



# **Natural Heritage Evaluation - 379 Eighth Line Road, Township of Douro-Dummer, County of Peterborough, Ontario**

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Prepared for:  
Ron Hurtubise

Cambium Reference: 12715-001

CAMBIUM INC.

866.217.7900

[cambium-inc.com](http://cambium-inc.com)

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## 1.0 Introduction

Cambium Inc. (Cambium) was retained by Ron Hurtubise to conduct a Natural Heritage Evaluation - 379 Eighth Line Road, Township of Douro-Dummer, County of Peterborough, Ontario (Figure 1). The proposed development includes residential lot severances resulting in one retained lot and two severed lots. The desired location of the severed lots is in the southeast corner of the property, fronting Webster Road. Based on the proposed development, the entire property will be considered the Site for this report.

A Natural Heritage Evaluation (NHE; the Study) is required to address potential negative impacts to natural heritage features identified during the preliminary development review process, as required by the Provincial Policy Statement, 2020 (PPS) and the Growth Plan for the Greater Golden Horseshoe, 2020 (GPGGH). The Site contains and is adjacent to (within 120 m of) a mapped unevaluated wetland and within an area of Species at Risk Observations (as listed in the pre-consultation record; Appendix A). The Site is within Ecoregion 6E-9 of Ontario (Crins, Gray, Uhlig, & Wester, 2009). The property is located outside of any Settlement Area.

The Site is within the jurisdiction of the Otonabee Region Conservation Authority (ORCA) and their regulated area overlaps the Site due to the presence of mapped unevaluated wetlands on and adjacent to the Site. As the Site contains wetlands, the Study will consider regulations on development as imposed by the local Conservation Authority's Regulation under the Conservation Authorities Act, 1990.

The Endangered Species Act, 2007 (ESA) protects endangered and threatened species and their habitats from harm or destruction. Habitat for endangered and threatened species is also afforded protection under provincial natural heritage policy; however, it is ultimately the landowner's responsibility to ensure that no harm to these species or their habitats occurs on their property. This Study includes a habitat-based screening for species of conservation concern to determine if the Site has suitable habitat for any provincially or federally listed species at risk (SAR).



Cambium has conducted this Study to provide an evaluation of reasonably anticipated ecological impacts, positive or negative, that may arise as a result of this proposed development, to guide the decision-making process and address approval authority requirements.

## **1.1 Terms of Reference**

The Terms of Reference (ToR) for this Study were circulated to ORCA and an email response with comments with respect to the ToR was received from Matt Wilkinson, Planner, on June 23, 2021. Relevant correspondence and documentation are provided in Appendix A.

## **1.2 Proposed Development and Conceptual Site Plan**

The Site is an irregular shape of approximately 18.3 ha. The Site currently contains a dwelling, garage, outbuildings (sheds), and a barn. The boundaries of the Site are abutted by Webster Road to the south, and Eighth Line to the west. To the north and east of the Site are natural and agricultural areas. The northern portion of the Site is forested, with open areas for pasture near the existing dwelling and barn. The southern portion of the Site, including the area of the proposed severed lots, is occupied by active hay fields. Adjacent properties consist of rural residential areas, pasture, hay fields, and forested areas with swamps and wetlands; as determined through observations from the Site, publicly accessible lands, and interpretation of orthoimagery.

The proposed development includes the creation of two new severed lots in the southeast corner of the Site and one retained lot. The two new severed lots are intended for residential purposes.

A Conceptual Site Plan is included in the Preliminary Severance Review in Appendix A. This Site Plan is preliminary and was used for the purpose of scoping the Study. Note that future Site Plans submitted in support future permit applications should include the recommendations provided herein.



## **2.0 Applicable Natural Heritage Policy and Regulation**

### **2.1 Provincial Policy Statement, 2020**

Section 2.1 of the Provincial Policy Statement (PPS) (Ministry of Municipal Affairs and Housing, 2020) protects the form and function of natural heritage features as defined by the PPS. Natural heritage features included in the PPS are provincially significant wetlands (PSW), significant coastal wetlands, significant woodlands, significant valleylands, significant wildlife habitat (SWH), significant areas of natural and scientific interest (ANSI), fish habitat, and the habitat of endangered and threatened species. Given their significance, development is prohibited within PSWs in Ecoregions 5E, 6E, and 7E and within significant coastal wetlands. Development in fish habitat and the habitat of endangered and threatened species shall only be permitted in accordance with provincial and federal requirements. Development within other natural heritage features and on lands adjacent to all natural heritage features are permitted only if demonstrated that there will be no negative impacts on the feature or their ecological function. Development includes the creation of a new lot, a change in land use, or the construction of buildings and structures requiring approval under the *Planning Act*.

Section 2.2 of the PPS protects the quality and quantity of water, including the form and hydrologic function of sensitive surface water features and sensitive ground water features. Focus is given to maintaining hydrologic linkages and functions at the watershed scale to minimize potential negative impacts, including cross-jurisdictional and cross-watershed impacts of development. Mitigative measures and/or alternative development approaches should be considered for development near water features.

### **2.2 Growth Plan for the Greater Golden Horseshoe, 2020**

The Greater Golden Horseshoe is one of the most dynamic and fast-growing regions in North America. To address the challenges of increased development within the area, the Growth Plan for the Greater Golden Horseshoe, 2020 (GPGGH) builds on the PPS *“to establish a unique land use planning framework for the Greater Golden Horseshoe that supports achievement of complete communities, a thriving economy, a clean and healthy environment,*





and social equity” (Ministry of Municipal Affairs and Housing, 2020). In general, the GPGGH seeks to preserve agricultural lands, water resources, and natural areas by directing growth to settlement areas as defined in municipal Official Plans. The GPGGH contains policies regarding a provincial Natural Heritage System (NHS), key hydrologic features (KHF), key hydrologic areas (KHAs), and key natural heritage features (KNHFs) (Table 1). Policies that reference the provincial NHS apply once the municipal Official Plan has incorporated the provincial NHS into their schedules; until that time, the policies that reference the NHS will apply outside settlement areas to the natural heritage systems identified in Official Plans that were approved and in effect as of July 1, 2017. Section 4.2.3 of the GPGGH states that, outside of settlement areas, development or site alteration is generally not permitted in KNHFs that are part of the NHS or in KHFs. Section 4.2.4 states that, outside of settlement areas, a proposal for new development or site alteration within 120 metres of a KNHF within the NHS or a KHF will require a natural heritage evaluation or hydrologic evaluation that identifies a suitable vegetation protection zone (i.e., a development setback). For KHFs, fish habitat, and significant woodlands the vegetation protection zone can be no less than 30 m measured from the outside boundary of the feature.

**Table 1 Protected Features of the GPGGH**

Key Hydrologic Features		Key Natural Heritage Features
Permanent Streams	Habitat of Endangered and Threatened Species	Significant Wildlife Habitat
Intermittent Streams	Fish Habitat	Sand Barrens
Inland Lakes and their Littoral Zones	Wetlands	Savannahs
Seepage Areas and Springs	Life Science Areas of Natural and Scientific Interest (ANSI)	Tallgrass Prairies
Wetlands	Significant Valleylands	Alvars
	Significant Woodlands	





## 2.3 Official Plan and Zoning By-Law

### ***Peterborough County Official Plan, 1994***

According to the Peterborough County Official Plan, the land designation of the Site is 'Rural'. The adjacent properties are also designated as 'Rural'. The Peterborough County Official Plan also functions as the Official Plan for the Township of Douro-Dummer.

### ***Township of Douro-Dummer Comprehensive Zoning By-law, 2010***

According to the Township of Douro-Dummer, the zoning of the Site is 'Rural' (RU). The adjacent properties are designated as 'Rural' (RU) and 'Environmental Conservation' (EC).

## 2.4 Conservation Authority Regulation

"Conservation Authorities are local watershed management agencies that deliver services and programs to protect and manage impacts on water and other natural resources in partnership with all levels of government, landowners and many other organizations" (Conservation Ontario, 2021). Conservation Authorities each have their own Ontario Regulation under the *Conservation Authorities Act, 1990*. In general, they regulate development within and adjacent to river or stream valleys, Great Lakes and inland lakes shorelines, watercourses, hazardous lands (flood, erosion, unstable soils) and wetlands.

Otonabee Region Conservation Authority regulates these features under Ontario Regulation 167/06: Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses.

## 2.5 Endangered Species Act, 2007

Species listed as endangered or threatened on the Species at Risk in Ontario (SARO) list are protected under the provincial Endangered Species Act, 2007 (ESA) (Government of Ontario, 2007). Section 9(1) of the ESA prohibits a person from killing, harming, harassing, capturing or taking a member of a species listed as endangered, threatened, or extirpated. Section 10(1) of the ESA prohibits the damage or destruction of habitat of species listed as endangered or threatened. Protection of special concern species is provided through designation of their habitat as significant wildlife habitat (SWH), a provincially protected natural heritage feature.



## 2.6 Species at Risk Act

The federal Species at Risk Act (SARA) was adopted in 2002 to prevent endangered or threatened species from becoming extinct or extirpated, to help in the recovery of endangered, threatened and extirpated species, and to manage species of special concern to help prevent them from becoming endangered or threatened. Habitat which is deemed necessary for the survival/recovery of a listed wildlife species, referred to as Critical Habitat, is protected under Section 56 of the SARA. The SARA applies to all federal lands in Canada; however, at-risk aquatic and migratory bird species located on private property in Ontario also receive protection under the Act.



### **3.0 Technical Approach and Data Collection Methods**

#### **3.1 Background Information Review**

Existing background information pertaining to the Site and surrounding landscape was compiled and reviewed, as part of a comprehensive desktop exercise, to better understand local biophysical conditions. In southern Ontario, readily available data includes orthoimagery, topographic base mapping, and geological records. Natural environment and land use schedules prepared in support of Official Plans and Zoning By-Laws were reviewed to acquire municipal data. Natural area records and species occurrences were obtained from digital resources and reference materials. The comprehensive desktop review for this Site included the following resources:

- Natural Heritage Areas: Make-a-map (Ministry of Natural Resources and Forestry, 2018)
- Ontario Reptile and Amphibian Atlas (ORAA) (Ontario Nature, 2018)
- Ontario Breeding Birds Atlas (OBBA) (2001-2005) (Bird Studies Canada, 2005)
- Peterborough County Preliminary Severance Review (October 22, 2020; Appendix A)
- Peterborough County Official Plan, 1994
- Township of Douro-Dummer Comprehensive Zoning By-law, 2010

Mapped natural heritage features present in the general area of the Site are shown on Figure 2.

##### **3.1.1 Ministry Consultation**

Depending on the natural feature of the Site, ministry consultation may include the Ministry of Northern Development, Mines, Natural Resources, and Forestry (NDMNRF) and/or the Ministry of Environment, Conservation, and Parks (MECP), as applicable. For this Study, Cambium consulted directly with MECP regarding SAR. A record of this correspondence is included in Appendix A, and a discussion of SAR is included in Sections 4.4, 5.3, and 5.4.



In early 2019, the Government of Ontario made changes to the regulating authority on matters related to SAR in the province. The MECP is now responsible for administering the ESA and providing direction on potential compliance issues. MECP has prepared a guidance document titled *Client's Guide to Preliminary Screening for Species at Risk* (Ministry of the Environment, Conservation and Parks, 2019). This document aims to “help clients better understand their obligation to gather information and complete a preliminary screening for SAR before contacting the Ministry”. This document was used to guide the SAR habitat-based screening for the Study.

### **3.2 Field Investigations**

Information gathered through the background information review was used to guide the development of the fieldwork program. The purpose of the field visit(s) was to verify information acquired through existing documentation and to gather additional site-specific information. The following sections detail the methodologies that were applied.

#### **3.2.1 Ecological Land Classification and Vegetation Inventory**

The Ecological Land Classification (ELC) System for Southern Ontario (Lee, et al., 1998) was used to classify vegetation communities on the Site. Definitions of vegetation types are derived from the ELC for Southern Ontario First Approximation Field Guide (Lee, et al., 1998) and the revised 2008 tables. ELC units were initially delineated and classified by orthoimagery interpretation. Field investigations served to confirm the type and extent of communities on the Site through vegetation inventory, and soil assessment with a hand auger where vegetation types could not be classified based on vegetation alone. Where vegetation communities extend off the Site, classification is done through observation from property boundaries and publicly accessible lands.

#### **3.2.2 Wetland Boundary Delineation**

Wetland boundaries were initially delineated and classified by orthoimagery interpretation. The presence/absence of wetlands on the Site was confirmed through field investigations during the growing season (late May through October). Wetland boundaries were determined using



the 50% wetland vegetation rule. Where vegetation-based delineation was inconclusive, soil assessment with a hand auger was used to confirm wetland boundaries. Wetland boundaries on the Site were marked with a hand-held GPS unit and staked/flagged in the field. Where wetland communities extend off the Site, classification was done through observation from property boundaries and publicly accessible lands.

### **3.2.3 Habitat-Based Wildlife Surveys**

Given the scale of the proposed development, a habitat-based approach was used to assess potential impacts to wildlife, consistent with standard practice. General habitat information gathered through the field investigations was used to assess the connectivity of the Site with the surrounding landscape and evaluate the ecological significance of the local area. Cambium staff actively searched for features that may provide specialized habitat for wildlife. These searches included inspecting tree cavities, overturning logs, rocks and debris, and scanning for scat, browse, sheds, fur, etc. Any evidence of breeding, forage, shelter, or nesting was noted. Species and habitat observations were documented and photographed.



## 4.0 Characterization of Natural Features and Functions

Data acquired through the background information review and field investigations is summarized in the following sections. Based on the information gathered, an assessment of significance has been completed to identify protected natural heritage features on and/or adjacent to the Site.

The following field investigations were carried out on the Site and are summarized in Table 2. Eastern Meadowlark observations are shown on Figure 3.

**Table 2 Summary of Field Investigations**

Date	Time On Site	Weather	Observer	Activities
2021-06-17	10:30 – 12:00	25°C, Sunny Wind: 1 Noise: 1	T. Jamieson	Ecological Land Classification Wetland Boundary Delineation Habitat-Based Wildlife Survey

**Notes:**

Wind speed is reported as a Beaufort Wind Scale value (0 = 0-2 kph, 1 = 3-5 kph, 2 = 6-11 kph, 3 = 12-19 kph, 4 = 20-30 kph, 5 = 31-39 kph, 6 = 40-50 kph).

Noise is reported based on background noise levels: Index 0 – no appreciable effect, 1 – slightly affecting sampling, 2 – moderately affecting sampling, 3 – seriously affecting sampling, 4 – profoundly affecting sampling.

### 4.1 Landscape Position and Topography

The Site is located within the Mixedwood Plains Ecozone: Lake Simcoe Rideau Ecoregion 6E, which extends southward from a line connecting Lake Huron in the west to the Ottawa River in the east, including Ottawa, Kingston, Peterborough, Barrie, Tobermory, Kitchener, and Toronto. This Ecoregion is characterized by a mixed geology that includes both shallow soil areas such as alvar and bedrock plains, as well as deep soil areas such as the Oak Ridges Moraine. It falls within the Great-Lakes St. Lawrence Forest Region, including deciduous and mixed forests; however, over 50% of the landscape in this Ecoregion is currently in use as agricultural land (Lee, et al., 1998).

The Site is relatively flat, consisting of gentle rolling hills with minor changes in topography in the southern half of the Site, and slight decreases in topography in the northern half of the Site where a wetland exists (Figure 3).



## 4.2 Vegetation Communities

Utilizing aerial imagery dating back to 1985, it appears that no major changes to vegetation cover have occurred at the Site. Currently, the Site contains an existing driveway, forested areas to the east and west of the driveway, and open areas near the centre and on the south portions of the Site. The surrounding area is mainly residential or forested areas and have been this way since at least 1985.

The vegetation communities on the Site are summarized in

Table 3 and are mapped on Figure 3. A list of identified species and representative photos for each community are provided in Appendix B.

