



Natural Heritage Evaluation at 276 Sixth Line Road South, Township of Douro- Dummer, County of Peterborough, Ontario

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Prepared for:
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1.0 Introduction

Cambium Inc. (Cambium) was retained by David Lobb to conduct a Natural Heritage Evaluation at 276 Sixth Line Road South, Township of Douro-Dummer, County of Peterborough, Ontario (Figure 1). The proposed development includes a residential lot severance on the northeast corner of the property. Based on the proposed development, the agricultural fields surrounding the proposed severance lot will be considered the Study Area for this report.

The Natural Heritage Evaluation (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 Greater Golden horseshoe, 2020 (GPGGH). The Study Area contains or is adjacent to (within 120 m) the following natural heritage and/or hydrologic features: Provincially Significant Wetland (PSW; Westwood), unevaluated wetland, West Ouse River, and unnamed tributary of the West Ouse River. The Study Area is within Ecoregion 6E of Ontario (Crins, Gray, Uhlig, & Wester, 2009). The property is outside of the settlement area of the Township of Douro-Dummer.

The Study Area is within the jurisdiction of the Otonabee Region Conservation Authority and their regulated area overlaps the Study Area due to the presence of watercourses and the PSW. As the Study Area contains wetlands and/or watercourses, 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 or threatened species and their habitats from harm or destruction. Habitat of endangered and threatened species is protected under provincial natural heritage policy; however, it is also the landowner's responsibility to ensure that no harm to these species occurs on their property. This Study includes a habitat-based screening for species of conservation concern to determine if the Study Area has suitable habitat for any provincial or federal species at risk (SAR).



In order to address the Study requirements of the approval authorities, 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.

1.1 Terms of Reference

A Preliminary Severance Review (PSR) prepared by Peterborough County dated May 20, 2020, was provided to Cambium and is included in Appendix A. The PSR details the Terms of Reference (ToR) required to complete the Natural Heritage Evaluation for this project. Cambium then confirmed the ToR with ORCA through email correspondence with Matt Wilkinson (Planner) on April 27, 2021 (Appendix A)

1.2 Proposed Development and Conceptual Study Area Plan

The proposed severance area is provided in the PSR as shown in Appendix A. The proposed severance is preliminary and was used for scoping of the Study. Study Area Plans submitted with the required applications/permits 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 Study Area 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 Study Area 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 Peterborough County Official Plan, the land designation of the Study Area is 'Rural Area'. 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 Study Area is 'Rural' and 'Provincially Significant Wetland'. The severed parcel is within the Rural designation only.

2.4 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, a provincially protected natural heritage feature.



3.0 Technical Approach and Data Collection Methods

3.1 Background Information Review

Existing background information pertaining to the Study Area 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 Study Area included the following resources:

- Natural Heritage Areas: Make-a-map (Ministry of Natural Resources and Forestry, 2018);
- Aquatic Species at Risk Maps - Ontario (Fisheries and Oceans Canada, 2018);
- Fish ON-Line (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 District Wetland Report, Westwood Wetland (Ministry of Natural Resources and Forestry, 2019)
- Peterborough County Official Plan, 1994
- Township of Douro-Dummer Comprehensive Zoning By-law

Figure 2 shows the mapped natural heritage features present in the general area of the Study Area.



3.1.1 Ministry Consultation

Depending on the natural feature of the Study Area, ministry consultation may include the Ministry of Northern Development, Mines, Natural Resources, and Forestry (MNDMRF; formerly MNRF) and/or the Ministry of Environment, Conservation, and Parks (MECP), as applicable.

In early 2019, the Government of Ontario made changes to the regulating authority on matters related to SAR in the province. The Ministry of Environment, Conservation and Parks (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 Study Area visit(s) was to verify information acquired through existing documentation and to gather additional Study Area-specific information. The following sections provide the methods that were used to gather Study Area-specific information.

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 Study Area. 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 Study Area through vegetation inventory and soil assessment with a hand auger. Where



vegetation communities extend off the Study Area, classification is done through observation from property boundaries and publically accessible lands.

3.2.2 Wetland Boundary Delineation

In Ontario, wetlands are mapped and evaluated under the Ontario Wetland Evaluation System (OWES). Mapped evaluated wetlands have undergone extensive study and been assessed based on their form and function under four categories: Biological, Social, Hydrological, and Special Features (Ministry of Natural Resources, 2014). Evaluated wetlands that score high enough are deemed Provincially Significant Wetlands (PSW). Evaluated wetlands that did not score high enough to be a PSW are called Locally Significant Wetlands (LSW). The province also maps unevaluated wetlands. These mapped wetlands are approximate; as such, they require field verification in order to confirm their presence and determine their boundaries.

The subject wetland was delineated following provincially approved methods outlined in the Ontario Wetland Evaluation System: Southern Manual, 3rd Ed. (Ministry of Natural Resources, 2014). Fieldwork was carried out by provincially certified Cambium staff.

Wetland boundaries were initially delineated and classified by orthoimagery interpretation. The presence/absence of wetlands on the Study Area 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 Study Area were marked with a hand-held GPS unit. Where wetland communities extend off the Study Area, classification was done through observation from property boundaries and publically accessible lands.

3.2.3 Surface Water and Drainage Feature Mapping

Presence, location, boundary, and direction of flow were confirmed for all surface water features on and adjacent to the Study Area through visual investigation. Where feasible, the substrate type and cover features of surface water features were also noted. Indicators of surface drainage, including erosion of soils, gullies, and sediment deposition areas were noted



and traced to identify sources of erosion. All watercourse and drainage feature crossings were noted and GPS marked in the field, including bridges, culverts, and bed-level crossings.

3.2.4 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 Study Area 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

Background information and field investigation data is provided in the following sections.

Based on the background and field data, an assessment of significance has been completed to identify protected natural heritage features on and/or adjacent to the Study Area.

The following field investigations were carried out on the Study Area and are summarized in Table 2.

Table 2 Summary of Field Investigations

Date	Time On Study Area	Weather	Observer	Activities
2021-06-24	7:45-9:00AM	14°C Sunny	Tyler Jamieson	Ecological Land Classification Wetland Delineation Surface Water and Drainage Feature Assessment Habitat-Based Wildlife Survey

4.1 Landscape Position and Topography

The Study Area is 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 Study Area has gentle undulating slopes throughout. The highest area at the Study Area is adjacent to Dummer Sixth Line Road South. The topography gently slopes towards the PSW towards the west. Study Area



4.2 Vegetation Communities

Utilizing aerial imagery dating back to 1985, it appears that no major changes to vegetation cover have occurred at the Study Area. Currently, the Study Area is mainly agricultural lands. Most agricultural fields are bordered with treed hedgerows. The western portion of the Study Area is the Westwood PSW.

The vegetation communities on the Study Area 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	SWM1-1	White Cedar – Hardwood Mineral Mixed Swamp	Wetland	S5
N/A	FOC4-1	Fresh – Moist White Cedar Coniferous Swamp	Terrestrial	S5
N/A	OAGM1	Row Crops	Terrestrial	N/A
N/A	FOCM5	Naturalized Coniferous Hedgerow	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. Currently, according to their respective Official Plan Schedules, the planning authority has not explicitly defined or designated significant woodlands within their jurisdiction. In the absence of local criteria for evaluating woodlands, the Natural Heritage Reference Manual provides guidance on evaluating woodlands (Ministry of Natural Resources, 2010).

Woodlands directly adjacent to the Study Area are entirely contained within the wetland areas (Section 4.3). Since wetlands receive a higher level of protection, Significant Woodlands will not be addressed further in this report. Study Area



4.3 Wetland Delineation

The Westwood PSW is located along the western side of the Study Area. According to the Peterborough District Wetland Report (MNR, 2019), the PSW is comprised of two wetland types, swamp (89%) and marsh (11%). The swamp contains mainly coniferous trees (Eastern White Cedar) and the marsh consists mainly of emergent such as cattails. The PSW received a total score of 668. The unevaluated wetland, attached to the PSW, is located towards the west of the mapped PSW area as shown in Figure 3.

The Westwood PSW/unevaluated wetland was confirmed through field investigations as the community contained over 50% wetland species including Black Ash and Sensitive Fern. The wetland boundary was consistent with the mapped unevaluated wetland, which extended further east than the mapped PSW. Since the unevaluated wetland is directly adjacent to the mapped PSW, the entire wetland area should be considered the PSW. Based on orthoimagery for the property, the PSW continues to the west as mapped. The boundary of the PSW was marked in the field by GPS.

4.4 Surface Water and Drainage Features

A tributary to the Ouse River is located south of the Study Area, within the same property. This tributary flows east to west through the southern portion of the adjacent lands. It originates east of Dummer Sixth Line Road South, on neighbouring private lands. Through aerial imagery, distinct channelization is observed within the Study Area. This tributary is a permanent watercourse.

An unnamed permanent watercourse was identified in the adjacent lands, across Dummer Sixth Line Road South, towards the east (Figure 3). As this channel was on private property, a detailed assessment could not be completed. Through aerial imagery and looking at topographical imaging, it is likely that this permanent watercourse is a topographical low area, that aids in draining the adjacent agricultural fields.



