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SCOPED ENVIRONMENTAL IMPACT STUDY

for

3248 Papineau Lake Road
Municipality of Hastings Highlands

November 2021

Submitted To: Papineau Lake Investments Inc.
c/o John Thompson
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Prepared by Ainley Group

November 2021

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1.0 INTRODUCTION

Ainley Group was retained to conduct a Scoped Environmental Impact Study (EIS) relating to the proposed re-severance of a lot on Papineau Lake Road, in the Municipality of Hastings Highlands. The subject property is identified as part of Lot 3, Concession 8 and Part of Shore Road Allowance in Front of Lot 3, Concession 8, geographic Township of Bangor, Municipality of Hastings Highlands, County of Hastings (**Figure 1**).

The development is proposed to include the re-severance of the above noted parcel into two (2) lots, to accommodate existing cottage dwellings on the subject property. Entrances to each of the existing cottage dwellings are identified as 3240 and 3248 Papineau Lake Road. In addition to the re-severance of the parcel, the existing cottage dwelling at 3248 Papineau Lake Road is proposed to be demolished, with a new cottage dwelling (similar footprint) to be constructed. The existing site conditions at the time of field investigations are shown on **Figure 2**, and the proposed cottage dwelling at 3248 Papineau Lake Road is shown on **Figure 3**.

2.0 PURPOSE OF THE REPORT AND SCOPE OF WORK

This report is being prepared to document the environmental features of the subject property and to provide an overview of potential impacts from the undertaking on the study area environment in consideration of Provincial and municipal planning policies.

The scope of work for this investigation was completed per the email from Fotenn Planning & Design (dated July 14, 2021) and in accordance with the Ainley Group proposal (dated July 26, 2021). The scope of work for the investigation (as outlined in the proposal) included the following:

- Minimum of 1 site visit during field work appropriate season, or more site visits as required.
- Ecological Land Classification (ELC) of all vegetation communities.
- General review of surface water feature(s).
- Species At Risk (SAR) presence and habitat assessment.
- Analysis of possible impacts of development to natural heritage features.
- Mitigation recommendations.

3.0 SOURCES OF EXISTING BASELINE INFORMATION

The following resources were identified and used to review background data on terrestrial and aquatic species within or in close proximity to the study area as part of the existing conditions and impact assessment.

- MNRF – Land Information Ontario (LIO) / Natural Heritage Make-a-Map review for natural heritage data.
- Ebird - review for bird species observation data.
- Ontario Breeding Bird Atlas (OBBA) – review for bird species observation data.

- Ontario Reptile and Amphibian Atlas (ORAA) – review for herpetofaunal species observation data.
- iNaturalist – review for wildlife and vegetation species observation data.
- Aerial Photographs – review aerial photographs of the study area.
- Letter of Opinion – 3264 Papineau Lake Road, Combermere – Gazebo Construction (Ainley Group, 2015) – Natural heritage information and assessment pertaining to development (gazebo construction) on adjacent lot.

Details pertaining to the above information sources and available information were utilized to compile existing conditions information in the study area, and are summarized in the existing conditions section of the report.

The sections below summarize the above information sources and available information.

MNRF LIO / Natural Heritage Make-a-Map (MNRF, 2020)

Mapping available from LIO and Natural Heritage Make-a-map identified one (1) waterbody, Papineau Lake within or adjacent to the subject property boundaries. No Provincially Significant Wetlands (PSWs), unevaluated wetlands, or Areas of Natural or Scientific Interest (ANSIs) were identified within or adjacent to the subject property boundaries. Information provided by the NHIC also indicated species of concern present within the area, which included; Ogden's Pondweed, Wood Thrush, and Canada Warbler in the proximity of the subject property.

Ebird (Cornell Lab of Ornithology, 2021)

Ebird was reviewed to determine observations of bird species (including SAR) which have historically occurred in the study area.

Ontario Breeding Bird Atlas (Bird Studies Canada, 2020)

OBBA was reviewed to determine observations of bird species (including SAR) which have historically occurred in the study area.

Ontario Reptile and Amphibian Atlas (Ontario Nature, 2020)

ORAA was reviewed to determine observations of herpetofaunal species (including SAR) which have historically occurred in the study area.

iNaturalist (California Academy of Sciences and the National Geographic Society, 2020)

iNaturalist was reviewed to determine observations of wildlife and vegetation species (including SAR) which have historically occurred in the study area.

Aerial Photographs

Aerial photographs of the study area were reviewed to observe current conditions as well as changes in the study area to better understand the site ecology. The available imagery suggests that no significant changes occurred on the subject lands between 2015 and 2019.

Letter of Opinion – 3264 Papineau Lake Road (Ainley Group, 2015)

A Letter of Opinion (LoO) related to potential impacts to natural heritage features was prepared by Ainley Group for development (gazebo construction) at the property identified as 3264 Papineau Lake Road and immediately adjacent the subject lands. The LoO included a review for SAR with the potential to be found at 3264 Papineau Lake Road, as well as a review of fisheries related information pertaining to Papineau Lake. The results of the review concluded that no SAR were identified with the potential to be impacted by the proposed gazebo construction and that Papineau Lake is a cold water fish habitat feature.

4.0 DATA COLLECTION METHODOLOGY

The following field survey protocols were completed to assess and document the presence of vegetative, wildlife, migratory and breeding birds, and herpetofaunal species within the study area. During the field survey, emphasis was placed on SAR with the potential to occur within the study area. Field surveys for respective ecological features were completed in accordance with the following methodology:

Vegetation

A vegetation field survey for species composition was completed within the study area on August 24, 2021. Photographs of the identified vegetation communities are shown in **Appendix B**, a species list is included in **Appendix C**, and ELC field forms are included in **Appendix D**.

Wildlife

Observations of incidental wildlife encounters (turtles, amphibians, birds, snakes, mammals) were recorded during the field visit on August 24, 2021. Any wildlife observations were noted along with locational information of the sighting. Specific attention was given to the evaluation for the presence of SAR during the field visits, including SAR turtles, birds, and vegetation.

During the survey, reference for specific habitat requirements for each species was per the *MNR - Significant Wildlife Habitat Technical Guide* (2000).

5.0 PLANNING POLICIES AND FRAMEWORK

The following planning policies and framework were reviewed and applied to establish the suitability of the proposed development in consideration of environmental impacts to the subject land and adjacent properties.

5.1 Provincial Planning Policy

The Provincial Policy Statement (PPS) (MMAH, 2020) outlines policies related to natural heritage features (Section 2.1) and water resources (Section 2.2). The *Planning Act* requires that planning decisions shall be consistent with the PPS.

According to the PPS, development and site alteration shall not be permitted in:

- Habitat of endangered or threatened species, except in accordance with provincial and federal requirements,
- Significant wetlands (in coastal areas or in Ecoregions 5E, 6E and 7E), and
- Significant coastal wetlands.

Similarly, unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions, development and site alteration shall not be permitted within:

- Significant wetlands in the Canadian Shield north of Ecoregions 5E, 6E, and 7E,
- Significant woodlands (Ecoregions 6E and 7E, excluding islands in Lake Huron and the St. Marys River),
- Significant valley lands (Ecoregions 6E and 7E, excluding islands in Lake Huron and the St. Marys River),
- Significant wildlife habitat,
- Significant Areas of Natural and Scientific Interest (ANSI), and
- Coastal wetlands in Ecoregions 5E, 6E, and 7E.

In addition, development and site alteration is not permissible on lands adjacent to the natural features and areas identified above unless the ecological function of the adjacent lands has been evaluated and it has been demonstrated that no negative impacts on natural features and functions will occur. Development and site alternation shall not be permitted in fish habitat except in accordance with federal and Ontario-specific requirements.

5.2 Hastings County Official Plan and Municipality of Hastings Highlands Zoning By-Law

5.2.1 Hastings County Official Plan

The County of Hastings has prepared an Official Plan with the intention that it will guide development activities in the County over a twenty year horizon. Official Plan documents (**Appendix E**) note the land use on the subject property to be Rural/Waterfront. Permitted uses within Rural/Waterfront designated lands shall relate to the management or use of resources, resource based recreational uses (including recreational dwellings), and limited residential development, home occupations and home industries, and other rural land uses. No other constraints are noted on the subject lands.

5.2.2 Municipality of Hastings Highlands Zoning By-Law

The Municipality of Hastings Highlands has prepared a Zoning By-law to identify the permitted use of lands within the Municipality. Zoning mapping (**Appendix E**) indicates that the subject lands are zoned Waterfront Residential (WR). Amongst other things, the WR zoning permits the use of the property for a single detached dwelling or a seasonal dwelling.

6.0 EXISTING CONDITIONS

An existing conditions review of the subject property was completed on August 24, 2021, during which it was noted that the subject property is generally part of low density residential (cottage) development along the shoreline of Papineau Lake. Access to the subject property is via Papineau Lake Road. The existing conditions of the subject property are shown on **Figure 2**, in the photographic log (**Appendix B**), and are detailed in the following sections.

6.1 Land Use, Topography, and Drainage

Land use on the subject property is currently (and will continue to be) as a seasonal dwelling (low density residential; **Figure 2**). The surrounding area includes a mixture of low density residential development, waterbody (Papineau Lake), and forest.

The topography of the subject property is steeply sloped from Papineau Lake Road down to Papineau Lake. The elevation of the property ranges from approximately 340 metres above sea level (masl) at Papineau Lake Road to 320 masl along the shoreline of Papineau Lake.

Drainage on the subject property is interpreted to follow the site topography as sheet-flow, with flow from east to west and ultimately to Papineau Lake. It should be noted that a “french drain” feature was previously constructed along the driveway of 3248 Papineau Lake Road. This feature captures flow along the slope and directs it away from the existing cottage dwelling, and towards the lake between the two cottage properties.

6.2 Surficial and Bedrock Geology

The subject property is located within the Algonquin Highlands physiographic region. The landform features of the study area consist of a relatively hilly landscape with forested areas, watercourses, and a mixture of permanent and seasonal residential features within the general project area.

Surficial geology in the study area is identified by the Ministry of Agriculture, Food, and Rural Affairs as rockland (OMAFRA, 2020). Bedrock geology in the study area consists of felsic igneous rocks such as tonalite, granodiorite, monzonite, granite, syenite, and derived gneisses (Lumbers, 1976).

6.3 Vegetation and Vegetation Communities

The study area is located in ecoregion 5E – Georgian Bay Ecoregion, within the Ontario Shield ecozone, which is typically dominated by mixed and deciduous forest, with coniferous and sparse forests present in small quantities (MNRF, 2009). A field survey was completed by Ainley Group

in August 2021 during which vegetative species and communities within the study limits were documented. Vegetation within the subject property was identified and categorized in accordance with the Ecological Land Classification (ELC) mapping, with vegetative communities assigned ELC codes consistent with the amended ELC classification tables (2013).

Vegetation communities within the study area consist of Low Density Residential (CVR_1).

SAR or rare vegetation identified by NHIC as having the potential to exist within the study limits includes; Ogden's Pondweed (END). No SAR or rare vegetation was observed during the field survey completed by Ainley Group. A discussion regarding SAR vegetation and the subject property is provided in detail within **Section 6.6**.

The following sections provide a detailed summary of the vegetation and vegetative community observed within the study area during the field investigation in 2021. An aerial view of the subject property and respective vegetation community is shown in **Figure 2**.

6.3.1 Low Density Residential (CVR_1)

This community was observed across the entire study area, and is characterized by manicured vegetation within the bounds of a seasonal dwelling property. Vegetation species observed within this community included; Eastern Hemlock (*Tsuga canadensis*), Sugar Maple (*Acer saccharum*), Ironwood (*Ostrya virginiana*), Red Clover (*Trifolium pretense*), English Plantain (*Plantago lanceolate*), Red Pine (*Pinus resinosa*), amongst other species.

6.4 Surface Water Features, Fish and Fish Habitat, and Aquatic SAR

The subject property is adjacent to Papineau Lake. No other intermittent or permanent surface water features were identified on or adjacent to the study area. Papineau Lake is understood to be a cold-water lake, which supports a lake trout fishery. The lake is located approximately 14.5 kilometres (km) north-east of the community of Maynooth, Ontario. Papineau lake is approximately 830 hectares (ha) in area, and has approximately 19.5 km of shoreline. Of this 19.5 km, approximately 75% has been developed with residences (seasonal or permanent); however, it is understood that the lake is not considered to be at capacity. Access around the lake is a mix of paved and gravel roads.

A review of fish and fish habitat along the shoreline was completed during the site visit on August 24, 2021. No fish species were observed; however the lake is known to contain a variety of warm and cold water species, including; Lake Trout, Lake Whitefish, Brown Bullhead, Fallfish, White Sucker, Burbot, Smallmouth Bass, Cisco, Northern Pike, and Pumpkinseed. MNRF previously identified a no in-water work timing window of October 1 to July 15, in any calendar year, for Papineau Lake (**Appendix A**). Fish habitat along the shoreline was observed to be dominated by sandy substrate in the nearshore area, and dock features were present along the water's edge. Limited overhanging and in-water vegetation was observed.

A review of available DFO information was completed by Ainley Group in an effort to determine the potential for aquatic SAR within the project limits. Upon completion of the review, no aquatic SAR fish / mussel species were identified. This is consistent with the correspondence from MNRF (**Appendix A**) which did not indicate the presence of any aquatic SAR within Papineau Lake.

