <i>Icteria virens</i> )	Known to Occur	Species and General Habitat Protection	generally prefer dense thickets around wood edges, riparian areas, and in overgrown clearings	Suitable breeding habitat not present on property. Not observed during breeding bird surveys.

FISH		ESA Protection	Key Habitats Used By Species	Subject Property
Lake Chubsucker ( <i>Erimyzon sucetta</i> )	Known to Occur	Species and General Habitat Protection	generally occur in wetlands with warm, shallow water and an abundance of aquatic plants; occur in the St. Lawrence River, Lake Ontario, Lake Erie, and Lake Huron	Potential habitat not present on property. Not observed during inventory.
Grass Pickerel ( <i>Esox americanus vermiculatus</i> )	Known to Occur	N/A	generally occur in wetlands with warm, shallow water and an abundance of aquatic plants; occur in the St. Lawrence River, Lake Ontario, Lake Erie, and Lake Huron	Potential habitat not present on property. Not observed during inventory.

INSECTS		ESA Protection	Key Habitats Used By Species	Subject Property
Monarch Butterfly ( <i>Danaus plexippus</i> )	Known to Occur	N/A	exist primarily wherever milkweed and wildflowers exist; abandoned farmland, along roadsides, and other open spaces	Suitable breeding habitat not present on property. Not observed on property.
Rusty-patched Bumble Bee ( <i>Bombus affinis</i> )	Formerly Occurred and May Still Occur	Species and General Habitat Protection June 27, 2014	generally inhabits a range of diverse habitats including mixed farmland, sand dunes, marshes, urban and wooded areas. It usually nests underground in abandoned rodent burrows	Suitable breeding habitat not present on property. Not observed on property.
West Virginia White ( <i>Pieris virginiensis</i> )	Known to Occur	N/A	generally prefer moist, deciduous woodlands. The larvae feed only on the leaves of the two-leaved toothwort ( <i>Cardamine diphylla</i> ), which is a small, spring-blooming plant of the forest floor.	Suitable breeding habitat not present on property. Not observed on property.

MAMMALS		ESA Protection	Key Habitats Used By Species	Subject Property
Eastern small-footed Myotis ( <i>Myotis leibii</i> )	Suspected to Occur	Species and General Habitat Protection	Overwintering habitat: Caves and mines that remain above 0 degrees Celsius Maternal Roosts: primarily under loose rocks on exposed rock outcrops, crevices and cliffs, and occasionally in buildings, under bridges and highway overpasses and under tree bark.	Potential roosting or maternal habitat on property limited to exfoliating bark on dead ash trees. Property not providing significant habitat for roosting bats.
Little Brown Myotis ( <i>Myotis lucifugus</i> )	Suspected to Occur	Species and General Habitat Protection	Overwintering habitat: Caves and mines that remain above 0 Maternal Roosts: Often associated with buildings (attics, barns etc.). Occasionally found in trees (25-44 cm dbh).	Potential roosting or maternal habitat on property limited to exfoliating bark on dead ash trees. Property not providing significant habitat for roosting bats.
Northern Myotis ( <i>Myotis septentrionalis</i> )	Suspected to Occur	Species and General Habitat Protection	Overwintering habitat: Caves and mines that remain above 0 degrees Celsius Maternal Roosts: Often associated with cavities of large diameter trees (25-44 cm dbh). Occasionally found in structures (attics, barns etc.)	Potential roosting or maternal habitat on property limited to exfoliating bark on dead ash trees. Property not providing significant habitat for roosting bats.
Tri-colored Bat ( <i>Perimyotis subflavus</i> )	Suspected to Occur	Species and General Habitat Protection	Overwintering habitat: Caves and mines that remain above 0 degrees Celsius Maternal Roosts: Can be in trees or dead clusters of leaves or arboreal lichens on trees. May also use barns or similar structures.	Typical roosting and maternal habitat not present on property.
Woodland Vole ( <i>Microtus pinetorum</i> )	Known to Occur	N/A	generally associated with deciduous forests in areas of soft, friable, often sandy soil beneath deep humus, where it can burrow easily.	Typical habitat not present on property. Not observed on property.

