

**Environmental Impact Study (EIS)
Proposed One (1) Lot Severance
Kawartha Hideaway Road, Lakehurst
Part of Lot 4, Concession 14 (former Harvey)
Municipality of Trent Lakes, County of Peterborough**

Prepared For:

Morgan Allen
146 Kawartha Hideaway Road
Lakehurst, Ontario
K0L 1J0

ORE File No. 24-3461

August 2025



ORE
Oakridge Environmental Ltd.
Environmental and Hydrogeological Services

August 28th, 2025

146 Kawartha Hideaway Road
Lakehurst, Ontario
K0L 1J0

Attention: **Morgan Allen**

Re: Environmental Impact Study (EIS)
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Kawartha Hideaway Road, Lakehurst
Part of Lot 4, Concession 14 (former Harvey)
Municipality of Trent Lakes, County of Peterborough
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Oakridge Environmental Ltd. (ORE) is pleased to provide this Environmental Impact Study (EIS) for the above-referenced property located in the County of Peterborough.

ORE staff completed six (6) site inspections during the spring, summer and winter seasons. The proposed severance contains woodland habitat which extends onto the lands to be retained. The Sandy Creek Provincially Significant Wetland (PSW) was identified within 120 m of the proposed severance. Although the Species at Risk (SAR) pre-screening has identified an abundance of SAR in the general vicinity of the subject property, only two (2) Special Concern (database) species were detected during the surveys (one on the lands to be retained and the other on neighbouring lands). ORE staff also identified two (2) bat species (not listed in pre-screening databases) which have a status of Endangered.

Recommended mitigation measures intended to prevent the proposed single residential development from imposing on key natural heritage features are included in this report. It is expected the development can proceed, provided those mitigation recommendations are implemented.

Yours truly,
Oakridge Environmental Ltd.



Rob West, HBSc.
Senior Ecologist

Table of Contents

Page No.

1.0	Introduction	1
1.1	General	1
1.2	Site Description, Location and Access	1
1.3	Proposed Development	1
2.0	Policy Framework	2
2.1	Provincial Planning Statement	2
2.2	County of Peterborough	2
2.3	Municipality of Trent Lakes	3
3.0	Scope of Work	3
4.0	Physical Setting	3
4.1	Topography and Drainage	3
4.2	Geological Setting	4
5.0	Background Data	5
5.1	Natural Heritage Information Centre (NHIC)	5
5.2	Ontario Breeding Bird Atlas (OBBA)	6
5.3	eBird	7
5.4	iNaturalist	8
5.5	Ontario Reptile & Amphibian Atlas (ORAA)	9
5.6	Fish ON-Line	10
6.0	Inspection Methodologies	10
6.1	Vegetation	10
6.2	Avifauna Surveys	11
6.3	Mammals	11
6.4	Herptiles	11
6.5	Significant Wildlife Habitat (SWH)	12
7.0	Site Inspection Data	12
7.1	General	12
7.2	Ecological Land Classification (ELC)	15
7.3	Fauna	18
	7.3.1 Avifauna	18
	7.3.2 Herptiles	19
	7.3.3 Mammals	19
8.0	Significant Wildlife Habitat Assessment (SWH)	21
9.0	SAR Pre-screen Assessment	24
9.1	General	24
9.2	NHIC Species	25
9.3	Ontario Breeding Bird Atlas (OBBA)	27
9.4	eBird	29
9.5	iNaturalist	29
9.6	Identified SAR/SAR Habitat	31
10.0	Conclusions	32
11.0	Recommendations	34

List of Figures

Figure 1	General Location
Figure 2	Topography and Drainage
Figure 3	Surficial Geology
Figure 4	Vegetation
Figure 5	Site Photos
Figure 6	Constraints

List of Appendices

Appendix A	Proponent's Concept Plan
Appendix B	Excerpt from the 2024 Provincial Policy Statement (PPS)
Appendix C	Copy of the County of Peterborough PSR
Appendix D	Species Descriptions
Appendix E	NHIC Database
Appendix F	OBBA Database
Appendix G	eBird Database
Appendix H	iNaturalist Database
Appendix I	ORAA Database
Appendix J	Fish On-line Database
Appendix K	Amphibian Call Survey Summary Table
Appendix L	Species List
Appendix M	Bat Summary Data
Appendix N	Significant Wildlife Habitat (SWH)
Appendix O	Light-Duty Silt Fence Schematic

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Part of Lot 4, Concession 14 (former Harvey)
Municipality of Trent Lakes, County of Peterborough

1.0 Introduction

1.1 General

Oakridge Environmental Ltd. is pleased to present this Environmental Impact Study (EIS) in support of an application for a one (1) lot severance within the Municipality of Trent Lakes.

The property owner is proposing a single lot severance for the purpose of single residential development. The proposed severance is located within 120 m of hydrologic features. As a result, an EIS is required to support the consent application.

The purpose of the study is to characterize the site conditions on the subject site and adjacent lands, and to demonstrate that the proposed development can be sustainably accommodated without resulting in unacceptable impacts to any sensitive hydrologic or natural heritage features. The study includes a review of the severance parcel and the 120 m adjacent lands. The 120 m adjacent lands is typically applied to a development as this is considered the Area of Influence (AOI).

The following sections outline our data sources, methodologies, findings and recommendations.

1.2 Site Description, Location and Access

The subject site is located on Kawartha Hideaway Road, within Part Lot 4, Concession 14 (former Harvey), Municipality of Trent Lakes, County of Peterborough (Figures 1 & 2). The total property consists of approximately 34.0 ha (84.2 Acres). The site can be accessed directly off Kawartha Hideaway Road, north of the Sandy Creek bridge.

1.3 Proposed Development

A single lot severance is being proposed for the purpose of a single residential development. The proposed lot will be located in the northeast corner of the subject property, fronting onto the west side of Kawartha Hideaway Road. The proposed lot will consist of approximately 0.99 ha (2.5 acres).

A development concept plan provided by the proponent includes a proposed residence, driveway layout, septic area and detached garage is presented in Appendix A.

2.0 Policy Framework

2.1 Provincial Planning Statement

The 2024 Provincial Planning Statement (PPS) is a streamlined province-wide Land Use Planning policy framework that provides policy direction on matters of provincial interest related to land use planning and development. The PPS stresses the need for appropriate development while protecting resources of provincial interest, public health and safety, and the quality of Natural Heritage Features.

Section 4.1 (Natural Heritage) has been reviewed with specific regard to the applicability of the Policy to the subject site. In addition, ORE has reviewed and utilized the methodologies outlined in the Ministry of Natural Resources and Forestry's (MNR's) Natural Heritage Reference Manual for Natural Heritage Policies of the Provincial Policy Statement (2005).

The PPS lists a number of features that must be addressed, including but not limited to the following:

- Significant Woodlands;
- Significant Wetlands;
- Significant Valleylands;
- Significant Wildlife Habitat (SWH);
- Significant Fisheries Habitat, and
- Species at Risk.

The MNR's assessment requirements under the "*Significant Wildlife Habitat Criteria Schedules For Ecoregion 6E*" is applicable to Planning Applications. ORE staff reviewed the site's vegetation and formed a candidate SWH list which was further refined, based on our knowledge of the site. The SWH assessment focussed on the type of vegetation to be impacted by the development, rather than all of the ELC types observed on the subject property.

Similarly, for any of the remaining Natural Heritage Features listed above that were identified on the property, these have been researched and discussed as per the PPS requirements.

An excerpt from the PPS is found in Appendix B.

2.2 County of Peterborough

A Preliminary Severance Review (PSR) was prepared by the County of Peterborough on May 1st, 2025. The PSR states the subject site contains the Sandy Creek Provincially

Significant Wetland - referred to as the PSW herein. Given the presence of this feature, a study is required to address potential impacts associated with the proposed development to ensure those are sustainably mitigated.

Our EIS has been prepared to address the County requirements. A copy of the County's Preliminary Severance Review (PSR) is included in Appendix C, including the requirements for an environmental study.

2.3 Municipality of Trent Lakes

It is anticipated the proponent's application will be circulated to the Municipality of Trent Lakes for the purpose of obtaining Planning approvals. The Municipality may rely on the County and its peer review process to ascertain whether the natural heritage objectives have been adequately addressed in this EIS.

3.0 Scope of Work

In completing this EIS, the following tasks were completed:

- Relevant background information regarding the site (air photos, topographic mapping, etc.) was compiled and reviewed. A high level screening for Species at Risk was completed.
- A total of six (6) inspections were completed. Some of the inspections were completed during the spring breeding bird period. Evening inspections for amphibians, bats (detector installed) and nightjars were also conducted. A biological inventory of visible flora and fauna of the property was completed. Basic vegetation communities were identified, where possible.

Any significant environmental features, important wildlife species or habitat were identified and their positions/boundaries were determined utilizing a GPS.

- All data were interpreted and this report was prepared.

4.0 Physical Setting

4.1 Topography and Drainage

As illustrated by Figure 2, the subject property occurs on a gentle, southeast-facing slope overlooking the northern part of Buckhorn Lake. Most of property's southern

boundary is lakeshore, along Buckhorn Lake and/or Sandy Creek, which discharges to the lake immediately to the east. The proposed lot is well removed from the lakeshore.

Total topographic relief on the property is approximately 13 m (as measured from the highest elevation in the northwest to the lake level). In contrast, the proposed lot exhibits approximately 2 m of relief.

The published mapping suggests that roughly the eastern two-thirds of the subject property is covered by wetland, all being part of the Sandy Creek Provincially Significant Wetland. The topography of the wetland is somewhat curious, with parts of the wetland occurring at a higher elevation than the dry, western part of the property and possibly 8 m above the lake. Despite this, the published mapping suggests that the proposed lot is entirely within the wetland. However, recent work completed by ORE staff to re-delineate portions of the wetland have resulted in significant modifications to the published data, especially in the vicinity of the proposed severance lot. These modifications have been accepted by the Province.

A number of small, unevaluated pocket wetlands also occur to the north, west and south of the subject property. One of those follows the southwestern boundary of the property and appears to be hydraulically connected to the larger Provincially Significant Wetland at the lakeshore. Other than Sandy Creek, there are no channelized watercourse features situated near the site.

The presence of the nearby wetland and creek features suggests that the proposed lot could exhibit a shallow water table condition.

4.2 Geological Setting

The geology of the subject property and surrounding area is fairly simple. As illustrated by Figure 3, most of the subject property is underlain by a stony, carbonate-rich silt and sand till. This till is part of the Dummer Complex.

Dummer Complex sediments have a sandy matrix supporting a coarse stony component. The coarse component is typically composed of large and angular (broken) blocks of Paleozoic bedrock limestone. The stone composition primarily reflects the underlying bedrock lithology, although can contain some granitic materials. The Dummer Complex is composed of scattered, pitted hummocks of blocky, angular debris extending as a broad belt from Lake Simcoe to northeast of Kingston, traditionally regarded as an “end moraine”. The northern margin generally follows the Precambrian - Paleozoic bedrock contact. The somewhat loose density of this till can locally enhance permeability. The proposed severance lot is entirely underlain by the Dummer Complex till, despite the published mapping (Figure 2) indicating the presence of wetlands.

Figure 3 also indicates that there are several areas of stone-poor till mapped in the vicinity of the site. These are occurrences of the Newmarket Till, which is extensive south of the site where it is commonly drumlinized. The Newmarket Till is widely recognized as a regional aquitard.

While both tills have similar compositions, the Newmarket Till is more commonly a very dense and low-permeability substrate in comparison to till of the Dummer Complex. However, the upper part of the Newmarket Till can exhibit enhanced permeability due to weathering and fissuring.

North of the subject property, deposits of stratified (layered) glaciofluvial sand and gravel occur, in association with pockets of lacustrine silt and clay (with minor fine sand) occur, representing the remnants of ancient glacial inundation. While these deposits are not mapped within the site, it is possible that small pockets could be present from place to place.

Figure 3 also indicates that fairly extensive organic deposits occur, primarily along the valley of Sandy Creek, extending into the eastern part of the subject site. These deposits are interpreted as overlying the till substrate and are typically associated with wetlands or poorly-drained areas where organic matter accumulates. Alternatively, some of these deposits could be organic-rich alluvium, if occurring along a waterway.

The thickness of the soil cover cannot be determined from the published mapping, although the underlying limestone bedrock can be quite shallow in the area. From perusal of the Ministry of the Environment, Conservation and Parks (MECP) well record database, we note that the log of nearby well No. 5105275 indicates that the till has a thickness of approximately 5.8 m, overlying limestone. The static water level measured at the time of completion was 1.2 m. The logs of other recorded wells in the vicinity (e.g., No. 5105271) indicate similar conditions. At well No. 5105275, no organic soils were noted by the driller, whereas a thin organic layer was encountered above the till at No. 5105271, possibly indicating that the surficial organic layer is not continuous.

5.0 Background Data

5.1 Natural Heritage Information Centre (NHIC)

The NHIC provides an online database managed by the Ministry of Natural Resources and Forestry (MNR). Within the database, Ontario has been divided into a grid consisting of 1 km² areas or regional squares, each given a unique identifier. The squares can be searched for species of conservation concern, plant communities, wildlife concentration areas and natural areas. This search includes a 120 m radius of adjacent lands around the property.

The search area falls within four (4) of the 1 km² squares: 17QK0430, 17QK00431, 17QK0530, and 17QK0531.

The query indicates that ten (10) Species at Risk (SAR) have been recorded in the area:

<u>Common Name</u>	<u>Scientific Name</u>	<u>SAR Status</u>
Blanding's Turtle	<i>Emydoidea blandingii</i>	Threatened
Common Nighthawk	<i>Chordeiles minor</i>	Special Concern
Eastern Meadowlark	<i>Sturnella magna</i>	Threatened
Eastern Milksnake	<i>Lampropeltis triangulum</i>	NAR ^{1 2}
Eastern Wood-Pewee	<i>Contopus virens</i>	Special Concern
Least Bittern	<i>Botaurus exilis</i>	Threatened
Midland Painted Turtle	<i>Chrysemys picta marginata</i>	Special Concern ²
Snapping Turtle	<i>Chelydra serpentina</i>	Special Concern
Wood Thrush	<i>Hylocichla mistelina</i>	Special Concern ³
RESTRICTED SPECIES	RESTRICTED SPECIES	RESTRICTED

1 Not at Risk (NAR) under Species at Risk Ontario (SARO).

2 Listed as Special Concern by the Committee of Endangered Wildlife in Canada (COSEWIC) and the federal Species at Risk Act Registry (SARA).

3 Listed as Threatened by the Committee of Endangered Wildlife in Canada (COSEWIC) and the federal Species at Risk Act Registry (SARA).

ORE staff contacted the NHIC to determine the identity of the Restricted Species. Given that this is a data-sensitive species, the species will not be named in this report to conceal its identity. However, the species has been considered in our study and provisions are included in this EIS to protect it from potential impacts.

Brief descriptions of the SAR species above and their preferred habitats are included in Appendix D. Our site inspections included targeted searches for potential SAR habitat of these species. An excerpt from the NHIC's website, illustrating the location of the squares relative to the 120 m search area around the subject site, is included in Appendix E.

5.2 Ontario Breeding Bird Atlas (OBBA)

The OBBA¹ provides up-to-date reliable information on birds within Ontario. The information includes species descriptions, habitats, range, documented sightings, etc. The subject site occurs within the 10 km² area mapped as 17tqk03, Region 16, Peterborough. The Summary Sheets for this atlas area are provided in Appendix F.

¹ managed by Bird Studies Canada.

From our review of the information, significant breeding species that could potentially be associated with habitats in the site area include the following:

<u>Common Name</u>	<u>Scientific Name</u>	<u>SARO Status</u>
Barn Swallow	<i>Hirundo rustica</i>	Special Concern
Black Tern	<i>Chlidonias niger</i>	Special Concern
Bobolink	<i>Dolichonyx oryzivorus</i>	Threatened
Canada Warbler	<i>Cardellina canadensis</i>	Special Concern
Common Nighthawk	<i>Chordeiles minor</i>	Special Concern
Eastern Meadowlark	<i>Sturnella magna</i>	Threatened
Eastern Whip-poor-will	<i>Antrostomus vociferus</i>	Threatened
Eastern Wood-Pewee	<i>Contopus virens</i>	Special Concern
Golden-winged Warbler	<i>Vermivora chrysoptera</i>	Special Concern
Grasshopper Sparrow	<i>Ammodramus savannarum</i>	Special Concern
Least Bittern	<i>Ixobrychus exilis</i>	Threatened
Red-headed Woodpecker	<i>Melanerpes erythrocephalus</i>	Endangered
Wood Thrush	<i>Hylocichla mustelina</i>	Special Concern

Brief descriptions of the SAR species above and their preferred habitats are included in Appendix D. Our site inspections included targeted searches for potential SAR habitat of these species. An excerpt from the OBBA website, illustrating the location of the 10 km² square relative to the subject site and the associated database of recorded avian species, is presented in Appendix F.

5.3 eBird

eBird is a citizen science database, whereby birding individuals can attend public areas referred to as “hotspots” and list species of bird they detect each time they visit the hotspot location. According to the eBird Geographic Information System (GIS) database, the nearest hotspots are the Buckhorn Lake - Sandy Creek (L4727815) site, located approximately 900 m northeast of the property, and the Buckhorn Lake - Kawartha Hideaway (L4082322) site, located approximately 1 km south of the property. A total of eighty-five (85) species were recorded at these hotspots (Appendix G). Of the 85, three (3) are SAR, as listed below:

<u>Common Name</u>	<u>Scientific Name</u>	<u>SARO Status</u>
Barn Swallow	<i>Hirundo rustica</i>	Special Concern
Canada Warbler	<i>Cardellina canadensis</i>	Special Concern
Common Nighthawk	<i>Chordeiles minor</i>	Special Concern

Brief descriptions of the SAR species above and their preferred habitats are included in

Appendix D. Our site inspections included targeted searches for potential SAR habitat of these species. An excerpt from the eBird website, displaying the species observed and recorded within the nearest hotspot to the subject site, is also provided in Appendix G.

5.4 iNaturalist

The iNaturalist database provides a geographical site map which contains individual species occurrences. The NHIC and *Species at Risk in Canada* projects on the iNaturalist database are specific to those species tracked by the two projects. These include SAR in the Species at Risk Ontario website and also provincially rare species that the NHIC tracks in their records. The occurrence data include the professional/surveyors name, confirmation identification by other professionals, occurrence photos, and the date the species was observed (Appendix H). The search extent is an approximate 2 km radius from the approximate property boundary.

The iNaturalist database was reviewed to determine if any SAR sightings of research grade have occurred either on, or within the vicinity of the subject site. Twelve (12) SAR species were reported either directly on or in the general vicinity of the subject site. The SAR occurrences have been compiled below:

<u>Common Name</u>	<u>Scientific Names</u>	<u>SAR Status</u>
American Bumble Bee	<i>Bombus pensylvanicus</i>	Special Concern
Blanding's Turtle	<i>Emydoidea blandingii</i>	Threatened
Butternut	<i>Juglans cinerea</i>	Endangered
Eastern Hog-nosed Snake	<i>Heterodon platirhinos</i>	Threatened
Eastern Meadowlark	<i>Sturnella magna</i>	Threatened
Eastern Milksnake	<i>Lampropeltis triangulum</i>	NAR ^{1 2}
Evening Grosbeak	<i>Coccothraustes vespertinus</i>	Special Concern
Golden-winged Warbler	<i>Vermivora chrysoptera</i>	Special Concern
Monarch	<i>Danaus plexippus</i>	Special Concern
Painted Turtle	<i>Chrysemys picta</i>	Special Concern ²
Snapping Turtle	<i>Chelydra serpentina</i>	Special Concern
Wood Thrush	<i>Hylocichia mustelina</i>	Special Concern ³

1 Not at Risk (NAR) under Species at Risk Ontario (SARO).

2 Listed as Special Concern by the Committee of Endangered Wildlife in Canada (COSEWIC) and the federal Species at Risk Act Registry (SARA).

3 Listed as Threatened by the Committee of Endangered Wildlife in Canada (COSEWIC) and the federal Species at Risk Act Registry (SARA).

Rare species were reported as follows:

<u>Common Name</u>	<u>Scientific Name</u>	<u>S-Rank</u>
Scudder's Bush Katydid	<i>Scudderia spp.</i>	S3

Brief descriptions of the SAR species above and their preferred habitats are included in Appendix D. Our site inspections included targeted searches for potential SAR habitat of these species. An excerpt from the iNaturalist website, illustrating the location of the data relative to the approximate 2 km radius from the subject site, is also included in Appendix H.

5.5 Ontario Reptile & Amphibian Atlas (ORAA)

The Ontario Reptile & Amphibian Atlas provides broad information on turtles, snakes, frogs, salamanders, and lizards within Ontario. The information includes earliest and latest observations dates within the square. The Atlas ceased collecting data for the project in 2019. The subject site occurs within the 10 km² area mapped as 17QK03.

SAR species within the square are listed below:

<u>Common Name</u>	<u>Scientific Names</u>	<u>SARO Status</u>
Blanding's Turtle	<i>Emydoidea blandingii</i>	Threatened
Common Five-lined Skink ¹	<i>Plestiodon fasciatus pop. 2</i>	Special Concern
Eastern Hog-nosed Snake	<i>Heterodon platirhinos</i>	Threatened
Eastern Milksnake	<i>Lampropeltis triangulum</i>	NAR ^{2 3}
Midland Painted Turtle	<i>Chrysemys picta marginata</i>	NAR ^{2 3}
Northern Map Turtle	<i>Graptemys geographica</i>	Special Concern
Snapping Turtle	<i>Chelydra serpentina</i>	Special Concern
Western Chorus Frog ⁴	<i>Pseudacris maculata pop. 1</i>	NAR ^{2 5}

1 Great Lakes/St. Lawrence/Southern Shield population.

2 Not at Risk (NAR).

3 Listed as Special Concern by the Committee of Endangered Wildlife in Canada (COSEWIC) and the federal Species at Risk Act Registry (SARA).

4 Great Lakes - St. Lawrence - Canadian Shield population.

5 Listed as Threatened by the Committee of Endangered Wildlife in Canada (COSEWIC) and the federal Species at Risk Act Registry (SARA).

Brief descriptions of the SAR species (above) and their preferred habitats are included in Appendix D. Our site inspections included targeted searches for potential SAR habitat of these species. An excerpt from the Ontario Reptile & Amphibian Atlas website, illustrating the location of the squares relative to the 120 m search area around the subject site, is included in Appendix I.

5.6 Fish ON-Line

The Fish ON-Line database was reviewed. The nearest data location is Sandy Creek (17-7054-49304), located south of the site. Fish in the observed list include the following species:

Pumpkinseed (*Lepomis gibbosus*)
Rock Bass (*Ambloplites rupestris*)
Smallmouth Bass (*Micropterus dolomieu*)
Yellow Perch (*Perca flavescens*)

Considering there is no water body directly adjacent to the proposed severance, these species would most likely be present off-shore of the lands to be retained associated with Buckhorn Lake. The distance from the proposed severance to the lake is 300 m or more.

An excerpt from the Fish ON-Line website, illustrating the location of the water body or watercourse and the species of fish recorded within, is included in Appendix J.

6.0 Inspection Methodologies

6.1 Vegetation

The site has been characterized by its various vegetation communities using the methodologies included in the *Ecological Land Classification (ELC) - First Approximation and Its Applications* (1998). The 1998 guide is used by Ecologists to standardize the classification of different vegetation community types across Ontario. The classification system enables an ecologist to identify vegetation communities based on the species present, soil materials and moisture regimes.

There have been a number of updates to the ELC scheme to further refine the classification of Ecosites throughout Ontario. As a result, the 2008 *Draft ELC Guide* provides a further breakdown of the 1998 guide and includes many new communities to index from. The 2008 guide also provides a cross-reference to the 1998 guide communities. This report uses a combination of the 1998 ELC communities (which are considered the primary vegetation communities) and the 2008 ELC communities to supplement the vegetation community lists, when the 1998 ELC does not accurately define the habitat.

Prior to conducting the site inspections, aerial photography of the subject site was analysed to roughly delineate communities based on recognizable vegetation differences. Each identified vegetation community was subsequently inspected during the growing season. Dominant vegetation types were recorded and boundaries of the

various communities mapped using a GPS (when the boundary of the ELC community is not recognizable on the air photo).