4.5 Fish and Fish Habitat

The Ouse River supports a diverse fish community and provides coldwater thermal habitat conditions. Species known to occur in the Ouse River include Blacknose Shiner, Bluntnose Minnow, Brook Stickleback, Brook Trout, Central Mudminnow, Common Shiner, Creek Chub, Eastern Blacknose Dace, Fathead Minnow, Johnny Darter, Northern Redbelly Dace, Spottail Shine, and White Sucker. The Ouse River tributary located in the adjacent lands to the south, could support fish and fish habitat. The riparian vegetation communities are active agricultural fields. Additionally, according to the Wetland Report for the Westwood Wetland PSW, the PSW provides fish spawning and rearing habitat.

4.6 Species of Conservation Concern

A list of species of conservation concern, including species at risk, with potential to occur in the general vicinity of the Study Area 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 the current study, as detailed in the previous sections. Cambium has employed a habitat-based screening, supplemented with targeted field surveys when necessary, in order to identify suitable habitat for species located on or adjacent to the Study Area. A detailed habitat suitability analysis is provided in Appendix C and a discussion of the results is provided below.

No Critical Habitat for aquatic species at risk listed under SARA was identified in the Ouse River tributary, or unnamed drainage channel on or adjacent to the Study Area.

4.6.1 Endangered and Threatened Species

Grassland bird species such as Eastern Meadowlark and Bobolink are known to exist in the area. Eastern Meadowlark and Bobolink prefer native grasslands or agricultural land such as pastures and hayfields for habitat use. Grassland habitat is not present on the Study Area, but may exist on adjacent private property. As such, these species will not be addressed further in this report.



Due to the presence of barns and accessory farming buildings, potential habitat for Barn Swallows exists in the adjacent lands. Barn Swallows prefer to make their mud nests in human-made structures such as barns and bridges. There is no suitable habitat for this species within the proposed severance area; as such, this species will not be addressed further in this report. Study Area

The PSW may contain trees with cavities that could contain habitat for bats such as the Tri-colored Bat, Eastern Small-footed Myotis, and Little Brown Myotis. There is no suitable habitat for these species within the proposed severance area; as such, these species will not be addressed further in this report.

4.6.2 Special Concern Species

Many bird species utilize forest edges for habitat. A forest edge exists in the adjacent lands at the edge of the swamp and the agricultural area in the western side of the adjacent lands. Species such as the Canada Warbler, Eastern Wood-pewee, Olive-sided Flycatcher, Wood Thrush, and Red-headed Woodpecker may utilize these areas. There is no suitable habitat for these species within the proposed severance area; as such, these species will not be addressed further in this report.

Grasshopper Sparrow is another grassland bird species. Due to the grasslands that are observed on the adjacent private lands across Dummer Sixth Line South, potential habitat for Grasshopper Sparrow exist on the adjacent lands. There is no suitable habitat for this species within the proposed severance area; as such, this species will not be addressed further in this report.

The PSW is located towards the western edge of the adjacent lands. This PSW may host many species that consider wetlands or forest edges as habitat including Eastern Milksnake, Eastern Ribbonsnake, and Western Chorus Frog.



5.0 Impact Assessment and Mitigation Measures

The proposed development includes a residential lot severance on the northeast corner of the property. The following sections address potential impacts to protected features identified on and adjacent to the Study Area that may result from the proposed development and Study Area alteration:

- Provincially Significant Wetland
- Watercourses and Fish Habitat
- Potential Significant Wildlife Habitat

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

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 Provincially Significant Wetland

As is the PSW is on adjacent lands, no direct impacts are expected to the PSW. Potential indirect impacts from construction include impacts from erosion and sediment control, noise and additional lighting, and potential invasive species introduction from transportation of garden waste dumping. A 30 m setback is recommended for the PSW confirmed on the Study Area, as shown on Figure 4. The 30 m setback is considered sufficient to protect the existing form and function of the PSW as the setback has been historically agricultural which provides minimal ecological buffering and the proposed development will not impact these lands.

Additionally, prior to any construction activities taking place, it is essential that perimeter sediment fencing be installed around construction areas. Fencing should be properly keyed into the ground and securely fastened to vertical supports spaced ≤ 2 m apart. This key control measure will help prevent sediment from entering surface water features (i.e., wetlands and the watercourse) 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 Study Area, 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.

The current area of the proposed development is active agricultural lands. Cambium recommends that landscaping plans for the proposed development use native species to increase species diversity and provide potential habitat for local wildlife. In particular, there is a treed hedgerow north of the proposed development. This area can be enhanced with planting native trees and shrubs to improve the transition zone between hedgerow and assumed maintained lawn. Tree species include Paper Birch, White Elm, White Spruce, Balsam Fir, and Basswood. Shrub species include Red Elderberry, Riverbank Grape, and Red-osier Dogwood.

5.2 Watercourses, Fish Habitat, and Drainage Features

As detailed in Section 4.5, the watercourse south of the Study Area, within the adjacent lands may contain fish and fish habitat as it connects to the Ouse River, a known area for fish and fish habitat. Additionally, there is a drainage channel east of the Study Area, within the adjacent lands across Dummer Sixth Line South Road. No direct or indirect impacts are expected due to it being located on the opposite side of the road and no connection to the Study Area was observed.

As no in-water work is expected, and both of these hydrologic features are in the adjacent lands, no direct impacts to these features are expected. Potential indirect impacts to the watercourse south of the Study Area are associated with erosion and sediment from the proposed construction. A 30 m setback is recommended for the watercourse and drainage channel observed on the Study Area, as shown on Figure 4. The 30 m setback is considered sufficient to protect the existing form and function of the watercourse features as the proposed development will not impact lands near this feature, and there is enough distance from the proposed development that erosion and sediment should not affect this feature. The 30 m setback from the drainage channel is considered sufficient as there are no direct pathways



from the proposed development to this feature. The drainage channel is across a road, and in adjacent lands, and direct or indirect impacts are not expected.

5.3 Potential Significant Wildlife Habitat

Potential Significant Wildlife Habitat for species listed in Section 4.6 exist on the Site. Direct impacts are not expected as lot lines and developable areas are not within the habitat of these species and in-direct impacts will be appropriately mitigated provided the following recommendations are adhered to.

Snakes are particularly vulnerable to construction-related impacts on Study Areas adjacent to their habitat. Erosion and Sediment Control (ESC) fencing can also function as wildlife exclusion fencing. In order to function as wildlife exclusion fencing should be installed around the entire perimeter of the construction area prior to May 1 or commencement of Study Area preparation in order to keep turtles and snakes from entering the construction area. This fencing should be made of light-duty sediment 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 silt fence 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.

Nesting birds are protected under the *Migratory Birds Convention Act, 1994*. Vegetation clearing on the Study Area should occur outside the breeding bird season, which extends from April 1 to August 31 in the local area (as per Environment and Climate Change Canada Guidelines). If vegetation clearing is to occur between April 1 and August 31, 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 the young have fledged or the nest is determined to be inactive.



6.0 Policy Compliance

Based on the key natural heritage and/or hydrologic features identified on or adjacent to the Study Area and the findings of the field investigations detailed herein, the proposed development of the Study Area is in compliance with the PPS and GPGGH. Compliance with applicable natural heritage policy is summarized Table 4.

Table 4 PPS and GPGGH Policy Compliance Summary

Key Natural Heritage / Hydrologic Feature	On Study Area	On Adjacent Lands	Meets Associated Policy
PSW	No	Yes	Yes; GPGGH: 4.2.3.1 & 4.2.4.1-3
	Explanation: No impacts to wetlands are expected. No development within wetlands. All proposed development is outside the wetland and 30 m setback (Figure 4).		
Fish Habitat	No	Yes	Yes; PPS: 2.1.6 & 2.1.8
	Explanation: Fish habitat exists in the adjacent lands. No in-water work is expected. No impacts are expected to fish habitat provided a 30 m setback is observed from the Ouse River Tributary in the southern adjacent lands (Figure 4).		
Potential Significant Wildlife Habitat	No	Potentially	Yes; PPS: 2.1.5 & 2.1.8
	Explanation: Direct impacts are not expected as lot lines and developable areas are not within the habitat of these species and in-direct impacts will be appropriately mitigated provided the recommendations herein are adhered to.		
Watercourse	No	Yes	Yes; GPGGH: 4.2.3 & 4.2.4



	<p>Explanation:</p> <p>Direct impacts are not expected as lot lines and developable areas are not within the watercourses or their associated 30 m buffers. In-direct impacts due to erosion and sediment from construction will be appropriately mitigated provided the recommendations herein are adhered to.</p>
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7.0 Summary of Mitigation, Compensation, and Best Practices

The following recommendations are provided with respect to 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, including wetland boundary, watercourses, and associated 30 m setbacks (Figure 4).
2. Key natural heritage features and key hydrologic features will be provided with a 30 m setback to ensure that direct and indirect impacts to these features are not observed (Figure 4).
3. In general, 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 1 to August 31), 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.
4. Light-duty sediment 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 sediment fencing should be properly trenched in and maintained in good working order until the area has been successfully revegetated. Sediment fencing will also serve as wildlife exclusion fencing to prevent access by some wildlife species.
5. 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 Study Areas adjacent to wetlands, watercourses, and waterbodies.
6. Any SAR discovered on the property 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.