Phosphorus inputs associated with sewage are possible as a result of the proposed development as it is anticipated that a new septic system will be required for the proposed seasonal dwelling. Nitrate-nitrogen loading is also a consideration with regards to septic systems; particularly given that the lot proposed for 3248 Papineau Lake Road is smaller than the 0.8 ha, whereby the attenuative processes would be considered sufficient to reduce the nitrate-nitrogen to an acceptable concentration. Particular attention should be paid to the infiltration rates of the on-site overburden, with septic design to be completed in accordance with Guideline D-5-4 *Individual On-Site Sewage Systems: Water Quality Impact Risk Assessment* to meet the recommended targets. Per the Ontario Building Code, the minimum setback for a septic system to a water feature is 15 m. The owner has indicated that the new septic would be in the general area of the existing (approximately 30 m from Papineau Lake) which will address the building code requirement.

Mitigation measures for the protection of the surface water features present on the subject property are further discussed in **Section 8.0**.

6.5 Birds, Wildlife, and Herpetofaunal Species and Habitat

Habitat within and adjacent to the subject property includes forested lands, and surface water communities, allowing for a wide variety of birds, wildlife, and herpetofaunal species with the potential to occur within the study limits. The following sections detail the species formerly reported to occur within the study area, as well as those observed during the field investigation completed by Ainley Group in 2021.

6.5.1 Bird Species

Observations of bird species were documented within the study area during the field survey in August 2021. Species were generally limits, and only three (3) bird species were observed (visually or audibly) within the study area. A summary of the species list (common names) is included below:

Black-capped Chickadee

Blue Jay

Red-eyed Vireo

Species observation data from the OBBA (Square 18TR82) indicate the presence of a wide variety of both upland and waterfowl species, which is to be expected given the available features at / adjacent the subject property.

Additional information to SAR birds with the potential to occur within the study area, is provided in **Section 6.6**.

6.5.2 Wildlife / Herpetofaunal Species

Wildlife species within the study area were documented via direct observation and interpretation of sign (i.e. tracks, scat, vocalizations, etc.). Observations of wildlife species during the environmental investigation by Ainley Group in 2021 were limited to Red Squirrel (*Tamiasciurus hudsonicus*). However, the subject property and adjacent lands are also anticipated to provide habitat for other typical small to medium mammals of southern Ontario including White-tailed Deer (*Odocoileus virginianus*) Coyote (*Canis latrans*), Raccoon (*Procyon lotor*), and Striped Skunk (*Mephitis mephitis*).

Incidental observations of herpetofaunal species that occurred during the field survey were documented. Although no herpetofaunal species were observed during the Ainley Group site visit, given the presence of Papineau Lake, the general area is anticipated to provide suitable habitat for herpetofaunal species such as Northern Leopard Frog (*Lithobates pipiens*), Snapping Turtle (*Chelydra serpentina*), Northern Watersnake (*Nerodia sipedon sipedon*) amongst others, is present.

Additional information pertaining to SAR wildlife with the potential to occur within the study limits is provided in **Section 6.6**.

6.6 Significant Natural Heritage Functions / Features

As part of the EIS, the following natural heritage functions and features were reviewed for the subject property:

- Significant habitat of endangered and threatened species;
- Significant wetlands;
- Significant coastal wetlands;
- Significant woodlands;
- Significant valleylands;
- Significant areas of natural and scientific interest;
- Significant Wildlife Habitat.

6.6.1 Species at Risk

To evaluate potential for species at risk on the subject property a site assessment for SAR was completed, including a review of background data from other sources (i.e. Reptile and Amphibian Atlas, eBird, iNaturalist, and NHIC). Based on the background data sources (**Appendix A**) and

previous experience in the general area, the following terrestrial species have been included for review:

Table 1: Species At Risk with the Potential to Occur within the Study Limits

Species (Latin Name)	Species (Common Name)	Federal Status	Provincial Status
Myotis lucifugus	Little Brown Bat	Endangered	Endangered
Myotis septentrionalis	Northern Myotis	Endangered	Endangered
Perimyotis subflavus	Tri-colored Bat	Endangered	Endangered
Myotis leibii	Eastern Small-footed Myotis	Endangered	Endangered
Potamogeton hillii x Potamogeton zosteriformis	Ogden's Pondweed	Endangered	Endangered
Hirundo rustica	Barn Swallow	Threatened	Threatened
Dolichonyx oryzivorus	Bobolink	Threatened	Threatened
Emydoidea blandingii	Blanding's Turtle	Threatened	Threatened
Sturnella magna	Eastern Meadowlark	Threatened	Threatened
Chaetura pelagica	Chimney Swift	Threatened	Threatened
Hylocichla mustelina	Wood Thrush	Threatened	Special Concern
Cardellina canadensis	Canada Warbler	Threatened	Special Concern
Contopus virens	Eastern Wood Pewee	Special Concern	Special Concern
Chelydra serpentina	Snapping Turtle	Special Concern	Special Concern
Falco peregrinus	Peregrine Falcon	Special Concern	Special Concern
Coccothraustes vespertinus	Evening Grosbeak	Special Concern	Special Concern

During field visits completed by Ainley Group in 2021, no SAR were observed on or adjacent the subject lands.

As part of the evaluation, habitat requirements of the terrestrial SAR identified with the potential to exist were compared against the habitat types present and species observations on the subject property. The results of this assessment are provided in **Table 2**.

Based on a review of the existing conditions, the proposed development (i.e. lot severance) is generally anticipated to have limited potential to impact the SAR identified for the subject property. The mature trees present on the subject property are considered to have the potential to support bat and forest bird species. No vegetation clearing is anticipated as a result of the proposed development; however, should it become a requirement, then any vegetation clearing should

respect the active season for bats and migratory breeding birds, with no clearing completed between April 1 and September 30, in any calendar year.

Measures to limit impacts to those species identified with the potential to be impacted by the development are discussed further in **Section 8.0**.

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Table 2 - Species at Risk Summary (Terrestrial)
21626-1

Common Name	Species Name	S Rank	SARA	SARO	Habitat Requirements	Potential for Species to be Present / Impacted	Rationale / Potential Impacts
Little Brown Bat	*Myotis lucifugus*	S4	END	END	Roost in buildings or trees but often select attics, barns, or abandoned buildings.	Minimal to Moderate	Mature trees on subject property may provide suitable habitat for species. While it is not anticipated that vegetation removal will be required, removal of any mature trees (i.e. trees with diameter at breast height greater than 10 cm) should be completed outside of the active season for bats (April 1 to September 30).
Northern Long-eared Bat	*Myotis septentrionalis*	S3	END	END	Northern long-eared bats are associated with boreal forests, choosing to roost under loose bark and in the cavities of trees. These bats hibernate from October or November to March or April, most often in caves or abandoned mines.	Minimal to Moderate	Mature trees on subject property may provide suitable habitat for species. While it is not anticipated that vegetation removal will be required, removal of any mature trees (i.e. trees with diameter at breast height greater than 10 cm) should be completed outside of the active season for bats (April 1 to September 30).
Tri-colored Bat	*Perimyotis subflavus*	S3?	END	END	Found in a variety of forest habitats, often forming day roots or maternity colonies in older forests and occasionally barns or other structures. The species forages over water and along streams and forests.	Minimal to Moderate	Mature trees on subject property may provide suitable habitat for species. While it is not anticipated that vegetation removal will be required, removal of any mature trees (i.e. trees with diameter at breast height greater than 10 cm) should be completed outside of the active season for bats (April 1 to September 30).
Eastern Small-footed Myotis	*Myotis leibii*	S2S3	END	END	These bats can be found roosting in a variety of habitats ranging from rock outcrops, buildings, bridges, caves, mines, or hollow trees. Roost locations often change on a daily basis	Minimal to Moderate	Mature trees on subject property may provide suitable habitat for species. While it is not anticipated that vegetation removal will be required, removal of any mature trees (i.e. trees with diameter at breast height greater than 10 cm) should be completed outside of the active season for bats (April 1 to September 30).
Ogden's Pondweed	*Potamogeton ogdenii*	SNA	END	END	Ogden's pondweed can be found in clear, slow-moving streams, beaver ponds and lakes, within Ontario. It is often found along side other narrow-leaved pondweed, which makes identification difficult.	Minimal	Last reported observation of species within Hastings County dates back to 1800's. No works proposed within Papineau Lake.
Barn Swallow	*Hirundo rustica*	S4B	THR	THR	Farmlands or rural areas; cliffs, caves, rock niches; buildings or other man-made structures for nesting; open country near body of water.	Minimal	No observations of species during field surveys completed by Ainley Group in 2021. No nests observed on subject property during field investigation.
Bobolink	*Dolichonyx oryzivorus*	S4B	THR	THR	Dense grasses or hayfields south of the boreal forest of Ontario, where they build their small nests on the ground. Feed off insects that are found in these grassy environments. Minimum area required estimated to be 5 hectares.	Minimal	Habitat suitable for species (i.e. grasslands) not present on the subject land. No observations of species during field survey by Ainley Group in 2021.
Blanding's Turtle	*Emydoidea blandingii*	S3	THR	THR	Shallow water marshes, bogs, ponds or swamps, or coves in larger lakes with soft muddy bottoms and aquatic vegetation; basks on logs, stumps, or banks; surrounding natural habitat is important in summer as they frequently move from aquatic habitat to terrestrial habitats; hibernates in bogs.	Minimal	Habitat suitable for species (i.e. lake with soft muddy bottom and aquatic vegetation) not present on or adjacent to subject property. No observations of individuals during field survey completed by Ainley Group in 2021.

3248 Papineau Lake Road - Environmental Impact Study
Table 2 - Species at Risk Summary (Terrestrial)
21626-1

Common Name	Species Name	S Rank	SARA	SARO	Habitat Requirements	Potential for Species to be Present / Impacted	Rationale / Potential Impacts
Eastern Meadowlark	*Sturnella magna*	S4B	THR	THR	Moderately tall grasslands, pastures, hayfields, alfalfa fields, weedy borders of croplands, orchards, airports, roadsides, shrubby overgrown fields and any other open areas present. Commonly seen sitting on small trees, fence posts or shrubs. Minimum area required estimated to be 5 hectares.	Minimal	Habitat suitable for species (i.e. grasslands) not present on the subject land. No observations of species during field survey by Ainley Group in 2021.
Chimney Swift	*Chordeiles minor*	S5B	THR	THR	Commonly found in urban areas near buildings; nests in hollow trees, crevices of rock cliffs, chimneys; highly gregarious; feeds over open water.	Minimal	No observations of species during field survey by Ainley Group in 2021. No observations of suitable habitat (i.e. existing unused chimney, hollow trees, rock cliffs for nesting) on the subject property.
Wood Thrush	*Hylocichla mustelina*	S4B	THR	SC	Found in mature deciduous and mixed forest. Limited to moist stands with well-developed undergrowth and tall trees.	Minimal to Moderate	Vegetation on subject property may provide suitable habitat; however, no vegetation clearing is proposed as part of the development. Should vegetation clearing become required then it should be completed outside of the active season for migratory breeding birds (early April to late August).
Canada Warbler	*Cardellina canadensis*	S4B	THR	SC	Found in a wide range of coniferous and deciduous forests, typically in forest types that are wet with a well developed dense shrub layer. Nests are often found on or near the ground.	Minimal to Moderate	Vegetation on subject property may provide suitable habitat; however, no vegetation clearing is proposed as part of the development. Should vegetation clearing become required then it should be completed outside of the active season for migratory breeding birds (early April to late August).
Eastern Wood-Pewee	*Contopus virens*	S4B	SC	SC	Found in the mid-canopy layer of forest clearings and edges of deciduous and mixed forest. Most abundant in mature forest stands with little understory.	Minimal to Moderate	Vegetation on subject property may provide suitable habitat; however, no vegetation clearing is proposed as part of the development. Should vegetation clearing become required then it should be completed outside of the active season for migratory breeding birds (early April to late August).
Snapping Turtle	*Chelydra serpentina*	S3	SC	SC	Permanent, semi-permanent fresh water; marshes, swamps or bogs; rivers and streams with soft muddy banks or bottoms; often uses soft soil or clean dry sand on south-facing slopes for nest sites; may nest at some distance from water; often hibernate together in groups in mud under water; home range size ~28ha.	Moderate	Species anticipated to be present within Papineau Lake; however, proposed development is not anticipated to impact individuals utilizing the lake for one or more life cycles.
Peregrine Falcon	*Falco peregrinus*	S3B	SC	SC	Commonly found nesting on tall cliff ledges in close proximity to large bodies of water, but have also been known to nest on the ledges of tall buildings in urban environments.	Minimal	Element occurrence of species noted within proximity to subject lands; however, observation was noted to be historical (1950's). Proposed development not anticipated to impact habitat in area suitable for species.
Evening Grosbeak	*Coccothraustes vespertinus*	S4B	SC	SC	During the breeding season this species can be found in open, mature mixed forests dominated by fir species, White Spruce and/or Trembling Aspen. Outside of the breeding season, this species strongly depends on seed crops from fir and spruce	Minimal to Moderate	Vegetation on subject property may provide suitable habitat; however, no vegetation clearing is proposed as part of the development. Should vegetation clearing become required then it should be completed outside of the active season for migratory breeding birds (early April to late August).

1. List of Species at Risk determined though information provided by the MNRF and Natural Heritage Information Centre and Site Observations by Ainley Group.
2. Ministry of Natural Resources. 2000. Significant Wildlife Habitat Guide - Appendix G.