In addition to identifying and mapping the ELC communities, ORE staff assessed each vegetation community from the perspective of whether they are hydrologically sensitive, and/or whether they may represent SAR habitat.

6.2 Avifauna Surveys

ORE staff attended the site within the spring breeding bird period and endeavoured to detect all available avian species by sight, calls and notes, within and proximal to the site. Bird calling devices and “pishing and squeaking” were used to attract bird species from within the forest communities.

All species overheard or observed during the surveys were recorded.

If a SAR bird was detected, the habitat was identified in relation to the proposed severance location and it was determined whether the proposed development represents a potential risk to that avian SAR and/or its habitat.

6.3 Mammals

Mammals were detected utilizing the methodologies outlined in the MNRF’s March 1998 - Wildlife Monitoring Programs and Inventory Techniques for Ontario. Mammals were generally identified by either direct observation or via their tracks and/or scat droppings².

No live traps were set/installed at the site as a permit is necessary to trap mammals. This was deemed unnecessary as there are no known SAR mammals within the area. Tracking and other signs to detect mammals were sufficient for the purpose of this study.

6.4 Herptiles

ORE staff conducted inspections to detect herptiles. If present, the habitat was identified in relation to the proposed severance location and whether the proposed lot represents a potential risk to the herptile(s). Two (2) evening inspections were conducted during the spring and summer season. ORE staff overturned downed woody

²

Tracking and the Art of Seeing, 2nd Edition: How to Read Animal Tracks and Signs, Paul Rezendes, Harper Collins Publisher. March 24th, 1999.

debris (etc.) to detect basking herptiles in the morning period, when they are most likely to still be under cover/shelter. A summarized table of the MMP survey results is presented in Appendix K.

Amphibian surveys were also conducted according to the Marsh Monitoring Program (MMP) criteria, as outlined by Bird Studies Canada (BSC) during the two (2) evening inspections³.

6.5 Significant Wildlife Habitat (SWH)

SWH has been evaluated utilizing the *Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E*, published by the MNR (January 2015).

Potential SWH were evaluated according to the criteria outlined in the schedules for candidate SWH. The SWH tables were consulted to assess whether the subject property in the area of the proposed severance possesses Seasonal Concentration Areas of Animals, Rare Vegetation Communities, Specialized Habitats of Wildlife considered SWH, and Animal Movement Corridors.

7.0 Site Inspection Data

7.1 General

Site inspections were conducted on the following dates:

³ Although not required in this instance, a third inspection would have been completed if the site possessed amphibian species calls that would potentially categorize the wetland habitat as Significant Wildlife Habitat (SWH) during the peak amphibian breeding period, meeting the SWH schedule requirements/criteria discussed in the following section.

<u>Date of Inspection</u>	<u>Time of Inspection</u>	<u>Temp. °C</u>	<u>Beaufort (Wind) Index</u>	<u>Descriptions</u>
August 22 nd , 2024	6 AM - 12 PM	16	0 - Calm	Mostly sunny with 25% cloud cover. Single site visit to review the proposed severance with the property owner, Ecological Land Classification - vegetation surveys, topography and setting surveys. Verify mapped drainage features and any other hydrological features. SAR or SAR habitat diurnal period detection based on Pre-screen.
December 18 th , 2024	9 AM - 10:30 AM	-2	1 - Light Air	Cloudy. 100% cloud cover and foggy. ORE staff conducted the winter period inspection to better review conditions related to the shallow groundwater/high water table conditions on-site. In recent years the freshet/melting period has become a series of events rather than a thaw in the early spring season. Melting and discharge conditions tend to occur after the first major snowfall in December. The information was used to identify potential sensitive groundwater conditions and map those conditions accordingly with respect to the nearby PSW. Tracks and scat of winter mammals were also collected to identify potential wintering SWH. Similarly, there was the potential for winter raptor nesting to occur on-site during the winter period, which is also an SWH.

May 28 th , 2025	6 AM - 10:30 AM	18	2 - Light Breeze	Mostly cloudy with 20% cloud cover. Detect early flowering flora and breeding fauna within the proposed severance and 120 m adjacent lands. Review the wetland conditions during the peak runoff period to track flows from intermittent water features and determine how runoff and possibly shallow water table conditions interact on and around the proposed severance. The date of the surveys also correspond to the early breeding bird period.
June 10 th , 2025	4:30 AM - 9:30 AM	19	0 - Calm	40% cloud cover, no rain/dry conditions. Calm morning and easy to distinguish calls of birds during breeding bird period inspection. Review the conditions within the PSW to obtain flora and fauna list. Review site in the context of pre-screen SAR to detect individual species and primary habitat conditions. Review the site in the context of SWH. Bat detector installation.
June 11 th , 2025	8:30 PM - 10 PM	19	1 - Light Air	First of the two amphibian surveys. Weather was clear with around 60% cloud coverage and no rain. ORE staff detected only one (1) species of amphibian (Gray Tree Frog) which does not constitute an SWH according to the 6E schedules. The inspection date also corresponds to the peak breeding/full moon phase for avian species and bats.

July 10 th , 2025	8:30 PM - 10:45 PM	23	2 - Light Breeze	Second and final amphibian survey. Higher humidity and temperatures were noted by ORE staff, likely influenced by rain occurring around 5 hours prior to the survey (3:00 PM). Weather during the survey itself was clear with around 40% cloud cover and no rain events. No frogs were heard calling throughout the duration of the surveys, however, Wood Frog was visually observed by ORE staff. The evening survey was also conducted during the full moon phase which is considered the peak period to detect nightjar species and other nocturnal species that could potentially have a status in Ontario.
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The above inspections were completed to identify any/all species on the property. The resulting species list was examined to identify any sensitive and/or rare species (S1, S2, S3), and whether they have a SARO status of Special Concern, Threatened, or Endangered. The vegetation types were also reviewed in the context of whether they are classified by the NHIC as provincially rare ecotypes.

ORE staff attended the site on June 26th, 2025 to retrieve the bat detector installed within the proposed severance. The June 26th date was not a formal site inspection, as it was only completed to retrieve the instrumentation.

7.2 Ecological Land Classification (ELC)

ELC inspections were focussed on the proposed severance area and the immediately adjacent lands, as per the recommendations of the MNR's Natural Heritage Reference Manual. The identified ELC communities are illustrated on Figure 4, with photos of the communities/site conditions provided in Figure 5. None of the ELC communities listed below are considered to be provincially rare by the NHIC.

A list of species identified within these communities is provided in Appendix L.

Based on our site inspections, the following vegetation communities have been identified on the site, as per the *1998 and /or the draft 2008 Ecological Land*

Classification (ELC) for Southern Ontario:

Upland Communities

1. Dry – Fresh Oak Deciduous Forest (FODM)

The ELC describes a Dry - Fresh Oak Deciduous Forest as being Oak (*Quercus spp.*) dominant with hardwood species such as Sugar Maple (*Acer saccharum*), White Ash (*Fraxinus americana*), Ironwood (*Ostrya virginiana*), and American Basswood (*Tilia americana*). The ecosite will likely possess sands and coarse loams with silt and clay components with moderate drainage.

The FODM habitat refers to the wooded area where the severance is proposed to occur and the surrounding upland wooded areas that comprise the northern two-thirds of the lands to be retained. The area contains a mixture of understorey younger and older mature deciduous tree species with minor occurrences of White Pine (*Pinus strobus*) interspersed throughout.

The oak-maple-basswood deciduous dominated stands within the upland areas of the woodland transitions to a more Eastern Hemlock/Eastern White Cedar dominated edge within the PSW area, discussed in the following section. The conifer dominated upland edge areas then transition to a more Ash Swamp type wetland habitat within the core areas of the PSW mapped feature, which are also discussed in more detail within the wetland communities below.

The wooded areas on the proposed severance and the lands to be retained (within 120 m of the severance) are highly naturalized as this woodland type possesses rich-wood subcanopy and groundcover species that were detected in small openings where the sunlight penetrates the forest floor. ORE staff also detected native fern species which tend to be associated with shade conditions and not wetland conditions. The fern base turns to a more wetland type habitat within the swampy conditions associated with the PSW habitats which are discussed below.

The proposed severance will occur entirely within this upland wooded habitat in the northeast corner of the property and will avoid the PSW - wooded swamp mapped area by ORE staff that are proximal to the proposed development.

One (1) Special Concern Species at Risk (SAR) bird was detected within this community type on adjacent lands to the north and northeast of the subject property - Eastern Wood-Pewee. The Eastern Wood-Pewee was not detected directly within the proposed severance lot nor was its nest identified within the proposed severance.

An acoustic bat detector was deployed within the proposed severance. Two (2)

Endangered Bat species were detected while the unit was stationed within this woodland community. Further discussion regarding the results of the bat detector survey is provided in a following section.

Wetland and Aquatic Communities

2. White Pine – Hemlock Mineral Coniferous Swamp (SWCM2)

The ELC describes this ecosite as having greater than 75% coniferous species. Ground vegetation will typically be fern-rich and contain a number of other hydrophytic species. This ecosite typically occurs in an area where microtopography is complex and subject to seasonal flooding, where the soil is aerated by late summer.

This type of wooded swamp is PSW habitat that occurs directly west of the proposed severance parcel. The conifer swamp habitat is dominated by White Pine and Eastern Hemlock (*Tsuga canadensis*) and contains minor amounts of Red Maple (*Acer rubrum*) that are interspersed within the conifers that can be aerated for the latter half of the growing season. The conifer swamp occurs as a rim around the SWMO4 community discussed below.

This wooded swamp community would convey flood waters during the freshet period to Buckhorn Lake between April and May each year. ORE anticipates the water levels lower significantly throughout the remainder of the year within the PSW and are predominantly dry/aerated with pockets of wooded swamp, other than when pooling occurs during precipitation events. It is within these low-lying pockets that there is sufficient runoff and localized shallow groundwater to support the wooded swamp conditions.

One (1) Special Concern Species at Risk (SAR) bird was detected within this community - Wood Thrush. Although the Wood Thrush was overheard on the subject property, it was not observed to be nesting within the proposed severance. It was observed within the wooded swamp/PSW area and is presumed to be nesting in this area based on it being detected twice during the surveys in this habitat on the retained lands.

ORE staff note that the provincial mapping of the PSW was incorrect. ORE staff mapped the wetland boundary of the PSW and forwarded the new delineation/linework spatial data to the MNRF. The boundaries have been accepted by the MNRF and the ORE-revised wetland boundary has been updated to the Land Information Ontario (LIO) website.

3. **Conifer - Hardwood Organic Mixed Swamp (SWMO4)**

The ELC describes this ecosite as having greater than 25% tree cover with both deciduous and coniferous species in greater than 25% abundance. Vegetation will typically be fern-rich, with a number of other hydrophytic species. This ecosite is often co-dominated by Eastern White Cedar (*Thuja occidentalis*) and a hardwood species. A 40 cm thick organic layer (or greater) must be observed and defined as Fibric (Of), Mesic (Om), or Humic (Oh), according to the Field Manual for Describing Soils in Ontario.

The SWMO4 community occurs within the central portions of the PSW. The SWC1 would account for portions of the wooded swamp where it is the lowest point (elevation-wise) within the PSW (i.e., there is a physical drop in elevation due to the bedrock topography of the proposed severance and PSW). The low relief bedrock channel features provide the setting for these narrow conifer swamp-like corridors. The habitat on-site contains Eastern White Cedar, Balsam Fir (*Abies balsamea*) and some clusters of Silver Maple (*Acer saccharinum*) and Red Maple mixed with the conifers.

7.3 **Fauna**

All faunal species identified during the site inspections were recorded. The list of faunal species observed at the site is presented in Appendix L. Relevant observations of faunal activities on and adjacent to the site are briefly discussed below.

7.3.1 **Avifauna**

ORE staff completed six (6) inspections in total; four (4) diurnal and evening surveys during the breeding bird/migratory bird period, one inspection (1) was completed in the winter period and one (1) inspection was completed in the mid-summer season. The spring inspections were conducted under ideal conditions between the end of May 2025 and early July 2025, which is consistent with the peak breeding bird period in Ontario.

Although all species were detected and recorded according to their vocalizations and/or sightings, the focus was on detecting any potential Species at Risk avian and/or their habitat, either on or directly adjacent to the site.

One (1) SAR avian was identified within the lands to be retained situated west of the proposed severance during the spring season inspections - Wood Thrush. A second SAR avian was identified off-site and to the north-northeast of the proposed severance - Eastern Wood-Pewee. Both avian are relatively common mature woodland related species that have a provincial status of Special Concern.

7.3.2 Herptiles

Herptiles include amphibians, salamanders, lizards, turtles and snakes species. Diurnal searches were conducted in the habitats on-site where these species could occur.

Blanding's Turtle, Midland Painted Turtle, Snapping Turtle and Northern Map Turtle were detected during the SAR pre-screen. ORE staff assume that the majority of these turtles would be associated with Buckhorn Lake and possibly the PSW that the lands to be retained abut to the south. There was no evidence of turtle nests or dead-on-road specimens in the area of the proposed severance. No turtles were detected within the on-site PSW during the site inspections.

ORE contacted the NHIC via email regarding the restricted species occurrence in the NHIC database. Restricted species information is very sensitive, therefore, will not be shared within this document. Measures to protect the individual are documented within this EIS to ensure it is not harmed, harassed or culled as a result of the proposed development. The restricted species was not observed on-site during the surveys.

No amphibians, salamanders, lizards or snake species of significance were identified during the site inspections.

A summarized table of the two (2) MMP surveys conducted by ORE staff is presented in Appendix K.

7.3.3 Mammals

Mammals include species such as fox, coyote, white-tailed deer, racoon, skunk, bats, etc.

The ESA lists very few species of mammal within south-central Ontario as either Endangered, Threatened, or Special Concern. The majority of the mammals that have attained SAR status occur within Northern and Southwestern Ontario. Very few of those mammal species listed within SARO occur in the Peterborough region, other than certain bats and Mountain Lion (*Puma concolor*).

Mountain Lion or Puma sightings are sometimes recorded in the local newspapers. ORE staff completed a search for local sightings, and there are no records of sightings in the area.

ORE staff conducted nighttime surveys to detect any/all nocturnal species. The proposed severance contains mature woodland areas and includes ELC communities identified to be bat habitat in the Guelph Districts - as per Bats and Bat Habitats: Guidelines for Wind Power Projects.

There are some good quality snags on the proposed severance and lands to be retained, however, the majority will be maintained for any roosting bats on the much larger retained lands. The subject site contains some fractured bedrock slopes, however, these fractures would not constitute suitable bat hibernaculum habitat as they appear to penetrate only the upper metre from the surface and are for the most part soil-filled. The flatter areas on the ridge tend to be devoid of fractured bedrock openings/outcrops and possess relatively contiguous soils associated with the mature deciduous woodland habitat. The areas where a potential dwelling and private services would be constructed are within the flatter-centralized swath of the bedrock ridge that crosses the proposed severance.

SAR bats are not typically identified during the SAR database pre-screen as they require specialized equipment to verify their presence/absence. Therefore, one (1) Anabat Swift bat detector (labeled as “BD5”) was deployed at the site from June 10th to June 26th, 2025. Over the course of fifteen (15) evenings, the detector recorded a total of nine hundred seventy-seven (977) sound (.wav) files. A compiled summary of the data collected from the detector is presented in Appendix M.

The SonoBat algorithm was used to process the sound files. This program will extract and classify identifiable sound files into two categories: “probable” identifications (i.e., with a 50% confidence level) and “detected” identifications (i.e., with a 90% confidence level).

BD5 produced one hundred and sixty-seven (167) identifiable sound files. Of those, the SonoBat algorithm was able to extract one hundred thirty-nine (139) auto-identifiable sound files. The remaining twenty-eight (28) identifiable sound files were classified as indeterminate species. These may include files where multiple species have been identified or where a low or high frequency call has been detected but the call doesn't meet the 50% confidence threshold to assign a species used in SonoBat.

The results of the data review are as follows:

Bat Species	Total Sound Files attributed to Species	Probable Identifications (>50% Confidence)	Detected Identifications (>90% Confidence)
Hoary Bat (<i>Lasiurus Cinereus</i>)	32	12	20
Silver-haired Bat (<i>Lasionycteris noctivagans</i>)	28	14	14
Big Brown Bat (<i>Eptesicus fuscus</i>)	78	53	25

Eastern Small-Footed Myotis (<i>Myotis leibii</i>)	1	1	-
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Of these four (4) species, three (3) are listed as endangered under SARO (Eastern Small-Footed Myotis, Silver-Haired Bat, and Hoary Bat). The Big Brown Bat does not possess any status under SARO or COSEWIC. However, upon further review of the data, ORE staff notes that the confidence level of the Eastern Small-footed Myotis did not meet the 90% confidence level suggesting there is a high probability this species may not have been detected on-site. Consequently, only Silver-Haired Bat and Hoary Bat (SAR) are known with confidence to be utilizing the on-site woodland habitat for roosting purposes during the growing season.

Appendix M contains a more detailed account of the bat data obtained from the detector.

As for the remaining mammals, ORE staff observed/detected only common/secure species on the subject property.

8.0 Significant Wildlife Habitat Assessment (SWH)

The assessment of SWH is divided into five (5) broad categories, consisting of Seasonal Concentration Area of Animals; Rare Vegetation Communities; Specialized Habitat for Wildlife; Habitat for Species of Conservation Concern (other than Endangered or Threatened), and Animal Movement Corridors. A summary table is provided in Appendix N indicating the potential for SWH to occur based on the criteria provided by the MNRF and whether the site has suitable habitat and/or species occurrences.

The following provides a discussion of areas deemed to be confirmed SWH (based on the MNRF criteria) and as indicated in Appendix N.

The SWH in the NHIC and area of the proposed severance are summarized below:

<u>SWH</u>	<u>SWH Location</u>	<u>Confirmed Within Proposed Severance Y/N</u>
Bat Maternity Colonies	Includes the mature wooded areas on-site and surrounding connective woodland habitats in the vicinity of the subject property.	Y - Habitat is suitable, as woodland is comprised of mature deciduous and mixed tracts. Hollowed trees and trees with Pileated Woodpecker cavities were observed within the proposed severance and lands to be retained. Two (2) SAR bat species and many other bats were also detected, thereby meeting the SWH Criteria Schedules for Ecoregion 6E for Bat Maternity Colonies.
Reptile Hibernaculum (Turtles assessed separately)	Includes areas where fractured bedrock occurs at or near the surface in proximity to the proposed severance. It is possible that reptiles such as snakes could enter the severance and/or lands to be retained to access the water table at depth via the bedrock outcrops/openings.	Y - There is some fractured bedrock in the area of the proposed severance. The fracturing appears to be shallow (e.g., <1 m deep) which is unlikely to penetrate to the water table. There are many areas within the lands to be retained (near the PSW) that exhibit potential fractured bedrock hibernaculum.
Woodland Raptor Nesting Habitat	Associated with the core woodland areas and lakeside on the subject property.	N - Raptors tend to nest in the core woodland habitat overlooking a field or watercourse. The proposed severance occurs along the edge of Kawartha Hideaway Road but does not possess a large enough opening (e.g., field or watercourse - not including wooded swamps) for the nest to overlook. The better quality habitat occurs on the south side of the lands to be retained, overlooking the massive open water areas of Buckhorn Lake and the PSW. No stick nests were identified within 120 m of the proposed severance.

Amphibian Breeding Habitat (Woodland)	Predominantly occur around the edge of PSW which is located within the retained lands.	N - ORE staff detected individual calls of Gray Treefrog during one of the two site visits. The call level was a Level 1, suggesting very few individuals called during that inspection. The Amphibian data summary table is provided in Appendix K. Considering the call levels and number of amphibian species did not meet the Schedule 6E SWH criteria, the PSW adjacent to the proposed severance is not considered SWH. The PSW to the west of the proposed severance is the most proximal hydrologic feature. Any other features occur 30 m or more outside the area where the site alterations would be completed and also within the lands to be retained.
Woodland Area-Sensitive Breeding Bird Habitat	Occurs both on-site and off-site within the large tract of woodland that attracts the woodpecker, warblers and thrush species listed in this SWH type. ORE staff overheard a variety of woodland avian calling during the breeding bird inspections between May and early July.	Y - This SWH occurs throughout the subject property, including within the proposed severance. The core woodland areas occur within the lands to be retained, which is where the majority of the woodland area-sensitive birds would be nesting. The proposed severance is within the edge habitat and not the core woodland habitat where the Woodland Area Sensitive birds tend to nest.
Amphibian Movement Corridors	Associated with the PSW feature to the west of the proposed severance. Amphibians could utilize the bedrock dominated corridor during the spring to access the wooded swamp areas and Buckhorn Lake to the south.	N - the KHF's are not located within the proposed severance. This SWH will be maintained on the lands to be retained and amphibians would not be interfered with, nor restricted from moving via the PSW feature to other locations on and off the subject site.

Special Concern and Rare Wildlife Species	Associated with the woodland that covers the entire subject parcel.	Y - an assessment was completed during the spring breeding bird period during which Wood Thrush and Eastern Wood-Pewee were detected. However, the Eastern Wood-Pewee was detected off-site both times on the neighbouring lands to the north and northeast of the proposed severance. The Wood Thrush was overheard on the lands to be retained and is believed to be nesting in the wooded swamp area.
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Mitigation for SWH is provided in the 2014 Significant Wildlife Habitat Mitigation Support Tool (SWHMiST). Mitigation is provided in the following sections and has regard for the tools outlined for Ecoregion 6E.

A brief description of the SWH on and immediately adjacent to the property is provided in Appendix N.

9.0 SAR Pre-screen Assessment

9.1 General

The following sections summarize our assessment of the SAR pre-screening results, by identifying any SAR occurrences from the field inspections, and the potential for suitable habitat to exist on the proposed severance lot and adjacent lands.

9.2 NHIC Species

<u>Species at Risk</u>	<u>Preferred Habitat</u>	<u>Individual and/or Habitat Present</u>
Blanding's Turtle	Open water flooded areas, beaver flooded ponds, wetlands and watercourses.	The wooded swamps can have flooded areas in the spring season. There are no permanently flooded areas within 120 m of the proposed severance. The nearest open water feature on or abutting the subject property is Buckhorn Lake which is suitable habitat for this species. It is possible that Blanding's Turtle could migrate up through the bedrock dominated valleys in the spring to access nesting areas in open sandy areas. The woodland within the proposed severance and lands to be retained is shaded due to the canopy, therefore, it does not possess suitable nesting habitat for turtle species in general. Blanding's Turtle was not detected during the surveys.
Common Nighthawk	Rock barren and thicket communities adjacent to waterways and wetlands.	Habitat <u>not</u> present within the subject property. It was not detected during the evening surveys.
Eastern Meadowlark	Open meadow grassland.	Habitat is <u>not</u> present within the proposed severance or the lands to be retained.
Eastern Milksnake	Open meadow grassland associated with farmland.	Species not detected during the surveys nor is there suitable habitat for this species on the subject property. It is dominated by forest cover which is not favourable with respect to the warm/basking aspect of this species thermo-regulating regiment.

Eastern Wood-Pewee*	Mature deciduous/mixed woodlands.	Habitat is present on-site and the species was detected within the 120 m AOI on the neighbouring lands to the north-northeast during the breeding/migratory bird avifauna surveys.
Least Bittern	Relatively large cattail marsh or emergent species marsh areas that possess open water channels created by beavers and muskrats, or within channels that transmit flows via a creek system.	Habitat is <u>not</u> present within 120 m of the proposed severance. It is present along the south shore of the subject property associated with Buckhorn Lake. The PSW in this location is comprised of a large cattail marsh shoreline. The PSW in the vicinity of the proposed severance is a wooded swamp which is not the type of habitat this species utilizes for its life cycle.
Midland Painted Turtle	Open water wetlands and waterways, sometimes man-made flooded pond areas.	Habitat is <u>not</u> present within 120 m of the proposed severance. It is present within Buckhorn Lake and has been detected within the same bay/channel by ORE staff completing surveys on behalf of other properties that fronted onto Buckhorn Lake. The sightings are not relevant to the subject property nor the proposed development, as there is no suitable habitat for this turtle species within the proposed severance, similar to the Blanding's Turtle.
Snapping Turtle	Open water wetlands and waterways, sometimes man-made flooded pond areas.	Habitat is <u>not</u> present within 120 m of the proposed severance for the same reason Blanding's Turtle and Midland Painted Turtle do not use the dry-shaded woodland habitat.