MOLLUSCS		ESA Protection	Key Habitats Used By Species	Subject Property
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MOSSES		ESA Protection	Key Habitats Used By Species	Subject Property
PLANTS		ESA Protection	Key Habitats Used By Species	Subject Property
American Ginseng ( <i>Panax quinquefolius</i> )	Known to Occur	Species and General Habitat Protection	grows in rich, moist, undisturbed and relatively mature deciduous woods in areas of neutral soil (such as over limestone or marble bedrock).	Typical habitat not present on property. Not observed during botanical inventories.
Butternut ( <i>Juglans cinerea</i> )	Known to Occur	Species and General Habitat Protection	generally grows in rich, moist, and well-drained soils often found along streams. It may also be found on well-drained gravel sites, especially those made up of limestone. It is also found, though seldomly, on dry, rocky and sterile soils. In Ontario, the Butternut generally grows alone or in small groups in deciduous forests as well as in hedgerows	Typical habitat not present on property. Not observed during botanical inventories.
Common Hoptree ( <i>Ptelea trifoliata</i> )	Known to Occur	Species and General Habitat Protection	generally grows in sandy soils in areas with a lot of natural disturbance - such as the outer edge of shoreline vegetation, sand spits, and sand points.	Typical habitat not present on property. Not observed during botanical inventories.
Eastern Flowering Dogwood ( <i>Cornus florida</i> )	Known to Occur	Species Protection and Habitat Regulation	generally grows in deciduous and mixed forests, in the drier areas of its habitat, although it is occasionally found in slightly moist environments; Also grows around edges and hedgerows	Potential habitat not present on property. Not observed during botanical inventories.
Green Dragon ( <i>Arisaema dracontium</i> )	Known to Occur	N/A	generally grows in damp deciduous forests and along streams.	Typical habitat not present on property. Not observed during botanical inventories.
Spotted Wintergreen ( <i>Chimaphila maculata</i> )	Historically Known to Occur	Species and General Habitat Protection	generally grow in sandy habitats in dry-mesic oak-pine woods. In Canada, they grow very close to the Great Lakes	Potential habitat not present on property. Not observed during botanical inventories.
Swamp Rose-mallow ( <i>Hibiscus moscheutos</i> )	Known to Occur	Species and General Habitat Protection	generally grows in open, coastal marshes, but it is also sometimes found in open wet woods, thickets and drainage ditches	Potential habitat not present on property. Not observed during botanical inventories.
White Wood Aster ( <i>Eurybia divaricata</i> )	Known to Occur	Species and General Habitat Protection	generally grows in open, dry, deciduous forests. It has been suggested that it may benefit from some disturbance, as it often grows along trails.	Typical habitat not present on property. Not observed during botanical inventories.
REPTILES		ESA Protection	Key Habitats Used By Species	Subject Property
Blanding's Turtle ( <i>Emydonidea blandingii</i> )	Known to Occur	Species and General Habitat Protection	generally occur in freshwater lakes, permanent or temporary pools, slow-flowing streams, marshes and swamps. They prefer shallow water that is rich in nutrients, organic soil and dense vegetation. Adults are generally found in open or partially vegetated sites, and juveniles prefer areas that contain thick aquatic vegetation including sphagnum, water lilies and algae. They dig their nest in a variety of loose substrates, including sand, organic soil, gravel and cobblestone. Overwintering occurs in permanent pools that average about one metre in depth, or in slow-flowing streams.	Potential habitat not present on property. Not observed during botanical inventories.
Eastern Hog-nosed Snake ( <i>Heterodon platirhinos</i> )	Historically Known to Occur	Species and General Habitat Protection	generally prefer habitats with sandy, well-drained soil and open vegetative cover, such as open woods, brushland, fields, forest edges and disturbed sites. The species is often found near water.	Typical habitat not present on property. Species not observed on property during inventories.
Snapping Turtle ( <i>Chelydra serpentina</i> )	Known to Occur	N/A	generally inhabit shallow waters where they can hide under the soft mud and leaf litter. Nesting sites usually occur on 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.	Potential habitat not present on property. Not observed during botanical inventories.
Spotted Turtle ( <i>Clemmys guttata</i> )	Known to Occur	Species and General Habitat Protection	generally prefers the shallow, slow-moving and unpolluted water of ponds, bogs, marshes, ditches, vernal pools and sedge meadows. It can also be found in woodland streams and near the sheltered shores of shallow bays	Potential habitat not present on property. Not observed during botanical inventories.