6.6.2 Significant Wetlands and Coastal Wetlands

Per the Natural Heritage Reference Manual (MNRF, 2010), a coastal wetland is defined as:

a) any *wetland* that is located on one of the Great Lakes or their connecting channels (Lake St. Clair, St. Mary's, St. Clair, Detroit, Niagara and St. Lawrence Rivers); or

b) any other *wetland* that is on a tributary to any of the above-specified water bodies and lies, either wholly or in part, downstream of a line located 2 kilometres upstream of the 1:100 year floodline (plus wave run-up) of the large water body to which the tributary is connected.

No wetlands have been identified on / adjacent the subject property by MNRF or were observed during the site visit by Ainley Group in 2021. Further, the location of the subject lands would exclude it from containing or being adjacent to a coastal wetland. As such, no impacts to significant or coastal wetlands are anticipated as a result of the undertaking.

6.6.3 Significant Woodlands

Significant Woodlands within the region have been mapped by Hastings County within 'Schedule B – North' of their Official Plan (2018; **Appendix E**). No Significant Woodlands have been proposed on the subject property by Hastings County. As such, no impacts to Significant Woodlands are anticipated as a result of the undertaking.

6.6.4 Significant Valleylands or Areas of Natural and Scientific Interest (ANSI)

No Significant Valleylands or ANSIs have been identified on the subject property by Hastings County (2018) or MNRF (2020). As such, no impacts to Significant Valleylands or ANSIs are anticipated as a result of the undertaking.

6.6.5 Significant Wildlife Habitat

In accordance with the *NHRM* (OMNR, 2010), there are four categories of significant wildlife habitat including the following:

- Rare vegetation communities or specialized habitat for wildlife.
- Habitat of species of conservation concern.
- Animal movement corridors.
- Habitats of seasonal concentrations of animals.

Criteria for confirmed significant wildlife habitat are provided in *Significant Wildlife Habitat Criteria Schedules for Ecoregion 5E* (OMNR, 2015).

Background information from NHIC (**Appendix A**) indicates the presence of a colonial waterbird nesting colony in the general study area. Per the *Significant Wildlife Habitat Criteria Schedules For Ecoregion 5E*, such colonies are identified as Colonially Nesting Bird Breeding Habitat

(Ground) and consist of greater than twenty-five (25) active nests for Herring Gulls or Ring-billed Gulls, greater than five (5) active nests for Common Tern, greater than two (2) active nests for Caspian Tern, or any active nesting of Little Gull and Great Black-backed Gull, and are found on rocky islands or peninsulas within a lake or large river. No nests of the identified bird species' were observed on/adjacent to the subject property, nor is the property located on a rocky island or peninsula. There was no evidence of significant nest activities on the property, which with the modestly developed nature of the shoreline is not unexpected. No impacts to the identified colonial waterbird community are anticipated as a result of the undertaking.

No other Seasonal Concentration Areas, Rare Vegetation Communities, Specialized Habitat for Wildlife, Habitat for Species of Conservation Concern, or Animal Movement Corridors were identified during field surveys within the study area.

7.0 PROPOSED DEVELOPMENT

The development is proposed to include the re-severance of the existing parcel which currently contains two (2) cottage dwellings. Upon completion of the re-severance, each cottage dwelling will be on a separate lot (#3240 Papineau Lake Road and #3248 Papineau Lake Road). Re-severance of the parcel is not anticipated to have any potential to impact natural heritage features on or adjacent to the property.

In addition to the re-severance of the parcel, the cottage dwelling at #3248 Papineau Lake Road is proposed to be demolished and re-built. The existing and proposed structures are shown on **Figure 3**. Typical construction aspects of the proposed development are likely to include building demolition, excavation and grading for the proposed new structure, deck construction and revisions to the existing "french drain" feature for construction purposes. The proposed cottage dwelling will be slightly larger than the existing, as noted by the extended footprint to the south; however, it is understood that the proposed cottage dwelling will be no closer to the lake than the existing structure. In addition, no modifications are proposed to the existing terracing along the shoreline, and no vegetation removal is planned.

8.0 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

This section of the report describes the potential impacts on the natural heritage environment associated with the proposed development. It also outlines proposed mitigation measures, in consideration of standard development practices, in order to minimize or prevent negative impacts from the undertaking.

8.1.1 Erosion and Sediment Control

Potential Impacts

Footprint excavation, and any related site grading activities, may result in the release of sediment into the adjacent natural features. In addition, exposed soils and/or stockpiles of excess material (such as earth, rock) can result in sediment transport to these areas during rain events.

Mitigation

In order to mitigate the transport of sediment during construction and post-development, environmental protection measures should be incorporated into the construction process. To ensure protection of the surrounding natural environment the following should be undertaken during development:

- All construction activities including maintenance procedures will be controlled to prevent entry of deleterious substances into the natural environment. Vehicular maintenance and refueling will be conducted at least 30 m from wetlands or waterways.
- During construction and grading activities, silt barrier or other suitable erosion and sediment controls should be placed along the downgradient boundary of the construction zone as well as around any stockpiled materials to reduce the potential for sedimentation. The erosion control barrier should remain in place until the grading area becomes sufficiently vegetated to limit erosion and sedimentation potential. Once the site is stabilized, the erosion control barriers can be removed.
- Prior to demolition and construction of the new cottage, an erosion and sediment control plan should be prepared detailing measures to be installed, and plans to control water (i.e. precipitation / run-off) that way enter the construction site.
- Monitor the weather during construction in an effort to avoid exposed soils and forecasted precipitation events.
- Stockpiling of materials excavated during the demolition of the existing cottage should be completed in the area of the existing garage feature adjacent to Papineau Lake Road. If this location does not provide suitable space for materials stockpiling, then all excavated materials should be removed from the subject property at the time of excavation.
- Any modifications required to the existing “french drain” should incorporate the existing outlet to ensure no changes to the shoreline and limit the potential for sedimentation of Papineau Lake.
- Exposed soils associated with grading areas should be minimized to the extent possible.
- Run-off from construction materials and any stockpiles shall be contained and discharged so as to prevent entry of sediment to the adjacent environment.

8.1.2 Surface Water Contamination and Debris Accumulation

Potential Impacts

During construction activities, the potential for accidental fuel or lubricant spillage, debris accumulation, and subsequent contamination to surface water is increased.

Mitigation

To prevent the contamination of any surface water features (i.e. Papineau Lake) within and adjacent to the project area during construction, precautions should be taken to avoid accidental

spillage or discharge of chemical contaminants (e.g., gasoline, oils and lubricants). These precautions require refueling to be carried out a minimum of 30 m from surface water features in a controlled manner so as to prevent fuel spillage. In addition, an emergency spill response kit should be on site at all times. In the event that a spill occurs, proper containment, clean up and reporting, in accordance with provincial requirements, should be undertaken.

The Contractor will be required to take all necessary precautions to prevent the accumulation of litter and construction debris in any natural areas within and outside of the construction grading limits. All materials used or generated (e.g. organics, soils, debris, stockpiles) should be disposed of or stored in a manner that mitigates their entry to the adjacent Papineau Lake.

8.1.3 Vegetation

Potential Impacts

Construction activities are not anticipated to require the removal of vegetation; however, changes may occur during construction.

Mitigation

The Municipality of Hastings Highlands has drafted a by-law which, when enacted, will enforce restrictions around tree removal adjacent to waterbodies (i.e. along shoreline areas). Further, the Municipality of Hastings Highlands also has a Tree Canopy Policy which serves to protect tree canopy cover in or adjacent to significant natural features such as significant woodlands, significant valleylands, and waterbodies. Given that construction activities on the subject property are not anticipated to require the removal of vegetation, works are anticipated to be in accordance with the above noted by-laws / policies.

Should any tree removal become necessary, it should be completed in accordance with the above noted policies and should include appropriate tree felling and grubbing procedures in order to minimize impacts on surrounding vegetation.

Migratory breeding birds are protected under the *Migratory Birds Convention Act, 1994*. Under this act it is unlawful to kill or destroy migratory breeding birds or active nests. To avoid impacts to migratory birds, vegetation removal (as necessary) during development of the subject property should be avoided between early April and late August (migratory bird breeding and nesting period; Environment and Climate Change Canada, 2018). If works are required within this timing window, then the area should be cleared of nests by a qualified biologist prior to the activity being undertaken.

A discussion of mitigation associated with SAR is provided in **Section 8.1.6**.

8.1.4 Wildlife and Bird Migration

Potential Impacts

Potential impacts to wildlife and bird migration are anticipated to predominantly be associated with footprint excavation and grading activities, and are expected to generally be temporary in nature.

Mitigation:

To limit potential impacts, care should be taken during construction to avoid incidental contact with wildlife.

8.1.5 Species at Risk (SAR)

Potential Impacts

As discussed in **Section 6.6.1** and **Table 2**, the proposed development is generally anticipated to have limited potential to impact the SAR identified for the subject property. The mature trees present on the subject property are considered to have the potential to support bat species. No vegetation clearing is anticipated as a result of the proposed development; however, should it become a requirement, then impacts to SAR bats and / or birds may occur.

Mitigation

Mitigation measures for protection of SAR should include the following:

- Should any clearing of vegetation with a diameter at breast height greater than 10 cm be required to support future development, then it should respect the active season for bats, with no clearing completed between April 1 and September 30, in any calendar year. Clearing of vegetation with a diameter at breast height less than 10 cm should be avoided between early April and late August, for the protection of migratory breeding birds.
- The construction contractor should be familiar with the SAR noted in this report. If SAR are identified during construction, all works in the immediate area should cease and the MECP must be contacted for direction on how to proceed.
- Harassment to SAR should not occur during construction activities.

8.1.6 Environmentally Sensitive Areas

Potential Impacts

No rare vegetation communities were identified by the MNRF or NHIC within the study limits, nor were any identified during field investigation for ELC.

Papineau Lake is considered to be a generally sensitive area.

Mitigation measures as outlined in **Sections 8.1.1** and **8.1.3** are anticipated to limit impacts to these features.

8.1.7 Fisheries, Associated Habitat, and In-Water Works

Potential Impacts

The existing cottage and decking is located generally close to the shoreline, with a setback ranging from 7.7 to 12.5 m. With the removal of the existing cottage, and construction of a new one, there is the potential for debris / construction materials, and exposed earth to impact the adjacent nearshore area of Papineau Lake. No in-water works are anticipated, and no alterations to the shoreline are proposed.

Mitigation Measures:

In order to ensure no impacts to Papineau Lake, the following mitigation measures should be considered:

- Implementation of erosion and sediment controls as detailed elsewhere.
- Avoid in-water works, and prevent and deleterious materials (i.e. construction debris and excess earth) from impacting the nearshore area of Papineau Lake.
- Potential fuel oil, and other hydrocarbon spills / leaks should be controlled by exercising off-site fuelling stations, a minimum of 30 m from all watercourses. Emergency spill kits should be available on-site for immediate use, as required.
- All equipment will be required to be properly maintained and in good working order, to be free of fluid leaks, and to minimize any noise / air emission impacts.

8.1.8 Long Term Use (Cumulative Impacts)

Potential Impacts

Cumulative impacts are generally defined as impact on the environment resulting from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions (Clark, 1994). In regards to the proposed development at 3248 Papineau Lake Road, there are no anticipated changes to the use of the property, and the cottage to be constructed is only marginally bigger than the current existing cottage footprint. No cumulative impacts are anticipated as a result of the cottage demolition and reconstruction.

9.0 CONCLUSIONS AND RECOMMENDATIONS

9.1 Conclusions

Based on the review of the background information, and the field visit completed in 2021, the following conclusions have been made. These conclusions are to be considered in addition to the information presented in **Section 8.0** which provides a summary of potential impacts and mitigation measures.

- The existing cottage lot which currently includes both 3240 Papineau Lake Road and 3248 Papineau Lake Road is proposed to be re-severed, creating a lot for each address.
- The lot is located adjacent to Papineau Lake, which is understood to be a cold water lake; however, is not at capacity for responsible development.
- The existing cottage dwelling at 3248 Papineau Lake Road is proposed to be demolished and rebuilt with a cottage that is roughly the same size and location.
- Impacts to SAR are anticipated to be minimal (limited to potential for impacts to bats and special concern bird species – pending any requirements for vegetation removal) as a result of the undertaking.

9.2 Recommendations

As a result of the aforementioned conclusions, the following recommendations are made:

- To minimize the potential for impacts associated with erosion, sedimentation, and the deposition of other deleterious materials, mitigation measures as outlined in **Sections 8.1.1** and **8.1.2** should be employed.
- Prior to demolition and construction of the new cottage, an erosion and sediment control plan should be prepared detailing measures to be installed, and plans to control water (i.e. precipitation / run-off) that way enter the construction site.
- Monitor the weather during construction in an effort to avoid exposed soils and forecasted precipitation events.
- While not anticipated, should any tree removal become necessary, it should be completed in accordance with tree cutting policies / by-laws in place within the Municipality of Hastings Highlands, and should include appropriate tree felling and grubbing procedures in order to minimize impacts on surrounding vegetation.
- Should any clearing of vegetation with a diameter at breast height greater than 10 cm be required to support future development, then it should respect the active season for bats, with no clearing completed between April 1 and September 30, in any calendar year. Clearing of vegetation with a diameter at breast height less than 10 cm should be avoided between early April and late August, for the protection of migratory breeding birds.
- Care should be taken during construction to avoid incidental contact with wildlife.
- The construction contractor should be familiar with the SAR noted in this report. If SAR are identified during construction, all works in the immediate area should cease and the MECP must be contacted for direction on how to proceed.
- Harassment to SAR should not occur during construction activities.