Wood Thrush*	Secondary succession deciduous and mixed woodlands.	The habitat is present on-site and Wood Thrush was detected within the lands to be retained during the migratory/breeding avifauna surveys.
Restricted Species	Diverse habitats.	The habitat of this species may be present on the retained lands. The only reason it would be observed/detected within the proposed severance would be if it were an incidental occurrence. Protections should be afforded to protect the individual restricted species.

* Note: identified during the surveys by ORE staff.

9.3 Ontario Breeding Bird Atlas (OBBA)

<u>Species at Risk</u>	<u>Preferred Habitat</u>	<u>Individual and/or Habitat Present On-site</u>
Black Tern	Relatively large cattail marsh or emergent species marsh areas that possess open water channels created by beavers and muskrats or within channels that transmit flows via a creek system.	Habitat is <u>not</u> present within 120 m of the proposed severance. This habitat is present along the coast of Buckhorn Lake which the lands to be retained overlook on the south side of the subject property. The species was not detected during the surveys.
Bobolink	Open meadow grasslands (includes prairies and alvars) and farm lands.	Habitat is <u>not</u> present within 120 m of the proposed severance. The habitat may be present on other neighbouring properties, however, the subject property which includes the proposed severance does not possess Bobolink habitat. Bobolink was not detected during the surveys.

Canada Warbler	Coniferous dominated shoreline habitat alongside water bodies	There is suitable/marginal habitat in the general vicinity of the proposed severance as there are Hemlock and Cedar conifer-rich rims that line the PSW, however, this species was not detected during the migratory/ breeding bird avifauna surveys.
Eastern Whip-poor-will	Mature woodlands similar preference of Eastern Wood-Pewee, however, it can also be associated with plantation pine woodlands.	Habitat is present on-site in the area of the proposed development, however, it was not detected on-site during the nocturnal surveys that were conducted within the full moon phase window.
Golden-winged Warbler	Thicket type habitats such as willow thickets adjacent to marshlands and waterways.	Habitat is <u>not</u> present within 120 m of the proposed severance. There is some thicket swamp associated with the PSW, however, this is completely tree covered which is not suitable for GWW. There could be suitable habitat for this species in the area of Buckhorn Lake associated with the retained lands, however, this is a great distance from the proposed severance.
Grasshopper Sparrow	Open fields/meadows, similar to Bobolink and Eastern Meadowlark.	Habitat is <u>not</u> present on the subject property. Grasshopper Sparrow was not detected during the migratory/breeding bird avifauna surveys.

Red-headed Woodpecker	Mature oak-maple secondary succession deciduous woodlands that possess very little understorey (i.e., natural savannahs or manmade park like settings). It can also nest within silver and red maple dominated wooded swamps that possess savannah-type settings.	Habitat is <u>not</u> present on-site within the proposed severance nor within the lands to be retained. There is a relatively high degree of understorey species and richwood base cover rather than grassland type vegetation which is not characteristic of the habitat. This species was not detected on-site during the migratory/breeding bird avifauna surveys.
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Note: if a SAR has already been discussed in the NHIC database above, it was not included within the OBBA table.

9.4 eBird

All of the SAR avian in the eBird have already been discussed above in the OBBA and/or NHIC section other than Barn Swallow.

Barn Swallow prefers open country habitats such as farm fields, alvars prairies etc. which the subject property does not possess. Therefore, Barn Swallow would not utilize the wooded areas that comprise both the proposed severance and retained lands for any part of its life cycle. Barn Swallow was not identified during the migratory/breeding bird site inspections.

9.5 iNaturalist

<u>Species at Risk</u>	<u>Preferred Habitat</u>	<u>Individual and/or Habitat Present On-site</u>
American Bumble Bee	Prefers open country meadow type areas that possess an abundance of flowering species that are used to forage within and pollinate.	This type of habitat is <u>not</u> present within 120 m of the proposed severance. There is suitable habitat within the Kawartha Hideaway Road corridor but not within the proposed severance nor nearby within the lands to be retained.

Butternut	In woodland openings and along the edge where there is a suitable exposure to the sun, as this species does not like shaded canopy conditions.	Suitable woodland habitat is present within the subject property. However, ORE staff made a concerted effort to inspect the area within 50m of the proposed severance to detect any Butternut. None were detected during the surveys.
Eastern Hog-nosed Snake	Prefers hibernating in bedrock openings that access the warmth and moisture regimes associated with the shallow water table. Is a generalist with respect to where the individuals can be found. Uses woodlands and waterways to moderate/cool its body temperature and open sandy barren areas to bask in the sun and increase its body temperature. It will regulate its temperature during the evening hours by infiltrating hollowed downed woody debris or take cover beneath manmade objects such as boards, plastic signs, etc.	Considering the individual can occur in any/all conditions, the subject site and all the surrounding neighbouring properties would possess suitable habitat for individuals. As for the hibernaculum, there is the potential for snakes to enter the fractured rock areas within the bedrock dominated valley system further west on the lands to be retained where there is evidence that shallow groundwater table conditions exist, however the PSW and bedrock conditions directly west of the proposed severance is perched higher above the shallow water table and not likely to serve as a hibernaculum. ORE staff did not observe any snakes in the bedrock areas of the subject parcel during the surveys.
Evening Grosbeak	Prefers conifer lined wetlands and waterways. They may choose to overwinter within mature woodlands during the winter period. They tend to be communal during the winter period.	There are conifer-lined wooded swamps areas that may be suitable habitat to the west of the proposed severance on the lands to be retained. Evening Grosbeak was not detected on-site during the migratory/breeding bird avifauna surveys.

Monarch	Prefers openings where the sun can easily penetrate ground covers and where their larval food plant (Milkweed sp.) is present. This can be in open meadows, woodland openings, wetlands, etc.	The subject property is predominantly woodland with an upper canopy cover that shades the ground surface, with the exception of the most southerly portion of the property that contains openings from existing development. Based on our review of the site conditions within 120 m of the proposed severance, there is no suitable habitat within the woodland in this area. The only area where Monarch would occur would be within the margins of Kawartha Hideaway Road which is outside the focus of this EIS.
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9.6 Identified SAR/SAR Habitat

Four (4) SAR were detected during the site inspections - two (2) birds and two (2) bats. Only the bats are subject to the Endangered Species Act (ESA) requirements as they are Endangered species. They would also be subject to the requirements under the 2024 PPS and/or County OP requirements for Endangered/Threatened species.

The two (2) birds have a status of Special Concern and their habitat would be considered SWH. As such, they are subject to the SWHMiST requirements.

The following section identifies the potential impacts to those SAR/SAR habitat that could be impacted by the proposed severance.

10.1 Potential Impacts

The main receptor with respect to potential impacts associated with future development of the proposed lot is the PSW habitat situated to the west, within the lands to be retained. Potential impacts considered herein include the following:

- Potential impacts to the Special Concern bird species identified off-site to the north and west (including the lands to be retained);
- Potential impacts to the Endangered bat species identified by the acoustic detector deployed on the proposed severance;

- Potential impacts to the water quality of the PSW (on the lands to be retained) from future septic effluent;
- Potential impacts to the PSW on the lands to be retained resulting from runoff water quality deterioration due to erosion and sedimentation during the construction phase;
- Potential impacts to the woodland SWH from vegetation removal/degradation;
- Potential impacts from importation of fill to the site to raise or level areas of the proposed lot for development;
- Potential impacts from the importation of fill materials containing invasive species that out-compete well established native species.
- Potential impacts from introduction of invasive non-native species in the construction and post-construction era, via machinery;
- Potential impacts from erosion and sedimentation generated by exposed unconsolidated soils during excavation and grading activities; and,
- Potential impacts from mismanagement of fill materials and presence of construction debris or waste materials during the construction period.

Specific recommendations for mitigating the above potential impacts are provided in a following section.

10.0 Conclusions

PSW

- 10.1 The proposed building envelope will need to maintain a distance greater than or equal to 15 m from the PSW (which represents the site alteration area as per the 2024 PPS). Provided the site alterations are contained within the building envelope of the proposed severance, the development should be permitted as the minimum Vegetation Protection Zone (VPZ) requirements will be met (Figure 6). The proposed development can also adhere to the “no negative impact test” requirement to any/all identified KHF’s, thus complying with the Official Plans, and 2024 PPS requirements.

Detailed recommendations are provided in the following section to protect the KHF from being impacted as a result of future construction on the proposed lot.

Species at Risk

- 10.2 Surveys were conducted during the migratory/breeding bird period, which is the ideal period to detect the majority of birds that could be present on the subject property. Two (2) SAR birds were detected. No SAR flora were detected during the surveys.

The Eastern Wood-Pewee and Wood Thrush are Special Concern SAR which were detected during the surveys, therefore, must meet the SWHMiST requirements in this regard.

A restricted species is noted to occur in the general area of the subject property according to the NHIC. The restricted species was not observed on-site. That being said, measures should be afforded to protect individuals from harm, harass and potentially cull as a result of the ESA requirements. The most recent version of the provincial ESA focusses on protecting the individuals and less with respect to general habitat protection measures. The habitat protection measures focus on the specific areas of each individual species specific life cycle needs.

SWH

- 10.3 The proposed severance development will comply with the primary SWHMiST criteria of avoiding the KHF's and the surrounding habitat on the retained lands. A 15 m setback/VPZ has been applied to the PSW whereby no site alterations can occur (as per the definition under the 2024 PPS) within this feature. This means activities, such as grading, excavation and the placement of fill that would change the landform and natural vegetative characteristics of a site will not be allowed within the VPZ. Considering no site alterations will occur within 15 m of the PSW, there would be no negative impact to these features and the proposed development will therefore comply with the PPS requirements (Figure 6), which exceeds the SWHMiST requirements.

The only SWH that could be impacted by the proposed severance would be the Special Concern and Rare Wildlife Species and Woodland Area-Sensitive Breeding Bird Habitat SWH.

As for the Special Concern and Rare Wildlife Species and Woodland Area-Sensitive Breeding Bird SWH, the proposed residential severance can mitigate impacts to these SWH according to other criteria outlined in the SWHMiST and should be allowed to proceed, by including the following:

- Reduce the site alteration areas to retain as much of the mature tree SWH as possible - in this instance the residences to be constructed can be constructed taller rather than sprawling to reduce the size of the building envelopes. This property is not the type where an opening should be

cleared to allow for a large lawnspace other than in the area where the septic system is to be constructed. The goal should be to retain as much of the woodland content on the property as possible.

- Tertiary treatment can be incorporated in the septic system to reduce the overall footprint of the tile bed. There may also be the potential to construct a filter bed system that would similarly reduce the size of the tile bed's footprint, thereby mitigating tree/habitat loss compared to a conventional type leaching bed system.
- The proposed residential lot is located in the edge/fringe of the woodland and not in the core, protecting the core of the SWH.

Provided the above mentioned mitigation is applied, it should be possible to construct a single residence on the proposed lot that would comply with the mitigation measures outlined in the SWHMiST.

NHF Compliance

- 10.4 Provided the recommendations outlined in this EIS report are adhered to, there should be no negative impacts to either the Sandy Creek PSW and/or localized SAR/SWH identified on Figure 6. Meeting the no negative test for any/all Natural Heritage Features would therefore comply with the Official Plan (OP) and Provincial Planning Statement (PPS).

11.0 Recommendations

- 11.1 If the single residential severance lot is created as illustrated on Figure 6, we recommend locating the building envelope outside the 15 m VPZ to ensure the site alterations do not indirectly impact the PSW feature.
- 11.2 It has also been determined that the proposed severance contains SWH. However, provided the mitigation measures in Section 10.3 are applied to the building envelope area, it should be possible to comply with the secondary objective SWHMiST requirements.
- 11.3 Proper Erosion Sedimentation Controls (ESC) will be required at all times while heavy equipment is in operation at this site (as per Appendix O). A single row of light-duty silt fence must be installed to identify the boundaries of the approved development envelope (i.e., site alteration area) on the lot, once defined.

The following additional recommendations would apply to the ESC:

- The silt fence should be checked and maintained on a regular basis. If any eroded materials from the construction bypass the silt fence, the materials should be removed manually (without equipment) and reestablished in the construction zone.
- The contractor and/or property owner should provide a drawing that illustrates any/all Erosion Sediment Controls (ESC) necessary to contain sediment within the construction area. The drawing should also include the volume of imported fill and areas to be filled. No fill materials shall be placed outside the identified building envelope nor outside the boundary of the proposed lot. This includes stockpiling.
- Neither track-mounted nor tire-mounted construction equipment should operate during heavy precipitation events nor outside the proposed lot limits identified on Figure 6. After any such events, the ESC should be checked to ensure their effectiveness.
- Ultimately, it is up to the contractor and/or property owner to ensure the effectiveness of the ESC and their Site Plan should account for whatever controls (temporary or permanent) are required, based on the site conditions and final grades.
- Any imported fill should not contain organic materials such as plant debris or topsoil that may contain exotic or invasive species. If imported topsoil is required, screened topsoil should be the only material applied as top dressing. Any construction equipment operating on the subject property should be inspected and cleaned according to the province's Clean Equipment Protocol for Industry.

The recommendations above will also prevent indirect impacts to the PSW which occurs west of the proposed severance. The building envelope must be situated greater than 15 m from the PSW, maintaining the form and function of the PSW on the retained lands.

- 11.4 There is the potential for bird species to be impacted during their nesting, breeding and fledging stages, as a consequence of clearing/vegetation removal. To mitigate the potential for such impacts, the property owner must not conduct any vegetation removal between April 1st and August 31st, corresponding to the main Breeding Bird period under the Migratory Bird Convention Act. This is a standard requirement for all construction. Provided any/all vegetation is removed outside this period, the remainder of the construction within the building envelopes can proceed during the Migratory

bird/breeding bird period.

The wooded area where the site alterations could occur (if approved) is proximal to core woodland areas that may contain roosting/maternity bat habitats. Therefore, the migratory bird window should be extended to the end of November (according to new information provided by the Ministry of Environment Conservation and Parks) to prevent bats from being harmed or harassed during the roosting period.

The vegetation removal would have to occur outside the April 1st to November 30th window to not impact both birds *and* bat species. The remainder of the construction can be completed inside this window which only pertains to the tree/vegetation removal.

In addition to the extension of the vegetation removal window to include bats, ORE recommends the installation of one (1) communal bat house to off-set any snag trees that may be removed within the building envelope. Depending on the size of the house (if a commercially purchased bat house is obtained), two (2) houses may be required. These should be installed a few metres inside the woodland edge to mitigate potential outdoor residential lighting sources from overlapping the bat houses. The proponent could contact ORE to determine what type of communal roosting house can be installed.

- 11.5 The light-duty silt fence can be an effective measure to prevent the Restricted Species and turtles listed within the SAR pre-screen from entering onto the proposed severance parcel during the construction period. Provided the base of the silt fence is installed correctly and checked prior to start-up each day or after a significant precipitation event, it should be possible to meet the ESA requirements with respect to not impacting Threatened or Endangered SAR individuals.

Furthermore, it has been determined through the site inspections that the proposed severance and building envelope will not negatively impact the primary habitat of the Restricted Species. It is possible the retained lands may provide primary habitat function for the Restricted Species. That being said, these areas on the lands to be retained will remain in an entirely natural state and untouched by the development.

- 11.6 Following construction, any disturbed areas shall be quickly seeded or sodded with native grass species to re-establish the root structure within the upper soils. Once the seeding or sodding is determined to be a success and the soils are stable (i.e., vegetation has taken root), the erosion/sedimentation controls can be removed.

- 11.7 As part of the Planning application package, the proponent shall provide the authorities with a survey of the proposed lot area. As it stands, a development footprint/site alteration area has been identified on the proposed lot (Figure 6) that occurs outside any KHF or their VPZ. If the severance is approved, an OLS should return to the site and stake the lot as it is proposed.

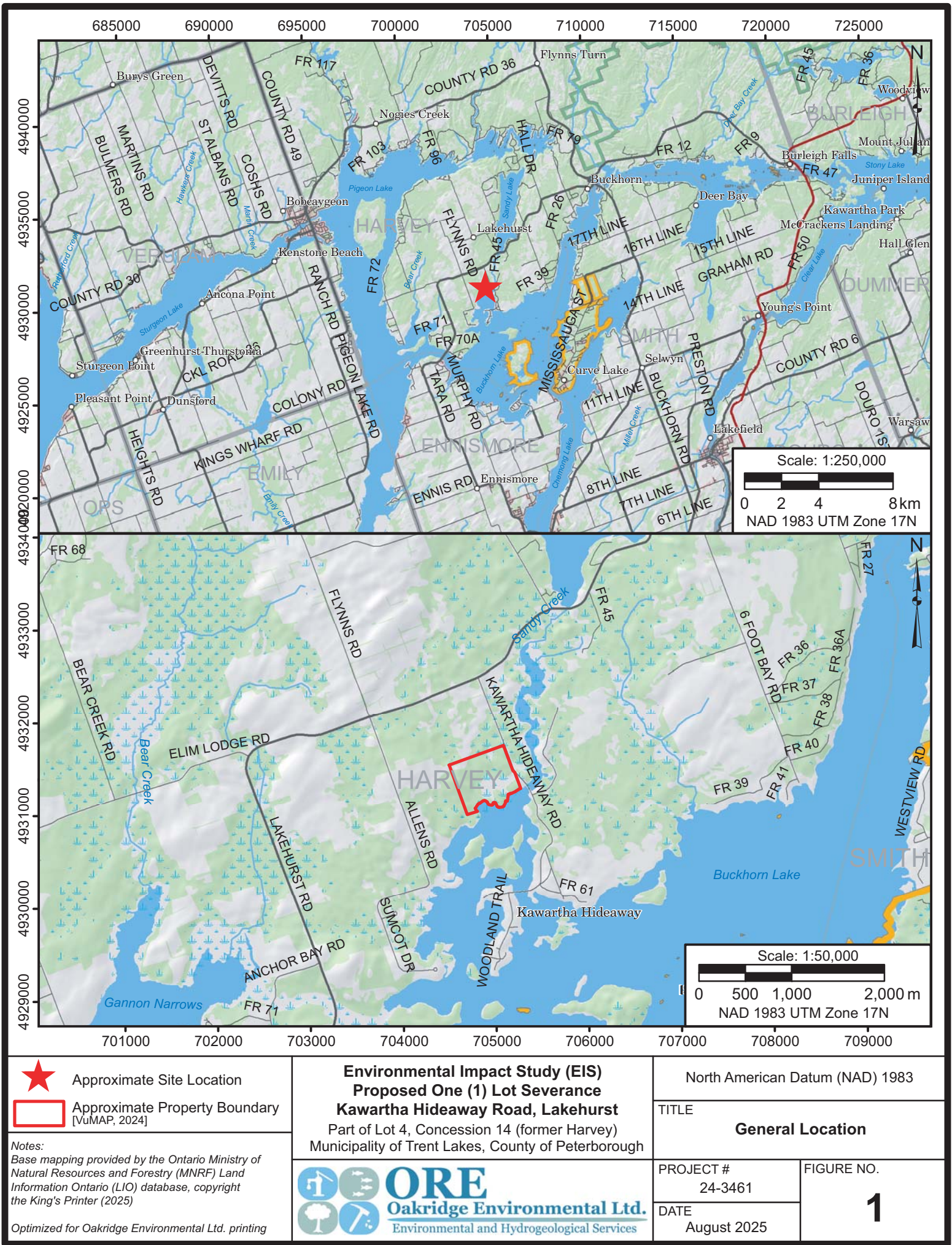
* end of EIS *

Yours truly,
Oakridge Environmental Limited



Rob West, HBSoc.
Senior Ecologist

Figures



Approximate Site Location



Approximate Property Boundary
[VuMAP, 2024]

Notes:

Base mapping provided by the Ontario Ministry of Natural Resources and Forestry (MNRF) Land Information Ontario (LIO) database, copyright the King's Printer (2025)

Optimized for Oakridge Environmental Ltd. printing



ORE

Oakridge Environmental Ltd.
Environmental and Hydrogeological Services

Environmental Impact Study (EIS)
Proposed One (1) Lot Severance
Kawartha Hideaway Road, Lakehurst
Part of Lot 4, Concession 14 (former Harvey)
Municipality of Trent Lakes, County of Peterborough

North American Datum (NAD) 1983

TITLE

General Location

PROJECT #

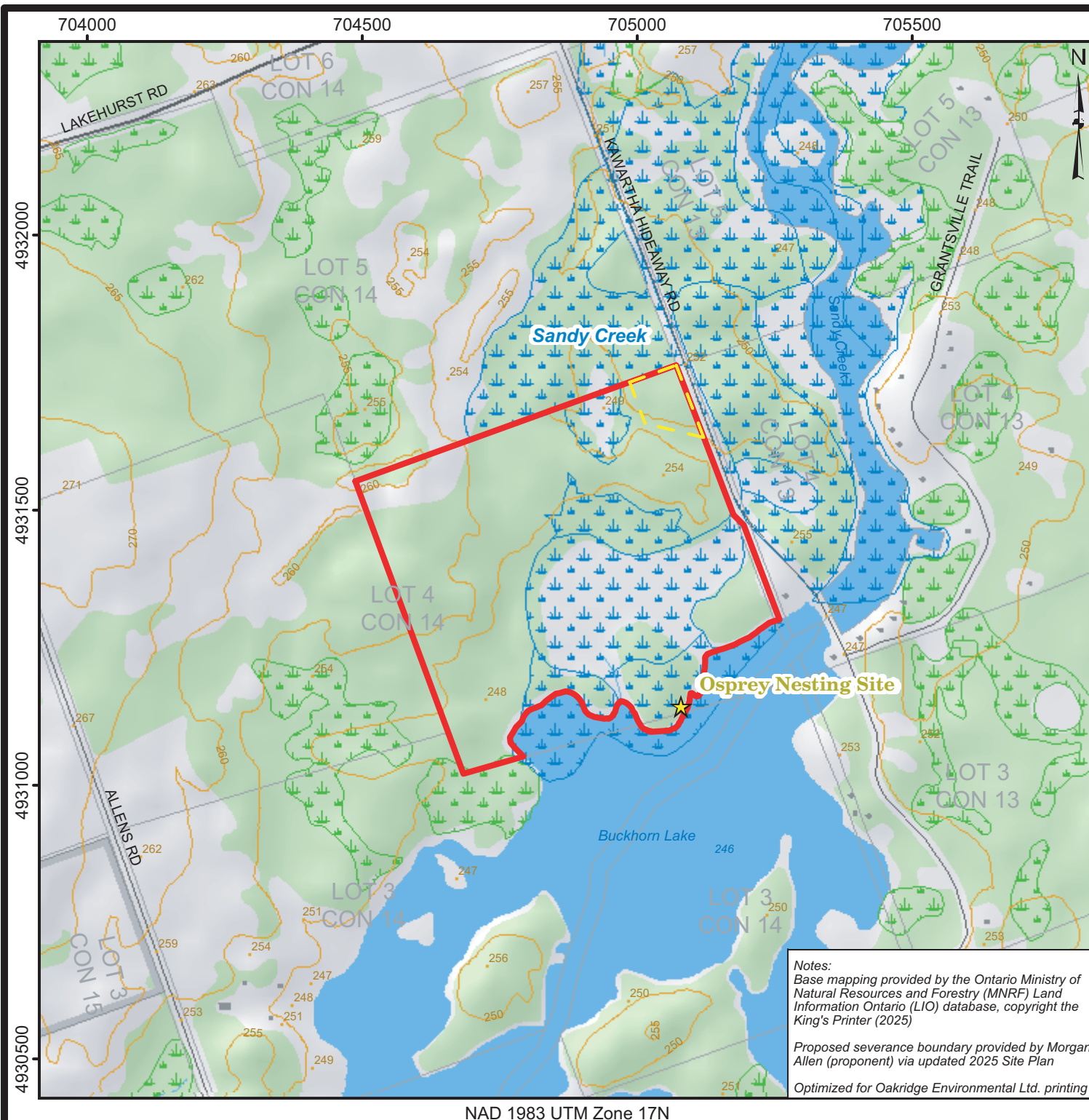
24-3461

DATE

August 2025

FIGURE NO.