**Table 3 Vegetation Communities**

No.	ELC Code	Community Description	Community Type	S -Rank
1	OAGM2	Perennial Cover Crops (Hay Field)	Terrestrial	N/A
2	FODM11	Naturalized Deciduous Hedge-row	Terrestrial	N/A
3	SWC1-1	White Cedar Coniferous Swamp	Wetland	S5
4	CUM1	Mineral Cultural Meadow	Terrestrial	N/A
5	FOC	Coniferous Forest	Terrestrial	S5
6	MAS2	Mineral Shallow Marsh	Wetland	S5
7	CVR	Residential	Terrestrial	N/A

A search for Butternut (*Juglans cinerea*; provincially endangered) was completed as part of the vegetation survey; no Butternut were identified.

### 4.2.1 Significant Woodlands

Significant woodlands are natural heritage features that are afforded protection under provincial policy. The PPS defines woodlands as: treed areas, woodlots or forested areas, and states that woodlands may be delineated according to the Forestry Act definition or the





Province's ELC system definition for "forest". According to the provincial ELC system, only Vegetation Community 5 meet the woodland definition.

Currently, according to their respective Official Plan Schedules, the County of Peterborough has not explicitly defined or designated significant woodlands within their jurisdiction. In the absence of local criteria for evaluating woodlands, the NHRM provides comprehensive guidance on evaluating woodlands for significance (Ministry of Natural Resources, 2010). The Greenbelt Plan provides evaluation criteria in the document entitled: *Technical definitions and criteria for key natural heritage features in the Natural Heritage System of the Protected Countryside Area* (Ministry of Natural Resources, 2012). While the Site is outside the Greenbelt Plan area, the North Area of the Greenbelt Plan (i.e., north of the Oak Ridges Moraine) is representative of the geographic and planning context for this Site, and these technical definitions can be used to guide evaluations in the absence of local criteria. The Greenbelt Plan criteria have been applied to this Site.

The Greenbelt Plan defines a woodland as significant if any of the following conditions are met:

- Size: woodland is larger than 10 ha
- Natural composition: area of the woodland composed of naturally occurring species is greater than 4 ha
- Age of trees: equal 10 or more trees per ha that are either 100 years old or 50 cm in diameter
- Woodlands of 4 ha or more that are within 30 m of a significant wetland, significant habitat, or significant woodland
- Any woodlands 0.5 ha or greater containing provincially rare treed vegetation with a S1, S2, or S3 ranking.

A woodland exists in the northern portion of the Site (Vegetation Community 5; Figure 3). This woodland is further connected to the adjacent woodlands to the west, as Eighth Line Road is less than 20 m wide. Therefore, the woodland is larger than 10 ha and is considered a candidate significant woodland.



### 4.3 Wetland Delineation

Field investigations confirmed that there are unevaluated wetlands on and adjacent to the Site; however, the location and extent of the field verified wetland overlapping the Site is not consistent with provincially mapped feature boundaries. One wetland was identified in the north-central section of the Site, as detailed in

Table 3 and illustrated on Figure 3. This wetland feature is located within the retained lot, adjacent to the existing dwelling, and is greater than 120 m from the proposed severed lots. The boundary of this wetland was GPS marked in the field.

The mapped unevaluated wetland located on adjacent lands to the northwest and southeast of the Site were observed from the road considering that these features are located on adjacent private property (Figure 3). The wetland to the northwest is well established and was effectively confirmed through orthoimagery interpretation. The wetland to the southeast has potential implications to the development proposal; therefore, conditions within this feature were documented from the roadside to the best extent possible. The wetland to the southeast of the proposed severance locations was observed to contain species such as Broad-leaved Cattail, Reed Canarygrass, and Northern Water-plantain. This wetland appears to be hydrologically disconnected from the Site as no connecting features (i.e. culverts, drains, etc.) from this wetland to the Site were observed. The boundary of this wetland in proximity to the road appeared consistent with provincial mapping.

### 4.4 Species of Conservation Concern

A list of species of conservation concern, including SAR, with potential to occur in the general vicinity of the Site has been compiled based on known species' ranges, habitat requirements, and review of background information sources (as listed in Section 3.1). In addition, the list has been augmented with direct field observations from this Study, as detailed in the previous sections. Cambium has employed a habitat-based screening, supplemented with targeted field surveys as necessary, to identify suitable habitat for species located on or adjacent to the Site.



A detailed habitat suitability analysis is provided in Appendix C and a discussion of the results is provided below.

#### **4.4.1 Endangered and Threatened Species**

As noted in the Preliminary Severance Review (Appendix A), there are SAR observation records for the Site. During background review, ORCA revealed that these SAR observations were for Eastern Meadowlark. Eastern Meadowlark were confirmed by Cambium staff during the site visit within appropriate habitat, as observed in Vegetation Community 1 (Figure 3), as such, SAR habitat for Eastern Meadowlark exists on the Site. The habitat area in which the Eastern Meadowlark were observed is a hay field that is actively managed/cut for agricultural purposes.

Bobolink are listed federally and provincially as threatened. They utilize similar habitat as Eastern Meadowlark such as hayfields and pastures. Appropriate habitat, as observed in Vegetation Community 1 (Figure 3), exists on the Site. As such, potential habitat for Bobolink exists on the Site. No Bobolink were observed during the site visit.

Barn Swallows are listed as threatened both federally and provincially. They require open habitats including grassy fields, pastures, agricultural crops, shorelines, cottage areas, wetlands, or sub-arctic tundras which are also in close association with human populations as this swallow typically nests inside man-made structures such as abandoned barns or other buildings with sufficient openings or road culverts. A barn and grassy fields are present on the Site. As such, potential habitat for Barn Swallows exists. No Barn Swallow were observed during the site visit. There are no structures within the proposed severance areas, and no alterations to structures on the retained lot are proposed.

Potential habitat for Western Chorus Frog exists within the wetland and adjacent forested areas of the Site. No Western Chorus Frog were observed during the site visit. Given that this species is not provincially regulated and wetland habitats will be protected as detailed in Section 5.1, this species is not discussed further in this report.



#### **4.4.2 Special Concern Species**

The habitat-based species of special concern screening, provided in Appendix C, identified three species with potential habitat on the Site.

Grasshopper Sparrow share similar habitat to Bobolink and Eastern Meadowlark, inhabiting open grasslands, hayfields, and pastures. This habitat is present on the Site within Vegetation Community 1 (Figure 3). No Grasshopper Sparrow were observed during the site visit, which was conducted during the breeding bird season.

Eastern Milksnake inhabit open areas such as fields and forest edges, as is present in Vegetation Communities 1, 4, and 7 (Figure 3). No Eastern Milksnake were observed during the site visit.

The Yellow-banded Bumble Bee is a habitat generalist and therefore could use Vegetation Communities 1, 4, and 7 (Figure 3) as they all contain pollinating species which the Yellow-banded Bumble Bee may use for food. No Yellow-banded Bumble Bees were observed during the site visit.



## **5.0 Impact Assessment and Mitigation Measures**

The proposed development includes the creation of two new severed lots in the southeast corner of the Site and one retained lot. The two new severed lots are intended for residential purposes.

The following sections address potential impacts to protected features identified on and adjacent to the Site that may result from the proposed development and site alteration.

Protected natural heritage features identified on the Site include:

- Significant Woodlands
- Wetlands
- SAR Habitat
- Potential Significant Wildlife Habitat (SWH) for Endangered, Threatened, and Special Concern Species

No other natural heritage features protected by provincial policy were confirmed on or adjacent to the Site.

Mitigation measures and best management practices have been recommended to ensure that the integrity of the current existing natural features are protected and/or enhanced and furthermore that their functions are not negatively impacted during or following construction.

### **5.1 Significant Woodlands**

Significant woodlands are not currently designated within Peterborough County; however, based on provincially approved evaluation criteria, the woodlands on the Site meet the significance criteria and have been classified as candidate significant woodlands. The proposed severances and future development will occur greater than 30 m from the dripline of the candidate significant woodland (Figure 4). Therefore, no direct or indirect impacts are expected.



## 5.2 Wetlands

As detailed in Section 4.2.1, wetlands were confirmed on and adjacent to the Site. Wetland boundaries on the Site were delineated in the field and are shown on Figure 3. A 30 m Vegetation Protection Zone (VPZ), functioning as a development setback, is required adjacent to wetland features in accordance with the GPGGH. The 30 m VPZ/wetland setback is illustrated on Figure 4. The 30 m VPZ is considered sufficient to protect the existing form and function of local wetland features provided that the area be maintained as the existing natural cover and be allowed to naturally self-sustain (i.e., a buffer area where no vegetation removals or grading is permitted).

Direct impacts are not expected as all proposed development, including lot line placement, is proposed to occur outside of the wetlands and the associated setbacks. If possible, access to the most eastern severed lot should be developed outside of the 30 m VPZ/wetland setback associated with the off-site wetland to the southeast (Figure 4). Considering that the wetland did not appear to be hydrologically connected to the Site and that a road passes through the setback and acts as a boundary to the wetland, limited impacts would be expected if access were proposed within the 30m VPZ/wetland setback.

The following mitigation measures are proposed to further protect the form and function of the wetlands located on and adjacent to the Site.

### Erosion and Sediment Control

Prior to any construction activities taking place, perimeter sediment fencing should be installed around construction areas. Fencing should be properly keyed into the ground and securely fastened to vertical supports spaced  $\leq 2$  m apart. This key control measure will help prevent sediment from entering surface water features (i.e., wetlands) in the surrounding landscape. All sediment fencing should be regularly maintained and kept in good working condition, until the area has been stabilized and/or successfully revegetated. Any observed overland drainage channels originating from Site, that may or may not have arisen as a result of erosion, should be directed to a check dam structure, prior to discharging to off-site areas.



### **Maintaining Local Hydrologic Balance**

Upon development for residential use, runoff from the Site is expected to increase with the introduction of impermeable surfaces (i.e., building roofs, roadways, and walkways) and compacted surfaces with reduced infiltration capacity. Measures to increase infiltration of runoff from these surfaces should be encouraged and, where possible, included in the Site Plan for the development. Eavestrough downspouts should be directed to vegetated areas (such as lawn, or gardens) and not onto hardened surfaces, to encourage infiltration to maintain the local level hydrologic balance.

Provided these recommendations are adhered to, no indirect impacts to the wetland are anticipated.

### **5.3 Species at Risk Habitat**

As detailed in Section 4.4.1, Eastern Meadowlark were observed at the Site, within the proposed severance lots. Eastern Meadowlark utilize grasslands, hay fields, and pastures, such as Community 1 on the Site, for nesting habitat. A breeding pair, an individual, and one flyover Eastern Meadowlark were observed during the site visit. These observations confirm the presence of breeding habitat for Eastern Meadowlark.

Cambium corresponded with MECP on August 9, 2021, regarding these observations. A response from the MECP was received on October 21, 2021, stating that severances are administrative in nature and do not have impact on SAR or SAR habitat (Appendix A); but did confirm that eventual development on the lots could impact SAR or their habitats. MECP went on further to indicate that due to the active agricultural nature of the Site, an exemption to the habitat protection regulations applies under Section 4.1 of Ontario Regulation 242/08. Upon a change in land use, this exemption no longer applies. MECP indicated that at such time that physical development of the lots is proposed the person undertaking those activities would need to determine whether an ESA authorization should be obtained before the activities are undertaken.

In the interest of providing a full assessment of the development potential of the proposed severances, Cambium has completed an evaluation of habitat suitability for Eastern





Meadowlark within the local landscape. Eastern Meadowlark require a minimum habitat area of 5 ha, according to the Eastern Meadowlark General Habitat Description (MECP, 2022). The suitable habitat patch overlapping the proposed severances is estimated to be approximately 22 ha, based on a review of recent orthoimagery of the local area. The subject property contains approximately 9 ha of this suitable habitat. The proposed lots comprise a total area of 0.8 ha. Assuming that the entire footprint of each of these lots is converted to residential use (i.e. structures, lawn, associated servicing), the suitable habitat patch on the Site will be reduced to approximately 8.2 ha, which maintains ample habitat on the Site for Eastern Meadowlark. Further, suitable habitat will continue to exist in the broader landscape. The location of the proposed lots, along an existing habitat edge (i.e. roadway) will not result in habitat fragmentation. Based on this evaluation, provided that the mitigation measures identified below are adhered to, impacts to Eastern Meadowlark individuals and the functional habitat provided on and surrounding the Site are not expected.

In order to avoid harm to the form and function of the Eastern Meadowlark habitat:

- Habitat alteration must be limited to the proposed lot limits.
- All required vegetation removals within the development envelope must occur outside the grassland breeding bird timing window of April 15 to August 15 in the local area (as per Environment and Climate Change Canada Guidelines). Vegetation removals for the purpose of development occurring between April 15 to August 15 may result in contravention of the ESA (2007) and would be an offence.

Provided that these recommendations are followed, the development proposal, and subsequent development of the lots for residential use, is not expected to have an impact on Eastern Meadowlark or protected habitat. Note that the same recommendations will safeguard Bobolink habitat.



## 5.4 Potential Significant Wildlife Habitat for Special Concern Species

As detailed in Section 4.4, potential habitat for three species of special concern exists on the Site. Provided the recommendations herein are adhered to, no impacts to SWH for special concern species is anticipated in relation to the proposed developments on the Site.

### Vegetation Clearing

As detailed in Section 5.3, migratory birds are protected under the *Migratory Birds Convention Act, 1994*. Nesting birds and their nests, eggs, and young are protected under the *Migratory Birds Convention Act, 1994*. Vegetation clearing on the Site should occur outside the breeding bird season, which extends from April 15 to August 15 in the local area (as per Environment and Climate Change Canada Guidelines).

If vegetation clearing is to occur between April 15 and August 15, the vegetation should be investigated by a qualified biologist to confirm if any nests are present. Vegetation clearing can proceed provided there are no active nests. If active nests are confirmed, the nests should be left undisturbed until young have fledged or the nest is determined to be inactive.

### Wildlife Exclusion

Small wildlife including snakes, amphibians, and small mammals are particularly vulnerable to construction-related impacts on sites adjacent to wetlands and woodlands. The ESC fencing detailed in Section 5.1 can also function as wildlife exclusion fencing. Fencing should be installed around the entire perimeter of the construction area prior to the earlier of May 1 or the commencement of Site preparation, in order to keep turtles and snakes from entering the construction area. This fencing should be made of light-duty silt fence, staked at regular intervals, trenched-in at least 10-20 cm below ground, with an above ground height of at least 60 cm.

The fencing should be inspected regularly to ensure that it remains in good condition: and any downed areas, rips, or holes should be repaired or replaced immediately. The area of construction should also be actively inspected for turtles and snakes each day prior to the start of work, throughout the duration of construction.



If any wildlife are encountered, they should be photographed and allowed time to move out of harm's way. If any SAR are discovered on the property, they should be left undisturbed as dictated by the Endangered Species Act, 2007. If any SAR individuals are encountered, they should be photographed and allowed time to move out of harms way. SAR observations should be reported to the Natural Heritage Information Centre (NHIC).

### **Native Pollinator Plants**

As the Site may provide habitat for pollinator species such as Yellow-banded Bumble Bee, vegetation removal should be limited to the amount required for construction.

Including native flowering herbaceous plants in the future landscaping plans will aid in maintaining habitat for these pollinator species. The Ontario Seed Company (OSC) based out of Waterloo, Ontario carries a variety of seed mixtures. Specialized mixtures such as an 'erosion control mixture' and the 'early successional dry prairie meadow mix' contain wildflowers and grass species, which provide rapid vegetation cover and a diversity of habitat for pollinators. These mixtures provide an excellent method of rehabilitating areas with a diverse composition of pollinating and nectar bearing plant species suitable for the conditions documented.

## **5.5 Best Management Practices**

### **5.5.1 Invasive Species**

Invasive species are becoming problematic throughout Ontario and can adversely impact our natural landscapes, including wetlands and woodlands. No vegetation dumping or yard waste disposal should occur within the wetlands or forested areas of the Site to maintain the natural state and avoid the introduction or spread of non-native or invasive species. Landscape Plans should focus on native or non-invasive species.