Provided these recommendations are followed, Ainley Group is of the opinion that the re-severance and cottage demolition / reconstruction will not result in significant impacts to natural heritage features in the study area.

10.0 CLOSURE

Ainley Group has prepared this Environmental Impact Study per the terms of reference in an effort to describe the proposed development, summarize potential impacts due to the undertaking, and identify mitigation measures and monitoring commitments to limit potential impacts, and to identify any future studies required.

11.0 REFERENCES

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FIGURES

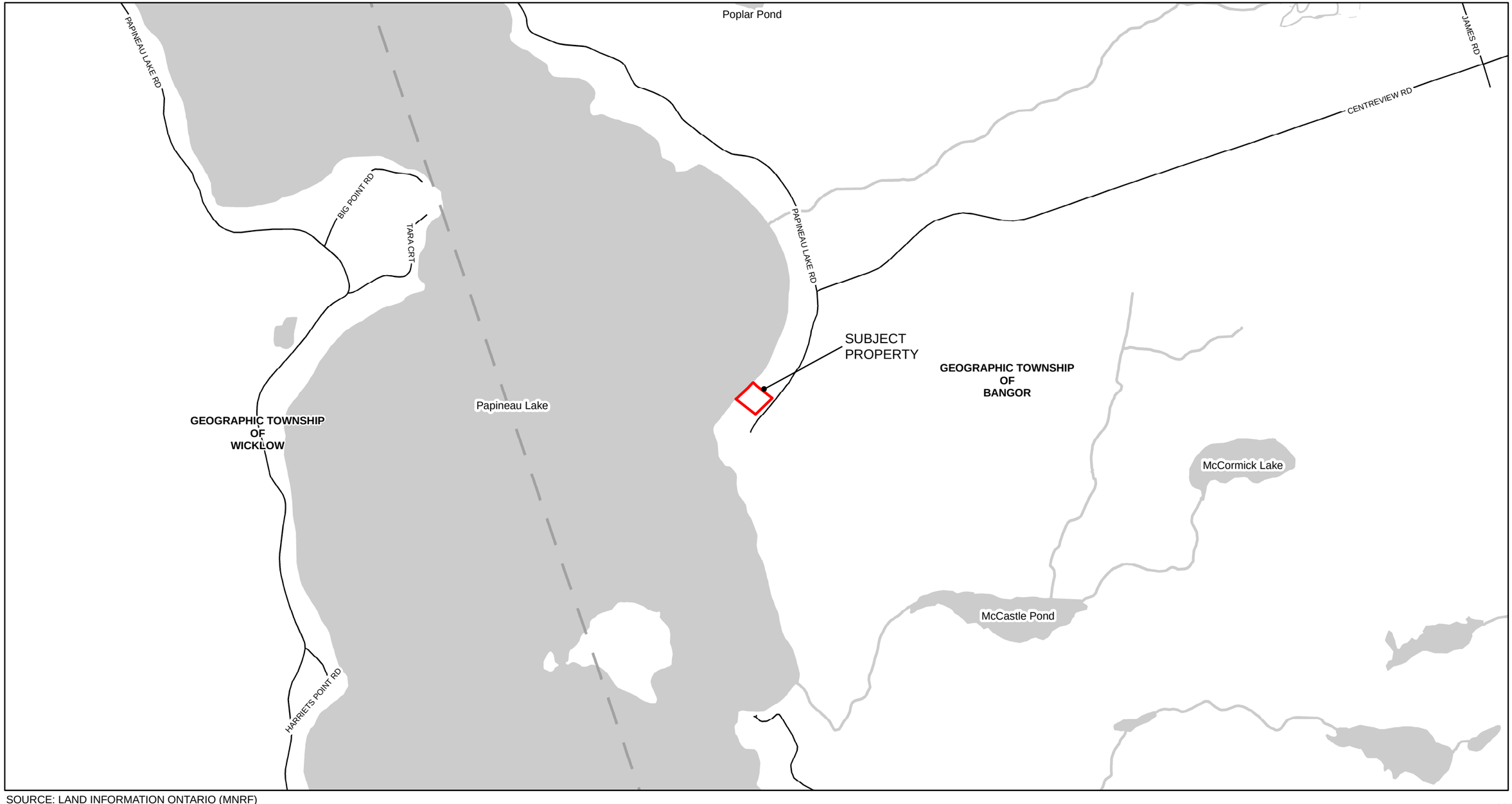
3248 PAPINEAU LAKE ROAD -
EIS

N

Minley GROUP CONSULTING ENGINEERS PLANNERS

FIGURE
1

REGIONAL LOCATION PLAN



SOURCE: LAND INFORMATION ONTARIO (MNRF)

N.T.S

Legend

- EXISTING PROPERTY
- PROPOSED PROPERTIES
- ELC COMMUNITIES

METRIC

DIMENSIONS ARE IN METRES
AND/OR MILLIMETERS
UNLESS OTHERWISE SHOWN

3248 PAPINEAU LAKE ROAD - EIS	N
Minley CONSULTING ENGINEERS PLANNERS	FIGURE 2
EXISTING CONDITIONS	

Service Layer Credits: Queen's Printer for Ontario, 2019
Source: Land Inforrmation Ontario (LIO)

N.T.S

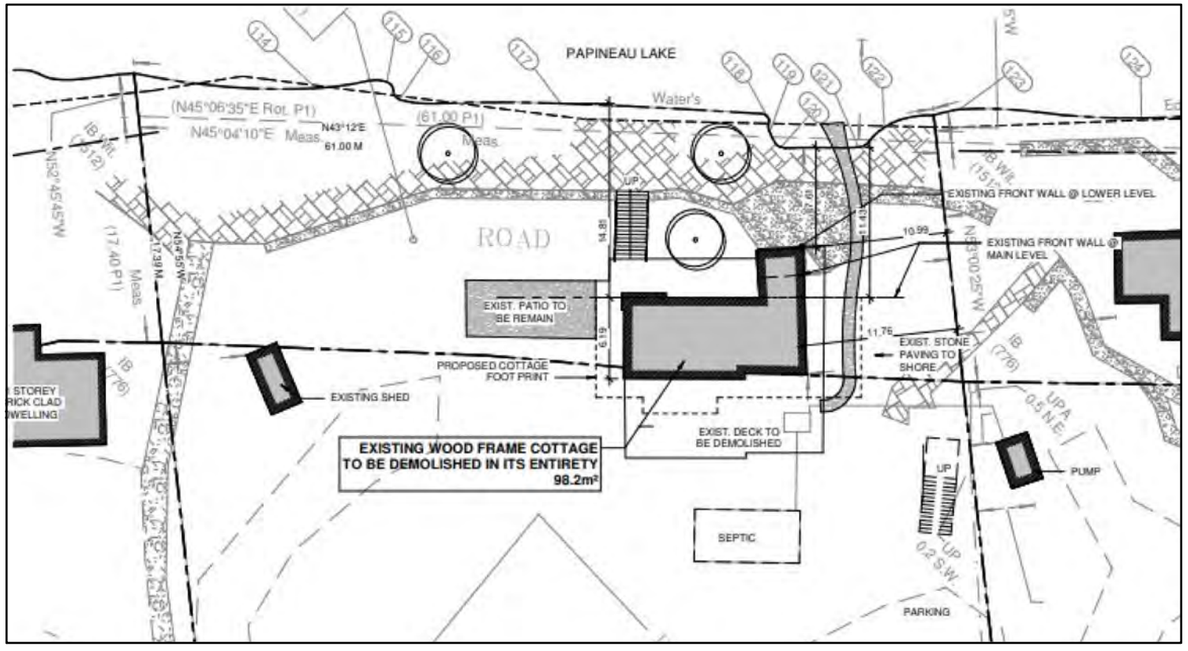
3248 PAPINEAU LAKE ROAD -
EIS

Minley CONSULTING ENGINEERS PLANNERS

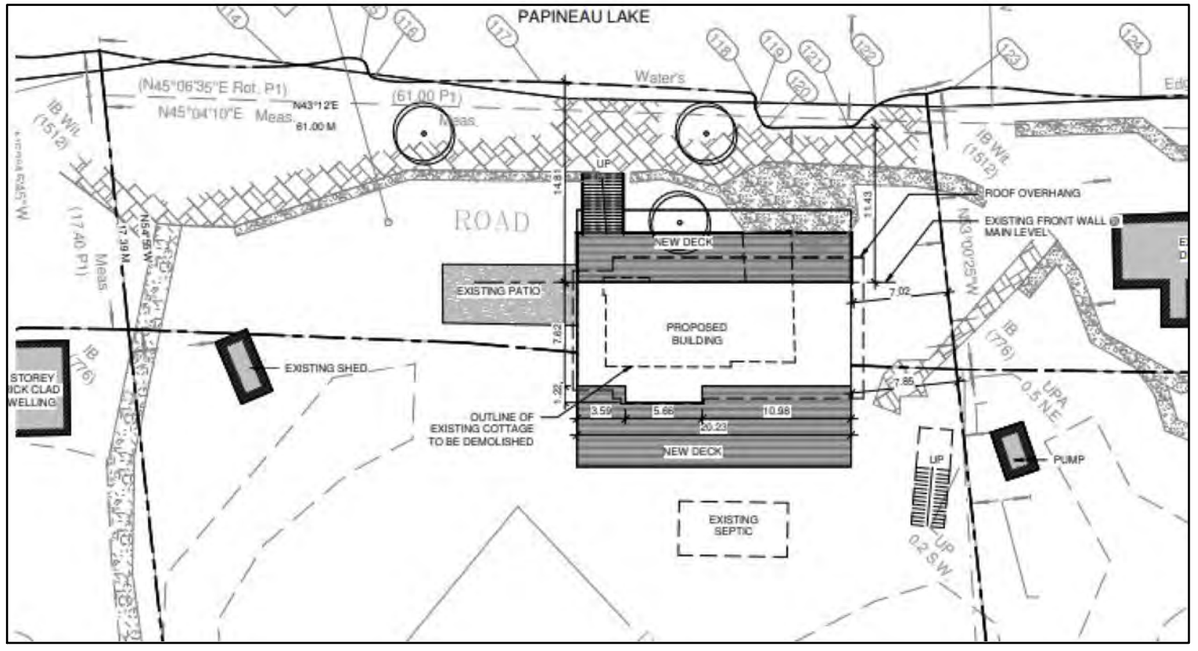
FIGURE 3

PROPOSED DEVELOPMENT

EXISTING DEVELOPMENT



PROPOSED DEVELOPMENT



APPENDIX A

Background Data / Proposed Development Plan

iNaturalist

Search

- Explore
- Community
  - People
  - Projects
  - Journal Posts
  - Forum
- More
  - Taxa Info
  - Guides
  - Places
  - Site Stats
  - Help
  - Video Tutorials
  - Managing Projects
  - Teacher's Guide

- Log In or Sign Up

Observations

Filters
Show
- Wild
- Captive
- Verifiable
- Research Grade
- Needs ID
- Threatened
- Introduced
- Popular
- Has Sounds
- Has Photos

Description / Tags blue, butterfly, etc.
Categories
Rank
High
Low
Sort By
Date Added
Desc
Date Observed
Any Exact Date YYYY-MM-DD Range Start End Months January February March April
More Filters
Person
Username or User ID
Project
Name or URL slug, e.g.
Place
Place
Photo Licensing All
Reviewed
Any Yes No
Date Added
Any Exact Date YYYY-MM-DD Range Start End
Update Search Reset Search Filters
Identify Atom Download
Species
Location Go
Bounding Box
15
observations
12
species
13
Identifiers
10
Observers
Map Grid List

Standard

North AmericaContinent

CanadaCountry
OntarioProvince
HastingsCounty

Community Curated

Around Bancroft

Media	Name	User	Observed	Place	Added
	Orange Peel Fungus Aleuria aurantia Needs ID 1	cdivany	Oct 1, 20218:38 AM EST	Papineau Lake Rd, Maple Leaf, ON, CA	Oct 3, 20217:13 AM EST
	Yellow Patches Amanita flavoconia Needs ID	cdivany	Sep 25, 202111:22 AM EST	Hastings, CA-ON, CA	Sep 26, 20214:04 AM EST
	Unknown Needs ID	acarew14	Aug 1, 202111:23 AM EST	Papineau Lake Rd, Maple Leaf, ON, CA	Aug 1, 202111:24 AM EST
	Arthropods Phylum Arthropoda Needs ID 1	dianasmith-bancroft	Jul 28, 20215:26 AM EST	Maple Leaf	Jul 29, 20211:56 AM EST
	North American Medicinal Leech Macrobdella decora Needs ID	dianasmith-bancroft	Jul 29, 20211:49 AM EST	Maple Leaf	Jul 29, 20211:53 AM EST
2	Snout and Bark Beetles Superfamily Curculionoidea Needs ID	mikegoleafsgo	Jul 10, 20215:41 AM EST	Papineau Lake Rd, Maple Leaf, ON, CA	Jul 10, 20215:42 AM EST
	Unknown Needs ID	ericaporato	May 26, 202112:16 PM EST	Davis Island, Maple Leaf, ON, CA	May 26, 202112:18 PM EST
3	Sheep's Sorrel Rumex acetosella Needs ID	m_gr	May 2021	Hastings, CA-ON, CA	May 2021
	Typical Foxes Genus Vulpes Needs ID 1	malgosia18	Jan 4, 202110:44 AM EST	Combermere, ON, CA	Jan 4, 202112:44 PM EST
	Owl-eyed Bird Dropping Moth Cerma cora Research Grade 2	lakeal	June 2020	Hastings, CA-ON, CA	July 2020
	Compost Fly Ptecticus trivittatus Research Grade 1	ericaporato	Jul 12, 20203:31 PM EDT	Hastings, CA-ON, CA	Jul 12, 20203:34 PM EDT
	Cisco Coregonus artedi Research Grade 3	cwguy	Sep 7, 20195:51 AM EDT	Papineau Lake, Hastings Highlands, ON, CA	Dec 8, 20197:42 PM EST
	Fallfish Semotilus corporalis Research Grade 2	cwguy	Aug 4, 20194:47 PM EDT	Papineau Lake, Hastings Highlands, ON, CA	Dec 8, 20197:42 PM EST
2	Tree Flute Lichen Menegazzia subsimilis Research Grade 1	a_smith	November 2019	Ontario, CA	November 2019
	Common Green Lacewings Genus Chrysoperla Needs ID 1	ericaporato	Jul 29, 20197:42 AM EDT	Hastings Highlands, Hastings Highlands, ON, CA	Jul 29, 20197:52 AM EDT

