

ENVIRONMENTAL IMPACT STUDY

Wylie Lane Development

Project #: 23-0462

Prepared for: Eco Lake Home Inc.

Date: July 17, 2026

Report Version: 01



July 17, 2026

Eco Lake Home Inc.
57 Rosehill Drive,
Stouffville, Ontario L4A 3X7

Attention: James Spratley

SUBJECT: ENVIRONMENTAL IMPACT STUDY, WYLIE LANE DEVELOPMENT

EnVision Consultants Ltd. is pleased to present the enclosed Environmental Impact Study for the site described as Wylie Lane Development, located in the Musselman Lake Community Area, Town of Whitchurch-Stouffville, York Region, Ontario. Please find the document attached for your review. The study outlines the proposed development, field investigations undertaken to assess potential environmental impacts and recommends mitigation measures to help maintain the form and function of the natural heritage features found within the area of influence of the proposed development.

Thank you for the opportunity to complete this assignment. Please contact the undersigned with questions or comments.

Yours sincerely,

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QUALITY MANAGEMENT

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1. INTRODUCTION

EnVision Consultants Ltd. (EnVision) was retained by Eco Lake Home Inc. (the 'Client') to conduct a Scoped Environmental Impact Study (EIS) referred to as the Wylie Lane Development; herein referred to as the 'Site'. This review also includes consideration for a larger Study Area defined as the lands beyond 120 m of the Site. The larger land parcel associated with the Site is shown on **Appendix B, Figure 1**. However, due to known existing natural heritage features constraints within the larger land parcel, this EIS has been scoped to the potential developable area (i.e., the Site). It is our understanding that this assessment has been requested in support of the proposed Zoning-By-law Amendment (ZBA) application to facilitate the development of a residential community through a Town of Whitchurch-Stouffville Official Plan (OP) submission within the larger land parcel. The proposed residential community will consist of 18 lots with 35 total dwelling units. The lots will include a mix of single detached, semi-detached, townhouse, apartment and cluster housing. Refer to **Appendix B, Figure 2** for scoped Site location details (i.e., the Site) which will be the focus of this EIS.

The Site is located approximately 75 m southwest of Musselman Lake and is bounded by rural residential dwellings of the Musselman community to the north and east, along with woodland and naturalized areas to the west and south. The woodland area to the west contains an area identified as a provincially significant Area of Natural Scientific Interest (ANSI) – Life Science. A small portion of a Provincially Significant Wetland (PSW) feature is found within the southwest corner of the Site and extends further into the Study Area and beyond. A second PSW is located within the Study Area to the southeast. Overall, the Site is largely characterized by agricultural crop fields, separated by small, scattered treed features.

This study aims to identify the location and extent of regulated natural heritage features and functions in accordance with provincial and municipal legislation and policies in order to define constraints and opportunities for development. The study also identifies potential impacts associated with the proposed development and recommends measures to mitigate those impacts while evaluating compliance with the applicable planning framework. The information presented in this report is based on review of relevant background information sources, consultation with relevant agencies and authorities, and direct observations through field investigations. This EIS conforms with the guidelines outlined within York Region OP (2022) (office consolidation June 2024), The Town of Whitchurch-Stouffville OP and the Terms of Reference (TOR) submitted and awaiting comments/approval by the Town of Whitchurch-Stouffville.



2. ENVIRONMENTAL POLICY REVIEW

2.1. FEDERAL FISHERIES ACT (1985)

In Ontario, Fisheries and Oceans Canada (DFO) manages fish habitat and the Ontario Ministry of Natural Resources (MNR) manages fisheries. Fish and fish habitat are protected under the federal Fisheries Act, last amended on August 28, 2019. The protection provisions of the Fisheries Act apply to all fish and fish habitat throughout Canada, and include 2 key prohibitions, specifically:

- Subsection 34.4(1) – No person shall carry on any work, undertaking or activity, other than fishing, that results in the death of fish.
- Subsection 35(1) – No person shall carry on any work, undertaking or activity that results in the harmful alteration, disruption or destruction of fish habitat.

Proponents are responsible for planning and implementing works, undertakings or activities in a manner that avoids harmful impacts, specifically the death of fish and the harmful alteration, disruption or destruction of fish habitat. Where proponents believe that their work, undertaking or activity will result in negative impacts to fish or fish habitat that cannot be fully mitigated, a Fisheries Act Authorization may be required.

No internal watercourses or waterbodies were found within the Site during field investigations; however, are indicated within the Study Area (i.e., Musselman Lake) and will be discussed further in Section 5.1.

2.2. MIGRATORY BIRDS CONVENTION ACT (1994)

The federal MBCA (1994) protects the active nests, eggs and young of most bird species from harassment, harm or destruction. No permitting or authorization is required under the MBCA (1994); however, proponents who fail to comply with the legislation may be fined if found to be in contravention of the MBCA (1994). The Study Area is within Zone C1 of the Lower Great Lakes/St. Lawrence Plain; in that zone, the active nesting period for migratory birds is approximately April 1 to August 31. Vegetation clearing conducted outside this period (i.e., during the non-nesting period) is the primary means of avoiding potential contravention of the MBCA (1994), although compliance cannot be guaranteed. If clearing is required during the active nesting period, it may be permissible provided that active nests and nesting birds are not impacted. While avoidance of clearing during the nesting period is the preferred risk-management approach, where clearing during this period is unavoidable, nest sweeps conducted by a qualified Avian Biologist may be undertaken immediately prior to clearing to reduce the risk of non-compliance, particularly in simple habitats (e.g., individual trees).

In addition to the above, the nests of 18 species listed in Schedule 1 of the Migratory Birds Regulations (2022), whose nests are habitually reused by migratory birds, have year-round nest protection, unless they have been shown to be abandoned. Abandonment is determined based on fulfillment of two conditions as follows:



- A number of months prior to an impactful activity (from 12 to 36 months, see Schedule 1), Environment and Climate Change Canada (ECCC) must be notified through the online Abandoned Nest Registry, that the nest does not contain a live bird or viable egg; and then,
- The proponent must demonstrate that the nest has not been used by (any) migratory birds during the designated wait time for that species.

The nests of Schedule 1 species most typically encountered are the those of the Herons and Egrets (Ardeidae) which have a 24-month waiting period, and Pileated Woodpecker (*Dryocopus pileatus*) which has a 36-month waiting period.

Natural and semi-natural vegetation communities within the Site have the potential to provide nesting habitat for migratory birds. Removal of vegetation within the Site is required for development. See Section 7 for discussion of recommended vegetation clearing timing restrictions. As the development plan application process advances, an Arborist Report including a tree inventory and tree protection plan (TPP) will be prepared to confirm all proposed tree removals, followed by a tree compensation planting plan to address the identified removals.

2.3. SPECIES CONSERVATION ACT (2025)

The Ontario Species Conservation Act (SCA) (2025) identifies Species at Risk (SAR) based on the best available information and provides for their protection and conservation, while considering social and economic factors. The SCA (2025) O. Reg. 60/26: Protected Species in Ontario List, identifies extirpated, endangered and threatened species as classified by the COSSARO. These species, as well as their habitats are afforded legal protection under the SCA (2025). The Protected Species in Ontario List does not include aquatic species or migratory birds that are federally listed as extirpated, endangered or threatened under the SARA.

Under the SCA, the definition of habitat means:

1. in respect of an animal species,
 - I. a dwelling-place, such as a den, nest or other similar place, that is occupied or habitually occupied by one or more members of a species for the purposes of breeding, rearing, staging, wintering or hibernating, and
 - II. the area immediately around a dwelling place described in subclause (i) that is essential for the purposes set out in that subclause.
2. in respect of a vascular plant species, the critical root zone surrounding a member of the species, and
3. in respect of all other species, an area on which any member of a species directly depends in order to carry on its life processes¹.

Under Section 16 (1), no person shall engage in:

¹ And does not include an area where the species formerly occurred or has the potential to be reintroduced unless existing members of the species depend on that area to carry on their life processes



- a) any activity that results or is likely to result in,
 - i. the killing, harming, capturing or taking of a member of a species that is listed on the Protected Species in Ontario List, or
 - ii. damage to or destruction of the habitat of a species that is listed on the Protected Species in Ontario List,
- b) possessing, transporting, collecting, buying, selling, leasing, trading or offering to buy, sell, lease or trade a protected species.

Unless an exception is met, a permit is obtained, or the activity is registered. These three pathways are outlined below for situations where impacts are anticipated.

Exceptions

Exceptions relevant to development applications are generally outlined as follows:

- The activity is within the one-year grace period, allowing existing authorized activities affecting newly added species to the Protected Species in Ontario List within the last year to continue until the species has been listed for a year;
- The activity is outside a specified geographic area in the Protected Species in Ontario List; or,
- The activity is an excepted activity per O. Reg. 61/26, where exceptions for unhealthy/immature Black Ash (*Fraxinus nigra*) trees or unhealthy Butternut (*Juglans cinerea*) trees require a report be submitted to the MECP through the Species Conservation Registry prior to any impact, but are otherwise exempt from registration.

Permitted Activities

Development activities are generally not subject to permit obtainment as defined in O. Reg. 74/26. If a proposed activity may impact SAR and no exception is met, the proponent must register the activity.

Registration

As described in O. Reg. 75/26, before commencing a registrable activity, proponents (i.e., registrants) shall:

- a) Register the activity in the Species Conservation Registry, generally including:
 - i. Administrative information
- b) Prepare a Conservation Plan (See Schedule 1), led by a qualified professional generally including:
 - ii. A description of the activity;
 - iii. Identification of affected protected species and habitats and anticipated adverse effects;
 - iv. A description of mitigation measures;
 - v. A monitoring approach including reporting and adaptive management; and,
 - vi. A description of conservation measure(s) If residual adverse effects² are anticipated.
- c) Receive training in regard to the species impacted and the conservation plan.

² Although undefined by Species Conservation Act, 2025 or regulation O. Reg. 75/26, Residual adverse effects are understood to mean negative effects on protected species or habitats that cannot be avoided or sufficiently minimized through required mitigation measures.



A review of SAR habitat identified through the background information review, field investigations and agency consultation and their potential relevance to the Site is provided in Section 5.3 and **Appendix F**.

2.4. PROVINCIAL POLICY STATEMENT (2024)

The Planning Act (1990) empowers the MMAH to issue the PPS (MMAH, 2024) which is a planning document that provides a framework for, and governs development within, the province of Ontario. To preserve various ecological resources deemed significant in the province, development lands must be assessed for the presence of natural heritage features prior to construction, for which the PPS (MMAH, 2024) defines and affords protections. Natural heritage features are generally specialized forms of habitat which support rare species in Ontario and are important for their environmental and social values. The PPS (MMAH, 2024) natural heritage policy of Section 4.1 outlines types of natural heritage features and respective development restrictions as listed below:

1. Natural features and areas shall be protected for the long term.
2. The diversity and connectivity of natural features in an area, and the long-term ecological function and biodiversity of natural heritage systems, should be maintained, restored or, where possible, improved, recognizing linkages between and among natural heritage features and areas, surface water features and ground water features.
3. Natural heritage systems shall be identified in Ecoregions 6E & 7E, recognizing that natural heritage systems will vary in size and form in settlement areas, rural areas, and prime agricultural areas.
4. Development and site alteration shall not be permitted in:
 - a. significant wetlands in Ecoregions 5E, 6E and 7E; and
 - b. significant coastal wetlands.
5. Development and site alteration shall not be permitted in:
 - a. significant wetlands in the Canadian shield north of Ecoregions 5E, 6E and 7E;
 - b. significant woodlands in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Marys River);
 - c. significant valleylands in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Marys River);
 - d. SWH;
 - e. significant ANSI; and,
 - f. coastal wetlands in Ecoregions 5E, 6E and 7E1 that are not subject to policy 4.1.4.b), unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions.
6. Development and site alteration shall not be permitted in fish habitat except in accordance with provincial and federal requirements.
7. Development and site alteration shall not be permitted in habitat of endangered species and threatened species, except in accordance with provincial and federal requirements.
8. Development and site alteration shall not be permitted on adjacent lands to the natural heritage features and areas identified in policies (4, 5 and 6 above) 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.

A review of natural heritage features and functions identified in the PPS and their relevance to the Site is presented Section 5 and summarized in *Table 5-1*.

2.5. CONSERVATION AUTHORITIES ACT AND ONTARIO REGULATION 41/24

The Conservation Authorities Act (1990) provides the legal framework for the establishment and operation of Conservation Authorities across Ontario. Its purpose is to provide for the organization and delivery of programs and services that further the conservation, restoration, development and management of natural resources in watersheds in Ontario.

Ontario Regulation 41/24 (Prohibited Activities, Exemptions, and Permits) replaced the previous individualized Conservation Authority regulations. This regulation introduced updated definitions, reduced the regulated area around PSW, and removed permit tests related to pollution and conservation of land.

Conservation Authorities have jurisdiction over areas termed regulated areas, within which, development activities are prohibited under Paragraph 2 of Subsection 28 (1) of the Conservation Authorities Act (1990). The following activities are prohibited unless a permit is issued by the respective Conservation Authority:

1. Activities to straighten, change, divert or interfere in any way with the existing channel of a river, creek, stream or watercourse or to change or interfere in any way with a wetland.
2. Development activities in areas that are within the Conservation Authority's area of jurisdiction and are,
 - I. hazardous lands;
 - II. wetlands;
 - III. river or stream valleys the limits of which shall be determined in accordance with the regulations;
 - IV. areas that are adjacent or close to the shoreline of the Great Lakes-St. Lawrence River System or to an inland lake and that may be affected by flooding, erosion or dynamic beach hazards, such areas to be further determined or specified in accordance with the regulations, and;
 - V. other areas in which development should be prohibited or regulated, as may be determined by the regulations.

Based on the Lake Simcoe Region Conservation Authority (LSRCA) mapping which provides their regulated areas, it indicates that the PSW wetland features within the southeast corner of the Study Area, southwest corner of the Site and Study Area and other lands to the west and south are regulated by the LSRCA. Development or site alteration within their regulated area may be permitted provided development is conducted in accordance with existing policies. A description of the potentially impacted regulated wetland features within the Site and Study Area is provided in Section 5.2.

2.6. GREENBELT PLAN (2017)

The Greenbelt Plan was introduced in 2005. Together with the Oak Ridges Moraine Conservation Plan (ORMCP) and the Niagara Escarpment Plan (NEP), identifies where urbanization should not occur in order to provide permanent protection to the agricultural land base and the ecological and hydrological features, areas and functions occurring on the landscape. The Greenbelt Plan builds upon the PPS to establish a land use planning framework that supports a thriving economy, a clean and healthy environment and social equity.

Schedule 1: Greenbelt Area indicates the Site is within the Greenbelt Area boundary and designed within the Oak Ridges Moraine (ORM) Area. According to Section 2.1 within the Greenbelt Plan, which addresses lands within the ORM area, the requirements of the ORMCP will continue to apply and the Protected Countryside policies within the Greenbelt Plan do not apply with the exception of Section 3.3 within the Greenbelt Plan.

Section 3.3 of the Greenbelt Plan generally addressed parkland, open space and trails which are not relevant to the proposed ZBA within the Site and thus, will not be discussed further.

Thus, as policies of the Greenbelt Plan largely do not apply to the Site and natural heritage protection will be dictated by the ORMCP (discussed in the next section), the Greenbelt Plan will not be discussed further. It is anticipated that the proposed works align with the overall goals of the Greenbelt Plan.

2.7. OAK RIDGES MORaine CONSERVATION PLAN (2017)

The ORM is one of Ontario's most significant landforms. The ORMCP is an ecologically based plan that provides land use and resource management direction for the land and water within the ORM. The lands to which the ORMCP and the NEP apply are also subject to the Greenbelt Plan, discussed in the previous section.

As shown on the ORMCP Land Use Designation Map which illustrates that the Site is within the ORMCP Area and designates the southwestern half of the Study Areas as Natural Core Area, while the remainder of the Study Area (i.e., northeastern half) as Rural Settlement (a component of the Countryside Area).

Policy 11 (1) describes the purpose of Natural Core Areas are to maintain and improve or restore the ecological integrity of the ORMCP Area, while Policy 11 (2) outlines additional objectives. Policy 11 (3) lists permitted uses in Natural Core Area such as wildlife management, agriculture uses, infrastructure, home industries among other uses which are all subject to Parts III and IV of the ORMCP.

Policy 13 (4), with respect to land in a Rural Settlement, residential development in accordance with Paragraph 3 of Subsection 15 (1) within the ORMCP and small-scale commercial, industrial and institutional uses are permitted. Review of Policy 15 (1) indicates new lots may be created in Countryside Areas for the purposes specified in Section 32 (lot creation), residential development permitted under Section 14 and minor infill within Rural Settlement Areas. Thus, Policy 32 was reviewed as lot creation is proposed.

Of relevance to the project, Policy 32 (3) states a lot may be created only if there is enough net developable area on both the severed lot and the retained lot to accommodate proposed uses,

buildings and structures and accessory uses without encroachment on key natural heritage features or key hydrologic features. As the proposed lot creation largely appear to be outside of existing natural heritage features (minor encroachments proposed; impacts to trees to be confirmed through the submission of an Arborist Report at Draft Plan) within the larger land parcel (i.e., Overall Site Boundary), it is anticipated that the remaining net developable area is sufficient for potential future development of the Site.

Moreover, Part III of the ORMCP outlines policies to protect the ecological and hydrological integrity of the ORM with Policy 19, outlining which policy section within Part III, apply to their respective land designation. Policy 21 (1) indicates that the Table found in Part III, identifies the minimum vegetation protection zone (VPZ) (Column 4) that relates to key natural heritage features or hydrologic features identified in Column 2. The largest VPZ will apply if land falls within one or more key natural heritage feature (Policy 21 [2]).

From the ORM Table, the minimum VPZ includes:

- **Wetlands:** All lands within 30 m of any part of the features, subject to clause 23(1)(d) if a natural heritage evaluation (NHE) is required.
- **Habitat of Endangered and Threatened species:** None.
- **ANSI (life science):** As determined by a NHE carried out under Section 21.
- **Significant woodlands:** All land within 30 m of the tree canopy drip line of the outermost trees within the woodland, subject to clause 23 (1) (d) if a NHE is required.
- **Kettle lakes:** All land within the surface catchment area or within 30 m of any part of the features, whichever is greater, subject to Clause 26 (4) (c) if a hydrological evaluation is required.

Generally, development and site alteration within key natural heritage features (identified in Policy 22 [1]) or the related minimum VPZ is prohibited, except for those listed in Policy 22 (2). However, development applications within the minimum area of influence (outside of the natural heritage feature and minimum VPZ) is permitted accompanied by a NHE under Section 23 of the ORMCP. Similar, policies are required for key hydrologic features (Policy 26).

Thus, the listed minimum VPZ will be used to determine appropriate setbacks to natural heritage features and hydrologic features within the Site and Study Area which will be used to inform constraints for potential future development. Overall, it is anticipated that the proposed works align with the overall goals of the ORMCP and impacts, and mitigation will be discussed in later sections of this EIS to maintain the ORM natural heritage system.

2.8. LAKE SIMCOE PROTECTION PLAN (2009)

The Lake Simcoe Act (2008) and associated Lake Simcoe Protection Plan (LSPP) were established by the Ontario government to provide a framework for the protection and restoration of Lake Simcoe. The Lake Simcoe watershed contains important natural, urban and agricultural systems that are vital to the region and Ontario, including parts of the ORM and the Greenbelt. Natural heritage features are vital components of the ecosystem in and of themselves and are closely linked to other elements such as water quality and quantity. Key natural heritage and key hydrologic features contribute to the ecological



health of the watershed. Therefore, within the LSPP are several policies that also apply to the surrounding lands of Lake Simcoe.

As the Site is situated within an existing settlement area, Policies 6.20 to 6.29 of the LSPP regarding key natural heritage and key hydrologic features do not apply. However, Policies 6.32 to 6.34 are applicable. Policy 6.33-DP, outlines general objectives for development and site alterations primarily to riparian areas and Lake Simcoe. While Policy 6.34-DP, requires buffers to be composed of natural self-sustaining vegetation. No limiting development policies or setback requirements were found, thus, the LSPP will not be discussed further.

2.9. YORK REGION OFFICIAL PLAN (2024)

The York Region OP (Region OP) sets the direction for growth and developments across nine local municipalities. The Region OP was adopted by York Regional Council on June 30, 2022, approved by the Province on November 4, 2022 and was last consolidated in June 2024. Policies regarding natural heritage features can be found in Section 3 of the Region OP.

Policy 3.2.1 indicates the Regional Greenlands System is shown on Map 2 and consists of cores, corridors, and linkages and includes various mapped natural heritage systems. Review of Map 2 describes the Site as primarily within a Settlement Area and the Regional Greenlands System is found largely within the southwest portion of the Study Area. Generally, development and site alterations are prohibited within the Regional Greenlands System (Policy 3.2.3) and development applications within 120 m require an EIS (Policy 3.2.4). However, Policy 3.2.5 does permit limited uses within the Regional Greenlands System such as agricultural related uses and infrastructure among other uses. As the Site is within 120 m of the Regional Greenlands System, this EIS was undertaken to assess impacts and recommend mitigation measures towards natural heritage features which comprise the regional system.

Key natural heritage features and key hydrologic features within York Region are listed in Policy 3.4.1. Background resources indicate potential habitat of Endangered and Threatened species, wetlands, Life Science Areas of ANSI, significant woodlands, SWH and kettle lakes may be present within the Study Area (additional Region OP mapping is discussed further in this section) which will be identified and confirmed in later sections of this EIS using criteria contained within the Region OP (Policy 3.4.3). Policy 3.4.5 prohibits development within these features and VPZs unless (a) permitted by the Region OP, Provincial Plan (e.g., PPS, Greenbelt Plan, ORMCP, etc.) and demonstrated through an EIS will not negatively impact these features or its ecological function. Alterations to fish habitat and habitat of Endangered and Threatened species are not permitted unless in accordance with provincial and federal requirements (Policy 3.4.6). Per Policy 3.4.13, minimum VPZs and adjacent lands to key natural heritage features will be determined through an EIS and meet the minimum widths identified in Table 3 of the Region OP. A summary of minimum VPZ from Table 3 for potentially relevant features within the Study Area are present in *Table 2-1* below.



Table 2-1: Minimum VPZ from Table 3 within the Region Official Plan

Feature	ORMCP (applies to Natural Core and Settlement Areas)	Regional Greenlands System (within the Greenbelt Plan)
Habitat of Endangered and Threatened species	Determined in accordance with provincial and federal requirements	Determined by an EIS
ANSI	Determined by an EIS	Determined by an EIS
Significant woodlands	30 m	30 m
SWH (including significant habitat of Special Concern species)	Determined by an EIS	Determined by an EIS
PSW	30 m	30 m
Kettle Lakes	The greater of all land within the surface catchment area or within 30 m of any part of feature	30 m

Map 3 of the Region OP identifies an ANSI (Life Science) is immediately adjacent to the western boundary of the Site. Map 4 does not indicate any key hydrologic features within the Site; however, they are present within the immediate Study Area. The nearby Musselman Lake is located within the northeast portion of the Study Area and is identified as Kettle Lake. While PSW areas are indicated within the southeastern corner of the Study Area and within the woodlands to the west. Map 5 of the Region OP identifies woodlands within the western portion of the Site and Study Area and includes portions of the existing hedgerow separating the agricultural crop fields within the Site. Policy 3.4.28 indicates the determination of woodland significance will rely on site-specific studies per policies 3.4.30 and 3.4.31 of the Region OP. As such these policies will be used to evaluate the woodlands identified within the Study Area and will be discussed in Section 5.6. Overall, specific policies pertaining to development within these features generally align with previous policies discussed (within the previous paragraph above) for natural heritage features within the Region OP thus, will not be discussed further.