Additional best management practices to reduce the spread of invasive species include:

- Revegetate with species native to the local area.



- Request fill and compost from reputable sources that are conscious of the potential for the spread of invasive species via these media.
- Get to know the most common invasive species in the area.
- Brush off or clean any shoes, boots and equipment that have encountered invasive species before returning to the property.
- Immediately eradicate invasive species if they are observed on the property.
- Do not compost invasive species; put them in plastic bags and dispose of them in the garbage.
- Do not dispose of lawn or garden clippings in the forest or wetlands to avoid species introductions.

### **5.5.2 Noise and Artificial Lighting**

Noise is not expected to increase significantly because of the proposed residential development as it is consistent with the low density, rural land uses on the surrounding properties. Maintaining the wooded areas surrounding the wetland will serve to buffer wildlife within the natural areas from any noise-related impacts.

Artificial lighting can have an impact on nocturnal movement of wildlife within natural areas. To minimize impacts to wildlife, it is recommended that outdoor lights be operated on timers, rather than by motion detection. Outdoor lighting associated with the development should be directed at the ground, rather than into the adjacent natural areas. Bulb wattage should be as low as practical while meeting the safety intent of the lighting.



## 6.0 Policy Conformity

Based on the key natural heritage and/or hydrologic features identified on or adjacent to the Site and the findings of the field investigations detailed herein, the proposed development of the Site is in compliance with the natural heritage policies of the PPS and GPGGH.

Compliance with applicable natural heritage policy is summarized Table 4.

**Table 4 Policy Conformity Summary**

Key Natural Heritage / Hydrologic Feature	On Site	On Adjacent Lands	Meets Associated Policy
Significant Woodlands	Yes	Yes	Yes; 2.1.5 & 2.1.8
	Explanation: No impacts to significant woodlands are expected. Development is proposed to occur greater than 30 m from the dripline of woodlands on the property (Figure 4).		
Wetlands	Yes	Yes	Yes; GPGGH: 4.2.3.1 & 4.2.4.1-3
	Explanation: No impacts to wetlands are expected. All physical development is proposed to occur outside of the 30 m VPZ/wetland setback. Access to the proposed eastern lot should be located outside of the associated 30 m wetland setback if possible. If this is not possible, limited impacts are expected as hydrologic connectivity was not observed and a road acts as a boundary to this wetland (Figure 4).		
SAR Habitat	Yes	Potentially	Yes; PPS: 2.1.5 & 2.1.7
	Explanation: Impacts to the form and function of Eastern Meadowlark habitat are not expected to be negatively influenced based on the proposed development assuming mitigation measures provided in Section 5.3 are followed.		
Significant Wildlife Habitat (including habitat of special concern species)	Potentially	Potentially	Yes, PPS: 2.1.5 & 2.1.8
	Explanation: Potential SWH for special concern species exists on the Site and adjacent lands. Direct and indirect impacts can be appropriately avoided or mitigated through the recommendations provided herein.		



## 7.0 Summary of Mitigation, Compensation, and Best Practices

The following measures are recommended for the proposed development:

1. Site Plans developed for the proposed development, including severances and building envelopes, should show the location of all confirmed natural features and setbacks (Figure 4).
2. A 30 m VPZ is recommended for all wetlands. If possible, access to the eastern proposed lot should be located outside of this wetland setback. However, if this is not possible, the access can be placed within the setback as the form and function of the wetland is not expected to be impacted.
3. ESC fencing should be installed around development areas to contain potential impacts from construction. ESC fencing can also function as exclusion fencing. ESC fencing should then be installed around the perimeter of construction areas prior to May 1 (or commencement of Site preparation) in order to isolate the area from wildlife. All ESC fencing should be removed once the development is complete and the soils are stabilized.
4. With proposed future development in the severed lots, runoff from the Site is expected to increase with the introduction of impermeable surfaces. Measures to increase infiltration of run-off from these surfaces should be encouraged and, where possible, included in the Site Plan for the development.
5. Due to the confirmed presence of Eastern Meadowlark habitat on the Site, vegetation removals should be strictly limited to the proposed severance areas and must occur outside of the breeding bird window of April 15 to August 15. Vegetation removals within this period may result in contravention of the ESA (2007).
6. Nesting birds are protected under the Migratory Birds Convention Act, 1994. In the event that construction is planned to proceed during the breeding season (April 15 to August 15), the construction area should be investigated regularly for the presence of breeding birds and nests containing eggs and/or young (some birds nest on man-made structures/machinery or in recently cleared areas). Nests discovered should be left



undisturbed until young have fledged or the nest is determined to be inactive by a certified biologist.

7. If wildlife are encountered within the construction areas, they should be photographed and allowed time to move out of harm's way. If any SAR are discovered on the property, they should be left undisturbed as dictated by the Endangered Species Act, 2007. If any SAR individuals are encountered, they should be photographed and allowed time to move out of harms way. SAR observations should be reported to the Natural Heritage Information Centre (NHIC).
8. Including native flowering herbaceous plants in the future landscaping plans will aid in maintaining habitat for pollinator species such as the Yellow-banded Bumble Bee.
9. Best management practices related to invasive species should be implemented to the best extent possible. No vegetation dumping or yard waste disposal should occur within the wetlands or forested areas of the Site to maintain the natural state and avoid the introduction or spread of non-native or invasive species.
10. To minimize impacts to wildlife, it is recommended that outdoor lights be operated on timers, rather than by motion detection. Outdoor lighting associated with the development should be directed at the ground, rather than into the adjacent natural areas. Bulb wattage should be as low as practical while meeting the safety intent of the lighting.





## 8.0 Closing

In closing, potential negative impacts associated with the proposed development and site alteration can be appropriately minimized, provided that the recommendations outlined in Section 7.0 are followed. The information presented herein demonstrates that the proposed development can be carried out in a way that will not adversely impact natural heritage and hydrologic features and function identified on or adjacent to the subject Site. Furthermore, the proposed development complies with applicable provincial policy.

Respectfully submitted,

**Cambium Inc.**

Myles Latter, Hons. B.A., Dipl.  
Project Coordinator

Andrea Coppins, Hons. B.A., Dipl.  
Project Manager/Senior Ecologist



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## Glossary of Terms

ANSI: Area of Natural and Scientific Interest	GIS: Geographic Information System
ARA: Aquatic Resources Area	GLSL: Great Lakes – St. Lawrence
ARA: Aggregate Resources Act	GPGGH: Growth Plan for the Greater Golden Horseshoe
AS: Agricultural System	GPS: Global Positioning System
ATK: Aboriginal Traditional Knowledge	HSA: Habitat Suitability Analysis
BMA: Bear Management Area	HIS: Habitat Suitability Index
BMP: Best Management Practice	KHA: Key Hydrologic Areas
CA: Conservation Authority	KHF: Key Hydrologic Features
CEAA: Canadian Environmental Assessment Act/Agency	KNHF: Key Natural Heritage Features
CFA: Canadian Forestry Association	LCFSP: Licence to Collect Fish for Scientific Purposes
CFIP: Community Fisheries Involvement Program	LIO: Land Information Ontario
CFS: Canadian Forestry Service	LRIA: Lake and Rivers Improvement Act
CHU: Critical Habitat Unit	LUP: Land Use Permit or Plan
CH: Cultural Heritage	MA: Management Area
CLI: Canada Land Inventory	MAFA: Moose Aquatic Feeding Area
CLU: Crown Land Use	MCEA: Municipal Class Environmental Assessment
COSSARO: Committee on the Status of Species at Risk in Ontario	MECP: Ontario Ministry of Environment, Conservation and Parks
CR: Conservation Reserve	MNDMRF: Ontario Ministry of Natural Resources and Forestry
CWIP: Community Wildlife Involvement Program	NER: Natural Environment Report
CWS: Canadian Wildlife Service	NHIC: Natural Heritage Information Centre
DFO: Fisheries and Oceans Canada	NHIS: Natural Heritage Information System
EA: Environmental Assessment	NHS: Natural Heritage System
EAA: Environmental Assessment Act	OBM: Ontario Base Map
EAB: Emerald Ash Borer	OFIS: Ontario Fisheries Information System
EBR: Environmental Bill of Rights	OLI: Ontario Land Inventory
EIA: Environmental Impact Assessment	OMAFRA: Ontario Ministry of Agriculture, Food and Rural Affairs
EIS: Environmental Impact Study/Statement	OWES: Ontario Wetland Evaluation System
ELC: Ecological Land Classification System	PPS: Provincial Policy Statement (2014)
ELUP: Ecological Land Use Plan	PSW: Provincially Significant Wetland
END: Endangered species	RLUP: Regional Land Use Plan
EPA: Environmental Protection Act	RMP: Regional Management Plan
ER: Environmental Registry	R.P.F.: Registered Professional Forester
ESA: Endangered Species Act (2007)	SAR: Species at Risk
ESA: Environmentally Sensitive Area	SARO: Species at Risk in Ontario
ESC: Erosion and Sediment Control	SC: Special Concern species



F&W: Fish and Wildlife  
FA: Fisheries Act (Federal)  
FEC: Forest Ecosystem Classification  
FMP: Forest Management Plan  
FRI: Forest Resources Inventory  
FWCA: Fish and Wildlife Conservation Act  
GGH: Greater Golden Horseshoe  
GHP: General Habitat Protection

SWH: Significant Wildlife Habitat  
SWM: Stormwater Management  
THR: Threatened species  
TOR: Terms of Reference  
TPP: Tree Preservation Plan  
WIA: Woodlands Improvement Act  
WMU: Wildlife Management Unit



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## Appended Figures

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# NATURAL HERITAGE EVALUATION

RON HURTUBISE  
379 Eighth Line Road  
Douro-Dummer, Ontario

## LEGEND

- Major Road
- Minor Road
- Water Area
- Ecodistrict
- Site (approximate) (20.2 ha.)

Notes:

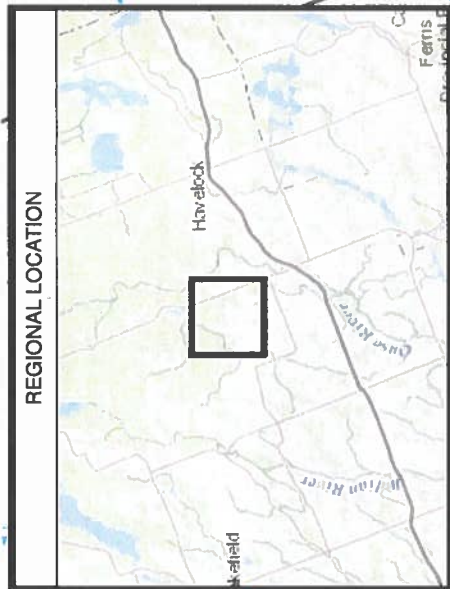
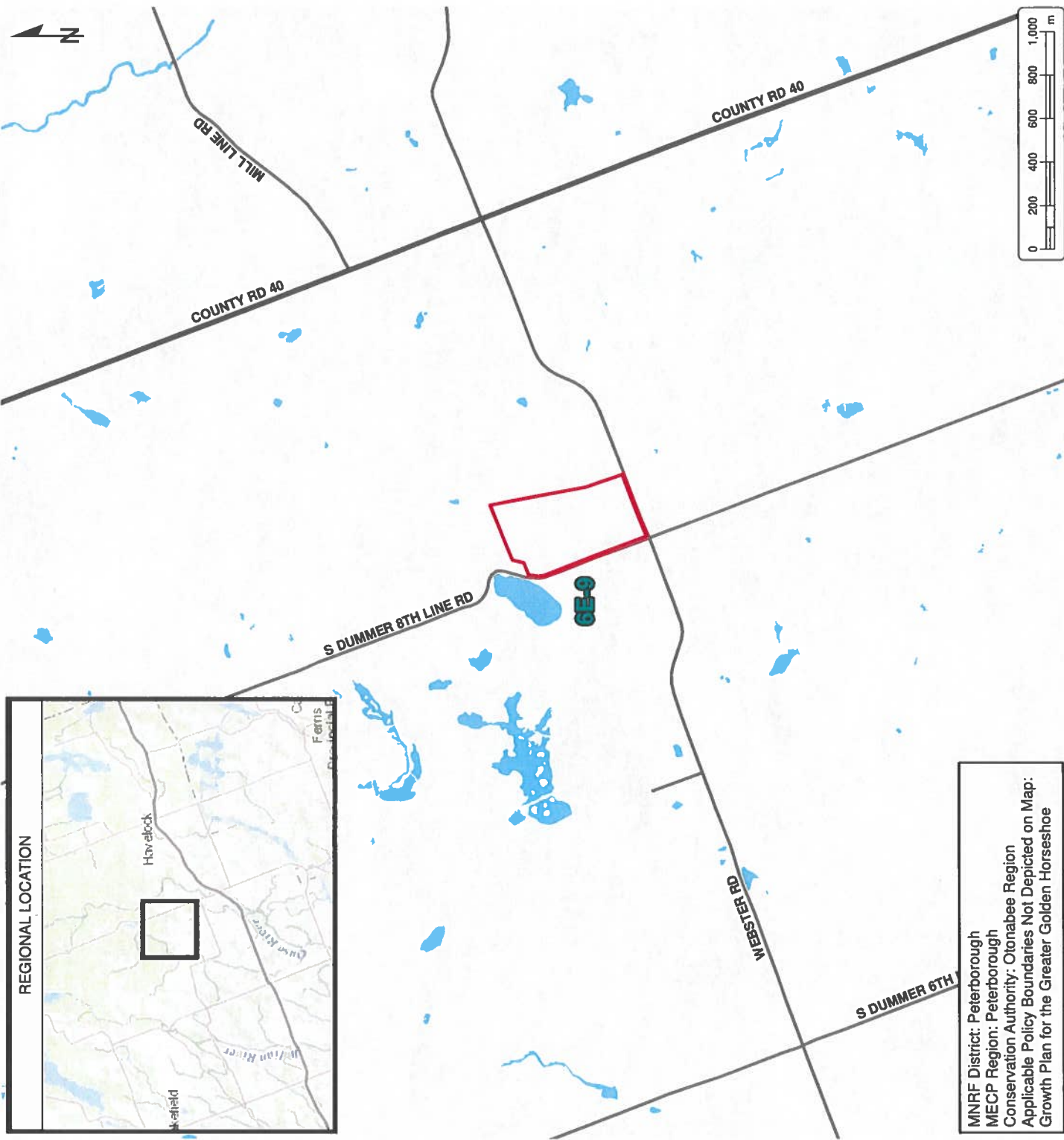
- Base mapping features are © Queen's Printer of Ontario, 2019 (this does not constitute an endorsement by the Ministry of Natural Resources and Forestry or the Ministry of Agriculture, Food and Rural Affairs).
- Distances on this plan are in metres and can be converted to feet by dividing by 0.3048.
- Cambium Inc. makes every effort to ensure this map is free from errors but does not warrant or represent that the map is free from errors. The map should not be used for navigation or legal purposes. It is intended for general reference use only.



194 Sophia Street  
Peterborough, Ontario, K9H 1E5  
Tel: (705) 742.7900 Fax: (705) 742.7907  
www.cambium-inc.com

## SITE LOCATION AND SPECIAL PLANNING AREAS

Project No.:	12715-001	Date:	March 2022
Scale:	1:25,000	Projection:	NAD 1983 UTM Zone 17N
Created by:	TLC	Checked by:	MOL
Figure:	1		



MNR District: Peterborough  
MECP Region: Peterborough  
Conservation Authority: Orontee Region  
Applicable Policy Boundaries Not Depicted on Map:  
Growth Plan for the Greater Golden Horseshoe



**NATURAL HERITAGE  
EVALUATION**  
RON HURTUBISE  
379 Eighth Line Road  
Douro-Dummer, Ontario

**LEGEND**

- Eastern Meadowlark Observation
- Vegetation Community
- Field Verified Wetland
- Unevaluated Wetland
- 120m Adjacent Lands
- Site (approximate) (20.2 ha.)