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
1073370	WILDLIFE CONCENTRATION AREA	Colonial Waterbird Nesting Area		SNR			18TR8024	
1073370	SPECIES	(Potamogeton hillii X Potamogeton zosteriformis)	Potamogeton x ogdenii		END	END	18TR8024	
1073370	SPECIES	Peregrine Falcon	Falco peregrinus		SC	NAR	18TR8024	
1073380	WILDLIFE CONCENTRATION AREA	Colonial Waterbird Nesting Area		SNR			18TR8124	
1073380	SPECIES	(Potamogeton hillii X Potamogeton zosteriformis)	Potamogeton x ogdenii		END	END	18TR8124	
1070461	WILDLIFE CONCENTRATION AREA	Colonial Waterbird Nesting Area		SNR			18TR7925	
1070461	SPECIES	(Potamogeton hillii X Potamogeton zosteriformis)	Potamogeton x ogdenii		END	END	18TR7925	
1073371	WILDLIFE CONCENTRATION AREA	Colonial Waterbird Nesting Area		SNR			18TR8025	
1073371	SPECIES	(Potamogeton hillii X Potamogeton zosteriformis)	Potamogeton x ogdenii		END	END	18TR8025	
1073381	WILDLIFE CONCENTRATION AREA	Colonial Waterbird Nesting Area		SNR			18TR8125	
1073381	SPECIES	(Potamogeton hillii X Potamogeton zosteriformis)	Potamogeton x ogdenii		END	END	18TR8125	
1073381	SPECIES	Wood Thrush	Hylocichla mustelina		SC	THR	18TR8125	
1073381	SPECIES	Canada Warbler	Cardellina canadensis		SC	THR	18TR8125	

OGF ID	Element Type	Common Name	Scientific Name	SRank	SARO Status	COSEWIC Status	ATLAS NAD83 IDENT	COMMENTS
1070460	WILDLIFE CONCENTRATION AREA	Colonial Waterbird Nesting Area		SNR			18TR7924	
1070460	SPECIES	(Potamogeton hillii X Potamogeton zosteriformis)	Potamogeton x ogdenii		END	END	18TR7924	

Atlas Data Summary

Select what type of data summary you would like to display and click the appropriate *view* button. You can use the square resource page to find out where your atlas squares or regions are located.

What years do you want to display : : all years combined Which version of the atlas Second (2001-2005)

How do you want to view the results: Tabular results

Show me statistics on the number of species reported, the effort, etc.

1. View summary statistics:: Province View
2. View summary statistics: By Square within region 1. Essex View
3. View list of completed Point Counts in **square** :: View

Show me the list of species, the highest breeding evidence and abundance

4. View species list for : : Province View
5. View species list for **square** or **block no.** : : 18TR82 View

Show me the list of regions or squares reporting a species

6. View list of Regions reporting View

Species list for square 18TR82 (number of entries returned: 96)

Region	Square	Species	Breeding Evidence				Point Counts			
			Max BE	Categ	#Sq	Atlasser Name	#PC	%PC	Abun	#Sq
27	18TR82	Canada Goose	FY	CONF	1	Tyler Hoar				
27	18TR82	Mallard	FY	CONF	1	Tyler Hoar				
27	18TR82	Ring-necked Duck	FY	CONF	1	Tyler Hoar				
27	18TR82	Hooded Merganser	FY	CONF	1	Tyler Hoar				
27	18TR82	Common Merganser	FY	CONF	1	Tyler Hoar	1	2.78	0.0278	1
27	18TR82	Common Loon	FY	CONF	1	Tyler Hoar	1	2.78	0.0278	1
27	18TR82	Pied-billed Grebe	H	POSS	1	Tyler Hoar				
27	18TR82	Double-crested Cormorant	NE	CONF	1	Tyler Hoar				
27	18TR82	American Bittern	H	POSS	1	Tyler Hoar				
27	18TR82	Great Blue Heron	H	POSS	1	Tyler Hoar				
27	18TR82	Osprey	P	PROB	1	Elaine Dimond				
27	18TR82	Broad-winged Hawk	T	PROB	1	Tyler Hoar				
27	18TR82	Red-tailed Hawk	CF	CONF	1	Tyler Hoar				
27	18TR82	American Kestrel	H	POSS	1	Tyler Hoar				
27	18TR82	Virginia Rail	H	POSS	1	Tyler Hoar				
27	18TR82	Killdeer	S	POSS	1	Tyler Hoar				
27	18TR82	Rock Pigeon	AE	CONF	1	Tyler Hoar				
27	18TR82	Common Snipe	H	POSS	1	Tyler Hoar				
27	18TR82	American Woodcock	S	POSS	1	Brian J. Shulist				
27	18TR82	Ring-billed Gull	NY	CONF	1	Tyler Hoar				
27	18TR82	Herring Gull	NY	CONF	1	2 atlassers				
27	18TR82	Mourning Dove	P	PROB	1	Tyler Hoar				
27	18TR82	Black-billed Cuckoo	H	POSS	1	Tyler Hoar				
27	18TR82	Barred Owl	S	POSS	1	Brian J. Shulist				
27	18TR82	Northern Saw-whet Owl	T	PROB	1	Brian J. Shulist				
27	18TR82	Chimney Swift	H	POSS	1	Brian J. Shulist				
27	18TR82	Ruby-throated Hummingbird	H	POSS	1	Tyler Hoar	2	5.56	0.0556	1
27	18TR82	Belted Kingfisher	NU	CONF	1	Tyler Hoar	3	8.33	0.0833	1
27	18TR82	Yellow-bellied Sapsucker	S	POSS	1	Tyler Hoar	9	25.0	0.25	1
27	18TR82	Downy Woodpecker	AE	CONF	1	Tyler Hoar	3	8.33	0.0833	1
27	18TR82	Hairy Woodpecker	CF	CONF	1	Elaine Dimond	3	8.33	0.0833	1
27	18TR82	Northern Flicker	AE	CONF	1	Tyler Hoar	3	8.33	0.0833	1
27	18TR82	Pileated Woodpecker	P	PROB	1	Tyler Hoar	6	16.67	0.1944	1
27	18TR82	Eastern Wood-Pewee	S	POSS	1	Tyler Hoar	3	8.33	0.1111	1
27	18TR82	Alder Flycatcher	P	PROB	1	Tyler Hoar	2	5.56	0.1667	1
27	18TR82	Least Flycatcher	T	PROB	1	Tyler Hoar	4	11.11	0.1667	1
27	18TR82	Eastern Phoebe	NY	CONF	1	Tyler Hoar	2	5.56	0.0556	1
27	18TR82	Great Crested Flycatcher	S	POSS	1	Tyler Hoar	6	16.67	0.2222	1
27	18TR82	Eastern Kingbird	CF	CONF	1	Tyler Hoar	1	2.78	0.0278	1
27	18TR82	Blue-headed Vireo	T	PROB	1	Tyler Hoar	7	19.44	0.1944	1
27	18TR82	Warbling Vireo	S	POSS	1	Tyler Hoar	4	11.11	0.1111	1
27	18TR82	Red-eyed Vireo	T	PROB	1	Tyler Hoar	24	66.67	1.4722	1

27	18TR82	Blue Jay	T	PROB	1	Tyler Hoar	11	30.56	0.4167	1
27	18TR82	American Crow	FY	CONF	1	Tyler Hoar	11	30.56	0.3889	1
27	18TR82	Common Raven	FY	CONF	1	Tyler Hoar	5	13.89	0.1389	1
27	18TR82	Tree Swallow	FY	CONF	1	Brian J. Shulist				
27	18TR82	Barn Swallow	AE	CONF	1	Tyler Hoar				
27	18TR82	Black-capped Chickadee	CF	CONF	1	Tyler Hoar	6	16.67	0.1944	1
27	18TR82	Boreal Chickadee	S	POSS	1	Tyler Hoar	1	2.78	0.0278	1
27	18TR82	Red-breasted Nuthatch	H	POSS	1	Tyler Hoar	3	8.33	0.0833	1
27	18TR82	White-breasted Nuthatch	FY	CONF	1	Tyler Hoar	6	16.67	0.2222	1
27	18TR82	House Wren	S	POSS	1	Tyler Hoar	1	2.78	0.0278	1
27	18TR82	Winter Wren	T	PROB	1	Tyler Hoar	14	38.89	0.4722	1
27	18TR82	Golden-crowned Kinglet	S	POSS	1	Tyler Hoar	1	2.78	0.0278	1
27	18TR82	Ruby-crowned Kinglet	S	POSS	1	Tyler Hoar	1	2.78	0.0278	1
27	18TR82	Eastern Bluebird	CF	CONF	1	Tyler Hoar				
27	18TR82	Veery	T	PROB	1	Tyler Hoar	15	41.67	0.6667	1
27	18TR82	Swainson's Thrush	S	POSS	1	Tyler Hoar	1	2.78	0.0278	1
27	18TR82	Hermit Thrush	T	PROB	1	Tyler Hoar	12	33.33	0.4722	1
27	18TR82	Wood Thrush	S	POSS	1	Tyler Hoar	3	8.33	0.0833	1
27	18TR82	American Robin	CF	CONF	1	Tyler Hoar	17	47.22	0.5833	1
27	18TR82	European Starling	H	POSS	1	Tyler Hoar				
27	18TR82	Cedar Waxwing	P	PROB	1	Tyler Hoar	2	5.56	0.1111	1
27	18TR82	Nashville Warbler	S	POSS	1	Tyler Hoar	6	16.67	0.1667	1
27	18TR82	Yellow Warbler	CF	CONF	1	Tyler Hoar	1	2.78	0.0556	1
27	18TR82	Chestnut-sided Warbler	CF	CONF	1	2 atlassers	13	36.11	0.6389	1
27	18TR82	Magnolia Warbler	S	POSS	1	Tyler Hoar	5	13.89	0.1389	1
27	18TR82	Black-throated Blue Warbler	A	PROB	1	Tyler Hoar	8	22.22	0.25	1
27	18TR82	Yellow-rumped Warbler	P	PROB	1	Tyler Hoar	4	11.11	0.1944	1
27	18TR82	Black-throated Green Warbler	T	PROB	1	Tyler Hoar	9	25.0	0.25	1
27	18TR82	Blackburnian Warbler	T	PROB	1	Tyler Hoar	3	8.33	0.0833	1
27	18TR82	Pine Warbler	S	POSS	1	Tyler Hoar	1	2.78	0.0833	1
27	18TR82	Black-and-white Warbler	T	PROB	1	Tyler Hoar	10	27.78	0.3333	1
27	18TR82	American Redstart	CF	CONF	1	Tyler Hoar	15	41.67	0.5278	1
27	18TR82	Ovenbird	FY	CONF	1	Tyler Hoar	28	77.78	1.3889	1
27	18TR82	Northern Waterthrush	T	PROB	1	Tyler Hoar	2	5.56	0.0833	1
27	18TR82	Mourning Warbler	T	PROB	1	Tyler Hoar	2	5.56	0.1111	1
27	18TR82	Common Yellowthroat	A	PROB	1	Tyler Hoar	6	16.67	0.2222	1
27	18TR82	Canada Warbler	S	POSS	1	Tyler Hoar	3	8.33	0.0833	1
27	18TR82	Eastern Towhee	S	POSS	1	Tyler Hoar	1	2.78	0.0278	1
27	18TR82	Chipping Sparrow	FY	CONF	1	Tyler Hoar	6	16.67	0.25	1
27	18TR82	Savannah Sparrow	H	POSS	1	Tyler Hoar				
27	18TR82	Song Sparrow	CF	CONF	1	Elaine Dimond	7	19.44	0.25	1
27	18TR82	Swamp Sparrow	T	PROB	1	Tyler Hoar	2	5.56	0.0556	1
27	18TR82	White-throated Sparrow	FY	CONF	1	Brian J. Shulist	11	30.56	0.3056	1
27	18TR82	Rose-breasted Grosbeak	P	PROB	1	Elaine Dimond	6	16.67	0.1944	1
27	18TR82	Indigo Bunting	S	POSS	1	Tyler Hoar				
27	18TR82	Bobolink	S	POSS	1	Tyler Hoar	1	2.78	0.0278	1
27	18TR82	Red-winged Blackbird	CF	CONF	1	Tyler Hoar	3	8.33	0.1944	1
27	18TR82	Eastern Meadowlark	H	POSS	1	Tyler Hoar				
27	18TR82	Common Grackle	CF	CONF	1	Tyler Hoar	5	13.89	0.2778	1
27	18TR82	Brown-headed Cowbird	FY	CONF	1	Tyler Hoar	3	8.33	0.0833	1
27	18TR82	Baltimore Oriole	S	POSS	1	Tyler Hoar				
27	18TR82	Purple Finch	S	POSS	1	Tyler Hoar	1	2.78	0.0278	1
27	18TR82	American Goldfinch	P	PROB	1	Tyler Hoar	4	11.11	0.1111	1
27	18TR82	Evening Grosbeak	FY	CONF	1	Elaine Dimond	3	8.33	0.0833	1

New data summary | Download results

Disclaimer: If you wish to use the data in a publication, research or for any purpose, or would like information concerning the accuracy and appropriate uses of these data, read the data use policy and request form. **These data are current as of 14 Oct 2021 .**

LEGEND

Breeding Evidence

Max BE: Highest Breeding Evidence recorded
Categ: Highest Breeding Category recorded (OBS=observed, POSS=possible, PROB=probable, CONF=confirmed)
#Sq: Number of squares with species (Breeding Evidence)
Atlasser name: Name of atlasser who reported the highest breeding evidence (if they accepted that their name be displayed). If more than one person provided the same breeding evidence code, then only the number of atlassers is listed.