7. Cambium recommends that landscaping plans for the proposed development use native species to increase species diversity and provide potential habitat for local wildlife. In particular, there is a treed hedgerow north of the proposed development. This area can be enhanced with planting native trees and shrubs to improve the transition zone between hedgerow and assumed maintained lawn. Tree species include Paper Birch, White Elm, White Spruce, Balsam Fir, and Basswood. Shrub species include Red Elderberry, Riverbank Grape, and Red-osier Dogwood.

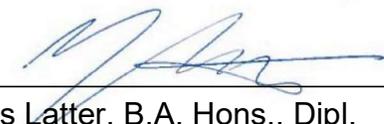


8.0 Closing

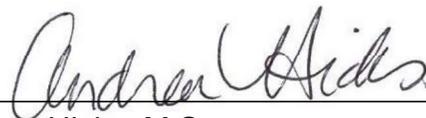
In closing, potential negative impacts associated with the proposed development and Study Area alteration can be appropriately minimized, provided that the recommendations outlined in Section 7.0 are adhered to. The information presented herein demonstrates that the proposed development can be carried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

Respectfully submitted,

Cambium Inc.



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



Andrea Hicks, M.Sc.
Group Manager – Natural Science

MOL/alh

P:\12700 to 12799\12777-001 David Lobb - NHE - 276 Sixth Line Road South, Douro-Dummer\Deliverables\REPORT - NHE\Draft\2021-08-20 RPT NHE 276 Sixth Line Rd - DRAFT.docx



References

- Bird Studies Canada. (2005). *Atlas of the Breeding Birds of Ontario*.
- Crins, W. J., Gray, P. A., Uhlig, P. W., & Wester, M. C. (2009). *The Ecoregions of Ontario, Part I: Ecozones and Ecoregions*. Peterborough, Ontario: Ministry of Natural Resources: Inventory, Monitoring and Assessment. Retrieved from <https://dr6j45jk9xcmk.cloudfront.net/documents/2712/stdprod-101587.pdf>
- Fisheries and Oceans Canada. (2018). *Aquatic Species at Risk Map*. Retrieved from Fisheries and Oceans Canada: <http://www.dfo-mpo.gc.ca/species-especes/sara-lep/map-carte/index-eng.html>
- Government of Ontario. (2007, August). *O.Reg 230/08: Species at Risk in Ontario List under Endangered Species Act, 2007, S.O. 2007, c.6*. Retrieved from e-Laws: <https://www.ontario.ca/laws/regulation/080230>
- Lee, H., Bakowsky, W., Riley, J., Bowles, J., Puddister, M., uhlig, P., & McMurray, S. (1998). *Ecological Land Classification for Southern Ontario: First Approximation and Its Application*. Southcentral Science Section, Science Development and Transfer Branch. SCSS Field Guid FG-02: Ministry of Natural Resources.
- Ministry of Municipal Affairs and Housing. (2020). *A Place to Grow: Growth Plan for the Greater Golden Horseshoe*. Queens Printer for Ontario.
- Ministry of Municipal Affairs and Housing. (2020). Provincial Policy Statement. Ontario.
- Ministry of Natural Resources. (2010). *Natural Heritage Reference Manual from the Natural Heritage Policies of the Provincial Policy Statement, 2005 - Second Ed.*
- Ministry of Natural Resources. (2014). *Ontario Wetland Evaluation System Southern Manual, 3rd Ed.* Ontario.
- Ministry of Natural Resources and Forestry. (2018). Retrieved from Make a Map: Natural Heritage Areas: http://www.gisapplication.lrc.gov.on.ca/mamnh/Index.html?site=MNR_NHLUPS_NaturalHeritage&viewer=NaturalHeritage&locale=en-US



Ministry of Natural Resources and Forestry. (2018). *Fish ON-Line*. Retrieved from <https://www.gisapplication.lrc.gov.on.ca/FishONLine/Index.html?locale=en-US&site=FishONLine&viewer=FishONLine>

Ministry of Natural Resources and Forestry. (2019). *Peterborough District Wetland Report - Westwood Wetland*.

Ministry of the Environment, Conservation and Parks. (2019). *Client's Guide to Preliminary Screening for Species at Risk*.

MNRF. (2019). *Peterborough District Wetland Report*.

Ontario Nature. (2018). *Ontario Reptile and Amphibian Atlas*. Retrieved from Ontario Nature: <https://ontarionature.org/oraa/maps/>



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	MNRF: 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



Appended Figures



Figures

- Figure 1** **Study Area Location and Special Planning Areas**
- Figure 2** **Local Natural Heritage Features**
- Figure 3** **Study Area Natural Heritage Features and Survey Locations**
- Figure 4** **Proposed Development Constraints**

NATURAL HERITAGE EVALUATION

DAVID LOBB
276 Sixth Line Road South
Douro-Dummer, Ontario

LEGEND

-  Major Road
-  Minor Road
-  Water Area
-  Ecodistrict
-  Site (approximate 40.5 ha.)

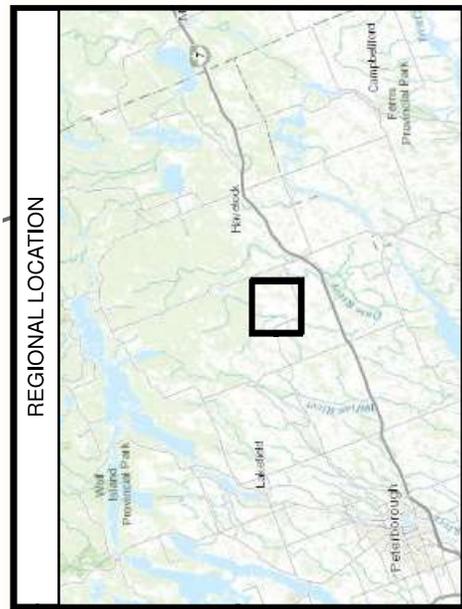
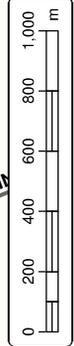
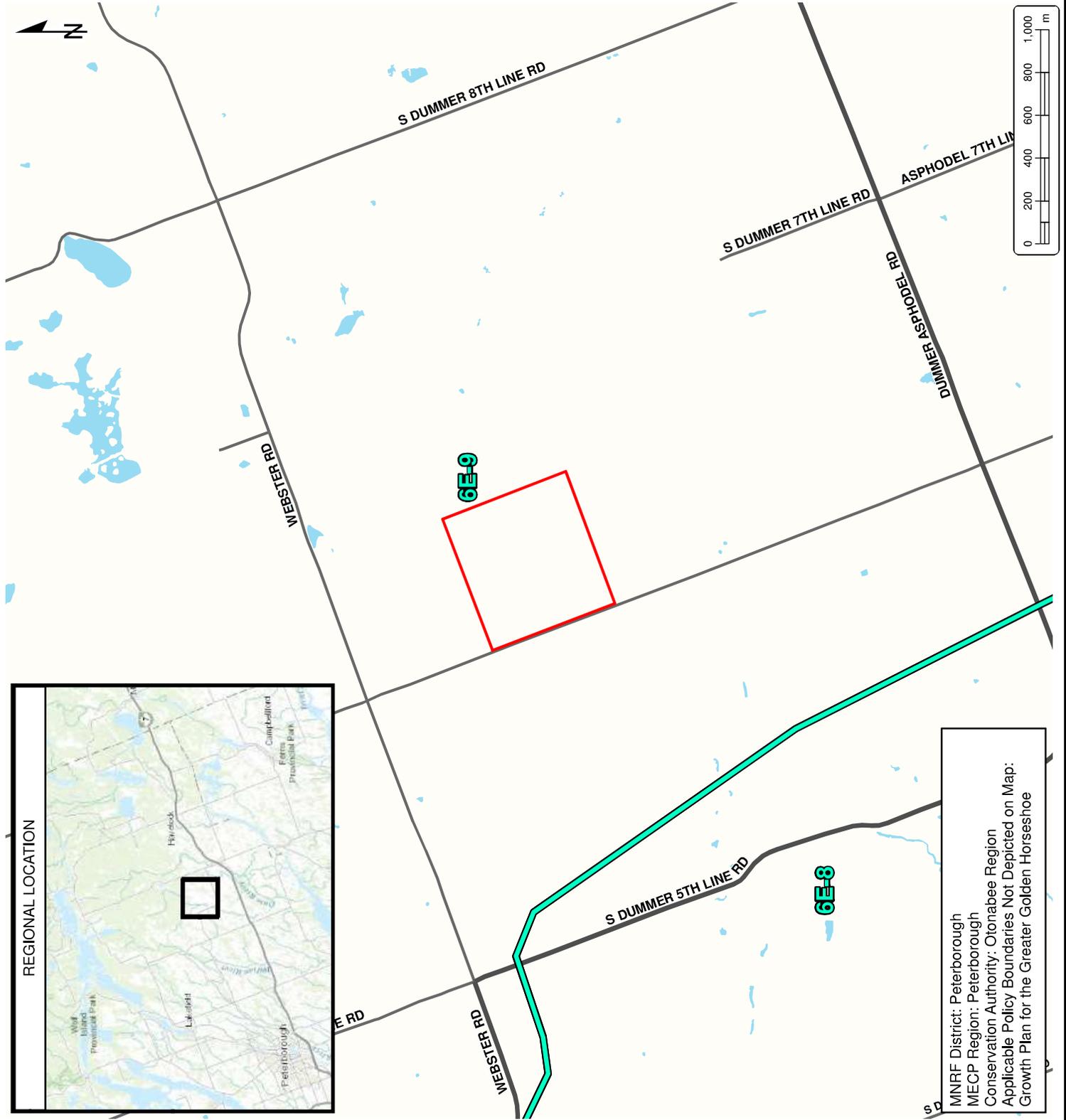
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SITE LOCATION AND SPECIAL PLANNING AREAS