This EIS conforms with the guidelines outlined within the York Regional OP (2024) and the TOR submitted to and approved by the Region of York.

2.10. THE TOWN OF WHITCHURCH-STOUFFVILLE OFFICIAL PLAN (2023)

The Town of Whitchurch-Stouffville OP (Town OP) was adopted by the Town of Whitchurch-Stouffville Council on September 5, 2000, approved by the Region of York on March 20, 2001, and approved by the province on June 23, 2004. The Town OP consolidated January 2023 is currently in effect. The Town of Whitchurch-Stouffville Council has recently enacted By-law 2024-057-OP to adopt the new Town OP (i.e., Re-Imagin Stouffville: Town of Whitchurch-Stouffville Official Plan, May 2024); however, as the new Town OP requires final approval from the Approval Authority, it has not come into effect. As such, the current Town OP, 2024 (consolidated June 2023) is currently still in effect and will largely guide the policy discussion for the Site.

Moreover, the purpose of the Town OP is to establish a general framework for the future planning of the municipality. Figure 1 of the Town OP identifies the Study Area is within the Ballantrae-Musselman Lake and Environs Secondary Plan Area which will be discussed in the next section.



Schedule A: Greenlands System has identified the ORM Natural Core Area within the southwestern half of the Study Area. Policy 3.2.9, pertaining to development review, outlines that areas within the ORM will be subject to provisions of the ORMCP and some key direction from Part III of the ORMCP are shown on Schedule H to J. Schedule H identifies the Site is within the area of influence of an ANSI, woodland and wetland and contains these features respective minimum VPZ. As the minimum VPZ for these features are outlined on Table 3.1 of the Town OP and are derived from the ORMCP, they will not be discussed further.

Thus, it is anticipated if the proposed works conform to the ORMCP, they will also generally conform to the Town OP for protection of natural heritage features.

2.11. BALLANTRAE-MUSSELMAN LAKE AND ENVIRONS SECONDARY PLAN (2023)

The purpose of the Ballantrae-Musselman Lake and Environs Secondary Plan is to provide detailed plans for the Ballantrae-Musselman Lake community. Secondary Plan policies for the community are found in Section 11 of the Town OP. Provisions of the Secondary Plan prevail over the provisions of the Town OP in the event of any conflict.

Schedule E: Land Use Plan designates the Site is within the Musselman Lake Community Area. Policy 11.4.9.1 generally prohibits new development within the settlement area; however, redevelopment of existing developed area may be considered if enhancement of natural features will result. Permitted uses are stated in Policy 11.4.9.2. Included in Policy 11.4.9.3 (ii) generally redevelopment of existing uses for new low-density residential development will require approval of a Subdivision Plan and Zoning By-law amendment.

Appendix A of the Secondary Plan indicates the Natural Feature Conservation Area designation through the Site. Policy 11.4.2.1 outlines this designation is intended to protect and enhance key natural heritage features in accordance with ORMCP policies. Policy 11.4.2.2 indicates permitted uses within this designation such as legally existing uses, buildings and structures, conservation management and recreational uses, among others. All development is required to conform with development review policies in Section 11.8 and servicing policies in Section 11.6 of the Town OP.



3. STUDY APPROACH

3.1. TERMS OF REFERENCE

A TOR (**Appendix K**) was prepared and submitted to the Town of Whitchurch-Stouffville for review on August 8, 2023. Additional correspondences include:

- August 8, 2023: an automatic response was received by EnVision from the Town of Whitchurch-Stouffville Development Services acknowledging the receipt of the TOR submission email.
- June 7, 2024: EnVision sent a follow-up email regarding the TOR submission to the Town of Whitchurch-Stouffville. An automatic response was received by EnVision from the Town of Whitchurch-Stouffville Development Planning Division acknowledging the receipt of the TOR follow-up email.

This EIS conforms with the guidelines outlined within the Region OP (consolidated June 2024), the Town OP (consolidated 2023), and the TOR submitted and awaiting review/comment by the Town of Whitchurch-Stouffville.

3.2. AGENCY CONSULTATION AND BACKGROUND INFORMATION REVIEW

The following agencies and information sources were consulted in preparation of this study (databases originally accessed July 2023):

- Ministry of Environment and Conservation of Parks (MECP) (J. Anderson, pers. comm. July 11, 2023);
- MNR staff (S. Varga, pers. comm. August 4, 2023);
- MNR Ontario Geohub online datasets;
- LSRCA (J. Chan, pers. comm. July 24, 2023);
- Greenbelt Plan (Ontario, 2017);
- ORMCP (Ontario, 2017);
- LSPP (Ontario, 2009)
- York Region Maps;
- York Region OP (2022) (office consolidation June 2024);
- The Town of Whitchurch-Stouffville OP (2004) (consolidation January 2023);
- iNaturalist internet site;
- DFO Aquatic SAR online mapping tool;
- Natural Heritage Information Centre (NHIC) Make a Map;
- Ontario Breeding Bird Atlas (OBBA) internet site (Bird Studies Canada, 2006);
- Ontario Butterfly Atlas (OBA) internet site (Toronto Entomologists' Association, 2024);
- Ontario Reptile & Amphibian Atlas (ORRA) internet site (Toronto Entomologists' Association, 2019); and,
- Satellite imagery.

A copy of all email correspondences from the regulatory agencies is provided in **Appendix A**. A complete list of references used in preparation of this study is provided in Section 10 of this report.

3.3. SPECIES AT RISK SCREENING

As part of the background review, a comprehensive list of SAR potentially present at the Site was assembled from the following sources (databases originally accessed July 2023):

- Agency consultation as noted above;
- NHIC Make a Map, 1 km grid squares 17PJ3776, 17PJ3876, 17PJ3775;
- OBA, 10 km atlas squares 17PJ37;
- OBBA, 10 km atlas squares 17PJ37;
- ORRA, 10 km atlas squares 17PJ37; and,
- iNaturalist species search results.

After assembling the list of potential SAR, a screening exercise was completed to evaluate the potential of each species and associated habitat to occur within the Site based on current Site conditions. This assessment identifies SAR species that may be relevant to the Site and warrant further consideration during field investigations and/or impact assessment, and those that are not relevant to the Site and are thus excluded from further consideration. Results of the SAR screening are summarized in Section 5.3 and Section 5.4, with the complete assessment matrix included in [Appendix F](#).

3.4. FIELD INVESTIGATION

Field investigations were undertaken in order to confirm and further characterize the natural heritage features and functions on or adjacent to the Site. Field investigations were undertaken between June 2023 and July 2024, and included botanical inventories, vegetation community mapping/Ecological Land Classification (ELC), bird breeding surveys, amphibian calling surveys and a bat habitat suitability assessment, as outlined in this section and summarized in *Table 3-1* below.

Table 3-1: Field Investigation Details

DATE	SURVEYS COMPLETED	TIME/ DURATION	WEATHER CONDITIONS*
JUNE 13, 2023	Breeding bird survey (round 1)	9:00 AM to 12:00 PM	Clear skies, $\pm 16^{\circ}\text{C}$, gentle breeze, no trace of precipitation
JULY 4, 2023	Breeding bird survey (round 2)	8:30 AM to 10:30 AM	Clear skies, $\pm 25^{\circ}\text{C}$, light air, no trace of precipitation
SEPTEMBER 8, 2023	ELC vegetation community survey (fall)	11:00 AM to 4:30 PM	Mostly clear, $\pm 15^{\circ}\text{C}$, slight breeze, no trace of precipitation
FEBRUARY 8, 2024	Bat habitat suitability assessment	11:00 AM to 1:30 PM	Cloudy, $\pm 3^{\circ}\text{C}$, gentle breeze, no trace of precipitation
APRIL 16, 2024	Amphibian calling survey (round 1)	8:00 PM to 9:00 PM	Clear skies, $\pm 10^{\circ}\text{C}$, slight breeze, no trace of precipitation
MAY 16, 2024	Amphibian calling survey (round 2)	9:20 PM to 10:00 PM	Cloudy, $\pm 15^{\circ}\text{C}$, calm, no trace of precipitation
JUNE 7, 2024	ELC vegetation community survey (spring)	2:00 PM to 6:00 PM	Cloudy, $\pm 16^{\circ}\text{C}$, gentle breeze, rain



DATE	SURVEYS COMPLETED	TIME/ DURATION	WEATHER CONDITIONS*
JUNE 20, 2024	Amphibian calling survey (round 3)	11:00 PM to 11:30 PM	Cloudy, $\pm 21^{\circ}\text{C}$, light air, trace precipitation
JULY 12, 2024	Butternut Health Assessment (BHA)	10:45 AM to 11:45 AM	Mostly clear, $\pm 29^{\circ}\text{C}$, light air, no trace precipitation

*Sky cover is defined as Clear (0-25 %), Mostly Clear (25-50 %), and Cloudy (75-100 %).

Precipitation is defined as None, Trace, or Rain.

Wind is defined as Calm (0-2 km/h), Light Air (3-5 km/h), Slight Breeze (6-11 km/h), Gentle Breeze (12-19 km/h), Moderate Breeze (20-38 km/h), Fresh Breeze (29-38 km/h), or Very Windy (39+ km/h).

3.4.1. *Ecological Land Classification and Botanical Inventory*

A two (2) season inventory of plant species located within the Site was completed by traversing natural/semi-natural vegetation communities on the Site and recording the species observed. Species inventory surveys were completed on September 8, 2023, and June 7, 2024. Identified species were evaluated for their provincial rarity (i.e., "S-Rank") and SAR status based on the NHIC Species List (NHIC, 2024) and the Protected Species Ontario (PSO) List (O. Reg. 60/26) to determine significance. A complete list of plant species observed is presented in [Appendix C](#).

Vegetation communities were mapped and classified according to the ELC for Southern Ontario (Lee et al, 1998) and its accompanying vegetation type list (Lee, 2008). Community boundaries were delineated using recent digital aerial orthophotography and refined in the field. Vegetation communities were scored for dominant species cover, community structure, presence of indicator species, and other notable features.

3.4.2. *Breeding Bird Survey*

Breeding bird surveys were conducted on June 13 and July 4, 2023, under favourable conditions and temperatures with low/no wind and no precipitation.

Each survey was completed at least six days apart and within five hours of sunrise, using a modified version of the Forest Bird Monitoring Protocol (FMBP). A total of five (5) point counts were completed throughout the Site, separated by approximately 100 to 150 m ([Appendix B, Figure 4](#)). In addition to the point counts, an active search was completed which involved looking and listening for birds while moving between the different habitats in the Site.

Breeding evidence was noted for each species observed on the Site. Breeding evidence is divided into four categories: confirmed (CONF), probable (PROB), possible (POSS), and none (NONE).

- CONF breeding evidence includes observations involving young or eggs; observations of adult birds carrying food, nesting material, or a fecal sac; observations of adult birds involved in a distraction display; or observations of adult birds exhibiting physiological evidence of a brood patch.
- PROB breeding evidence includes observations of a bird occupying territory for at least seven (7) days, visiting a nest site, or exhibiting territorial behaviour; observations of a pair in appropriate habitat; or observations of a pair copulating.

- POSS breeding evidence includes observations of a singing male or observations of a bird in suitable breeding habitat.
- NONE refers to migrant or vagrant birds that are considered to have no breeding evidence.

3.4.3. Bat Snag Survey

SAR screening identified the potential for four SAR bat species currently listed as Endangered on the PSO List and protected under the SCA, specifically:

- Eastern Red Bat (*Lasiurus borealis*);
- Eastern small-footed Myotis (*Myotis leibii*);
- Hoary Bat (*Lasiurus cinereus*)
- Little Brown Myotis (*Myotis lucifugus*);
- Northern Myotis (*Myotis septentrionalis*);
- Silver-Haired Bat (*Lasionycteris noctivagans*); and,
- Tri-colored Bat (*Perimyotis subflavus*).

As potential roost habitat, maternity roost habitat and foraging habitat are present within the Study Area, a preliminary field assessment was conducted to define the location of potentially suitable habitat for these species using a modified version of the MECP Bat Survey Protocol (MECP, 2022). Specifically, steps 1 and 2 of the MECP 4 step survey protocol were completed as outlined below:

- Vegetation communities were mapped according to the ELC for southern Ontario (Lee et al., 1998) and its accompanying vegetation type list (Lee, 2008).
- Forest and swamp communities were surveyed to identify the location of all snags greater than 25 cm diameter at breast height (DBH). Snag density plots (as recommended by the MECP Bat Survey Protocol [2022]) were not considered suitable due to the small, narrow character of the treed habitats present on the Site. All treed habitats within the Site were surveyed by wandering transects, and all snag trees greater than 25 cm DBH were inventoried.

Acoustic monitoring as outlined in steps 3 and 4 of the MECP protocol were deemed not necessary at this time and will be reviewed again in the future as the development plan advances to confirm the proposed impacts to forest habitats by the proposed residential development to comply with applicable Acts and Policies.

3.4.4. Amphibian Calling Survey

Amphibian breeding activity was assessed using the Marsh Monitoring Program (MMP) Amphibian Calling Survey Protocol (Bird Studies Canada, 2008). Using air photo interpretation and field observations, a total of three stations were established throughout the Site near wetlands to obtain coverage of the entire Site (Appendix B, Figure 4).

During the surveys, all species heard over the course of the 3-minute survey period were documented, in addition to the Call Code. The Call Code is used to describe the calling intensity and is summarized as one of three codes:

- Code 1 – Individuals can be counted;
- Code 2 – Calls distinguishable with some simultaneous calling; and,



- Code 3 – Full chorus, with continuous and overlapping calls.

Surveys were completed by qualified, experienced staff under appropriate conditions (i.e., dusk/evening survey with suitable air temperatures, relative humidity and wind strength) on April 16, May 16, and June 20, 2024.

Amphibian calling survey results are discussed in Section 4.4.

3.5. SIGNIFICANT WILDLIFE HABITAT ASSESSMENT

Based on background information and field investigations, an assessment of potential SWH was performed to evaluate the potential of SWH to occur within or adjacent to the Site. Specifically, all types of SWH identified in the Significant Wildlife Habitat Technical Manual and the Ecoregion 6E criteria schedules were reviewed to determine if the Site has the potential to support SWH. The results of this evaluation are summarized in Section 5.4 and the complete SWH assessment matrix is provided in **Appendix G**.

3.6. ASSESSMENT OF SIGNIFICANCE, CONSTRAINTS, IMPACTS AND MITIGATION

The ecological database assembled for the project through agency consultation, background information review, and field investigations was assessed in consideration of the applicable policies outlined in Section 2, to determine the significance and status of the biophysical features and functions within the Site and to identify constraints to development. Constraints were used to guide the design of the proposed works and avoid impacts wherever possible. An assessment of residual impacts was completed and mitigation measures proposed as provided in Section 7.

4. EXISTING CONDITIONS

4.1. SITE AND STUDY AREA OVERVIEW

Overall, the Site is located in Ecoregion 6E and generally characterized by agricultural crop fields, separated by small, scattered tree features. The scoped Site consists of a single location for a proposed residential development in the Town of Whitchurch-Stouffville. The Site currently contains garages and trailers with the remaining area as crop fields separated by a hedgerow feature. While extensive woodland areas are largely located in the west of the overall parcel land, they partially extend onto the Site.

The Study Area includes residential developments to the north and east which includes Musselman Lake which is a designated Kettle Lake. While naturalized wooded wetland areas largely comprise the west and south portion of the entire land parcel. Remaining Study Areas immediately adjacent to the Site include an existing residential dwelling and agricultural crop fields.

4.2. VEGETATION AND WETLANDS

4.2.1. *Floral Inventory Summary*

A list of vascular plant species recorded during field investigations is provided in **Appendix C**. Based on the data collected, a total of 91 plant taxa were identified within the Study Area, of which, four (4) were identified to the genus level only. Of the 87 taxa identified to species level or greater, 38 (44%) are considered non-native in Ontario. All species observed are considered common, with provincial rarity ranks of SNA (not suitable for conservation activities) S4 (apparently secure), S5 (demonstrably secure), with the exception of a Butternut (*Juglans cinerea*) which is a provincially Endangered species protected under the SCA.

During field investigations, a single Butternut was observed along the northern Site boundary (**Appendix B, Figure 4**). As a Butternut was identified within the Site/Study Area, a Butternut Health Assessment (BHA) was undertaken by Butternut Health Experts (BHE) to assess this specimen on July 12, 2024. A BHA is undertaken when a proposed activity is likely to result in the killing, harming or taking of a Butternut tree. An assessment must be completed by a BHE to assess the health of the Butternut tree in question and determine the class to which the Butternut tree belongs (Category 1, 2 or 3), whether the tree is a putative hybrid and whether the tree is believed to be naturally occurring or cultivated. Results of the BHA are discussed further in Section 5.3.

No other plant species of conservation concern, including Endangered or Threatened species, were recorded.

4.2.2. *Ecological Land Classification*

The vegetation communities within the Site have been mapped (**Appendix B, Figure 4**) using the standardized ELC for Southern Ontario – first approximation (Lee et al., 1998) and the Southern Ontario Ecological Land Classification – Vegetation Type List (Lee, 2008). Thus, based on field investigations, identified communities are described below.



Unit 1: FOC2-2, Dry – Fresh White Cedar Coniferous Forest Type

A young Dry – Fresh White Cedar Coniferous Forest was located in the western area of the Site. The most dominant species in the canopy was Eastern White Cedar (*Thuja occidentalis*). The canopy had a height of 12 m and covered 90% of the unit. No subcanopy layer existed within this unit. The understorey was dominated by Eastern White Cedar, with a height of 2 m and provided 20% coverage of the unit. The ground layer was generally absent of vegetation due to the deep shade. Trees with DBH measurements from 10 to 24 cm were abundantly found throughout the unit.

Unit 2: CUW1, Mineral Cultural Woodland Ecosite

A young Cultural Woodland was located in the northern area of the Site. A small meadow inclusion was also present adjacent (Unit 2a - CUM1-1, Dry – Moist Old Field Meadow Type). In the woodland, the canopy layer contained no clear dominance by species; it included White Ash (*Fraxinus americana*), Black Walnut (*Juglans nigra*), Large Toothed Aspen (*Populus grandidentata*), American Basswood (*Tilia americana*), and Sugar Maple (*Acer saccharum*) all ranging in size from approximately 10 to 24 cm DBH. A row of mature planted Scots Pine (*Pinus sylvestris*) was present along the north edge of the woodland (adjacent to Unit 7). The canopy had a height of 15 m and provided 60% coverage for the unit. No sub-canopy layer existed within this unit. The understorey was dominated by Thicket Creeper (*Parthenocissus vitacea*), Riverbank Grape (*Vitis riparia*), Common Buckthorn (*Rhamnus cathartica*), Bell's Honeysuckle (*Lonicera xbella*); it had a height between 2 to 3 m and provided a 15% coverage for the unit. The ground layer contained a mix of forest understory species and meadow species including respectively: Tall Goldenrod (*Solidago altissima*), Smooth Brome (*Bromus inermis*), and Yarrow (*Achillea borealis*); and Heart-leaved Aster (*Symphyotrichum cordifolium*), Bloodroot (*Sanguinaria canadensis*), and invasive Lily-of-the-valley (*Convallaria majalis*).

Unit 3a: CVR, Residential

A residential area with buildings and driveways, mowed turfgrass, and occasional planted trees was present along the east edge of the Site.

Unit 3b: CUW1, Mineral Cultural Woodland Ecosite

A small Cultural Woodland adjacent to Wylie Lane was mapped as a cluster of trees that was generally mown beneath the canopy. This area was not reviewed in detail as it is well setback from the proposed development and is a small feature that is largely anthropogenically influenced.

Unit 3c: Recently Disturbed

This area was mostly disturbed and appeared to be a stockpile/dumping area adjacent to an area of ploughed/graded soil.

Unit 4: MAM2-2, Reed Canary Grass Mineral Meadow Marsh

A Reed Canary Grass Mineral Meadow Marsh bordering the southeast area of the Study Area was present. Two young Peachleaf Willow (*Salix amygdaloides*) with DBH measurements between 10 to 24 cm were present. The majority of the unit was dominated by Reed-canary Grass (*Phalaris arundinacea*) with a few Narrowleaf Cattail (*Typha angustifolia*) rarely scattered throughout the unit.



Unit 5: OAG, Open Agriculture

Two agricultural fields comprise the majority of the Site. During some surveys, the field was cropped in Common Wheat (*Triticum aestivum*), while during a more recent July 9, 2025 survey, the agricultural fields appeared fallow.

Unit 6a: HR, Hedgerow

Hedgerows were observed running north-south down the middle area of the Site and east-west south of the Site. The trees in the north tip of the north-south hedgerow have been cut down since 2022. The canopy layer was dominated by Black Walnut and Sugar Maple, providing approximately 70% coverage for the unit. DBH measurements for trees in the canopy range from less than 10 cm to greater than 50 cm with the majority of trees being in the 25 to 50 cm range. The height of the canopy layer is approximately 15 m. The subcanopy layer provides 20% coverage for the unit and is dominated by Riverbank Grape, Cranberry Viburnum (*Viburnum opulus* var *opulus*) and Sugar Maple, with a height of approximately 7.5 m providing 20% coverage for the unit. The majority of trees within the subcanopy have DBH measurements less than 10 cm and a few between 10 to 25 cm DBH. The understory was dominated by Cranberry Viburnum and Trembling Aspen (*Populus tremuloides*) providing approximately 30% coverage for the unit. Trees in the understory have DBH measurements less than 10 cm and between 10 to 25 cm. The height of the understory is approximately 5 m. The ground layer is dominated by Smooth Brome providing approximately 25% coverage for the unit, with a height less than 1 m.

Unit 6b: CUM1-1, Dry – Moist Old Field Meadow Type

A portion of the east-west hedgerow south of the Site was cultural meadow and was dominated by Tall Goldenrod and Smooth Brome.

Unit 7: FOD3-1, Dry-Fresh Poplar Deciduous Forest

A Dry-Fresh Poplar Deciduous Forest appeared as a relatively narrow extension of the larger woodlands to the west. The canopy was dominated by Trembling Aspen and Large-toothed Aspen, with occasional White Ash, American Basswood and rare Sugar Maple. The understory contained abundant Alternate-leaved Dogwood (*Cornus alternifolia*) with saplings of Poplars and White Ash. The ground layer was dominated by Zig-zag Goldenrod (*Solidago flexicaulis*) with other native forest understory plants including Rosey Sedge (*Carex rosea*), Virginia Waterleaf (*Hydrophyllum virginianum*), Red Baneberry (*Actaea rubra*), Eary Meadow-rue (*Thalictrum dioicum*), Bloodroot, and Heart-leaved Aster. Invasive Lily-of-the-valley was also abundantly present.

Unit 8: HR, Hedgerow

Projecting further east from the Unit 7 Poplar Forest, a narrow band of trees was observed separating the residential area to the north and the agricultural fields to the south. The hedgerow contained American Basswood, Large-toothed Aspen, Trembling Aspen, and Black Walnut. Alternate-leaved Dogwood and Staghorn Sumac (*Rhus typhina*) and Young White Ash comprised the understory.



4.3. BREEDING BIRD SURVEY

A total of 42 bird species were observed at the Site over the two survey periods. Refer to [Appendix D](#) for a list of birds observed during breeding bird surveys and incidentally within the Site during other field surveys.

Breeding was confirmed for 3 species including American Robin (*Turdus migratorius*), Red-winged Blackbird (*Agelaius phoeniceus*) and European Starling (*Sturnus vulgaris*).

Breeding was considered probable for 20 species such as American Goldfinch (*Spinus tristis*), Downy Woodpecker (*Dryobates pubescens*), Song Sparrow (*Melospiza melodia*), Northern Flicker (*Colaptes auratus*), Gray Catbird (*Dumetella carolinensis*) and Baltimore Oriole (*Icterus galbula*) to name a few.

