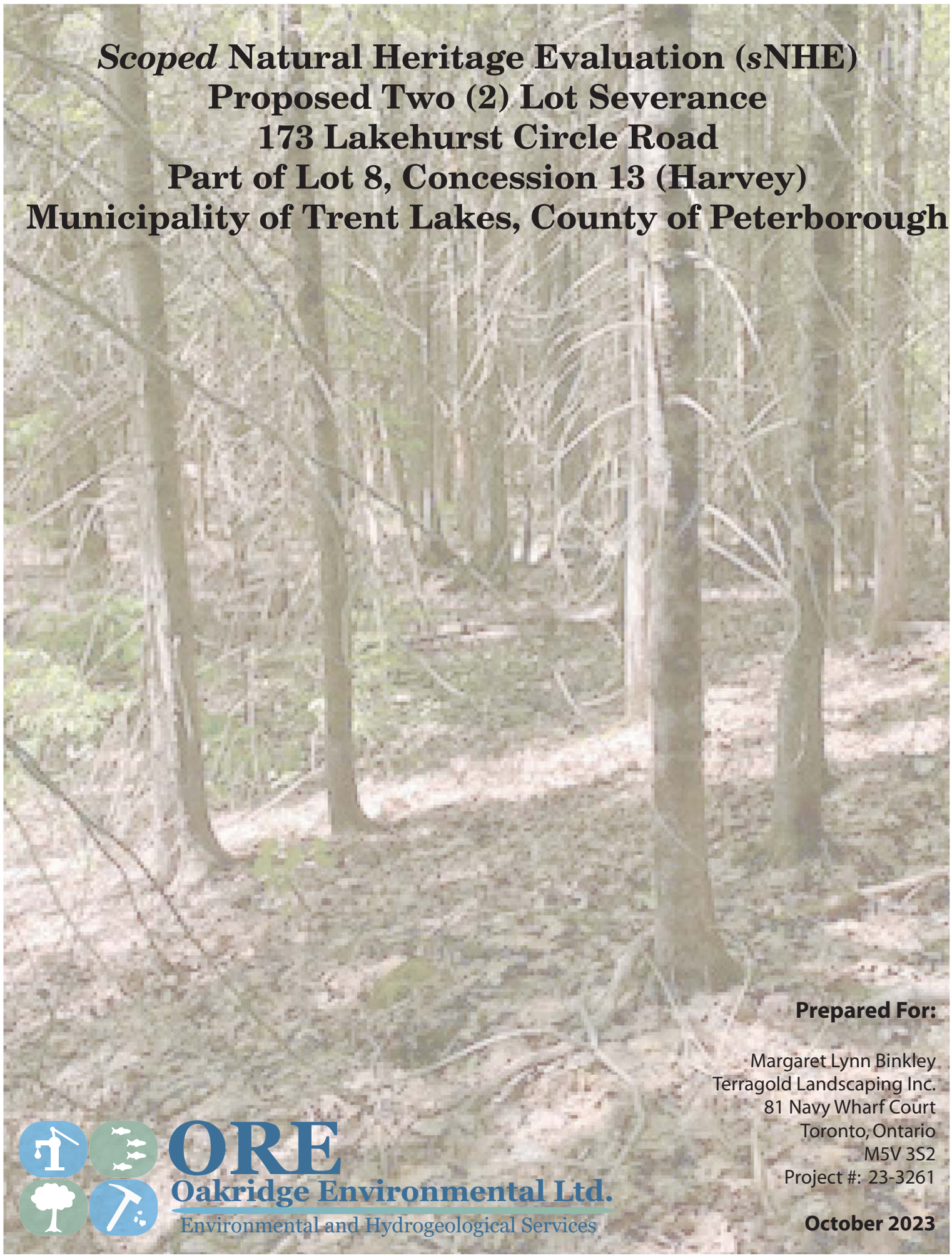
Scoped Natural Heritage Evaluation (*s*NHE)
Proposed Two (2) Lot Severance
173 Lakehurst Circle Road
Part of Lot 8, Concession 13 (Harvey)
Municipality of Trent Lakes, County of Peterborough



Prepared For:

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Project #: 23-3261

October 2023

ORE
Oakridge Environmental Ltd.
Environmental and Hydrogeological Services

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October 11th, 2023

Terragold Landscaping Inc.
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Attention: **Margaret Lynn Binkley**

Re: Scoped Natural Heritage Evaluation (*s*NHE)
Proposed Two (2) Lot Severance
173 Lakehurst Circle Road
Part of Lot 8, Concession 13 (Harvey)
Municipality of Trent Lakes, County of Peterborough
ORE File No. 23-3261

Oakridge Environmental Ltd. (ORE) is pleased to provide this *Scoped* Natural Heritage Evaluation (*s*NHE) for the above-referenced property located in the County of Peterborough.

ORE staff completed one (1) site inspection during the spring season. The site contains mature woodland and localized unevaluated wetlands that function as localized recharge areas. ORE staff confirmed the location/limit of the unevaluated wetlands on-site which are subject to the Growth Plan requirements. ORE staff also detected Eastern Wood-Pewee on-site which is a Special Concern species. The nesting site was identified within a cavity nest across Lakehurst Circle Road on the neighbour's property to the north. Eastern Wood-Pewee is not subject to the Endangered Species Act (ESA) requirements, however, is subject to the Significant Wildlife Habitat Mitigation Support Tool (SWHMiST) requirements.

Recommendations with respect to mitigation measures intended to prevent the development from imposing on nearby sensitive features have been included in this report. It is expected the two (2) developments can proceed, provided those recommendations are implemented.

Yours truly,
Oakridge Environmental Ltd.

Rob West, HBSc.
Senior Ecologist

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1.0 Introduction

1.1 General

Oakridge Environmental Ltd. (ORE) is pleased to present this Scoped Natural Heritage Evaluation (*s*NHE) in support of a consent application in the Municipality of Trent Lakes.

It is our understanding that the proponent is proposing to sever two (2) lots for the purpose of single residential development (with private services) along Lakehurst Circle Road. The subject site and adjacent lands contain Unevaluated Wetlands and hydrologic features, and are also located within the Growth Plan area for the Greater Golden Horseshoe. As a result, an *s*NHE 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 demonstrate that the proposed severances and developments can be sustainably accommodated without resulting in unacceptable impacts to any sensitive hydrologic or natural environment features.

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

1.2 Site Description, Location and Access

The subject site is located at 173 Lakehurst Circle Road, within Part Lot 8, Concession 13 (former Harvey), Municipality of Trent Lakes, County of Peterborough. The total property consists of approximately 2.96 ha (7.3 acres) located west of Sandy Lake, on the south and west side of Lakehurst Circle Road (Figures 1 & 2).

The lot currently possesses a residence and accessory structures, located on the lands to be retained, in the northern portion of the property. Existing residences, vacant and agricultural uses are noted on adjacent lands. Unevaluated wetlands are located on surrounding lands to the north and south. Both proposed lots are entirely wooded.

1.3 Proposed Development

A two (2) lot severance is being proposed for the purpose of a single residential development. The proposed severances will be located in the northwest and eastern

portion of the property, consisting of approximately 0.3 ha (0.74 acres) each.

A proposed development concept plan has not been provided, as the plan will be based on any potential constraints identified in this report.

2.0 Policy Framework

2.1 Provincial Policy Statement

The 2020 Provincial Policy Statement (PPS) provides policy direction on matters of provincial interest related to land use planning and development. This document stresses the need for appropriate development while protecting resources of provincial interest, public health and safety, and the quality of Natural Heritage Features.

Section 3 of the Planning Act requires that Planning authorities shall "have regard for" the PPS when exercising any authority that affects municipal Planning matters. Since this is a Planning application, the Township and County will usually apply the most recent version of the PPS Natural Heritage section requirements to ensure the relevant natural heritage features are detected and that any required mitigation is applied to protect those features (Appendix A).

ORE is knowledgeable of, and has reviewed Section 2.1 (Natural Heritage) of the 2020 PPS 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 Northern Development, Mines, Natural Resources and Forestry's (MNDMNRF'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 MNDMNRF'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.

2.2 Growth Plan for the Greater Golden Horseshoe (Growth Plan)

It is understood the proposed severances are subject to a Planning application and related approvals, and that the Growth Plan is applicable.

In July of 2017, the Ministry of Municipal Affairs and Housing (MMAH) issued the Growth Plan for the Greater Golden Horseshoe (Growth Plan or GPGGH). The Growth Plan is a policy document intended to assist planning authorities implement a set of standardized objectives for development within their jurisdictions. Among other things, the Growth Plan established a Natural Heritage System (NHS) in accordance with the PPS for the entire region. The NHS identifies Key Natural Heritage Features (KNHF) and water resource systems (Key Hydrologic Features - KHF).

The Growth Plan also prescribes certain setbacks from these features, typically in the form of a "Vegetation Protection Zone" (VPZ). The NHS and these prescribed setbacks are intended to be applicable to all new developments that require a Planning application, outside the designated settlement areas of the Greater Golden Horseshoe.

The Growth Plan was amended in May 2019 due to its restrictive nature. It was revised to allow Municipalities more decision-making abilities within their jurisdiction by providing their own Natural Heritage System (NHS), rather than adopting the Growth Plan in its entirety.

Section 4.2.3.1 of the Growth Plan states that *"outside of settlement areas, development or site alteration is not permitted in key natural heritage features that are part of the Natural Heritage System for the Growth Plan or in key hydrologic features…"*. Since the Natural Heritage System for the Growth Plan has not yet been implemented by the County of Peterborough nor the Municipality, this policy currently does not prohibit development in key natural heritage features. Similarly, there is no County NHS mapping that identifies Significant Valleylands, nor does the OP identify any criteria to evaluate Valleylands, therefore, no policies exist with respect to development in valleylands at this point either. However, this policy provides protection to the key hydrologic features (i.e., the non-PSW and unevaluated wetlands) from development and site alteration.

ORE staff have identified any/all KNHFs/KHFs that apply to the proposed severances.

The applicable setbacks have been applied, as per the Growth Plan.

2.3 Conservation Authority

The subject site does not appear to fall within an area regulated by a Conservation Authority. As such, there are no requirements to meet any regulation administered by a Conservation Authority.

2.4 County of Peterborough

A Preliminary Severance Review (PSR) was prepared by the County of Peterborough on July 18th, 2022. The PSR states the subject site is located within 120 m of non-evaluated wetlands. The PSR further states that one of the lots appears to be located within a 30 metre vegetation protection zone (VPZ), however, the wetland is located across the road and is not considered adjacent to the proposed parcel. The study must confirm the appropriateness of the placement of this lot.

The County of Peterborough is drafting its own Natural Heritage System (NHS) which trumps the Growth Plan's NHS. In the interim, Significant Woodlands are not being assessed at this time due to there being no County assessment criteria.

This study has been prepared to address the County requirements. An excerpt from the County's Official Plan is included in Appendix B. The excerpt includes the requirements for an environmental study.

2.5 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 for the severances and subsequent development. 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 *s*NHE.

3.0 Scope of Work

In completing this *s*NHE, the following tasks were completed:

- Relevant background information regarding the site (air photos, topographic mapping, etc.) was compiled and reviewed. Queries of the following databases

were completed: MNDMNRF's Natural Heritage Information Centre (NHIC); iNaturalist; eBird, and the Ontario Breeding Bird Atlas (OBBA).

- Site features were mapped using a Global Positioning System (GPS). A base plan (using geo-referenced aerial photography) was prepared and all site information (i.e., vegetation and sensitive features) was plotted.

- One (1) site inspection was completed in the growing season. A biological inventory of visible flora and fauna of the property was completed. Basic vegetation communities were identified, where possible.

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

- All data have been interpreted and this report has been prepared.

4.0 Physical Setting

4.1 Topography and Drainage

As illustrated by Figure 2, the subject site occurs on a southeast-facing slope of a large ridge overlooking Sandy Lake, approximately 500 m to the east. The ridge feature defines the drainage divide between the Pigeon Lake - Gannon Narrows Subwatershed and the Burleigh Falls Dam - Lower Buckhorn Lake Subwatershed. The total relief on the property is approximately 5 m, with about 1 m of relief on each of the proposed severance lots.

There are no mapped watercourses on the site, other than possibly the edge of an irregularly shaped wetland (unevaluated) that extends away from the site to the southwest, within the lower part of the slope. A small "pocket" wetland is also mapped as occurring immediately north of the property (on the north side of Lakehurst Circle Road). There are no (mapped) channelized features associated with these wetlands, thus there are no surface hydraulic connections to Sandy Lake.

The presence of the mapped wetlands immediately north and south of the property suggests that there could be a shallow water table condition in the area.

4.2 Geological Setting

The geology of the subject property and surrounding area is fairly simple. As illustrated by Figure 3, most of the map area 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. 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.

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.

Above the Dummer Complex Till, pockets of stratified (layered) glaciolacustrine silt and clay (with minor fine sand) occur, representing the deep remnants of ancient glacial lakes that once inundated the area. While these deposits are not mapped within the subject site, it is possible that small pockets could be present from place to place.

Similarly, west of the site there are deposits of glaciofluvial sands that could be more extensive than suggested by the mapping. Should any occur on the site, those deposits would likely be very thin, consisting of permeable sand and gravel, with some finer grained interbeds.