1



NAD 1983 UTM Zone 17N

Notes:
Base mapping provided by the Ontario Ministry of Natural Resources and Forestry (MNRF) Land Information Ontario (LIO) database, copyright the King's Printer (2025)

Proposed severance boundary provided by Morgan Allen (proponent) via updated 2025 Site Plan

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Environmental Impact Study (EIS) **Proposed One (1) Lot Severance** **Kawartha Hideaway Road, Lakehurst** Part of Lot 4, Concession 14 (former Harvey) Municipality of Trent Lakes, County of Peterborough

- Approximate Property Boundary [VuMAP, 2024]
- Proposed Severance [Morgan Allen, 2025]
- Wetland (Unevaluated)
- Wetland (Provincially Significant)
- Waterbody
- Wooded Area
- Building (to scale)
- Aggregate Site
- Geographic Lot Fabric
- Watercourse
- Intermittent Watercourse
- Arterial Road
- Road
- Contour (5m Intervals)
- Building (symbol)
- Spot Height (m asl)
- Osprey Nesting Site

Scale: 1:10,000



TITLE

Topography and Drainage

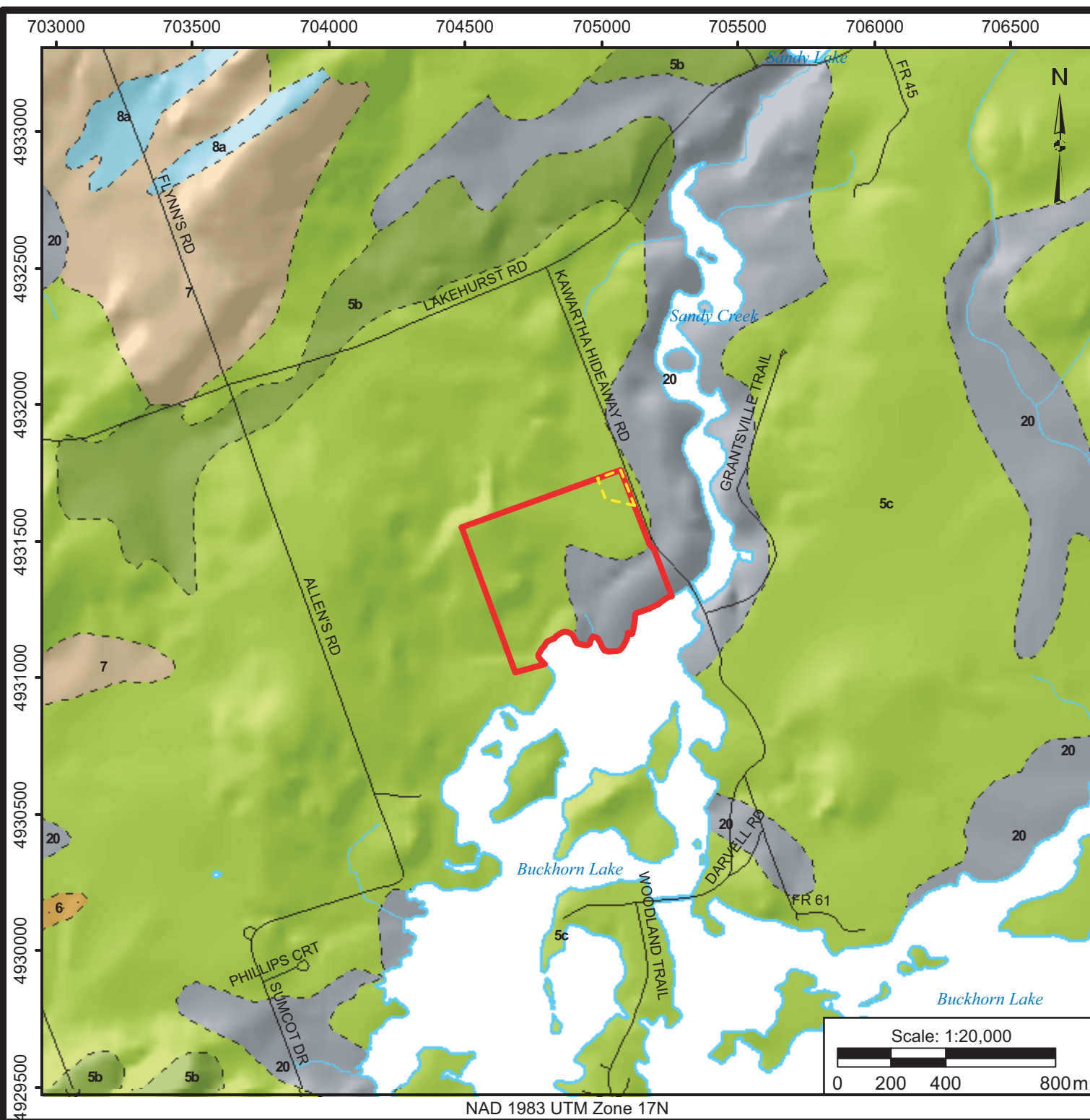


PROJECT #
24-3461

DATE
August 2025

FIGURE NO.

2



Environmental Impact Study (EIS)
Proposed One (1) Lot Severance
Kawartha Hideaway Road, Lakehurst
Part of Lot 4, Concession 14 (former Harvey)
Municipality of Trent Lakes,
County of Peterborough

Approximate Property Boundary
[VuMap 2024]

Proposed Severance
[Morgan Allen, 2025]

Drumlin or Drumlinoid Ridges

Esker (direction of flow known)

Contact (approximate/assumed)

5b

Glacial Deposits (Till):
Stone-poor, carbonate-derived
silty to sandy till

5c

Glacial Deposits (Till): Stony,
carbonate-derived silty to
sandy till

6

Ice-contact stratified deposits

7

Glaciofluvial deposits

8a

Fine-textured glaciolacustrine
deposits: Massive-well laminated

20

Organic deposits

Waterbody

Watercourse

Notes:
Base maps provided by Ontario Geological Survey
(OGS), copyright the King's Printer
(MRD-128REV, 2011)

Proposed severance boundary provided by Morgan Allen
(proponent) via updated 2025 Site Plan

Optimized for Oakridge Environmental Ltd. printing

TITLE

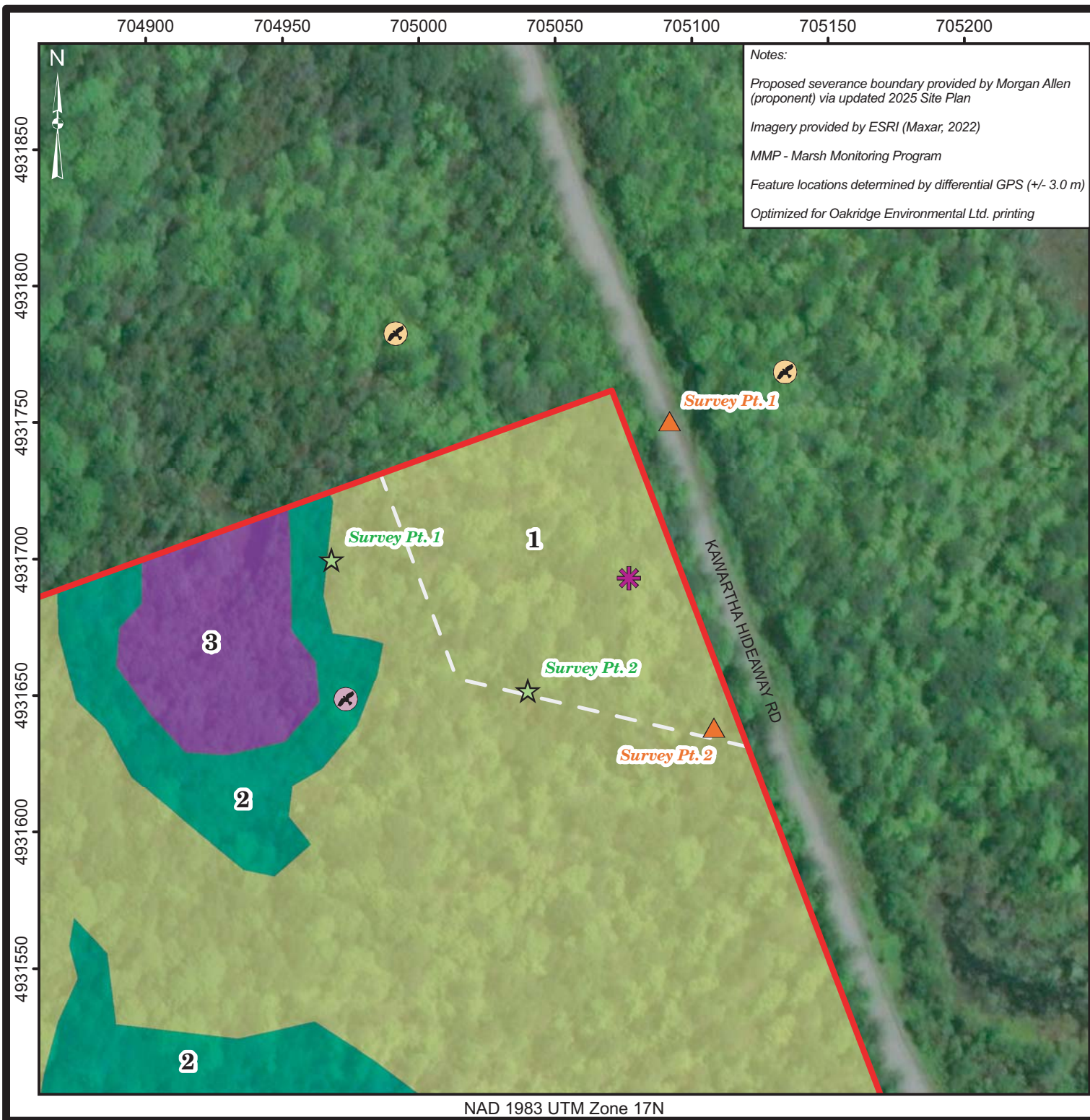
Surficial Geology

ORE
Oakridge Environmental Ltd.
Environmental and Hydrogeological Services

PROJECT #
24-3461

DATE
August 2025

FIGURE NO.
3



Environmental Impact Study (EIS)

Proposed One (1) Lot Severance

Kawartha Hideaway Road, Lakehurst

Part of Lot 4, Concession 14 (former Harvey)
Municipality of Trent Lakes,
County of Peterborough

Approximate Property Boundary
[VuMAP, 2024]

Proposed Severance
[Morgan Allen, 2025]

Bat Detector (BD5)

MMP Amphibian Survey Locations

Breeding Bird Survey Locations

SAR Observed

Eastern Wood-Pewee

Wood Thrush

ELC Communities

1

FODM - Dry – Fresh Oak Deciduous Forest Ecosite

2

SWCM2 - White Pine – Hemlock Mineral Coniferous Swamp

3

SWMO4 - Conifer - Hardwood Organic Mixed Swamp Ecosite

Scale: 1:2,000

0

20

40

80 m

TITLE	
Vegetation	

ORE
Oakridge Environmental Ltd.
Environmental and Hydrogeological Services

PROJECT # 24-3461	FIGURE NO. 4
DATE August 2025	



Photo A (Above): Was taken while standing within the Conifer - Hardwood Organic Mixed Swamp Ecosite that is part of the PSW west of the proposed severance. The ephemeral inundated conditions observed in this December 2024 image did not persist into the June/July 2025 amphibian inspections. This feature was dry/aerated during the spring/summer period surveys.



Photo B (Above): Was captured prior to the start of the first amphibian inspection in June and was located within the edge of the White Pine – Hemlock Mineral Coniferous Swamp (SWCM2) ELC community. The Conifer - Hardwood Organic Mixed Swamp Ecosite (SWMO4) ELC type associated with the PSW is present within the background of the photo.



Photo C (Above): Shows a Wood Frog (*Lithobates sylvaticus*) observed by ORE staff during the second amphibian inspection. No frogs were heard calling during the entirety of the survey, only visual identification/observation.



Photo D (Above): Was taken looking northwest within the deciduous dominated woodland habitat on the proposed severance parcel. It was taken along the edge of the proposed severance overlooking the slope that transitions from the deciduous woodland to a Hemlock dominated lowland that eventually becomes the PSW wooded swamp further west.

Site photo A was taken on December 18th, 2024 Site Photo B was taken on June 11th, 2025 Site Photo C was taken on July 10th, 2025 Site Photo D was taken on May 28th, 2025	Environmental Impact Study (EIS) Proposed One (1) Lot Severance Kawartha Hideaway Road, Lakehurst Part of Lot 4, Concession 14 (former Harvey) Municipality of Trent Lakes, County of Peterborough		TITLE Site Photos	
			PROJECT # 24-3461	FIGURE NO. 5
			DATE August 2025	



Environmental Impact Study (EIS)
Proposed One (1) Lot Severance
Kawartha Hideaway Road, Lakehurst
Part of Lot 4, Concession 14 (former Harvey)
Municipality of Trent Lakes,
County of Peterborough

- Approximate Property Boundary [VuMAP, 2024]
 - Proposed Severance [Morgan Allen, 2025]
 - Proposed Driveway [Morgan Allen, 2025]
 - Proposed Dwelling [Morgan Allen, 2025]
 - Proposed Garage [Morgan Allen, 2025]
 - Proposed Septic [Morgan Allen, 2025]
 - Recommended Light-duty Silt Fence
 - Wetland (Provincially Significant)
 - 15 m Vegetation Protection Zone (VPZ)
 - Bat Detector (BD5)
 - Contour (5 m Intervals)
 - Spot Height (m asl)
- SAR Observed**
- Eastern Wood-Pewee
 - Wood Thrush

Notes:
Base mapping provided by the Ontario Ministry of Natural Resources and Forestry (MNR) Land Information Ontario (LIO) database, copyright the King's Printer (2025)
Imagery provided by Esri (Maxar, 2022)
Proposed development and severance provided by Morgan Allen (proponent) via updated 2025 Site Plan
MMP - Marsh Monitoring Program
Feature locations determined by differential GPS (+/- 3.0 m)
Optimized for Oakridge Environmental Ltd. printing

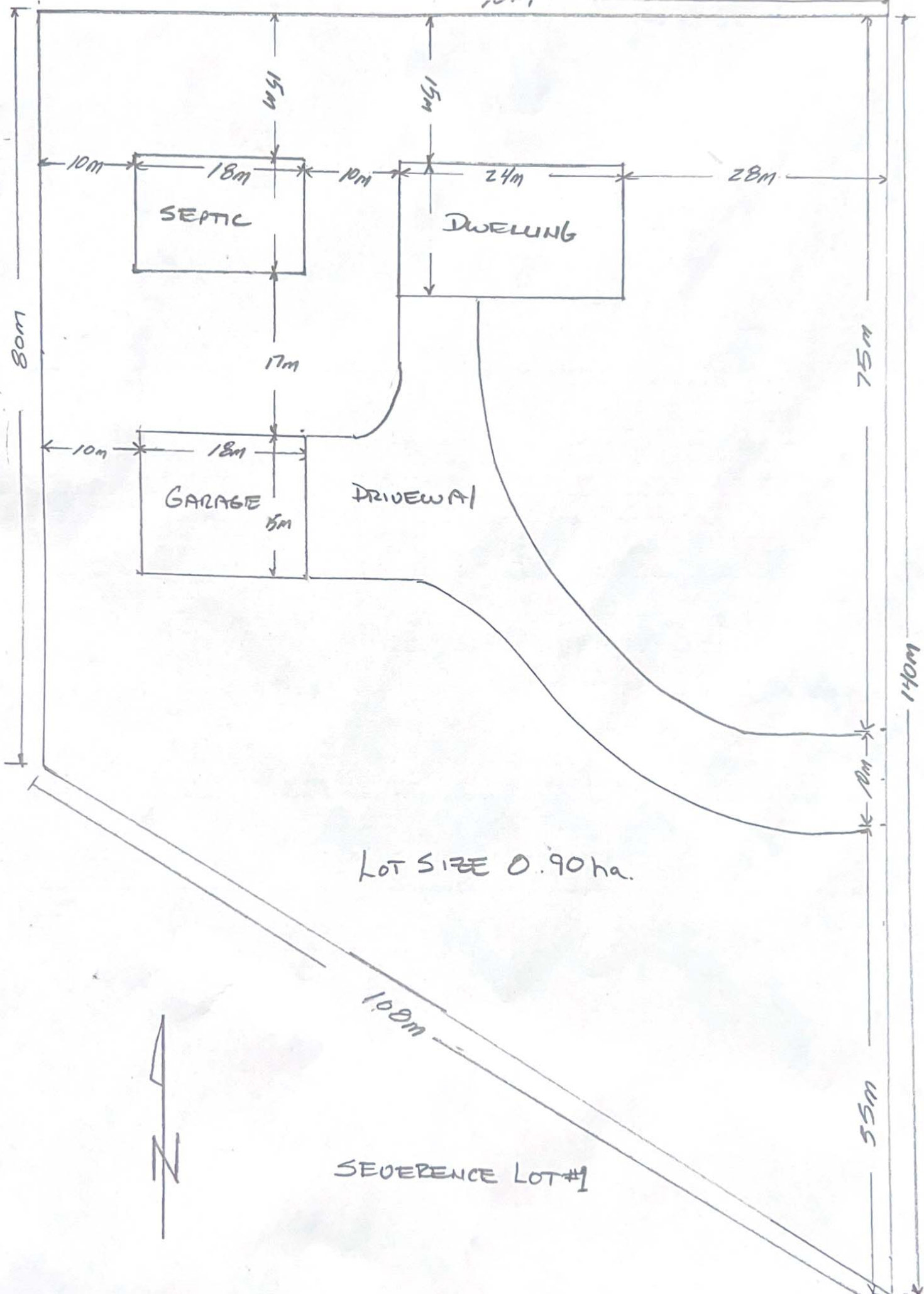
TITLE
Constraints



PROJECT # 24-3461	FIGURE NO. 6
DATE August 2025	

Appendix A

Proponent's Concept Plan



KAWARTHA HIDEAWAY RD.

Appendix B

Excerpt from the 2024 Provincial Policy Statement (PPS)

The following has been copied from the 2024 Provincial Planning Statement (PPS):

“Chapter 4: Wise Use and Management of Resources

4.1 Natural Heritage

1. *Natural features and areas shall be protected for the long term.*
2. *The diversity and connectivity of natural features in an area, and the long-term ecological function and biodiversity of natural heritage systems, should be maintained, restored or, where possible, improved, recognizing linkages between and among natural heritage features and areas, surface water features and ground water features.*
3. *Natural heritage systems shall be identified in Ecoregions 6E & 7E¹, recognizing that natural heritage systems will vary in size and form in settlement areas, rural areas, and prime agricultural areas.*
4. *Development and site alteration shall not be permitted in:*
 - a) *significant wetlands in Ecoregions 5E, 6E and 7E¹; and*
 - b) *significant coastal wetlands.*
5. *Development and site alteration shall not be permitted in:*
 - a) *significant wetlands in the Canadian Shield north of Ecoregions 5E, 6E and 7E¹;*
 - b) *significant woodlands in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Marys River)¹;*
 - c) *significant valleylands in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Marys River)¹;*
 - d) *significant wildlife habitat;*
 - e) *significant areas of natural and scientific interest; and*
 - f) *coastal wetlands in Ecoregions 5E, 6E and 7E¹ that are not subject to policy 4.1.4.b),*

unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions.
6. *Development and site alteration shall not be permitted in fish habitat except in accordance with provincial and federal requirements.*
7. *Development and site alteration shall not be permitted in habitat of endangered species and threatened species, except in accordance with provincial and federal requirements.*
8. *Development and site alteration shall not be permitted on adjacent lands to the natural heritage features and areas identified in policies 4.1.4, 4.1.5, and 4.1.6 unless the ecological function of the adjacent lands has been evaluated and it has been demonstrated that there will be no negative impacts on the natural features or on their ecological functions.*
9. *Nothing in policy 4.1 is intended to limit the ability of agricultural uses to continue.”*

Appendix C

Copy of the County of Peterborough PSR

Preliminary Severance Review

Prepared by the Peterborough County
Planning Department



Date: May 1, 2025

Name: J. Morgan Allen, Lori Allen and
Brem Allen

Agent: -

Email: morganallen@live.ca

Phone: 705-657-8546

Municipality: Trent Lakes, Harvey Ward

Lot: 4

Concession: 14

Roll No.: 1542-010-001-43400

Municipal Address: Kawartha Hideaway Road

Type of Severance: residential lot(s)

	Severed	Retained
County Official Plan	Rural	Rural
Municipal Official Plan	Rural, Provincially Significant Wetland	Rural, Provincially Significant Wetland, Environmental Protection, Aggregate Resource Extraction
Municipal Zoning	(EP)	(EP), (RU)
Area and Frontage	Lot 1 - ± 0.90 hectares with ± 140 m of frontage Lot 2 - ± 0.56 hectares with ± 0 m of road frontage, 61 m lake frontage	± 31.6 hectares with ± 180 m of frontage
Existing Use/Buildings	vacant	vacant

Conforms to Provincial policies?

☐ Yes ☒ No

Study is required to demonstrate conformity with provincial policies.

Conforms to County Official Plan policies?

☐ Yes ☒ No

Severed Lot 2 does not front on a public road and is subject to flooding. Further, severances cannot be recommended when contrary to local Official Plan policy.

Conforms to Township Official Plan policies?

☐ Yes ☒ No

Severed Lot 2 does not front on a public road. Severances are discouraged in low lying areas and shall not be granted on parcels subject to flooding or other physical hazards (ie. wetlands)

Conforms to Township Zoning By-Law?

Severed parcel meets Zoning requirements:

☐ Yes ☒ No

Retained parcel meets Zoning requirements:

☐ Yes ☒ No

Severed lot 2 has no municipal frontage. Both severed lots require rezoning.

Studies or documentation required to support the application?

☒ Yes ☐ No

- Environmental Impact Study

Provincial Policy Review:

The following significant features have been identified on or adjacent to the subject property:

- | | | |
|--|--|---|
| ☒ Wetlands | ☐ Wildlife Habitat | ☐ Area of Natural and Scientific Interest (ANSI) |
| ☐ Fish habitat | ☐ Woodlands | |
| ☐ Species at Risk | ☐ Habitat of Endangered or Threatened Species | |

Does the proposal require an Environmental Impact Study to address the features identified above?

☒ Yes ☐ No

The subject lands are traversed by a provincially significant wetland (PSW). Section 4.1.4 (a) of the Provincial Planning Statement, 2024 (PPS) prohibits development - including lot creation - and site alteration within a PSW.

In addition, development and site alteration are not permitted on lands adjacent (within 120-metres) to PSWs unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions (S.2.1.8).

It is noted that the subject lands, including the two severed parcels, were previously located within the PSW boundary, based on provincial mapping available to the County at the time of this submission. The applicant's environmental consultant provided the County and MECP with an OWES Evaluation of the property which determined that the PSW lands remain on the property, but that the proposed severed parcels are outside of the PSW boundary. County GIS mapping has been automatically updated by MECP to reflect this, as show on the attached map. An Environmental Impact Study (EIS), as outlined in Sections 4.1.3.1 and 4.1.3.4 of the County Official Plan and Section 5.9.8.1 of the municipal Official Plan is required to assess the impacts of proposed development on the wetland and conformity with provincial and municipal policies.

Section 5.2.3 of the PPS states that development and site alteration shall not be permitted in areas that would be rendered inaccessible to people and vehicles during times of flooding hazards, erosion hazards and/or dynamic beach hazards, unless it has been demonstrated that the site has safe access appropriate for the nature of the development and the natural hazard. The water frontage of Severed Lot 2 to a depth of approximately 20 metres appears to be within the floodplain of Buckhorn Lake. Since this proposed lot has no public road frontage, it would not appear to meet the above policy. This is addressed further under Municipal OP Policy Review.

Please note that any technical study submitted to the County (EIS, traffic impact study, hydrogeological study etc.) will be peer reviewed at the County's request. Both the cost of the study and the peer review will be at the applicant's expense.

A portion of the subject property is located within a (tertiary) aggregate deposit. Section 4.5.2.5 of the Provincial Planning Statement, 2024 (PPS) states that “in known deposits of mineral aggregate resources and on adjacent lands, development and activities which would preclude or hinder the establishment of new operations or access to the resources shall only be permitted if:

- a) resource use would not be feasible; or
- b) the proposed land use or development serves a greater long-term public interest; and
- c) issues of public health, public safety and environmental impact are addressed.”

Given the provincially significant features on the property and the small scale of tertiary aggregate uses identified, it is considered that a resource operation would not be feasible. An aggregate assessment is therefore not required.