Notes:  
- Imagery obtained from the City of Peterborough using GIS  
- Base map features are to Queen's Printer of Ontario, 2019 (the date  
not constitute an endorsement by the Ministry of Natural Resources and  
Forestry or the Ontario Government.  
- Cambium Inc. makes every effort to ensure this map is free from error but  
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194 Sophia Street  
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Tel: (705) 742-7900 Fax: (705) 742-7907  
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**SITE NATURAL  
HERITAGE FEATURES**

Project No.:	12715-001	Date:	March 2022
Scale:	1:5,000	Rev.:	
Projection:	NAD 1983 UTM Zone 17N	Created by:	ACS
Checked by:	MOL	Figure:	3










**VEGETATION COMMUNITIES**

- 1: OAGM2 Perennial Cover Crops
- 2: FODM11 Naturalized Deciduous Hedge-row
- 3: SWC1-1 White Cedar Mineral Coniferous Swamp
- 4: CUM1 Mineral Cultural Meadow
- 5: FOC Coniferous Forest
- 6: MAS2 Mineral Shallow Marsh
- 7: CVR Residential



**NATURAL HERITAGE  
EVALUATION**  
RON HURTUBISE  
379 Eighth Line Road  
Douro-Dummer, Ontario

### LEGEND

- Eastern Meadowlark Observation  
 — Saved Lots  
 ↑ Watercourse, Permanent  
 — Contour 5m Interval (Major)  
 — Contour 5m Interval (Minor)  
 Developable Area (approximate)  
 (0.79 ha)  
 Field Verified Wetland  
 Unevaluated Wetlands  
 Candidate Significant Woodland  
 30m VPZ/Wetland Setback  
 120m Adjacent Lands  
 Site (approximate) (20.2 ha)

Notes: Base mapping features are © Queen's Printer of Ontario, 2019 (this does not constitute an endorsement by the Ministry of Natural Resources and Forestry or the Ontario Government). Distances on this plan are in metres and can be converted to feet by multiplying by 1.0936. Carcasses every effort to ensure this map is free from errors but cannot be held responsible for any damages due to errors or omissions. This map should not be used for navigation or legal purposes. It is intended for informational purposes only.



194 Sophia Street  
Peterborough, Ontario, K9H 1E5  
Tel: (705) 742.7900 Fax: (705) 742.7907  
[www.cambium-inc.com](http://www.cambium-inc.com)

## NATURAL HERITAGE CONSTRAINTS

Project No.:	12715-001	Date:	March 2022
Rev.:		Rev.:	
Scale:	1:6,000	Projection:	NAD 1983 UTM Zone 17N
Created by:	ACS	Checked by:	MOL
		Figure:	4





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## **Appendix A**

## **Correspondence**

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## Myles Latter

---

**From:** Matt Wilkinson <mwilkinson@otonabeeconservation.com>  
**Sent:** June 23, 2021 9:14 AM  
**To:** Myles Latter  
**Cc:** Jasmine Gibson  
**Subject:** RE: ToR - NHE 379 Eighth Line Road, Douro-Dummer (12715-001)

Hi Myles,

Sorry for the delay.

Here is a link to our overall terms of reference <https://www.otonabeeconservation.com/wp-content/uploads/2017/07/Appendix-G-EIS-TORs-for-website.pdf>

In the rear of the document is checklist that may be completed. Obviously, not all the sections will be relevant-in these cases, simply state "N/A" and provide justification as to why. In this way we can both be satisfied that provincial policy has been addressed. You may want to consider using the PPS sections 2.1 and 2.2 as a policy checklist.

The NHE should identify the applicable policy and provide guidance as to how you have addressed it. The scoping of the TOR is to catch anything that may be missed.

The inventory of the site should be done at a time of year when you would expect to see the probable species/vegetation – this is most relevant to wet features (extent of ponding/boundaries) and species at risk with element occurrences on or within proximity of the development that would trigger "habitat" (general or Cat 1, 2 & 3) under the ESA. As a qualified professional, you may choose otherwise. If so, you will need to provide an ecological justification as to the time of year for the site visit(s), and how policy has been/ or can be addressed.

Please note that the probable impact of the development and site occupancy should be identified with mitigations/ recommendations.

This may seem redundant, but as the work volume continues to grow, we are trying to minimize the amount of "guess work" for both client and agency. Cambiums work has always been complete and easy to follow. In this small change, we hope to streamline the application process.

Happy to chat if you have any further questions.

Best,  
Matt



**Matt Wilkinson**  
Planner  
705-745-5791 x213

[mwilkinson@otonabeeconservation.com](mailto:mwilkinson@otonabeeconservation.com)

**ARE YOU PLANNING AN UPCOMING CONSTRUCTION PROJECT ON YOUR PROPERTY?** Submit a [Property Inquiry Form](#) so we can help you understand how natural hazards may affect your property.

This e-mail is confidential. If you are not an addressee named above, please immediately delete and notify the sender. Thank you.

---

**From:** Myles Latter <[Myles.Latter@cambium-inc.com](mailto:Myles.Latter@cambium-inc.com)>  
**Sent:** June 17, 2021 12:45 PM  
**To:** Matt Wilkinson <[mwilkinson@otonabeeconservation.com](mailto:mwilkinson@otonabeeconservation.com)>  
**Subject:** RE: ToR - NHE 379 Eighth Line Road, Douro-Dummer (12715-001)

Hi Matt,

I do not see a response from you for this one so just wanted to follow-up to see if you have any concerns regarding that terms of references provided?

Thanks,



**Myles Latter, B.A. Hons., Dipl.**  
Project Coordinator

**Cambium Inc. - Peterborough**

p: 705.742.7900 x 252 | c: 705.957.5571 | toll: 866.217.7900 | w: [cambium-inc.com](http://cambium-inc.com)

Under modified work conditions in response to the current pandemic and government directives, Cambium continues to provide the professional services you have come to expect to guide good decisions. The well-being and safety of our teams, clients, and communities are a top priority. We ask for your patience and look forward to working together as we evolve into the "new normal". Stay safe. Better days are ahead.

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Check out our [video](#) - an inside look at Cambium's culture & career opportunities.

---

**From:** Myles Latter  
**Sent:** March 26, 2021 10:23 AM  
**To:** 'Matt Wilkinson' <[mwilkinson@otonabeeconservation.com](mailto:mwilkinson@otonabeeconservation.com)>  
**Subject:** ToR - NHE 379 Eighth Line Road, Douro-Dummer (12715-001)

Morning Matt,

Can I please confirm the Terms of Reference with you for this project? I have attached the PSR showing the severance, and the SAR identified are Meadowlark, Bobolink, Wood Thrush and Chorus Frogs. The fields are active hay field/annual row crops, no forested areas are to be impacted, and the closest wetland is across the road so I do not foresee any direct impacts to SAR habitat.

The following scope has been provided:

One Site visit in spring 2021 to document natural features on the property that were not identified in Task 1, if any, including:

- Delineate the boundaries of the wetland based on the Ontario Wetland Evaluation System (OWES) for Southern Ontario (Ministry of Natural Resources, 2013). The Site visit will capture appropriate wetland delineation characteristics, including vegetation species and wetted limits.
- Classify existing vegetation communities on the Site, according to the Ecological Land Classification (ELC) System for Southern Ontario (Lee, et al., 1998), and evaluate them for sensitivity, rarity, and botanical quality.
- Document drainage connectivity and/or watercourse characteristics including riparian vegetation, erosion prone areas, and special habitat features.
- Record observations of wildlife occurrences and assess wildlife habitat function on the Site. Any evidence of breeding, forage, shelter or nesting sites, and/or travel corridors will be noted. A habitat-based screening for SAR will be completed for the Site.

Please let me know if there is anything that I have missed.

Thanks and take care,



# Preliminary Severance Review

Prepared by the Peterborough County  
Planning Department



Name: Ronald & Tule  
Hurtubise

Agent:

Date: October 22, 2020

Lot: 6

Concession: 8

Municipality: Dummer Ward  
Township of Douro-Dummer

Description: 379 Eighth Line Rd-S-Dummer

Phone: (705) 639-1733

Email:  
rhurtubise@nexicom.net

Office Phone:

Communication Sent To:

Owner: ☒

Agent: ☐

	Severed	Retained
County O.P. Description	Rural Area	Rural Area
Municipal O.P. Designation (effective April 2014)	Rural	Rural
Municipal Zoning (By-Law No. 10-1996)	(RU)	(RU)
Area/Lot Dimensions	Both lots $\pm 0.4$ hectares with $\pm 64$ m of frontage on Webster Road	$\pm 17.2$ hectares with $\pm 560$ m of frontage on Eighth Line R-S-Dummer
Existing Use/Buildings	Rural/dwelling, barns, shed, garage	Rural/vacant

Intent: To sever more than one residential lot. Roll No.(s) 1522-020-002-05400.

**County Official Plan Policy Review:** The subject property is described as Rural Area in the County of Peterborough Official Plan. Section 2.6.3.5 of the Plan suggests that residential severances for land holdings located in the Rural Area should be discouraged in favour of development in Settlement Areas in an effort to promote orderly growth and development. However, severances in the Rural Area may be considered provided Health Unit, road frontage and access and Minimum Distance Separation requirements can be met (Ss.2.6.3.5 (A), (C) & (G)) and provided the applicable policies of Sections 2.6.3.1, 2.6.3.5, 4.1.3 and 4.3 are complied with (S.2.6.3.5 (H)).

**Municipal Official Plan Policy Review:** The subject property is designated Rural in the Township Official Plan. In the Rural designation a maximum of two severances are permitted from a property as it existed 25 years prior to the date of application (S. 6.1.1 & 6.2.2.5(d)). Peterborough County Land Division records indicate that subject property was severed in 1989 through Land Division File B-11-89 and in 1992 through Land Division File B-28-92, the deeds for which were stamped by the Land Division Secretary on April 13, 1989 and May 25, 1992, respectively, and would have been registered with Land Registry sometime thereafter. Since there have been no severances in the last 25 years, the subject property is eligible for severance.

In addition to the above requirement for a residential lot in the Rural designation, the landowner must have owned the property for a minimum of 5 years, and the size of the new lot created specifically for a residential use shall not exceed 1 hectare in area (S. 6.2.2.5(d)(i)&(ii)). According to property assessment information, the land owner appears to have owned the property for a minimum of 5 years and the size of the new lots do not exceed 1 hectare.

As applicable, consents must meet road frontage & access, Zoning By-law, Health Unit and Minimum Distance Separation (MDS) requirements (S. 7.12.1, 7.12.4, 7.12.12, and 7.2.3).

**Municipal Zoning By-Law Review:** The severed parcels are zoned Rural (RU) in the Municipal Zoning By-law. A single detached dwelling is permitted in the (RU) Zone (S. 9.1.5) provided it has a minimum lot area of 0.4 hectares and lot frontage of 45 metres (S. 9.2.2(a)&(b)). The proposed severed parcels appear to meet these requirements.

The retained parcel is zoned Rural (RU) in the Municipal Zoning By-law. A farm including a single detached dwelling is permitted in the (RU) Zone (S. 9.1.1) provided it has a minimum lot area of 20 hectares and lot frontage of 135 metres (S. 9.2.1(a)&(b)). It is recommended that the proposal be discussed with the Township to determine if a rezoning of the retained parcel would be supported.

**Provincial Policy Review:** The Provincial Policy Statement (PPS) and Growth Plan for the Greater Golden Horseshoe (GPGGH) apply to this proposal.

The following key natural heritage features and/or key hydrologic features have been identified on or adjacent to the subject property: non-evaluated wetlands and potential habitat of endangered and threatened species.

Section 4.2.4.1 of the GPGGH states that development and site alteration, including lot creation, within 120 metres of a key hydrologic feature will require a natural heritage evaluation/hydrologic evaluation that identifies a vegetation protection zone (VPZ) that is no less than 30 metres. Since the severed parcels are within 120 metres of a wetland, a natural heritage evaluation is required. Evaluations undertaken in accordance with these policies will identify the boundaries of the key natural heritage feature, vegetation protection zones, and any additional restrictions to be applied before, during and after development to protect the hydrologic and ecological functions of the feature. Please contact Otonabee Conservation regarding study requirements.

Sections 4.2.3 further states that development and site alteration, including lot creation, is not permitted in key hydrologic features. The applicant should be aware that the natural heritage/hydrologic evaluation must identify a minimum 30 metre vegetation protection zone from key hydrologic features (S4.2.4.1(c)), and new lots are not permitted within this 30 metre buffer. The proposed severed lot may or may not have to be adjusted.

The proposed severed lots are traversed by an area identified for habitat of endangered species and threatened species. Policy 2.1.7 of the PPS prohibits development and site alteration, including lot creation, within habitat of endangered species and threatened

species, except in accordance with provincial and federal requirements. A Species at Risk (SAR) assessment is required as part of the natural heritage evaluation, referenced above.

Minimum Distance Separation Formula I (MDS I) as per policy 1.1.5.8 of the 2020 Provincial Policy Statement has been calculated for the livestock facilities (i.e. barns) on the subject property and at 1342 Webster Road and 390 Eighth Line Rd-S-Dummer (see calculations and map attached). The proposal appears to meet MDS I setback requirements.

**Additional Notes:**

The lands appear to be regulated by Regulation 167/06, the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation of the Otonabee Conservation Authority. Therefore, the proposal should be discussed with Matt Wilkinson/Don Allin at (705) 745-5791 ext.213/ext.225 to determine what, if any permits may be necessary.

The applicant and any prospective owners are advised that endangered and/or threatened species exist in the area and may exist on the site. It is the responsibility of the landowner to identify endangered and threatened species and their habitat within the property prior to undertaking work, and to ensure that the work/activity will not result in negative impacts. Landowners are encouraged to consult with the Ministry of Environment, Conservation and Parks (MECP) if they have questions about the *Endangered Species Act, 2007 (ESA)*. Any sightings of a threatened or endangered species during development and construction on the property must be reported in accordance with the ESA.

**This Preliminary Severance Review has been circulated by the Planning Department to the following agencies (marked with an X):**

- ☒ Local Municipality of Douro-Dummer
- ☐ County Infrastructure Services (i.e. Roads) ;
- ☒ Conservation Authority ;
- ☐ First Nations ;
- ☐ Other Choose an item.

**Agencies to be Contacted by Owner/Agent (marked with an X):**

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Township                             | <input type="checkbox"/> Health Unit           |
| <input checked="" type="checkbox"/> Conservation Authority               | <input type="checkbox"/> Trent-Severn Waterway |
| <input type="checkbox"/> Source Water Risk Management Officer            | <input type="checkbox"/> First Nations         |
| <input type="checkbox"/> Ministry of Environment, Conservation and Parks | <input type="checkbox"/> Other                 |

**Proposal does not appear to conform to the Growth Plan for the Greater Golden Horseshoe and/or Provincial Policy Statement policies.**

The proposed severed lots are located within 120 metres of key hydrologic features (i.e. wetlands). In accordance with Section 4.2.4.1 of the Growth Plan, a natural heritage evaluation/hydrologic evaluation is required.

**Proposal appears to conform to County Official Plan policies.**

Although the proposal conforms to the County Official Plan, the Growth Plan takes precedence over the County Official Plan.

**Proposal appears to conform to Township Official Plan policies.**

Although the proposal conforms to the Township Official Plan, the Growth Plan takes precedence over the Township Official Plan.