The thickness of the till is not known, although the underlying limestone bedrock can be quite shallow in the Lakehurst area, with bedrock outcropings common just north of the site. From perusal of the Ministry of the Environment, Conservation and Parks (MECP) well record database, we note that the log of nearby well No. 5118389 indicates that the till has a thickness of 3.66 m, overlying limestone. The static water level measured at the time of completion was 2.74 m. The logs of several other recorded wells in the vicinity (e.g., Nos. 5112376, 5112377 and 5112073) indicate similar conditions.

5.0 Background Data

5.1 Natural Heritage Information Centre (NHIC)

The NHIC provides an online database managed by the Ministry of Northern Development, Mines, Natural Resources and Forestry (NDMNRF). Within the database, Ontario has been divided into a grid consisting of 1 km^2 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 120 m of adjacent lands around the property.

The search area falls within three (3) of the 1 km^2 squares: 17QK0433, 17QK0434, and 17QK0534.

The query indicates that eight (8) Species at Risk (SAR) have been recorded in the area:

Common Name	**Scientific Name**	**SAR Status**
Bobolink	*Dolichonyx oryzivorus*	Threatened
Canada Warbler	*Cardellina canadensis*	Special Concern
Eastern Meadowlark	*Sturnella magna*	Threatened
Eastern Wood-Pewee	*Contopus virens*	Special Concern
Golden-winged Warbler	*Vermivora chrysoptera*	Special Concern
Snapping Turtle	*Chelydra serpentina*	Special Concern
Western Chorus Frog[1]	*Pseudacris maculata pop. 1*	NAR[2]
Wood Thrush	*Hylocichla mustelina*	Special Concern

1 Great Lakes - St. Lawrence - Canadian Shield population
2 Not at Risk (SARO); Threatened (SARA/COSEWIC)

The query indicates that one (1) provincially rare species of note (not a SAR but tracked by the ministry) has been recorded in the area:

Common Name	**Scientific Name**	**S-Rank**
Upland Sandpiper	*Bartramia longicauda*	S2*B*

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

5.2 Ontario Breeding Bird Atlas (OBBA)

The OBBA[1] 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 km^2 area mapped as 17TQK03, Region 16, Peterborough. The Summary Sheets for this atlas area are provided in Appendix E.

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

Common Name	**Scientific Name**	**SARO Status**
Barn Swallow	*Hirundo rustica*	Special Concern
Black Tern	*Chlidonias niger*	Special Concern
Bobolink	*Dolichonyx oryzivorus*	Threatened
Canada Warbler	*Cardellina canadensis*	Special Concern
Common Nighthawk	*Chordeiles minor*	Special Concern
Eastern Meadowlark	*Sturnella magna*	Threatened
Eastern Whip-poor-will	*Antrostomus vociferus*	Threatened
Eastern Wood-Pewee	*Contopus virens*	Special Concern
Golden-winged Warbler	*Vermivora chrysoptera*	Special Concern
Grasshopper Sparrow	*Ammodramus savannarum*	Special Concern
Wood Thrush	*Hylocichla mustelina*	Special Concern

Brief descriptions of the listed species and their preferred habitats are included in Appendix C. The site inspections included a review of potential SAR habitat and targeted searches for the listed species.

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 hotspot is the Sandy Creek Bay (L4727815) site, located approximately 1.4 km south of the site. A total of ten (10) species were recorded at this hotspot (Appendix F). Of the 10, one (1) is SAR and listed below:

Common Name	**Scientific Name**	**Status**
Common Nighthawk	*Chordeiles minor*	Special Concern

[1] managed by Bird Studies Canada.

A brief description of the above SAR and its preferred habitat is included in Appendix C. The site inspections included a review of potential SAR habitat and targeted searches for the listed species.

5.4 iNaturalist

The iNaturalist database provides a geographical site map which contains individual species occurrences. The NHIC version of the iNaturalist database is specific to those species tracked by the NHIC. These include SAR as per those identified in the Species at Risk Ontario website and also provincially rare species that the NHIC tracks in their records. The occurrence data includes the professional/surveyors name, confirmation identification by other professionals, occurrence photos, and the date the rare species was observed. The search extent is an approximate 2 km^2 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. Four (4) SAR species were reported either directly on or in the general vicinity of the subject site. The SAR occurrences have been compiled below:

Common Name	**Scientific Names**	**SAR Status**
Blanding's Turtle	*Emydoidea blandingii*	Threatened
Butternut	*Juglans cinerea*	Endangered
Eastern Milksnake	*Lampropeltis triangulum*	NAR[1 2]
Midland Painted Turtle	*Chrysemys picta marginata*	Special Concern[1]

1 Special Concern (SARA/COSEWIC)
2 Not at Risk

Rare species were reported as follows:

Common Name	**Scientific Name**	**S-Rank**
Boreal Chorus Frog	*Pseudacris maculata*	S5

The descriptions of the SAR species occurrences are provided in Appendix C. Our site inspections included targeted searches for these listed species and their habitat.

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 Ecological Land Classification - First Approximation is a guide 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 ELC Guide - First Approximation communities and includes many new communities to index from. The 2008 ELC scheme also provides a cross-reference to the 1998 guide communities. This report uses a combination of both the 1998 ELC communities (which are considered the primary vegetation communities) and the 2008 Draft ELC, to supplement the vegetation community lists, when the 1998 ELC does not accurately define the habitat.

Prior to conducting the site inspection, 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 dGPS (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 Species at Risk habitat.

6.2 Avifauna Surveys

ORE staff attended the site inside of the migratory/breeding bird season 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 survey were recorded.

If a SAR bird was detected, the habitat was identified in relation to the proposed

severance locations and it was determined whether the proposed developments could represent a potential risk to that avian SAR and/or its habitat.

6.3 Mammals

Mammals were detected utilizing the methodologies outlined in the MNDMNRF'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 droppings[2].

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.

The proposed severance lots do not contain any deer wintering habitat nor any other significant mammal wildlife habitat for those species outlined in the MNDMNRF's October 2000 - Significant Wildlife Habitat Technical Guide.

6.4 Herptiles

The inspection was conducted during the ideal time of year for observing herptiles. ORE staff conducted detailed inspections in the woodland to detect herptiles. If present, the habitat was identified in relation to the proposed severance location and whether the proposed lots represent a potential risk to the herptile(s).

6.5 Significant Wildlife Habitat (SWH)

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

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

7.0 Site Inspection Data

7.1 General

For this *s*NHE, ORE staff conducted one (1) diurnal site inspection on the following date:

Date of Inspection	**Time of Inspection**	**Temp. ^{O}C**	**Beaufort (Wind) Index**	**Conditions**
Diurnal - May 26th, 2023	5:30 AM - 6:30 AM 11:30 AM- 2 PM	18	4 - Moderate Breeze	Mostly sunny 25% Cloud Cover. Two site visits during the same day to review proposed severance areas, vegetation surveys, topography and drainage, confirm LIO unevaluated wetland areas and detect any SAR and/or SAR habitat.

The above inspections were conducted to identify any/all species on the property. The resulting species list was examined to identify any sensitive rare species (S1, S2, S3), and/or 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.

7.2 Ecological Land Classification (ELC)

ELC inspections were focussed on the proposed severances and the immediate adjacent lands, as per the recommendations of the MNDMNRF'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 G.

Based on our site inspection, 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. **Rural Property (CVR_4)**

No description is provided in the draft May 2008 Ecological Land Classification for Southern Ontario for this community.

The Rural Property type habitat refers to the open/cleared area associated with the existing residential area on the subject property.

No Species at Risk or other bird species (etc.), were detected in the disturbed areas associated with the existing residence.

2. **Dry - Fresh Sugar Maple Deciduous Forest (FOD5)**

According to the ELC, FOD5 is typically Sugar Maple (*Acer saccharum*) rich, with fewer occurrences of Beech (*Fagus grandifolia*), Red Oak (*Quercus rubra*), White Pine (*Pinus strobus)*, Ironwood (*Ostrya virginiana*), Basswood (*Tilia americana*), Black Cherry (*Prunus serotina*), White Ash (*Fraxinus americana)*, Red Maple (*Acer rubrum*), White Birch (*Betula papyrifera*), Trembling Aspen (*Populus tremuloides*), and Largetooth Aspen (*Populus grandidentata*).

The FOD5 community occurs throughout both proposed severance areas and within the lands to be retained. In addition to possessing the above-mentioned species, it also contains some minor amounts of American Elm *(Ulmus americana*), and Staghorn Sumac (*Rhus typhina*) along the roadside edge.

The majority of the understory/subcanopy consists of young Ironwood and Sugar Maple. The groundcover beneath the canopy and subcanopy consists of woodland species such as White Trillium (*Trillium grandiflorum*), Broad-leaved Goldenrod (*Solidago flexicaulis*), etc.

Wetland Communities

3. **White Cedar - Conifer Mineral Coniferous Swamp (SWC1-2)**

The ELC describes a White Cedar - Conifer Mineral Coniferous Swamp (SWC1-2) as having tree cover present in greater than 25% of the ecosite, with coniferous tree species being present in greater than 75% of the canopy. This ecosite is dominated by conifer species such as Eastern White Cedar (*Thuja occidentalis*), Balsam Fir (*Abies balsamea*), Eastern Hemlock (*Tsuga canadensis*) and White Pine (*Pinus strobus*). Ground cover will vary with the degree of open canopy.

The SWC1-2 habitat also possesses minor amounts of White Ash and Black Ash (*Fraxinus nigra*). It is fern-rich in the base of the wetland, whereby both Sensitive Fern (*Onoclea sensibilis*) and Ostrich Fern (*Matteuccia struthiopteris*) are the dominant species in the wooded swamp habitat.

The only watercourse on-site is the unevaluated wetland and it does not constitute fish habitat nor were there any fish observed in this KHF. The unevaluated wetland is comprised of a series of isolated ephemeral pools, which is typically not suitable for fish.

The proposed severances are situated 30 m or more from the boundary of the SWC1-2 community which is located along the southern limit of the property.

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 G. Relevant observations of faunal activities on and adjacent to the site are briefly discussed below.

7.3.1 Avifauna

ORE staff completed two diurnal inspections on the same day during the spring migratory bird season. The inspections were completed under ideal conditions in the morning and afternoon of May 26th, 2023.

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

One (1) SAR avian was detected during the survey - Eastern Wood-Pewee (*Contopus virens*). One (1) Eastern Wood-Pewee was overheard on-site during the early morning avian surveys completed from the roadside of Lakehurst Circle. The same individual was observed flying to a dead cedar tree on the neighbour's property directly north of Lakehurst Circle and entering a cavity nest in the tree. Therefore, it appears the Eastern Wood-Pewee calls and forages on the subject site, but nests on the neighbour's property directly north of the entrance to the existing residential area on the subject site.

7.3.2 Herptiles

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

Blanding's Turtle, Midland Turtle and Snapping Turtle are the only herptile turtle species that were detected within the databases during the SAR pre-screen. ORE staff assumes these turtles may have been encountered in Sandy Lake or nearby wetlands that contain open water areas. The wooded swamp habitat on-site did not have any significant open water areas. ORE staff anticipates this wetland is aerated most of the summer months soon after the spring freshet. There was no evidence of turtle nests or dead-on-road specimens along Lakehurst Circle Road in the area of the subject property. No other tracked herptile species were detected during the site inspections.

As for the Eastern Milksnake, it prefers farm/open country areas which is not present on-site. The Western Chorus Frog may occur in the ephemeral pools associated with the unevaluated wetland, however, this species was not detected during the site inspections in this KHF.

7.3.3 Mammals

Mammals include species such as fox, coyote, white-tailed dear, 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 sightings are sometimes recorded in the local newspapers. ORE staff completed a search for local sightings, and there is no record of sightings in the area of Lakehurst Circle. ORE staff inspected the site for tracks and none were identified during the on-site surveys.

Bats may occur on-site, these are discussed in a following section under the Significant Wildlife Habitat section below.

7.4 Endangered - Threatened or Provincially Rare Species

ORE staff completed a thorough search of all potential SAR (and/or their habitat) on the subject property when conducting the inspection. This included efforts to identify Butternut and any of the database's provincially rare species identified in the pre-screen. One (1) SAR bird was identified on-site during the inspections - Eastern Wood-Pewee. The nesting site was identified to be off-site during the breeding bird surveys.

The unevaluated wetland that occurs within the southern portion of property could

contain turtle species during the early spring period. However, no turtle activity evidence was noted on the subject property indicating that the habitat is not used by turtles.

Only one (1) snake was identified in the SAR pre-screen - Eastern Milksnake. This species tends to be associated with farms and agricultural field areas. Therefore, it is unlikely it would occur on the subject property that is predominantly comprised of woodland.

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 H indicating the potential for SWH to occur based on the criteria provided by the MNDMNRF 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 MNDMNRF criteria) and as indicated in Appendix H.

The SWH in the area of the subject parcel and immediate surrounding lands is summarized below:

- Bat Maternity Colonies (both upland and wetland wooded areas);
- Woodland Raptor Nesting Habitat (Upland woodlands);
- Old Growth Forest (both upland and wetland wooded areas);
- Woodland Raptor Nesting Habitat (Upland woodlands);
- Amphibian Breeding Habitat (Wetlands), and
- Woodland Area-Sensitive Breeding Bird Habitat (both upland and wetland wooded areas).