Does the proposal meet Minimum Distance Separation (MDS) requirements?

☐ Yes ☐ No ☐ Not Applicable ☒ Not Calculated

There does not appear to be any livestock facilities (i.e. barns) within 750 m of the proposed severed lot (2017 MDS I, guideline #6).

County Official Plan Policy Review:

The Plan discourages residential severances in the Rural Area 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)).

The Plan prohibits new development in areas rendered inaccessible to people and vehicles during times of flooding hazards, or are located in a floodway, regardless of whether the area of inundation contains high points of land not subject to flooding, in recognition of potential threats to life and property (S.4.1.3.2).

All new development and sewage disposal systems must be set back at least 30 metres from the ordinary high water marks of all waterbodies. Excepted from this requirement are marina facilities, docks and other water access facilities, pumphouses, and minor accessory buildings and structures as defined in zoning by-laws (S.4.4.3).

Section 5.3.3.5 of the Plan states that “new development is not permitted if it is not accessible by a public road which is maintained year round, unless the local plan contains policies permitting new development not accessible by a public road maintained year-round, in some or all of the following situations:

- in plans of condominium with internal roads to standards acceptable to the municipality;

- on private roads, subject to criteria in the local plan...;
- on lots accessible only by water or by seasonally maintained public road, subject to criteria in the local plan.”

Local plan policies are discussed under Municipal OP Policy Review.

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.”

Municipal Official Plan Policy Review:

The subject lands are designated Rural, Provincially Significant Wetland, Environmental Constraint and Aggregate Resource Extraction in the Trent Lakes Official Plan. The severed lots are within the PSW designation, based on former provincial mapping.

Section 5.9.8 of the Township Official Plan states that “where areas identified as Provincially Significant Wetlands are determined by the Ministry of Natural Resources and/or the Conservation Authority not to form part of a wetland, development shall be permitted in accordance with the adjacent land use designation. An amendment to the Zoning By-law, however, will be required.

As per the above, if the PSW boundary is amended to reflect current provincial mapping, the severed lots would appear to be designated Rural, matching the remainder of the site (excluding aggregate lands).

In the Rural designation, the maximum number of lots that may be created by consent per land holding shall be two (2) severed lots and one (1) retained lot (S.6.2.1.1). A land holding is a parcel of land recorded as a separate parcel in the Land Registry Office at least fifteen (15) years prior to the date of the severance application (S.6.2.1.1). A search of County Land Division records appears to indicate that the subject lands have not received any consents (severances) for new lot creation within the past 15 years and is therefore (not) eligible for consent.

As noted, the subject lands are traversed by a provincially significant wetland, and a portion of Severed lot 2 is within a floodplain. Section 6.2.1.12 of the Township Official Plan (OP) states, in part, that severances will be discouraged in low lying areas and shall not be granted on parcels subject to flooding or other physical hazard. The Municipality may require an Environmental Impact Study (EIS) as part of any proposal for development, including lot creation, or site alteration, where potential exists for a negative impact on the natural environmental features, functions and/or adjacent lands (Township OP S. 5.1.10.3(b)).) Section 5.9.8.1 further states that development within 120 metres of a PSW shall only be permitted following the completion of an Environmental Impact Study (EIS). The EIS may be peer reviewed and demonstrate that there will be no negative impacts on the natural features or on their ecological functions.

Section 6.2.1.4.1 states that severances for new lots shall only be considered when both the newly created lot and the retained lot front on an assumed public road that is currently maintained on a year-round basis by a public authority. Notwithstanding this, a consent for lands in the Rural designation may be granted with access by a deeded

private road, provided that the minimum lot area of both severed and retained lots is 4.0 hectares, and both are zoned to prohibit permanent and recreational residential dwellings (S.6.2.1.4.3).

As noted, Severed lot 2 has no public road frontage, and proposed shared access appears to be via a private driveway on the adjacent property (146 Kawartha Hideaway Road). The 0.56 hectares in area, severed lot 2 would not meet the 4 hectare lot size requirement, and a dwelling use would not be permitted. The northerly relocation of Severed lot 2 to front on Kawartha Hideaway Road may resolve these issues. It is recommended that these matters be addressed further with municipal Planning staff.

As applicable, all consent applications must comply with Zoning, road frontage and access, Health Unit, and Minimum Distance Separation requirements (S. 6.2.1.5, 6.2.1.4.1, 6.2.1.6 & 6.2.1.14).

The severed lots are zoned Environmental Protection (EP) in the municipal Zoning By-law, reflecting their PSW designation in the Official Plan. The (EP) zone prohibits residential uses, therefore rezoning appears to be required.

Reviewed By: Malini Menon

Additional Notes

Agencies to be contacted by landowner or agent (marked with an X):

- | | |
|--|---|
| ☒ Township | ☐ Peterborough Public Health |
| ☐ Conservation Authority | ☐ Trent-Severn Waterway |
| ☐ Source Water Risk Management Official | ☐ First Nations |
| ☐ Ministry of Environment, Conservation and Parks | ☐ Other |

- ☒ Proposal requires confirmation from the Township or identified agency regarding policy conformity.

* The landowner should be aware that 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 Bylaw.

* The lands may be within the watershed of a local Conservation Authority. It is recommended that you contact the Authority to determine what, if any, permits may be necessary:

- ☒ No Conservation Authority in the area
- ☐ Otonabee Region Conservation Authority (ORCA), (705) 745-5791
- ☐ Crowe Valley Conservation Authority (CVCA), (613) 472-3137
- ☐ Kawartha Region Conservation Authority (KRCA), (705) 328-227

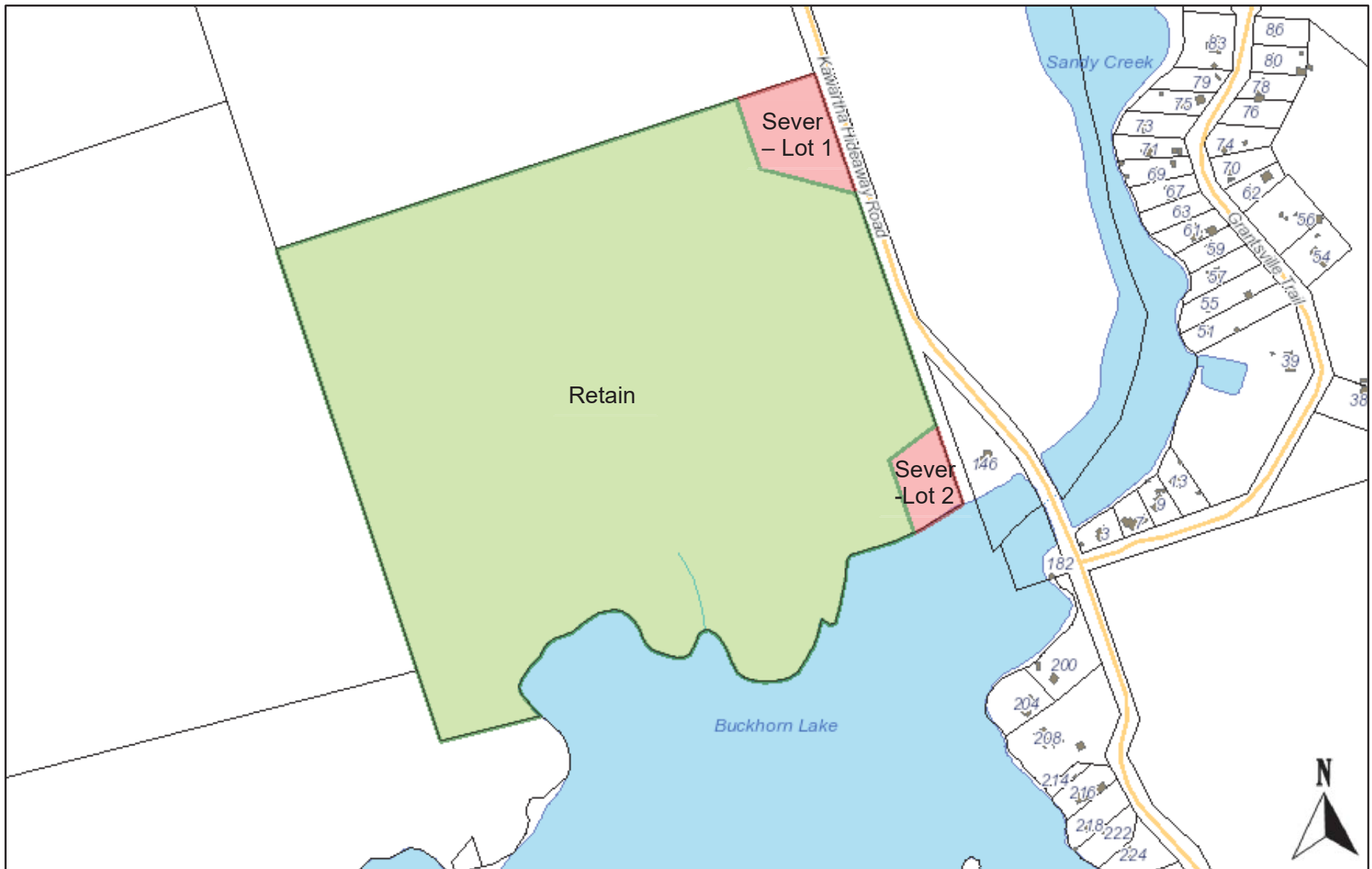
* It is the responsibility of the landowner to identify endangered and threatened species and their habitat on the property prior to undertaking work, and to ensure that the work/activity will not result in negative impacts. Landowners are encouraged to consult with the Ministry of Environment, Conservation 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.

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. 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 # 1542-010-001-43400

Kawartha Hideaway Road, Lot 4, Concession 14, Harvey Ward
Allen (Kawartha Hideaway Rd)
Severance Sketch



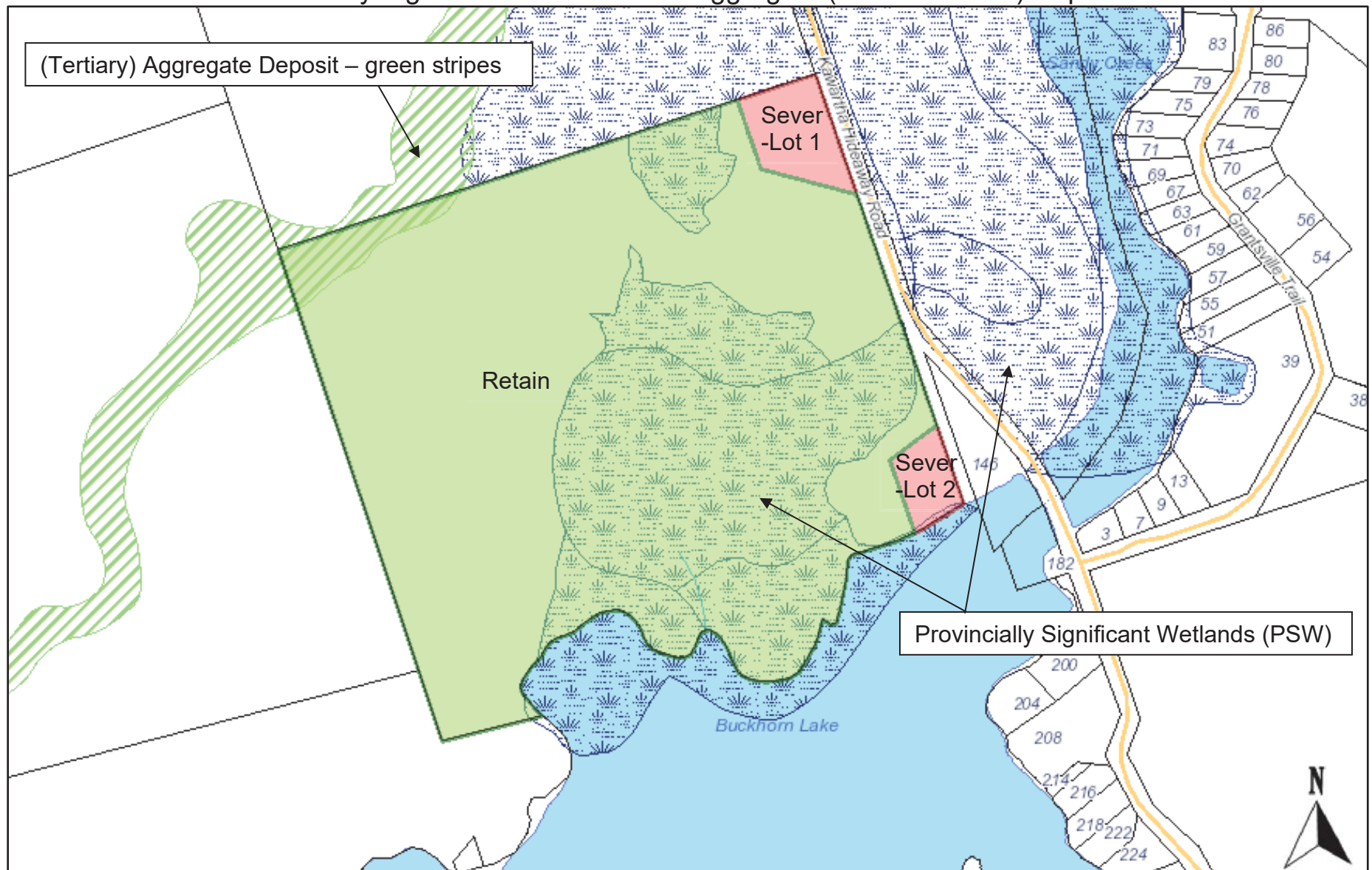
Scale (metric)
1:9028

Roll # 1542-010-001-43400

Kawartha Hideaway Road, Lot 4, Concession 14, Harvey Ward

Allen (Kawartha Hideaway Rd)

Provincially Significant Wetlands and Aggregate (Sand & Gravel) Deposits



Appendix D

Species Descriptions

Birds

Barn Swallow (*Hirundo rustica*) is listed as “Special Concern” by SARO and is not protected under the ESA. The Barn Swallow inhabits open-rural and urban sites where buildings are situated near watercourses. Nesting is typically sporadic within loose colonies on building structures, bridges and other suitable overhanging structures. The cup-like mud nest is adhered to areas beneath the roof of the structure to conceal the nest from predators and keep it dry. The Barn Swallow feeds on insects by catching them on the wing.

Black Tern (*Chlidonias niger*) is listed as “Special Concern” by SARO, and is not protected under the ESA. The Black Tern prefers shallow, freshwater cattail marshes, wetlands, lake edges and sewage ponds with emergent vegetation. Nesting occurs on dead plant material piled upon aquatic floating vegetation. The Black Tern hunts small insects and minnows along the surface of lakes and ponds.

Bobolink (*Dolichonyx oryzivorus*) is listed as “Threatened” by SARO and is protected under the ESA. The Bobolink prefers large tracts of tallgrass areas, either true prairies or hay fields, as it forages low to the ground in search of larvae and seeds.

Canada Warbler (*Cardellina canadensis*) is listed as “Special Concern” by SARO, and is not protected under the ESA. It prefers large tracts of mixed forests on bottomlands within wetlands or drainage courses. The species nests within the upper extremities of the canopy in deciduous and coniferous trees. The Canada Warbler feeds on beetles, caterpillars and common insects. Typically, this species prefers creeks and mixed forests with a coniferous edge along a moving creek, tributary or river system.

Common Nighthawk (*Chordeiles minor*) is listed as “Special Concern” by SARO, and is not protected under the ESA. The Common Nighthawk is part of the Nightjar family which prefers forest openings, bogs and sometimes open field/meadow areas. Nesting is on bare ground where both adults feed the young. Feeding can take place during day or night, while the species constantly forages for all types of insects.

Eastern Meadowlark (*Sturnella magna*) is listed as “Threatened” by SARO and is protected under the ESA. The Eastern Meadowlark is similar to Bobolink, as this species also prefers large tracts of agricultural fields or tallgrass prairies to nest within. Eastern Meadowlark is a ground nester, thus requires the tall grass to conceal its nest and eggs. Feeding includes beetles, crickets and spiders.

Eastern Whip-poor-will (*Anthrostomus vociferus*) is listed as “Special Concern” by SARO, and is not protected under the ESA. The Whip-poor-will prefers a combination of large natural tracts of secondary succession forest, watercourses and edge habitat consisting of meadow areas, with open deciduous and pine woodlands. The Whip-poor-will does not construct a nest, but rather uses the soft leaf litter on the ground to form a nest and lay the eggs directly on the ground. The Whip-poor-will is a nighttime hunter, calling its own name while searching for large flying insects, beetles, moths, mosquitos and sometimes grasshoppers. The Whip-poor-will often choose pine species adjacent to waterways to call from.

Eastern Wood-Pewee (*Contopus virens*) is listed as “Special Concern” by SARO and is not protected under the ESA. This species prefers mixed deciduous and coniferous woodlands which are open or considered edge habitat. Nesting occurs on a tree branch as the species catches insects from a perch.

Evening Grosbeak (*Coccothraustes vespertinus*) is listed as “Special Concern” by SARO and is not protected under the ESA. During the breeding season, Evening Grosbeak is generally found in open, mature mixed-wood forests dominated by fir species, White Spruce and/or Trembling Aspen. Its abundance is strongly linked to the cycle of its primary prey, the Spruce Budworm. Outside the breeding season, the species depends mostly on seed crops.

Golden-winged Warbler (*Vermivora chrysoptera*) is listed as “Special Concern” by SARO and is not protected under the ESA. The Golden-winged Warbler prefers woodland edge habitat with young successional tree species and moist shrubby fields. This species gleans insects on shrubs and the forest floor and nesting occurs on the ground.

Grasshopper Sparrow (*Ammodramus savannarum*) is listed as “Special Concern” by SARO and is not protected under the ESA. The Grasshopper Sparrow prefers large (greater than 5 ha) grassland habitats where it breeds. Grassland habitats include pastures, hayfields, natural prairies, alvars. Nests are typically hidden within the grassland and its preferred diet in the summer is large insects (i.e., Grasshoppers).

Least Bittern (*Ixobrychus exilis*) is listed as "Threatened" by SARO and is protected under the ESA. The Least Bittern inhabits freshwater marshes where tall, impenetrable stands of emergent vegetation are utilized for coverage. The Least Bittern may build up a hunting platform in search of small fish, insects, and amphibians.

Red-headed Woodpecker (*Melanerpes erythrocephalus*) is listed as “Endangered” by SARO and is protected under the ESA. It prefers a combination of deciduous forests and rural development areas, similar to a park-like setting. The deciduous species can be oak or maple, however, the understory must be meadow-like or maintained lawnspace in parklands. This species will either roost within cavities constructed by other woodpeckers, or create its own cavity. It feeds on beetles, caterpillars and common insects that are found within the bark of trees.

Wood Thrush (*Hylocichia mustelina*) is listed as “Special Concern” by SARO and is not protected under the ESA. The Wood Thrush enjoys relatively undisturbed, mature woodlands. Nesting occurs low in the fork of a tree as this species forages for berries and insects at ground level. Similar to the Eastern Wood-Pewee, this species prefers large tracts of woodland.

Amphibians & Reptiles

Blanding’s Turtle (*Emydoidea blandingii*) is listed as “Threatened” by SARO and is protected under the ESA. It tends to inhabit shallow waters within large wetlands or shallow lakes that have lots of aquatic plants. However, they have been known to travel hundreds of metres from a main body of water for nesting or mating. This species is most easily identified by its bright yellow throat and chin.

Common Five-lined Skink (Great Lakes/St. Lawrence/Southern Shield population) (*Plestiodon fasciatus*) is listed as “Special Concern” by SARO and is not protected under the ESA. This species of lizard basks on sunny rocks and logs to maintain a preferred body temperature (28 - 36°C). During the winter, they hibernate in crevices among rocks or buried in the soil. The Great Lakes/St. Lawrence/Southern Shield population can be found underneath rocks on open bedrock in forests.

Eastern Hog-nosed Snake (*Heterodon platirhinos*) is listed as “Threatened” by SARO and is protected under the ESA. This snake species like most are generalists, however it tends to occur between waterbodies, where warm sandy substrates occur and where there is fractured rock which allows for them to hibernate from year to year. It may be found alongside roadways within short to tall grass sandy substrate areas. It will bask in the sunlight in these areas to raise its temperature on cool mornings and evenings. It will also utilize shade in woodlands and swamps to thermoregulate its body temperature.

Eastern Milksnake (*Lampropeltis triangulum*) is listed as “Not at Risk” by SARO however, it is listed as “Special Concern” under COSEWIC. Gray or tan in colour, with alternating reddish brown patches that have a black outline, the Eastern Milksnake commonly has a distinct Y shape on the top of the head. They prefer open areas for their habitat such as rocky areas, forest and field edges.

Midland Painted Turtle (*Chrysemys picta marginata*) was assessed by COSSARO in 2020 and is listed as “Not At Risk” under SARO. Though, this species is given the “Special Concern” status by COSEWIC. Midland Painted Turtles spend the majority of their lives in water. They prefer shallow water with aquatic vegetation, soft mud, and leaf litter at the bottom. Typically found basking on logs, rocks, and shorelines in sunlight. Midland Painted Turtles nest between mid-spring and early summer. They tend to choose gravely, sandy and loam soils for nesting.

Northern Map Turtle (*Graptemys geographica*) is listed as “Special Concern” by SARO, and is not protected under the ESA. This species inhabits rivers and lakeshores where it basks on emergent rocks and fallen trees throughout the spring and summer. In winter, the turtles hibernate on the bottom of deep, slow-moving sections of river. They require high-quality water that supports the female’s mollusc prey. Their habitat must contain suitable basking sites, such as rocks and deadheads, with an unobstructed view from which a turtle can drop immediately into the water if startled.

Snapping Turtle (*Chelydra serpentina*) is listed as “Special Concern” by SARO and is not protected under the ESA. Snapping Turtles spend most of their lives in water. They prefer shallow waters so they can hide under the soft mud and leaf litter, with only their noses exposed to the surface to breathe. During the nesting season, from early to mid summer, females travel overland in search of a suitable nesting site, usually gravelly or sandy areas along streams. Snapping Turtles often take advantage of man-made structures for nest sites, including roads (especially gravel shoulders), dam and aggregate pits.

Western Chorus Frog (Great Lakes - St. Lawrence - Canadian Shield population) (*Pseudacris maculata* pop. 1) is listed as “Not at Risk” by SARO, however is listed as “Threatened” by SARA and COSEWIC. The Western Chorus Frog is a small frog which is brown to olive gray in colour. It has three dark lines on its back, a wider line on each side, and broad line across the eyes. Its call is a “cre-ee-ee-eek” sound similar to a fingernail being dragged across a comb. The Western Chorus prefers lowland habitats with open or discontinuous canopy. Also preferring areas which can become vernal pools in the spring. Vegetation typical to find Western Chorus Frogs are: sedges (*Carex spp.*), cattails (*Typha spp.*), Reed Canary Grass (*Phalaris arundinacea*), Red Osier Dogwood (*Cornus stolonifera*), willows (*Salix spp.*), Speckled Alder (*Alnus incana ssp. rugosa*), Black Ash (*Fraxinus nigra*), and Red Maple (*Acer rubrum*).

Insects

American Bumble Bee (*Bombus pensylvanicus*) is listed as “Special Concern” by COSEWIC and not SARO. It is not protected under the ESA. The American Bumble Bee is a medium sized bee with dark wings and the yellow and black striping of typical bumble bees. The head and tongue are longer than most bees in Canada. They prefer farmlands, meadows and grasslands. American Bumble Bees nest above ground in grass mats, or abandoned rodent/bird nests. Queens overwinter underground in decomposing organic material.

Monarch (*Danaus plexippus*) is listed as “Special Concern” by SARO and is not protected under the ESA. Throughout their life cycle, Monarchs use two different types of habitat in Ontario. Only the caterpillars feed on milkweed (*Asclepias* spp.) plants and are confined to meadows and open areas where milkweed grows. Adult butterflies can be found in more diverse habitats where they feed on nectar from a variety of wildflowers. Monarchs spend the winter in central Mexico.

Plants

Butternut (*Juglans cinerea*) is listed as “Endangered” by SARO and is protected under the ESA. Butternut usually grows alone or in small groups in deciduous forests. It prefers moist, well-drained soil and is often found along streams. It may also be found on well-drained gravel sites and rarely on dry rocky soil. This species does not do well in the shade, and often grows in sunny openings and near forest edges.