Project No.:	12777-001	Date:	August 2021
Scale:	1:25,000	Projection:	NAD 1983 UTM Zone 17N
Created by:	MAT	Checked by:	ML
			Figure:
			1



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

NATURAL HERITAGE EVALUATION

DAVID LOBB
276 Sixth Line Road South
Douro-Dummer, Ontario

LEGEND

-  Major Road
-  Minor Road
-  Watercourse, Intermittent
-  Watercourse, Permanent
-  Contour 5m Interval (Major)
-  Contour 5m Interval (Minor)
-  Unevaluated Wetlands
-  Locally Significant Wetlands
-  Provincially Significant Wetlands
-  Water Area
-  Deer Wintering Area (Stratum 1)
-  ANSI, Earth Science
-  Property Boundary (42.27 ha) (approximate)

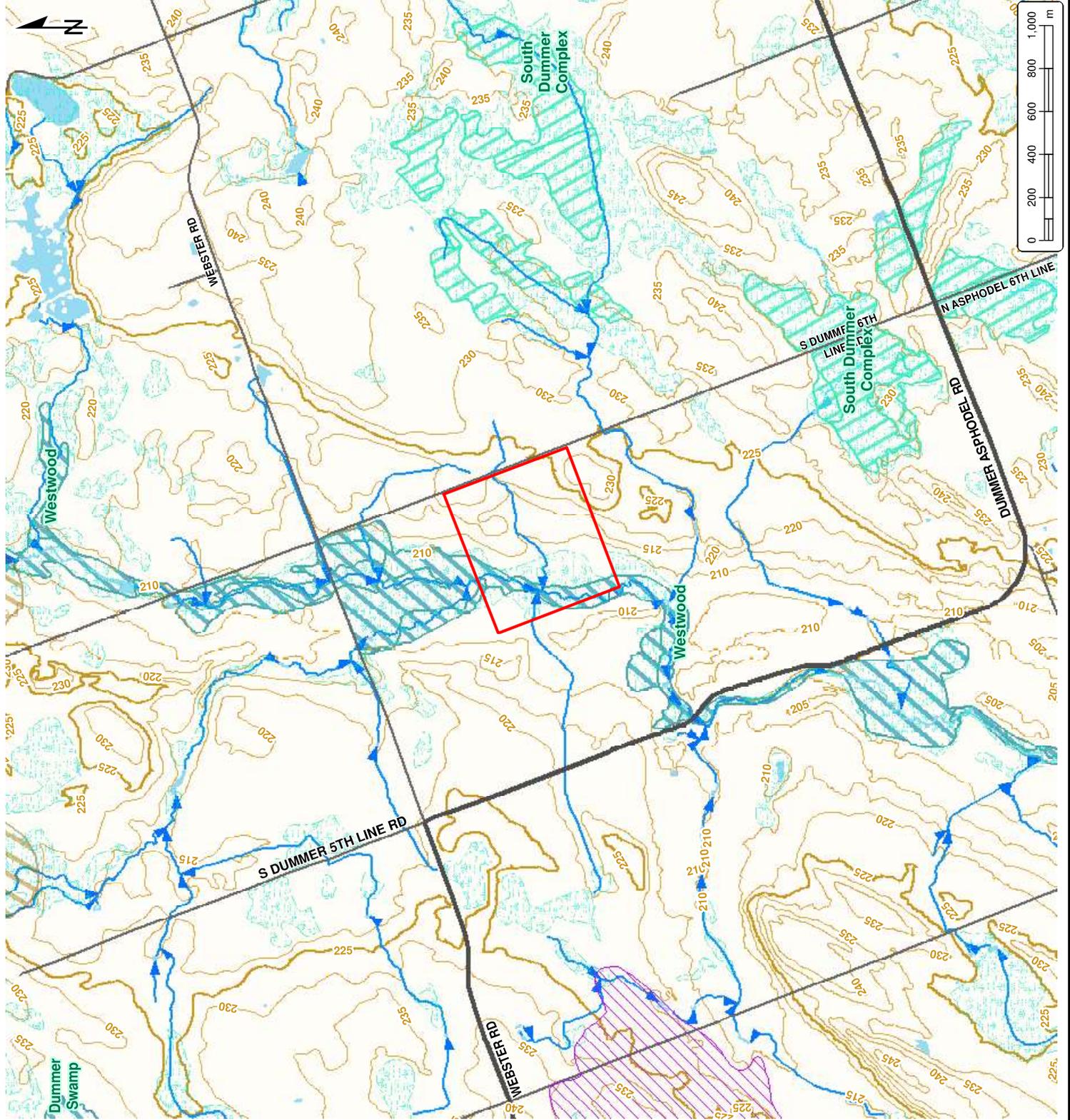
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LOCAL NATURAL HERITAGE FEATURES

Project No.:	12777-001	Date:	August 2021
Scale:	1:25,000	Rev.:	
Projection:	NAD 1983 UTM Zone 17N	Created by:	MAT
Checked by:		Figure:	2



NATURAL HERITAGE EVALUATION

DAVID LOBB
276 Sixth Line Road South
Douro-Dummer, Ontario

LEGEND

-  Verified Wetland Boundary
-  Vegetation Community
-  Watercourse, Permanent
-  Contour 5m Interval (Major)
-  Contour 5m Interval (Minor)
-  120m Adjacent Lands
-  Wetland
-  Provincially Significant Wetlands
-  Study Area
-  Property Boundary (approximate 42.27 ha.)

VEGETATION COMMUNITIES

- 1: SWM1-1; White Cedar - Hardwood Mineral Mixed Swamp**
- FOC4-1; Fresh - Moist White Cedar Coniferous Swamp**
- OAGM1; Row Crops**
- FOCM5; Naturalized Coniferous Hedgerow**

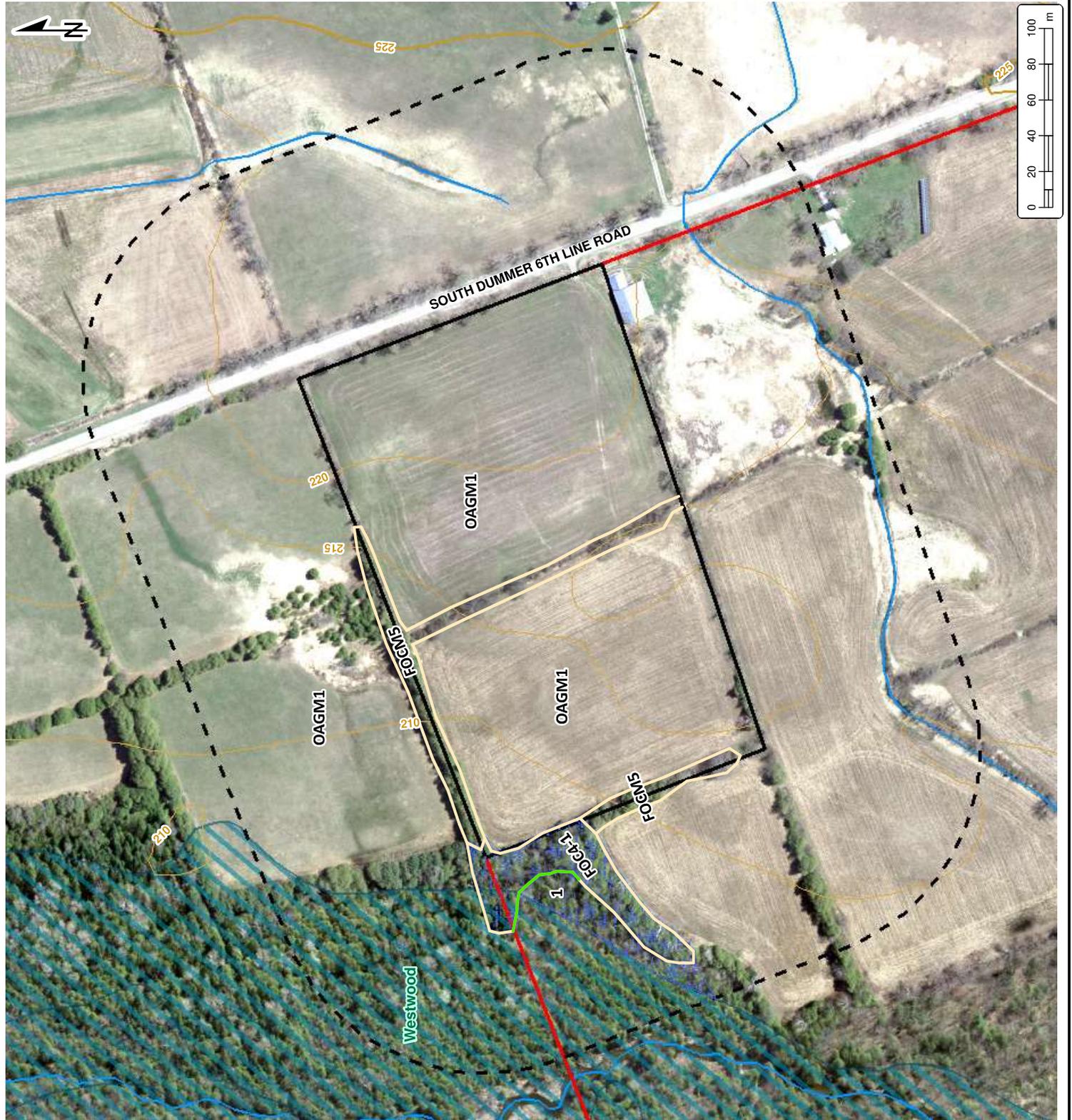
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SITE NATURAL HERITAGE FEATURES