Point Counts

#PC: Number of Point Counts with species
%PC: Percent of Point Counts with species
Abun: Average number of birds per Point Count
#Sq: Number of squares with species (Point Counts)

Species list in taxonomic order for square 18TR82

All species

Number of rows of data displayed below: 11.

Species #	Common Name	# of Records	Earliest Yr	Latest Yr
1	Blanding's Turtle	1	2015	2015
3	Midland Painted Turtle	4	1988	2017
12	Eastern Gartersnake	2	1988	2010
27	Gray Treefrog	5	1988	1992
28	Green Frog	5	1988	2010
29	Mink Frog	1	2010	2010
32	Spring Peeper	7	1971	2010
34	Wood Frog	1	1992	1992
35	American Toad	4	1988	2017
38	Blue-spotted Salamander	1	2017	2017
46	Northern Two-lined Salamander	1	1992	1992

TEA home page | Main atlas page

David Davison

From: Van Allen, Jesse (MNRF) <Jesse.VanAllen@ontario.ca>
Sent: May 15, 2015 2:14 PM
To: davison@ainleygroup.com
Subject: RE: Information Request - 3264 Papineau Lake Road

Hi David,

Observations of Ogden's Pondweed are historical in nature with location specifications limited to the entire County; this species is of low concern at the site of the gazebo development.

Peregrine falcons have been documented <200m from the subject site; the largest potential impact would be disturbance. A survey of ledges and cliffs south of the development site (recommend 1km south and up to 50m from shore) be carried out if development/construction is being undertaken during the nesting and fledging period. If construction is proposed outside this period, it shouldn't be a concern.

Papineau Lake has a coldwater thermal regime; species include: lake trout, lake whitefish, brown bullhead, fallfish, white sucker, burbot, smallmouth bass, cisco, northern pike, pumpkin seed. The timing windows for in-water construction are: March 15 – July 15 and October 1 – May 31.

Thanks,
Jesse

From: David Davison [mailto:davison@ainleygroup.com]
Sent: April-30-15 4:23 PM
To: Van Allen, Jesse (MNRF)
Cc: Scott Reynolds
Subject: Information Request - 3264 Papineau Lake Road

Good Afternoon Jesse,

Please find the attached information request for natural heritage and fisheries information pertinent to 3264 Papineau Lake Road. Ainley Group has been retained by the property owner to complete an Environmental Impact Study for proposed gazebo construction.

Please let us know if you have any questions or concerns.

Regards,

David Davison, B.Sc. (Env)
Environmental Planner

Ainley Graham & Associates Limited
45 South Front Street
Belleville, Ontario, K8N 2Y5
Tel: (613) 966-4243 ext. 109
Fax: (613) 966-1168
Cell: (613) 242-0283
davison@ainleygroup.com

1 SITE PLAN - EXISTING/DEMO
SCALE: 1 : 250

ISSUE

NO.	DATE	DESCRIPTION

REVISION

NO.	DATE	DESCRIPTION

DISCLAIMER:

CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL DIMENSIONS. ANY DISCREPANCIES SHALL BE REPORTED TO THE ARCHITECT PRIOR TO PROCEEDING WITH THE WORK. DRAWINGS ARE NOT TO BE SCALED.

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NOTIFY ARCHITECT OF ANY DISCREPANCIES AND WAIT FOR INSTRUCTION PRIOR TO PROCEEDING WITH WORK.

paradigm
architecture + design
2198 Gerrard St E Toronto ON M4E
[t]416.686.3624 www.paradigm-ad.com

STAMP:

PROJECT NAME / LOCATION:

PAPINEAU LAKE COTTAGE

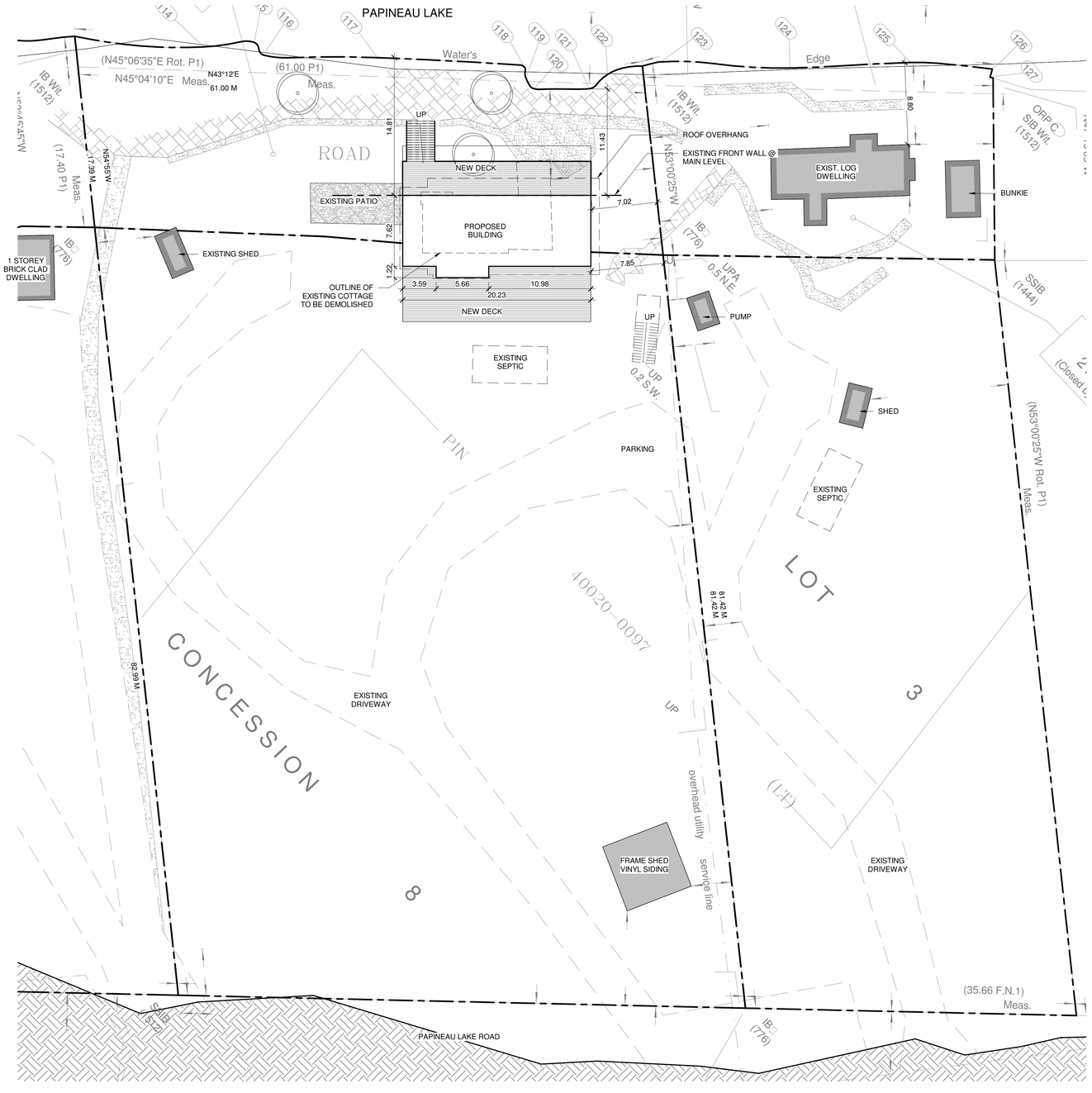
3248 Papineau Lake Rd

DRAWING TITLE:

SITE PLAN - EXISTING

DRAWN BY: MM	PROJECT NO.: 1139
CHECKED BY: MC	SCALE: 1 : 250
	DATE: 2021-09-10
	DRAWING NO.: A001

2021-09-13 11:36:12 AM
C:\Users\mjaf\Dropbox\PAD sharing files\1139 - PAPINAU LAKE COTTAGE\Papineau Lake Rd. Permit - 10 - Revised.rvt



1 SITE PLAN - PROPOSED
SCALE: 1 : 250

ISSUE		
NO.	DATE	DESCRIPTION

NO.	DATE	DESCRIPTION
REVISION		

DISCLAIMER:

CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL DIMENSIONS. ANY DISCREPANCIES SHALL BE REPORTED TO THE ARCHITECT PRIOR TO PROCEEDING WITH THE WORK. DRAWINGS ARE NOT TO BE SCALED.

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paradigm
architecture + design
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[t]416.686.3624 www.paradigm-ad.com

STAMP:

PROJECT NAME / LOCATION:

PAPINAEU LAKE COTTAGE

3248 Papineau Lake Rd

DRAWING TITLE:

SITE PLAN - PROPOSED

DRAWN BY: MM	PROJECT NO.: 1139
CHECKED BY: MC	SCALE: 1 : 250
	DATE: 2021-09-13
	DRAWING NO.: A002

2021-09-13 11:39:12 AM
C:\Users\mcunn\Dropbox\PAD sharing files\1139 - PAPINAU LAKE COTTAGE\Papineau Lake Rd. Permit - 10 - Cunn.pln

APPENDIX B

Photographic Log

Photo 1 – Existing cottage at 3240 Papineau Lake Road (August 24, 2021).

Photo 2 – Existing cottage at 3248 Papineau Lake Road (August 24, 2021).

Photo 3 – Shoreline of 3248 Papineau Lake Road
(August 24, 2021).

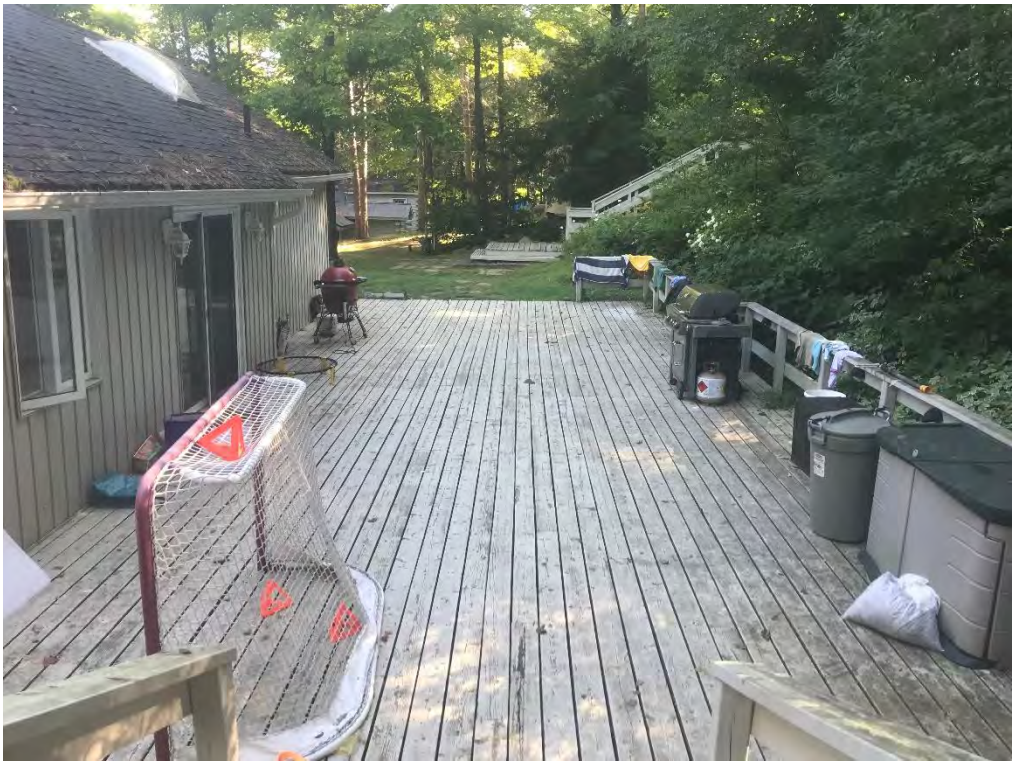


Photo 4 – Existing deck at rear of 3248 Papineau Lake Road building
(August 24, 2021).

Photo 5 – Driveway at 3248 Papineau Lake Road with existing “French Drain” (August 24, 2021).

Photo 6 – Existing “French Drain” system at 3248 Papineau Lake Road (August 24, 2021).