Appendix E

NHIC Database

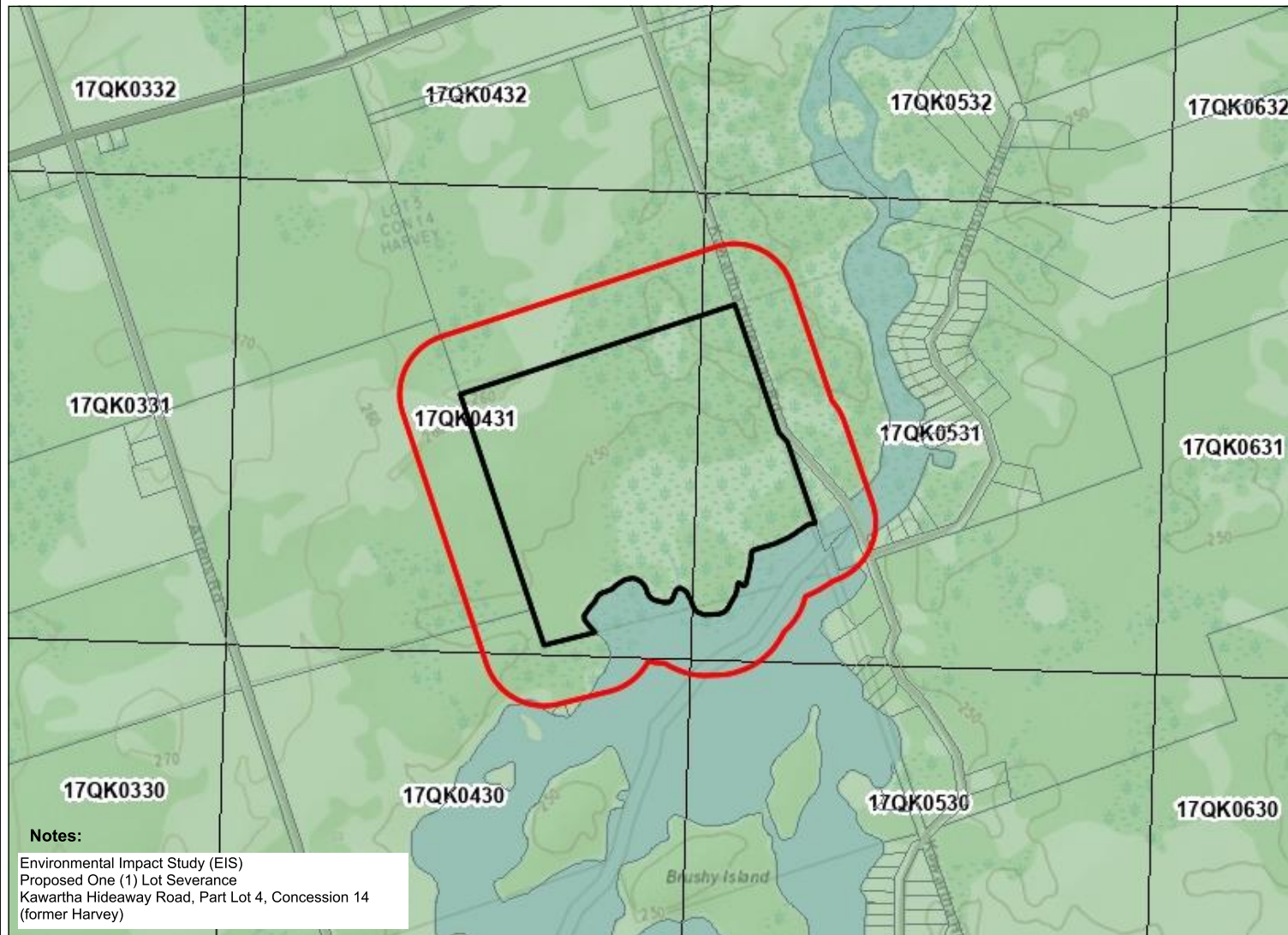


NHIC Query

Map created:5/21/2025

Legend

- Assessment Parcel
- NHIC 1 Km Grid
- ANSI
- Earth Science Provincially Significant/sciences de la terre d'importance provinciale
- Earth Science Regionally Significant/sciences de la terre d'importance régionale
- Life Science Provincially Significant/sciences de la vie d'importance provinciale
- Life Science Regionally Significant/sciences de la vie d'importance régionale
- Conservation Reserve
- Provincial Park
- Natural Heritage System



0.7 0 0.33 0.7 Kilometres

Absence of a feature in the map does not mean they do not exist in this area.

This map should not be relied on as a precise indicator of routes or locations, nor as a guide to navigation. The Ontario Ministry of Natural Resources(OMNR) shall not be liable in any way for the use of, or reliance upon, this map or any information on this map.

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NHIC Data

To work further with this data select the content and copy it into your own word or excel documents.

OGF ID	Element Type	Common Name	Scientific Name	SRank	SARO Status	COSEWIC Status	ATLAS NAD83 IDENT COMMENTS
1056175 SPECIES		Midland Painted Turtle	Chrysemys picta marginata	S4		SC	17QK0431
1056175 SPECIES		Wood Thrush	Hylocichla mustelina	S4B	SC	THR	17QK0431
1056175 SPECIES		Eastern Wood-pewee	Contopus virens	S4B	SC	SC	17QK0431
1056175 SPECIES		Least Bittern	Botaurus exilis	S4B	THR	THR	17QK0431
1056175 SPECIES		Snapping Turtle	Chelydra serpentina	S4	SC	SC	17QK0431
1056174 SPECIES		Midland Painted Turtle	Chrysemys picta marginata	S4		SC	17QK0430
1056174 SPECIES		Common Nighthawk	Chordeiles minor	S4B	SC	SC	17QK0430
1056174 SPECIES		Wood Thrush	Hylocichla mustelina	S4B	SC	THR	17QK0430
1056174 SPECIES		Eastern Wood-pewee	Contopus virens	S4B	SC	SC	17QK0430
1056174 SPECIES		Eastern Milksnake	Lampropeltis triangulum	S4	NAR	SC	17QK0430
1056174 SPECIES		Least Bittern	Botaurus exilis	S4B	THR	THR	17QK0430
1056174 SPECIES		Snapping Turtle	Chelydra serpentina	S4	SC	SC	17QK0430
1056174 SPECIES		Blanding's Turtle	Emydoidea blandingii	S3	THR	END	17QK0430
1056185 SPECIES		Midland Painted Turtle	Chrysemys picta marginata	S4		SC	17QK0531
1056185 SPECIES		Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0531
1056185 SPECIES		Wood Thrush	Hylocichla mustelina	S4B	SC	THR	17QK0531
1056185 SPECIES		Eastern Wood-pewee	Contopus virens	S4B	SC	SC	17QK0531
1056185 SPECIES		Least Bittern	Botaurus exilis	S4B	THR	THR	17QK0531
1056185 SPECIES		Snapping Turtle	Chelydra serpentina	S4	SC	SC	17QK0531
1056185 SPECIES		Blanding's Turtle	Emydoidea blandingii	S3	THR	END	17QK0531
1056185 RESTRICTED SPECIES	RESTRICTED SPECIES	RESTRICTED SPECIES	RESTRICTED SPECIES	RESTRICTED SPEC	RESTRICTED SPEC	RESTRICTED SPEC	17QK0531
1056184 SPECIES		Midland Painted Turtle	Chrysemys picta marginata	S4		SC	17QK0530
1056184 SPECIES		Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0530
1056184 SPECIES		Wood Thrush	Hylocichla mustelina	S4B	SC	THR	17QK0530
1056184 SPECIES		Eastern Wood-pewee	Contopus virens	S4B	SC	SC	17QK0530
1056184 SPECIES		Least Bittern	Botaurus exilis	S4B	THR	THR	17QK0530
1056184 SPECIES		Snapping Turtle	Chelydra serpentina	S4	SC	SC	17QK0530

Appendix F

OBBA Database

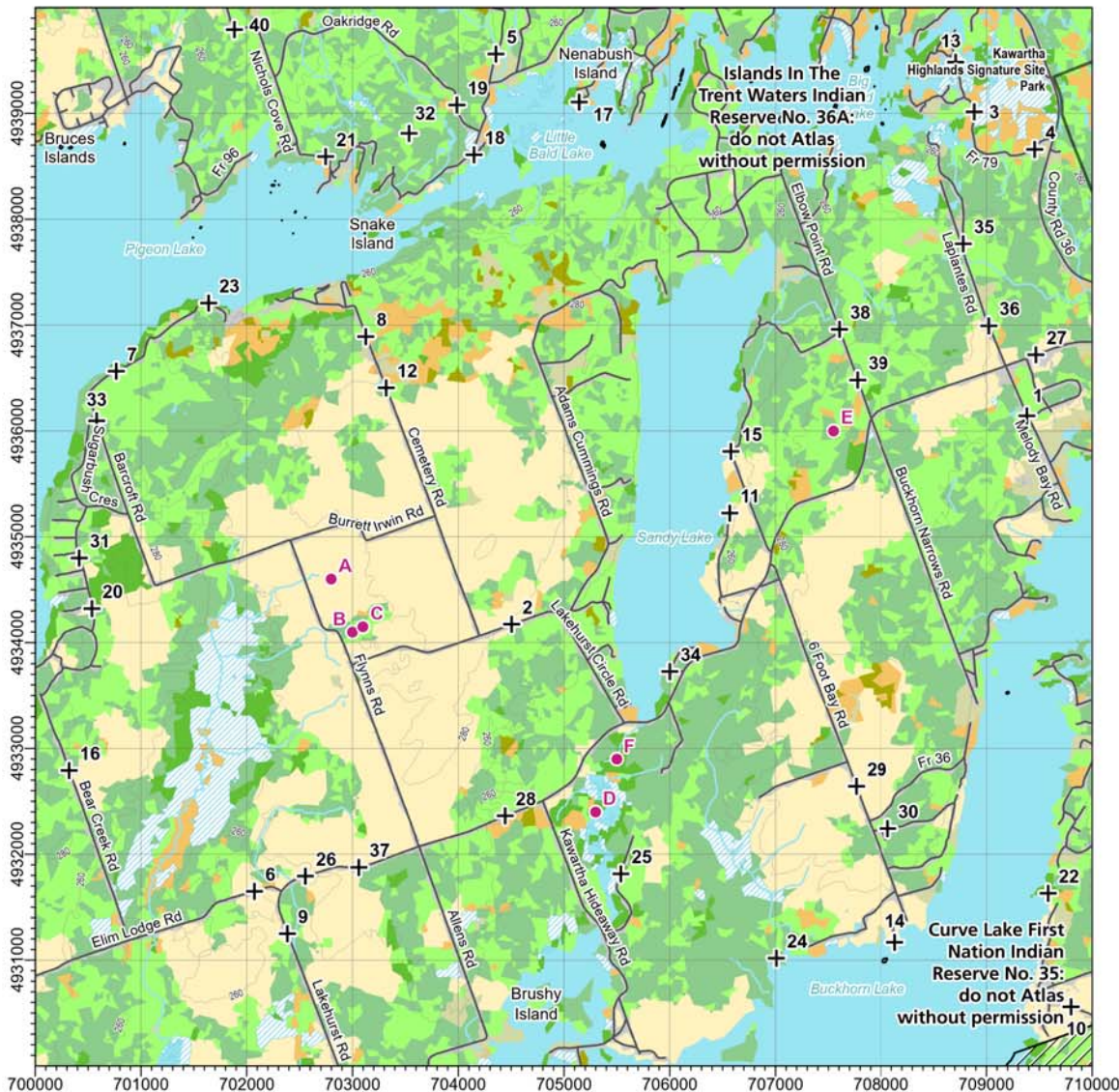
Region / Région:16

Square / Parcelle:17TQK03

Predefined point count coordinates
Coordonnées des points d'écoute prédéterminés



17TQK03



POINT EASTING NORTHING
+ UTM Est UTM Nord

1	709383	4936142
2	704506	4934173
3	708885	4939015
4	709457	4938658
5	704357	4939560
6	702074	4931650
7	700767	4936563
8	703126	4936891
9	702385	4931250
10	709799	4930558
11	706567	4935223
12	703320	4936406
13	708709	4939482
14	708133	4931168
15	709579	4935806
16	700321	4932791
17	705145	4939105
18	704149	4938608
19	703987	4939079
20	700536	4934321
21	702746	4938590
22	709583	4931631
23	701640	4937208
24	707008	4931017
25	705539	4931815
26	702554	4931793
27	709467	4936718
28	704443	4932363
29	707766	4932642
30	708065	4932242
31	700415	4934799
32	703536	4938810
33	700581	4936094
34	706001	4933725
35	708781	4937767
36	709022	4936993
37	703061	4931876
38	707605	4936959
39	707779	4936479
40	701883	4939792

Legend	Légende
Expressway or highway	Autoroute ou route nationale (asphaltée)
Regional or local road	Route régionale ou locale (asphaltée ou non)
Resource / Recreation	Ressource / route récréative
Rail line	Chemin de fer
Utility corridor	Ligne de transport d'énergie
Watercourse	Rivière ou ruisseau
First Nation Reserve	Réserve des Premières Nations
Protected or conserved area	Zone protégée ou conservée
Fire disturbance since 2000	Incendie perturbé depuis 2000

Broadleaf forest	21	Forêt de feuillus
Coniferous forest	3	Forêt de conifères
Mixed forest	24	Forêt mixte
Shrubland	3	Milieu arbustif
Grassland	1	Prairie
Lichen-moss	1	Lichen-mousse
Barren	1	Dénudé
Wetland	3	Milieu humide
Agriculture	19	Milieu agricole
Water	21	Eau
Developed area	6	Zone développée
Unclassified		Non classifié

The approximate percent coverage of each habitat type is indicated by the numbered box in the legend.

La couverture approximative est indiquée en pourcentage dans le rectangle coloré de la légende.

Cartographic production by Birds Canada
Production cartographique par oiseaux Canada

Note: The project partners are in no way responsible for any inaccuracies, mistakes or omissions in the information that appears on this map.

Avis: Les responsables du projet d'atlas ne peuvent être tenus responsables de toute inexactitude, erreur ou omission concernant les informations apparaissant sur cette carte.

6° Universal Transverse Mercator (UTM) Projection; Zone 17, Central Meridian -81°; North American Datum 1983 (NAD 83)

Projection universelle transverse de Mercator (UTM) 6°

Zone 17, méridien central -81°;

Système de référence géodésique nord-américain 1983 (NAD 83)



November 2023 / novembre 2023

<https://www.birdsontario.org/>

Number of off-road point counts
Nombre de points d'écoute hors route

Broadleaf forest:	2	Grassland:	0
Coniferous forest:	0	Wetland:	1
Mixed forest:	2	Shrubland:	0

Predefined / Prédéterminés: 20
Off-road / Hors route: 5

Atlas-2 off-road point Point hors route Atlas-2



0 1 km

Peterborough

Region / Région:16



Square Summary (17TQK03) [\[change\]](#)

	#species				#hours		#pc done	
	poss	prob	conf	total	total	peak	road	offrd
Curr.	22	43	48	113	305.6	163.7	49	4
Prev.	26	38	51	115	116.1	—	72	

Region summary (#16: Peterborough, ON)

#squares	#sq with data	#species	#squares (pc)	
			target	compl.
60	60	170	60	32
60	60	185	0	60

Target number of point counts in this square: 25 in total: 20 road side, 5 off road (Broadleaf Forest in 2, Mixed Forest in 2, Wetland in 1). Please try to ensure that each off-road station is located such that the entire 100m radius circle is within the prescribed habitat.**Predef. completed:** [01, 02, 03, 04, 05, 06, 09, 10, 13, 14, 16, 17, 18, 19, 21, 22, 25, 27, 29, 30, 31, 32, 34, 35, 36, 38, 39, 40, D, F]

SPECIES	Prev.	Code	%
Canada Goose	FY	FY	88
Mute Swan ‡			5
Trumpeter Swan		FY	40
Wood Duck	FY	FY	85
Blue-winged Teal ‡	H		15
Northern Shoveler ‡			1
Gadwall ‡			0
American Wigeon ‡			0
Mallard	FY	FY	90
American Black Duck			10
Northern Pintail ‡			0
Green-winged Teal ‡	P		6
Redhead †			0
Ring-necked Duck			33
Lesser Scaup ‡			0
Hooded Merganser	FY	FY	70
Common Merganser ‡	P	H	30
Ruddy Duck ‡			0
Wild Turkey	P	FY	93
Ruffed Grouse	T	FY	93
Ring-necked Pheasant ‡			0
Rock Pigeon (Feral Pigeon)	V		0
Mourning Dove	FY	T	90
Yellow-billed Cuckoo		P	55
Black-billed Cuckoo	FY	T	75

Coccyzus sp. ‡	S		0
Common Nighthawk §	D	H	33
Eastern Whip-poor-will §	T	S	48
Chimney Swift ‡			13
Ruby-throated Hummingbird	P	CF	85
Virginia Rail	S	A	70
Sora	S		30
Common Gallinule ‡			13

SPECIES	Prev.	Code	%
American Coot ‡			1
Sandhill Crane ‡			41
Killdeer §	H	S	60
Upland Sandpiper †	H		16
American Woodcock	T	FY	80
Wilson's Snipe		T	66
Spotted Sandpiper	P	H	53
Ring-billed Gull § ‡			1
American Herring Gull §			36
Caspian Tern ‡			0
Black Tern † §	H		5
Common Tern § ‡			0
Pied-billed Grebe			31
Common Loon	P	NE	83
Double-crested Cormorant § ‡			5
American Bittern	H	S	78
Least Bittern †		FY	40
Green Heron §	H	FY	53
Great Blue Heron §	AE	H	75
Turkey Vulture	H	H	91
Osprey	AE	AE	56
Sharp-shinned Hawk	H	T	28
Cooper's Hawk		CF	31
American Goshawk ‡			11
Northern Harrier	H		35
Bald Eagle ‡			15
Broad-winged Hawk	P	FY	91
Red-shouldered Hawk	P	H	48
Red-tailed Hawk	H	AE	50
Eastern Screech-Owl			16
Great Horned Owl ‡	P		26
Barred Owl	T	D	63
Long-eared Owl ‡			8

SPECIES	Prev.	Code	%
Short-eared Owl †			0
Northern Saw-whet Owl	S		10
Belted Kingfisher	NY	T	90
Yellow-bellied Sapsucker	NY	T	98
Red-headed Woodpecker †		H	16

Red-bellied Woodpecker		D	41
Black-backed Woodpecker ‡			3
Downy Woodpecker	P	T	86
Hairy Woodpecker	CF	NY	96
Pileated Woodpecker	AE	N	98
Northern Flicker	CF	CF	96
American Kestrel §	H	H	55
Merlin	AE	V	56
Peregrine Falcon ‡			1
Olive-sided Flycatcher ‡			13
Eastern Wood-Pewee §	T	D	100
Yellow-bellied Flycatcher ‡			0
Alder Flycatcher	T	T	95
Willow Flycatcher			38
Least Flycatcher	S	T	95
Eastern Phoebe	AE	NY	100
Great Crested Flycatcher	FY	CF	100
Eastern Kingbird	AE	CF	95
Yellow-throated Vireo	S		46
Blue-headed Vireo		T	81
Philadelphia Vireo ‡			0
Warbling Vireo	CF	V	80
Red-eyed Vireo	FY	NY	100
Loggerhead Shrike †			0
Canada Jay ‡			5
Blue Jay	CF	CF	100
American Crow	FY	CF	96
Common Raven		CF	98

Breeding Bird Atlas - Summary Sheet for Square 17TQK03 (page 2 of 2)

SPECIES	Prev.	Code	%
Black-capped Chickadee	CF	CF	100
Boreal Chickadee ‡			0
Horned Lark ‡			11
Bank Swallow §			18
Tree Swallow	AE	T	85
Purple Martin ‡			6
Northern Rough-winged Swallow	P		21
Barn Swallow §	FY	H	81
Cliff Swallow §			21
Ruby-crowned Kinglet ‡	S		0
Golden-crowned Kinglet		S	50
White-breasted Nuthatch	P	T	90
Red-breasted Nuthatch		T	95
Brown Creeper	T	T	81
Blue-gray Gnatcatcher ‡			5
Northern House Wren	CF	CF	81
Winter Wren		T	98
Pacific/Winter Wren ‡	FY		0
Sedge Wren ‡			11
Marsh Wren	T	S	50
Carolina Wren ‡			6
European Starling	FY	P	85
Gray Catbird	FY	A	86
Brown Thrasher	FY	CF	76
Northern Mockingbird ‡			5
Eastern Bluebird	AE	V	56
Veery	A	CF	100
Swainson's Thrush	S	H	25
Hermit Thrush	T	T	83
Wood Thrush §	S	T	93
American Robin	NY	NY	100
Cedar Waxwing	CF	FY	95
House Sparrow	FY		40
SPECIES	Prev.	Code	%
Evening Grosbeak ‡			3
House Finch			23
Purple Finch	FY	T	100
Red Crossbill ‡		H	28
White-winged Crossbill ‡			8
Pine Siskin ‡	P		38
American Goldfinch	D	FY	98
Grasshopper Sparrow §	S	S	25
Chipping Sparrow	CF	NY	96
Clay-colored Sparrow ‡	CF		23
Field Sparrow §	FY	T	70
Dark-eyed Junco ‡			5

White-throated Sparrow	T	T	98
Vesper Sparrow			33
Savannah Sparrow	T	S	60
Song Sparrow	CF	CF	100
Lincoln's Sparrow ‡			5
Swamp Sparrow	CF	CF	100
Eastern Towhee §	S	T	60
<u>Bobolink §</u>	D		55
Eastern Meadowlark §	D	CF	60
Orchard Oriole ‡			10
Baltimore Oriole	D	CF	75
Red-winged Blackbird	CF	CF	100
Brown-headed Cowbird	FY	T	75
Common Grackle	FS	CF	100
Ovenbird	T	CF	100
Northern Waterthrush	T	A	96
Golden-winged Warbler †	H	S	28
Blue-winged Warbler ‡		P	18
Black-and-white Warbler	T	T	96
Tennessee Warbler ‡			0
Nashville Warbler	CF	T	93

SPECIES	Prev.	Code	%
Mourning Warbler	S	S	83
Common Yellowthroat	T	CF	100
Hooded Warbler ‡			0
American Redstart	AE	D	100
Cape May Warbler ‡			0
Cerulean Warbler †			3
Northern Parula ‡	S	S	33
Magnolia Warbler		S	78
Bay-breasted Warbler ‡			0
Blackburnian Warbler	S	T	80
Yellow Warbler	CF	FS	91
Chestnut-sided Warbler	CF	FY	98
Black-throated Blue Warbler	T	T	68
Pine Warbler	CF	FY	96
Yellow-rumped Warbler	CF	FY	91
Prairie Warbler †			1
Black-throated Green Warbler	CF	T	96
Canada Warbler §		T	75
Scarlet Tanager	P	CF	95
Northern Cardinal	CF	CF	53
Rose-breasted Grosbeak	D	T	100
Indigo Bunting	CF	FY	96

This list includes all breeding species expected in the region #16 (Peterborough). Underlined species are those that you should try to add to this square (17TQK03). They have not yet been reported in this square, but have been reported in more than 50% of the squares in this region so far. "Prev." is the code for the highest breeding evidence for that species in square 17TQK03 in the previous atlas. "Code" is the code for the highest breeding evidence for that species in square 17TQK03 over the last 5 years. The % columns give the percentage of squares in that region where that species was reported (this gives an idea of the expected chance of