The SWH identified above are mostly associated with the on-site upland and unevaluated wetland wooded areas.

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.

Brief descriptions of the SWH on and immediately adjacent to the property are provided in Appendix H.

9.0 Impact Assessment and Mitigation

9.1 Sensitive Features

The main receptor with respect to potential impacts associated with future development of the subject site is the unevaluated wetland habitat situated in the southern portion of the property. There is a section of unevaluated wetland north of the property, however, Lakehurst Circle Road occurs between it and the proposed severances. Therefore, it would not be impacted by the proposed severances. Furthermore, the typography in the area suggests runoff and groundwater flows are towards the south, making impacts to the north unevaluated wetland imperceptible. Potential impacts considered herein include the following:

- Potential impacts to the water quality of the unevaluated wetland from septic effluent;
- Potential impacts to runoff water quality from erosion and sedimentation during the construction phase on the unevaluated wetland;
- Potential impacts to the unevaluated wetland from vegetation removal/degradation;
- Potential impacts from importation of fill to the site to raise or flatten areas of the lots for development, and
- Potential impacts from introduction of invasive non-native species in the construction and post construction era, via machinery and/or imported materials (respectively).

Specific recommendations for mitigating potential impacts to sensitive features on and adjacent to the site are provided in a following section.

9.2 NHIC Species

According to the NHIC, the following SAR have been detected in the 1 km square search areas for the subject site:

- Bobolink
- Canada Warbler
- Eastern Meadowlark
- Eastern Wood-Pewee
- Golden-winged Warbler
- Snapping Turtle
- Western Chorus Frog, and
- Wood Thrush.

The subject site does not possess suitable habitat for any of the turtle species as the wooded swamp exhibits only short term (seasonal) shallow flows. However, it is possible that Western Chorus Frog occurs in the area, as the ephemeral pools in the woodland would be present in the early spring period, although this species was not detected during our inspections. ORE staff has detected this amphibian species within the wetland areas east of Sandy Lake in the past, which may correspond to the occurrence in the databases.

As for the Eastern Meadowlark, Bobolink, and Golden-winged Warbler, these require open fields and thicket wetland areas which are not present on-site. The Canada Warbler would not occur on-site as there are no conifer lined watercourses. The woodlands on-site are ideal for Wood Thrush as they represent a secondary succession woodland habitat.

9.3 Ontario Breeding Bird Atlas (OBBA)

The following species of SAR avian were detected in the general vicinity of the site during OBBA surveys:

- Barn Swallow - there is no Barn Swallow habitat on-site as it is an entirely wooded parcel.

- Black Tern - prefers large marshy areas to nest. None of this habitat occurs on the property or directly adjacent to it.

- Bobolink - the site is entirely wooded and there is no farm field habitat that this species prefers to nest within.

- Canada Warbler - the site possesses woodland and there is some cedar swamp areas however the cedars occur in the interior of the wetland and not the edge. The edge is entirely upland woodland which is not favourable for this species. It was not observed nor overheard during the surveys.

- Common Nighthawk - was not observed nor overheard during the surveys, however, ORE staff conducted a diurnal site visit. Common Nighthawk prefers scrubby rock barren habitats overlooking waterways. This type of habitat is not present on the subject property. Many Common Nighthawk migrate through the Peterborough area in the spring season, however, very few stay within the vicinity of Peterborough. They tend to prefer either alvar habitats in the limestone bedrock communities in the Peterborough area or Precambrian bedrock conditions along the contact.

- Wood Thrush - possible within the upland and wooded swamp habitats of subject property as it contains mature late/secondary succession woodland habitat. Wood Thrush was not detected during the site inspections.

- Eastern Meadowlark - the property does not contain hay field habitat, therefore, there is no potential for Eastern Meadowlark to occur on the property. Eastern Meadowlark was not detected during the survey.

- Eastern Whip-poor-will - prefers upland woodlands similar to what occurs on the subject property. ORE staff did not conduct evening surveys to detect this species, however, it was not observed during the diurnal surveys. Considering ORE staff conducted a thorough search of the property, a nesting Whip-poor-will would have been flushed.

- Eastern Wood-Pewee - was detected on-site during the site inspections and the subject property possesses the woodland communities it prefers to nest within. The nesting site was identified along Lakehurst Circle Road on the neighbouring property to the north.

- Grasshopper Sparrow - the severance parcel does not possess Grasshopper Sparrow habitat, as this species prefers agricultural fields similar to Eastern Meadowlark and Bobolink. Grasshopper Sparrow was not detected during the inspection and it is not anticipated to occur on-site due to the absence of its preferred habitat.

- Golden-winged Warbler - prefers open field and swamp thicket habitats which are not present on the subject property. This species was not detected during the site inspections.

9.4 eBird

According to the eBird database, the following species of SAR avian were detected in the general vicinity of the site:

- Common Nighthawk- already discussed above in OBBA.

9.5 iNaturalist

The iNaturalist database detected four (4) SAR species in the vicinity of the subject property, including Blanding's Turtle, Butternut, Eastern Milksnake and Midland Painted Turtle.

ORE staff inspected the woodlands for Butternut and none were observed within 50 m of the proposed severances. ORE staff inspected the neighbouring properties across Lakehurst Circle for Butternut, utilizing binoculars, and none were observed.
As for Midland Painted Turtle, it is highly unlikely this species would reside in the wooded swamp - unevaluated wetlands as the depths are too shallow. No roadside turtle nests were observed along Lakehurst Circle suggesting no turtles nest in the area of the unevaluated wetlands, nor were there any old nests alongside the wetland. The inspections were completed during the peak season for turtles to be basking within the wetland after the emergence period. There is little to no sunny areas within the wetland which is likely the main reason turtles do not use this wetland.

As for the Eastern Milksnake, it is an NHIC tracked species, not a provincial SAR, and it was not detected during the site inspection. It typically occurs in farm type regimes where there is an abundance of grass where it can conceal itself, in addition to openings where it can easily sun itself to thermo-regulate its body temperature.

The site does not contain ideal habitat for Blanding's Turtle, as the unevaluated wetland is too shallow for this species to reside within this feature. Although Blanding's Turtle can utilize these ephemeral type shallow pools to migrate to deeper ponds for breeding purposes in the early spring period, the unevaluated wetland on the subject site is not connected to any other wetlands that appear to have any open water areas (according to the published mapping). Therefore, it is extremely unlikely Blanding's Turtle would migrate up through the unevaluated wetland areas to cross the property without a final destination such as a small lake or beaver pond. The subject property is also heavily forested, which means the forest floor is well shaded by the tree canopies. Most turtles choose highly open areas where the sun's warmth is able to penetrate the ground surface and warm the eggs in the nest. In general, the on-site shaded and cooler woodland habitats are not favourable with respect to nesting turtles.

9.6 Significant Wildlife Habitat

The subject site and surrounding neighbouring parcels possess SWH. The list is provided below and the recommendations (below) should be implemented to mitigate direct and/or indirect impacts to these habitats, in adherence to the Significant Wildlife Habitat Mitigation Support Tool (SWHMiST).

The wetland to the south (and dowgradient of the proposed lots) will be unaffected due to the exceedingly large distances to this KHF to meet the Growth Plan setback requirements. The Amphibian Breeding Habitat (Wetlands) will not be affected by the development as it will be possible to entirely avoid the unevaluated wetland SWH associated with the KHF. Therefore, it will be possible to meet or exceed the SWHMiST requirements for the unevaluated wetland related SWH.

The remaining SWH are associated with the upland woodland areas on the site:

- Bat Maternity Colonies - No cavity nests were observed in the proposed lots as the trees were reviewed in the context of the methodology outlined earlier in this report for bat snag surveys.

- Woodland Raptor Nesting Habitat - No raptor nests identified on subject property.

- Old Growth Forest - Large diameter Old Growth trees would be removed.

- Woodland Area-Sensitive Breeding Bird Habitat - Trees would be removed that could be nesting sites for Area-Sensitive Breeding Birds.

Provided standard mitigation is applied to the proposed development areas to minimize the development footprints on each lot while retaining as much of the upland woodlands as possible and by avoiding the unevaluated wetland habitat, development of the two proposed lots could proceed while meeting the secondary measures of reducing the overall footprint of the building envelopes and locating the developments within the edge of the SWH. The core woodland areas representing the best quality SWH will be retained. Therefore, the proposed severance lots meet the secondary objectives outlined in the residential/commercial development mitigation measures as per the SWHMiST.

The following sections provide recommendations for avoiding negative impacts to the features listed above.

9.7 Identified SAR/SAR Habitat

Only one (1) SAR was detected proximal to the proposed severance; a single Eastern Wood-Pewee was observed to be nesting on the neighbour's property directly north of the subject property. It was nesting within a woodpecker cavity hole that overlooks the subject property from the other side of Lakehurst Circle Road.

No other SAR fauna or flora were detected on the property during the site surveys.

9.8 Construction

General potential impacts related to future construction activities are listed below:

- vegetation removal/disturbances;
- erosion and sedimentation generated by exposed unconsolidated soils during excavation and grading activities;

- mismanagement of fill materials and presence of construction debris or waste materials during the construction period, and
- importation of materials containing invasive species that out-compete well established native species.

To mitigate the potential for impacts associated with the above, appropriate construction scheduling will need to be considered. In addition, careful attention to the limits associated with building/grading envelopes and maintaining buffers will be required.

Specific recommendations for mitigation of impacts associated with construction activities are provided in a following section.

10.0 Conclusions

10.1 The proposed severances will maintain a distance greater than 30 m from the unevaluated wetland (downgradient watercourse feature) that occurs at the southerly property limit, thus meeting the minimum Vegetation Protection Zone (VPZ) requirements under the Growth Plan, as illustrated on Figure 6. The proposed development can also adhere to the "no negative impact test" requirement to any/all identified KNHFs on the property, thus complying with the Peterborough County Official Plan, and 2020 PPS requirements. Therefore, the proposed severances should be permitted.

As mentioned earlier in the report, Peterborough County does not have criteria in their Official Plan (in the form of an NHS) that would identify Significant Woodland. Therefore, the Significant Woodland designation does not apply. Only the KHFs are protected at this time.

Even though the unevaluated wetland area across Lakehurst Circle (on the north side of the roadway) occurs within 30 m of the proposed north lot, impacts from this proposed lot on the off-site wetland would be non-existent. Runoff/drainage within this lot drains southward toward the on-site unevaluated wetland and no part of the development will impose on the off-site unevaluated wetland.

Any future septic systems could be situated two (2) times greater than the 15 m setback to a wetland/watercourse required under the Ontario Building Code, therefore, the 30 m VPZ is ample distance to ensure the effluent of any septic system is fully attenuated well before reaching this KHF.

Detailed recommendations are provided in the following section to protect the on-site sensitive KHFs from being impacted as a result of future construction.

10.2 Avian surveys were conducted during the spring migratory bird period to detect SAR birds. Presence/absence and habitat-based approaches were applied to those SAR birds detected within the database search. One (1) Species at Risk avian was identified calling on-site and nesting on the neighbouring property to the north during the survey - Eastern Wood-Pewee.

Eastern Wood-Pewee appears to be utilizing the subject site and the off-site property to the north as part of its life cycle. Considering Eastern Wood-Pewee is a Special Concern species, avoidance and/or minimizing habitat destruction are the primary measures according to the SWHMiST. The ESA does not apply to Special Concern species. Therefore, ORE staff did not contact SAR Ontario in this regard.

10.3 In regards to the SWH identified on-site, mitigation should be in the form of maintaining the unevaluated wetland and minimizing the disturbance footprint/building envelope on each proposed lot. Avoidance is key with respect to maintaining the SWH associated with the unevaluated wetland.

The proposed severance developments will comply with the primary SWHMiST criteria of avoiding all of the wooded swamp SWHs listed above. As for the SWH associated with the upland wooded areas, it should be possible to minimize the building envelopes to only what is necessary and locate the development in the woodland edge areas closer to Lakehurst Circle Road, thus complying with the SWHMiST mitigation requirements.

10.4 Provided the recommendations outlined in this *s*NHE report are adhered to, impacts to the KNHF/KHF and localized SWH identified on Figure 6 should be undetectable. Given that the unevaluated wetland and SWH associated with the wooded areas on-site will not be impacted (provided the mitigation measures are applied), it should be possible to create two (2) new residential lots on the subject parcel, outside of the VPZ applied to the unevaluated wetland/KHF along the southern edge of the subject property.

The proposed northwest lot possesses a small portion of the 30 m VPZ off the unevaluated wetland on the adjacent parcel to the north. The unevaluated wetland on the neighbour's property to the north is not hydraulically connected to the unevaluated wetland on the south side of the subject property, whatsoever. Furthermore, the only portion of the proposed development that would alter within the 30 m VPZ would be the access road. Roads according to the MNDMNRF do not constitute habitat fragmentation, therefore, the 30 m VPZ would still function as a vegetation protection zone/buffer. The building envelope on the proposed northwest lot could occur entirely outside the 30 m VPZ off the unevaluated wetland on the north side of Lakehurst Circle Road.