Photo 7 – Area of existing septic at 3248 Papineau Lake Road
(August 24, 2021)

Photo 8 – Vegetated area east of the existing driveway at 3248 Papineau Lake Road
(August 24, 2021)

Photo 9 – Manicured lawn area east of existing dwelling at 3248 Papineau Lake Road (August 24, 2021)

Photo 10 – Potential area for stockpiling of materials near existing garage at 3248 Papineau Lake Road (August 24, 2021)

APPENDIX C

Vegetation Species List

Appendix C - Vegetation Species List
Environmental Impact Study
3248 Papineau Lake Road

Scientific Name	Common Name	SARA	SARO	S Rank	N Rank	G Rank	Exotic Status	Coefficient of Conservatism	Coefficient of Wetness
Abies balsamea	Balsam Fir			S5	N5	G5		5	-3
Acer pensylvanicum	Striped Maple			S4	N5	G5		7	3
Acer saccharum	Sugar Maple			S5	N5	G5		4	3
Actaea pachypoda	White Baneberry			S5	N5	G5		6	5
Anaphalis margaritacea	Pearly Everlasting			S5	N5	G5		3	3
Aralia nudicaulis	Wild Sarsaparilla			S5	N5	G5		4	3
Athyrium filix-femina	Common Lady Fern			S5	N5	G5		4	0
Betula alleghaniensis	Yellow Birch			S5	N5	G5		6	0
Betula papyrifera	Paper Birch			S5	N5	G5		2	3
Clintonia borealis	Yellow Clintonia			S5	N5	G5		7	0
Comptonia peregrina	Sweet-fern			S5	N5	G5		7	5
Corylus cornuta	Beaked Hazelnut			S5	N5	G5		5	3
Eurybia macrophylla	Large-leaved Aster			S5	N5	G5		5	5
Fragaria virginiana	Wild Strawberry			S5	N5	G5		2	3
Fraxinus americana	White Ash			S4	N5	G5		4	3
Lactuca canadensis	Canada Lettuce			S5	N5	G5		3	3
Leucanthemum vulgare	Oxeye Daisy			SNA	NNA	GNR	SE5		5
Lonicera canadensis	Canada Fly Honeysuckle			S5	N5	G5		6	3
Maianthemum canadense	Wild Lily-of-the-valley			S5	N5	G5		5	3
Onoclea sensibilis	Sensitive Fern			S5	N5	G5		4	-3
Ostrya virginiana	Eastern Hop-hornbeam			S5	N5	G5		4	3
Oxalis stricta	Upright Yellow Wood-sorrel			S5	N5	G5		0	3
Pinus resinosa	Red Pine			S5	N5	G5		8	3
Plantago lanceolata	English Plantain			SNA	NNA	G5	SE5		3
Populus tremuloides	Trembling Aspen			S5	N5	G5		2	0
Prunus pensylvanica	Pin Cherry			S5	N5	G5		3	3
Pteridium aquilinum	Bracken Fern			S5	N5	G5		2	3
Quercus rubra	Northern Red Oak			S5	N5	G5		6	3
Rubus occidentalis	Black Raspberry			S5	N5	G5		2	5
Rubus odoratus	Purple-flowering Raspberry			S5	N5	G5		3	5
Sambucus racemosa	Red Elderberry			S5	N5	G5		5	3
Solidago canadensis	Canada Goldenrod			S5	N5	G5		1	3
Solidago rugosa	Rough-stemmed Goldenrod			S5	N5	G5		4	0
Spiraea spp.	Spirea sp.			-	-	-			
Taraxacum officinale	Common Dandelion			SNA	N5	G5	SE5		3
Tilia americana	Basswood			S5	N5	G5		4	3
Trifolium pratense	Red Clover			SNA	NNA	GNR	SE5		3
Tsuga canadensis	Eastern Hemlock			S5	N5	G5		7	3
Vicia cracca	Tufted Vetch			SNA	NNA	GNR	SE5		5

APPENDIX D
Field Forms

Wildlife

Weather information is recorded on the Wildlife data card. Such information can be useful for helping to interpret records or results.

Temperature: Record of approximate ambient temperature (°C) during the field survey.

Cloud: Record, in tenths, the proportion of the sky covered by clouds.

Wind: Record the Beaufort Scale number according to Table 20

Table 20. Beaufort Wind Scale (adapted from Whittow 1984).

0	Calm	smoke rises vertically
1	Light Air	smoke drifts, but wind vanes do not
2	Light Breeze	wind felt on face, leaves rustle
3	Gentle Breeze	leaves and small twigs in constant motion; light flags extended
4	Moderate Breeze	wind raises dust and loose paper; small branches move
5	Fresh Breeze	small trees in leaf begin to sway
6	Strong Breeze	large branches in motion; whistling in phone wires; umbrella use difficult
7	Near Gale	whole trees in motion; inconvenience felt when walking against wind
8	Gale	twigs break off trees; progress impeded
9	Strong Gale	slight structural damage – roofing shingles, TV antennae
10	Storm	trees uprooted; considerable structural damage

Precipitation: Brief statement of precipitation, e.g ., none, steady rain, fog.

Conditions: Brief statement of conditions, surveyor mood, etc., which might affect the survey; a text field of 50 characters.

Indicate the presence of Potential Wildlife Habitat by checking the appropriate box of features that are present within the polygon.

Wildlife: All wildlife sightings and signs should be recorded while in the polygon. Record each sighting by type (TY) (B = bird, H = herpetofauna, etc.) and by species (SP. CODE). Use four-letter codes, provided in the database, for recording species.

Evidence Codes: (EV) should be used to record the type of observation. If possible, give an indication of the estimated number of individuals, pairs or signs for each wildlife species.

ELC COMMUNITY DESCRIPTION & CLASSIFICATION

SITE: 3248 Rge. Cres Rd | POLYGON: CVR-1
SURVEYOR(S): DD/RE | DATE: Dec 24/21 | UTME
START | END | UTMZ | UTMN

POLYGON DESCRIPTION

SYSTEM	SUBSTRATE	TOPOGRAPHIC FEATURE	HISTORY	PLANT FORM	COMMUNITY
☒ TERRESTRIAL ☐ WETLAND ☐ AQUATIC	☐ ORGANIC ☒ MINERAL SOIL ☐ PARENT MIN ☐ ACIDIC BEDRK ☐ BASIC BEDRK ☐ CARB. BEDRK	☐ LACUSTRINE ☐ RIVERINE ☐ BOTTOMLAND ☐ TERRACE ☐ VALLEY SLOPE ☐ TABLELAND ☐ ROLL. UPLAND ☐ CLIFF ☐ TALUS ☐ CREVICE / CAVE ☐ ALVAR ☐ BOGLAND ☐ BEACH / BAR ☐ SAND DUNE ☐ BLUFF	☒ NATURAL ☐ CULTURAL	☐ PLANKTON ☐ SUBMERGED ☐ FLOATING-LVD ☐ GRAMINOID ☐ FORB ☐ LICHEN ☐ BRYOPHYTE ☐ DECIDUOUS ☐ CONIFEROUS ☐ MIXED	☐ LAKE ☐ POND ☐ RIVER ☐ STREAM ☐ MARSH ☐ SWAMP ☐ FEN ☐ BOG ☐ BARREN ☐ MEADOW ☐ PRAIRIE ☐ THICKET ☐ SAVANNAH ☐ WOODLAND ☐ FOREST ☐ PLANTATION
SITE ☐ OPEN WATER ☐ SHALLOW WATER ☒ SURFICIAL DEP. ☐ BEDROCK			**COVER** ☐ OPEN ☐ SHRUB ☐ TREED		

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>> MUCH GREATER THAN; > GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY			
2	SUB-CANOPY			CVR-1
3	UNDERSTOREY			
4	GRD. LAYER			

HT CODES: 1 = >25 m 2 = 10<HT<25 m 3 = 2<HT<10 m 4 = 1<HT<2 m 5 = 0.5<HT<1 m 6 = 0.2<HT<0.5 m 7 = HT<0.2 m
CVR CODES: 0= NONE 1= 0% < CVR < 10% 2= 10 < CVR < 25% 3= 25 < CVR < 60% 4= CVR > 60%

STAND COMPOSITION:								BA:	
SIZE CLASS ANALYSIS:		< 10		10 - 24		25 - 50		> 50	
STANDING SNAGS:		< 10		10 - 24		25 - 50		> 50	
DEADFALL / LOGS:		< 10		10 - 24		25 - 50		> 50	

ABUNDANCE CODES: N = NONE R = RARE O = OCCASIONAL A = ABUNDANT

COMM. AGE		PIONEER		YOUNG		MID-AGE		MATURE	OLD GROWTH

SOIL ANALYSIS:

TEXTURE:	DEPTH TO MOTTLES / GLEY	g =	G=
MOISTURE:	DEPTH OF ORGANICS:		(cm)
HOMOGENEOUS / VARIABLE	DEPTH TO BEDROCK:		(cm)

COMMUNITY CLASSIFICATION:

COMMUNITY CLASS:		CODE:
COMMUNITY SERIES:		CODE:
ECOSITE:		CODE:
VEGETATION TYPE:		CODE:
INCLUSION		CODE:
COMPLEX		CODE:

Notes:

ELC

STAND & SOIL CHARACTERISTICS

SITE:
POLYGON:
DATE:
SURVEYOR(S):

TREE TALLY BY SPECIES:

PRISM FACTOR ☐

SPECIES	TALLY 1	TALLY 2	TALLY 3	TALLY 4	TOTAL	RELATIVE AVERAGE
TOTAL						100
BASAL AREA (BA)						MEAN:
DEAD						

STAND COMPOSITION:

SOIL ASSESSMENT:	1	2	3	4
TEXTURE				
DEPTH TO MOTTLES:	g=	g=	g=	g=
DEPTH TO GLEY:	G=	G=	G=	G=
DEPTH OF ORGANICS				
DEPTH TO BEDROCK				
MOISTURE REGIME				

SOIL PROFILE

COMMUNITY PROFILE DIAGRAM

NOTES:

ELC

PLANT SPECIES LIST

SITE: 3248 Rae Lake Rd.
POLYGON: CUR-1
DATE: Aug 24/21
SURVEYOR(S): DJ / SR

LAYERS: 1 = CANOPY > 10m 2 = SUB-CANOPY 3 = UNDERSTOREY 4 = GROUND (GRD.) LAYER
ABUNDANCE CODES: R = RARE O = OCCASIONAL A = ABUNDANT D = DOMINANT

SPECIES CODE	LAYER 1	2	3	4	COLL.
E. HEMLOCK					
SUGAR MAPLE					
IRONWOOD					
BASSWOOD					
PERP. FLOW. ASTR.					
C. DOGWOOD					
W. DOGWOOD					
Y. BIRCH					
W. STRAWBERRY					
W. ASH					
BEAKED HAZELNUT					
Y. WOODSORREL					
COMMON LADY FERN					
BEAK FERN					
RED ELDERBERRY					
BRISTLY BC					
STRIPED MAPLE					
BLACK RASPBERRY					
W. BIRCH					
SWEET FERN					
E. OAK					
BRACKEN FERN					
W. GOLDEN VALLEY					
W. LETTUCE					
T. VETCH					
PEARLY EVERLASTING					

SPECIES CODE	LAYER 1	2	3	4	COLL.
CAN GOLDENROD					
LARGE LEAF ASTER					
AM. FLY HONEYSUCKLE					
WILD SARSAPARILLA					
CLINTONIA - BLUE BEAD LILY					
WEIGELA - LEMON GOLDENROD					
~~SPIREA~~ SPIRAEA SPP.					
OBEDIENCE PLANT					
ENGLISH PLANTAIN					
RED CLOVER					
RED PINE					
T- ASPEN					
PIN CHERRY					

Page ___ of ___

RED FOXES
V. RED
BLUE JAY
BC CHICKADEE

APPENDIX E

Official Plan and Zoning Schedules

Hastings County Official Plan

Land Use Designations
OP-A Schedule

This is to certify that this map was adopted as Official Plan Schedule OP-A of the County of Hastings Official Plan 2017-0030. Plot Date: 12/18/2017 Signing Date: 12/19/2017

Jim Duffin, C.A.O.-Clerk of Hastings County

Rodney Cooney, Warden of Hastings County

This schedule forms a part of the County of Hastings Official Plan and must be read in conjunction with the written text. Visit www.hastingscounty.com for the full Official Plan. Please refer to secondary plan schedules for detailed mapping of urban areas. Some special policy areas may also have detailed maps within the text.

Produced by the County of Hastings Planning & Development Department. Data supplied under license by members of the Ontario Geospatial Data Exchange and the County of Hastings. The County of Hastings disclaims all responsibility for errors, omissions or inaccuracies in this publication.