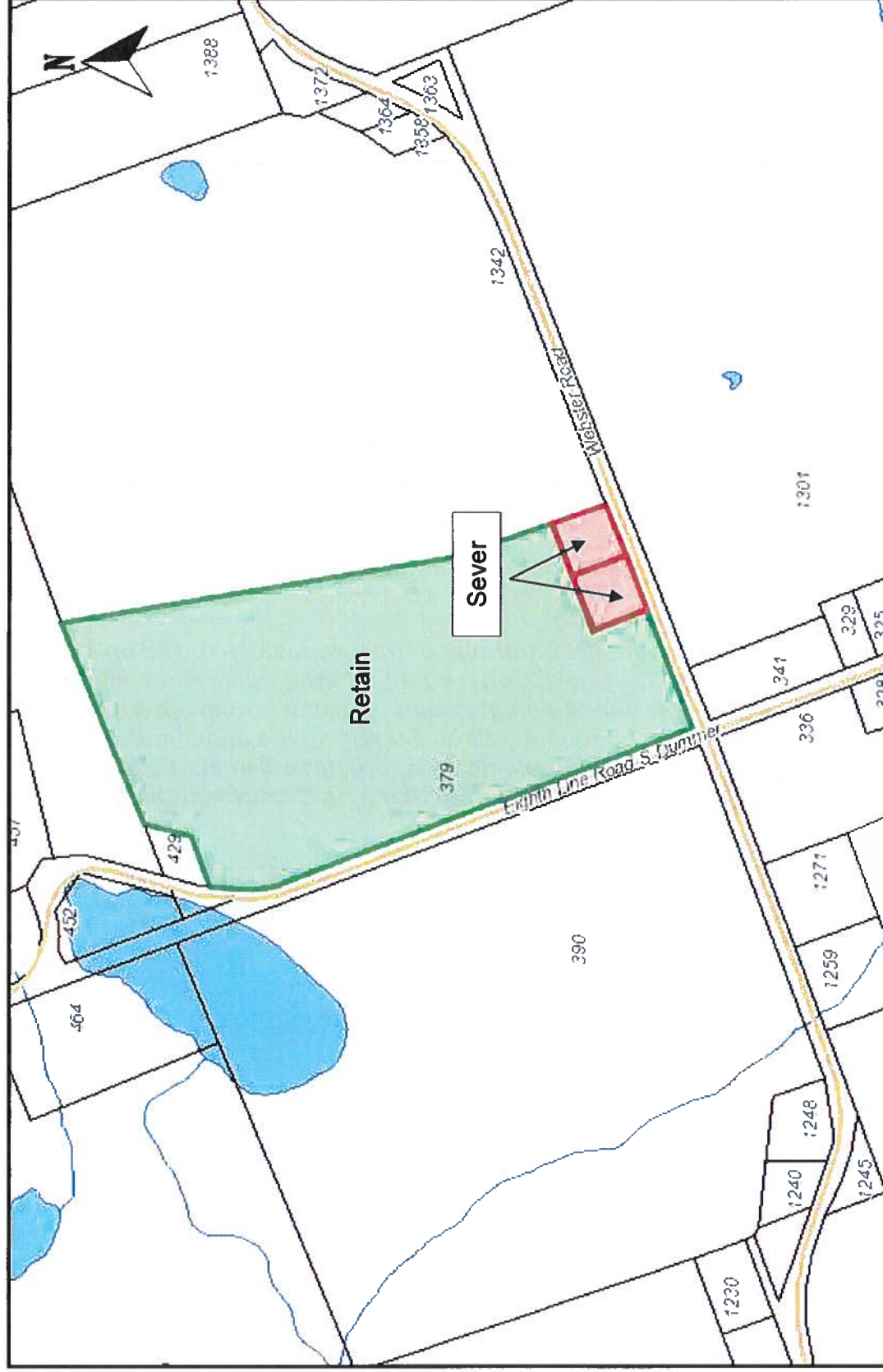
- ☒ **Application requires confirmation from the Township or identified agency regarding policy conformity. \*\*Please note that the landowner should be aware that members of the local council may not support a rezoning or minor variance to create a lot that is not in compliance with the provisions of the zoning by-law.\*\***

***Reviewed By: Caitlin Robinson***

**Important**

***Our position on the overall conformity of the proposal is based on information available at the time of review. Subsequent information from commenting agencies can change our comments relating to any formal application for severance which is subsequently filed. Therefore, the above-noted comments should not be construed as preliminary approval or denial of a proposal but recognized as a position of the County Planning Department based on the availability of current information.***

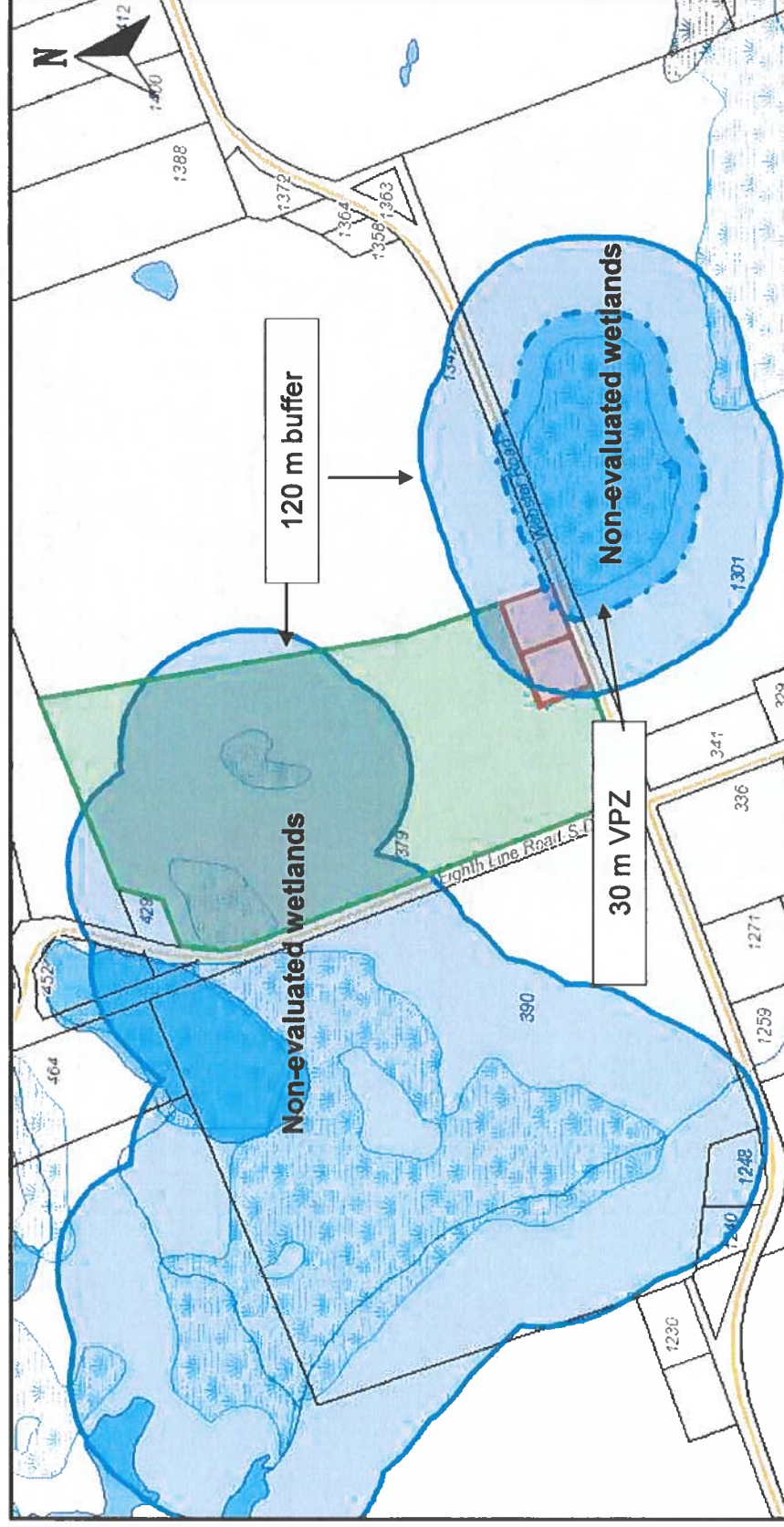
**Roll #1522-020-002-05400**  
**Lot 6, Concession 8, Dummer Ward**  
**(Hurtubise)**  
**Severance Sketch**



**Scale (metric)**  
**1:7,200**

**Roll #1522-020-002-05400**  
 Lot 6, Concession 8, Dummer Ward  
 (Hurtubise)

Key Hydrologic Features – (i.e. wetlands) with 120 m buffer and 30 m min VPZ

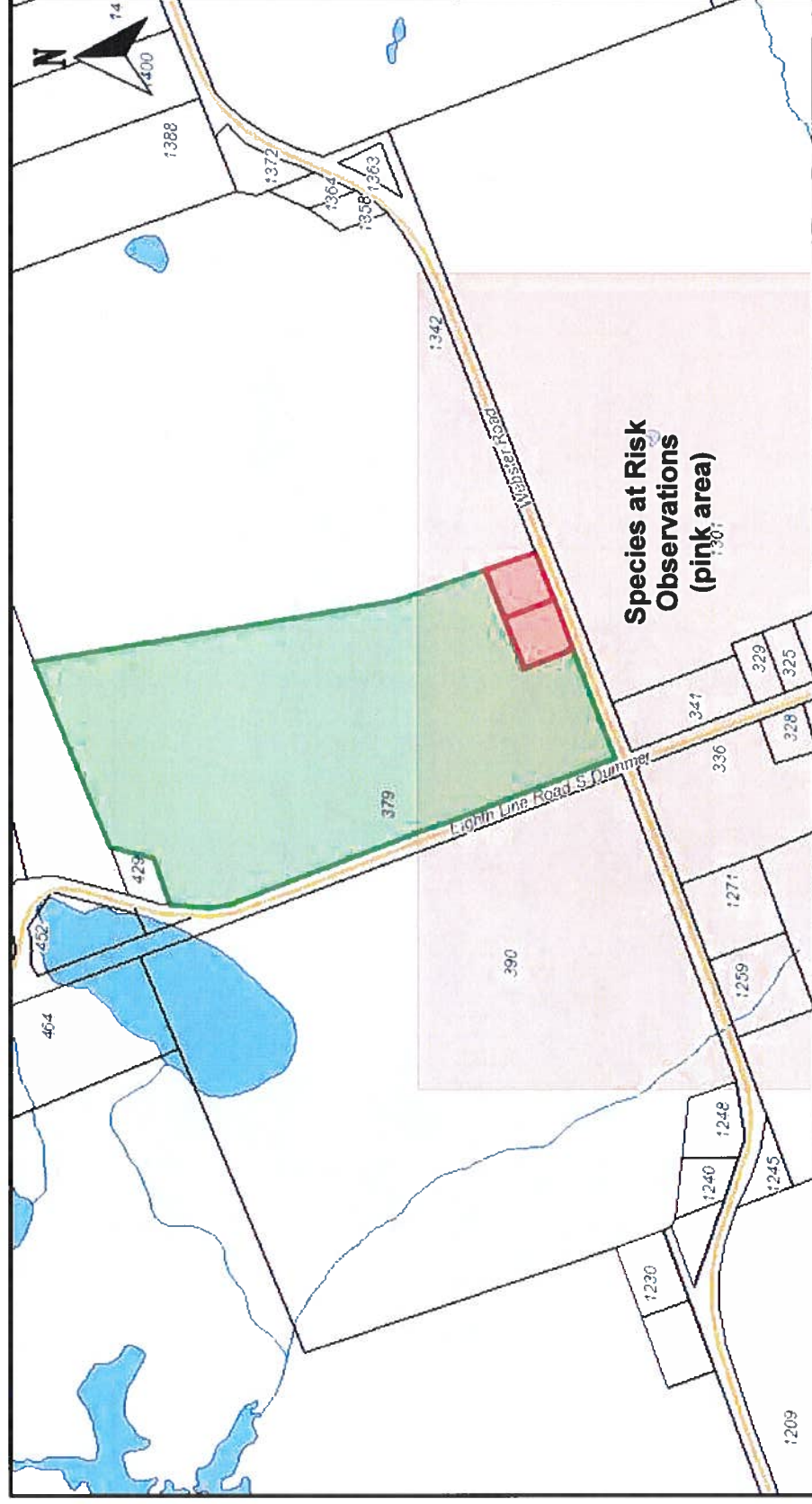


NOTE: Development and site alteration, including lot creation is not permitted within key hydrologic features; any development proposed within the 120 metre buffer surrounding key hydrologic features requires a natural heritage evaluation/hydrologic evaluation to identify a vegetative protection zone (no less than 30 metres). No development, including lot creation, is permitted within the 30 metre vegetation protection zone (VPZ).

Scale (metric)  
 1:7,200



**Roll #1522-020-002-05400**  
 Lot 6, Concession 8, Dummer Ward  
 (Hurtubise)  
 Potential Habitat of Endangered and Threatened Species



**NOTE:** New development, including lot creation, is not permitted within habitat of threatened and endangered species, except in accordance with provincial and federal requirements. Species at Risk Data available to the County has identified an observation or potential habitat (i.e. pink squares) that requires a Species at Risk (SAR) Assessment to support the severance application.

**Scale (metric)**  
1:7,200



**Roll #1522-020-002-05400**  
**Lot 6, Concession 8, Dummer Ward**  
**(Hurtubise)**  
**Minimum Distance Separation (MDS 1) Requirements**



NOTE: New development, including lot creation, must be located outside the MDS arc(s) shown above

Scale (metric)  
1:7,200

# Minimum Distance Separation I

Worksheet 1

Prepared By: Caitlin Robinson, Planner, County of Peterborough

**Description:** Hurtubise - PSR

**Application Date:** Thursday, October 22, 2020

**Municipal File Number:**

**Proposed Application:** Lot creation for a maximum of three non-agricultural use lots  
Type A Land Use

**Applicant Contact Information**  
Ronald Hurtubise

**Location of Subject Lands**  
County of Peterborough, Township of Douro-Dummer  
DUMMER, Concession: 8, Lot: 6  
Roll Number: 152202000205400

**Calculation Name:** *Farm 1*

**Description:** Home Farm on subject property

**Farm Contact Information**  
Ronald Hurtubise

**Location of existing livestock facility or anaerobic digester**  
County of Peterborough, Township of Douro-Dummer  
DUMMER, Concession: 8, Lot: 6  
Roll Number: 152202000205400  
Total Lot Size: 45 ac

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Horses, Medium-framed, mature; 227 - 680 kg (including unweaned offspring)	5	5.0	1,250 ft²



The livestock/manure information has not been confirmed with the property owner and/or farm operator.

**Existing Manure Storage:** V3. Solid, outside, no cover, >= 30% DM

**Design Capacity (NU):** 5.0

**Potential Design Capacity (NU):** 5.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance F' (minimum distance from livestock barn)	(actual distance from livestock barn)
0.7	X	150	X	0.7	X
				1.1	
				=	
				81 m (265 ft)	TBD
				Storage Base Distance 'S'	
				(minimum distance from manure storage)	(actual distance from manure storage)
				81 m (265 ft)	TBD

**Calculation Name:** *Farm 2*

**Description:** 1342 Webster Road

**Farm Contact Information**  
William Gunn

**Location of existing livestock facility or anaerobic digester**  
County of Peterborough, Township of Douro-Dummer  
DUMMER, Concession: 8, Lot: 6  
Roll Number: 152202000205450  
Total Lot Size: 74 ac

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

# Minimum Distance Separation I

Worksheet 1

Prepared By: Caitlin Robinson, Planner, County of Peterborough

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Horses, Medium-framed, mature; 227 - 680 kg (including unweaned offspring)	5	5.0	1,250 ft <sup>2</sup>



The livestock/manure information has not been confirmed with the property owner and/or farm operator.

**Existing Manure Storage:** V3. Solid, outside, no cover, >= 30% DM

**Design Capacity (NU):** 5.0

**Potential Design Capacity (NU):** 5.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance F' (minimum distance from livestock barn)	Storage Base Distance 'S' (minimum distance from manure storage)
0.7	X	150	X	0.7	X
				1.1	
				=	
				81 m (265 ft)	TBD
					81 m (265 ft)
					TBD

**Calculation Name:** *Farm 3*  
**Description:** 390 Eighth Line Road-S-Dummer

**Farm Contact Information**  
 Julie Kapyrka

**Location of existing livestock facility or anaerobic digester**  
 County of Peterborough, Township of Douro-Dummer  
 DUMMER, Concession: 7, Lot: 6  
 Roll Number: 152202000201100  
 Total Lot Size: 78 ac

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	17	17.0	850 ft <sup>2</sup>



The livestock/manure information has not been confirmed with the property owner and/or farm operator.