Breeding was considered possible for 16 species such as Warbling Vireo (*Vireo gilvus*), Osprey (*Pandion haliaetus*), Belted Kingfisher (*Megasceryle alcyon*), Hairy Woodpecker (*Leucotomises villosus*), House Sparrow (*Passer domesticus*) and White-breasted Nuthatch (*Sitta carolinensis*).

Breeding evidence was not identified for 3 species including Ring-billed Gull (*Larus delawarensis*), Turkey Vulture (*Cathartes aura*) and Great Blue Heron (*Ardea herodias*).

Overall, most bird species identified during breeding bird surveys are considered generalist species which are common within Ontario and do not require specialized habitats. However, two SAR bird species; Eastern Wood-pewee (*Contopus virens*) and Chimney Swift (*Chaetura pelagica*) were observed within the Site and/or within the Study Area during surveys.

Eastern Wood-pewee is listed as a species of Special Concern on the COSSARO List. Only one (1) Eastern Wood-pewee was observed during the July 4, 2023, breeding bird survey at Station 4. This species was considered a possible breeder with potential suitable habitat may be found along forest edges found within the Site and in the Study Area.

Chimney Swift is listed as a Threatened species on the SARA List. Similarly, only one (1) Chimney Swift was observed flying high over the Site during the July 4, 2023, breeding bird survey at Station 3. This species was also considered a possible breeder; however, no potential suitable habitat (i.e., open chimneys) was found within the Site or Study Area.

4.4. AMPHIBIAN CALLING SURVEYS

During all amphibian calling surveys, no amphibians were heard calling at monitoring stations A1 located adjacent to the woodland feature on the western portion of the Site or at monitoring station A3 located within the northeastern portion of the Site. However, during all calling survey rounds, various amphibians were heard calling at monitoring station A2 located adjacent to the wetland feature to the immediate south of the Site and just outside the Study Area.

At monitoring station A2, during the April 16 and May 16, 2024, surveys, chorus of Spring Peepers (*Pseudacris crucifer*) could be heard within the general vicinity beyond the nearby eastern treeline. Similarly, during the June 20, 2024, survey, a chorus of Gray Treefrogs (*Hyla versicolor*) could be heard in the nearby treeline further south. Thus, with the exception of a single American Toad (*Anaxyrus*



americanus) heard calling within the Site, no amphibian calls were heard originating from the wetland feature to the immediate south of the Site during the May 16 and June 20, 2024, surveys. As such, amphibian calls originating from the small wetland feature to the immediate south were only heard on the April 16, 2024, survey. Approximately three Wood Frogs (*Lithobates sylvaticus*) and four Spring Peepers were recorded within this wetland feature.

Thus, amphibian species recorded during calling surveys included Spring Peepers, Grey Treefrogs, American Toad and Wood Frogs. These species are considered common species present within Ontario. Species can be found in a wide variety of terrestrial habitats from gardens to heavily forested areas. These species were calling beyond the Site and Study Area towards the southeast, indicating potential breeding habitat within this retained wetland feature. Potential amphibian breeding habitat indicated in this wetland in the southeast of the Site and Study Area will be assessed further as SWH in Section 5.4. However, no amphibian breeding habitat was indicated within north or western portions of the Site (i.e., Stations A1 and A3) and will not be discussed further.

4.5. BAT HABITAT ASSESSMENT AND SNAG SURVEY

A bat habitat assessment was undertaken with the Bat Survey Standard Note 2022 (MECP, 2022). Due to the small size of treed areas within the Site and woodland habitat largely within the Study Area and beyond, snag density survey plots were not considered practical, and so a comprehensive survey of the location and condition of all snag trees was completed on February 8, 2024. The results of the bat habitat suitability survey are presented **Appendix E** and snags identified during the snag survey are shown on **Appendix B, Figure 4**.

During the snag survey, 12 potential habitat trees (T1 to T12) were identified. However, with the exception of one moderate to high quality snag (T11), all other identified snags were considered to have low to moderate habitat potential for bats. To get a general indication if high quality potential roost habitat is present within the Study Area, as the total surveyed areas of the treed features within the Study Area containing the snags is approximately 2.5 ha, the snag density within the Study Area was calculated at approximately 4.8 snags/ha. In accordance with the Bat Survey Standard Note (MECP, 2022), this density is lower than the 10 snag/ha density required to be considered high quality potential roost habitat.

Thus, the habitat assessment indicates the Site contains low to moderate suitable roosting habitat for SAR bats largely located to the western and northern portions of the Site. A few trees are also present within hedgerow features within the Site (i.e., Unit 6a). Further, it is likely that additional suitable roosting habitat is located within the larger naturalized wooded wetland areas beyond the western and southern boundary of the Study Area.

4.6. INCIDENTAL WILDLIFE OBSERVATIONS

During several field investigations there were a number of incidental wildlife observations within the Site. Refer to **Appendix D** for a full list of Wildlife Species. Mammals such as Red Squirrel (*Tamiasciurus hudsonicus*) and Eastern Cottontail (*Sylvilagus floridanus*) were observed within the Site.

5. SIGNIFICANT FEATURES AND FUNCTIONS SUMMARY

A review of the natural environment features (as defined below) and functions identified on the Site or adjacent lands is presented in *Table 5-1*.

5.1. FISH HABITAT

The conservation, management, and protection of fish and fish habitat are the responsibility of DFO. DFO is given authority to achieve this under the federal Fisheries Act. In section 35 (1) of the Fisheries Act details that no person shall carry on any work, undertaking, or activity that results in harmful alternation, disruption or destruction of fish habitat. Plans to undertake activities in or near water that have the potential to negatively affect fisheries, shall be avoided or mitigated by following best practices such as those described in the 'Measures to protect fish and fish habitat on DFO's Projects Near Water' on the DFO Website. Any negative impacts to fish and fish habitat that remain following the implementation of avoidance and mitigation measures, is considered to have the potential to negatively affect a fishery. This potential for negative effects has to be reviewed by DFO under the Fisheries Act. If DFO determines that negative effects are likely as a result of the project, then a Fisheries Act Authorization (FAA) will be required.

Based on MNR's NHIC mapping and Map 4 of the Region OP, no watercourses were identified within the Site. A headwater drainage feature was indicated associated with the PSW feature immediately to the south of the Study Area; however, as this feature is within the wetland feature, is considered part of the wetland feature and will not be discussed further. Therefore, as the Site lacks internal watercourses and water features, no fish habitat was identified within the Site during field investigations.

The Musselman Lake is located within the Study Area approximately 30 m northeast of the Site. This feature is indicated as a Kettle Lake on Map 4 of the Region OP. From Ontario Geohub Aquatic Resource Area (ARA) Polygon Segment database indicates the thermal regime is unknown; however, fish species listed generally included tolerant baitfish species. Nonetheless, it is anticipated that the Musselman Lake most likely provides permanent direct fish habitat

However, the lake is separated from the Site by existing nearby developments and roadways and the proposed residential development is limited to the Site boundaries with no encroachments or in-water works proposed for the nearby lake. Thus, it is anticipated that indirect impacts towards water quality during construction can be mitigated though general mitigation measures outlined in Section 0 of this report and through the implementation of sediment and erosion control measures during construction. Thus, impacts and mitigation for nearby fish habitat (i.e., Musselman Lake) will not be discussed further.

5.2. SIGNIFICANT WETLANDS

Wetlands are defined in the PPS (OMMAH, 2024) as lands that are seasonally or permanently covered by shallow water, as well as lands where the water table is close to or at the surface. There are four major wetland types, which are classified as swamps, marshes, bogs, and fens. A significant wetland is defined as an area identified as provincially significant by the MNR using evaluation procedures established by

the province, as amended from time to time (OMMAH, 2024). Accordingly, it is the responsibility of the MNR to both identify and classify wetlands as significant in Ontario.

Based on a review of the MNR NHIC online mapping tool and as indicated on Map 4 of the Region OP, PSW features were identified within the Site and Study Area to the immediate south and west of the Site.

Review of requested background information provided by MNR (Steve Varga, pers. comm. August 4, 2023), indicated at the request of the landowner and adjacent landowner at the time, MNR staff re-examine the wetland boundaries of the provincially significant Musselman Lake Wetland Complex. Resulting in a visit on September 17, 2015, by MNR staff to refine the existing two wetland boundaries added six additional wetlands into the Musselman Lake Wetland Complex.

Based on field investigations and ELC mapping, this PSW feature was confirmed present immediately adjacent to the Study Area to the southeast (i.e., Unit 4 – MAM2-2). Wetland areas indicated within the western portion of the Site were not identified during field investigations; however, as indicated on MNR's refined mapping, wetlands are most likely are present further west within the woodland area beyond the Site (i.e., Study Area to the west and beyond). Staking of the MAM2-2 community was not undertaken as part of this EIS scope; however, the Client (pers. comm.) advised EnVision's ecologist that the wetland boundary had previously been staked and delineated and thus, was not required re-delineation by EnVision. ELC mapping of the wetland feature is presented on [Appendix B, Figure 3](#) (MNR) and [Figure 4](#) (EnVision).

Thus, PSW areas are present outside the Study Area ([Figure 4](#)) to the south and west of the Site, impacts and mitigation measures towards these areas considered necessary and will be discussed in Section 7.1.

5.3. ENDANGERED AND THREATENED SPECIES

Background information review, field investigations and agency consultation (J. Anderson, pers. comm. July 11, 2023; [Appendix A](#)) identified the potential presence of the following Endangered or Threatened species in the general vicinity of the Site.

- Bank Swallow (*Riparia riparia*) (Threatened [THR])
- Bobolink (*Dolichonyx oryzivorus*) (THR);
- Chimney Swift (THR);
- Eastern Meadowlark (*Sturnella magna*) (THR);
- Butternut (Endangered [END]);
- Eastern Small-footed Myotis (END);
- Little Brown Myotis (END);
- Northern Myotis (END); and,
- Tri-colored Bat (END).

A comprehensive review of the potential for these Endangered and Threatened to occur within the Site is presented in [Appendix F](#). During field investigations a few Endangered or Threatened species and/or potential habitat were observed and are discussed briefly below.

Endangered Bats (Eastern Small-footed Myotis, Little Brown Myotis, Northern Myotis and Tri-colored Bat)

ELC forest communities containing snag/wildlife habitat trees have potential to support bat maternity colonies. No bats were observed within the Site; however, no targeted surveys were conducted, and so bat species are considered to be potentially present. Overall, based on the bat habitat assessment, the Site has low habitat potential for bat species. Nonetheless, low to moderate suitable habitat areas are associated with the Unit 1 – FOC2-2 and Unit 7 – FOD3-1 communities present within the Site. As tree removals will be required as part of the proposed residential development, further review will be required once the Arborist Report and TPP are completed to confirm if any of the snags within potential roosting habitat will be impacted. If impacts to SAR bats are confirmed, suitable compensation will be provided to be compliant with the applicable Acts and Policies, in addition to the proposed restoration planting plan. This detail will be confirmed within the future Draft Plan submission.

Butternut

Following the BHA, the Butternut specimen identified outside of the Site boundary but within the Study Area was determined to be a Category 1 tree. Category 1 trees are affected by Butternut Canker to such an advanced degree that retaining the tree would not support the protection or recovery of Butternut trees in the area in which the tree is located. A BHA Report and Butternut Data Collection form were submitted to MECP on November 1, 2024. As 30 days have elapsed since the submission to MECP, the tree can be removed or retained dependent on proposed development (Species at Risk branch pers. comm. January 17, 2025). As such further protection such as setbacks are not considered necessary.

None of the other Endangered or Threatened species are considered likely based on the SAR screening exercise presented in [Appendix F](#), and no other Endangered or Threatened species were detected during field investigations. Overall, based on that assessment, it is anticipated the SAR species observed within the Site and/or species with potential habitat with the exception for SAR bats (which will be reviewed further for the Draft Plan submission), will not be negatively impacted by the proposed residential development and thus, impact assessment is not considered necessary and SAR species will not be discussed further.

5.4. SIGNIFICANT WILDLIFE HABITAT

Wildlife habitat is defined as areas where plants, animals, and other organisms live and find adequate amounts of food, water, shelter, and space needed to sustain their populations. Specific wildlife habitats of concern may include areas where species concentrate at a vulnerable point in their annual life cycle; and areas that are important to migratory or non-migratory species (OMMAH, 2024).

Wildlife habitat is referred to as significant if it is ecologically important in terms of features, functions, representation or amount, and contributing to the quality and diversity of an identifiable geographic area or natural heritage system (OMMAH, 2024).

Guidelines and criteria for the identification of SWH are detailed in the Significant Wildlife Habitat: Technical Guide (MNRF, 2000), and the Significant Wildlife Habitat Criterion Schedule for Ecoregion 6E (MNRF, 2015b).

SWH is described under the following categories:

- Seasonal concentrations of animals;



- Rare vegetation communities or specialized habitats for wildlife;
- Animal movement corridors; and
- Habitats of Species of Conservation Concern.

Species of Conservation Concern include species identified as Special Concern (SC) by COSSARO, and provincially rare species with an “S-Rank” of S1-S3. Background information review and agency consultation identified the potential presence of the following SC or provincially rare species in the general vicinity of the Site:

- Barn Swallow (*Hirundo rustica*) (SC);
- Snapping Turtle (*Chelydra serpentina*) (SC); and,
- Eastern Wood-pewee (SC).

An assessment of the habitat potential for the above-mentioned species in and within 120 m of the Site is provided in [Appendix G](#), below. These species were given special consideration during the field investigations. Based on SWH review, potential habitat for one Species of Conservation Concern (i.e., Eastern Wood-pewee), was identified and is discussed further below.

Eastern Wood-pewee

One (1) Eastern Wood-pewee was observed during the July 4, 2023, breeding bird survey at Station 4. Potential suitable habitat may be found along forest edges found within the Site and in the Study Area. Further, extensive woodland areas are largely present beyond the Site which may provide suitable habitat for this species which will remain unchanged, maintaining its current function. As the proposed residential development will require the select removal of a few trees a part of the forest edges found within specific locations within the Site, impacts and mitigation to Eastern Wood-pewee will be discussed once the tree removals are confirmed during the Draft Plan submission of the Arborist Report.

None of the other SC or rare species are considered likely based on the SAR screening exercise presented in [Appendix F](#), and none were detected during field investigations.

Based on the SWH assessment in [Appendix G](#), no other SWH were identified within the Site. However, due to the extensive woodland areas largely to the west of the Site, several potential candidate SWH were identified including:

- Raptor Wintering Area;
- Bat Maternity Colonies;
- Deer Yarding Areas;
- Bald Eagle and Osprey Nesting, Foraging and Perching Habitat; and,
- Woodland Nesting Habitat.

As the woodland areas are largely outside of the Site boundary and outside of this EIS's Study Area, these potential candidate SWH's beyond the Study Area and further were unable to be confirmed. However, it is anticipated that potential SWH's within the general vicinity are not anticipated to be negatively impacted by the proposed residential development which will be confirmed in the Draft Plan submission.

Only Amphibian Woodland Breeding Habitat was confirmed within the Study Area and beyond to the southeast of the Study Area. However, as this woodland area is located beyond the Site and will be

unchanged and maintain its current function is not anticipated to be negatively impacted by the proposed residential development and thus, will not be discussed further.

5.5. SIGNIFICANT AREAS OF NATURAL AND SCIENTIFIC INTEREST

An ANSI is defined as area of land and water containing natural landscapes or features that have been identified as having life science or earth science values related to protection, scientific study or education (OMMAH, 2024). ANSIs can be ranked as Provincially or Regionally significant.

The MNR's NHIC database indicated that a Life Science Provincially Significant ANSI exists on and within 120 m of the Site to the west. From MNR's Ontario Geohub ANSI dataset, identified the ANSI as the Musselman Lake Kettles and indicated as provincially significant. Further, background information received by MNR (Steve Varga, pers. comm. August 4, 2023), MNR made refinements to the Provincial Musselman Lake Kettles Life Science ANSI located on the western side of the Site on September 15, 2015.

As an ANSI was identified within the Site and Study Area, potential impacts and mitigation measures towards this feature will be discussed within Section 7.2.

5.6. SIGNIFICANT WOODLANDS

Significant woodlands are defined as treed areas that provide environmental and economic benefits such as erosion prevention, water retention, and provision of habitat, recreation and the sustainable harvest of woodland products (OMMAH, 2024). Woodlands include treed areas, woodlots or forested areas and vary in their level of significance. The identification and assessment of significant woodlands is the responsibility of the local planning bodies, in this case the York Region and Town of Whitchurch-Stouffville, and should be identified using criteria established by the MNR. Woodland significance is determined by evaluating key criteria related to woodland size, ecological function, uncommon woodland species, and economic/social value.

Woodland areas were indicated within the Site and Study Area largely to the immediate west and further south of the Site based on MNR's NHIC mapping, Map 5 of the Region OP and Schedule H of the Town of Whitchurch-Stouffville OP. As indicated in Policy 3.4.28 of the Region OP, determination of woodland significance will rely on site-specific studies per policies 3.4.30 and 3.4.31 of the Region OP. Thus, these policies were used to evaluate the woodland areas within the Site and Study Area, presented in **Appendix H**.

Based on the evaluation (**Appendix H, Table 1**) the larger contiguous woodland met the required Site requirements of the sub-criteria's (i.e., Policy 3.4.30[a and b]), occurs within the Regional Greenlands System and is within 30 m of a PSW, waterbody (i.e., Musselman Lake) and a Life Science ANSI.

Additionally, as the woodland was located within the ORM and met evaluation criteria outlined in ORMCP technical papers (**Appendix H, Table 2**) and did not meet exception criteria, the woodland areas within the Site and within the Study Area should be considered a significant woodland based on Policy 3.4.30 of the York Region OP.

As the Site is located within an existing settlement area and within the ORMCP would not meet criteria of Policy 3.4.31 to be considered a non-significant woodland otherwise deemed significant by Policy 3.4.30. As Policy 3.4.31 does not apply, Policy 3.4.32 of the Region OP permitting partial development and alteration within woodlands and requiring woodland compensation is not applicable and will not be discussed further.

No significant woodland criteria were identified within the Town of Whitchurch-Stouffville OP and thus, significant woodland evaluation relies on the Region criteria outlined above. As a significant woodland was identified within the Site and within the Study Area based on the Region OP evaluation criteria, impacts and mitigation towards significant woodlands will be discussed in Section 7.2.

5.7. SIGNIFICANT VALLEYLANDS

The PPS (OMMAH, 2024) refers to a significant valleyland as a natural area that occurs in a valley or other landform depression that has water flowing through or standing for some period of the year and is ecologically important in terms of features, functions, representation or amount, and contributes to the quality or diversity of an identifiable geographic region or natural heritage system. The local planning authority is responsible for identifying and evaluating significant valleylands.

No significant valleylands were identified during background review or during field investigations. Thus, significant valleylands will not be discussed further.

5.8. SIGNIFICANT FEATURE SUMMARY

The results of the assessment of key natural heritage features identified on or adjacent to the Site are provided in *Table 5-1* below.

Table 5-1: Significant Features Summary

FEATURE	PRESENT	COMMENT
FISH HABITAT	No	No internal watercourses or water features were identified within the Site thus, no fish habitat was identified within the Site during field investigations. It is anticipated that the Musselman Lake, a kettle lake located within the Study Area most likely provides permanent direct fish habitat. No direct impacts to fish habitat within the Study Area are anticipated as no in-water works are proposed. It is anticipated that indirect impacts towards off-site fish habitat can be mitigated though general mitigation measures outlined in Section 7.4. Thus, impacts and mitigation towards nearby fish habitat (i.e., Musselman Lake) will not be discussed further.
SIGNIFICANT ANSI	Yes	The Life Science provincially significant Musselman Lake Kettles ANSI was identified within the Site and Study Area. This feature was refined by MNR (Steve Varga, pers. comm. August 4, 2023) on September 15, 2015. As an ANSI was identified within the Site and Study Area, potential impacts and mitigation measures towards this feature will be discussed within Section 7.2.
THREATENED AND ENDANGERED SPECIES HABITAT	Yes	During field investigations a few Endangered or Threatened species and/or potential habitat were observed and are discussed briefly below. Endangered Bats (Eastern Small-footed Myotis, Little Brown Myotis, Northern Myotis and Tri-colored Bat) Overall, based on the bat habitat assessment, the Site has low habitat potential for bat species. As minimal select tree removals are proposed as part of the proposed residential development further review will be required once the Arborist Report and TPP are completed to confirm if any of the snags within potential roosting habitat will be impacted. If impacts to SAR bats are confirmed, suitable compensation will be provided to be compliant with the applicable Acts and Policies, in addition to the proposed restoration planting plan. This detail will be confirmed within the future Draft Plan submission. Butternut Following the BHA, the Butternut specimen identified off-Site within the Study Area was determined to be a Category 1 tree. Following consultation with MECP (Species at Risk branch pers. comm. January 17, 2025) protection measures such as setbacks are not considered necessary as this tree is not retainable. None of the other Endangered or Threatened species are considered likely based on the SAR screening exercise presented in Appendix F, and no other Endangered or Threatened species were detected during field investigations. Overall, based on that assessment, it is anticipated the SAR species observed within the Site and/or species with potential habitat with the exception for SAR bats (which will be reviewed further for the Draft Plan submission), will not be negatively impacted by the proposed residential development and thus, impact assessment is not considered necessary and SAR species will not be discussed further.
SIGNIFICANT WILDLIFE HABITAT	NO	Refer to Appendix G for a full SWH evaluation matrix. Eastern Wood-pewee: A single Eastern Wood-pewee was observed during the July 4, 2023, breeding bird survey at Station 4. Potential suitable habitat may be found along forest edges, as the proposed residential development will require the select and minimal removal of forest edges found within the Site at specific locations, impacts and mitigation to Eastern Wood-pewee will be discussed once the tree removals are confirmed through the Arborist and TPP during the Draft Plan submission. None of the other SC or rare species are considered likely based on the SAR screening exercise presented in Appendix F, and none were detected during field investigations. While no other SWH were identified within the Site. Several potential candidate SWH were identified within the extensive woodland areas largely to the west of the Site. However, as the woodland areas are largely off-site and outside of this EIS's Study Area, these potential candidate SWH's were unable to be confirmed. It is anticipated that potential SWH's within the general vicinity are not anticipated to be negatively impacted and will not be discussed further. Only Amphibian Woodland Breeding Habitat was confirmed within the Study Area and beyond to the southeast of the Site. However, as this woodland area is located beyond the Site and will remain unchanged and is not anticipated to be negatively impacted thus, will not be discussed further.

FEATURE	PRESENT	COMMENT
SIGNIFICANT WETLAND	Yes	The provincially significant Musselman Lake Wetland Complex was identified within the Study Area to the immediate south and west of the Site. ELC mapping identified Unit 4 - MAMM1-3 within the southeastern portion of the Study Area. Wetland areas indicated to the west most likely are present further west within the woodland area beyond the Study Area. Staking of the MAMM1-3 community was not undertaken as part of this EIS scope as advised by the Client (pers. comm.) the boundary had been previously staked and thus, re-delineation was not required. As such only ELC mapping of the wetland feature is presented on Appendix B, Figure 3 (MNR) and Figure 4 (EnVision). Thus, PSW areas are present within the Study Area to the south and west of the Site, impacts and mitigation measures towards these areas considered necessary and will be discussed in Section 7.1.
SIGNIFICANT WOODLAND	Yes	Woodland areas were indicated within the Study Area. As indicated in Policy 3.4.28 of the Region OP, determination of woodland significance will rely on site-specific studies per policies 3.4.30 and 3.4.31 of the Region OP. Thus, these policies were used to evaluate the woodland areas within the Site and Study Area, presented in Appendix H. Based on the evaluation (Appendix H, Table 1) the larger contiguous woodland met the required Site requirements of the Region OP's criteria. Additionally, as the woodland met evaluation criteria outlined in ORMCP technical papers (Appendix H, Table 2). Thus, the woodland areas within the Site and within the Study Area should be considered a significant woodland based on Policy 3.4.30 of the York Region OP. As the Site is located within an existing settlement area and within the ORMCP would not meet criteria of Policy 3.4.31 to be considered a non-significant woodland. As Policy 3.4.31 does not apply, Policy 3.4.32 of the Region OP was not applicable. No significant woodland criteria were identified within the Town of Whitchurch-Stouffville OP and thus, significant woodland evaluation relies on the Region criteria outlined above. As significant woodlands were identified within the Site and within the Study Area based on the Region OP evaluation criteria, impacts and mitigation towards significant woodlands will be discussed in Section 7.2.
SIGNIFICANT VALLEYLAND	No	No significant valleylands identified on or within 120 m of the Site.