Project No.:	12777-001	Date:	August 2021
Scale:	1:3,000	Projection:	NAD 1983 UTM Zone 17N
Created by:	MAT	Checked by:	ML
Figure:	3		



NATURAL HERITAGE EVALUATION

DAVID LOBB
276 Sixth Line Road South
Douro-Dummer, Ontario

LEGEND

-  30m Watercourse Setback
-  30m Wetland Setback
-  Watercourse, Permanent
-  Contour 5m Interval (Major)
-  Contour 5m Interval (Minor)
-  120m Adjacent Lands
-  Wetland
-  Provincially Significant Wetlands
-  Developable Area (4.72 ha)
-  Study Area
-  Property Boundary (approximate 42.27 ha.)

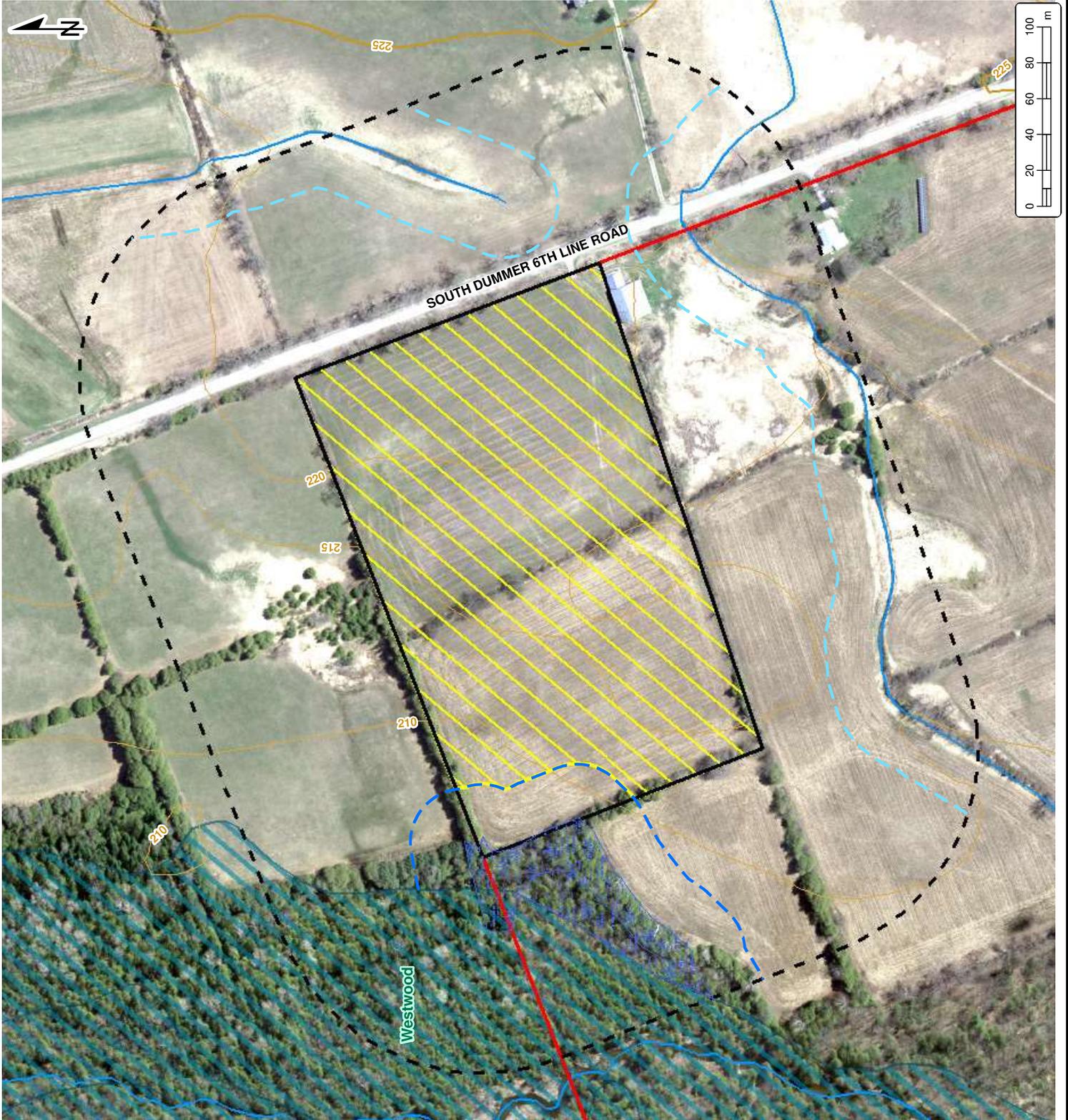
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SITE NATURAL HERITAGE CONSTRAINTS

Project No.:	12777-001	Date:	August 2021
Scale:	1:3,000	Projection:	NAD 1983 UTM Zone 17N
Created by:	MAT	Checked by:	ML
		Figure:	4





Appendix A Correspondence

Myles Letter

From: Matt Wilkinson <mwilkinson@otonabeeconservation.com>
Sent: April 27, 2021 6:19 AM
To: Myles Latter
Cc: Jasmine Gibson
Subject: RE: Ecology Comments, re: EIS ToR for 276 Sixth Ln Rd S Dummer (PGCD-715)

Hi Myles,

Re: 276 Sixth Line Rd S Dummer (Roll # 1522 020 001 08200) proposed Consent Application (PGCD-715)

There appears to be wetland features associated with a small tree area on adjacent lands to the norther and associated with the watercourse near the barn (retained lands) and across the road (east of severed parcel).

The terms of reference appears appropriate to address most of the PPS natural heritage (2.1) and water (2.2) policies and 4.2.3 and 4.2.4 of the Growth Plan.

- Using the PPS Section 2.0 as a checklist to ensure all features of interest within 120 of the proposal have been discussed (e.g., presence/absence) in the EIS.
- Please denoted that the severed parcel must be setback at least 30m from all wetlands and watercourses.
- As a precautionary measure, where features may be wet and cannot be thoroughly investigated, consider reconfiguring or relocating the lot to minimize risk of flooding.

April/early May may not be appropriate for agricultural field-dependent birds that are known to occur in the area. With respect to species at risk – threatened and endangered protected by the ESA, where a NHIC element occurrence is flagged for the subject lands/proposal area and appropriate habitat exists, species-targeted surveys are recommended or at least conduct a site visit when those species are most active. Ontario Make a Map has flagged the property for bobolink and eastern meadowlark; these species are most active in June.

We recommend that you note the appropriately-timed visit to confirm presence/absence of “habitat” for these species.

Best,
Matt



Matt Wilkinson
Planner
705-745-5791 x213
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>
Sent: Tuesday, April 20, 2021 11:12 AM
To: Matt Wilkinson <mwilkinson@otonabeeconservation.com>
Cc: Cambium File <file@cambium-inc.com>
Subject: ToR - NHE 276 Sixth Line Road South, Douro-Dummer (12777-001)

Good 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 and Bobolink. The fields are active hay field/annual row crops, no forested areas are to be impacted, and the key hydrologic features will be assessed, however, the majority of them are further than 30m away, or are across the road so limited indirect impacts are expected. With regards to the Minimum Distance Separation, the client is going to rezone their barn on the retained parcel, as it has never and will never hold livestock.

The following scope has been provided:

One Site visit in spring 2021 to document natural features on the property 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.

Additionally, are there any reasons why we could not complete this in April/ early May since the proposed area is active agriculture and thus limited vegetation is expected? Please let me know if there is anything that I have missed.