**Existing Manure Storage:** V3. Solid, outside, no cover, >= 30% DM

**Design Capacity (NU):** 17.0

**Potential Design Capacity (NU):** 34.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance F' (minimum distance from livestock barn)	Storage Base Distance 'S' (minimum distance from manure storage)
0.7	X	228	X	0.7	X
				1.1	
				=	
				123 m (403 ft)	TBD
					123 m (403 ft)
					TBD

---

**Preparer Information**

Caitlin Robinson  
Planner  
County of Peterborough  
470 Water Street  
Peterborough, ON, Canada K9H 3M3  
Phone #1: (705) 743-0380  
Email: crobison@ptbocounty.ca

Signature of Preparer: \_\_\_\_\_

Caitlin Robinson, Planner

Date: \_\_\_\_\_

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**NOTE TO THE USER:**

The Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) has developed this software program for distribution and use with the Minimum Distance Separation (MDS) Formulae as a public service to assist farmers, consultants, and the general public. This version of the software distributed by OMAFRA will be considered to be the official version for purposes of calculating MDS. OMAFRA is not responsible for errors due to inaccurate or incorrect data or information; mistakes in calculation; errors arising out of modification of the software, or errors arising out of incorrect inputting of data. All data and calculations should be verified before acting on them.

## Myles Latter

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**From:** Species at Risk (MECP) <SAROntario@ontario.ca>  
**Sent:** October 21, 2021 12:34 PM  
**To:** Myles Latter  
**Subject:** RE: SAR Habitat - Severance 379 Eighth Line Road, Douro-Dummer, Peterborough (12715-001)

Good afternoon Mr. Latter,

I have reviewed the information you have provided and have the following comments to provide.

Species At Risk (SAR) surveys may be required to help inform whether development proposals may impact SAR and their habitat. Activities that may have impact on SAR and/or SAR habitat are prohibited and may require authorization under the Endangered Species Act. Severances are administrative in nature and do not have impacts on SAR and/or SAR habitat. Therefore, MECP does not require SAR surveys for lot severances. I've included information related to lot severances below.

We understand that surveys took place and Eastern Meadowlark were observed in the areas to be severed. Based on the information provided, it appears that the activity may be eligible for an exemption under O. Reg. 242/08. Information on O. Reg. 242/08 and registering of an activity and associated eligibility requirements can be found at the following link: [O. Reg. 242/08: GENERAL \(ontario.ca\)](#) . It is the responsibility of the proponent to ensure that they meet the eligibility requirements of the exemption. Should they determine that the activity is not eligible for registration, an authorization may be required under the *Endangered Species Act, 2007*.

The mitigation measures you have recommended seem reasonable. However, if your client chooses to register their activity, they will be required to meet the listed conditions of the registry.

Please let me know if you have any questions.

**Monique Charette**  
Management Biologist  
Ministry of the Environment, Conservation and Parks  
Permissions and Compliance Section  
Species At Risk Branch  
(613) 583-3162  
[Monique.charette@ontario.ca](mailto:Monique.charette@ontario.ca)

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### Lot Severances

There are no requirements under the ESA to undertake a species at risk site assessment for lot severances/passing bylaws/land sales or purchases.

Section 2.1.7 of the Provincial Policy Statement states:

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.

The “provincial requirements” would include the ESA. You may find it helpful to consult the MECP website explaining the ESA to understand those requirements, at <https://www.ontario.ca/page/how-get-endangered-species-act-permit-or-authorization>. You may find the section on “What requires a permit” particularly helpful.

The ESA prohibits activities such as killing, harming, harassing and capturing species at risk (listed under the Act). The ESA also prohibits damaging or destroying species' habitat. If the activity that is to be undertaken might affect species at risk in these ways then a person may need a permit or authorization.

Lot severances (and zoning changes) by themselves and in the absence of any additional development proposals are administrative; these activities on their own do not

contravene the ESA. Specifically, to contravene the ESA, an activity must have the effect of killing, harming or harassing individuals of a species at risk, or damaging or destroying their habitat. The simple act of severing a lot, passing a bylaw or other similar administrative activities do not result in any of these impacts. For the purpose of the PPS, anyone undertaking these activities are “in accordance with provincial ... requirements” because the two aforementioned prohibitions have not been violated.

If activities subsequent to a severance or bylaw or other administrative activity (for example, site clearing and other alterations, building a structure, installing infrastructure) that could impact species at risk or their habitat are planned, then the person undertaking those activities would need to determine if an ESA authorization should be obtained before the activities are undertaken. Please visit “How to avoid authorization” and “Permit types” (<https://www.ontario.ca/page/how-get-endangered-species-act-permit-or-authorization>) for more information. A person carrying out an activity may also wish to consult the Act and seek legal advice to understand its legal obligations.

It may also be worth noting that when reviewing whether an activity could impact species at risk, the Species at Risk Branch needs specific details on the species, their habitat, the proposed activity, where the activity is happening, when it is happening, how much area will be developed and so on. The person carrying out the activity may even choose to build in such a manner that impacts to species at risk and their habitat will be avoided but we cannot know this until we see the details as proposed by the individual. Any review of potential development for ESA compliance should be done before the time of development. Such an assessment, if performed at this stage, may not be relevant 5, 10, 20 years after it is completed as species may move to other areas, their protection status may change, or new species may be found on the property.

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**From:** Myles Latter <Myles.Latter@cambium-inc.com>

**Sent:** August 9, 2021 2:11 PM

**To:** Species at Risk (MECP) <SAROntario@ontario.ca>

**Subject:** SAR Habitat - Severance 379 Eighth Line Road, Douro-Dummer, Peterborough (12715-001)

**CAUTION -- EXTERNAL E-MAIL - Do not click links or open attachments unless you recognize the sender.**

Good afternoon,

A Client has requested to complete a severance of their property into two new severed lots and one retained lot, as noted in the attached Preliminary Severance Review (PSR) by Peterborough County. The proposed severances are for



future single dwelling residential areas. A terms of reference to complete the Natural Heritage Evaluation as part of this project was discussed in the PSR and with Otonabee Region Conservation Authority. The Species at Risk Observations mapping as listed in the PSR are for Eastern Meadowlark and Bobolink. Therefore, field studies were to be conducted during their breeding period, and a habitat based survey would be required. During the site visit, a pair of meadowlark were observed showing displays of mating/nesting in the areas to be severed. These areas are currently used as hay fields for farming use and are cut and bailed each year. Adjacent properties show further grassland areas where more suitable habitat would exist. Due to the presence of Eastern Meadowlark habitat from our field visit observations, discussions with MECP were recommended to determine if any additional requirements are necessary. The Client agreed to proceed with contacting MECP, providing the development proposal and mitigation and recommendations in attempt to determine any additional requirements.

The following mitigation and recommendations have been provided:

- Vegetation clearing, including hay removal, prior to construction should occur before May 1 or After July 31, in order to avoid impacts to nesting birds.
- If construction is taking place during the breeding season (i.e., May 1 to July 31), workers should be aware of the potential for nesting by Bobolink and/or Eastern Meadowlark. If these species are observed in proximity to the construction area, work should stop until a biologist is able to determine if and where nesting is occurring.
- The remainder of the field not being used for the proposed severances should remain as a hay field. The owner should consider letting the hay within this field remain in place until July 31 (i.e. avoid a spring cut) to allow for successful nesting by these species within this field.
- Observations of Bobolink and/or Eastern Meadowlark should be reported to the Natural Heritage Information Centre to assist with population tracking.
- Site Plans developed for the proposed development, including severances, should show location of all confirmed natural features and associated setbacks.
- Light-duty silt fencing is to be installed prior to May 15 of the year of construction and must be properly installed around the perimeter of the construction area. All silt fencing should be properly trenched in and maintained in good working order until the area has been successfully revegetated. Silt fencing will also serve as wildlife exclusion fencing to prevent access by some wildlife species.
- During the construction phase, the work area should be actively checked for the presence of any wildlife. Reptiles are particularly vulnerable to construction-related impacts on sites adjacent to wetlands, watercourses, and waterbodies.

Please review the mitigation and recommendations and provide any further additional comments or requirements necessary to complete the proposed severances and future development of single residential dwellings.

Thanks,



**Myles Latter, B.A. Hons., Dipl.**  
Project Coordinator

**Cambium Inc. - Peterborough**

Environmental | Building Sciences | Geotechnical | Construction Monitoring  
p: 705.742.7900 x 252 | c: 705.957.5571 | toll: 866.217.7900 | w: [cambium-inc.com](http://cambium-inc.com)

Under modified work conditions in response to the current pandemic and government directives, Cambium continues to provide the professional services you have come to expect to guide good decisions. The well-being and safety of our teams, clients, and communities are a top priority. We ask for your patience and look forward to working together as we evolve into the "new normal". Stay safe. Better days are ahead.

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## **Appendix B**

### **Vegetation Species List**

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VEGETATION  
COMMUNITY  
CLASSIFICATION: Cultural  
Meadow

COMMUNITY #: 1

LOCATION: 379 Eighth Line Rd,  
Douro-Dummer

COORDINATES: 44.4569782,  
-78.1179723

PROJECT NUMBER: 12823-001

DATE: June 17, 2021

PROJECT  
MANAGER: Myles Latter

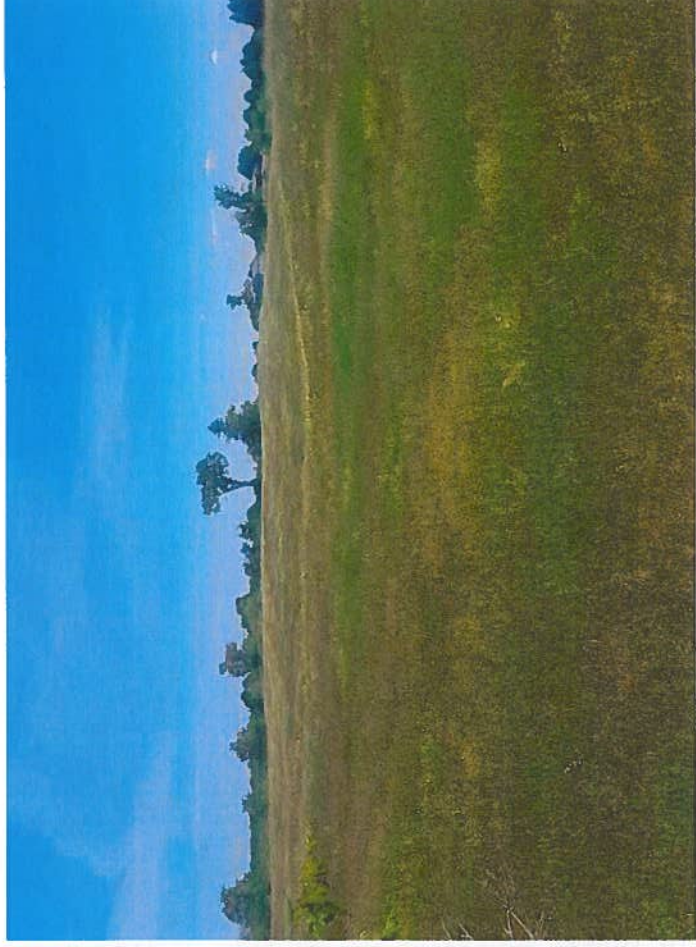
FIELD STAFF: Tyler Jamieson

FIELD SHEET – Vegetation Species List

Common Name	Scientific Name	Family	CoW	CoC	SARA	SARO	S-Rank
Alfalfa	<i>Medicago sativa</i> ssp. <i>sativa</i>	Fabaceae	5				SNA
Bladder Campion	<i>Silene vulgaris</i>	Caryophyllaceae	5				SNA
Common Goatsbeard	<i>Anemone dioica</i> var. <i>vulgaris</i>	Rosaceae	3				SNA
Common Hawkweed	<i>Hieracium vulgatum</i>	Asteraceae	5				SNA
Common Mullein	<i>Verbascum thapsus</i> ssp. <i>thapsus</i>	Scrophulariaceae	5				SNA
Common Viper's Bugloss	<i>Echium vulgare</i>	Boraginaceae	5				SNA
Orchard Grass	<i>Dactylis glomerata</i>	Poaceae	3				SNA
Smooth Bedstraw	<i>Galium mollugo</i>	Rubiaceae	5				SNA
Smooth Brome	<i>Bromus inermis</i>	Poaceae	5				SNA
Tufted Vetch	<i>Vicia cracca</i>	Fabaceae	5				SNA

NOTES: Hay field with thatch

VEGETATION COMMUNITY PHOTOS:





VEGETATION  
COMMUNITY  
CLASSIFICATION: Unknown –  
see Notes

COMMUNITY #: 2

LOCATION: 379 Eighth Line Rd,  
Douro-Dummer

COORDINATES: 44.437084,  
-78.1318102

PROJECT NUMBER: 12715-001

PROJECT  
MANAGER: Myles Latter

FIELD STAFF: Tyler Jamieson

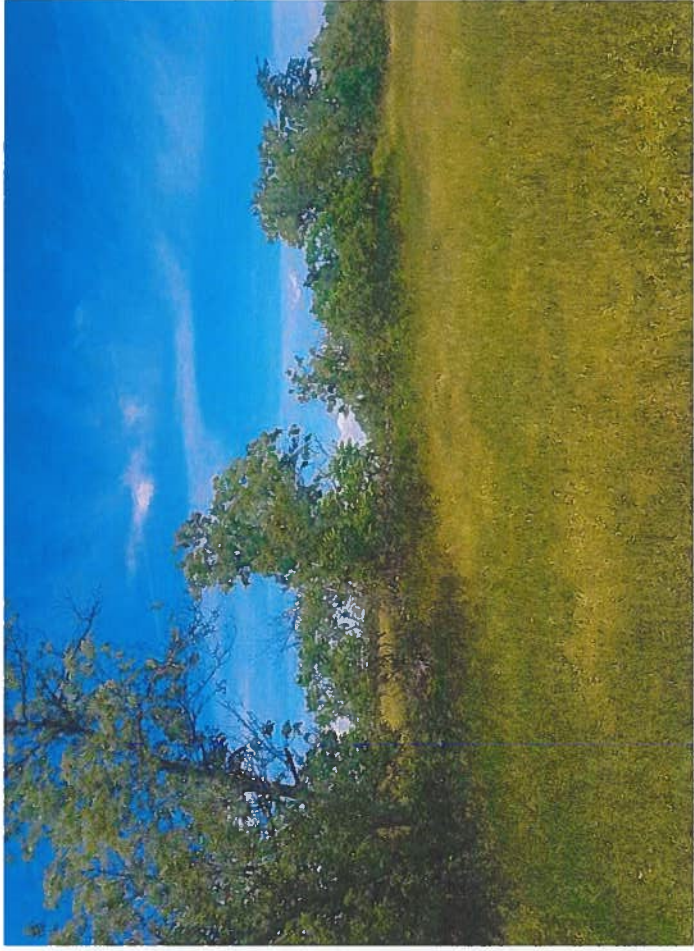
FIELD SHEET – Vegetation Species List

Common Name	Scientific Name	Family	CoW	CoC	SARA	SARO	S-Rank
Basswood	<i>Tilia americana</i>	Tiliaceae	3	4			S5
Chokecherry	<i>Prunus virginiana</i> var. <i>virginiana</i>	Rosaceae	3	2			S5
Common Apple	<i>Malus pumila</i>	Rosaceae	5				SNA
Common Burdock	<i>Arcium minus</i>	Asteraceae	3				SNA
Eastern White Cedar	<i>Thuja occidentalis</i>	Cupressaceae	-3	4			S5
European Buckthorn	<i>Rhamnus cathartica</i>	Rhamnaceae	0				SNA
Manitoba Maple	<i>Acer negundo</i>	Aceraceae	0	0			S5
Red-osier Dogwood	<i>Cornus sericea</i>	Comaceae	-3	2			S5
Riverbank Grape	<i>Vitis riparia</i>	Vitaceae	0	0			S5
Staghorn Sumac	<i>Rhus typhina</i>	Anacardiaceae	3	1			S5
White Elm	<i>Ulmus americana</i>	Ulmaceae	-3	3			S5

NOTES: Hedgerow. Old stone



VEGETATION COMMUNITY PHOTOS:





VEGETATION  
COMMUNITY  
CLASSIFICATION:

SWC1-1

COMMUNITY #: 3

LOCATION: 379 Eighth Line Rd,  
Douro-Dummer

COORDINATES: 44.4198128,  
-78.0161938



PROJECT NUMBER: 12715-001

DATE: June 17, 2021

PROJECT  
MANAGER: Myles Latter

FIELD STAFF: Tyler Jamieson

FIELD SHEET – Vegetation Species List

Common Name	Scientific Name	Family	CoW	CoC	SARA	SARO	S-Rank
Bittersweet Nightshade	<i>Solanum dulcamara</i>	Solanaceae	0				SNA
Broad-leaved Cattail	<i>Typha latifolia</i>	Typhaceae	-5	1			S5
Eastern White Cedar	<i>Thuja occidentalis</i>	Cupressaceae	-3	4			S5
Northern Water-plantain	<i>Alisma triviale</i>	Alismataceae	-5	1			S5
Reed Canarygrass	<i>Phalaris arundinacea</i> var. <i>arundinacea</i>	Poaceae	-3	0			S5
Southern Water-plantain	<i>Alisma subcordatum</i>	Alismataceae	-5	1			S4?