6. PROPOSED SITE PLAN

The Client is proposing a residential development within the larger land. The residential community will consist of 18 lots and 35 total dwelling units. The lots will include a mix of single detached, semi-detached, townhouse, apartment and cluster housing. However, a ZBA through the Town of Whitchurch-Stouffville OP will be required prior to an application for Draft Plan for the Site.

A Site Plan of the proposed residential development is shown on [Appendix B, Figure 5](#) and [Appendix I](#).

7. IMPACTS AND MITIGATION

Potential impacts to the natural environment features and functions identified within the Site and adjacent lands, and proposed mitigation measures, are presented below, based on the proposed works outlined in Section 6 and identified on **Appendix B, Figure 5**. General mitigation measures applicable to the overall Site are discussed in Section 0.

As a ZBA is currently proposed, the impact and mitigation discussed will largely surround identifying constraints of identified natural heritage features within the Study Area intended to inform future development of the Site. However, as the ZBA is required to facilitate potential future development of the Site, a preliminary high-level discussion of impacts for typical construction works required for development such as tree removals will be included in the assessment below. As the design details and required construction activity will be developed in later phases of the project, it is anticipated that this EIS will be updated to address potential impacts of the future development of the Site. Information from other technical reports such as stormwater and geotechnical reports will be incorporated into the EIS as they become available.

7.1. SIGNIFICANT WETLAND

Background information indicated PSW within the Study Area to the immediate south and west of the Site. These areas were further identified as part of the provincially significant Musselman Lake Wetland Complex. Field investigations and ELC mapping confirmed the wetland feature immediately adjacent to the Study Area and was identified as a Unit 4 - MAMM1-3. Larger wetland areas indicated to the west of the Site were not identified during field investigations; however, are most likely present beyond the Study Area. The proposed ZBA and potential future development of the Site is not anticipated to negatively impact potential wetland areas to the west as these areas will likely be retained within the proposed significant woodland setback discussed in the next section.

As identified previously in Section 2 of this EIS, the ORMCP and Region OP requires a minimum 30 m VPZ from PSW features. However, since the PSW feature was not observed during field investigation, a 30 m PSW setback is not shown on **Appendix B, Figure 5**. Thus, no direct impacts to PSW within the Site and/or Study Area is anticipated.

For potential future development, through the implementation of an erosion and sediment control (ESC) plan and general mitigation measures, indirect impacts to nearby features can be successfully mitigated. Thus, as the PSW feature southeast of the Study Area will be maintained in its current form, it is anticipated that the ecological function of this feature will be maintained and not negatively impacted by the ZBA and potential future development of the Site.

7.2. SIGNIFICANT WOODLAND AND ANSI

Based on background review, largely within the western portion of the Study Area and beyond, is a large woodland associated with the Life Science provincially significant Musselman Lake Kettles ANSI. The woodland area to the west was also deemed a significant woodland based on the criteria from the

Region OP and ORMCP. While not confirmed, due to the extensive woodland and potential wetlands within this naturalized area may also contain several potential candidate SWH.

Moreover, the ORMCP and Region OP, requires significant woodlands to have a minimum 30 m VPZ from the tree canopy drip line of outermost trees within the woodland. VPZ from an ANSI are determine through an EIS. Thus, a 30 m significant woodland setback is shown on [Appendix B, Figure 5](#) associated with Units 1, 2 and 7. As relatively narrow linear treed areas such as hedgerows are excluded from woodland delineations (MNR, 2005), hedgerow areas within the Site are not included within the significant woodland area and hedgerow setbacks are not required. It is anticipated that the associated ANSI will be protected within the significant woodland setback and thus, is not shown.

The policy noted 30 m significant woodland setback significantly reduces the developable land within the Site. To make future development of the Site feasible, encroachment into the 30 m setback and into the woodland with minimal and select tree removals is proposed. Selected removal of trees is proposed for Lots 12, 13 and 14 with the exact number of trees proposed to be removed to be confirmed with the completion of the Arborist Report and TPP during Draft Plan. Due to existing farming operation within the Site within the survey dripline and in some locations, extending up to the adjacent tree trunks, the significant woodland edges have existing anthropogenic disturbed soils and root zones, thereby reducing their ecological sensitivity. Limiting proposed future development to the existing farm field edges (i.e., disturbed areas) within the Site, rather than the 30 m setback, is anticipated to be sufficient to maintain the current function of the adjacent natural heritage feature (i.e., significant woodland and ANSI). To compensate for encroachment into the 30 m significant woodland setback and the woodland feature with selected tree removals, a tree restoration area is proposed within the larger land parcel as a compensation/enhancement opportunity. This potential for setback encroachment, selected tree removals has been discussed by the proponent of this ZBA with the Town of Whitchurch-Stouffville staff, Kathryn Jones (Planner) and with Graham Ross (Arborists), who both appear to be receptive to accepting this level of impact to the Significant Woodland. However, further consultation and approval will be required by regulatory agencies to determine if this is accepted. Further, the proposed residential development plan has made great effort to retain high quality trees along hedgerows within the proposed development area (i.e., between Lots 9 and 10) to maintain the tree canopy where possible to further reduce to overall proposed number of tree removals. Confirmation of which trees will be removed and which will be retained will be done through the completion of the Arborist Report for the Draft Plan submission.

Thus, direct impacts to the significant woodland and associated ANSI are anticipated to be minimal as a result of ZBA and proposed future development of the Site which has already experienced prolonged impacts as a result of current and on-going agricultural practises which will cease with the proposed future residential development. As the current function of the woodland will be maintained, it is anticipated that the existing ecological functions including potential SWH's associated with ANSI and significant woodland will also not be affected due to the proposed residential development by building within the existing agricultural operations area and associated minimal and selective tree removals. It is anticipated potential indirect impacts resulting from construction activities during future potential development can be addressed through general mitigation measures with any tree removals



compensated with the proposed tree restoration area as noted on **Figure 5** in **Appendix B** and discussed further in Section 7.5 below.

7.3. VEGETATION CLEARING AND LOCAL WILDLIFE

While not required for the proposed ZBA, potential future development of the Site will require vegetation clearing and tree removals. Tree removals may result in the direct loss of general habitat for local wildlife within the vicinity and loss of potential roosting habitat for forest roosting bats. Potential indirect impacts may be associated with noise and vibration disturbance during future construction.

In the context of the overall woodland cover within the general vicinity, the localized and select removal of a few trees to facilitate potential future development of the Site, is not anticipated to impair or eliminate the overall function of the larger woodland to provide maternity roosting habitat or general forest habitat for local wildlife (e.g., Eastern Wood-pewee). To further mitigate impacts, all vegetation removals should avoid the core active season for bats and sensitive breeding bird window. It is recommended that vegetation clearing occur between October 1 and March 31 to avoid impacts to forest reliant species.

It is also anticipated that tree removals will be addressed through an Arborist Report and TPP, which will identify trees required for removals, protection measures for retained trees and any required compensation. It should also be noted that a considerable effort has been made to retain as many trees as possible along the hedgerow between Lots 9 and 10 to incorporate those trees into the proposed residential development. This assessment of which trees will be retained and removed will be confirmed within the Draft Plan submission

Other indirect impacts such as noise during future construction can be successfully mitigated through general mitigation measures. As the Site is situated in an existing settlement area with anthropogenic disturbances (i.e., roadways and buildings), it is anticipated that local wildlife is adapted to urban noise and the introduction of additional buildings within the Site will not increase wildlife mortality within the general vicinity. Thus, it is anticipated that local wildlife will not be negatively impacted by the future development of the Site.

7.4. GENERAL MITIGATION MEASURES

The following general recommendations are proposed to reduce impacts to local wildlife and key natural heritage features on and within 120 m of the Site. This should not be considered a comprehensive list as recommendations of other technical specialties and planning approval and/or permitting associated with these works will result in additional requirements.

- Temporarily store, handle, and dispose of materials used or generated (e.g., organics, soils, woody debris, temporary stockpiles) during site preparation and construction in a manner that prevents their entry into naturalized areas. It is recommended that materials temporarily stored within the Site are to be stockpiled as far away from the tree driplines and wetland areas, to mitigate negative impacts.



- Areas where clearing/grubbing will result in exposed soils within 30 m of wetland features should be isolated from surrounding areas with sturdy silt fencing that is maintained until exposed soils are revegetated to prevent erosion and sedimentation which could impact these features.
- Work areas will be clearly delineated on construction drawings and in the field to minimize the potential for unnecessary encroachment into natural areas.
- Maintenance, cleaning, or refuelling work on machinery should be completed a minimum of 30 m from sensitive natural environment features.
- The contractor shall not destroy active nest, or wound or kill birds, of species protected under the MBCA and/or Regulations under the MBCA. When active nests are encountered the contractor shall contact a qualified biologist and/or the MNR for direction.
- Should vegetation or trees need to be removed, to avoid impacts to nesting birds (and roosting bats, if present) it is recommended that trees or vegetation be removed between October 1 and March 31.
- Tree removal should conform to local, municipal, or regional by-laws, and should be performed by properly trained and accredited individuals.
- Wildlife incidentally encountered during construction shall not be knowingly harmed and shall be allowed to move away from construction on its own.
- In the event wildlife encountered during construction does not move from the construction zone, the contractor shall contact MNR District Office to move the animal to a safe area.
- If SAR are encountered within or adjacent to construction activities, the MECP SAR Branch is to be contacted immediately.

7.5. TREE RESTOATION AREA

As noted on **Figure 5** in **Appendix B**, a proposed Tree Restoration Area has been included into the residential development layout along the southside of Lots 3 to 8. A preliminary review of this area has estimated that the available area can accommodate the planting of approximately 50 to 60 trees. The trees proposed to be planted will be native species and will be selected from an approved species list and where possible, select the same species proposed for removal. Although this proposed planted area will not be physically connected to the woodland to the west, it is anticipated to function to support local wildlife as the existing hedgerow between Lots 9 and 10 that is anticipated to be retained as much as feasible within the proposed residential development. Further, a monitoring plan will be proposed during Draft Plan to ensure the planting success of the tree restoration area including measures to prevent invasive species from becoming established.

8. CONCLUSIONS

This EIS was prepared due to the presence of natural heritage features including significant wetlands, significant woodlands and a provincially significant ANSI within the Site and/or Study Area. A ZBA to facilitate a future residential development within the larger land parcel is currently proposed. As only a proposed Site Plan is currently available, following ZBA approval and during later detailed design phases, it is anticipated this EIS will be updated to confirm potential impacts of the future development proposed within the Site with respect of the anticipated selected tree removals. As such, this EIS largely identified constraints to development and identified required setbacks from natural heritage features. Largely based on the ORMCP and Region OP, a 30 m minimum VPZ is required from significant woodland areas as per policy. However, to provide a suitable developable footprint, encroachments into the 30 m setback are proposed along with selective tree removals along the woodland edge that have historically been impacted by on-going agricultural practises such that the significant woodland has adapted to these existing anthropogenic impacts. It is anticipated that the significant ANSI will be protected within the significant woodland except for a few proposed tree removals.

Moreover, a review of available background data indicated most of the species potentially found within the vicinity of the Site are common within Ontario and generally SAR species have low potential to be present within the Site. By restricting tree clearing activities to be outside of the active bat period, Endangered bat species are not anticipated to be adversely impacted. A Category 1 Butternut was identified outside of the Site boundary but within the Study Area and setbacks towards this specimen are not required. No SWH was identified within the Site; however, amphibian breeding woodland habitat was confirmed to the south of the Study Area along with several candidate SWH associated with the extensive woodland areas to the west. Overall, through appropriate mitigation the proposed ZBA to facilitate the potential future development of the Site is not anticipated to negatively impact identified natural heritage features or their associated functions within and adjacent to the Study Area.

Nonetheless, the potential adverse effects towards associated natural heritage features were assessed, and corresponding mitigation measures identified to minimize these effects, to create a balanced plan that maintains the form and function of the features and protects the wildlife species reliant to the habitats within the Site and surrounding Study Area.

9. SIGNATURES

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9.1. QUALIFIER

EnVision prepared this report solely for the use of the intended recipient in accordance with the professional services agreement. In the event a contract has not been executed, the parties agree that the EnVision General Terms and Conditions, which were provided prior to the preparation of this report, shall govern their business relationship.

The report is intended to be used in its entirety. No excerpts may be taken to be representative of the findings in the assessment. The conclusions presented in this report are based on work performed by trained, professional and technical staff, in accordance with their reasonable interpretation of current and accepted engineering and scientific practices at the time the work was performed.

The content and opinions contained in the report are based on the observations and/or information available to EnVision at the time of preparation, using investigation techniques and engineering analysis methods consistent with those ordinarily exercised by EnVision and other engineering/scientific practitioners working under similar conditions, and subject to the same time, financial and physical constraints applicable to this project.



EnVision disclaims any obligation to update this report if, after the date of this report, any conditions appear to differ significantly from those presented in this report; however, EnVision reserves the right to amend or supplement this report based on additional information, documentation or evidence.

EnVision makes no other representations whatsoever concerning the legal significance of its findings. The intended recipient is solely responsible for the disclosure of any information contained in this report. If a third party makes use of, relies on, or makes decisions in accordance with this report, said third party is solely responsible for such use, reliance or decisions. EnVision does not accept responsibility for damages, if any, suffered by any third party as a result of decisions made or actions taken by said third party based on this report.

EnVision has provided services to the intended recipient in accordance with the professional services agreement between the parties and in a manner consistent with that degree of care, skill and diligence normally provided by members of the same profession performing the same or comparable services in respect of projects of a similar nature in similar circumstances. It is understood and agreed by EnVision and the recipient of this report that EnVision provides no warranty, express or implied, of any kind. Without limiting the generality of the foregoing, it is agreed and understood by EnVision and the recipient of this report that EnVision makes no representation or warranty whatsoever as to the sufficiency of its scope of work for the purpose sought by the recipient of this report.

In preparing this report, EnVision has relied in good faith on information provided by others, as noted in the report. EnVision has reasonably assumed that the information provided is correct and EnVision is not responsible for the accuracy or completeness of such information.

Unless otherwise agreed in writing by EnVision, the report shall not be used to express or imply warranty as to the suitability of the site for a particular purpose. EnVision disclaims any responsibility for consequential financial effects on transactions or property values, or requirements for follow-up actions/or costs.

This limitations statement is considered an integral part of this report.



10. REFERENCES

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APPENDIX A:

Email Correspondences

Anne Ha

From: Anne Ha
Sent: August 8, 2023 4:53 PM
To: developmenthelp@townofws.ca
Subject: Wylie Lane TOR Submission
Attachments: 23-0462 Wylie Lane TOR.pdf; Study Area_Wylie Ln.PNG

To Whom it May Concern,

EnVision Consultants Ltd (EnVision) has been retained to complete an Environmental Impact Study (EIS) report for the property Wylie Lane, Stouffville, ON located at 638086 E 4876269 N (see attached .PNG).

Additionally, attached to this email is the submission of the Terms of Reference (TOR) for review.

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

Thank you,

Anne Ha, B.Sc.
Junior Ecologist



6415 Northwest Drive U37-40,
Mississauga, ON, L4V1X1
Cell / 647-997-5650
Office/ 905-677-0202
Email / aha@envisionconsultants.ca
Website / www.envisionconsultants.ca

Anne Ha

From: Development Help <developmenthelp@townofws.ca>
Sent: August 8, 2023 4:53 PM
To: Anne Ha
Subject: Automatic reply: Wylie Lane TOR Submission

Hello,

Thank you for your e-mail.

Please be advised that we are experiencing a higher volume of e-mails than normal. Staff will do their best to get back to you within five (5) business days.

Thank you for your understanding.

PLANNING STAFF

Development Services

111 Sandiford Drive, Stouffville, Ontario L4A 0Z8

t: 905-640-1900 ext. 2442 | **tf:** (855) 642-TOWN | [townofws.ca](mailto:developmenthelp@townofws.ca)



This email and any files transmitted with it are confidential and are intended solely for the use of the individual or entity to whom they are addressed. If you are not the intended recipient or the person responsible for delivering the email to the intended recipient, be advised that you have received this email in error and that any use, dissemination, forwarding, printing, or copying of this email is strictly prohibited. If you have received this email in error, please immediately notify me by telephone at (905) 640-1900 ext. 2442.

Anne Ha

From: Anne Ha
Sent: June 7, 2024 4:24 PM
To: Development Help
Subject: RE: Wylie Lane TOR Submission

Hello,

I would like to follow-up on this Terms of Reference submission made on August 8, 2023, as I have not heard back.

Thank you,



Anne Ha, B.Sc.
Ecologist
ISA Certified Arborist (ON-3179A)
Cell / 647-997-5650
Email / aha@envisionconsultants.ca

From: Development Help <developmenthelp@townofws.ca>
Sent: Tuesday, August 8, 2023 4:53 PM
To: Anne Ha <aha@envisionconsultants.ca>
Subject: Automatic reply: Wylie Lane TOR Submission

Hello,

Thank you for your e-mail.

Please be advised that we are experiencing a higher volume of e-mails than normal. Staff will do their best to get back to you within five (5) business days.

Thank you for your understanding.

PLANNING STAFF

Development Services
111 Sandiford Drive, Stouffville, Ontario L4A 0Z8
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Anne Ha

From: Development Help <developmenthelp@townofws.ca>
Sent: June 7, 2024 4:24 PM
To: Anne Ha
Subject: Automatic reply: Wylie Lane TOR Submission

Thank you for contacting the Town of Stouffville's Development Planning Division. Your inquiry is important to us!

Please note - this inbox is monitored Monday to Friday from 8:30am to 4:30pm, excluding civic and statutory holidays. We will continue to do our best to respond to your inquiry in a timely manner.

If you require immediate assistance, please contact the Town of Stouffville's main line at 905-640-1900 and a Customer Service associate will be happy to assist you or direct your inquiry. Please note that after 4:30pm Monday to Friday, and on weekends, civic and statutory holidays, your call will be directed to our after-hours answering service.

Thank you and have a wonderful day!

PLANNING STAFF

Development Services

111 Sandiford Drive, Stouffville, Ontario L4A 0Z8

t: 905-640-1900 ext. 2442 | tf: (855) 642-TOWN | [townofws.ca](https://www.townofws.ca)



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Anne Ha

From: Jessica Chan <J.Chan@lsrca.on.ca>
Sent: July 24, 2023 10:20 AM
To: Anne Ha
Subject: RE: Contact Us

Follow Up Flag: Follow up
Flag Status: Flagged

You don't often get email from j.chan@lsrca.on.ca. [Learn why this is important](#)

Good morning Anne,

LSRCA's data can be found using this link to our Open Data portal: <https://www.lsrca.on.ca/watershed-health/open-data>.

In our data portal, you can find our natural heritage system (NHSRS) and our landcover/ELC layer which is based on ortho-interpretation and has not been ground-truthed.

Please note, there are provincially significant wetlands on the subject property so you should contact the MNRF for information on the Musselman Lake Provincial Wetland.

Please let me know if you need anything further.

Best,

Jessica Chan, B.Sc.(Env.) (she/her)
Natural Heritage Ecologist
Lake Simcoe Region Conservation Authority
120 Bayview Parkway
Newmarket, Ontario L3Y 3W3
905-895-1281, ext. 132 | 1-800-465-0437
j.chan@LSRCA.on.ca | www.LSRCA.on.ca
Twitter: @LSRCA
Facebook: LakeSimcoeConservation

Please note: the LSRCA Board of Directors approved a change to our Fee Policy. The new fees took effect on December 30, 2022. Please click [here](#) to view our updated fee schedule.

The information in this message (including attachments) is directed in confidence solely to the person(s) named above and may not be otherwise distributed, copied or disclosed. The message may contain information that is privileged, confidential and exempt from disclosure under the Municipal Freedom of Information and Protection of Privacy Act and by the Personal Information Protection Electronic Documents Act. If you have received this message in error, please notify the sender immediately and delete the message without making a copy. Thank you.

From: Info Mail <infomail@lsrca.on.ca>
Sent: Tuesday, July 11, 2023 8:41 AM
To: Jessica Lim <J.Lim@lsrca.on.ca>
Subject: FW: Contact Us

From: noreply@formstack.com <noreply@formstack.com>
Sent: Monday, July 10, 2023 11:01 PM

To: Info Mail <infomail@lsrca.on.ca>

Subject: Contact Us

CAUTION: This email originated outside of LSRCA. DO NOT click links or open attachments unless you recognize the sender and trusted content. If in doubt, contact the IT Helpdesk at ITHelpdesk@lsrca.on.ca



Formstack Submission For: **Contact Us**

Submitted at 07/10/23 11:00 PM

Your Name: Anne Ha

Your Email Address: aha@envisionconsultants.ca

Area of Interest: Other

Municipality/Region: Town of Whitchurch-Stouffville / York Region

Have you already contacted a Lake Simcoe Conservation staff member?: No

Comments:

To Whom it May Concern,

EnVision Consultants Ltd (EnVision) has been retained to complete an Environment Impact Study (EIS) report for 2 Wylie Lane, Stouffville, ON located at 638086 E 4876269 N.

The purpose of this email is to request any available Natural Heritage information for the subject property and the general area. Any details or information that you can provide to help our natural heritage inventory would be greatly appreciated.

Thank you,

Anne Ha
Junior Ecologist

Anne Ha

From: Varga, Steve (MNRF) <steve.varga@ontario.ca>
Sent: August 4, 2023 3:10 PM
To: Anne Ha
Subject: RE- Natural Heritage Information on 2 Wylie Lane
Attachments: Musselman Lake Wetland Complex Map 2016.pdf; Musselman Lake Wetlands_Update Letter April 2016.pdf; 2 Wylie Lane_Map.pdf; NHGuide_MNRF_2019-04-01.pdf

You don't often get email from steve.varga@ontario.ca. [Learn why this is important](#)

Hi Anne

You requested background natural heritage information on the subject property at 2 Wylie Lane in the Town of Whitchurch-Stouffville. At the request of the landowner at 2 Wylie Lane and the adjacent landowner to the south, the Ministry did a site visit to the subject properties on September 15, 2015 (see attached pdf letter and accompanying map). The site visit resulted in an update to the provincially significant Musselman Lake Wetland Complex. A refinement was also made to the Provincial Musselman Lake Kettles Life Science Area of Natural and Scientific Interest (ANSI) that is situated on the western side of the subject property (see attached 2 Wylie Lane Map).

It should be noted that the subject property occurs in the Oak Ridges Moraine Conservation Plan and most of it is designated Natural Core Area except for a Rural Settlement Area designation in a small corner of the property next to Musselman Lake (see attached 2 Wylie Lane map).

All the mapping shown including the shape files are available free of charge on our provincial database (see attached guide).

If you have any questions on this material please email me or call me.