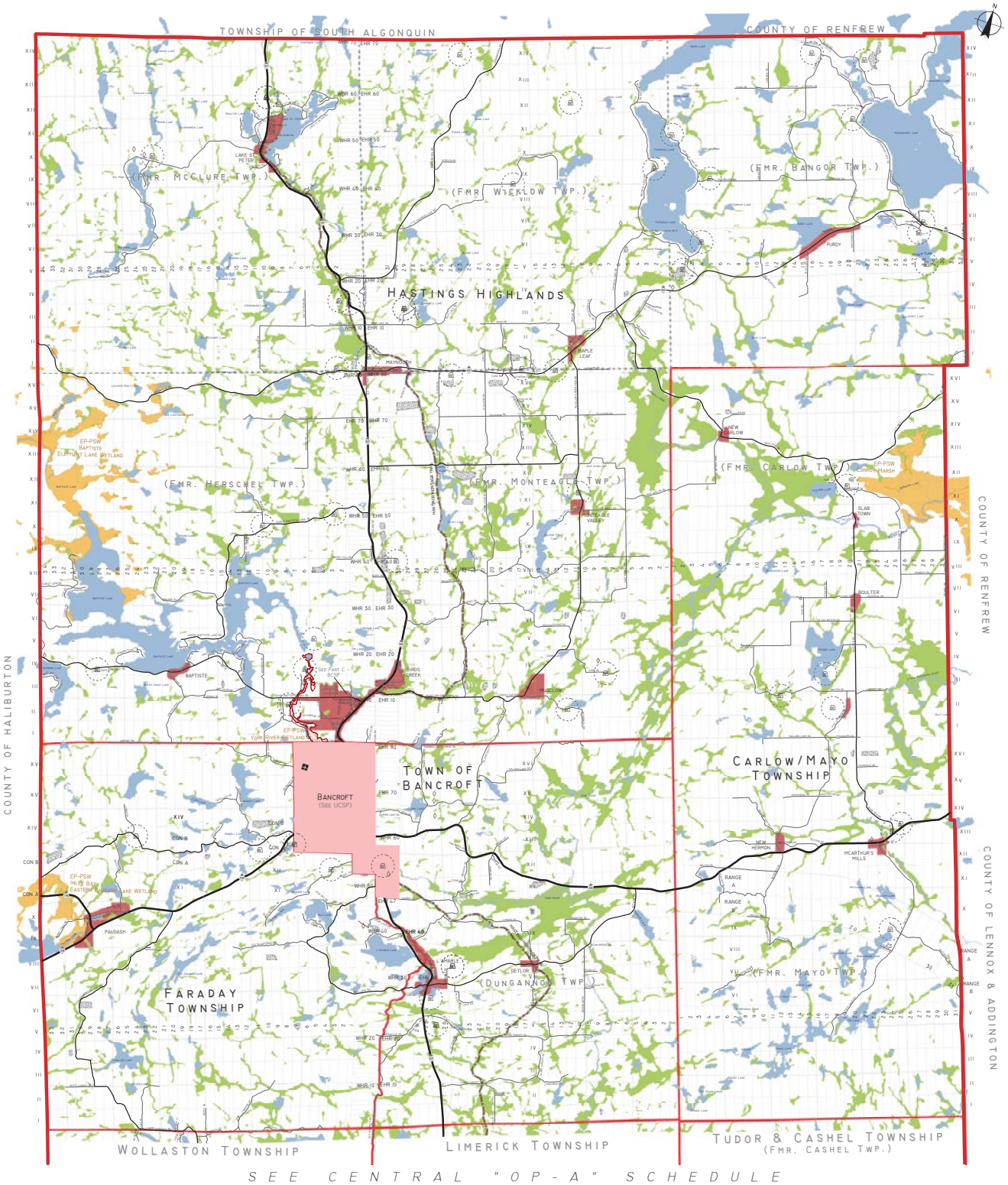
June 22, 2018

Land Use Designations
- Prime Agriculture
- Rural/Waterfront
- Environmental Protection
- Environmental Protection - Provincially Significant Wetland
- Extractive (Large Site)
- Extractive (Small Site)
- Urban
- Hamlet
- Waterbody
- Wellhead Protection Area
- Intake Protection Zone
- Issues Contributing Area
- Well Head Protection Area - E
- Waste Management
- Site Specific Policy Area (Large Site)
- Site Specific Policy Area (Small Site)
- Engineered Floodline

Geographic Features
- Non Official Plan Area
- Lot & Concession Line
- Geographic Township Boundary
- Municipal Boundary
- County Boundary

Infrastructure
- Highway (Prov. & Fmr. Provincial)
- Collector Road (Former County)
- Municipal Road
- Railway
- Hastings Heritage Trail
- TransCanada Trail
- Airfield

0 1 2 3 4 5 Kilometres



Hastings County Official Plan

Natural Heritage Features & Areas

OP-B Schedule

This is to certify that this map was adopted as Official Plan Schedule OP-B of the County of Hastings Official Plan 2017-0030.
Plot Date: 12/18/2017 Signing Date: 12/19/2017

Jim Duffin, Clerk of Hastings County

Rodney Cooney, Warden of Hastings County

This schedule forms a part of the County of Hastings Official Plan and must be read in conjunction with the written text. Visit www.hastingscounty.com for the full Official Plan. Please refer to secondary plan schedules for detailed mapping of urban areas. Some special policy areas may also have detailed maps within the text.

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June 22, 2018

Natural Heritage Features

- Significant Woodland
- Areas of Natural or Scientific Interest (EP-ANSI)
- Areas of Natural & Scientific Interest (Small Site)
- Significant Valleyland
- Conservation Authority Land
- Provincial Parks & Conservation Reserves
- Crown Land

Significant Wildlife Habitat

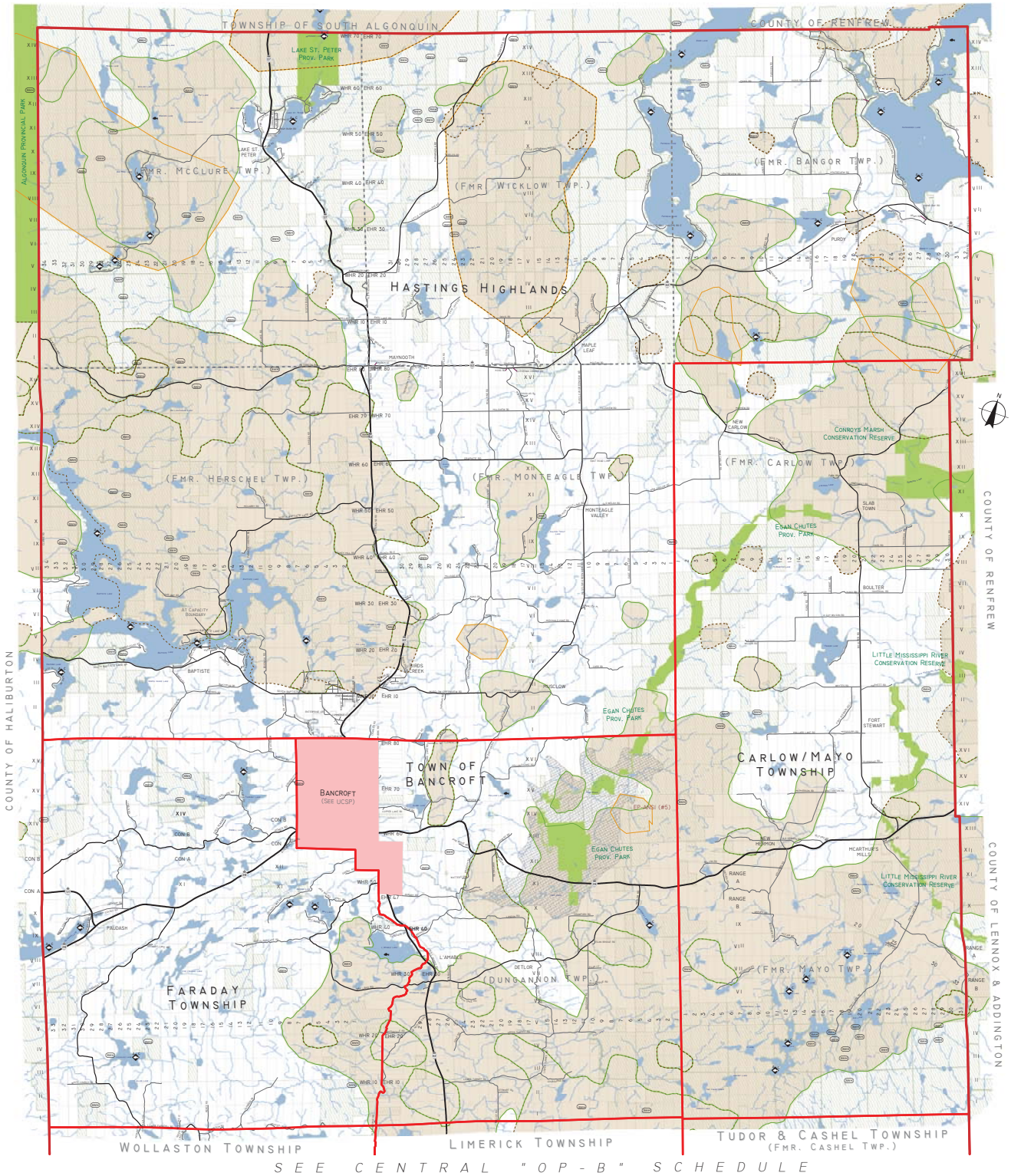
- Deer Yard (Stratum I)
- Deer Wintering Area (Stratum 2)
- Moose Early Wintering Area
- Significant Wildlife Habitat (Small Site)
- Lake Trout Lake At Capacity (LTL-AC)
- Lakes Managed for Lake Trout (LTL-C)

Geographic Features

- Stream/Creek
- Boundary of Ecoregion 6E (See 4.3.5)
- Watercourse & Waterbody
- Non Official Plan Area
- Urban Secondary Plan Area
- Lot & Concession Line
- Geographic Township Boundary
- Municipal Boundary
- County Boundary

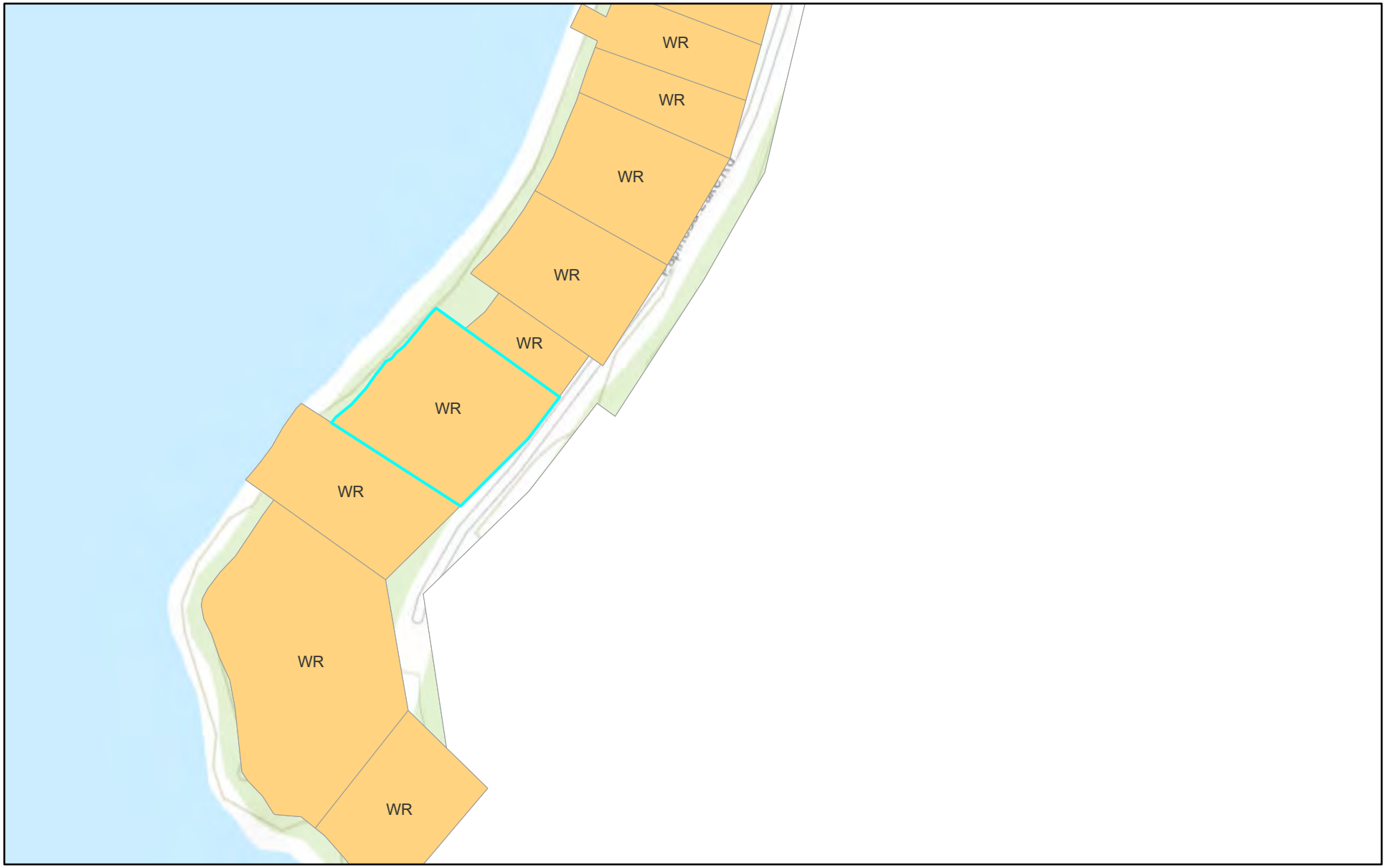
Infrastructure

- Highway (Prov. & Fmr. Provincial)
- Collector Road (Former County)
- Municipal Road



0 1 2 3 4
Kilometres

Municipal Zoning



2021-10-12, 3:05:45 p.m.

1:4,514

0 0.03 0.06 0.11 mi

0 0.04 0.09 0.17 km

Zoning: Hastings Highlands

Waterfront Residential (WR)

Marginal Agriculture (MA)

Property Information

Hastings County, Province of Ontario, Ontario MNR, Esri Canada, Esri,

Public Access