Thanks and take care,



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

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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Preliminary Severance Review



Prepared by the Peterborough County
Planning Department

Name: Roy Lobb

Agent: David Lobb

Date: May 20, 2020

Lot: 4

Concession: 5

Municipality: Dummer Ward
Township of Douro-Dummer

Description: 276 Sixth Line Road South Dummer

Phone: 705-933-0112

Email:
david.lobb91@gmail.com

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 & Provincially Significant Wetland
Municipal Zoning (By-Law No. 10-1996)	(RU)	(RU) & (EC(P))
Area/Lot Dimensions	± 0.8 hectares with ±90m of frontage	± 39.6 hectares with ±520m of frontage
Existing Use/Buildings	Vacant	House, Barn

Intent: To sever a residential lot. Roll No.(s) 1522-020-001-08200.

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 and Provincially Significant Wetland in the Local Component of the County Official Plan; the severed parcel is within the Rural designation only.

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 the subject property has not received any severances in the last 25 years, therefore the lands remain eligible for consent.

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)). Assessment information indicates that the landowner appears to meet the ownership requirements, and the severed parcel does not exceed 1 hectare.

All consents meet road frontage & access, Zoning By-law, Minimum Distance Separation and Health Unit requirements (Ss.7.12.2, 7.12.4, 7.2.3 & 7.12.12). Minimum Distance Separation (MDS) must be calculated for any livestock facility, regardless as to whether it is currently being used to house livestock. As can be seen on the attached sketch, the severed parcel is located entirely within the MDS arc from the barn on the retained parcel and therefore does not meet Minimum Distance Separation requirements.

Since the subject lands front on a Township Road, any proposed entrances must be approved by the local Municipal Public Works department.

Municipal Zoning By-Law Review: The severed parcel is zoned Rural (RU) in the Municipal Zoning By-law. A single detached dwelling is permitted in the (RU) zone (S.9.1.5), provided the parcel has a minimum lot area of 0.4 hectares and a minimum lot frontage of 45 metres (S.9.2.4(a)&(b)). The severed parcel appears to meet these minimum requirements.

The retained parcel is zoned Rural (RU) and Provincially Significant Wetland (EC(P)) in the Municipal Zoning By-law. An agricultural use is permitted in the (RU) zone (S.9.1.1), provided the parcel has a minimum lot area of 20 hectares and a minimum lot frontage of 135 metres (S.9.2.1(a)&(b)). The retained parcel appears to meet these minimum requirements. The applicant should be aware that new buildings and structures are not permitted within the area zoned (EC(P)) (S.19.2).

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: wetlands, streams and potential species at risk.

Section 4.2.4.1 of the Growth Plan (2019) 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 parcel is located within 120 metres of the above key hydrologic features, a natural heritage evaluation and/or hydrologic evaluation is required. Evaluations undertaken in accordance with policy 4.2.4.1 will identify any additional restrictions to be applied before, during and after development to protect the hydrologic and ecological functions of the feature. Although the Otonabee Region Conservation Authority can be contacted for specific study requirements, it is not recommended that further study be pursued until such time as other conformity issues with the proposal have been addressed.

A portion of the subject property is traversed by an area identified for habitat of endangered species and threatened species, as shown on the attached sketch. Policy 2.1.7 of the Provincial Policy Statement 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) at 277 Sixth Line Road, 191 Sixth Line Road and on the retained parcel (see map attached). The proposal does not appear to meet MDS I setback requirements since the severed parcel is located entirely within the MDS arc from the barn on the retained parcel. In order to address this issue, it is recommended that the severed parcel be moved to a location elsewhere on the property outside of the MDS arc, the barn be removed from the property or rezoned to prohibit the keeping of livestock.

The subject property is located within a Candidate Agricultural Area, as identified in the new Agricultural System for the Greater Golden Horseshoe (Growth Plan, 2019). Outside of the Greenbelt Area, provincial mapping of the agricultural land base does not apply until it has been implemented in the County Official Plan. Until such time, Candidate Agricultural Areas will be subject to the rural policies of the Provincial Policy Statement. Section 1.1.5.2 of the Provincial Policy Statement allows for limited residential development on rural lands.

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**

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

- | | |
|--|---|
| <input checked="" type="checkbox"/> Township | <input checked="" 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 severance proposal does not appear to conform to the Provincial Plan(s). Minimum Distance Separation requirements have not been met since the severed parcel is located entirely within the MDS arc from the barn on the retained parcel. It is recommended that the severed parcel be moved to a location elsewhere on the property outside of the MDS arc, or the barn be removed from the property or rezoned to prohibit the keeping of livestock.

The applicant should be aware that any development proposed within the 120 metre buffer surrounding key hydrologic features on the property will require a Natural Heritage Evaluation.

Proposal does not appear to conform to County Official Plan policies.

The severance proposal does not appear to conform to the County Official Plan. Section 2.6.3.1 of the Plan states that “under no circumstances shall severances be recommended for approval where proposed severances are contrary to this Plan and/or the respective local Official Plan.”

Proposal does not appear to conform to Township Official Plan policies.

The severance proposal does not appear to conform to the Township Official Plan. Minimum Distance Separation requirements have not been met since the severed parcel is located entirely within the MDS arc from the barn on the retained parcel. It is recommended that the severed parcel be moved to a location elsewhere on the property outside of the MDS arc, or the barn be removed from the property or rezoned to prohibit the keeping of livestock.

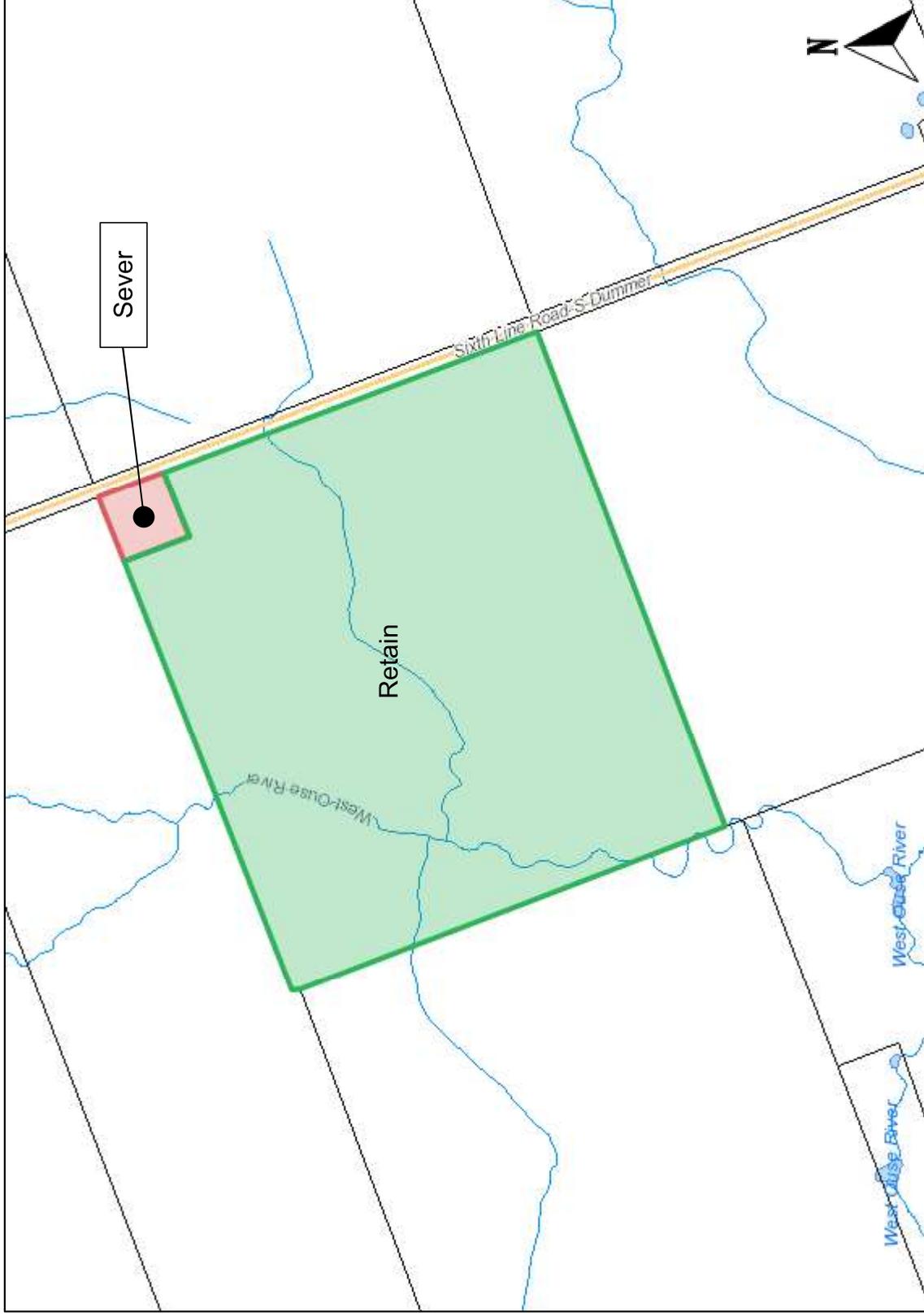
- Application requires confirmation from the Township or identified agency regarding policy conformity. **Please note that the landowner should be aware that members of the local council may not support a rezoning or minor variance to create a lot that is not in compliance with the provisions of the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

Reviewed By: Keziah Holden

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.