All the best
Steve

Steve Varga

Management Biologist | Ontario Ministry of Natural Resources and Forestry | Aurora-Midhurst-Owen Sound (AMOS) District Office

50 Bloomington Road, Aurora, Ontario, L4G 0L8 | Email: steve.varga@ontario.ca | Phone: 289-221-8157

For general inquiries, please contact the Aurora District line at 905-713-7400



From: MIDHURSTINFO (MNRF) <MIDHURSTINFO@ontario.ca>
Sent: July 27, 2023 1:14 PM
To: NRISC (MNRF) <NRISC@ontario.ca>; Scientific Collection Permits Aurora (MNRF) <scp.aurora@ontario.ca>
Subject: FW: Reply: Yes, Page: /page/ministry-natural-resources-and-forestry (65620)

Good Afternoon,

This email is being forwarded to the Aurora Work Centre to respond. It falls within their work centre.

Thanks,

Shari Haak

Resources Clerk | Aurora Midhurst Owen Sound District Office
Ministry of Natural Resources and Forestry
☎ 226-974-2967 | ✉ shari.haak@ontario.ca

From: NRISC (MNRF) <NRISC@ontario.ca>

Sent: July 27, 2023 11:50 AM

To: MIDHURSTINFO (MNRF) <MIDHURSTINFO@ontario.ca>

Subject: Fw: Reply: Yes, Page: /page/ministry-natural-resources-and-forestry (65620)

Hello -

The following email was received at the Natural Resources Information and Support Centre (NRISC). Please respond directly to the client or have someone in your area respond, and cc the NRISC for our information; alternatively, you may provide us with a response to forward to the client.

Regards,

NRISC web reader - SF

Natural Resources Information and Support Centre

Ministry of Natural Resources and Forestry

300 Water Street

Peterborough, ON K9J 3C7

Tel: 1-800-667-1940 / 1-800-387-7011

TTY: 1-866-686-6072

NRISC@ontario.ca



Please Note: As part of providing [accessible customer service](#), please let us know if you have any accommodation needs or require communication supports or alternate formats.

From: ontario.ca <do.not.reply@ontario.ca>
Sent: Tuesday, July 25, 2023 12:20 PM
To: NRISC (MNRF) <NRISC@ontario.ca>
Subject: Reply: Yes, Page: /page/ministry-natural-resources-and-forestry (65620)

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

Referring page: /page/ministry-natural-resources-and-forestry (65620)

Message:

To Whom it May Concern,

EnVision Consultants Ltd (EnVision) has been retained to complete an Environment Impact Study (EIS) report for 2 Wylie Lane, Stouffville, ON located at 638086 E 4876269 N.

The purpose of this email is to request any available Natural Heritage information for the subject property and the general area. Through background review and correspondence with LSRCA, indicates a provincially significant wetland (PSW) on/near the subject property (i.e., the Musselman Lake Provincial Wetland) is present. Thus, any details or information that you can provide regarding this PSW and any additional ecological features within the general vicinity to help our natural heritage inventory would be greatly appreciated.

Thank you,

Anne

Reply Request: Yes

Name: Anne Ha

E-mail: aha@envisionconsultants.ca

Phone number: [6479975650](tel:6479975650)

Address:

Anne Ha

From: Species at Risk (MECP) <SAROntario@ontario.ca>
Sent: January 17, 2025 11:18 AM
To: Christian Buchanan-Fraser
Cc: Alex Stettler
Subject: RE: Butternut Health Assessment Report and Butternut Data Collection Form - Submission

Hi Christian,

You may proceed with removing the tree since it has been 30 days since we have approved your submission.

Have a great day,
Species at Risk branch

From: Christian Buchanan-Fraser <cbuchanan@envisionconsultants.ca>
Sent: Friday, January 17, 2025 9:54 AM
To: Species at Risk (MECP) <SAROntario@ontario.ca>
Cc: Alex Stettler <astettler@envisionconsultants.ca>
Subject: Re: Butternut Health Assessment Report and Butternut Data Collection Form - Submission

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

To Whom it May Concern,

In regard to EnVision Consultant's Butternut Health Assessment form submitted on November 1, 2024 for a single Category 1 tree in Whitchurch-Stouffville, please advise on when a response/timeline estimate for a response can be expected. We believe that since 30 days have past since our submission, the Ministry will not submit a request to examine the tree. We hope to hear from you soon.

Thank you,



Christian Buchanan-Fraser, B.Sc., M.Sc
Junior Ecologist
Cell / 519-320-9015
Email / cbuchanan@envisionconsultants.ca

From: Species at Risk (MECP) <SAROntario@ontario.ca>
Sent: Friday, November 1, 2024 9:57 AM
To: Christian Buchanan-Fraser <cbuchanan@envisionconsultants.ca>
Cc: Alex Stettler <astettler@envisionconsultants.ca>
Subject: RE: Butternut Health Assessment Report and Butternut Data Collection Form - Submission

Hello Christian,

Thank you for submitting your Butternut Health Assessment (BHA) to the Species at Risk Branch (SARB).

Please use this email as acceptance of your submission, dated November 1st, 2024.

If you are proposing to rely on [Part 5 of Ontario Regulation 830/21](#) for the tree identified in the BHA, then you are eligible to do so 30-days following the date that the BHA was submitted to the SARB.

Thank you,
Species at Risk Branch

From: Christian Buchanan-Fraser <cbuchanan@envisionconsultants.ca>
Sent: Friday, November 1, 2024 9:37 AM
To: Species at Risk (MECP) <SAROntario@ontario.ca>
Cc: Alex Stettler <astettler@envisionconsultants.ca>
Subject: Butternut Health Assessment Report and Butternut Data Collection Form - Submission

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

To Whom it May Concern,

Attached is the Butternut Health Assessment Report and Butternut Data Collection form for a single Category 1 tree in Whitchurch-Stouffville, Ontario.

Thank you,

Christian Buchanan-Fraser
Junior Ecologist



435 McNeilly Road, Unit 103,

Hamilton, ON, L8E 5E3

Cell / 519-320-9015

Email / cbuchanan@envisionconsultants.ca

Website / www.envisionconsultants.ca

Anne Ha

From: Andersen, Jeff (MECP) <Jeff.Andersen@ontario.ca>
Sent: July 11, 2023 4:12 PM
To: Anne Ha
Subject: RE: Request for Information: 2 Wylie Lane, ON

Anne;

Thank you for your submission to the Ministry of the Environment, Conservation and Parks (MECP) about species at risk (SAR).

MECP is responsible for the administration of the *Endangered Species Act, 2007* (ESA). The ESA provides for the protection and recovery of species listed as endangered or threatened on the Species at Risk List in Ontario ([O. Reg. 230/08: SPECIES AT RISK IN ONTARIO LIST](#)). The ESA ([Endangered Species Act, 2007, S.O. 2007, c. 6 \(ontario.ca\)](#)) prohibits any person from “kill, harm, harass, capture or take a living member of a species...” (Section 9) and/or prohibits a person from “damage or destroy the habitat of a species...” (Section 10) that is listed on the Species at Risk in Ontario List as an endangered or threatened species, without an exemption or authorization.

Seeking an ESA authorization or exemption is a proponent-led process. This means that the person carrying out the activity is responsible for determining SAR presence/absence, activity impacts on SAR if any, and ultimately ensuring their actions do not contravene the ESA. **Authorization may be sought if you are planning an activity that is likely to impact SAR and/or their habitat in a manner that is prohibited by section 9 or 10 of the ESA.** Depending on the impacts, the authorization may take the form of a permit issued under the ESA by the Minister or an agreement entered into with the Minister, or you may be able to follow rules set out in an applicable regulation made under the ESA. Authorizations from other jurisdictions (e.g. an approved site plan from a municipality) do not limit the application of the ESA to your planned activities nor your duty to comply with the ESA.

For information on completing a preliminary screening for SAR to assess and determine which SAR may be present on or in the area of your site, please refer to the MECP’s Draft “**Client’s Guide to Preliminary Screening for Species at Risk**” (attached).

MECP is managing an extremely high volume of requests. To action them in priority sequence of receipt, it may take up to 3 months to receive a response from MECP and so the following is offered for your consideration on moving your project forward.

If you have carried out a thorough SAR screening and the proper field assessments and surveys, where necessary, and you can confidently confirm that there are no species at risk or habitat located on or adjacent to the site of your activity and your activity will therefore not cause any impacts, you can proceed. In this case, an authorization under the ESA would not be necessary. The ministry strongly recommends that you document your SAR preliminary screening and assessment and rationale for avoiding prohibited impacts for future reference if needed. Proponents are responsible for ensuring their actions do not contravene the ESA.

If there IS evidence of species at risk and/or habitat on or around the location of your activity, but in considering that evidence it may be possible to carry out the activity in such a way that you WILL NOT have any prohibited impacts to species (ESA section 9) or habitat (ESA section 10), you can proceed. In this case, an authorization under the ESA would not be necessary. The ministry strongly recommends that you document

your SAR preliminary screening and assessment and rationale for avoiding prohibited impacts for future reference if needed. Proponents are responsible for ensuring their actions do not contravene the ESA.

If after considering the SAR screening and potential for impacts you have determined that the proposed activities COULD POTENTIALLY have adverse impacts prohibited by sections 9 and/or 10 of the ESA, please consider submitting an Information Gathering Form (IGF). A complete IGF includes documentation of consideration of all the elements in your SAR screening data collection and further levels of assessment of impacts and potential to minimize adverse effects. This means, please include information in the IGF on SAR presence/absence, surveys that were undertaken, survey methodologies, data collected, consideration of [Harm and Harass](#) and habitat [Damage and Destroy](#) policy guidance and species specific recovery strategies to support your rationale for determination as to whether or not your planned activities will cause either a section 9 or section 10 prohibited impact to any SAR individuals or habitats. For more information on how to get an ESA permit or authorization please visit [How to get an Endangered Species Act permit or authorization | ontario.ca](#)

Please consider in your project planning that it may take an average of 12-15 months from the submission of an IGF to a decision about a permit, if one is needed. This timing considers the time required to conduct the technical review of the application as well as public and Indigenous consultation along with factors such as project complexity, volume of applications and quality of submissions. It is recommended that proponents submit a complete IGF to SAROntario@ontario.ca well in advance of the project's proposed start date. Failure to submit a complete and accurate IGF with supporting rationale and not allowing adequate time for project review and authorization issuance (if required) could result in delays to the project's anticipated start date.

Regards;

JEFF J. ANDERSEN

**MANAGEMENT BIOLOGIST
PERMISSIONS SECTION, SPECIES AT RISK BRANCH
LAND AND WATER DIVISION
ONTARIO MINISTRY OF THE ENVIRONMENT, CONSERVATION AND PARKS**

50 Bloomington Road, Aurora ON L4G 0L8 | jeff.andersen@ontario.ca | 289-221-1705

From: Anne Ha <aha@envisionconsultants.ca>
Sent: July 11, 2023 9:52 AM
To: Andersen, Jeff (MECP) <Jeff.Andersen@ontario.ca>
Subject: Request for Information: 2 Wylie Lane, ON

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

Hi Jeff,

EnVision Consultants Ltd (EnVision) has been retained to complete an Environmental Impact Study (EIS) for 2 Wylie Lane, Stouffville, Ontario 638086 E 4876269 N (see attached .jpeg). The purpose of this email is to request any available information regarding species at risk (SAR).

A review of background information including the Natural Heritage Information Center (NHIC) data available through the Ministry of Natural Resources and Forestry Make a Map: Natural Heritage Areas application, ebird, and iNaturalist indicate the following SAR have been documented within the vicinity of the Site:

- Bank Swallow (*Riparia riparia*);
- Barn Swallow (*Hirundo rustica*);
- Bobolink (*Dolichonyx oryzivorus*);
- Eastern Wood-Pewee (*Contopus virens*);
- Eastern Meadowlark (*Sturnella magna*); and,
- Snapping Turtle (*Chelydra serpentina*).

Based on aerials potential habitat for:

- Little Brown Myotis (*Myotis lucifugus*);
- Northern Myotis (*Myotis septentrionalis*);
- Tri-colored Bat (*Perimyotis subflavus*); and
- Eastern small-footed Myotis (*Myotis leibii*).

If possible, please confirm:

- That there are no other records of SAR or species of conservation concern on or within the vicinity of the Site.

Any other details or information that you can provide to help our natural heritage inventory would be greatly appreciated.

Thank you,

Anne Ha, B.Sc.
Junior Ecologist

ENVISION

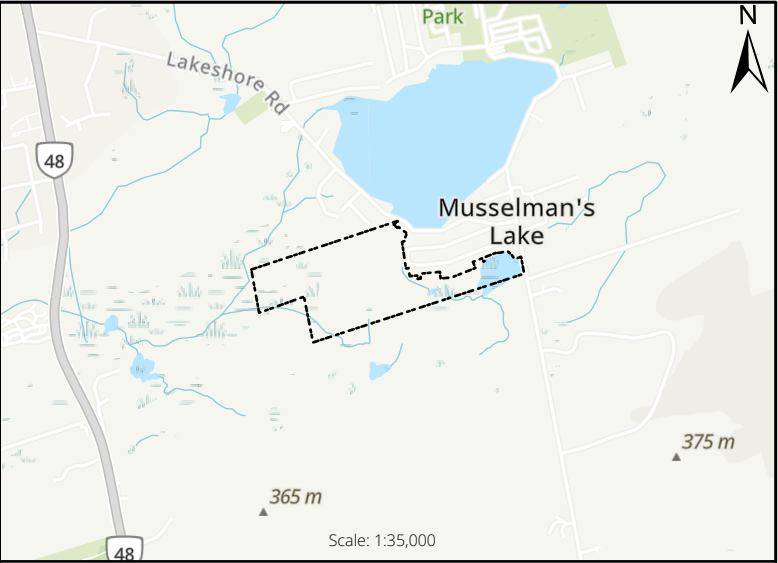
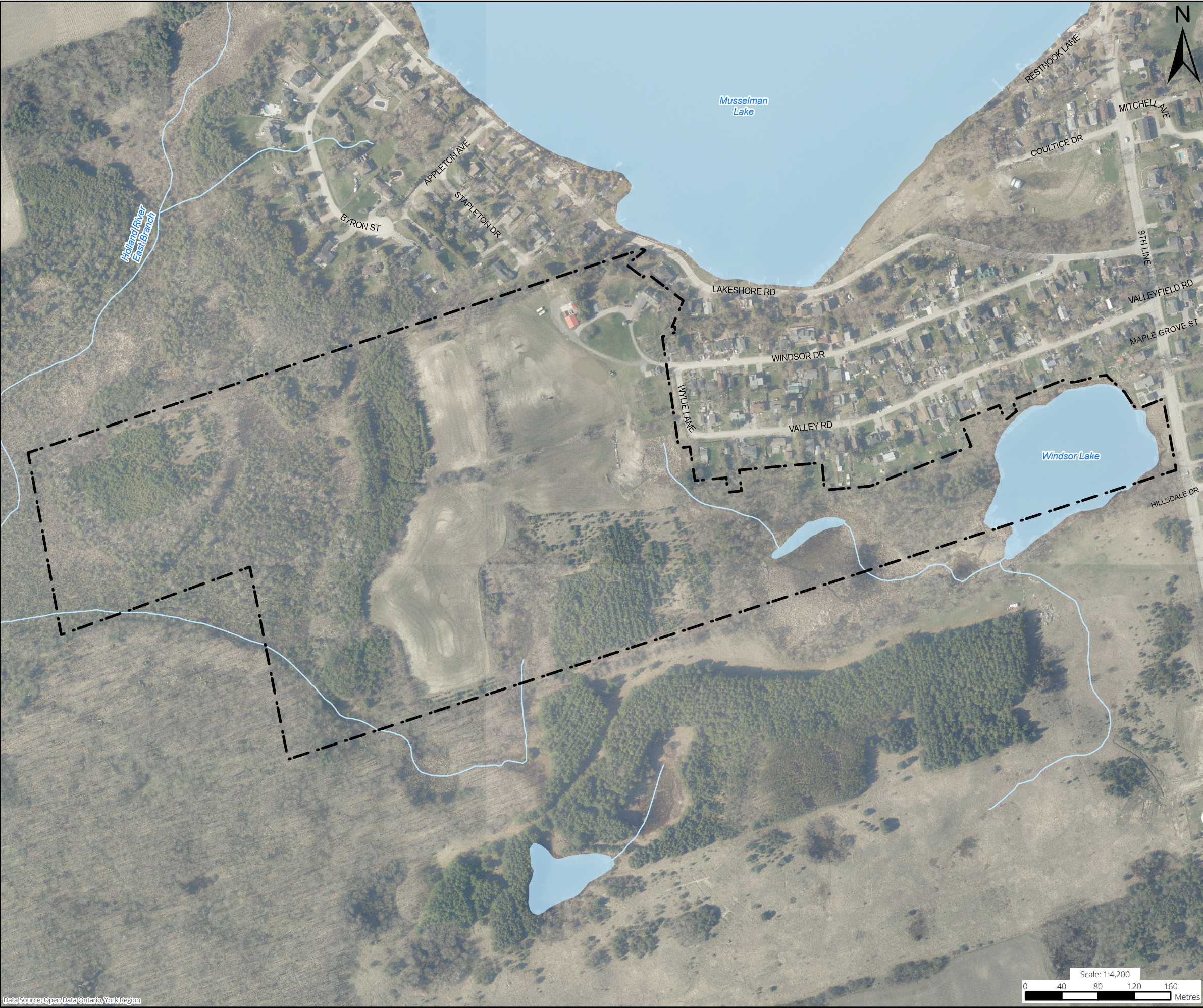
CONSULTANTS LTD

6415 Northwest Drive U37-40,
Mississauga, ON, L4V1X1
Cell / 647-997-5650
Office/ 905-677-0202
Email / aha@envisionconsultants.ca
Website / www.envisionconsultants.ca



APPENDIX B:

Figures



LEGEND

- OVERALL LAND PARCEL
- WATERCOURSE
- WATERBODY

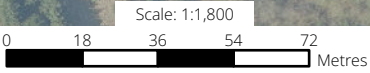
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PROJECT				
ENVIRONMENTAL IMPACT STUDY WYLIE LANE DEVELOPMENT TOWN OF WHITCHURCH-STOUFFVILLE YORK REGION, ONTARIO				
CLIENT				
ECO LAKE HOMES INC.				
PROJECT NO.	DATE	PREPARED BY	APPROVED BY	FIGURE
23-0462	AUGUST 2026	TP	AS	1

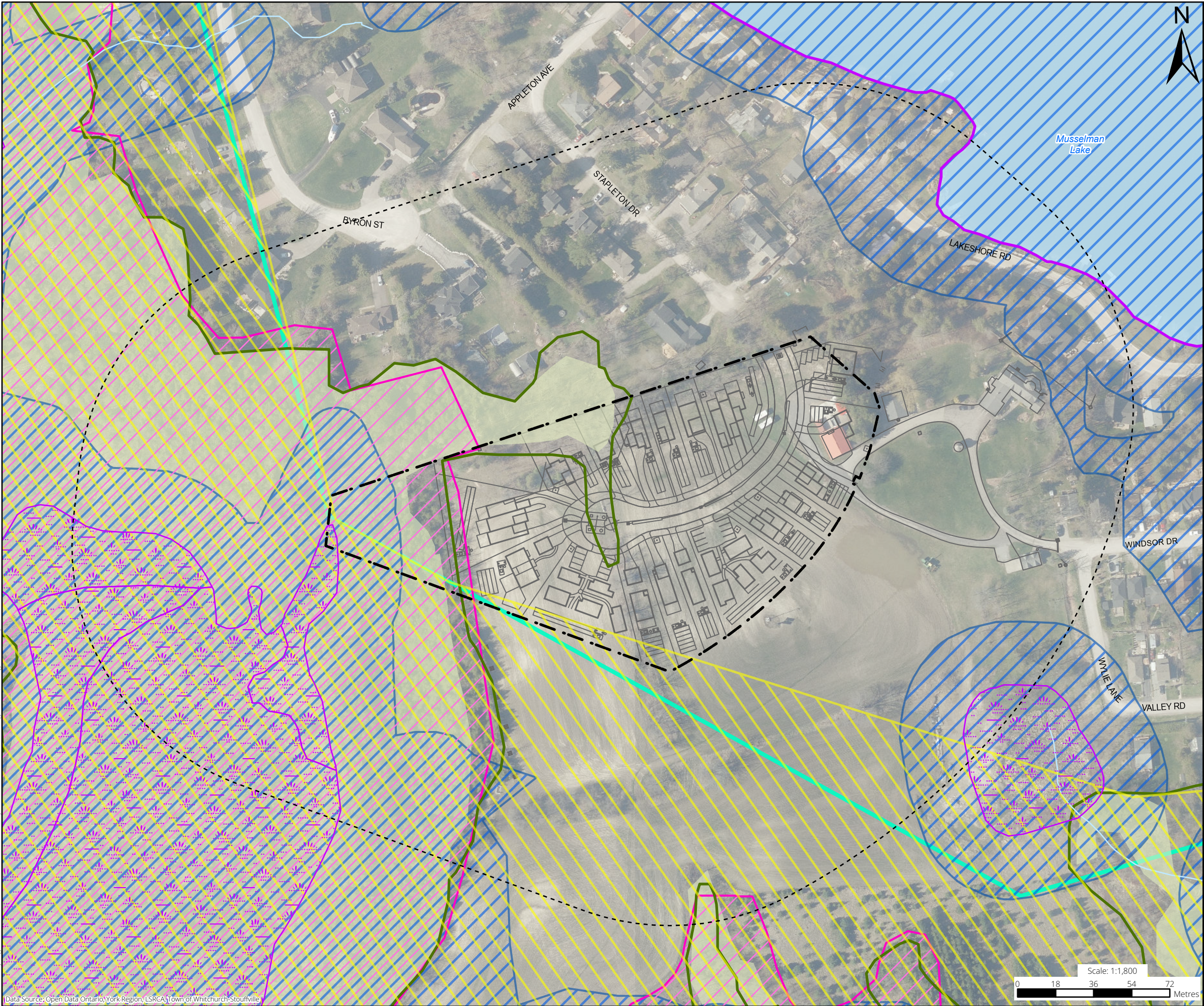


LEGEND

- SITE LOCATION
- 120 m STUDY AREA
- WATERCOURSE
- WATERBODY

TITLE				
SCOPED STUDY AREA LOCATION				
PROJECT				
ENVIRONMENTAL IMPACT STUDY WYLIE LANE DEVELOPMENT TOWN OF WHITCHURCH-STOUFFVILLE YORK REGION, ONTARIO				
CLIENT				
ECO LAKE HOMES INC.				
PROJECT NO.	DATE	PREPARED BY	APPROVED BY	FIGURE
23-0462	AUGUST 2026	TP	AS	2





LEGEND

- SITE LOCATION
- 120 m STUDY AREA
- PROPOSED DEVELOPMENT
- MNRF:
 - WATERCOURSE
 - WATERBODY
 - WOODED AREA
 - PROVINCIALY SIGNIFICANT WETLAND
 - AREAS OF NATURAL & SCIENTIFIC INTEREST
 - NHS CORE AREA (OAK RIDGES MORaine)
- LSRCA:
 - REGULATION LIMIT
- YORK REGION:
 - GREENLANDS SYSTEM
 - WOODLANDS
 - KETTLE LAKE
- TOWN OF WHITCHURCH-STOUFFVILLE:
 - GREENLANDS SYSTEM

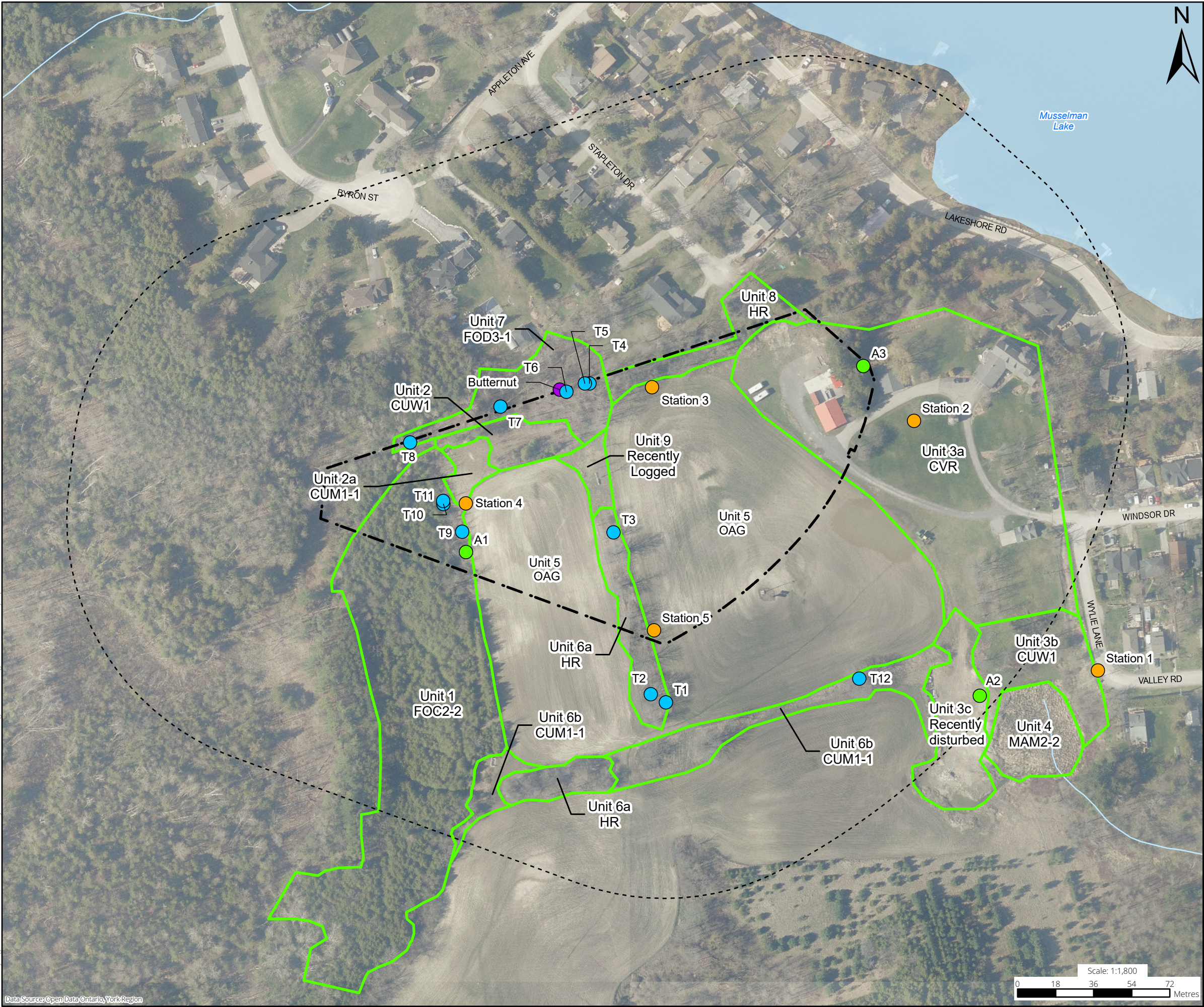
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NATURAL HERITAGE FEATURES

PROJECT
ENVIRONMENTAL IMPACT STUDY
WYLIE LANE DEVELOPMENT
TOWN OF WHITCHURCH-STOUFFVILLE
YORK REGION, ONTARIO

CLIENT
ECO LAKE HOMES INC.