Appendix G

eBird Database



Change Region

Buckhorn Lake--Sandy Creek Bay Peterborough, Ontario, Canada

Directions Map

- Overview
- Bird List**
- Recent Checklists
- eBirders
- Illustrated Checklist

Bird List

Updated ~12 seconds ago

10

All Years

0

This Year
2025

0

This Month
May 2025

Last Observed

First Observed

High Count

Custom Time Period

SPECIES NAME		COUNT	DATE	OBSERVER	LOCATION
1. Bufflehead	<i>Bucephala albeola</i>	20	2 Nov 2020	Ken Fulsang	Buckhorn Lake--Sandy Creek Bay
2. Common Merganser	<i>Mergus merganser</i>	2	2 Nov 2020	Ken Fulsang	Buckhorn Lake--Sandy Creek Bay
3. Common Loon	<i>Gavia immer</i>	2	2 Nov 2020	Ken Fulsang	Buckhorn Lake--Sandy Creek Bay
4. Blue Jay	<i>Cyanocitta cristata</i>	2	2 Nov 2020	Ken Fulsang	Buckhorn Lake--Sandy Creek Bay
5. Black-capped Chickadee	<i>Poecile atricapillus</i>	2	2 Nov 2020	Ken Fulsang	Buckhorn Lake--Sandy Creek Bay
6. Common Nighthawk	<i>Chordeiles minor</i>	2	11 Aug 2018	Iain Rayner	Buckhorn Lake--Sandy Creek Bay
7. American Crow	<i>Corvus brachyrhynchos</i>	1	20 Sep 2016	Jason Smyrlis	Buckhorn Lake--Sandy Creek Bay
8. Wild Turkey	<i>Meleagris gallopavo</i>	6	14 Sep 2016	Jason Smyrlis	Buckhorn Lake--Sandy Creek Bay
9. American Robin	<i>Turdus migratorius</i>	2	17 Jul 2016	Jason Smyrlis	Buckhorn Lake--Sandy Creek Bay
10. Chipping Sparrow	<i>Spizella passerina</i>	2	17 Jul 2016	Jason Smyrlis	Buckhorn Lake--Sandy Creek Bay

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Species Maps
Explore Regions

Science

eBird Status and Trends
Conservation impacts

About

Resources
Regional portals & collaborators

Land Acknowledgement
Web accessibility assistance
Privacy policy



Change Region

Buckhorn Lake--Kawartha Hideaway Peterborough, Ontario, Canada

Directions Map

- Overview
- Bird List
- Recent Checklists
- eBirders
- Illustrated Checklist

- EXPLORE...
- Hotspot Map
- Bar Charts
- Media
- Rare Bird Alerts
- Printable Checklist

Bird List

Updated ~10 seconds ago

75 All Years	0 This Year 2025	0 This Month May 2025	Last Observed	First Observed	High Count	Custom Time Period
SPECIES NAME	COUNT	DATE	OBSERVER	LOCATION		
1. Great Egret <i>Ardea alba</i>	1	15 Sep 2023	Anonymous eBirder	Buckhorn Lake--Kawartha Hideaway		
2. Trumpeter Swan <i>Cygnus buccinator</i>	2	6 May 2023	Eric Lamond	Buckhorn Lake--Kawartha Hideaway		
3. Canada Goose <i>Branta canadensis</i>	16	4 Apr 2023	Donald A. Sutherland	Buckhorn Lake--Kawartha Hideaway		
4. Mallard <i>Anas platyrhynchos</i>	42	4 Apr 2023	Donald A. Sutherland	Buckhorn Lake--Kawartha Hideaway		
5. American Black Duck <i>Anas rubripes</i>	15	4 Apr 2023	Donald A. Sutherland	Buckhorn Lake--Kawartha Hideaway		
6. Ring-necked Duck <i>Aythya collaris</i>	8	4 Apr 2023	Donald A. Sutherland	Buckhorn Lake--Kawartha Hideaway		
7. Bufflehead <i>Bucephala albeola</i>	4	4 Apr 2023	Donald A. Sutherland	Buckhorn Lake--Kawartha Hideaway		
8. Common Goldeneye <i>Bucephala clangula</i>	2	4 Apr 2023	Donald A. Sutherland	Buckhorn Lake--Kawartha Hideaway		
9. Hooded Merganser <i>Lophodytes cucullatus</i>	6	4 Apr 2023	Donald A. Sutherland	Buckhorn Lake--Kawartha Hideaway		
10. Common Merganser <i>Mergus merganser</i>	16	4 Apr 2023	Donald A. Sutherland	Buckhorn Lake--Kawartha Hideaway		
11. American Herring Gull <i>Larus smithsonianus</i>	1	4 Apr 2023	Donald A. Sutherland	Buckhorn Lake--Kawartha Hideaway		
12. Turkey Vulture <i>Cathartes aura</i>	2	4 Apr 2023	Donald A. Sutherland	Buckhorn Lake--Kawartha Hideaway		
13. Red-shouldered Hawk <i>Buteo lineatus</i>	1	4 Apr 2023	Donald A. Sutherland	Buckhorn Lake--Kawartha Hideaway		

14.	Red-bellied Woodpecker <i>Melanerpes carolinus</i>	1	4 Apr 2023	Donald A. Sutherland	Buckhorn Lake--Kawartha Hideaway
15.	Downy Woodpecker <i>Dryobates pubescens</i>	1	4 Apr 2023	Donald A. Sutherland	Buckhorn Lake--Kawartha Hideaway
16.	Eastern Phoebe <i>Sayornis phoebe</i>	1	4 Apr 2023	Donald A. Sutherland	Buckhorn Lake--Kawartha Hideaway
17.	American Crow <i>Corvus brachyrhynchos</i>	2	4 Apr 2023	Donald A. Sutherland	Buckhorn Lake--Kawartha Hideaway
18.	Black-capped Chickadee <i>Poecile atricapillus</i>	4	4 Apr 2023	Donald A. Sutherland	Buckhorn Lake--Kawartha Hideaway
19.	Red-breasted Nuthatch <i>Sitta canadensis</i>	1	4 Apr 2023	Donald A. Sutherland	Buckhorn Lake--Kawartha Hideaway
20.	Song Sparrow <i>Melospiza melodia</i>	4	4 Apr 2023	Donald A. Sutherland	Buckhorn Lake--Kawartha Hideaway
21.	Red-winged Blackbird <i>Agelaius phoeniceus</i>	2	4 Apr 2023	Donald A. Sutherland	Buckhorn Lake--Kawartha Hideaway
22.	Common Grackle <i>Quiscalus quiscula</i>	12	4 Apr 2023	Donald A. Sutherland	Buckhorn Lake--Kawartha Hideaway
23.	American Robin <i>Turdus migratorius</i>	1	2 Apr 2023	Iou Smyrlis	Buckhorn Lake--Kawartha Hideaway
24.	Wood Duck <i>Aix sponsa</i>	4	28 Mar 2023	Donald A. Sutherland	Buckhorn Lake--Kawartha Hideaway
25.	Ring-billed Gull <i>Larus delawarensis</i>	3	28 Mar 2023	Donald A. Sutherland	Buckhorn Lake--Kawartha Hideaway
26.	Blue Jay <i>Cyanocitta cristata</i>	2	28 Mar 2023	Donald A. Sutherland	Buckhorn Lake--Kawartha Hideaway
27.	Dark-eyed Junco <i>Junco hyemalis</i>	3	28 Mar 2023	Donald A. Sutherland	Buckhorn Lake--Kawartha Hideaway
28.	Ruby-throated Hummingbird <i>Archilochus colubris</i>	1	14 Aug 2022	Mike Ullman	Buckhorn Lake--Kawartha Hideaway
29.	Common Loon <i>Gavia immer</i>	1	14 Aug 2022	Mike Ullman	Buckhorn Lake--Kawartha Hideaway
30.	Hairy Woodpecker <i>Dryobates villosus</i>	1	14 Aug 2022	Mike Ullman	Buckhorn Lake--Kawartha Hideaway
31.	Great Crested Flycatcher <i>Myiarchus crinitus</i>	1	14 Aug 2022	Mike Ullman	Buckhorn Lake--Kawartha Hideaway
32.	Red-eyed Vireo <i>Vireo olivaceus</i>	1	14 Aug 2022	Mike Ullman	Buckhorn Lake--Kawartha Hideaway
33.	Barn Swallow <i>Hirundo rustica</i>	1	14 Aug 2022	Mike Ullman	Buckhorn Lake--Kawartha Hideaway
34.	White-breasted Nuthatch <i>Sitta carolinensis</i>	1	14 Aug 2022	Mike Ullman	Buckhorn Lake--Kawartha Hideaway

35.	Northern House Wren <i>Troglodytes aedon</i>	2	14 Aug 2022	Mike Ullman	Buckhorn Lake--Kawartha Hideaway
36.	Purple Finch <i>Haemorhous purpureus</i>	1	14 Aug 2022	Mike Ullman	Buckhorn Lake--Kawartha Hideaway
37.	Chipping Sparrow <i>Spizella passerina</i>	5	14 Aug 2022	Mike Ullman	Buckhorn Lake--Kawartha Hideaway
38.	Northern Cardinal <i>Cardinalis cardinalis</i>	1	14 Aug 2022	Mike Ullman	Buckhorn Lake--Kawartha Hideaway
39.	Mourning Dove <i>Zenaida macroura</i>	1	14 Aug 2022	Phil Ullman	Buckhorn Lake--Kawartha Hideaway
40.	Yellow-bellied Sapsucker <i>Sphyrapicus varius</i>	1	14 Aug 2022	Phil Ullman	Buckhorn Lake--Kawartha Hideaway
41.	American Goldfinch <i>Spinus tristis</i>	1	14 Aug 2022	Phil Ullman	Buckhorn Lake--Kawartha Hideaway
42.	Northern Flicker <i>Colaptes auratus</i>	1	13 Aug 2022	Phil Ullman	Buckhorn Lake--Kawartha Hideaway
43.	Eastern Kingbird <i>Tyrannus tyrannus</i>	1	13 Aug 2022	Phil Ullman	Buckhorn Lake--Kawartha Hideaway
44.	Broad-winged Hawk <i>Buteo platypterus</i>	1	12 Aug 2022	Phil Ullman	Buckhorn Lake--Kawartha Hideaway
45.	Gray Catbird <i>Dumetella carolinensis</i>	1	12 Aug 2022	Phil Ullman	Buckhorn Lake--Kawartha Hideaway
46.	Bald Eagle <i>Haliaeetus leucocephalus</i>	1	28 May 2022	Camryn Prikker	Buckhorn Lake--Kawartha Hideaway
47.	Pileated Woodpecker <i>Dryocopus pileatus</i>	2	9 Apr 2022	Donald A. Sutherland	Buckhorn Lake--Kawartha Hideaway
48.	Great Blue Heron <i>Ardea herodias</i>	1	9 Oct 2021	Reinaldo Valverde	Buckhorn Lake--Kawartha Hideaway
49.	Osprey <i>Pandion haliaetus</i>	1	23 Apr 2021	Donald A. Sutherland	Buckhorn Lake--Kawartha Hideaway
50.	Tree Swallow <i>Tachycineta bicolor</i>	3	23 Apr 2021	Donald A. Sutherland	Buckhorn Lake--Kawartha Hideaway
51.	Ruby-crowned Kinglet <i>Corthylio calendula</i>	1	23 Apr 2021	Donald A. Sutherland	Buckhorn Lake--Kawartha Hideaway
52.	European Starling <i>Sturnus vulgaris</i>	* 2	23 Apr 2021	Donald A. Sutherland	Buckhorn Lake--Kawartha Hideaway
53.	American Tree Sparrow <i>Spizelloides arborea</i>	2	31 Mar 2021	Donald A. Sutherland	Buckhorn Lake--Kawartha Hideaway 
54.	Redpoll <i>Acanthis flammea</i>	3	17 Dec 2020	Hannah Dodington	Buckhorn Lake--Kawartha Hideaway
55.	Brown Thrasher <i>Toxostoma rufum</i>	1	19 May 2020	Rachel Enns	Buckhorn Lake--Kawartha Hideaway

56.	Cape May Warbler <i>Setophaga tigrina</i>	2	18 May 2020	Rachel Enns	Buckhorn Lake--Kawartha Hideaway	
57.	Brown-headed Cowbird <i>Molothrus ater</i>	1	8 May 2020	Rachel Enns	Buckhorn Lake--Kawartha Hideaway	
58.	Wild Turkey <i>Meleagris gallopavo</i>	3	5 May 2020	Rachel Enns	Buckhorn Lake--Kawartha Hideaway	
59.	Brown Creeper <i>Certhia americana</i>	1	26 Apr 2020	Rachel Enns	Buckhorn Lake--Kawartha Hideaway	
60.	Red-breasted Merganser <i>Mergus serrator</i>	2	5 Apr 2019	Anonymous eBirder	Buckhorn Lake--Kawartha Hideaway	
61.	American Wigeon <i>Mareca americana</i>	2	1 Apr 2017	Warren Dunlop	Buckhorn Lake--Kawartha Hideaway	
62.	Sandhill Crane <i>Antigone canadensis</i>	1	19 Mar 2016	Donald A. Sutherland	Buckhorn Lake--Kawartha Hideaway	
63.	Pine Siskin <i>Spinus pinus</i>	3	19 Mar 2016	Donald A. Sutherland	Buckhorn Lake--Kawartha Hideaway	
64.	Lesser Scaup <i>Aythya affinis</i>	88	3 Nov 2012	Donald A. Sutherland	Buckhorn Lake--Kawartha Hideaway	
65.	Common Raven <i>Corvus corax</i>	1	3 Nov 2012	Donald A. Sutherland	Buckhorn Lake--Kawartha Hideaway	
66.	Green-winged Teal <i>Anas crecca</i>	6	27 Oct 2012	Donald A. Sutherland	Buckhorn Lake--Kawartha Hideaway	
67.	Redhead <i>Aythya americana</i>	4	27 Oct 2012	Donald A. Sutherland	Buckhorn Lake--Kawartha Hideaway	
68.	Pied-billed Grebe <i>Podilymbus podiceps</i>	2	27 Oct 2012	Donald A. Sutherland	Buckhorn Lake--Kawartha Hideaway	
69.	American Redstart <i>Setophaga ruticilla</i>	1	15 Aug 2005	Paul Dawson	Buckhorn Lake--Kawartha Hideaway	
70.	Canada Warbler <i>Cardellina canadensis</i>	1	15 Aug 2005	Paul Dawson	Buckhorn Lake--Kawartha Hideaway	
71.	Belted Kingfisher <i>Megasceryle alcyon</i>	1	14 Aug 2005	Paul Dawson	Buckhorn Lake--Kawartha Hideaway	
72.	Veery <i>Catharus fuscescens</i>	1	14 Aug 2005	Paul Dawson	Buckhorn Lake--Kawartha Hideaway	
73.	Nashville Warbler <i>Leiothlypis ruficapilla</i>	1	14 Aug 2005	Paul Dawson	Buckhorn Lake--Kawartha Hideaway	
74.	Mourning Warbler <i>Geothlypis philadelphia</i>	1	14 Aug 2005	Paul Dawson	Buckhorn Lake--Kawartha Hideaway	
75.	Rose-breasted Grosbeak <i>Pheucticus ludovicianus</i>	1	14 Aug 2005	Paul Dawson	Buckhorn Lake--Kawartha Hideaway	

HYBRIDS (1)

	Mallard x American Black Duck (hybrid)	1	18 Nov 2021	Donald A. Sutherland	Buckhorn Lake--Kawartha Hideaway	
--	--	---	-------------	----------------------	----------------------------------	---

ADDITIONAL TAXA (2)

passerine sp. <i>Passeriformes</i> sp.	2	7 May 2020	Rachel Enns	Buckhorn Lake--Kawartha Hideaway	
goose sp. <i>Anatidae</i> (goose sp.)	1	5 Apr 2019	Anonymous eBirder	Buckhorn Lake--Kawartha Hideaway	

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- Species Maps
- Explore Regions
- Explore Hotspots
- Search photos and sounds

Science

- eBird Status and Trends
- Conservation impacts
- Publications
- Request data

About

- Resources
- Regional portals & collaborators
- Staff
- Jobs
- Getting started with eBird
- Frequently asked questions
- Contact

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Appendix H

iNaturalist Database

28
OBSERVATIONS

13
SPECIES

47 IDENTIFIERS

8 OBSERVERS

Kawartha

Elim Lodge 

Map Legend ▲

A small bird, possibly a chickadee, is perched on a thin, dark branch. The bird is facing left and has a white underside with a dark cap. The background is a soft-focus green, suggesting foliage.

Golden-winged Warbler
(*Vermivora chrysoptera*)
Ontario, CA June 2013

Research Grade 4

Nov '24

A close-up photograph of a snake's head and the first few segments of its body. The snake is positioned horizontally, with its head on the left and body extending to the right. The background is a coarse, grey gravel surface. The snake's head is dark, and its body is a mottled pattern of brown and tan.

Eastern Milksnake
(*Lampropeltis triangulum*)
Buckhorn, ON K0L 1... May 23, 2024

Research Grade 4

May '24

Evening Grosbeak
(*Coccothraustes vespertinus*)
67 Sumcot Dr, Tren... Dec 1, 2022

Research Grade 5

Dec '22

Eastern Hognose Snake
(*Heterodon platirhinos*)
Peterborough, CA-O... August 2022

Research Grade 4

Ⓢ Aug '22

Common Snapping Turtle

Keyboard shortcuts Map data ©2025 Google 1 km



7 observations
Painted Turtle
(*Chrysemys picta*)



5 observations
Eastern Milksnake
(*Lampropeltis triangulum*)



4 observations
Common Snapping Turtle
(*Chelydra serpentina*)



2 observations
Evening Grosbeak
(*Coccothraustes vespertinus*)



2 observations
Scudder's Bush Katydid
(Genus *Scudderia*)



1 observation
Eastern Meadowlark
(*Sturnella magna*)



1 observation
Golden-winged Warbler
(*Vermivora chrysoptera*)



1 observation
Wood Thrush
(*Hylocichla mustelina*)



1 observation
Eastern Hognose Snake
(*Heterodon platirhinos*)



1 observation
Blanding's Turtle
(*Emydoidea blandingii*)



1 observation
Monarch
(*Danaus plexippus*)



1 observation
Butternut
(*Juglans cinerea*)



1 observation
American Bumble Bee
(*Bombus pensylvanicus*)

Appendix I

ORAA Database



Species list in taxonomic order for square 17QK03

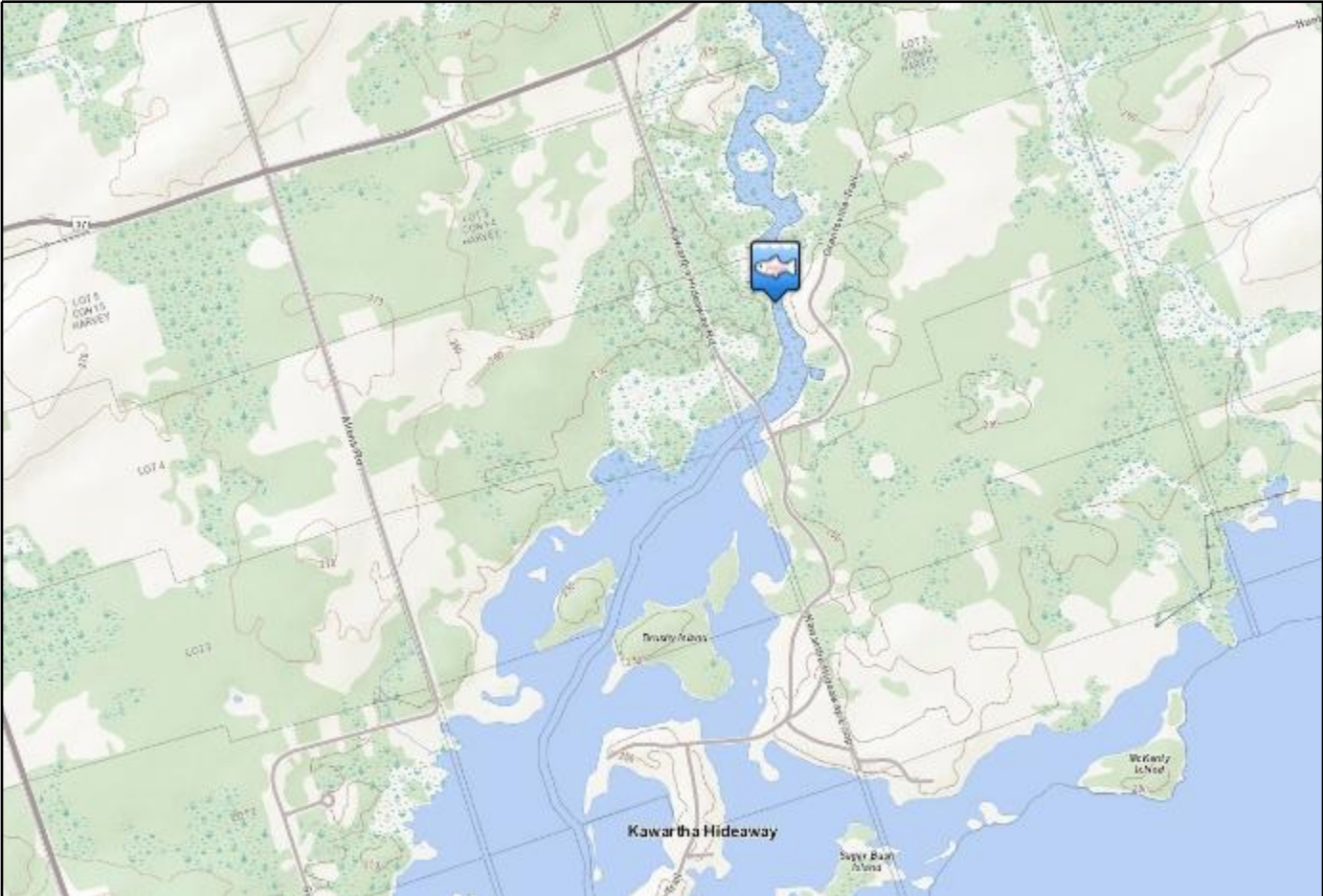
All species

Number of rows of data displayed below: 27.