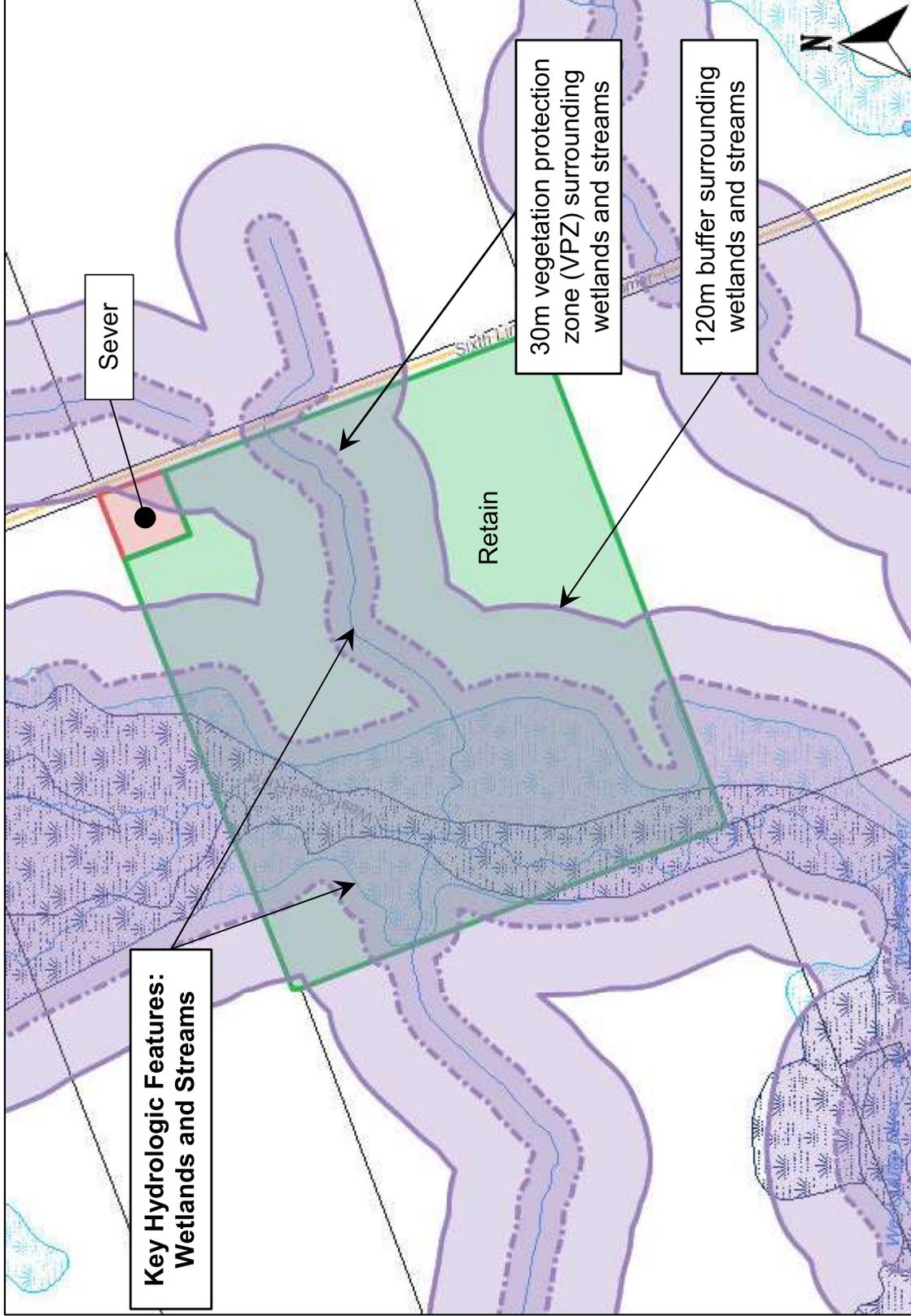
Roll # 1522-020-001-08200
Lot 4, Concession 5, Dummer Ward



Scale (metric)
1:8,000

Roll # 1522-020-001-08200

Special Features Mapping: Key Hydrologic Features

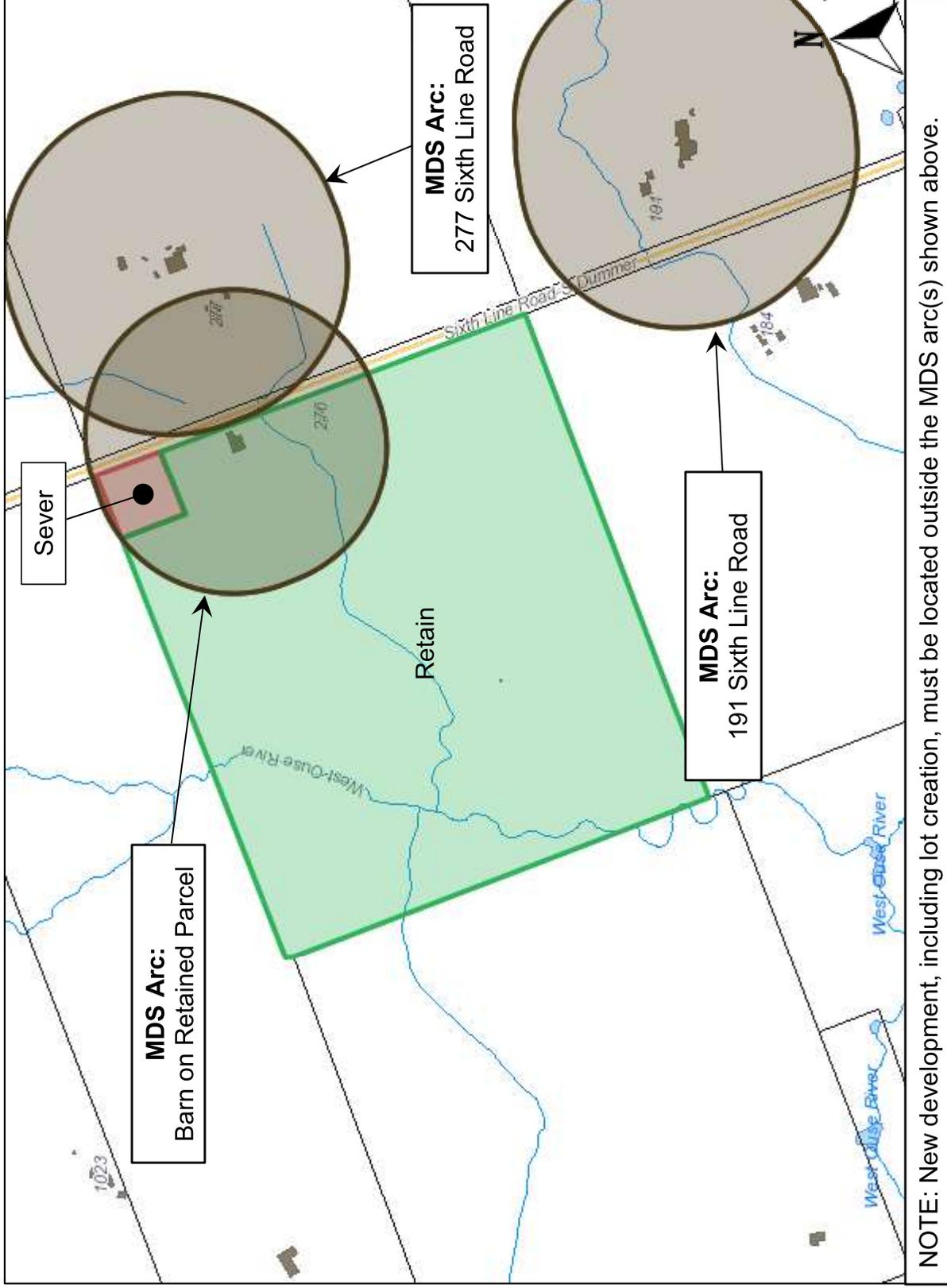


NOTE: New development, including lot creation, is not permitted across streams, within wetland boundaries or within the 30 metre vegetation protection zone; any development proposed within the 120 metre buffer surrounding a wetland or stream will require a Natural Heritage Evaluation (NHE).