11.0 Recommendations

11.1 ORE staff recommends any new lot owners identify within their Site Plan - Building Permit Application how they intend to minimize the building envelope within the two (2) proposed lots identified on Figure 6. Where possible, the property owners should seek approvals for either a filter bed or other type of septic system that minimizes the clearing within the woodland. The focus is to retain as many of the trees as possible on each proposed lot. The existing residential area on the lands to be retained is a prime example of how a residence should be implemented within the woodland habitat. A similar approach should be applied to the proposed lot areas.

11.2 A 30 m VPZ is proposed to protect the unevaluated wetland's form and function, as illustrated by Figure 6. No part of the development is to occur within the wetland so the form will not be impacted.

The recommended 30 m VPZ provides double the distance required under the Ontario Building Code for Sewage Disposal Systems, therefore, should be more than sufficient to protect the unevaluated wetland from any proposed septic systems.

11.3 Proper erosion/sedimentation controls will be required at all times while heavy equipment is in operation at this site. A single row of heavy-duty silt fence must be installed to identify the boundaries of the approved development envelopes (i.e., disturbed areas) on each lot. The silt fence should be maintained on a regular basis. If eroded materials bypass the silt fence, the materials should be removed manually (without equipment) and reestablished in the construction zone. The heavy-duty silt fence is considered an exclusion fence for turtles. Even though turtles were not observed in the unevaluated wetland, the fence will prevent any turtles from migrating up through the wetland (although extremely unlikely) to either nest in the road shoulders or any exposed soils on-site during construction.

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. Neither track-mounted nor tire-mounted construction equipment should operate during heavy precipitation events. 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, in addition to the heavy-duty silt fence) are required based on the site conditions and final grades on the proposed lots.

If filling is necessary, the volume and areas should be illustrated on the same plan as the ESC. No fill materials shall be placed within the KHFs or outside the property

boundary of the proposed lots.

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 help to prevent impacts to the unevaluated wetland which occurs downgradient of the proposed severance parcels.

11.4 There is a 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 lot 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 the vegetation is removed outside this period, the remainder of the construction within the building envelope(s) can proceed during the Migratory bird/breeding bird period.

11.5 The proposed severance areas contain some woodland related SWH. However, there is an abundance of SWH on the retained lands and neighbouring properties. According to the Significant Wildlife Habitat Mitigation Support Tool (SWHMiST), avoidance is the primary mitigation tool.

In this instance, it is not possible to entirely avoid the upland woodland SWH, however, it is possible to avoid the wetland SWH altogether and maintain a 30 m or greater distance between the proposed severances. A 30 m VPZ is applied to unevaluated wetland (the nearest KHF) which goes beyond the requirement outlined in the SHWMiST, therefore, complying with the Mitigation Support Tool for protecting this KHF.

In order to comply with the secondary measures for the SWH directly within the upland woodland areas, the two (2) severances should be located along the edge of Lakehurst Circle Road which represents the edge of the SWH.

In addition, a reasonable sized building envelope should be identified within each proposed lot prior to any building application approvals. Each lot owner shall identify the proposed residence/outbuildings and private services and demonstrate they are making an effort to minimize tree removal and retain as much of the mature woodland SWH on each proposed lot.

Provided, the above-mentioned measures are applied to the identified SWH, the developments will comply with the SWHMiST requirements.

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 from each proposed lot.

11.7 As part of the application package, the proponent shall provide the authorities with a survey of the proposed lot areas, demonstrating that they will occur well outside the southerly KHF and its VPZ.

* end of *s*NHE *

Yours truly,
Oakridge Environmental Limited

Rob West, HBSc.
Senior Ecologist

Selected References

Argus, G.W. and K.M. Pryer. 1982-1987**,** *"Atlas of the Rare Vascular Plants of Ontario*". Four Parts. National Museum of Natural Sciences, Ottawa, Ontario.

Austen, M.J. et. al. 1995. "*Ontario Birds at Risk Program*". Federation of Ontario Naturalists and Long Point Observatory. 165 pp. OBAR website.

Bezener.A. 2000. "*Birds of Ontario*".Lone Pine Publishing.. 376 pp.

Bakowsky, W., 1995. *"S-ranks for Southern Ontario Vegetation Communities".* OMNR, Natural Heritage Information Centre, Peterborough, ON. 11 pp.

Bellrose F.C. 1976. *"Ducks, Geese and Swans of North America".* Stackpole Books

Cadman, M.D. et. al., 2007**,** *"Atlas of Breeding Birds of Ontario"***,** OBBA website, 2nd Edition (2001-2005).

Cheskey, E.D. 1995. *"Towards Conserving Birds of Ontario*". Federation of Ontario Naturalists. 48 pp.

CSW Lake Plan Steering Committee, 2008. *"A Delicate Balance: The Clear, Ston(e)y and White Lake Plan",* Association of Stony Lake Cottagers & Upper Stoney Lake Cottagers Association website

Gill F.B. 2007. *"Ornithology - Third Edition".* National Audobon Society, W.H. Freeman and Company.

Habib, L., Bayne, E. M. & Boutin, S. *"Chronic Industrial Noise Affects Pairing Success and Age Structure of Ovenbirds Seiurus Aurocapilla*." Journal of Applied Ecology 44 (2007): 176-84.

Holmes et. al. 1991. "*The Ontario Butterfly Atlas".* Toronto Entomologists Association, Toronto, Ontario.

Holmgren, Noel H., "*Manual of Vascular Plants of Northeastern United States and Adjacent Canada - Second Edition* ", The New York Botanical Garden, 1998.

Jones et. al. 2008. "*The Dragonflies and Damselfies of Algonquin Park and the Surrounding Area.*" The Friends of Algonquin Park. 263 pp.

Lee, H.D. et. al.. 1998. *Ecological Land Classification for Southern Ontario -First Approximation and it's Application - SCSS FieldGuide; FG-02*. OMNR, North Bay, Ontario.

Lee, H.D. et. al.. 2008. *Ecological Land Classification for Southern Ontario -Second Approximation and it's Application - Ecosystems Catalogue*. Conservation Ontario website.

Newcomb, L., "Nerwcomb's Wildflower Guide". Little Brown and Company(Canada) Limited, 1977.

Oldham, M.J., 1996, "*Natural Heritage Resources of Ontario, Amphibians and Reptiles"* **,**Ontario Herpetofaunal Survey (OHS),, 1996, OHS website contacted August 2012.

Ontario Ministry of Natural Resources and Forestry. 2015. "*Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E*"; Regional Operations Division, Peterborough, Ontario.

Ontario Ministry of Natural Resources and Forestry. 2014. "*Significant Wildlife Habitat Mitigation Support Tool*"; Peterborough, Ontario.

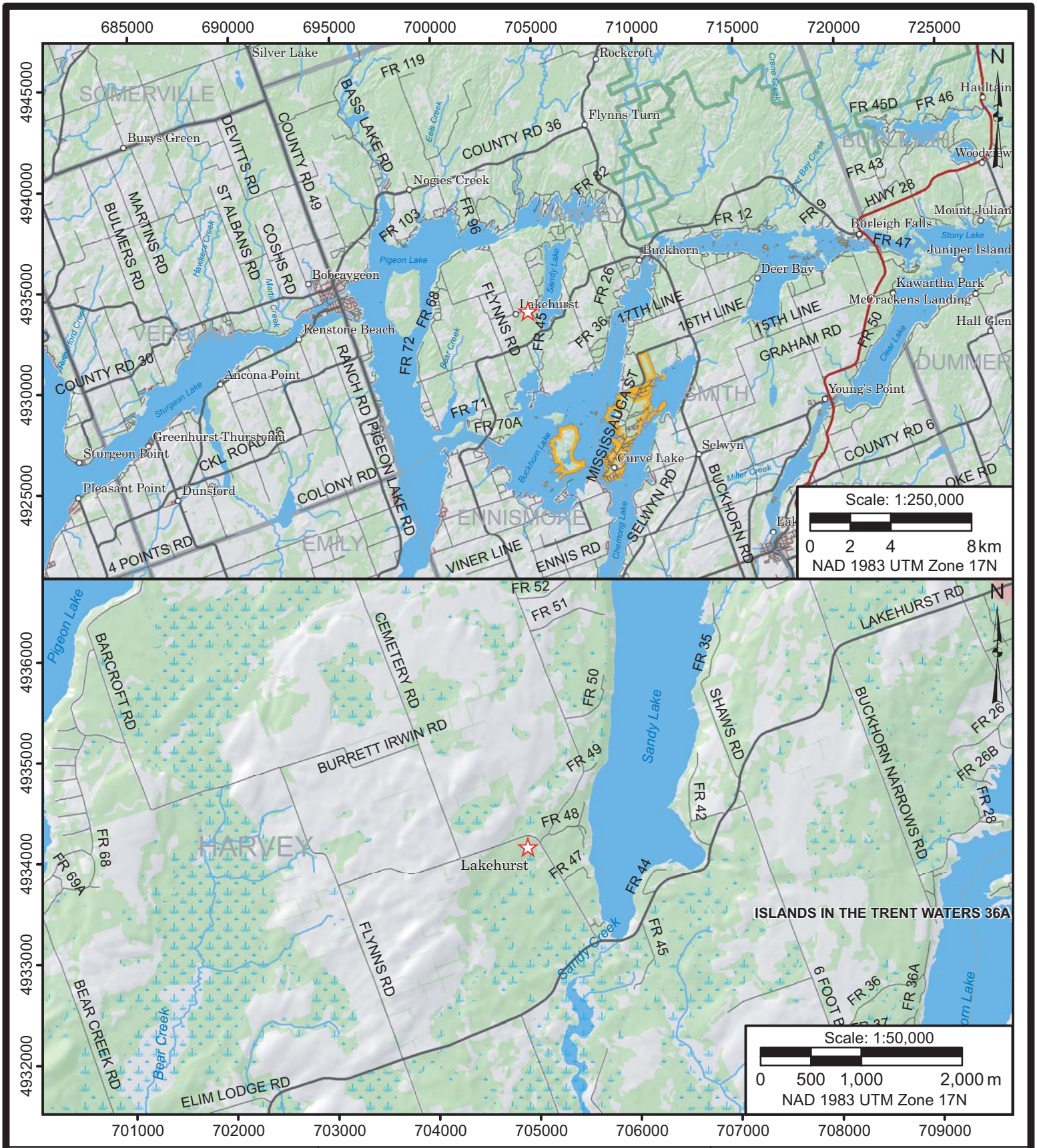
Peck G.K. & James R.D. 1983, "*Breeding Birds of Ontario Nidiology and Distribution Volume 1 : Nonpasserines and Volume 2: Passerines".* Royal Ontario Museum, Toronto.

Sibley, D.A. 2003, "*The Sibley Field Guide to Birds of Eastern North America*". New York: Alfred A. Knopf.

"**Species at Risk in Ontario List**." Ontario.ca. N.p., November 2015. http://www.ontario.ca/environment-and-energy/species-risk-ontario-list.

Voss, Edward G., "*Michigan Flora - Part I to Part III*"; Cranbrook Institute of Science Bulletin 55 and The University of Michigan Herbarium, 1972.

Figures



☆ Approximate Site Location

Notes: Base maps provided by Land Information Ontario and Natural Resources Canada (2023)

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***Scoped* Natural Heritage Evaluation (sNHE)**
Proposed Two (2) Lot Severance
173 Lakehurst Circle Road
Part of Lot 8, Concession 13 (Harvey)
Municipality of Trent Lakes,
County of Peterborough