PROJECT NO. 23-0462	DATE AUGUST 2026	PREPARED BY TP	APPROVED BY AS	FIGURE 3
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Data Sources: Open Data Ontario, York Region

LEGEND

- SITE LOCATION
- 120 m STUDY AREA
- WATERCOURSE
- WATERBODY
- BREEDING BIRD SURVEY LOCATION
- AMPHIBIAN CALLING SURVEY LOCATION
- BUTTERNUT LOCATION
- SNAG TREE LOCATION
- ELC VEGETATION COMMUNITIES

Unit 1: FOC2-2 - Dry – Fresh White Cedar Coniferous Forest Type
Unit 2: CUW1 - Mineral Cultural Woodland Ecosite
Unit 2a: CUM1-1 - Dry – Moist Old Field Meadow Type
Unit 3a: CVR - Residential
Unit 3b: CUW1 - Mineral Cultural Woodland Ecosite
Unit 3c: Recently disturbed
Unit 4: MAM2-2 - Reed Canary Grass Mineral Meadow Marsh
Unit 5: OAG - Open Agriculture
Unit 6a: HR - Hedgerow
Unit 6b: CUM1-1 - Dry – Moist Old Field Meadow Type
Unit 7: FOD3-1 - Dry-Fresh Poplar Deciduous Forest
Unit 8: HR - Hedgerow
Unit 9: Recently Logged

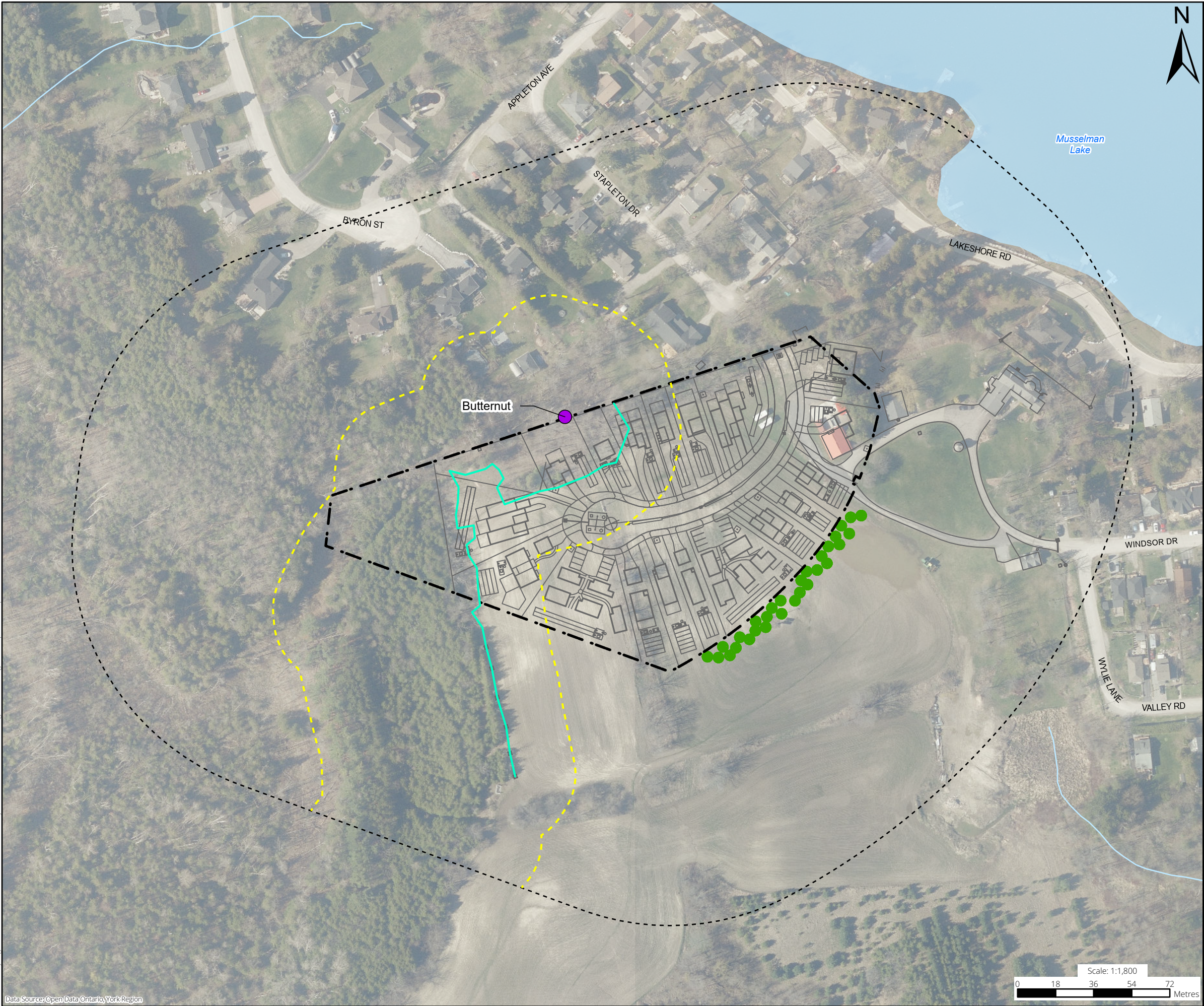
TITLE
ECOLOGICAL LAND CLASSIFICATION (ELC) AND WILDLIFE SURVEYS

PROJECT
ENVIRONMENTAL IMPACT STUDY
WYLIE LANE DEVELOPMENT
TOWN OF WHITCHURCH-STOUFFVILLE
YORK REGION, ONTARIO

CLIENT
ECO LAKE HOMES INC.



PROJECT NO. 23-0462	DATE AUGUST 2026	PREPARED BY TP	APPROVED BY AS	FIGURE 4
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LEGEND

- SITE LOCATION
- 120 m STUDY AREA
- PROPOSED DEVELOPMENT
- STAKED DRIPLINE (JULY 2025)
- WATERCOURSE
- WATERBODY
- BUTTERNUT LOCATION
- 30 m SIGNIFICANT WOODLAND SETBACK
- PROPOSED TREE RESTORATION AREA



TITLE
PROPOSED LOT SEVERANCES AND CONSTRAINTS

PROJECT
ENVIRONMENTAL IMPACT STUDY
WYLIE LANE DEVELOPMENT
TOWN OF WHITCHURCH-STOUFFVILLE
YORK REGION, ONTARIO

CLIENT
ECO LAKE HOMES INC.



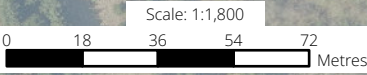
PROJECT NO.
23-0462

DATE
AUGUST 2026

PREPARED BY
TP

APPROVED BY
AS

FIGURE
5





APPENDIX C:

Vegetation Species List



SCIENTIFIC NAME	COMMON NAME	CC ¹	CW ¹	G_RANK ²	S_RANK ³	COSEWIC ⁴	SARA ⁵	SARO ⁶	NATIVE STATUS ⁷	UNIT 1: FOC2-2	UNIT 2: CUW1 WITH UNIT 2A: CUM1-1 INCLUSION	UNIT 3: CVR / CUW1 / RECENTLY DISTURBED	UNIT 4: MAM2-2	UNIT 6: HR / CUM1-1	UNIT 7: FOD3-1	UNIT 8: HR
<i>Acer negundo</i>	Manitoba Maple	0	0	G5	N5	S5			N		X	X				
<i>Acer saccharinum</i>	Silver Maple	5	-3	G5	N5	S5			N			X				
<i>Acer saccharum</i>	Sugar Maple	4	3	G5	N5	S5			N		X	X		X	X	
<i>Achillea borealis</i>	Woolly Yarrow	0	3	GNR	NNR	S5			N		X	X				
<i>Actaea rubra</i>	Red Baneberry	6	3	G5	N5	S5			N						X	
<i>Agrostis gigantea</i>	Redtop		-3	G4G5	NNA	SNA			I		X					
<i>Ambrosia artemisiifolia</i>	Common Ragweed	0	3	G5	N5	S5			N			X		X		
<i>Anemone virginiana</i>	Tall Anemone	4	3	G5	NNR	S5			N		X					
<i>Asclepias syriaca</i>	Common Milkweed	0	5	G5	N5	S5			N			X		X		
<i>Betula papyrifera</i>	Paper Birch	2	3	G5	N5	S5			N		X				X	
<i>Bromus inermis</i>	Smooth Brome		5	G5	NNA	SNA			I		X	X				
<i>Cardamine impatiens</i>	Narrow-leaved Bittercress		0	GNR	NNA	SNA			I					X		
<i>Carex rosea</i>	Rosy Sedge	2	5	G5	N5	S5			N						X	
<i>Carya ovata</i>	Shagbark Hickory	6	3	G5	N5	S5			N		X					
<i>Cichorium intybus</i>	Wild Chicory		5	GNR	NNA	SNA			I			X				
<i>Circaea canadensis</i>	Broad-leaved Enchanter's Nightshade	2	3	G5	N5	S5			N			X				
<i>Cirsium arvense</i>	Canada Thistle		3	G5	NNA	SNA			I			X		X		
<i>Cirsium vulgare</i>	Bull Thistle		3	GNR	NNA	SNA			I					X		
<i>Clinopodium vulgare</i>	Wild Basil	4	5	G5	N5	S5			N			X				
<i>Convallaria majalis</i>	European Lily-of-the-valley		5	G5	NNA	SNA			I		X			X	X	
<i>Cornus alternifolia</i>	Alternate-leaved Dogwood	6	3	G5	N5	S5			N						X	X
<i>Cornus sericea</i>	Red-osier Dogwood	2	-3	G5	N5	S5			N		X	X		X		
<i>Dactylis glomerata</i>	Orchard Grass		3	GNR	NNA	SNA			I			X				
<i>Daucus carota</i>	Wild Carrot		5	GNR	NNA	SNA			I			X		X		
<i>Digitaria sp.</i>	Crabgrass sp.										X					
<i>Echinochloa crus-galli</i>	Large Barnyard Grass		-3	GNR	NNA	SNA			I			X				
<i>Equisetum arvense</i>	Field Horsetail	0	0	G5	N5	S5			N			X		X		



SCIENTIFIC NAME	COMMON NAME	CC ¹	CW ¹	G_RANK ²	S_RANK ³	COSEWIC ⁴	SARA ⁵	SARO ⁶	NATIVE STATUS ⁷	UNIT 1: FOC2-2	UNIT 2: CUW1 WITH UNIT 2A: CUM1-1 INCLUSION	UNIT 3: CVR / CUW1 / RECENTLY DISTURBED	UNIT 4: MAM2-2	UNIT 6: HR / CUM1-1	UNIT 7: FOD3-1	UNIT 8: HR
<i>Erigeron annuus</i>	Annual Fleabane	0	3	G5	N5	S5			N	X		X				
<i>Erigeron philadelphicus</i>	Philadelphia Fleabane	1	-3	G5	N5	S5			N					X		
<i>Erigeron strigosus</i>	Rough Fleabane	4	3	G5	N5	S5			N		X					
<i>Euthamia graminifolia</i>	Grass-leaved Goldenrod	2	0	G5	N5	S5			N			X				
<i>Eutrochium maculatum</i>	Spotted Joe Pye Weed	3	-5	G5	N5	S5			N				X			
<i>Fragaria virginiana</i>	Wild Strawberry	2	3	G5	N5	S5			N		X					
<i>Fraxinus americana</i>	White Ash	4	3	G5	N5	S4			N	X	X	X		X	X	X
<i>Geum aleppicum</i>	Yellow Avens	2	0	G5	N5	S5			N			X				
<i>Hesperis matronalis</i>	Dame's Rocket		3	G4G5	NNA	SNA			I			X				
<i>Hieracium sp.</i>	Hawkweed sp.										X					
<i>Hydrophyllum virginianum</i>	Virginia Waterleaf	6	0	G5	N5	S5			N		X				X	
<i>Impatiens capensis</i>	Spotted Jewelweed	4	-3	G5	N5	S5			N			X				
<i>Juglans cinerea</i>	Butternut	6	3	G4	N3N4	S2?	END	END	N		X					
<i>Juglans nigra</i>	Black Walnut	5	3	G5	N4	S4?			N	X	X	X		X		X
<i>Leucanthemum vulgare</i>	Oxeye Daisy		5	GNR	NNA	SNA			I		X	X		X		
<i>Lonicera x bella</i>	Bell's Honeysuckle		3	GNA	NNA	SNA			I		X			X	X	
<i>Malus pumila</i>	Common Apple		5	G5	NNA	SNA			I			X		X		
<i>Medicago lupulina</i>	Black Medick		3	GNR	NNA	SNA			I			X		X		
<i>Myosotis arvensis</i>	Field Forget-me-not		3	GNR	NNA	SNA			I		X	X			X	
<i>Parthenocissus vitacea</i>	Thicket Creeper	4	3	G5	N5	S5			N	X	X	X		X	X	
<i>Phalaris arundinacea</i>	Reed Canary Grass	0	-3	G5	N5	S5						X	X	X		
<i>Phleum pratense</i>	Common Timothy		3	GNR	NNA	SNA			I		X					
<i>Pilosella caespitosa</i>	Meadow Hawkweed		5	GNR	NNA	SNA			I		X			X		
<i>Pilosella officinarum</i>	Mouse-ear Hawkweed		5	GNR	NNA	SNA			I	X						
<i>Pinus strobus</i>	Eastern White Pine	4	3	G5	N5	S5			N	X	X	X				
<i>Pinus sylvestris</i>	Scots Pine		3	GNR	NNA	SNA			I	X	X	X				
<i>Plantago major</i>	Common Plantain		3	G5	NNA	SNA			I			X				



SCIENTIFIC NAME	COMMON NAME	CC ¹	CW ¹	G_RANK ²	S_RANK ³	COSEWIC ⁴	SARA ⁵	SARO ⁶	NATIVE STATUS ⁷	UNIT 1: FOC2-2	UNIT 2: CUW1 WITH UNIT 2A: CUM1-1 INCLUSION	UNIT 3: CVR / CUW1 / RECENTLY DISTURBED	UNIT 4: MAM2-2	UNIT 6: HR / CUM1-1	UNIT 7: FOD3-1	UNIT 8: HR
<i>Populus grandidentata</i>	Large-toothed Aspen	5	5	G5	NNR	S5			N		X				X	X
<i>Populus tremuloides</i>	Trembling Aspen	2	0	G5	N5	S5			N	X	X			X	X	X
<i>Potentilla sp.</i>	Cinquefoil sp.										X					
<i>Prunella vulgaris</i>	Common Self-heal		0	G5	N5	S5					X					
<i>Prunus serotina</i>	Black Cherry	3	3	G5	N5	S5			N		X	X			X	
<i>Ranunculus acris</i>	Common Buttercup		0	G5	NNA	SNA			I			X		X	X	
<i>Reynoutria japonica</i>	Japanese Knotweed		3	GNR	NNA	SNA			I			X				
<i>Rhamnus cathartica</i>	European Buckthorn		0	GNR	NNA	SNA			I	X	X					
<i>Rhus typhina</i>	Staghorn Sumac	1	3	G5	N5	S5			N			X				X
<i>Rumex obtusifolius</i>	Bitter Dock		-3	GNR	NNA	SNA			I			X				
<i>Rumex sp.</i>	Dock sp.											X				
<i>Salix amygdaloides</i>	Peach-leaved Willow	6	-3	G5	N5	S5			N				X			
<i>Sanguinaria canadensis</i>	Bloodroot	5	3	G5	N5	S5			N		X				X	
<i>Silene vulgaris</i>	Bladder Campion		5	GNR	NNA	SNA			I		X			X		
<i>Solanum dulcamara</i>	Climbing Nightshade		0	GNR	NNA	SNA			I			X				
<i>Solidago altissima</i>	Tall Goldenrod	1	3	G5	N5	S5			N		X	X		X	X	X
<i>Symphyotrichum cordifolium</i>	Heart-leaved Aster	5	5	G5	N5	S5			N		X			X	X	
<i>Symphyotrichum lanceolatum</i>	Panicled Aster	3	-3	G5	N5	S5			N		X	X				
<i>Symphyotrichum lateriflorum</i>	Calico Aster	3	0	G5	N5	S5			N					X		
<i>Symphyotrichum novae-angliae</i>	New England Aster	2	-3	G5	N5	S5			N		X	X				
<i>Symphyotrichum urophyllum</i>	Arrow-leaved Aster	6	5	G4G5	N4	S4			N		X					
<i>Taraxacum officinale</i>	Common Dandelion		3	G5	N5	SNA			I		X	X			X	
<i>Thuja occidentalis</i>	Eastern White Cedar	4	-3	G5	N5	S5			N	X	X					X
<i>Tilia americana</i>	Basswood	4	3	G5	N5	S5			N		X				X	X
<i>Toxicodendron radicans</i>	Poison Ivy	2	0	G5	N5	S5			N					X		
<i>Tragopogon dubius</i>	Yellow Goatsbeard		5	GNR	NNA	SNA			I					X		
<i>Trifolium hybridum</i>	Alsike Clover		3	GNR	NNA	SNA			I			X		X		



SCIENTIFIC NAME	COMMON NAME	CC ¹	CW ¹	G_RANK ²	S_RANK ³	COSEWIC ⁴	SARA ⁵	SARO ⁶	NATIVE STATUS ⁷	UNIT 1: FOC2-2	UNIT 2: CUW1 WITH UNIT 2A: CUM1-1 INCLUSION	UNIT 3: CVR / CUW1 / RECENTLY DISTURBED	UNIT 4: MAM2-2	UNIT 6: HR / CUM1-1	UNIT 7: FOD3-1	UNIT 8: HR
<i>Trifolium pratense</i>	Red Clover		3	GNR	NNA	SNA			I			X		X		
<i>Trifolium repens</i>	White Clover		3	GNR	NNA	SNA			I		X	X				
<i>Tussilago farfara</i>	Coltsfoot		3	GNR	NNA	SNA			I			X		X		
<i>Typha angustifolia</i>	Narrow-leaved Cattail		-5	G5	N5	SNA			I				X			
<i>Ulmus americana</i>	White Elm	3	-3	G5	N5	S5			N	X	X					
<i>Verbascum thapsus</i>	Common Mullein		5	GNR	NNA	SNA			I					X		
<i>Viburnum opulus ssp. Opulus</i>	Cranberry Viburnum		-3	G5TNR	NNA	SNA			I					X	X	
<i>Vicia cracca</i>	Tufted Vetch		5	GNR	NNA	SNA			I		X	X				
<i>Vincetoxicum rossicum</i>	European Swallowwort		5	GNR	NNA	SNA			I	X	X					
<i>Vitis riparia</i>	Riverbank Grape	0	0	G5	N5	S5			N	X	X			X		

¹Coefficient of Conservatism and Coefficient of Wetness Source: NHIC and Oldham et al. (1995), ²G-Rank (Global) Source: NatureServe, ³S-Ranks (Provincial) Source: NHIC, ⁴COSEWIC (Committee on the Status of Endangered Wildlife in Canada), ⁵SARA (Species at Risk Act), ⁶PSO (Protected Species in Ontario) Source: PSO List (O. Reg. 60/26), ⁷Native Status Source: Canadensys (VASCAN) and NHIC.