## **Appendix D**

### **Significant Wildlife Habitat Summary Table**

Assessment of Significant Wildlife Habitat on the Seymour Avenue Property.

Significant Wildlife Habitat (SWH) Type	Known or Candidate SWH present/absent	Rationale
<b>SEASONAL CONCENTRATION AREAS OF ANIMALS</b>		
Waterfowl Stopover and Staging Areas	Absent	Suitable habitat not present on property
Shorebird Migratory Stopover Area	Absent	Suitable habitat not present on property
Raptor Wintering Area	Absent	Suitable habitat not present on property
Bat Hibernacula	Absent	Suitable habitat not present on property
Bat Maternity Colonies	Absent	Significant potential habitat not present on property
Turtle Wintering Areas	Absent	Suitable habitat not present on property
Reptile Hibernaculum	Absent	Suitable habitat not present on property
Colonially -Nesting Bird Breeding Habitat (Bank and Cliff)	Absent	Suitable habitat not present on property
Colonially -Nesting Bird Breeding Habitat (Tree/Shrubs)	Absent	Suitable habitat not present on property
Colonially -Nesting Bird Breeding Habitat (Ground)	Absent	Suitable habitat not present on property
Migratory Butterfly Stopover Areas	Absent	Suitable habitat not present on property
Landbird Migratory Stopover Areas	Absent	Suitable habitat not present on property
Deer Winter Congregation Areas	Absent	Suitable habitat not present on property
<b>RARE VEGETATION COMMUNITIES</b>		
Cliffs and Talus Slopes	Absent	Habitat type not present on property
Sand Barren	Absent	Habitat type not present on property
Alvar	Absent	Habitat type not present on property
Old Growth Forest	Absent	Habitat type not present on property
Savannah	Absent	Habitat type not present on property
Tallgrass Prairie	Absent	Habitat type not present on property
Other Rare Vegetation Communities	Absent	No rare vegetation communities present on Subject Property



<b>SPECIALIZED HABITATS OF WILDLIFE CONSIDERED SWH</b>		
Waterfowl Nesting Area	Absent	Suitable habitat not present on property
Bald Eagle and Osprey Nesting, Foraging and Perching Habitat	Absent	Suitable habitat not present on property
Woodland Raptor Nesting Habitat	Absent	Suitable habitat not present on property
Turtle Nesting Areas	Absent	Suitable habitat not present on property
Seeps and Springs	Absent	Suitable habitat not present on property
Amphibian Breeding Habitat (Woodland)	Absent	Suitable habitat not present on property
Amphibian Breeding Habitat (Wetlands)	Absent	Suitable habitat not present on property
Woodland Area-Sensitive Bird Breeding Habitat	Absent	Suitable habitat not present on property
<b>HABITATS OF SPECIES OF CONSERVATION CONCERN CONSIDERED SWH</b>		
Marsh Breeding Bird Habitat	Absent	Suitable habitat not present on property
Open Country Bird Breeding Habitat	Absent	Suitable habitat not present on property
Shrub/Early Successional Bird Breeding Habitat	Absent	Suitable habitat not present on property
Terrestrial Crayfish	Absent	Suitable habitat not present on property
Special Concern and Rare Wildlife Species	Absent	Suitable habitat not present on property
<b>ANIMAL MOVEMENT CORRIDORS</b>		
Amphibian Movement Corridors	Absent	Suitable habitat not present on property
Bat Migratory Stopover Area	Absent	Suitable habitat not present on property

Please note the above SWH criteria are based on guidance provided by the Significant Wildlife Habitat Criteria Schedules for Ecoregion 7E and modified to be specific for the Subject Property.