ORE
Oakridge Environmental Ltd.
Environmental and Hydrogeological Services

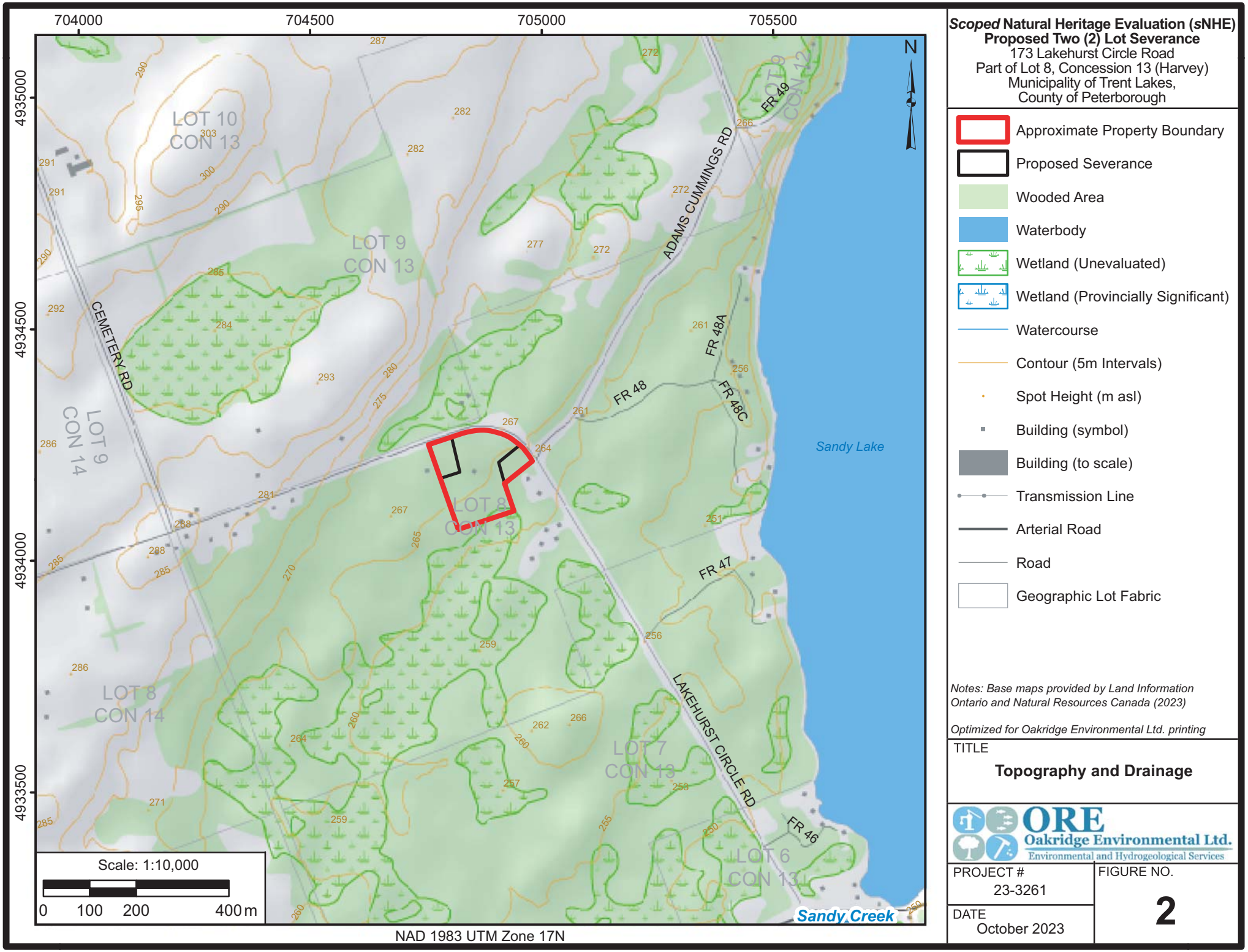
North American Datum (NAD) 1983

TITLE
General Location

PROJECT #
23-3261

DATE
October 2023

FIGURE NO.
1



***Scoped* Natural Heritage Evaluation (sNHE)**
Proposed Two (2) Lot Severance
173 Lakehurst Circle Road
Part of Lot 8, Concession 13 (Harvey)
Municipality of Trent Lakes,
County of Peterborough

- Approximate Property Boundary
- Proposed Severance
- Wooded Area
- Waterbody
- Wetland (Unevaluated)
- Wetland (Provincially Significant)
- Watercourse
- Contour (5m Intervals)
- Spot Height (m asl)
- Building (symbol)
- Building (to scale)
- Transmission Line
- Arterial Road
- Road
- Geographic Lot Fabric

Notes: Base maps provided by Land Information Ontario and Natural Resources Canada (2023)

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TITLE

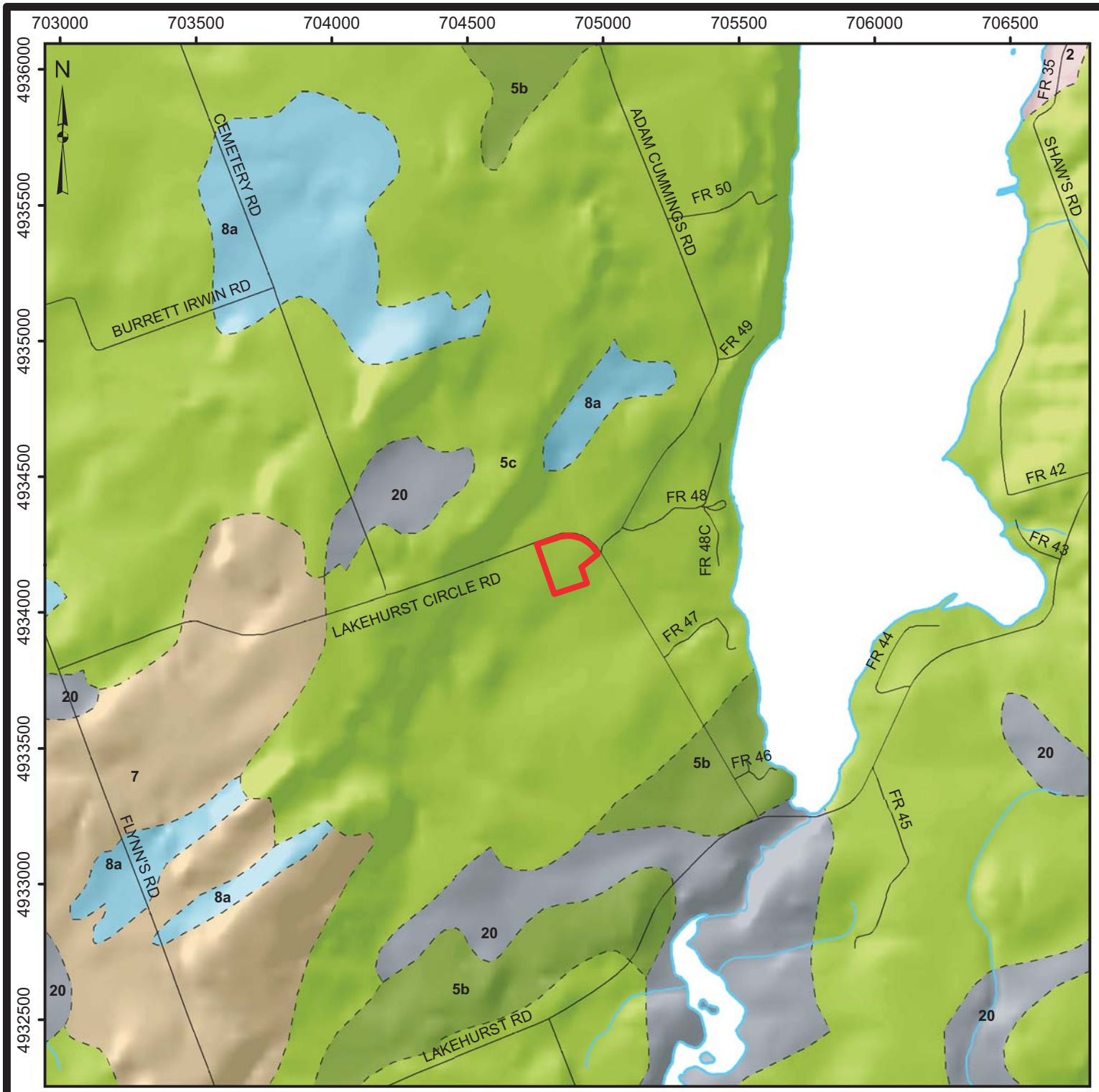
Topography and Drainage

ORE Oakridge Environmental Ltd.
Environmental and Hydrogeological Services

PROJECT # 23-3261

FIGURE NO. **2**

DATE October 2023



***Scoped* Natural Heritage Evaluation (*s*NHE)**
Proposed Two (2) Lot Severance
173 Lakehurst Circle Road
Part of Lot 8, Concession 13 (Harvey)
Municipality of Trent Lakes,
County of Peterborough

- Approximate Property Boundary
- Waterbody
- Watercourse
- Contact (approximate/assumed)
- 2 — Precambrian bedrock-drift complex
- 5b — Glacial Deposits (Till): Stone-poor, carbonate-derived silty to sandy till
- 5c — Glacial Deposits (Till): Stony, carbonate-derived silty to sandy till
- 7 — Glaciofluvial deposits
- 8a — Fine-textured glaciolacustrine deposits: Massive-well laminated
- 20 — Organic deposits

Scale: 1:20,000

0 200 400 800 m

Notes: Base maps provided by Land Information Ontario and Natural Resources Canada (2023)

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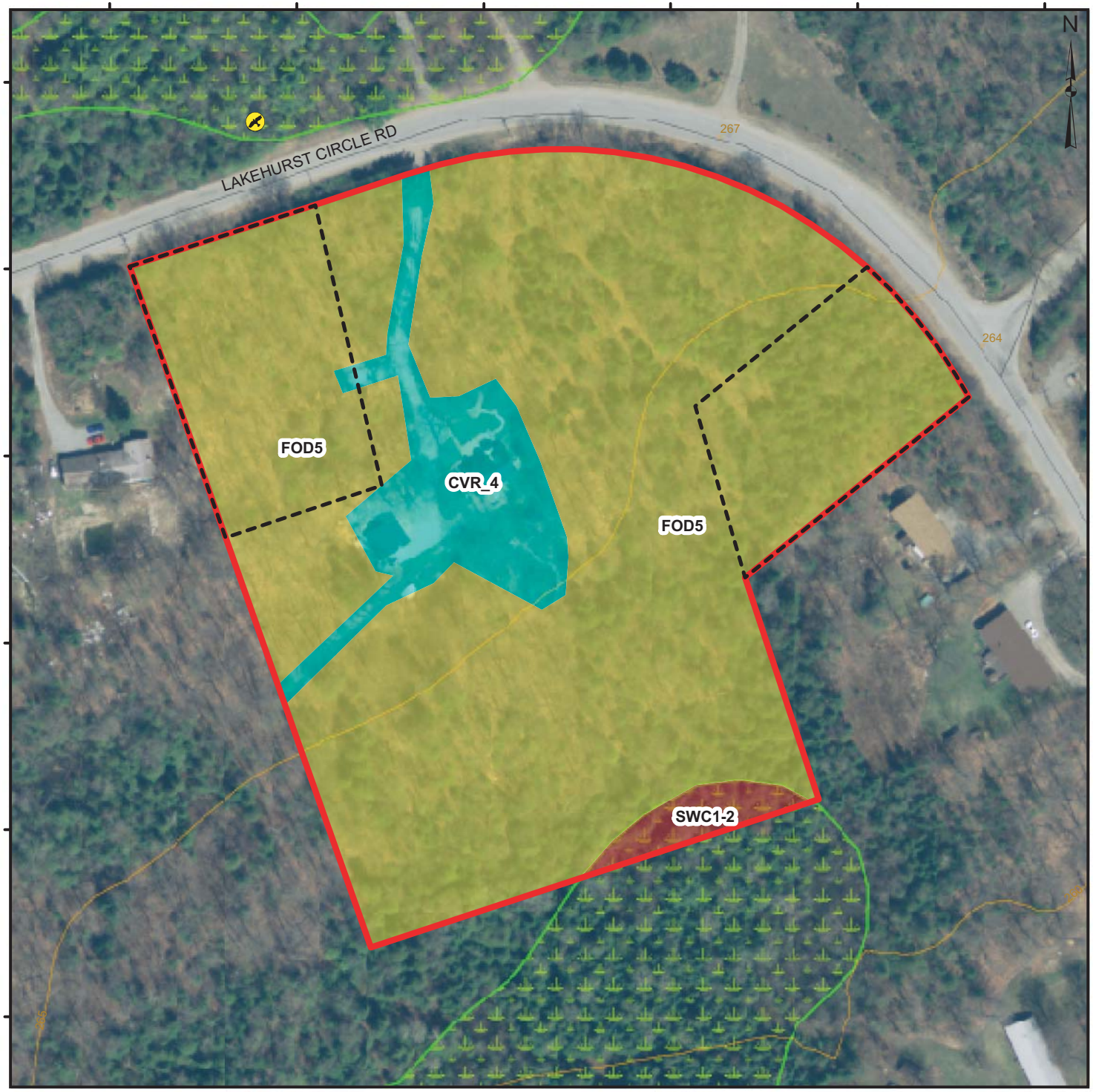
TITLE

Surficial Geology

ORE Oakridge Environmental Ltd.
Environmental and Hydrogeological Services

PROJECT #	FIGURE NO.
23-3261	3
DATE	
October 2023	



Scoped Natural Heritage Evaluation
Proposed Two (2) Lot Severance
173 Lakehurst Circle Road
Part of Lot 8, Concession 13 (Harvey)
Municipality of Trent Lakes,
County of Peterborough

- Approximate Property Boundary
- Proposed Severance
- Rural Property (CVR_4)
- Dry - Fresh Sugar Maple Deciduous Forest (FOD5)
- White Cedar - Conifer Mineral Coniferous Swamp (SWC1-2)
- Wetland (Unevaluated)
- Road
- Contour (5 m Intervals)
- Spot Height (m asl)
- Eastern Wood-Pewee

Scale: 1:1,500

0 15 30 60 m

Notes: Base maps provided by Land Information Ontario and Natural Resources Canada (2023)

Imagery provided by South Central Ontario Orthophotography (SCOOP, 2013)

Feature locations determined by differential GPS (+/- 3.0 m)

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TITLE

Vegetation

ORE Oakridge Environmental Ltd.
Environmental and Hydrogeological Services

PROJECT #	FIGURE NO.
23-3261	4
DATE	
October 2023	

Photo A (Above): was taken on the proposed south lot. It was taken looking towards the existing residence on the subject property. The photo illustrates the maple dominated deciduous woodland conditions on this proposed lot.

Photo B (Above): was taken on the proposed south lot and identifies the deciduous woodland type that occurs throughout this proposed lot and surrounding areas proximal to the subject property.