APPENDIX D:

Wildlife Species List



TYPE	SCIENTIFIC NAME	COMMON NAME	G_RANK ¹	S_RANK ²	SARA ³	SARO ⁴	MBCA ⁵	CONF	PROB	POSS	NONE	INCIDENTAL ONLY
BIRD	<i>Agelaius phoeniceus</i>	Red-winged Blackbird	G5	S5				X				
	<i>Ardea herodias</i>	Great Blue Heron	G5	S4			x				X	
	<i>Bombycilla cedrorum</i>	Cedar Waxwing	G5	S5			x		X			
	<i>Cardinalis cardinalis</i>	Northern Cardinal	G5	S5			x		X			
	<i>Cathartes aura</i>	Turkey Vulture	G5	S5B, S3N							X	
	<i>Chaetura pelagica</i>	Chimney Swift	G4G5	S3B	THR	THR	x			X		
	<i>Charadrius vociferus</i>	Killdeer	G5	S4B			x		X			
	<i>Colaptes auratus</i>	Northern Flicker	G5	S5			x		X			
	<i>Contopus virens</i>	Eastern Wood-pewee	G5	S4B	SC	SC	x			X		
	<i>Corvus brachyrhynchos</i>	American Crow	G5	S5					X			
	<i>Corvus corax</i>	Common Raven	G5	S5						X		
	<i>Cyanocitta cristata</i>	Blue Jay	G5	S5					X			
	<i>Dryobates pubescens</i>	Downy Woodpecker	G5	S5			x		X			
	<i>Dryobates villosus</i>	Hairy Woodpecker	G5	S5			x			X		
	<i>Dumetella carolinensis</i>	Gray Catbird	G5	S5B, S3N			x		X			
	<i>Geothlypis trichas</i>	Common Yellowthroat	G5	S5B, S3N			x			X		
	<i>Haemorhous mexicanus</i>	House Finch	G5	SNA			x			X		
	<i>Icterus galbula</i>	Baltimore Oriole	G5	S4B					X			
	<i>Larus delawarensis</i>	Ring-billed Gull	G5	S5			x				X	
	<i>Megaceryle alcyon</i>	Belted Kingfisher	G5	S5B, S4N						X		
	<i>Melospiza georgiana</i>	Swamp Sparrow	G5	S5B, S4N			x			X		
	<i>Melospiza melodia</i>	Song Sparrow	G5	S5			x		X			
	<i>Molothrus ater</i>	Brown-headed Cowbird	G5	S5						X		
	<i>Myiarchus crinitus</i>	Great Crested Flycatcher	G5	S5B			x			X		
	<i>Pandion haliaetus</i>	Osprey	G5	S5B						X		
	<i>Parkesia noveboracensis</i>	Northern Waterthrush	G5	S5B			x			X		
	<i>Passer domesticus</i>	House Sparrow	G5	SNA						X		
	<i>Pheucticus ludovicianus</i>	Rose-breasted Grosbeak	G5	S5B			x		X			



TYPE	SCIENTIFIC NAME	COMMON NAME	G_RANK ¹	S_RANK ²	SARA ³	SARO ⁴	MBCA ⁵	CONF	PROB	POSS	NONE	INCIDENTAL ONLY
BIRD	<i>Poecile atricapillus</i>	Black-capped Chickadee	G5	S5			x		X			
	<i>Quiscalus quiscula</i>	Common Grackle	G5	S5					X			
	<i>Setophaga petechia</i>	Yellow Warbler	G5	S5B			x		X			
	<i>Setophaga ruticilla</i>	American Redstart	G5	S5B			x		X			
	<i>Sitta carolinensis</i>	White-breasted Nuthatch	G5	S5			x			X		
	<i>Spinus tristis</i>	American Goldfinch	G5	S5			x		X			
	<i>Spizella passerina</i>	Chipping Sparrow	G5	S5B, S3N					X			
	<i>Sturnus vulgaris</i>	European Starling	G5	SNA				X				
	<i>Troglodytes aedon</i>	House Wren	G5	S5B			x		X			
	<i>Turdus migratorius</i>	American Robin	G5	S5			x	X				
	<i>Tyrannus tyrannus</i>	Eastern Kingbird	G5	S4B			x			X		
	<i>Vireo gilvus</i>	Warbling Vireo	G5	S5B			x			X		
	<i>Vireo olivaceus</i>	Red-eyed Vireo	G5	S5B			x		X			
	<i>Zenaida macroura</i>	Mourning Dove	G5	S5			x		X			
MAMMAL	<i>Sylvilagus floridanus</i>	Eastern Cottontail	G5	S5								X
	<i>Sciurus carolinensis</i>	Eastern Gray Squirrel	G5	S5								X
	<i>Tamiasciurus hudsonicus</i>	Red Squirrel	G5	S5								X
AMPHIBIAN	<i>Anaxyrus americanus</i>	American Toad	G5	S5								X
	<i>Dryophytes versicolor</i>	Gray Treefrog	G5	S5								X
	<i>Pseudacris crucifer</i>	Spring Peeper	G5	S5								X
	<i>Lithobates sylvaticus</i>	Wood Frog	G5	S5								X

¹G-Rank (Global) Source: NatureServe, ²S-Ranks (Provincial) Source: NHIC, ³SARA (Species at Risk Act) Source: Government of Canada's Species at Risk Public Registry, ⁴SARO (Species at Risk in Ontario): MECP, ⁵MBCA (Migratory Bird Convention Act, 1994). Breeding Bird Evidence: Confirmed (CONF), Probable (PROB), Possible (POSS) and None (NONE). Incidental Only – species only observed incidentally during field investigations.



APPENDIX E:

Snag Survey Results



SNAG ID	COMMON NAME	SCIENTIFIC NAME	DBH (cm)	HEIGHT OF TREE (m)	CAVITY	LOOSE BARK	WOODPECKER HOLE	KNOT HOLE	DECAY CLASS	HEIGHT OF CAVITY (m)	OVERALL ROOST QUALITY
T1	Oak species	<i>Quercus sp.</i>	55	15	No	Yes	No	No	2-3	N/A	Low
T2	Black Walnut	<i>Juglans nigra</i>	200	20	Yes	Yes	No	No	2	5	Low
T3	Ash species	<i>Fraxinus sp.</i>	145	15	No	Yes	Yes	Yes	2	N/A	Low – Moderate
T4	Largetooth Aspen	<i>Populus grandidentata</i>	113	12	No	Yes	No	No	5	N/A	Low – Moderate
T5	Unknown species	<i>Unknown</i>	125	14	No	No	Yes	No	2-3	N/A	Low
T6	Unknown species	<i>Unknown</i>	106	15	No	Yes	Yes	No	3-4	N/A	Moderate
T7	Unknown species	<i>Unknown</i>	30	9	No	Yes	No	No	1-2	N/A	Low
T8	Popular species	<i>Populus sp.</i>	105	10	Yes	Yes	No	No	1-2	4	Moderate
T9	Black Walnut	<i>Juglans nigra</i>	82	6	No	Yes	Yes	No	4-5	N/A	Moderate
T10	American Basswood	<i>Tilia americana</i>	90	15	No	Yes	No	No	3-4	N/A	Low – Moderate
T11	Maple species	<i>Acer sp.</i>	65	15	Yes	Yes	Yes	No	4	5	Moderate – High
T12	Sugar Maple	<i>Acer saccharum</i>	280	20	No	Yes	Yes	No	1-2	N/A	Low



APPENDIX F:

*Species at Risk and Species of
Conservation Concern
Screening*

SPECIES NAME	COSSARO / SARO ¹	COSEWIC ² / SARA	NHIC S-RANK ³	HABITAT DESCRIPTION ⁴	HABITAT AND SPECIES PRESCENCE POTENTIAL	FIELD ASSESSMENT AND RESULTS LIKELIHOOD OF IMPACTS TO SPECIES OR HABITAT	INCLUDED IN IMPACT ASSESSMENT?
EASTERN WOOD- PEWEE	SC	SC	S4B	Eastern Wood-Pewee lives in the mid-canopy layer of forest clearings and edges of deciduous and mixed forests. It is most abundant in intermediate-age mature forest stands with little understory vegetation (MNRF, 2014).	Low – Moderate	One Eastern Wood-pewee was observed at Breeding Bird Survey Station 4 during the July 4, 2023, survey and determined as a possible breeder. As areas of deciduous forest were identified within the Site and Study Area, suitable habitat for this species may be found within the Site. Species may utilize the Site as foraging grounds. While suitable habitat for this species exists within the Site and Study Area, habitat areas will be retained as the proposed lot severance does not require tree removals or removal of woodland habitats. As such, no anticipated impact to species and Eastern Wood-pewee will not be discussed further.	NO
EASTERN MEADOWLARK	THR	THR	S4B, S3N	Eastern Meadowlarks breed primarily in moderately tall grasslands, such as pastures and hayfields, but are also found in alfalfa fields, weedy borders of croplands, roadsides, orchards, airports, shrubby overgrown fields, or other open areas. Small trees, shrubs or fence posts are used as elevated song perches (MECP, 2021).	Low	None observed during field surveys. No hayfields and pastures present on Site. Species may utilize the Site as foraging grounds. Habitat is not considered present within the Site. Species not anticipated to be present. No anticipated impact to species.	NO
CHIMNEY SWIFT	THR	THR	S3B	Before European settlement Chimney Swifts mainly nested on cave walls and in hollow trees or tree cavities in old growth forests. Today, they are more likely to be found in and around urban settlements where they nest and roost (rest or sleep) in chimneys and other manmade structures. They also tend to stay close to water as this is where the flying insects they eat congregate. In Ontario, it is most widely distributed in the Carolinian zone in the south and southwest of the province but has been detected throughout most of the province south of the 49 th parallel (MECP, 2024).	Low	One Chimney Swift observed flying over the Site at Breeding Bird Survey Station 3 during the July 4, 2023, survey and determined as a possible breeder. No open chimneys were observed on the existing buildings found within the Site. Suitable habitat may be found within the general vicinity beyond the Site. Species may utilize the Site as foraging grounds. Habitat is not considered present within the Site. While species may be present within the general vicinity, this species habitat was not found within the Site and thus, no anticipated impact to species. As such Chimney Swifts will not be discussed further.	NO
BARN SWALLOW	SC	THR	S4B	Barn Swallows often live in close association with humans, building their cup-shaped mud nests almost exclusively on human-made structures such as open barns, under bridges and in culverts. The species is attracted to open structures that include ledges where they can build their nests, which are often re-used from year to year. They prefer unpainted, rough-cut wood, since the mud does not adhere as well to smooth surfaces (MECP, 2023).	Low – Moderate	None observed during field surveys. Existing buildings on Site may provide suitable habitat however, no cup nests were observed during field surveys. Species may utilize the Site as foraging grounds. Habitat is not considered present within the Site. Species not anticipated to be present. No anticipated impact to species.	NO
BANK SWALLOW	THR	THR	S4B	Bank Swallows nest in burrows in natural and human-made settings where there are vertical faces in silt and sand deposits. Many nests are on banks of rivers and lakes, but they are also found in active sand and gravel pits or former ones where the banks remain suitable. The birds breed in colonies ranging from several to a few thousand pairs (MNRF, 2014).	Low	None observed during field surveys. No vertical banks of sand or silt were found on the Site to provide suitable nesting habitat. Species may utilize the Site as foraging grounds. Habitat is not present within the Site. Species not anticipated to be present. No anticipated impact to species.	NO

SPECIES NAME	COSSARO / SARO ¹	COSEWIC ² / SARA	NHIC S-RANK ³	HABITAT DESCRIPTION ⁴	HABITAT AND SPECIES PRESCENCE POTENTIAL	FIELD ASSESSMENT AND RESULTS LIKELIHOOD OF IMPACTS TO SPECIES OR HABITAT	INCLUDED IN IMPACT ASSESSMENT?
BOBOLINK	THR	THR	S4B	Bobolink breed in a variety of natural grassland habitat types, including remnant prairies, savannahs and alvar grasslands. They also nest commonly in grassland habitat restoration sites and primarily in hayfields and pastures. Bobolinks will also nest in low densities in large grassy bogs, fens and beaver meadows (MNRF, 2013).	Low	None observed during field surveys. No hayfields and pastures present on Site. Species may utilize the Site as foraging grounds. Habitat is not considered present within the Site. Species not anticipated to be present. No anticipated impact to species.	NO
SNAPPING TURTLE	SC	SC	S4	Snapping Turtles spend most of their lives in water. They prefer shallow water 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), dams and aggregate pits. It is primarily limited to the southern part of Ontario (MECP, 2021).	Low	None observed during field surveys. No wetland habitats found on Site. Nearby wetland features within the Study Area may provide suitable habitat for this species, however, no turtles were observed during field investigations. Most likely due to the lack of basking structures (i.e., logs, trees, etc.) and areas lowers this species habitat suitability. Fruther, no nesting sites were observed within the Site. Suitable habitats may be present beyond the Site and immediate Study Area. Habitat is not considered present within the Site. Species is not anticipated to be present within the Site. No anticipated impact to species.	NO
BUTTERNUT	END	END	S2?	In Ontario, Butternut is usually associated with deciduous forests, establishing under canopy openings or along forest edges. It is also found in treed fence lines. It prefers moist, well-drained soil and frequently occurs within the floodplains of streams or small rivers. It is also 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 (MECP, 2024).	High	A single Butternut was observed off-Site within the Study Area just beyond the northern boundary of the Site. No other Butternuts were found within the Study Area or Site. Following a BHA, this specimen was determined to be a Category 1 tree affected by Butternut Cankers. A BHA Report was submitted to MECP on November 1, 2024, and as 30 days have elapsed since submission MECP, the tree can be removed or retained dependent on the proposed development (Species at Risk branch pers. comm. January 17, 2025). As such further protection for this species is not required. As land severance is currently proposed, this species is not anticipated to be negatively impacted and thus, will not be discussed further.	NO
EASTERN SMALL-FOOTED MYOTIS	END	END	S2S3	In the spring and summer, Eastern Small-footed Myotis will roost in a variety of habitats, including in or under rocks, in rock outcrops, in buildings, under bridges, or in caves, mines, or hollow trees. In the winter, these bats hibernate, most often in caves and abandoned mines that remain above zero degrees Celsius. They seem to choose colder and drier sites than similar bats and will return to the same spot each year. The Eastern Small-footed Myotis has been found from south of Georgian Bay to Lake Erie and east to the Pembroke area. There are also records from the Bruce Peninsula, the Espanola area, and Lake Superior Provincial Park. Most documented sightings are of bats in their winter hibernation sites (MECP, 2023)	Low	None observed during field surveys, however, targeted surveys were not undertaken. No rocky outcrops or features were identified within the Site. The snag survey found primarily low to moderate quality snags found within the Dry-Fresh White Cedar Coniferous Forest and Hedgerow units present on Site. Overall, the Site was determined to have low bat habitat suitability. Existing buildings on Site may provide alternative roosting habitat for bats. Species may be a foraging visitant within the general vicinity. As tree removals are not proposed as part of the proposed land severance and identified snags within potential roosting habitat will be retained, no anticipated impact to species.	NO



APPENDIX G:

Significant Wildlife Habitat Evaluation

SPECIES NAME	COSSARO / SARO ¹	COSEWIC ² / SARA	NHIC S-RANK ³	HABITAT DESCRIPTION ⁴	HABITAT AND SPECIES PRESCENCE POTENTIAL	FIELD ASSESSMENT AND RESULTS LIKELIHOOD OF IMPACTS TO SPECIES OR HABITAT	INCLUDED IN IMPACT ASSESSMENT?
LITTLE BROWN MYOTIS	END	END	S3	During the day they roost in trees and buildings. They often select attics, abandoned buildings and barns for summer colonies where they can raise their young. Bats can squeeze through very tiny spaces (as small as six millimetres across) and this is how they access many roosting areas. The little brown bat is widespread in southern Ontario and found as far north as Moose Factory and Favourable Lake (MECP, 2021).	Moderate	None observed during field surveys, however, targeted surveys were not undertaken. The snag survey found primarily low to moderate quality snags found within the Dry-Fresh White Cedar Coniferous Forest and Hedgerow units present on Site. Overall, the Site was determined to have low bat habitat suitability. Existing buildings on Site may provide alternative roosting habitat for bats. Species may be a foraging visitant within the general vicinity. As tree removals are not proposed as part of the proposed land severance and identified snags within potential roosting habitat will be retained, no anticipated impact to species.	NO
NORTHERN LONG-EARED MYOTIS	END	END	S3	Northern Long-eared Myotis 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. The Northern Long-eared Myotis is found throughout forested areas in southern Ontario, to the north shore of Lake Superior and occasionally as far north as Moosonee, and west to Lake Nipigon (MECP, 2021).	Moderate	None observed during field surveys, however, targeted surveys were not undertaken. The snag survey found primarily low to moderate quality snags found within the Dry-Fresh White Cedar Coniferous Forest and Hedgerow units present on Site. Overall, the Site was determined to have low bat habitat suitability. Existing buildings on Site may provide alternative roosting habitat for bats. Species may be a foraging visitant within the general vicinity. As tree removals are not proposed as part of the proposed land severance and identified snags within potential roosting habitat will be retained, no anticipated impact to species.	NO
TRI-COLORED BAT	END	END	S3?	During the summer, the Tri-colored Bat is found in a variety of forested habitats. It forms day roosts and maternity colonies in older forest and occasionally in barns or other structures. They forage over water and along streams in the forest. At the end of the summer, they travel to a location where they swarm; it is generally near the cave or underground location where they will overwinter. This bat is found in southern Ontario and as far north as Espanola near Sudbury (MECP, 2021).	Moderate	None observed during field surveys, however, targeted surveys were not undertaken. The snag survey found primarily low to moderate quality snags found within the Dry-Fresh White Cedar Coniferous Forest and Hedgerow units present on Site. Overall, the Site was determined to have low bat habitat suitability. Existing buildings on Site may provide alternative roosting habitat for bats. Species may be a foraging visitant within the general vicinity. As tree removals are not proposed as part of the proposed land severance and identified snags within potential roosting habitat will be retained, no anticipated impact to species.	NO

Protection status: ¹SARO – Species at Risk in Ontario;² COSEWIC – Committee on the Status of Endangered Wildlife in Canada: END – Endangered, THR – Threatened, SC – Special Concern, “-” – Not listed. ³ S-Rank – Provincial Status from the NHIC; ⁴ Habitat Description Source: COSEWIC reports and/or SAR in Ontario (SARO List, MECP).



SWH NAME	SWH EXPLANATION	ELC ECOSITE CODES	POTENTIALLY PRESENT ON SITE?
SEASONAL CONCENTRATION AREAS OF ANIMALS			
WATERFOWL STOPOVER AND STAGING AREAS (TERRESTRIAL)	Fields with sheet water during Spring (mid-March to May). Fields flooding during spring melt and run-off provide important invertebrate foraging habitat for migrating waterfowl. Agricultural fields with waste grains are commonly used by waterfowl, these are not considered SWH unless they have spring sheet water available.	CUM1 and CUT1; plus evidence of annual spring flooding from melt water or run-off within these Ecosites.	NO. ELC ecosite types are not present on Site. Further, there is no evidence of annual spring flooding from melt water or run off. Additionally, there is no evidence of historical use by waterfowl. Agricultural fields are not considered SWH.
WATERFOWL STOPOVER AND STAGING AREAS (AQUATIC)	Ponds, marshes, lakes, bays, coastal inlets, and watercourses used during migration. Sewage treatment ponds and stormwater ponds do not qualify as a SWH; however, a reservoir managed as a large wetland or pond/lake does qualify. These habitats have an abundance food supply (mostly aquatic invertebrates and vegetation in shallow water).	MAS1, MAS2, MAS3, SAS1, SAM1, SAF1, SWD1, SWD2, SWD3, SWD4 SWD5, SWD6, and SWD7	NO. No ecosites included in this SWH are present on Site. Further, there is also no evidence of historical use by waterfowl.
SHOREBIRD MIGRATORY STOPOVER AREA	Shorelines of lakes, rivers and wetlands, including beach areas, bars and seasonally flooded, muddy and un-vegetated shoreline habitats. Great Lakes coastal shorelines, including groynes and other forms of armour rock shorelines, are extremely important for migratory shorebirds in May to mid-June and early July to October. Sewage treatment ponds and stormwater ponds do not qualify as a SWH.	BBO1, BBO2, BBS1, BBS2, BBT1, BBT2, SDO1, SDS2, SDT1, MAM1 MAM2, MAM3, MAM4, and MAM5	NO. No shoreline habitats or ELC ecosite types are present on Site.
RAPTOR WINTERING AREA	The habitat provides a combination of fields and woodlands that provide roosting, foraging and resting habitats for wintering raptors. Raptor wintering (hawk/owl) sites need to be greater than 20 ha with a combination of forest and upland. Least disturbed sites, idle/fallow or lightly grazed field/meadow (greater than 15 ha) with adjacent woodlands. Field area of the habitat is to be wind swept with limited snow depth or accumulation. Eagle sites have open water and large trees and snags available for roosting.	Hawks/Owls: Combination of ELC Community Series; need to have present one Community Series from each land class: Forest: FOD, FOM, or FOC Upland: CUM; CUT; CUS; or CUW. Bald Eagle: Forest community Series: FOD, FOM, FOC, SWD, SWM or SWC on shoreline areas adjacent to large rivers or adjacent to lakes with open water (hunting area).	POSSIBLE (within Study Area and beyond). The contiguous forest extends onto the Site is greater than 20 ha, however, this feature is largely off-Site. No Hawks, Owls or Bald Eagles were observed during field investigations. Further, no stick nests were observed within the Site. As such potential candidate raptor wintering areas may be present beyond the Study Area, however, were not identified on Site.
BAT HIBERNACULA	Hibernacula may be found in caves, mine shafts, underground foundations and Karsts. Active mine sites are not SWH. The locations of bat hibernacula are relatively poorly known.	Bat Hibernacula may be found in these ecosites: CCR1, CCR2, CCA1, and CCA2 (Note: buildings are not considered to be SWH).	NO. ELC ecosite types are not present on Site.



SWH NAME	SWH EXPLANATION	ELC ECOSITE CODES	POTENTIALLY PRESENT ON SITE?
BAT MATERNITY COLONIES	Maternity colonies can be found in tree cavities, vegetation and often in buildings (buildings are not considered to be SWH). Maternity roosts are not found in caves and mines in Ontario. Maternity colonies located in Mature (dominant trees greater than 80 years old) deciduous or mixed forest stands with greater than 10/ha large diameter (greater than 25 cm DBH) wildlife trees. Female Bats prefer wildlife trees (snags) in early stages of decay, class 1 to 3. Silver-haired Bats prefer older mixed or deciduous forest and form maternity colonies in tree cavities and small hollows. Older forest areas with at least 21 snags/ha are preferred.	Maternity colonies considered SWH are found in forested Ecosites. All ELC Ecosites in ELC Community Series: FOD, FOM, SWD, and SWM.	POSSIBLE (within Study Area and beyond). Treed vegetation located in the deciduous woodland (WOD; Unit 2) and hedgerow (Unit 6) communities were determined to provide low to moderate quality snag trees. While the woodland areas on Site was determined to provide low habitat potential for bats, as beyond the Study Area extensive woodland areas exists, potential candidate bat maternity colonies may be present beyond the Site.
TURTLE WINTERING AREAS	For most turtles, wintering areas are in the same general area as their core habitat. Water has to be deep enough not to freeze and have soft mud substrates. Over-wintering sites are permanent waterbodies, large wetlands, and bogs or fens with adequate dissolved oxygen. Man-made ponds such as sewage lagoons or stormwater ponds should not be considered SWH.	Snapping and Midland Painted Turtles; ELC Community Classes; SW, MA, OA, and SA, ELC Community Series; FEO and BOO. Northern Map Turtle: open water areas such as deeper rivers or streams and lakes with current can also be used as over-wintering habitat.	NO. ELC ecosite types are not present on Site. A mineral meadow marsh (MAM2-2; Unit 4) community is found within the immediate Study Area to the south which may provide suitable habitat for turtle, however, no turtles were observed on Site during field investigations. However, as this wetland area appears relatively small, and shallow would most likely freeze over winter. Thus, no turtle wintering areas are considered present within the immediate Study Area.
REPTILE HIBERNACULUM	Hibernation takes place in sites located below frost lines in burrows, rock crevices and other natural or naturalized locations. The existence of features that go below frost line; such as rock piles or slopes, old stone fences, and abandoned crumbling foundations assist in identifying candidate SWH. Areas of broken and fissured rock are particularly valuable since they provide access to subterranean sites below the frost line. Wetlands can also be important over-wintering habitat in conifer or shrub swamps and swales, poor fens, or depressions in bedrock terrain with sparse trees or shrubs with sphagnum moss or sedge hummock ground cover. Five-lined skink prefer mixed forests with rock outcrop openings providing cover rock overlaying granite bedrock with fissures.	For all snakes, habitat may be found in any ecosite other than very wet ones. Talus, rock barren, crevice, cave, and alvar sites may be directly related to these habitats. Observations or congregations of snakes on sunny warm days in the spring or fall is a good indicator.	NO. No suitable landscape features or ELC ecosite types identified that would support reptile hibernaculum. No snakes or congregation of snakes were observed on Site during field investigations.
COLONIALY - NESTING BIRD BREEDING HABITAT (BANK AND CLIFF)	Any site or areas with exposed soil banks, sandy hills, borrow pits, steep slopes, and sand piles that are undisturbed or naturally eroding that is not a licensed/permitted aggregate area. Does not include man-made structures (bridges or buildings) or recently (2 years) disturbed soil areas, such as berms, embankments, soil or aggregate stockpiles. Does not include a licensed/permitted mineral aggregate operation.	Eroding banks, sandy hills, borrow pits, steep slopes, sand piles, cliff faces, bridge abutments, silos, and barns. Habitat found in the following ecosites: BLO1, BLS1, BLT1, CUM1, CUT1, CUS1, CLO1, CLS1, and CLT1.	NO. No exposed soil banks or exposed sandy sites were found on Site. No breeding evidence for colonial bank and cliff nesting birds recorded during breeding bird surveys.
COLONIALY - NESTING BIRD BREEDING HABITAT (TREE/SHRUBS)	Nests in live or dead standing trees in wetlands, lakes, islands, and peninsulas. Shrubs and occasionally emergent vegetation may also be used. Most nests in trees are 11 to 15 m from ground, near the top of the tree.	SWM2, SWM3, SWM5, SWM6, SWD1, SWD2, SWD3, SWD4, SWD5, SWD6, SWD7, and FET1.	NO. ELC ecosite types not present within the Site. Further, no nests were observed on Site during field investigations.