Scale (metric)
1:8,000

Roll # 1522-020-001-08200

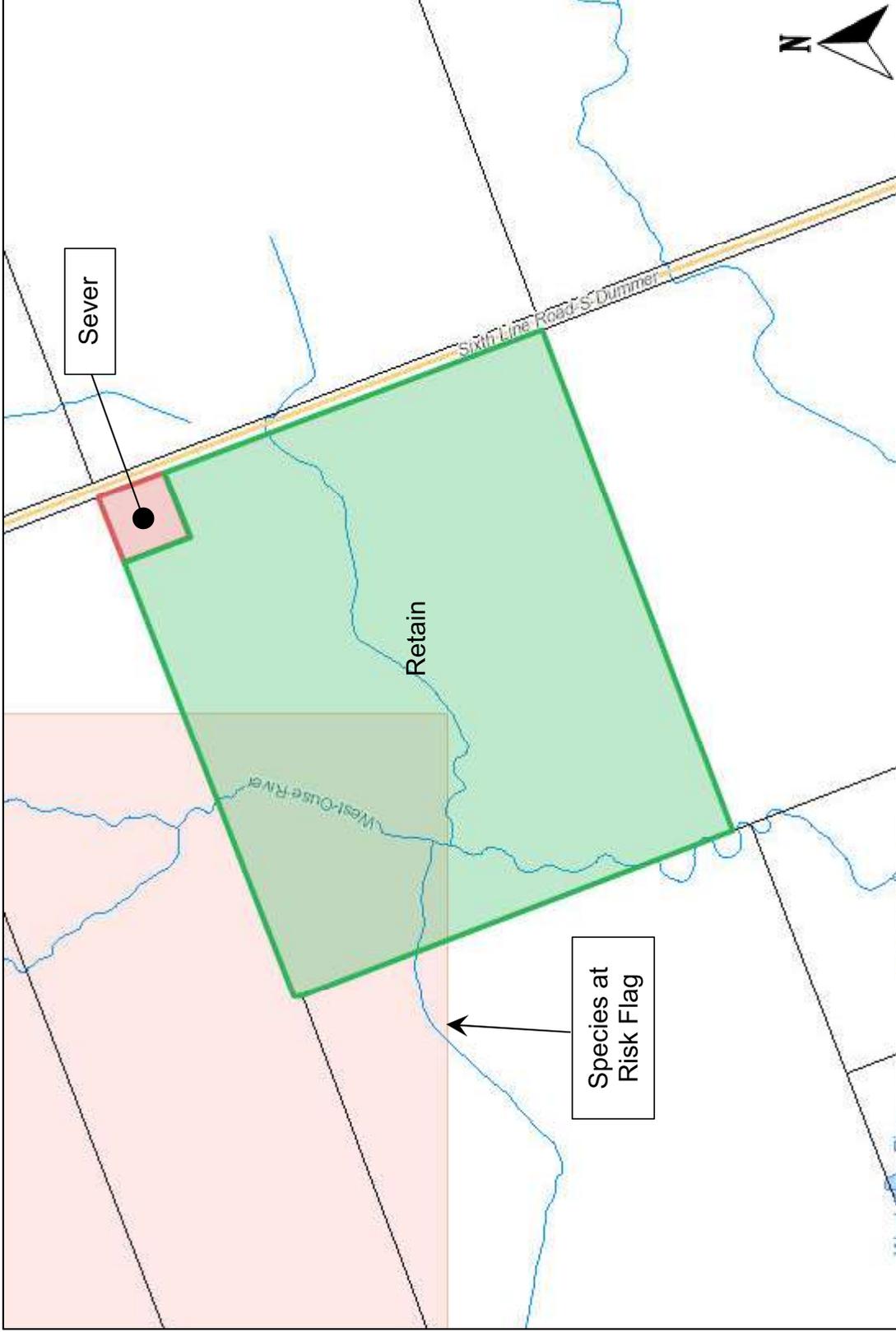
Minimum Distance Separation (MDS) Requirements



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

Scale (metric)
1:8,000

Roll # 1522-020-001-08200
Special Features Mapping – Species at Risk



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 that may require a Species at Risk (SAR) Assessment to support the severance application.

Scale (metric)
1:8,000



Appendix B
Vegetation Species List



VEGETATION
COMMUNITY

CLASSIFICATION: Swamp

COMMUNITY #: 1

LOCATION: 276 6th line

44.3967979, -
COORDINATES: 78.0810792

PROJECT NUMBER: 12777-001

DATE: June 24, 2021

PROJECT
MANAGER: myles.latter@ca
mbium-inc.com

FIELD STAFF: Tyler Jamieson

FIELD SHEET – Vegetation Species List

Common Name	Scientific Name	Family	CoW	CoC	SARA	SARO	S-Rank
Black Ash	Fraxinus nigra	Oleaceae	-3	7			S3
White Elm	Ulmus americana	Ulmaceae	-3	3			S5
Paper Birch	Betula papyrifera	Betulaceae	3	2			S5
Sensitive Fern	Onoclea sensibilis	Dryopteridaceae	-3	4			S5
Small Enchanter's Nighthshade	Circaea alpina ssp. alpina	Onegraceae	-3	6			S5
White Spruce	Picea glauca	Pinaceae	3	6			S5
Balsam Fir	Abies balsamea	Pinaceae	-3	5			S5
Poison Ivy	Toxicodendron radicans	Anacardiaceae	0	2			S5
Canada Wood Nettle	Laportea canadensis	Urticaceae	-3	6			S5
Basswood	Tilia americana	Tiliaceae	3	4			S5
Canada Enchanter's Nighthshade	Circaea canadensis ssp. canadensis	Onagraceae	3	2			S5
Red Elderberry	Sambucus racemosa ssp. pubens var. pubens	Caprifoliaceae	3	5			S5
Bittersweet Nighthshade	Solanum dulcamara	Solanaceae	0				SNA
Ostrich Fern	Matteuccia struthiopteris	Dryopteridaceae	0	5			S5
Riverbank Grape	Vitis riparia	Vitaceae	0	0			S5
Manitoba Maple	Acer negundo	Aceraceae	0	0			S5



VEGETATION
COMMUNITY
CLASSIFICATION:

Swamp

PROJECT NUMBER:

12777-001

FIELD SHEET – Vegetation Species List

COMMUNITY #: 1

DATE: June 24, 2021

COORDINATES: 44.3967979, -
78.0810792

LOCATION: 276 6th line

PROJECT: myles.latter@ca
MANAGER: mbium-inc.com

FIELD STAFF: Tyler Jamieson

VEGETATION COMMUNITY PHOTOS:





Appendix C

Species at Risk Screening



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: adjacent lands only	Known to occur in the general area	Potential significant wildlife habitat on adjacent lands		
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: adjacent lands only	Known to occur in the general area	Potential significant wildlife habitat on adjacent lands		
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).	Yes: adjacent lands only	Known to occur in the general area	Potential significant wildlife habitat on adjacent lands		
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: adjacent lands only	Known to occur in the general area	Potential significant wildlife habitat on adjacent lands		
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 understorey vegetation (1). It typically creates nests on tree branches 2-12 m in height (2).	Yes: adjacent lands only	Known to occur in the general area	Potential significant wildlife habitat on adjacent lands		
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).	Yes: adjacent lands only	Known to occur in the general area	Potential significant wildlife habitat on adjacent lands		
Grasshopper Sparrow	<i>Ammodramus saviannorum</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 flattish 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: adjacent lands only	Known to occur in the general area	Potential significant wildlife habitat on adjacent lands		



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).	Yes: adjacent lands only	Known to occur in the general area	Potential significant wildlife habitat on adjacent lands		
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).	Yes: on-site and adjacent lands	Known to occur in the general area	Potential significant wildlife habitat on adjacent lands		
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).	Yes: adjacent lands only	Known to occur in the general area	Potential significant wildlife habitat on adjacent lands		
Fish										
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 in available deeper water habitat as well (1).	No	Known to occur in the general area	No further consideration required
Herptiles								
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 (1).	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 mucky 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 (1).	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).	No	Known to occur in the general area	No further consideration required
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).	No	Known to occur in the general area	No further consideration required	
Eastern Milksnake	<i>Lampropeltis triangulum</i>	SC	NAR	S4	The Eastern Milksnake's colouration is grey or tan with reddish alternating blotches or lines 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: adjacent lands only	Known to occur in the general area	Potential significant wildlife habitat on adjacent lands	
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).	Yes: adjacent lands only	Known to occur in the general area	Potential significant wildlife habitat on adjacent lands	
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 adjacent lands	
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	



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COMMON NAME	SCIENTIFIC NAME	Federal SARA	Provincial SARO	S-RANK	SPECIES DESCRIPTION AND HABITAT REQUIREMENTS		SUITABLE HABITAT	SPECIES OBSERVATIONS	ASSESSMENT
Mottled Duskywing	<i>Erynnis marialis</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 virginienis</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).	No	Known to occur in the general area	No further consideration required	
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).	Yes: adjacent lands only	Known to occur in the general area	Potential significant wildlife habitat on adjacent lands	
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).	Yes: adjacent lands only	Known to occur in the general area	Potential significant wildlife habitat on adjacent lands	
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).	Yes: adjacent lands only	Known to occur in the general area	Potential significant wildlife habitat on adjacent lands	
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
Trees, plants, fungi and lichens								
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

1. Ministry of Environment, Conservation and parks. (2019). Species at risk in Ontario. Retrieved from <https://www.ontario.ca/page/species-risk-ontario>
2. Government of Canada. (2019). Species at risk public registry. Retrieved from <https://species-registry.canada.ca/index-en.html#/species?ranges=5&sortBy=commonName&sortDirection=asc&pageSize=10>
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).