Photo C (Above): was taken within the proposed north lot and identifies the mixed woodland conditions in this area. Some of the Balsam Fir in this portion of the woodland is deteriorating and slowly being replaced by young Pines, Birch, Maples and Basswoods.

Photo D (Above): was taken within the proposed north lot severance illustrating the young deciduous species in the understorey. A curious Barred Owl was asleep within the woodland and followed the author around the lot.

Scoped Natural Heritage Evaluation
Proposed Two (2) Lot Severance
173 Lakehurst Circle Road
Part of Lot 8, Concession 13 (Harvey)
Municipality of Trent Lakes,
County of Peterborough

TITLE
Site Photos

Photos Taken: May 26, 2023

ORE Oakridge Environmental Ltd.
Environmental and Hydrogeological Services

PROJECT # 23-3261

FIGURE NO. **5**

DATE October 2023

Optimized for Oakridge Environmental Ltd. printing

NAD 1983 UTM Zone 17N

Scoped Natural Heritage Evaluation
Proposed Two (2) Lot Severance
173 Lakehurst Circle Road
Part of Lot 8, Concession 13 (Harvey)
Municipality of Trent Lakes,
County of Peterborough

- Approximate Property Boundary
- Proposed Severance
- Unevaluated Wetland (LIO)
- Wetland VPZ (30 m)
- Eastern Wood-Pewee
- SWH Related to Woodland
- SWH Related to Wetland

Scale: 1:1,500

0 15 30 60 m

Notes: Base maps provided by Land Information Ontario (LIO) and Natural Resources Canada (2023)

Imagery provided by South Central Ontario Orthophotography (SCOOP, 2013)

Feature locations determined by differential GPS (+/- 3.0 m)

Vegetation Protection Zone (VPZ); Significant Wildlife Habitat (SWH)

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TITLE

Constraints

ORE Oakridge Environmental Ltd.
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PROJECT #	FIGURE NO.
23-3261	6
DATE	
October 2023	

Appendix A

Excerpt from the Provincial Policy Statement (PPS)

The following has been copied from the 2020 Provincial Policy Statement (PPS):

"*2.1 Natural Heritage*

2.1.1 Natural features and areas shall be protected for the long term.

2.1.2 The diversity and connectivity of natural features in an area, and the long-term ecological function and biodiversity of natural heritage systems, should be maintained, restored or, where possible, improved, recognizing linkages between and among natural heritage features and areas, surface water features and ground water features.

2.1.3 Natural heritage systems shall be identified in Ecoregions 6E & 7E1, recognizing that natural heritage systems will vary in size and form in settlement areas, rural areas, and prime agricultural areas.

2.1.4 Development and site alteration shall not be permitted in:
a) significant wetlands in Ecoregions 5E, 6E and 7E1; and
b) significant coastal wetlands.

2.1.5 Development and site alteration shall not be permitted in:
a) significant wetlands in the Canadian Shield north of Ecoregions 5E, 6E and 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 2.1.4(b) unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions. Ecoregions 5E, 6E and 7E are shown on Figure 1.

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

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

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

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

Appendix B

Excerpt from the County of Peterborough Official Plan (OP)

The following has been copied from the County of Peterborough Official Plan:

- *"a description of the proposal and statement of rationale for the undertaking;*
- *a description of the existing land use(s) on site and adjacent lands;*
- *the land use designation on site and adjacent lands, as identified by the County and local municipal Official Plans;*
- *a description of alternative development proposals for the site as well as the environmental impacts of the alternatives;*
- *a comprehensive description of the proposal including its direct and indirect effect on the environment and considering both the advantages and disadvantages of the proposal;*
- *an identification of environmental constraint areas;*
- *an environmental inventory of the area under development consideration (plant life, land-based and aquatic wildlife, wetlands, natural landforms, surface waters, hydrogeological features);*
- *a statement of environmental and ecological significance of the area affected by the proposed development;*
- *a statement on how the development will establish or facilitate the establishment of linkages between natural areas within the watershed and adjacent watersheds and how these linkages will contribute to the preservation and enhancement of the natural areas;*
- *a detailed description of mitigating effects;*
- *any additional information requested by the local municipality;*
- *an assessment of options for servicing the development with full municipal or communal water and sewage services as well as the environmental impacts of the servicing options.*

An environmental impact assessment for proposed development within or adjacent to a significant natural heritage feature will include as its study area the natural heritage feature plus the area surrounding that feature as follows:

- *significant wetlands - all lands within 120 metres;*
- *significant portions of the habitat of endangered and threatened species - all lands within 50 metres;*
- *fish habitat - all lands within 30 metres of the high water mark of all watercourses;*
- *significant wildlife habitat - all lands within 50 metres;*
- *significant woodlands south of the southern limit of the Canadian Shield - all lands within 50 metres;*
- *significant valleylands south of the southern limit of the Canadian Shield - all lands within 50 metres;*
- *significant areas of natural and scientific interest (ANSI) - all lands within 50 metres.*"

Appendix C

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 "Threatened" by SARO and is 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.

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).

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.

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*) is listed as "Special Concern" by COSEWIC and is currently under review by COSSARO. 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.

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 to 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*).

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 D

NHIC Database

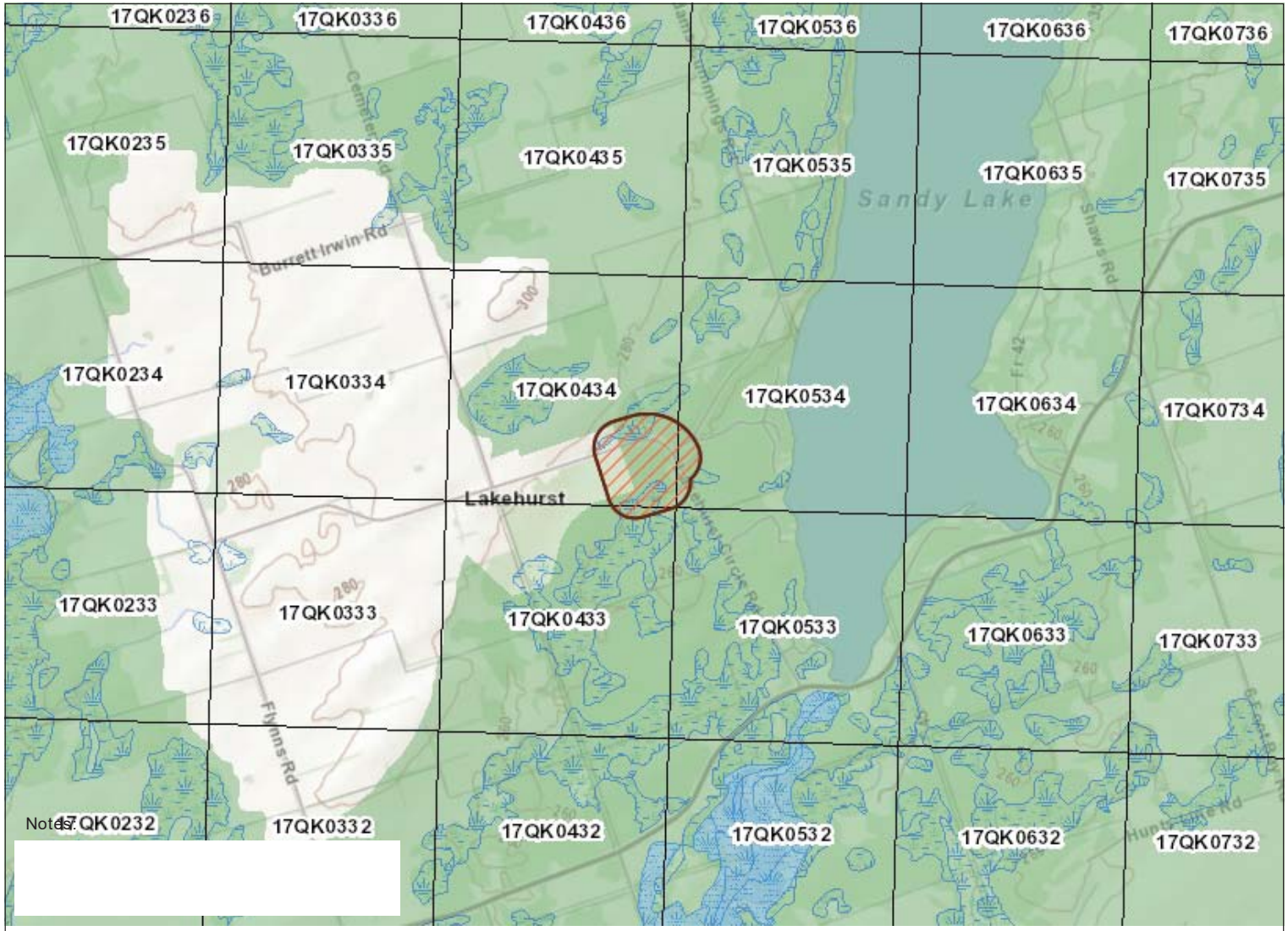
Ontario

Ministry of Natural Resources and Forestry

Make-a-Map: Natural Heritage Areas

NHIC Map

Map created:5/31/2023



Notes:

Legend

- 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
- Evaluated Wetland
- Provincially Significant/considérée d'importance provinciale
- Non-Provincially Significant/non considérée d'importance provinciale
- Unevaluated Wetland
- Conservation Reserve
- Provincial Park
- Natural Heritage System

1.3 0 0.65 1.3 Kilometres

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

NHIC Data

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

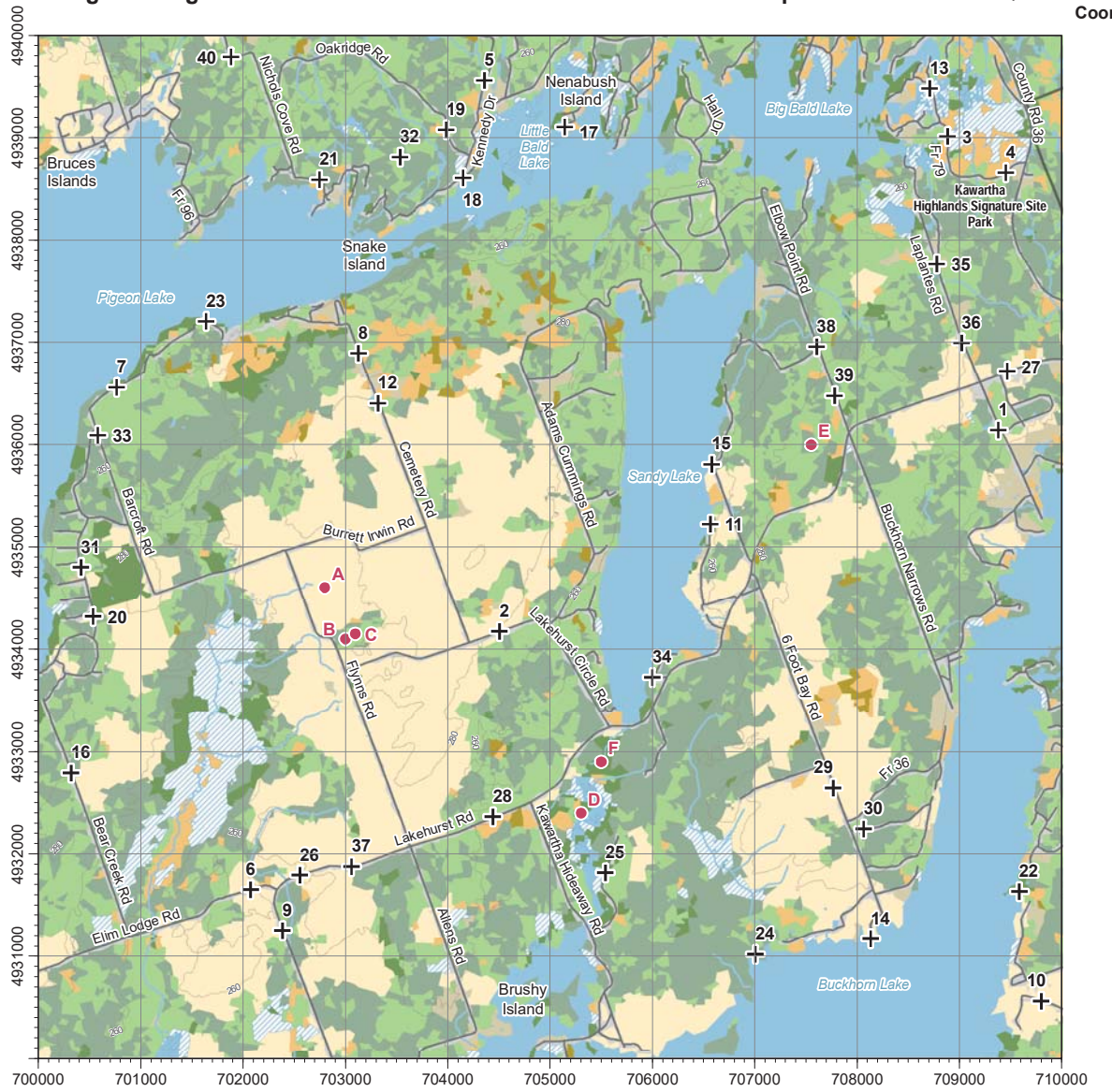
OGF ID	Element Type	Common Name	Scientific Name	SRank	SARO Status	COSEWIC Status	ATLAS NAD83 IDENT	COMMENTS
1056178	SPECIES	Upland Sandpiper	Bartramia longicauda	S2B			17QK0434	
1056178	SPECIES	Wood Thrush	Hylocichla mustelina	S4B	SC	THR	17QK0434	
1056178	SPECIES	Eastern Wood-pewee	Contopus virens	S4B	SC	SC	17QK0434	
1056178	SPECIES	Western Chorus Frog - Great Lakes - St. Lawrence - Canadian Shield population	Pseudacris maculata pop. 1	S4	NAR	THR	17QK0434	
1056178	SPECIES	Canada Warbler	Cardellina canadensis	S5B	SC	SC	17QK0434	
1056178	SPECIES	Golden-winged Warbler	Vermivora chrysoptera	S3B	SC	THR	17QK0434	
1056178	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0434	
1056178	SPECIES	Bobolink	Dolichonyx oryzivorus	S4B	THR	THR	17QK0434	
1056177	SPECIES	Wood Thrush	Hylocichla mustelina	S4B	SC	THR	17QK0433	
1056188	SPECIES	Wood Thrush	Hylocichla mustelina	S4B	SC	THR	17QK0534	
1056188	SPECIES	Eastern Wood-pewee	Contopus virens	S4B	SC	SC	17QK0534	
1056188	SPECIES	Canada Warbler	Cardellina canadensis	S5B	SC	SC	17QK0534	
1056188	SPECIES	Snapping Turtle	Chelydra serpentina	S4	SC	SC	17QK0534	
1056188	SPECIES	Golden-winged Warbler	Vermivora chrysoptera	S3B	SC	THR	17QK0534	
1056188	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17QK0534	