Species #	Common Name	# of Records	Earliest Yr _____	Latest Yr
1	Blanding's Turtle	15	2014	2018
3	Midland Painted Turtle	39	1987	2019
4	Northern Map Turtle	10	2006	2017
6	Snapping Turtle	37	1985	2018
12	Eastern Gartersnake	15	1976	2018
13	Eastern Hog-nosed Snake	2	1963	1963
15	Eastern Milksnake	11	1970	2018
18	Northern Ribbonsnake	2	2002	2017
19	Northern Ring-necked Snake	1	2019	2019
20	Northern Watersnake	8	1970	2009
22	Red-bellied Snake	7	1978	2018
24	Smooth Greensnake	2	1978	2017
25	American Bullfrog	153	1987	2017
28	Gray Treefrog	175	1988	2019
29	Green Frog	287	1978	2019
30	Mink Frog	4	1984	2017
31	Northern Leopard Frog	146	1976	2019
33	Spring Peeper	270	1978	2018
34	Western Chorus Frog	114	1996	2018
35	Wood Frog	113	1978	2018
36	American Toad	62	1988	2017
40	Blue-spotted Salamander	11	2016	2018
44	Eastern Red-backed Salamander	15	1978	2018
45	Four-toed Salamander	5	1937	2017
51	Red-spotted Newt	4	1978	2017
53	Spotted Salamander	6	1978	2017
54	Five-lined Skink	12	1988	2017

Appendix J

Fish On-line Database



Waterbody Information

Latitude: 44.510204
Longitude: -78.416143
Surface Area (ha): -
Maximum Depth (m): -
Average Depth (m): -
Fisheries Management Zone(s): 17
Bait Management Zone: Southern BMZ

Legend

- | | | | |
|---|-------------------------|---|---------------------------|
|  | Waterbody |  | Licence Issuer |
|  | Fish Sanctuary |  | Fisheries Management Zone |
|  | Lake Depth Contours (m) |  | Bait Management Zone |
|  | Fishing Access Points | | |

Fish Species Found in Waterbody

Pumpkinseed, Rock Bass, Smallmouth Bass, Yellow Perch

Appendix K

Amphibian Call Survey Summary Table

Amphibian Survey Data Summary

[illegible]

Appendix L

Species List

Species List

KINGDOM	Common Name	Scientific Name	SARO	SARA
Animalia	American Crow	Corvus brachyrhynchos		
	American Goldfinch	Spinus tristis		
	American Redstart	Setophaga ruticilla		
	American Robin	Turdus migratorius		
	American Woodcock	Scolopax minor		
	Baltimore Oriole	Icterus galbula		
	Barred Owl	Strix varia		
	Big Brown Bat	Eptesicus fuscus		
	Black-capped Chickadee	Poecile atricapillus		
	Black-throated Green Warbler	Setophaga virens		
	Canadian Toad	Anaxyrus hemiophrys		
	Common Loon	Gavia immer	NAR	
	Dark-eyed Junco	Junco hyemalis		
	Eastern Phoebe	Sayornis phoebe		
	Eastern Wood-pewee	Contopus virens	SC	Special Concern/Préoccupante
	European Starling	Sturnus vulgaris		
	Eyed Brown	Lethe eurydice		
	Golden-crowned Kinglet	Regulus satrapa		
	Gray Catbird	Dumetella carolinensis		
	Gray Treefrog	Dryophytes versicolor		
	Great Crested Flycatcher	Myiarchus crinitus		
	Hairy Woodpecker	Dryobates villosus		
	Indigo Bunting	Passerina cyanea		
	Mourning Dove	Zenaida macroura		
	Northern Cardinal	Cardinalis cardinalis		
	Northern Flicker	Colaptes auratus		

KINGDOM	Common Name	Scientific Name	SARO	SARA
	Northern Harrier	Circus hudsonius	NAR	
	Northern Hoary Bat	Lasiurus cinereus	END	
	Ovenbird	Seiurus aurocapilla		
	Porcupine	Erethizon dorsatum		
	Question Mark	Polygonia interrogationis		
	Red Fox	Vulpes vulpes		
	Red Squirrel	Tamiasciurus hudsonicus		
	Red-bellied Woodpecker	Melanerpes carolinus		
	Red-eyed Vireo	Vireo olivaceus		
	Sandhill Crane	Antigone canadensis		
	Scarlet Tanager	Piranga olivacea		
	Silver-haired Bat	Lasionycteris noctivagans	END	
	Song Sparrow	Melospiza melodia		
	Tree Swallow	Tachycineta bicolor		
	Turkey Vulture	Cathartes aura		
	Veery	Catharus fuscescens		
	White-crowned Sparrow	Zonotrichia leucophrys		
	White-footed Mouse	Peromyscus leucopus		
	White-tailed Deer	Odocoileus virginianus		
	White-throated Sparrow	Zonotrichia albicollis		
	Wild Turkey	Meleagris gallopavo		
	Winter Wren	Troglodytes hiemalis		
	Wood Duck	Aix sponsa		
	Wood Frog	Lithobates sylvaticus		
	Wood Thrush	Hylocichla mustelina	SC	Threatened/Menacée
	Yellow Warbler	Setophaga petechia		
	Yellow-bellied Sapsucker	Sphyrapicus varius		
	Yellow-rumped Warbler	Setophaga coronata		
Plantae				
	American Beech	Fagus grandifolia		

KINGDOM	Common Name	Scientific Name	SARO	SARA
	Balsam Fir	Abies balsamea		
	Basswood	Tilia americana		
	Blue Cohosh	Caulophyllum thalictroides		
	Bracken Fern	Pteridium aquilinum		
	Canada Goldenrod	Solidago canadensis		
	Common St. John's-wort	Hypericum perforatum		
	Dark-green Bulrush	Scirpus atrovirens		
	Eastern Bracken Fern	Pteridium aquilinum ssp. latiusculum		
	Eastern Hemlock	Tsuga canadensis		
	Eastern Hop-hornbeam	Ostrya virginiana		
	Large False Solomon's Seal	Maianthemum racemosum		
	Large-leaved Aster	Eurybia macrophylla		
	Large-toothed Aspen	Populus grandidentata		
	Long-headed Anemone	Anemone cylindrica		
	Northern Bush-honeysuckle	Diervilla lonicera		
	Northern Dewberry	Rubus flagellaris		
	Northern Red Oak	Quercus rubra		
	Ostrich Fern	Matteuccia struthiopteris		
	Paper Birch	Betula papyrifera		
	Pennsylvania Sedge	Carex pensylvanica		
	Poverty Oatgrass	Danthonia spicata		
	Purple Loosestrife	Lythrum salicaria		
	Red Ash	Fraxinus pennsylvanica		
	Red Baneberry	Actaea rubra		
	Red Clover	Trifolium pratense		
	Red Maple	Acer rubrum		
	Red Trillium	Trillium erectum		
	Riverbank Grape	Vitis riparia		
	Rough-leaved Mountain Rice	Oryzopsis asperifolia		
	Round-lobed Hepatica	Hepatica americana		

KINGDOM	Common Name	Scientific Name	SARO	SARA
	Royal Fern	Osmunda regalis		
	Rugel's Plantain	Plantago rugelii		
	Sensitive Fern	Onoclea sensibilis		
	Silver Maple	Acer saccharinum		
	Small Duckweed	Lemna minor		
	Small Enchanter's Nightshade	Circaea alpina		
	Speckled Alder	Alnus incana ssp. rugosa		
	Spinulose Wood Fern	Dryopteris carthusiana		
	Spotted Jewelweed	Impatiens capensis		
	Spotted Joe Pye Weed	Eutrochium maculatum		
	Spreading Dogbane	Apocynum androsaemifolium		
	Star Sedge	Carex echinata		
	Striped Maple	Acer pensylvanicum		
	Sugar Maple	Acer saccharum		
	Trembling Aspen	Populus tremuloides		
	Tufted Vetch	Vicia cracca		
	Upright Brome	Bromus erectus		
	Virginia Creeper	Parthenocissus quinquefolia		
	Water Speedwell	Veronica anagallis-aquatica		
	Western Poison Ivy	Toxicodendron radicans var. rydbergii		
	White Ash	Fraxinus americana		
	White Elm	Ulmus americana		
	White Meadowsweet	Spiraea alba		
	White Spruce	Picea glauca		
	Wild Caraway	Carum carvi		
	Wild Chicory	Cichorium intybus		
	Wild Lily-of-the-valley	Maianthemum canadense		
	Wild Sarsaparilla	Aralia nudicaulis		
	Wild Strawberry	Fragaria virginiana		
	Woodland Strawberry	Fragaria vesca		

KINGDOM	Common Name	Scientific Name	SARO	SARA
	Woolly Blue Violet	Viola sororia		
	Yellow Trout-lily	Erythronium americanum		
	Zigzag Goldenrod	Solidago flexicaulis		

Appendix M

Bat Summary Data

Bat Detection Summary Brief				
Location ID:		BD5		Occurrence
Common Name	Scientific Name	Detected	Probable	% of Identifiable Calls
Eastern Small-Footed Myotis	<i>Myotis leibii</i>	0	1	0.72%
Northern Long-eared Myotis	<i>Myotis septentrionalis</i>	0	0	0.00%
Little Brown Myotis (Bat)	<i>Myotis lucifugus</i>	0	0	0.00%
Tri-coloured Bat	<i>Perimyotis subflavus</i>	0	0	0.00%
Eastern Red Bat	<i>Lasiurus borealis</i>	0	0	0.00%
Big Brown Bat	<i>Eptesicus fuscus</i>	53	25	56.12%
Silver-haired Bat	<i>Lasionycteris noctivagans</i>	14	14	20.14%
Hoary Bat	<i>Lasiurus cinereus</i>	20	12	23.02%
	Number of Files:	977		
	Number of Files with Bat Calls Detected:	167		
	Signal Interference:	810		
	Indeterminate Species:	28		
	Files with Identifiable Calls:	139		

Appendix N

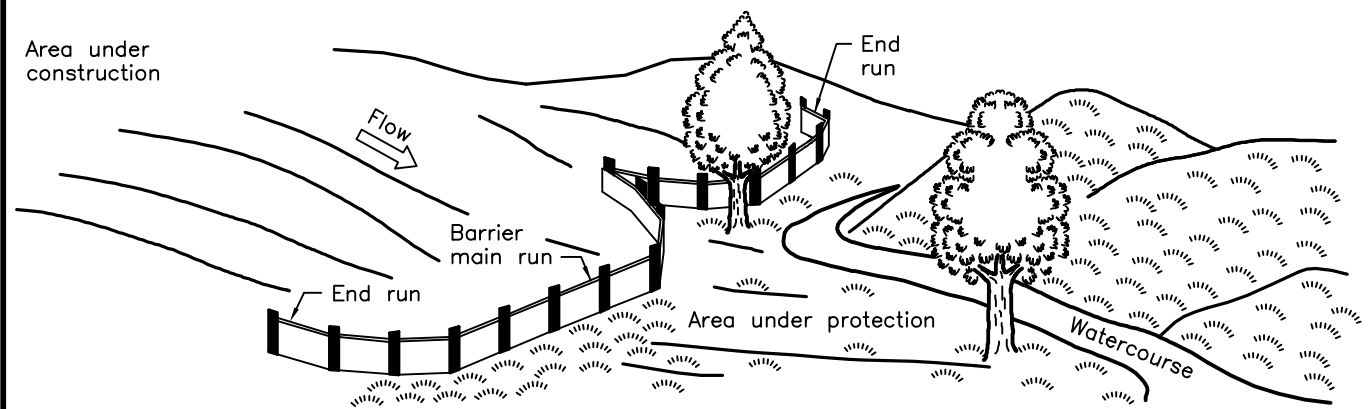
Significant Wildlife Habitat (SWH)

Significant Wildlife Habitat Screening					
Significant Wildlife Habitat Type	ELC Habitat (for internal use)	General Habitat Description	ELC Observed	SWH Present	Comments
Wildlife Concentration Areas					
Waterfowl Stopover and Staging Areas (Terrestrial)	CUM1, CUT1, plus annual spring flooding	Fields with sheet water during the spring	NO	NO	Does not possess ELC types.
Waterfowl Stopover and Staging Areas (Aquatic)	MAS1 to MAS 3, SAS1, SAM1, SAF1, SWD1 to SWD7	Ponds, marshes, lakes, bays, coastal inlets, and watercourses used during migration	NO	NO	Does not possess ELC types.
Shorebird Migratory Stopover Area	BBO1 to 2, BBS1 to 2, BBT1 to 2, SDO1, SDS2, SDT1, MAM1 to 5	Shorelines of lakes, rivers and wetlands, including beach areas, bars and seasonally flooded, muddy and un-vegetated shoreline habitats	NO	NO	Does not possess ELC types.
Raptor Wintering Area	At least one of FOD, FOM or FOC and one of CUM, CUT, CUS, CUW	The habitat provides a combination of fields and woodlands that provide roosting, foraging and resting habitats for wintering raptors	NO	NO	Does not possess ELC types.
Bat Hibernacula	CCR1, CCR2, CCA1, CCA2	Caves, mine shafts, underground foundations and Karsts. Hibernacula relatively poorly known	NO	NO	Does not possess ELC types.
Bat Maternity Colonies	FOD, FOM, SWD, SWM	Mature forests with >10 ha of large diameter (>25 cm dbh) wildlife trees, 21 snags per hectare preferred	YES	YES	Woodland ELC represents roosting habitat.
Turtle Wintering Areas	Classes SA, MA, OA and SA, ELC Community Series FEO and BOO	Within core habitat, water must be deep enough not to freeze and have soft mud substrates	NO	NO	Does not possess ELC types.
Reptile Hibernaculum (Turtles assessed separately)	Any Ecosite with the exception of very wet communities, Five-lined Skink prefers FOD and FOM communities, Ecosites FOC1 & FOC3	Below frost lines in burrows, rock crevices and other natural or naturalized locations. Rock crevices, talus slopes, etc.	YES	YES	There are fractured bedrock exposures in the area of the Hemlock woodland adjacent to the PSW that could provide access to the shallow water table. These bedrock exposures are on the retained lands.
Colonial Nesting Bird Breeding Habitat (Bank and Cliff)	CUM1, CUT1, CUS1, BLO1, BLS1, BLT1, CLO1, CLS1, CLT1	Eroding banks, sandy hills, borrow pits, steep slopes, sand piles, cliff faces, bridge abutments, silos, barns. Man-made structure and disturbance over 2 years old	NO	NO	Does not possess ELC types.
Colonial Nesting Bird Breeding Habitat (Tree/Shrubs)	SWM2, SWM3, SWM5, SWM6, SWD1-7, FET1	Live or dead standing trees (typically 11 to 15 m tall) in wetlands, lakes, islands and peninsulas. Occasionally shrubs and emergent vegetation.	NO	NO	Does not possess ELC types.
Colonial Nesting Bird Breeding Habitat (Ground)	MAM1 - 6, MAS1 - 3, CUM, CUT, CUS	Rocky island or peninsula within a lake or river. Close proximity to watercourses in open fields or pastures with scattered trees or shrubs	NO	NO	Does not possess ELC types.
Migratory Butterfly Stopover Areas	At least one of FOD, FOM, FOC and CUP and one of CUM, CUT, CUS	At least 10 ha in size with combination of field and forest within 5 km of Lake Ontario	YES	NO	Is not located near Lake Ontario.
Landbird Migratory Stopover Areas	FOC, FOM, FOD, SWC, SWM, SWD	Woodlots need to be >10 ha in size and within 5 km of Lake Ontario	YES	NO	Is not located near Lake Ontario.
Deer Yarding Areas	FOM, FOC, SWM, SWC, CUP2, CUP3, FOD3, CUT MNRF to confirm	Core (Stratum I) is located within Stratum II. Core is critical for survival of deer during winter months	NO	NO	Does not possess ELC types.
Deer Winter Congregation Areas	FOC, FOM, FOD, SWC, SWM, SWD	Large woodlots typically >100 ha, however smaller woodlots with densities of 0.1 - 1.5 deer/ha may also be considered	YES	NO	Not mapped by MNRF as a deer wintering habitat.
Rare Vegetation Communities					
Cliffs and Talus Slopes	TAO, TAS, TAT, CLO, CLS, CLT	Cliff is vertical to near vertical >3 m tall Talus slope is rock rubble at base of a cliff made up of coarse rock debris	NO	NO	Does not possess ELC types.
Sand Barren	SBO1, SBS1, SBT1	Typically >0.5 ha with exposed sand, generally sparsely vegetated and caused by lack of moisture, periodic fires and erosion	NO	NO	Does not possess ELC types.
Alvar	ALO1, ALS1, ALT1, FOC1, FOC2, CUM2, CUS2, CUT2-1, CUW	Typically >0.5 ha with level, mostly fractured calcareous bedrock	NO	NO	Does not possess ELC types.
Old Growth Forest	FOD, FOM, SWD, SWC, SWM	Woodland areas 30 ha or greater with at least 10 ha interior habitat assuming 100 m buffer at edge of forest	YES	NO	Does not possess 10 ha of interior woodland mostly edge.
Savannah	TPS1, TPS2, TPW1, TPW2, CUS2	Any tallgrass prairie habitat that has tree cover between 25 - 60%	NO	NO	Does not possess ELC types.
Tallgrass Prairie	TPO1, TPO2	Dominated by prairie grasses with < 25% tree cover	NO	NO	Does not possess ELC types.
Other Rare Vegetation Communities	Provincially Rare S1, S2 and S3 vegetation communities, refer to Appendix M of SWHTG	Beaches, fens, forest, marsh, barrens, dunes and swamps	NO	NO	Does not possess ELC types.
Specialized Habitat for Wildlife					
Waterfowl Nesting Area	MAS1 to 3, SAS1, SAM1, SAF1, MAM1 to 6, SWT1, SWT2, SWD1 to 4	Extends 120 m from a wetland (>0.5 ha) or a wetland (>0.5 ha) and any small wetlands or a cluster of 3 small wetlands where waterfowl nesting is known to occur	NO	NO	Does not possess ELC types.
Bald Eagle and Osprey Nesting, Foraging and Perching Habitat	FOD, FOM, FOC, SWD, SWM, SWC directly adjacent to riparian areas	Nests are associated with lakes, ponds, rivers or wetlands along forested shorelines, islands or in structures over water	NO	NO	Perhaps near Buckhorn Lake but not within 120 m of proposed development.
Woodland Raptor Nesting Habitat	All forested ecosites May also occur in SWC, SWM, SWD, CUP3	All natural or conifer plantation woodland / forest stands >30 ha with >10 ha of interior habitat	YES	NO	Perhaps near Buckhorn Lake but not within 120 m of proposed development.
Turtle Nesting Areas	Exposed mineral soil area adjacent (<100m) or within MAS1 to 3, SAS1, SAM1, SAF1, BOO1, FEO1	Close to water with sand and gravel that turtles are able to dig in, located in open sunny areas.	NO	NO	Does not possess ELC types.

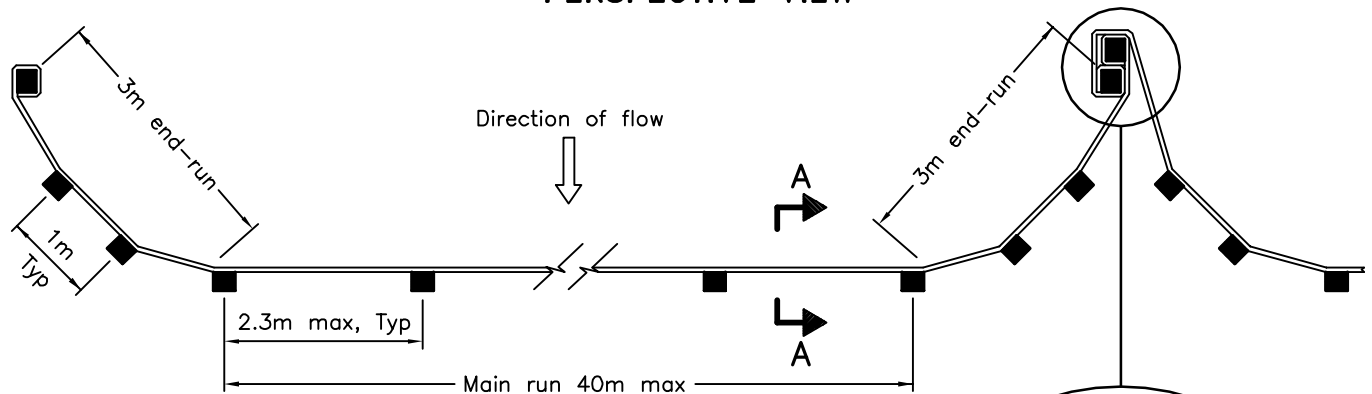
Significant Wildlife Habitat Screening					
Significant Wildlife Habitat Type	ELC Habitat (for internal use)	General Habitat Description	ELC Observed	SWH Present	Comments
Seeps and Springs	Any forested Ecosite within a headwater area	Any forested area (with >25% meadow/field/pasture) within headwaters of a stream or river system	YES	NO	Seeps and springs not observed in this portion of the property, outside 120 m AOI. Mostly observed in southern portion on retained lands.
Amphibian Breeding Habitat (Woodland)	FOC, FOM, FOD, SWC, SWM, SWD	Presence of a wetland, pond or woodland pool >500m ² , within or adjacent to woodland	YES	NO	Habitat not present within the proposed severance. Surveys did not detect significant amphibian populations associated with the PSW adjacent to the proposed development.
Amphibian Breeding Habitat (Wetlands)	Classes SW, MA, FE, BO, OA, SA Typically isolated (>120 m) from woodland ecosites	Wetlands >500m ² (25m diameter), supporting high species diversity	NO	NO	Habitat not present within the proposed severance. Not greater than 120 m from woodland ecosite. Surveys did not detect significant amphibian populations associated with the PSW adjacent to the proposed development.
Woodland Area-Sensitive Breeding Bird Habitat	FOC, FOM, FOD, SWC, SWM, SWD	Habitats where interior forest birds are breeding, typically large mature (>60 yrs old) forest stands or woodlots >30 ha	YES	YES	Possessed the number and types of woodland breeding bird species.
Habitat of Species of Conservation Concern (other than Threatened or Endangered)					
Marsh Breeding Bird Habitat	MAM1 to 6, SAS1, SAM1, SAF1, FEO1, BOO1 Green Heron: SW, MA, CUM1	Nesting occurs in wetlands consisting of shallow water with emergent aquatic vegetation Green Heron: edge water habitat	NO	NO	Does not possess ELC types.
Open Country Bird Breeding Habitat	CUM1, CUM2	Large grassland areas (including natural and cultural field and meadows) >30 ha	NO	NO	Does not possess ELC types.
Shrub/Early Successional Bird Breeding Habitat	CUT1, CUT2, CUS1, CUS2, CUW1, CUW2	Large field areas succeeding to shrub thicket habitats >10 ha in size	NO	NO	Does not possess ELC types.
Terrestrial Crayfish	MAM1 to 6, MAS1 to 3, SWD, SWT, SWM CUM1 with inclusions above meadow marsh or swamp ecosites	Wet meadow edges of shallow marshes Only found in SW Ontario	NO	NO	Does not possess ELC types.
Special Concern and Rare Wildlife Species	Varies	All Special Concern and Provincially Rare plant and animal species. May also consider Area Sensitive and Culturally Sensitive Species	YES	YES	Both Eastern Wood-Pewee and Wood Thrush detected during the surveys
Animal Movement Corridors					
Amphibian Movement Corridors	Corridors found in all ecosites associated with water, determined from breeding habitats	Determined as part of breeding habitat assessment	YES	NO	Habitat not present within the proposed severance. Surveys did not detect significant amphibian populations associated with the PSW adjacent to the proposed development. The proposed severance is not between two water features that amphibians would migrate to and from.
Deer Movement Corridors	All forested Ecosites	All proposals within Stratum II Deer Wintering Area have potential for corridors	NO	NO	Not mapped by MNRF as a deer wintering area.
General Comments:					

Appendix O

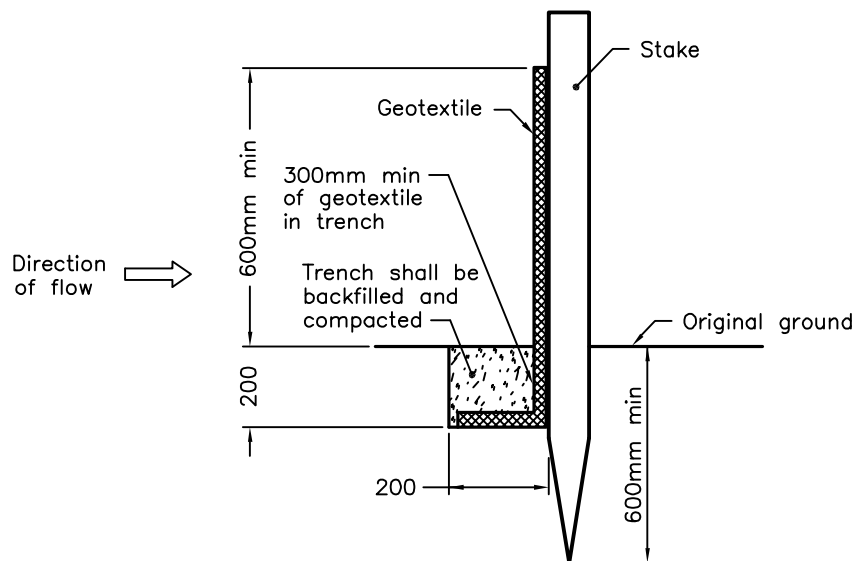
Light-Duty Silt Fence Schematic



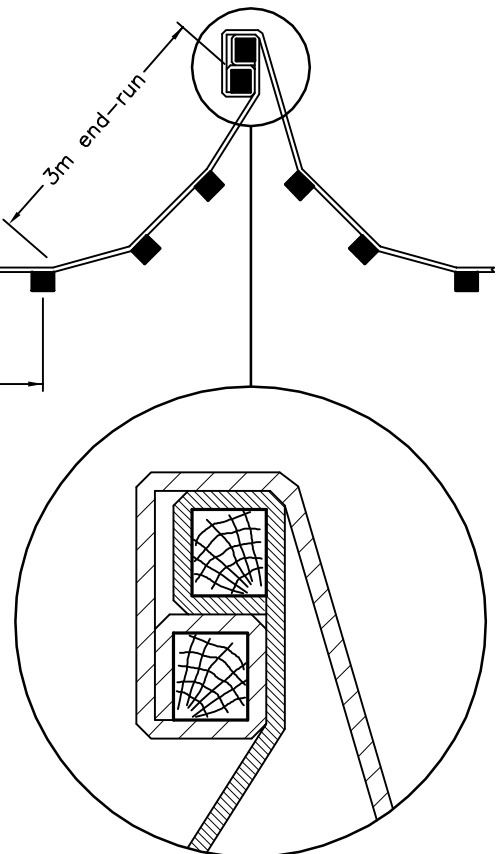
PERSPECTIVE VIEW



PLAN



SECTION A-A



JOINT DETAIL

NOTE:

A All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING

Nov 2015

Rev 2

**LIGHT-DUTY
SILT FENCE BARRIER**



OPSD 219.110