NOTES: Swamp across road. No culvert observed.





VEGETATION  
COMMUNITY  
CLASSIFICATION:

SWC1-1

CAMBIUM

PROJECT NUMBER: 12715-001

FIELD SHEET – Vegetation Species List

VEGETATION COMMUNITY PHOTOS:

COMMUNITY #: 3

DATE: June 17, 2021

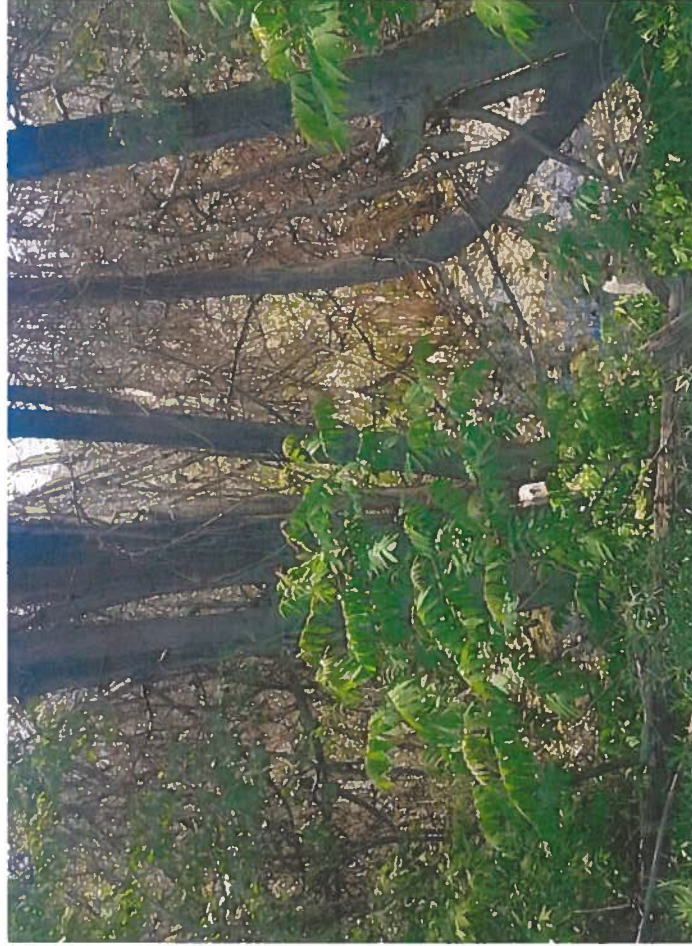
LOCATION: 379 Eighth Line Rd,  
Douro-Dummer

COORDINATES: 44.4198128,  
-78.0161938

PROJECT

MANAGER: Myles Latter

FIELD STAFF: Tyler Jamieson





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## **Appendix C**

### **Species Of Conservation Concern Screening**

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APPENDIX: Species of Conservation Concern - County of Peterborough

COMMON NAME		SCIENTIFIC NAME	Federal SARA	Provincial SARO	S-RANK	SPECIES DESCRIPTION AND HABITAT REQUIREMENTS		SUITABLE HABITAT	SPECIES OBSERVATIONS	ASSESSMENT
Birds										
Bald Eagle	<i>Haliaeetus leucocephalus</i>	No Status	SC		S2N,S4B	The Bald Eagle is a bird of prey with a white head, neck and tail, a massive bright yellow beak, powerful legs, and a wingspan of over 2 m. It nests in a variety of habitats and forest types, almost always near a major lake or river where they do most of their hunting. These nests are usually on islands in freshwater lakes or in large trees such as the pine and poplar. During the winter, they may also be found near open bodies of water that do not freeze (1).		No	Known to occur in the general area	No further consideration required
Bank Swallow	<i>Riparia riparia</i>	THR	THR		S4B	The Bank Swallow is a small songbird of around 12 cm long with a distinctive dark breast band, that flies with quick and erratic wingbeats (1). It nests in burrows in natural and human-made settings where there are vertical faces in silt and sand deposits. This can include banks of rivers and lakes, bluffs, active sand and gravel pits, road cuts and stockpiles of soils. However, they prefer sand-silt substrates for excavating their nest burrows. They often use large wetlands as communal nocturnal roosts post-breeding or during wintering periods (2).		No	Known to occur in the general area	No further consideration required
Barn Swallow	<i>Hirundo rustica</i>	THR	THR		S4B	The Barn Swallow is a mid-sized songbird with steel-blue backs and wings, glossy in males, and a line of white spots across its upper tail. It lives in a variety of open habitats for foraging, such as grassy fields, pastures, certain agricultural crops, shorelines, cottage areas, wetlands, or subarctic tundra (2). They prefer to nest within human made structures such as barns, bridges, and culverts. Barn Swallow nests are cup-shaped and made of mud, typically attached to horizontal beams or vertical walls underneath an overhang (1).		Yes: on-site	Known to occur in the general area	Potential habitat for endangered or threatened species on site
Black Tern	<i>Chlidonias niger</i>	No Status	SC		S3B	The Black Tern is a small waterbird with a forked tail, straight pointed bill, slender shape, and black head during breeding season. It builds floating nests in loose colonies in shallow marshes, with a preference for cattails. They breed primarily in the marshes along the edges of the Great Lakes, but may also use wetlands further north if suitable (1).		No	Known to occur in the general area	No further consideration required
Bobolink	<i>Dolichonyx oryzivorus</i>	THR	THR		S4B	The Bobolink is a mid-sized songbird of tan colour with black stripes, except for males during summer breeding season who are black with a white back and yellow collar. It prefers tall, grassy meadows, hayfields and some croplands, and feeds (largely on insects) on the ground in dense grasses (1). It tends to nest in forage crops: hayfields and pastures dominated by species including clover, bluegrass, and broadleaf plants (2).		Yes: on-site and adjacent lands	Known to occur in the general area	Potential habitat for endangered or threatened species on site
Canada Warbler	<i>Cardellina canadensis</i>	THR	SC		S4B	The Canada Warbler is a small songbird with bright yellow underparts and bluish-grey back and tail (1). It can be found in a variety of forest types, but is most abundant in moist, mixed forests with a well-developed, dense shrub layer. Nests are usually located on or near the ground on mossy logs, and along stream banks (3).		No	Known to occur in the general area	No further consideration required
Cerulean Warbler	<i>Setophaga cerulea</i>	END	THR		S3B	The Cerulean Warbler, a small songbird, is blue-green with white eyebrows and two prominent white wing bars (1). It requires relatively large tracts of mature deciduous forest (>100 ha), and nests in older, second-growth deciduous forests. During breeding season, it is found in relatively large tracts of mature deciduous forests that feature large, tall trees and an open understorey (4).		No	Known to occur in the general area	No further consideration required
Chimney Swift	<i>Chaetura pelagica</i>	THR	THR		S4B,S4N	The Chimney Swift is a small bird, between 12 and 14 cm, with a brown, cigar-shaped body, slender wings, and an erratic flight pattern. Prior to settlement, the Chimney Swift would mainly nest in cave walls and hollow trees. Now, it is found mostly near urban and suburban areas where the presence of chimneys or other manmade structures provide nesting and roosting habitat. They also tend to stay in habitat close to the water (1).		No	Known to occur in the general area	No further consideration required



APPENDIX: Species of Conservation Concern - County of Peterborough

COMMON NAME	SCIENTIFIC NAME	Federal SARA	Provincial SARO	S-RANK	SPECIES DESCRIPTION AND HABITAT REQUIREMENTS			SUITABLE HABITAT	SPECIES OBSERVATIONS	ASSESSMENT
Common Nighthawk	<i>Chordeiles minor</i>	THR	SC	S4B	The Common Nighthawk is a medium-sized bird with long, pointed wings, a long tail with a notch, and large eyes. Its plumage of dark brown with black and white specks blends with its roost site. It is typically found in open areas such as gravel beaches, rock outcrops and burned woodlands, that have little to no ground vegetation. This species can also be found in highly disturbed locations such as clear cuts, mine tailing areas, cultivated fields, urban parks, gravel roads, and orchards (1).			No	Known to occur in the general area	No further consideration required
Eastern Meadowlark	<i>Sturnella magna</i>	THR	THR	S4B	The Eastern Meadowlark is a medium-sized migratory songbird with a bright yellow throat and belly, a black V shape on its chest, and a pointed bill. It prefers pastures and hayfields, but is also found to breed in orchards, shrubby fields, human-use areas such as airports and roadsides, or other open areas. The Eastern Meadowlark can nest from early May to mid-August, in nests that are built on the ground and well-camouflaged with a roof woven from grasses (1).			Yes: on-site and adjacent lands	Incidental observation on-site	Potential habitat for endangered or threatened species on-site
Eastern Whip-poor-will	<i>Antrostomus vociferus</i>	THR	THR	S4B	The Eastern Whip-poor-will is a medium-sized bird with mottled brown and grey feathers to blend in with its surroundings, a large flattened head, and small bill. They are usually found in areas with a mix of open and forested areas such as patchy forests with clearings, forests that are regenerating after major disturbances, savannahs, open woodlands or openings in more mature forests. Breeding habitat is dependent on forest structure rather than composition, although common tree associations are pine and oak, and it nests directly on the forest floor (2). The species prefers to nest in semi-open or patchy forests with clearings as it forages in open areas and uses forested areas for roosting (1).			No	Known to occur in the general area	No further consideration required
Eastern Wood-Pewee	<i>Contopus virens</i>	SC	SC	S4B	The Eastern Wood-pewee is a species of 'flycatcher', a bird that eats flying insects. It grows to approximately 15 cm, has greyish-olive upper parts and pale bars on its wings. This species lives in the mid-canopy layer of forest clearings and edges of deciduous and mixed forests. It prefers intermediate-age forest stands with little understory vegetation (1). It typically creates nests on tree branches 2-12 m in height (2).			No	Known to occur in the general area	No further consideration required
Evening Grosbeak	<i>Coccothraustes vespertinus</i>	No Status	SC	S4B	The Evening Grosbeak is a large songbird with a thick greenish bill. It is a social bird that is often found in flocks, particularly during the winter months. Their preferred habitat is thick coniferous forest. During their breeding season, they are generally found in open, mature mixed forests dominated by Firs, White Spruce, or Trembling Aspen (1).			No	Known to occur in the general area	No further consideration required
Golden Winged Warbler	<i>Vermivora chrysoptera</i>	THR	SC	S4B	The Golden-winged Warbler is a small songbird with distinctive yellow wing patches and patches behind their eyes. It inhabits early successional habitat of old fields and favour areas where trees are spread out or forest edges to use for perching, singing, and searching for food. They seem to prefer regeneration zones with young shrub growth, surrounded by mature forest, locations that have recently been disturbed, such as field edges, hydro or utility right-of-ways, or logged areas for their breeding sites; often frequenting clusters of herbaceous plants and low bushes (1).			No	Known to occur in the general area	No further consideration required
Grasshopper Sparrow	<i>Ammodramus savannarum</i>	SC	SC	S4B	The Grasshopper Sparrow is a small songbird with a streaked back, a white stripe down the center of its crown, a flatish head, and a conical beak. It inhabits open grasslands and prairies with well-drained soil, preferring areas that are sparsely vegetated. It will also nest in hayfields and pastures, as well as always and occasionally grain crops such as barley (1).			Yes: on-site and adjacent lands	Known to occur in the general area	Potential significant wildlife habitat on-site





**APPENDIX: Species of Conservation Concern - County of Peterborough**

COMMON NAME	SCIENTIFIC NAME	Federal SARA	Provincial SARO	S-RANK	SPECIES DESCRIPTION AND HABITAT REQUIREMENTS			SUITABLE HABITAT	SPECIES OBSERVATIONS	ASSESSMENT
Least Bittern	<i>Ixobrychus exilis</i>	THR	THR	S4B	The Least Bittern is a small member of the heron family, reaching around 30 cm in length. It has brown and beige plumage with chestnut patches on its wings (1). The species nests in marshes (> 5 - 10 ha) and swamps dominated by emergent vegetation, preferably cattails, interspersed with patches of woody vegetation and open water. They require dense vegetation and open water with stable levels within 10 m for nesting, and access to clear, open water for foraging (4).			No	Known to occur in the general area	No further consideration required
Loggerhead Shrike	<i>Lanius ludovicianus</i>	END	END	S2B	The Loggerhead Shrike is a small bird with a black, hooked bill, grey crown, and white throat and chest. This species has specific habitat requirements that are dependent on active livestock grazing, or grassland areas that have naturally short grass cover (i.e. alvar communities). They also require spiny, multi-branched shrubs, or barbed fencing, to catch prey. They prefer grassland habitats that have sporadic occurrences of low trees and shrubs; particularly hawthorn species, which are used as part of their feeding behaviour (1).			No	Known to occur in the general area	No further consideration required
Olive-sided Flycatcher	<i>Contopus cooperi</i>	THR	SC	S4B	The Olive-sided Flycatcher is a medium-sized songbird with olive colouring, often seen perching on top of tall trees waiting to catch their prey. It prefers open areas along natural mature forest edges, forest edges near natural openings such as rivers or swamps, human-made openings, or burned forest openings with numbers of dead trees. Breeding habitat usually consists of coniferous or mixed forests adjacent to rivers or wetlands, in Ontario often nesting in White and Black Spruce, Jack Pine, and Balsam Fir (1).			No	Known to occur in the general area	No further consideration required
Red-headed Woodpecker	<i>Melanerpes erythrocephalus</i>	THR	SC	S4B	The Red-headed Woodpecker is a mid-sized bird, at around 20 cm long, with a vivid red head, neck and breast as well as a strong bill. The species can be found in open woodland and woodland edges, often near man-made landscapes such as parks, golf courses and cemeteries. These areas must contain a large number of dead trees for perching and nesting (1).			No	Known to occur in the general area	No further consideration required
Short-eared owl	<i>Asio flammeus</i>	SC	SC	S2N,S4B	The Short-eared Owl has a large round head with small tufts of feathers, long wings, a short tail, and cryptic colouring of brown streaks. This species is found in scattered pockets across the province where suitable open habitat, including grasslands, tundra, peat bogs and marsh, can be found in sufficient quantities. Adults build nests on the ground in grassy areas and occasionally agricultural fields (1). The main factor influencing their choice in habitat is believed to be an abundance of their food source, primarily rodents and other small mammals (2).			No	Known to occur in the general area	No further consideration required
Wood Thrush	<i>Hylocichla mustelina</i>	THR	SC	S4B	The Wood Thrush is a medium-sized songbird of around 20 cm with rusty brown coloured upper parts and white underparts with large dark spots. It breeds in deciduous and mixed forests with moderate understories, shade and abundant leaf litter where it forages for food, including larval and adult insects as well as plant material. They prefer moist stands of trees with well-developed undergrowth and tall trees for perches (1).			No	Known to occur in the general area	No further consideration required
<b>Fish</b>										
American Eel	<i>Anguilla rostrata</i>	No Status	END	S1?	The American Eel is a long, slender bodied fish, with one long fin extending down the back and around the tail, and two small pectoral fins. It has thick lips, and a protruding lower jaw that extends out above the upper jaw. At the juvenile stage, they swim up the St. Lawrence River to reach Lake Ontario and connected tributaries where they will remain for 8 to 23 years before migrating back to their spawning grounds. In Ontario, the American eel prefers mud, sand or gravel substrates during the juvenile stage when they reside primarily in the benthic zone of waterbodies. More mature eels are able to thrive in most environments provided there is available cover during daylight hours, and the habitat is accessible (2).			No	Known to occur in the general area	No further consideration required