Appendix E

OBBA Database

Region / Région: 16

Square / Parcelle: 17TQK03



Predefined point count coordinates
Coordonnées des points d'écoute prédéterminés

POINT +	EASTING UTM Est	NORTHING 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	706579	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

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

Atlas des oiseaux nicheurs Ontario Breeding Bird Atlas

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
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
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)

BIRDS CANADA OISEAUX CANADA

March 2021 / mars 2021

https://www.birdsontario.org/

17TQK03

Peterborough

Region / Région: 16

BIRDS CANADA
OISEAUX CANADA

Square Summary (17TQK03) [change]

	#species				#hours		#pc done	
	poss	prob	conf	total	total	peak	road	offrd
Curr.	42	36	21	99	54.9	33.9	31	22
Prev.	26	38	51	115	116.1	—	72	

Region summary (#16: Peterborough, ON)

#squares	#sq with data	#species	#squares (pc)	
			target	compl.
60	60	169	60	24
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	81
Mute Swan ‡			3
Trumpeter Swan		P	23
Wood Duck	FY	FY	80
Blue-winged Teal ‡	H		10
Northern Shoveler ‡			1
Gadwall ‡			0
American Wigeon ‡			0
Mallard	FY	FY	81
American Black Duck			5
Northern Pintail ‡			0
Green-winged Teal ‡	P		0
Redhead †			0
Ring-necked Duck			23
Lesser Scaup ‡			0
Hooded Merganser	FY	H	56
Common Merganser ‡	P	H	21
Ruddy Duck ‡			0
Wild Turkey	P	FY	90
Ruffed Grouse	T	S	85
Ring-necked Pheasant ‡			0
Pied-billed Grebe			23
Rock Pigeon (Feral Pigeon)	V	H	50
Mourning Dove	FY	T	81
Yellow-billed Cuckoo		P	50
Black-billed Cuckoo	FY	T	68
Coccyzus sp. ‡	S		0
Common Nighthawk §	D		25
Eastern Whip-poor-will §	T	S	35
Chimney Swift ‡			11
Ruby-throated Hummingbird	P	T	70
Virginia Rail	S	A	56
Sora	S		18

SPECIES	Prev.	Code	%
Common Gallinule ‡			13
American Coot ‡			1
Sandhill Crane ‡			38
Killdeer §	H	H	53
Upland Sandpiper †	H		15
American Woodcock	T	S	55
Wilson's Snipe			48
Spotted Sandpiper	P	H	46
Ring-billed Gull § ‡			1
Herring Gull §			28
Caspian Tern ‡			0
Black Tern †	H		1
Common Tern § ‡			0
Common Loon	P	AE	71
Double-crested Cormorant § ‡			5
American Bittern	H	S	66
Least Bittern †			31
Great Blue Heron §	AE	H	63
Green Heron §	H	H	48
Turkey Vulture	H	H	88
Osprey	AE	AE	50
Northern Harrier	H		26
Sharp-shinned Hawk	H		23
Cooper's Hawk		H	21
Northern Goshawk ‡			6
Bald Eagle ‡			11
Red-shouldered Hawk	P		33
Broad-winged Hawk	P	H	78
Red-tailed Hawk	H	AE	48
Eastern Screech-Owl			11
Great Horned Owl ‡	P		21
Barred Owl	T	D	43
Long-eared Owl ‡			6

SPECIES	Prev.	Code	%
Short-eared Owl †			0
Northern Saw-whet Owl	S		6
Belted Kingfisher	NY	T	88
Yellow-bellied Sapsucker	NY	P	96
Red-headed Woodpecker †			15
Red-bellied Woodpecker		D	38
Black-backed Woodpecker ‡			1
Downy Woodpecker	P	S	83
Hairy Woodpecker	CF	T	91
Pileated Woodpecker	AE	N	90
Northern Flicker	CF	T	93
American Kestrel §	H		50
Merlin	AE		45
Peregrine Falcon ‡			1
Olive-sided Flycatcher ‡			10
Eastern Wood-Pewee §	T	S	100
Yellow-bellied Flycatcher ‡			0
Alder Flycatcher	T		91
Willow Flycatcher			36
Least Flycatcher	S	S	91
Eastern Phoebe	AE	NY	100
Great Crested Flycatcher	FY	T	100
Eastern Kingbird	AE	AE	90
Yellow-throated Vireo	S		31
Blue-headed Vireo		S	78
Philadelphia Vireo ‡			0
Warbling Vireo	CF	S	75
Red-eyed Vireo	FY	T	100
Loggerhead Shrike †			0
Canada Jay ‡			3
Blue Jay	CF	FS	100
American Crow	FY	T	95
Common Raven		FY	91

SPECIES	Prev.	Code	%
Black-capped Chickadee	CF	T	98
Boreal Chickadee ‡			0
Horned Lark ‡			8
Northern Rough-winged Swallow	P		20
Purple Martin ‡			5
Tree Swallow	AE	H	81
Bank Swallow §			15
Barn Swallow §	FY	H	75
Cliff Swallow §			18
Ruby-crowned Kinglet ‡	S		0
Golden-crowned Kinglet			30
Red-breasted Nuthatch		S	93
White-breasted Nuthatch	P	T	88
Brown Creeper	T	H	71
Blue-gray Gnatcatcher ‡			3
House Wren	CF	AE	76
Winter Wren	FY	T	96
Sedge Wren ‡			10
Marsh Wren	T	S	46
Carolina Wren ‡			5
European Starling	FY	P	80
Gray Catbird	FY	A	80
Brown Thrasher	FY	CF	75
Northern Mockingbird ‡			3
Eastern Bluebird	AE	P	53
Veery	A	S	100
Swainson's Thrush	S	H	16
Hermit Thrush	T	S	78
Wood Thrush §	S	S	88
American Robin	NY	NY	98
Cedar Waxwing	CF	S	88
House Sparrow	FY		38
Evening Grosbeak ‡			1

SPECIES	Prev.	Code	%
House Finch			18
Purple Finch	FY	S	96
Red Crossbill ‡			21
White-winged Crossbill ‡			3
Pine Siskin ‡	P		30
American Goldfinch	D	T	93
Grasshopper Sparrow §	S		21
Chipping Sparrow	CF	CF	95
Clay-colored Sparrow ‡	CF		18
Field Sparrow §	FY	T	61
Dark-eyed Junco ‡			3
White-throated Sparrow	T	S	96
Vesper Sparrow			28
Savannah Sparrow	T	S	58
Song Sparrow	CF	CF	100
Lincoln's Sparrow ‡			5
Swamp Sparrow	CF	S	100
Eastern Towhee §	S	T	48
Bobolink §	D		50
Eastern Meadowlark §	D	S	58
Orchard Oriole ‡			5
Baltimore Oriole	D	T	75
Red-winged Blackbird	CF	CF	100
Brown-headed Cowbird	FY	S	63
Common Grackle	FS	CF	98
Ovenbird	T	T	100
Northern Waterthrush	T	T	91
Golden-winged Warbler †	H	S	21
Blue-winged Warbler ‡			11
Black-and-white Warbler	T	S	96
Tennessee Warbler ‡			0
Nashville Warbler	CF	H	90
Mourning Warbler	S	S	71

SPECIES	Prev.	Code	%
Common Yellowthroat	T	A	100
Hooded Warbler ‡			0
American Redstart	AE	D	96
Cape May Warbler ‡			0
Cerulean Warbler †			3
Northern Parula ‡	S		26
Magnolia Warbler		S	70
Bay-breasted Warbler ‡			0
Blackburnian Warbler	S	S	66
Yellow Warbler	CF	FS	85
Chestnut-sided Warbler	CF	T	93
Black-throated Blue Warbler	T	S	58
Pine Warbler	CF	FY	93
Yellow-rumped Warbler	CF	T	83
Prairie Warbler †			0
Black-throated Green Warbler	CF	T	93
Canada Warbler §			61
Scarlet Tanager	P	CF	95
Northern Cardinal	CF	T	50
Rose-breasted Grosbeak	D	T	98
Indigo Bunting	CF	T	95

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 finding that species in region #16). Rare/Colonial Species Report Forms should be completed for species marked: § (Species of interest), ‡ (regionally rare), † (provincially rare). An up-to-date version of this sheet is available from https://naturecounts.ca//nc//atlas/squaresummaryform.jsp?squareID=17TQK03&lang=EN Data current as of **30/05/2023 16:31**.

Appendix F

eBird Database

Change location | Year-round, All years

Sandy Creek Bay

Peterborough County (/region/CA-ON-PB?yr=all&m=),
Ontario (/region/CA-ON?yr=all&m=),
CA (/region/CA?yr=all&m=)

Map(/hotspots?hs=L4727815&yr=all&m=)

Directions(https://www.google.com/maps/search/?api=1&query=44.5171336,-78.4158182)

Hotspot navigation

Overview (/hotspot/L4727815?yr=all&m=)

Illustrated Checklist (/hotspot/L4727815/media?yr=all&m=)

VIEW MY...

My eBird (/myebird/L4727815)

Life List (/lifelist/L4727815)

Target Species (/targets?r1=L4727815&bmo=1&emo=12)

Checklists (/mychecklists/L4727815)

EXPLORE...

Hotspot Map (/hotspots?hs=L4727815&yr=all&m=)

Bar Charts (/barchart?r=L4727815&yr=all&m=)

Media (https://ebird.org/media/catalog?regionCode=L4727815)

Printable Checklist (/printableList?regionCode=L4727815&yr=all&m=)

10
Species observed
(/hotspot/L4727815?yr=all&m=)

1
Complete checklists
(/hotspot/L4727815/activity?yr=all&m=)

1.	**Bufflehead**	20	2 Nov 2020	Ken Fulsang
2.	**Common Merganser**	2	2 Nov 2020	Ken Fulsang
3.	**Common Loon**	2	2 Nov 2020	Ken Fulsang
4.	**Blue Jay**	2	2 Nov 2020	Ken Fulsang
5.	**Black-capped Chickadee**	2	2 Nov 2020	Ken Fulsang
6.	**Common Nighthawk**	2	11 Aug 2018	Iain Rayner
7.	**American Crow**	1	20 Sep 2016	jason smyrlis
8.	**Wild Turkey**	6	14 Sep 2016	jason smyrlis
9.	**American Robin**	2	17 Jul 2016	jason smyrlis
10.	**Chipping Sparrow**	2	17 Jul 2016	jason smyrlis

Appendix G

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		
	Black-and-white Warbler	Mniotilta varia		
	Black-capped Chickadee	Poecile atricapillus		
	Black-throated Green Warbler	Setophaga virens		
	Blue Jay	Cyanocitta cristata		
	Blue-spotted Salamander	Ambystoma laterale		
	Broad-winged Hawk	Buteo platypterus		
	Brown-headed Cowbird	Molothrus ater		
	Cedar Waxwing	Bombycilla cedrorum		
	Chestnut-sided Warbler	Setophaga pensylvanica		
	Chipping Sparrow	Spizella passerina		
	Common Gartersnake	Thamnophis sirtalis		
	Common Grackle	Quiscalus quiscula		
	Common Raven	Corvus corax		
	Cooper's Hawk	Accipiter cooperii	NAR	
	Dark-eyed Junco	Junco hyemalis		
	Eastern American Toad	Anaxyrus americanus americanus		
	Eastern Chipmunk	Tamias striatus		
	Eastern Cottontail	Sylvilagus floridanus		
	Eastern Kingbird	Tyrannus tyrannus		