**APPENDIX: Species of Conservation Concern - County of Peterborough**

COMMON NAME	SCIENTIFIC NAME	Federal SARA	Provincial SARO	S-RANK	SPECIES DESCRIPTION AND HABITAT REQUIREMENTS	SUITABLE HABITAT	SPECIES OBSERVATIONS	ASSESSMENT
Lake Sturgeon	<i>Acipenser fulvescens</i>	No Status	END	S2	The Lake Sturgeon, a large freshwater fish, has an extended snout with four whisker-like organs hanging near the mouth and is dark to light brown or grey on its back and sides with a lighter belly. In Ontario, this fish is found in the rivers of the Hudson Bay Basin, the Great Lakes basin, and their connecting waterways. Lake Sturgeon's live almost exclusively in freshwater lakes and rivers with soft bottoms of mud, sand or gravel and are usually found at depths of 5 to 20 m. They spawn in relatively shallow, fast-flowing water or if available deeper water habitat as well (1).	No	Known to occur in the general area	No further consideration required
<b>Herptiles</b>								
Blanding's Turtle	<i>Emydoidea blandingii</i>	THR	THR	S3	Blanding's Turtles are identifiable by their bright yellow throat and chin and domed shell. They spend the majority of their life cycle in the aquatic environment, usually in large wetlands or shallow lakes with high densities of water plants (1). These turtles prefer shallow, nutrient rich water with organic sediment and dense vegetation. They use terrestrial sites for travel between habitat patches and to lay clutches of eggs, often going hundreds of meters from their nearest water body. Blanding's Turtles nest in dry coniferous and mixed forest habitats, as well as fields and roadsides (2). From late October until the end of April, they hibernate in the mud at the bottom of permanent water bodies (3).	No	Known to occur in the general area	No further consideration required
Eastern Musk Turtle	<i>Sternotherus odoratus</i>	SC	SC	S3	The Eastern Musk Turtle is small with a narrow carapace, a dark brown body and two light stripes on each side of their head (5). It is a small freshwater turtle found primarily in slow moving water bodies with abundant emergent vegetation and muddy bottoms along the southern edge of the Canadian Shield within which they burrow into overwinter. Nesting sites vary, but must be close to the water and exposed to direct sunlight (3).	No	Known to occur in the general area	No further consideration required
Midland Painted Turtle	<i>Chrysemys picta marginata</i>	SC	-	S4	The Midland Painted Turtle has a olive to black carapace with red or dark orange markings on the marginal scutes, as well as red and yellow stripes on the head and neck. The species uses a variety of waterbodies including, ponds, marshes, lakes and slow-moving creeks with a soft bottom and an abundance of basking sites and aquatic vegetation. This species usually hibernates on the bottom of waterbodies (5).	No	Known to occur in the general area	No further consideration required
Northern Map Turtle	<i>Graptemys geographica</i>	SC	SC	S3	The Northern Map Turtle is a medium sized turtle identified by its carapace's map contour-like patterning. It lives in larger lakes and rivers, requiring high water quality to support their primary prey species: molluscs. This species can often be seen in large groups basking together on rocks and logs. In the winter, the Northern Map Turtle can be found hibernating on the bottom of slow-moving rivers (1).	No	Known to occur in the general area	No further consideration required
Snapping Turtle	<i>Chelydra serpentina</i>	SC	SC	S3	The Snapping Turtle, with its large serrated carapace, small plastron, and spiked tail, is Canada's largest freshwater turtle (5). It spends the majority of its life in water, preferring shallow water with soft mud and leaf litter, and will travel upland to gravel or sandy embankments, roadsides, along railway lines or beaches to lay their eggs (1).	Yes: adjacent lands only	Known to occur in the general area	Potential significant wildlife habitat on-site
Spotted Turtle	<i>Clemmys guttata</i>	END	END	S2	The Spotted Turtle is named after the distinct yellow spots on its carapace. The species is semi-aquatic and prefers ponds, marshes, bogs and even ditches with slow-moving, unpolluted water and an abundant supply of aquatic vegetation. This species usually hibernates in wetlands or seasonally wet areas with structures such as overhanging banks, hummocks, tree roots, or aquatic animal burrows (1).	No	Known to occur in the general area	No further consideration required



APPENDIX: Species of Conservation Concern - County of Peterborough

COMMON NAME	SCIENTIFIC NAME	Federal SARA	Provincial SARO	S-RANK	SPECIES DESCRIPTION AND HABITAT REQUIREMENTS		SUITABLE HABITAT	SPECIES OBSERVATIONS	ASSESSMENT
Wood Turtle	<i>Glyptemys insculpta</i>	THR	END	S2	The Wood Turtle has orange coloured front legs, neck and chin and a sculpted carapace with raised, pyramidal scutes (5). They prefer clear rivers and streams that have moderate current, and sandy or gravelly substrates. This species spends more time on land than other turtle species including in meadows, swamps and fields. Wooded areas are an essential habitat component, and the species uses aquatic habitats for hibernation and mating. Nesting occurs in areas with sandy soil and abundant light (1).		No	Known to occur in the general area	No further consideration required
Eastern Hog-nosed Snake	<i>Heterodon platirhinos</i>	THR	THR	S3	The Eastern Hog-nosed Snake can be a variety of colours and patterns so is most easily identified by its flattened, upturned nose. They prefer sandy well-drained habitats such as beaches and dry forests because they lay their eggs, hibernate and burrow in these areas. The main diet of this snake is toads and frogs, so they usually stay close to water including marshes and swamps, where they have an increased chance of finding their preferred prey (1).		Yes: adjacent lands only	Known to occur in the general area	Potential habitat for endangered or threatened species on site
Eastern Milksnake	<i>Lampropeltis triangulum</i>	SC	NAR	S4	The Eastern Milksnake's colouration is grey or tan with reddish alternating blotches outlined in black along its back and sides (5). It has recently been delisted from being a species at risk in Ontario (1). This species tends to use open habitats such as rocky outcrops, fields and forest edges. The preferred prey of milksnakes are mice, small rodents, and ground nesting birds which are amply found in and surrounding agricultural outbuildings. The milksnake is secretive and is not likely to be encountered during the day or at night while hunting (5).		Yes: on-site	Known to occur in the general area	Potential significant wildlife habitat on-site
Eastern Ribbonsnake	<i>Thamnophis sauritus</i>	SC	SC	S4	The Eastern Ribbonsnake is slender with three bright yellow stripes running down its back and sides and a white crescent in front of each eye. This snake is usually found close to water as they are strong swimmers, often fleeing predators by diving into shallow water. It prefers wetland habitats where its prey species, frogs and small fish, are abundant. Over winter, they congregate in underground burrows or rock crevices to hibernate (1).		No	Known to occur in the general area	No further consideration required
Common Five-lined Skink (Southern Shield Population)	<i>Plestiodon fasciatus</i>	SC	SC	S3	The Common Five-lined Skink is Ontario's only lizard species. Its Southern Shield population can be found underneath rocks on open bedrock in forests and like to bask on sunny rocks and logs. They hibernate in crevices among rocks or buried in the soil (1). They hibernate in groups under rocks and tree stumps or in rotting wood (5).		No	Known to occur in the general area	No further consideration required
Western Chorus Frog	<i>Pseudacris triseriata</i>	THR	-	S3	The Western Chorus Frog is small with a dark stripe running through its eye and a light stripe underneath (5). It is primarily a lowland terrestrial species that requires access to terrestrial and aquatic habitats in close proximity to one another. Relying on marshes and wooded wetlands adjacent to forested habitats, this species also requires isolated, predator free pools for breeding. Temporary pools, such as vernal pools in wooded areas, are preferred. This species hibernates terrestrially in a variety of environments, including leaf litter, wood debris, and vacant animal burrows (2).		Yes: adjacent lands only	Known to occur in the general area	Potential significant wildlife habitat on-site
Invertebrates									
Monarch Butterfly	<i>Danaus plexippus</i>	SC	SC	S2N, S4B	The Monarch is an orange and black butterfly with small white spots and a wingspan of around 10 cm. It relies on milkweed plants as a food source for growing caterpillars, but the adult butterflies forage in diverse habitats for nectar from wildflowers (1).		No	Known to occur in the general area	No further consideration required





APPENDIX: Species of Conservation Concern - County of Peterborough

COMMON NAME		SCIENTIFIC NAME	Federal SARA	Provincial SARO	S-RANK	SPECIES DESCRIPTION AND HABITAT REQUIREMENTS			SUITABLE HABITAT	SPECIES OBSERVATIONS	ASSESSMENT		
Mottled Duskywing	<i>Erynnis martialis</i>	No Status	END	S2	The mottled duskywing is a medium-sized butterfly in the skipper family with a wingspan of 25-42 mm. It is dark grey with yellow-brown spots on its hind wings that give the species its mottled appearance and its name. The wings of freshly emerged adults have a purplish iridescence that fades with age. The mottled duskywing tends to live in dry habitats with sparse vegetation. These include open barrens, sandy patches among woodlands, and alvars. In Ontario, the mottled duskywing will only deposit their eggs on two closely-related plants: New Jersey tea and prairie redroot (1).						No	Known to occur in the general area	No further consideration required
West Virginia White	<i>Pieris virginianensis</i>	No Status	SC	S3	The West Virginia White is a small, dingy white butterfly. This species is found in moist deciduous woods, and requires a supply of toothwort, a small, spring-blooming plant, which provides the only source of food for its larvae. The West Virginia White is found mostly in the central and southern parts of Ontario, but its range extends north to Manitoulin and St. Joseph Islands (1).						No	Known to occur in the general area	No further consideration required
Yellow-banded Bumble Bee	<i>Bombus terricola</i>	SC	SC	S3S5	The Yellow-banded Bumble Bee is a medium-sized bumble bee with a distinct yellow and black abdominal band pattern found on its queens, males, and workers. This species is a forage and habitat generalist, able to use a variety of nectaring plants and environmental conditions. It can be found in mixed woodlands, particularly for nesting and overwintering, as well as a variety of open habitat such as native grasslands, farmlands and urban areas. The Yellow-banded Bumble Bee ranges from the Mixedwood Plains of southern Ontario to the Hudson Bay Lowlands in the north (1).						Yes: on-site and adjacent lands	Known to occur in the general area	Potential significant wildlife habitat on-site
Mammals													
Tri-colored Bat	<i>Perimyotis subflavus</i>	END	END	S3?	The Tri-colored Bat is small, with pale brown with orange-red forearms, muzzle, and ears. It is named for the black, yellow, and brown hairs on its back. It is considered rare in this region of Ontario which is at the northernmost limit of the natural range. These bats prefer to nest in foliage, tree cavities and woodpecker holes, but are occasionally found in buildings; though this is not their preferred habitat. Winter hibernation takes place in caves, mines and deep crevices. Tri-colored Bats prefer an open forest habitat type in proximity to water (6).						No	Known to occur in the general area	No further consideration required
Eastern Small-footed Myotis	<i>Myotis leibii</i>	No Status	END	S2S3	The Eastern Small-footed Myotis has fur with black roots and shiny brown tips as well as very small feet. In the spring and summer, the Eastern Small-footed Myotis 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. They change their roosting locations daily and hunt at night for insects. They hibernate in winter, often in caves and abandoned mines choosing colder and drier sites than other similar bats (1).						No	Known to occur in the general area	No further consideration required
Little Brown Myotis	<i>Myotis lucifugus</i>	END	END	S4	The Little Brown Myotis has glossy brown fur and a fleshy projection covering the entrance to its ears. This species roosts in trees and buildings, often selecting attics, abandoned buildings and barns for summer colonies where they can raise their young. Little Brown Bats hibernate from October/November to March/April, most often in caves or abandoned mines that are humid and remain above freezing (1).						No	Known to occur in the general area	No further consideration required
Northern Myotis	<i>Myotis septentrionalis</i>	END	END	S3	The Northern Myotis has dull yellow-brown fur with pale bellies and long, rounded ears. This species is found in boreal forests, roosting under loose bark and in the cavities of trees. These bats hibernate from October/November to March/April, most often in caves or abandoned mines (1).						No	Known to occur in the general area	No further consideration required



#### APPENDIX: Species of Conservation Concern - County of Peterborough

COMMON NAME	SCIENTIFIC NAME	Federal SARA	Provincial SARO	S-RANK	SPECIES DESCRIPTION AND HABITAT REQUIREMENTS	SUITABLE HABITAT	SPECIES OBSERVATIONS	ASSESSMENT
Algonquin Wolf	<i>Canis lycaon</i>	SC	THR	S4	Formerly called the Eastern Wolf, this canine was recently renamed the Algonquin Wolf. In the southern portion of the province, this species prefers deciduous and mixed forest landscapes while their northern range include mixed and coniferous forests. It is most prevalent in areas with abundant prey species which include Beaver, White-tailed Deer and Moose. Dens sites are usually found in coniferous forests with easily excavated soil types like sand and close to a permanent water source (1).	No	Known to occur in the general area	No further consideration required
<b>Trees, plants, fungi and lichens</b>								
American Ginseng	<i>Panax quinquefolius</i>	END	END	S2	American Ginseng is a perennial plant which grows up to 60 centimetres in height. The leaves typically have five leaflets arranged in a whorl at the end of the leaf stem. The root looks like a gnarly parsnip. The flowers are an inconspicuous green-white in colour, but the berries are bright red and arranged in a cluster. In Ontario, the American Ginseng typically grows in rich, moist, and mature deciduous woods dominated by Sugar Maple, White Ash, and American Basswood. It typically grows in deep, nutrient rich soil over limestone or marble bedrock (1).	No	Known to occur in the general area	No further consideration required
Butternut	<i>Juglans cinerea</i>	END	END	S2?	The Butternut is a medium sized tree reaching 30 m in height. It has large compound leaves with 11 to 17 leaflets. The fruit is oval, fuzzy and sticky. In Ontario, the Butternut prefers moist, well-drained soil, often along streams, or occasionally well-drained gravel sites. It grows alone or in small groups in deciduous forests (1).	No	Known to occur in the general area	No further consideration required
Pale-bellied Frost Lichen	<i>Physconia subpallida</i>	END	END	S3	The Pale-bellied Frost Lichen resembles a light dusting of frost on a dark tree trunk. This species is found throughout eastern North America, growing in wooded areas rich in hardwood species, such as White Ash, Hop Hornbeam (Ironwood), Black Walnut, and American Elm. It is also common to find this species growing on fenceposts or boulders within or near these wooded areas. In Ontario, this species has been found in the following counties: Frontenac, Haliburton, Hastings, Peterborough, Lanark and Renfrew (1).	No	Known to occur in the general area	No further consideration required

#### References

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3. Committee on the Status of Endangered Wildlife in Canada. (2008).
4. Environment Canada. (2018).
5. Ontario Nature. (2020). Reptiles and amphibians. Retrieved from <https://ontarionature.org/programs/citizen-science/reptile-amphibian-atlas/species/>
6. University of Michigan Museum of Zoology. (2004).