KINGDOM	Common Name	Scientific Name	SARO	SARA
	Eastern Phoebe	Sayornis phoebe		
	Eastern Towhee	Pipilo erythrophthalmus		
	Eastern Wood-pewee	Contopus virens	SC	Special Concern/Préoccupante
	European Starling	Sturnus vulgaris		
	Fox Squirrel	Sciurus niger		
	Hairy Woodpecker	Dryobates villosus		
	Mourning Dove	Zenaida macroura		
	Northern Cardinal	Cardinalis cardinalis		
	Northern Flicker	Colaptes auratus		
	Ovenbird	Seiurus aurocapilla		
	Pileated Woodpecker	Dryocopus pileatus		
	Purple Finch	Haemorhous purpureus		
	Red Admiral	Vanessa atalanta		
	Red Fox	Vulpes vulpes		
	Red Squirrel	Tamiasciurus hudsonicus		
	Red-bellied Woodpecker	Melanerpes carolinus		
	Red-breasted Nuthatch	Sitta canadensis		
	Red-eyed Vireo	Vireo olivaceus		
	Rose-breasted Grosbeak	Pheucticus ludovicianus		
	Ruffed Grouse	Bonasa umbellus		
	Scarlet Tanager	Piranga olivacea		
	Song Sparrow	Melospiza melodia		
	Southern Flying Squirrel	Glaucomys volans	NAR	
	Spring Peeper	Pseudacris crucifer		
	Striped Skunk	Mephitis mephitis		
	Turkey Vulture	Cathartes aura		
	Two-spotted Bumble Bee	Bombus bimaculatus		
	Veery	Catharus fuscescens		
	Widow Skimmer	Libellula luctuosa		
	Winter Wren	Troglodytes hiemalis		

KINGDOM	Common Name	Scientific Name	SARO	SARA
	Wood Duck	Aix sponsa		
	Yellow Warbler	Setophaga petechia		
	Yellow-bellied Sapsucker	Sphyrapicus varius		
Fungi				
	Gray Reindeer Lichen	Cladonia rangiferina		
	Green Reindeer Lichen	Cladonia arbuscula ssp. mitis		
Plantae				
	Alternate-leaved Dogwood	Cornus alternifolia		
	American Beech	Fagus grandifolia		
	American Hop	Humulus lupulus var. lupuloides		
	American Mountain-ash	Sorbus americana		
	Balsam Fir	Abies balsamea		
	Basswood	Tilia americana		
	Black Ash	Fraxinus nigra	END	
	Black Cherry	Prunus serotina		
	Black Swallowwort	Vincetoxicum nigrum		
	Blue-stemmed Goldenrod	Solidago caesia		
	Bracken Fern	Pteridium aquilinum		
	Brownish Sedge	Carex brunnescens		
	Bull Thistle	Cirsium vulgare		
	Bur Oak	Quercus macrocarpa		
	Butter-and-eggs	Linaria vulgaris		
	Calico Aster	Symphyotrichum lateriflorum		
	Coltsfoot	Tussilago farfara		
	Common Burdock	Arctium minus		
	Common Buttercup	Ranunculus acris		
	Common Dandelion	Taraxacum officinale		
	Common Hop	Humulus lupulus		
	Common Juniper	Juniperus communis		
	Common Motherwort	Leonurus cardiaca		

KINGDOM	Common Name	Scientific Name	SARO	SARA
	Common Oak Fern	Gymnocarpium dryopteris		
	Common Plantain	Plantago major		
	Common Prickly-ash	Zanthoxylum americanum		
	Common Self-heal	Prunella vulgaris ssp. vulgaris		
	Common Speedwell	Veronica officinalis		
	Common St. John's-wort	Hypericum perforatum		
	Common Timothy	Phleum pratense		
	Common Yarrow	Achillea millefolium		
	Downy Yellow Violet	Viola pubescens var. pubescens		
	Eastern Hemlock	Tsuga canadensis		
	Eastern Hop-hornbeam	Ostrya virginiana		
	Eastern Poison Ivy	Toxicodendron radicans var. radicans		
	Eastern Star Sedge	Carex radiata		
	Eastern White Cedar	Thuja occidentalis		
	Eastern White Pine	Pinus strobus		
	English Plantain	Plantago lanceolata		
	Field Mustard	Brassica rapa		
	Garden Bird's-foot Trefoil	Lotus corniculatus		
	Hard Fescue	Festuca trachyphylla		
	Herb-Robert	Geranium robertianum		
	Kentucky Bluegrass	Poa pratensis		
	Large-toothed Aspen	Populus grandidentata		
	May-apple	Podophyllum peltatum		
	Northern Red Oak	Quercus rubra		
	Ostrich Fern	Matteuccia struthiopteris		
	Paper Birch	Betula papyrifera		
	Pearly Everlasting	Anaphalis margaritacea		
	Pennsylvania Sedge	Carex pensylvanica		
	Perennial Ragweed	Ambrosia psilostachya		
	Poverty Oatgrass	Danthonia spicata		

KINGDOM	Common Name	Scientific Name	SARO	SARA
	Red Columbine	Aquilegia canadensis		
	Red Maple	Acer rubrum		
	Red Pine	Pinus resinosa		
	Red Raspberry	Rubus idaeus		
	Red Trillium	Trillium erectum		
	Riverbank Grape	Vitis riparia		
	Rough Fleabane	Erigeron strigosus		
	Round-leaved Dogwood	Cornus rugosa		
	Round-lobed Hepatica	Hepatica americana		
	Rugel's Plantain	Plantago rugelii		
	Scots Pine	Pinus sylvestris		
	Sensitive Fern	Onoclea sensibilis		
	Sheep Sorrel	Rumex acetosella		
	Spinulose Wood Fern	Dryopteris carthusiana		
	Spotted Jewelweed	Impatiens capensis		
	Spreading Dogbane	Apocynum androsaemifolium		
	Staghorn Sumac	Rhus typhina		
	Sugar Maple	Acer saccharum		
	Tall Hawkweed	Pilosella piloselloides		
	Tall Meadow-rue	Thalictrum pubescens		
	Tatarian Honeysuckle	Lonicera tatarica		
	Trembling Aspen	Populus tremuloides		
	Tufted Vetch	Vicia cracca		
	Two-leaved Mitrewort	Mitella diphylla		
	Upright Brome	Bromus erectus		
	Western Poison Ivy	Toxicodendron radicans var. rydbergii		
	White Ash	Fraxinus americana		
	White Elm	Ulmus americana		
	White Spruce	Picea glauca		
	White Trillium	Trillium grandiflorum		

KINGDOM	Common Name	Scientific Name	SARO	SARA
	Wild Carrot	Daucus carota		
	Wild Chicory	Cichorium intybus		
	Wild Leek	Allium tricoccum		
	Wild Lily-of-the-valley	Maianthemum canadense		
	Wild Sarsaparilla	Aralia nudicaulis		
	Wild Strawberry	Fragaria virginiana		
	Yellow Avens	Geum aleppicum		
	Yellow Trout-lily	Erythronium americanum		
	Zigzag Goldenrod	Solidago flexicaulis		

Appendix H

Significant Wildlife Habitat (SWH)

Significant Wildlife Habitat Screening				
Signficant Wildlife Habitat Type	**General Habitat Description**	**ELC Observed**	**SWH Present**	**Comments**
Wildlife Concentration Areas				
Waterfowl Stopover and Staging Areas (Terrestrial)	Fields with sheet water during the spring	NO	NO	ELC not observed
Waterfowl Stopover and Staging Areas (Aquatic)	Ponds, marshes, lakes, bays, coastal inlets, and watercourses used during migration	NO	NO	ELC not observed
Shorebird Migratory Stopover Area	Shorelines of lakes, rivers and wetlands, including beach areas, bars and seasonally flooded, muddy and un-vegetated shoreline habitats	NO	NO	ELC not observed
Raptor Wintering Area	The habitat provides a combination of fields and woodlands that provide roosting, foraging and resting habitats for wintering raptors	NO	NO	ELC not observed
Bat Hibernacula	Caves, mine shafts, underground foundations and Karsts. Hibernacula relatively poorly known	NO	NO	ELC not observed
Bat Maternity Colonies	Mature forests with >10 ha of large diameter (>25 cm dbh) wildlife trees, 21 snags per hectare preferred	YES	YES	SWH Present
Turtle Wintering Areas	Within core habitat, water must be deep enough not to freeze and have soft mud substrates	NO	NO	ELC not observed
Reptile Hibernaculum (Turtles assessed separately)	Below frost lines in burrows, rock crevices and other natural or naturalized locations. Rock crevices, talus slopes, etc.	YES	NO	SHW not Present
Colonial Nesting Bird Breeding Habitat (Bank and Cliff)	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	ELC not observed
Colonial Nesting Bird Breeding Habitat (Tree/Shrubs)	Live or dead standing trees (typically 11 to 15 m tall) in wetlands, lakes, islands and peninsulas. Occasionally shrubs and emergent vegetation.	NO	NO	ELC not observed
Colonial Nesting Bird Breeding Habitat (Ground)	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	ELC not observed
Migratory Butterfly Stopover Areas	At least 10 ha in size with combination of field and forest within 5 km of Lake Ontario	NO	NO	ELC not observed
Landbird Migratory Stopover Areas	Woodlots need to be >10 ha in size and within 5 km of Lake Ontario	YES	NO	Not within 5 km of Lake Ontario
Deer Yarding Areas	Core (Stratum I) is located within Stratum II. Core is critical for survival of deer during winter months	YES	NO	No deer wintering habitat associated near site
Deer Winter Congregation Areas	Large woodlots typically >100 ha, however smaller woodlots with densities of 0.1 - 1.5 deer/ha may also be considered	YES	NO	No deer wintering habitat associated near site
Rare Vegetation Communities				
Cliffs and Talus Slopes	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	ELC not observed
Sand Barren	Typically >0.5 ha with exposed sand, generally sparsely vegetated and caused by lack of moisture, periodic fires and erosion	NO	NO	ELC not observed
Alvar	Typically >0.5 ha with level, mostly fractured calcareous bedrock	NO	NO	ELC not observed
Old Growth Forest	Woodland areas 30 ha or greater with at least 10 ha interior habitat assuming 100 m buffer at edge of forest	YES	YES	SWH Present
Savannah	Any tallgrass prairie habitat that has tree cover between 25 - 60%	NO	NO	ELC not observed
Tallgrass Prairie	Dominated by prairie grasses with < 25% tree cover	NO	NO	ELC not observed
Other Rare Vegetation Communities	Beaches, fens, forest, marsh, barrens, dunes and swamps	NO	NO	ELC not observed
Specialized Habitat for Wildlife				
Waterfowl Nesting Area	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	ELC not observed
Bald Eagle and Osprey Nesting, Foraging and Perching Habitat	Nests are associated with lakes, ponds, rivers or wetlands along forested shorelines, islands or in structures over water	YES	NO	SWH Not Present
Woodland Raptor Nesting Habitat	All natural or conifer plantation woodland / forest stands >30 ha with >10 ha of interior habitat	YES	YES	SWH Present
Turtle Nesting Areas	Close to water with sand and gravel that turtles are able to dig in, located in open sunny areas.	NO	NO	ELC not observed
Seeps and Springs	Any forested area (with >25% meadow/field/pasture) within headwaters of a stream or river system	YES	NO	SWH Not Present
Amphibian Breeding Habitat (Woodland)	Presence of a wetland, pond or woodland pool >500m^2, within or adjacent to woodland	YES	NO	SWH Not Present

Significant Wildlife Habitat Screening				
Signficant Wildlife Habitat Type	**General Habitat Description**	**ELC Observed**	**SWH Present**	**Comments**
Amphibian Breeding Habitat (Wetlands)	Wetlands >500m^2 (25m diameter), supporting high species diversity	YES	YES	SWH Present
Woodland Area-Sensitive Breeding Bird Habitat	Habitats where interior forest birds are breeding, typically large mature (>60 yrs old) forest stands or woodlots >30 ha	YES	YES	SWH Present
Habitat of Species of Conservation Concern (other than Threatened or Endangered)				
Marsh Breeding Bird Habitat	Nesting occurs in wetlands consisting of shallow water with emergent aquatic vegetation Green Heron: edge water habitat	YES	NO	SWH Not Present
Open Country Bird Breeding Habitat	Large grassland areas (including natural and cultural field and meadows) >30 ha	NO	NO	ELC not observed
Shrub/Early Successional Bird Breeding Habitat	Large field areas succeeding to shrub thicket habitats >10 ha in size	NO	NO	ELC not observed
Terrestrial Crayfish	Wet meadow edges of shallow marshes Only found in SW Ontario	NO	NO	ELC not observed
Special Concern and Rare Wildlife Species	All Special Concern and Provincially Rare plant and animal species. May also consider Area Sensitive and Culturally Sensitive Species	NO	NO	ELC not observed
Animal Movement Corridors				
Amphibian Movement Corridors	Determined as part of breeding habitat assessment	YES	NO	SWH Not Present
Deer Movement Corridors	All proposals within Stratum II Deer Wintering Area have potential for corridors	YES	NO	No deer wintering habitat associated near site
General Comments:				