SWH NAME	SWH EXPLANATION	ELC ECOSITE CODES	POTENTIALLY PRESENT ON SITE?
COLONIALY - NESTING BIRD BREEDING HABITAT (GROUND)	Nesting colonies of gulls and terns are on islands or peninsulas (natural or artificial) associated with open water, marshy areas, lake or large river (two-lined on a 1;50,000 NTS map). Brewer's Blackbird colonies are found loosely on the ground in or in low bushes in close proximity to streams and irrigation ditches within farmlands.	Any rocky island or peninsula (natural or artificial) within a lake or large river (two-lined on a 1;50,000 NTS map). Close proximity to watercourses in open fields or pastures with scattered trees or shrubs (Brewer's Blackbird), MAM1-6, MAS1-3, CUM, CUT, and CUS.	NO. Habitat features not present on Site. No Brewer's Blackbirds or nesting structures were observed during breeding bird surveys and thus, this species is considered not present on Site.
MIGRATORY BUTTERFLY STOPOVER AREAS	A butterfly stopover area will be a minimum of 10 ha in size with a combination of field and forest habitat present and will be located within 5 km of Lake Erie or Lake Ontario.	Combination of ELC Community Series; need to have present one Community Series from each land class: Field: CUM, CUT, or CUS Forest: FOC, FOD, FOM, or CUP. Anecdotally, a candidate site for butterfly stopover will have a history of butterflies being observed.	NO. Site is not within 5 km of Lake Ontario or Lake Erie.
LANDBIRD MIGRATORY STOPOVER AREAS	Woodlots greater than10 ha in size and within 5 km of Lake Erie and Lake Ontario.	All ecosites associated with these ELC Community Series: FOC, FOM, FOD, SWC, SWM, and SWD.	NO. Site is not within 5 km of Lake Ontario or Lake Erie.
DEER YARDING AREAS	Woodlots greater than 100 ha in size or if large woodlots are rare in a planning area woodlot greater than 50 ha.	All forested ecosites with these ELC Community Series: FOC, FOM, FOD, SWC, SWM, and SWD. Conifer plantations much smaller than 50 ha may also be used.	POSSIBLE (within Study Area and beyond). The contiguous woodland to the west of the Site is approximately 100 ha in size based on aerial imagery measurements, which may potentially provide deer yarding areas. However, as this feature is largely off-Site, no deer yarding areas were identified on Site or within the immediate Study Area. No Deer were observed on Site during field investigations. As beyond the Study Area extensive woodland areas exists, potential candidate deer yarding areas may be present beyond the Site.
RARE VEGETATION COMMUNITIES OR SPECIALIZED HABITAT FOR WILDLIFE			
CLIFF AND TALUS SLOPES	A cliff is vertical to near vertical bedrock greater than 3 m in height. A talus slope is rock rubble at the base of a cliff made up of coarse rocky debris.	Any ELC ecosite within Community Series: TAO, CLO, TAS, CLS, TAT, and CLT.	NO. No cliff or talus ecosites identified within or adjacent to the Site.



SWH NAME	SWH EXPLANATION	ELC ECOSITE CODES	POTENTIALLY PRESENT ON SITE?
SAND BARREN	Sand Barrens typically are exposed sand, generally sparsely vegetated and caused by lack of moisture, periodic fires and erosion. Usually located within other types of natural habitat such as forest or savannah. Vegetation can vary from patchy and barren to tree covered, but less than 60% coverage.	ELC ecosites: SBO1, SBS1, and SBT1. Vegetation cover varies from patchy and barren to continuous meadow (SBO1), thicket-like (SBS1), or more closed and treed (SBT1). Tree cover always less than 60%.	NO. No sand barren ecosite types identified within or adjacent to the Site.
ALVAR	An alvar is typically a level, mostly unfractured calcareous bedrock feature with a mosaic of rock pavements and bedrock overlain by a thin veneer of soil. The hydrology of alvars is complex, with alternating periods of inundation and drought. Vegetation cover varies from sparse lichen-moss associations to grasslands and shrublands and comprising a number of characteristic or indicator plants. Undisturbed alvars can be phyto- and zoogeographically diverse, supporting many uncommon or are relict plant and animal species. Vegetation cover varies from patchy to barren with a less than 60% tree cover.	ALO1, ALS1, ALT1, FOC1, FOC2, CUM2, CUS2, CUT2-1,and CUW2 Five alvar indicator species: 1) <i>Carex crawei</i> ; 2) <i>Panicum philadelphicum</i> ; 3) <i>Eleocharis compressa</i> ; 4) <i>Scutellaria parvula</i> ; and 5) <i>Trichostema brachiatum</i> . These indicator species are very specific to alvars within Ecoregion 6E.	NO. No alvar or related ecosite types identified within or adjacent to the Site. No alvar indicator species observed.
OLD GROWTH FOREST	Old Growth Forests are characterized by heavy mortality or turnover of over-storey trees resulting in a mosaic of gaps that encourage development of a multi-layered canopy and an abundance of snags and downed woody debris.	Forest Community Series: FOD, FOC, FOM, SWD, SWC, and SWM.	NO. Forest ecosite types are present within Study Area, woodland areas identified are considered mature but are not considered old-growth.
SAVANNAH	A Savannah is a tallgrass prairie habitat that has tree cover between 25 to 60%. In Ecoregion 7E, known tallgrass prairie and savannah remnants are scattered between Lake Huron and Lake Erie, near Lake St. Clair, north of and along the Lake Erie shoreline, in Brantford and in the Toronto area (north of Lake Ontario).	TPS1, TPS2, TPW1, TPW2, and CUS2	NO. Ecosite types are not present on the Site.
TALLGRASS PRAIRIE	A tallgrass prairie has ground cover dominated by prairie grasses. An open tallgrass prairie habitat has less than 25% tree cover. In Ecoregion 7E, known tallgrass prairie and savannah remnants are scattered between Lake Huron and Lake Erie, near Lake St. Clair, north of and along the Lake Erie shoreline, in Brantford and in the Toronto area (north of Lake Ontario).	TPO1 and TPO2	NO. Ecosite types are not present on the Site.
OTHER RARE VEGETATION COMMUNITIES	Rare vegetation communities may include beaches, fens, forest, marsh, barrens, dunes and swamps.	Provincially rare S1, S2 and S3 vegetation communities are listed in Appendix M of the SWHTG. Any ELC ecosite code that has a possible ELC vegetation type that is provincially rare is a candidate for SWH.	NO. Ecosite types are not present on the Site.



SWH NAME	SWH EXPLANATION	ELC ECOSITE CODES	POTENTIALLY PRESENT ON SITE?
SPECIALIZED HABITATS OF WILDLIFE CONSIDERED SWH			
WATERFOWL NESTING AREA	A waterfowl nesting area extends 120 m from a wetland (greater than 0.5 ha) or a wetland (greater than 0.5 ha) and any small wetlands (0.5 ha) within 120 m or a cluster of 3 or more small (less than 0.5 ha) wetlands within 120 m of each individual wetland where waterfowl nesting is known to occur. Upland areas should be at least 120 m wide so that predators such as racoons, skunks, and foxes have difficulty finding nests. Wood Ducks and Hooded Mergansers utilize large diameter trees (greater than 40 cm DBH) in woodlands for cavity nest sites.	All upland habitats located adjacent to these wetland ELC ecosites are Candidate SWH: MAS1, MAS2, MAS3, SAS1, SAM1, SAF1, MAM1, MAM2, MAM3, MAM4, MAM5, MAM6, SWT1, SWT2, SWD1, SWD2, SWD3, and SWD4. Note: includes adjacency to PSW.	NO. While the Site is adjacent to a PSW, no upland habitats were found on Site.
BALD EAGLE AND OSPREY NESTING, FORAGING AND PERCHING HABITAT	Nests are associated with lakes, ponds, rivers or wetlands along forested shorelines, islands, or on structures over water. Osprey nests are usually at the top a tree whereas Bald Eagle nests are typically in super canopy trees in a notch within the tree’s canopy. Nests located on man-made objects are not to be included as SWH (e.g., telephone poles and constructed nesting platforms).	ELC Forest Community Series: FOD, FOM, FOC, SWD, SWM and SWC directly adjacent to riparian areas – rivers, lakes, ponds and wetlands.	POSSIBLE (within Study Area and beyond). Forest communities are present within the Site however, this feature is largely within the Study Area and beyond. However, no stick nests were observed on Site, and no Bald Eagle were observed during breeding bird or other surveys. An Osprey was observed near Breeding Bird Station 4 during the June 13, 2024, survey. As this species was observed within suitable forest habitat present within the general vicinity, was considered a possible breeder.
WOODLAND RAPTOR NESTING HABITAT	All natural or conifer plantation woodland/forest stands greater than 30 ha with greater than 10 ha of interior habitat. Interior habitat determined with a 200 m buffer. Stick nests found in a variety of intermediate-aged to mature conifer, deciduous or mixed forests within tops or crotches of trees. Species such as Coopers Hawk nest along forest edges sometimes on peninsulas or small off-shore lands. In disturbed sites, nests may be used again, or a new nest will be in close proximity to old nest.	May be found in all forested ELC ecosites. May also be found in SWC, SWM, SWD and CUP3.	POSSIBLE (within Study Area and beyond). Forest ELC ecosite present within the Study Area and beyond are considered large enough (approximately 100 ha) to be considered potential candidate woodland raptor nesting habitat. No stick nests observed on Site. As such potential woodland raptor nesting habitat was not identified within the Site, however, may be present within the Study Area and beyond.
TURTLE NESTING AREAS	Best nesting habitats for turtles are close to water and away from roads and sites less prone to loss of eggs by predation from skunks, raccoons or other animals. For an area to function as a turtle-nesting area, it must provide sand and gravel that turtles are able to dig in and are located in open, sunny areas. Nesting areas on the sides of municipal or provincial road embankments and shoulders are not SWH. Sand and gravel beaches adjacent to undisturbed shallow weedy areas of marshes, lakes, and rivers are most frequently used.	Exposed mineral soil (sand or gravel) areas adjacent (less than 100 m) or within the following ELC ecosites: MAS1, MAS2, MAS3, SAS1, SAM1, SAF1, BOO1, and FEO1.	NO. No exposed mineral soil areas are present within the Site.



SWH NAME	SWH EXPLANATION	ELC ECOSITE CODES	POTENTIALLY PRESENT ON SITE?
SEEPS AND SPRINGS	Any forested area (with less than 25% meadow/field/pasture) within the headwaters of a stream or river system. Seeps and springs are important feeding and drinking areas especially in the winter will typically support a variety of plant and animal species.	Seeps/springs are areas where groundwater comes to the surface. Often, they are found within headwater areas within forested habitats. Any forested ecosite within the headwater areas of a stream could have seeps/springs.	NO. No seeps/springs were identified within the Site.
AMPHIBIAN BREEDING HABITAT (WOODLAND)	Presence of a wetland, pond or woodland pool (including vernal pools) greater than 500 m² (about 25 m diameter) within or adjacent (within 120 m) to a woodland (no minimum size). Some small wetlands may not be mapped and may be important breeding pools for amphibians. Woodlands with permanent ponds or those containing water in most years until mid-July are more likely to be used as breeding habitat.	All ecosites associated with these ELC Community Series: FOC, FOM, FOD, SWC, SWM, and SWD. Breeding pools within the woodland or the shortest distance from forest habitat are more significant because they are more likely to be used due to reduced risk to migrating amphibians.	YES (within the Study Area and beyond). No amphibian breeding habitat was identified within the Site. While no ponds or waterbodies were identified within the woodland areas to the southeast of the Site as these lands were beyond the Study Area. Based on results of amphibian calling surveys, near station A2, beyond the wetland feature and tree line, choruses of Spring Peepers and Grey Treefrogs were heard. Indicating potential significant breeding woodland habitat within the Study Area and beyond.
AMPHIBIAN BREEDING HABITAT (WETLANDS)	Wetlands greater than 500 m² (about 25 m diameter), supporting high species diversity are significant; some small or ephemeral habitats may not be identified on MNRF mapping and could be important amphibian breeding habitats. Presence of shrubs and logs increase significance of pond for some amphibian species because of available structure for calling, foraging, escape and concealment from predators. Bullfrogs require permanent waterbodies with abundant emergent vegetation.	ELC Community Classes: SW, MA, FE, BO, OA, and SA. Typically, these wetland ecosites will be isolated (greater than 120 m) from woodland ecosites; however, larger wetlands containing predominantly aquatic species (e.g., Bullfrog) may be adjacent to woodlands.	NO. No amphibian breeding habitat was identified within the Site. The mineral meadow marsh (MAMM1-3; Unit 4) within the Study Area is considered a wetland greater than 500 m². However, only approximately three Wood Frogs and four Spring Peepers were recorded at station A2 within this wetland feature during the April 16, 2024, survey. Thus, this feature would not meet defining criteria (i.e., two or more of the listed frog/toad species with Call Level Coads of 3) to be considered significant breeding wetland habitat.
WOODLAND AREA-SENSITIVE BIRD BREEDING HABITAT	Habitats where interior forest breeding birds are breeding, typically large mature (greater 60 years old) forest stands or woodlots greater than 30 ha. Interior forest habitat is at least 200 m from forest edge habitat.	All ecosites associated with these ELC Community Series: FOC, FOM, FOD, SWC, SWM, and SWD.	POSSIBLE (within Study Area and beyond). Forest ELC ecosite present within the Study Area and beyond are considered large enough (approximately 100 ha) to be considered potential candidate woodland area sensitive breeding bird habitat. However, woodland areas extending on Site is not considered interior habitat and thus, this SWH was not identified within the Site. As such woodland area sensitive breeding bird habitat was not identified within the Site, however, may be present within the Study Area and beyond.



SWH NAME	SWH EXPLANATION	ELC ECOSITE CODES	POTENTIALLY PRESENT ON SITE?
HABITATS OF SPECIES OF CONSERVATION CONCERN			
MARSH BREEDING BIRD HABITAT	Nesting occurs in wetlands. All wetland habitat is to be considered as long as there is shallow water with emergent aquatic vegetation present. For Green Heron, habitat is at the edge of water such as sluggish streams, ponds and marshes sheltered by shrubs and trees. Less frequently, it may be found in upland shrubs or forest a considerable distance from water.	MAM1, MAM2, MAM3, MAM4, MAM5, MAM6, SAS1, SAM1, SAF1, FEO1, and BOO1 For Green Heron: All SW, MA, and CUM1 ecosites.	NO. One mineral meadow marsh (MAMM1-3; Unit 4) community present within the Study Area, however, no Green Herons were found during breeding bird surveys or during field investigations.
OPEN COUNTRY BIRD BREEDING HABITAT	Large grassland areas (includes natural and cultural fields and meadows) greater than 30 ha. Grasslands not Class 1 or 2 agricultural lands, and not being actively used for farming (i.e., no row cropping or intensive hay or livestock pasturing in the last 5 years). Grassland sites considered significant should have a history of longevity, either abandoned fields, mature hayfields and pasturelands that are at least 5 years or older. Indicator bird species are area sensitive requiring larger grassland areas than common grassland species.	CUM1 and CUM2	NO. One cultural catchall (CU; Unit 3) community is present within the Site, however, the community is less than 30 ha.
SHRUB/EARLY SUCCESSIONAL BIRD BREEDING HABITAT	Large field areas succeeding to shrub and thicket habitats greater than 10 ha in size. Shrub land or early successional fields, not class 1 or 2 agricultural lands, not being actively used for farming (i.e., no row cropping, haying or live-stock pasturing in the last 5 years). Shrub thicket habitats (greater than 10 ha) are most likely to support and sustain a diversity of these species. Shrub and thicket habitat sites considered significant should have a history of longevity, either abandoned fields or pasturelands.	CUT1, CUT2, CUS1, CUS2, CUW1, and CUW2 Patches of shrub ecosites can be complexed into a larger habitat for some bird species.	NO. One cultural catchall (CU; Unit 3) community is present within the Site, however, the community is less than 10 ha.



SWH NAME	SWH EXPLANATION	ELC ECOSITE CODES	POTENTIALLY PRESENT ON SITE?
TERRESTRIAL CRAYFISH	Wet meadow and edges of shallow marshes (no minimum size) should be surveyed for terrestrial crayfish. Constructs burrows in marshes, mudflats, and meadows and the ground can't be too moist. Can often be found far from water. Both species are a semi-terrestrial burrower which spends most of its life within burrows consisting of a network of tunnels. Usually, the soil is not too moist so that the tunnel is well formed.	MAM1, MAM2, MAM3, MAM4, MAM5, MAM6, MAS1, MAS2, MAS3, SWD, SWT, SWM, and CUM1 with inclusions of above meadow marsh ecosites can be used by terrestrial crayfish.	NO. No wet meadow or shallow marsh ecosites present within the Site. A mineral meadow marsh (MAMM1-3; Unit 4) community is present within the Study Area however, no crayfish tunnels were observed or indicated along the edges of this feature during field investigations.
SPECIAL CONCERN AND RARE WILDLIFE SPECIES	When an element occurrence is identified within a 1 or 10 km grid for a special concern or provincially rare species; linking candidate habitat on the site needs to be completed to ELC ecosite. Assessment/inventory of the site for the identified special concern or rare species needs to be completed during the time of year when the species is present or easily identifiable.	All plant and animal element occurrences within a 1 or 10 km grid. Older element occurrences were recorded prior to GPS being available; therefore, location information may lack accuracy.	YES. Special Concern wildlife species habitat is present on the Site. One Eastern Wood-pewee was observed during the July 4, 2023, breeding bird survey Round 2 at Station 4. As woodland areas within the Study Area are not proposed for removal, this species habitat will remain intact and is abundant within the general vicinity. As this species and habitat are not anticipated to be negatively impacted by the proposed land severance, will not be discussed further. NHIC Records check and consultation with MECP identified potential for the following species: • Barn Swallow (SC) ◦ No suitable habitat was considered present within the Site. • Snapping Turtle (SC) ◦ No suitable habitat was considered present within the Site. • Eastern Wood-Pewee (SC) ◦ Potential suitable habitat may be found along forest edges found on the Site and in the Study Area. See above.
ANIMAL MOVEMENT CORRIDORS			
AMPHIBIAN MOVEMENT CORRIDORS	Movement corridors between breeding habitat and summer habitat. Corridors may be found in all ecosites associated with water. Corridors will be determined based on identifying the significant breeding habitat for these species. Movement corridors must be determined when amphibian breeding habitat is confirmed as SWH.	Corridors may be found in all ecosites associated with water. Corridors will be determined based on identifying the significant breeding habitat for these species in Table 1.1 of the Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E (MNRF, 2015).	POSSIBLE (within Study Area and beyond). No amphibian breeding habitats identified within the Site. As amphibian breeding woodland habitat is mostly present within the Study Area and beyond, amphibian movement corridors also be present beyond the Study Area.
DEER MOVEMENT CORRIDORS	Movement corridor must be determined when deer wintering habitat is confirmed as SWH.	Corridors may be found in all forested ecosites.	NO. No deer wintering yards identified within the Site or immediate Study Area.



APPENDIX H:

Significant Woodland Evaluation Table

Table 1: York Region Official Plan (2022) (consolidation June 2024) Significant Woodlands Evaluation

POLICY	CRITERIA	IS THE CRITERIA SATISFIED BASED ON SITE?	COMMENTS REGARDING CRITERIA
3.4.30 That significant woodlands be verified on a site-by-site basis and shall include those woodlands meeting one of the following criteria: a. is 0.5 ha or larger and: i. directly supports globally or provincially rare plants, animals or communities as assigned by the NHIC; or, ii. directly supports Threatened or Endangered species, with the exception of specimens deemed not requiring protection by the Province (e.g. as is sometimes the case with Butternut); or, iii. is within 30 m of a PSW or wetland as identified on Map 4, waterbody, permanent stream or intermittent stream; b. Is 2 ha or larger and: i. is located outside of the Urban Area, Towns and Villages, or Hamlets and is within 100 m of a Life Science ANSI, a PSW or wetland including those identified on Map 4, significant valleyland, or fish habitat; or, ii. occurs within the Regional Greenlands System; c. Is south of the ORM and is 4 ha or larger in size; d. Is north of the ORM and is 10 ha or larger in size; e. On the ORM the woodland will be evaluated for significance based on the requirements of the ORMCP and associated technical papers; or, f. On lands in the Greenbelt Natural Heritage System, the woodland will be evaluated for significance based on the requirements of the Greenbelt Plan and associated technical papers; or, g. On lands in the Lake Simcoe watershed, outside of the Greenbelt, the ORMCP, and existing settlement areas, the woodland will be evaluated for significance based on the requirements of the LSPP and associated technical papers.	a	Yes	The woodland area on Site meets the minimum size requirement (i.e., 0.5 ha) as it is approximately 100 ha in size based on aerial imagery and includes contiguous canopy off-Site.
	i	No	Based on field investigations, no rare plants, animals or communities were found on Site.
	ii	No	During vegetation surveys, a single Butternut, a listed Endangered species under the ESA, was found off-Site near the northern boundary within the Study Area. However, following a BHA and consultation with MECP, the tree was deemed a Category 1 tree and thus, was not deemed retainable or required additional protection measures. Thus, while an Endangered species was identified during field investigations was not deemed requiring protection by the province and; therefore, this sub-criterion was considered not met.
	iii	Yes	The Site is within 30 m of a PSW as identified in Map 4 of the Region OP.
	b	Yes	The woodland area on Site meets the minimum size requirement (i.e., 2 ha) as it is approximately 100 ha in size based on aerial imagery and includes contiguous canopy off-Site.
	i	Yes	The woodland area is located within a designated settlement area and is within 100 m of a Life Science ANSI and a PSW as identified on Map 4.
	ii	Yes	The woodland is designated as part of the Regional Greenlands System.
	c	No	The woodland is not located south of the ORM.
	d	No	The woodland is not located south of the ORM.
	e	Yes	Based on the ORMCP Technical Paper Series #7 – Identification and Protection of Significant Woodlands, as the woodland meets the significant woodland identification criteria (see Table 2 on the following page) to be deemed a significant woodland in the ORMCP.
	f	No	The Site is not located within the Greenbelt Natural Heritage System.
	g	No	The Site is located within the Greenbelt, ORMCP and an existing settlement area.

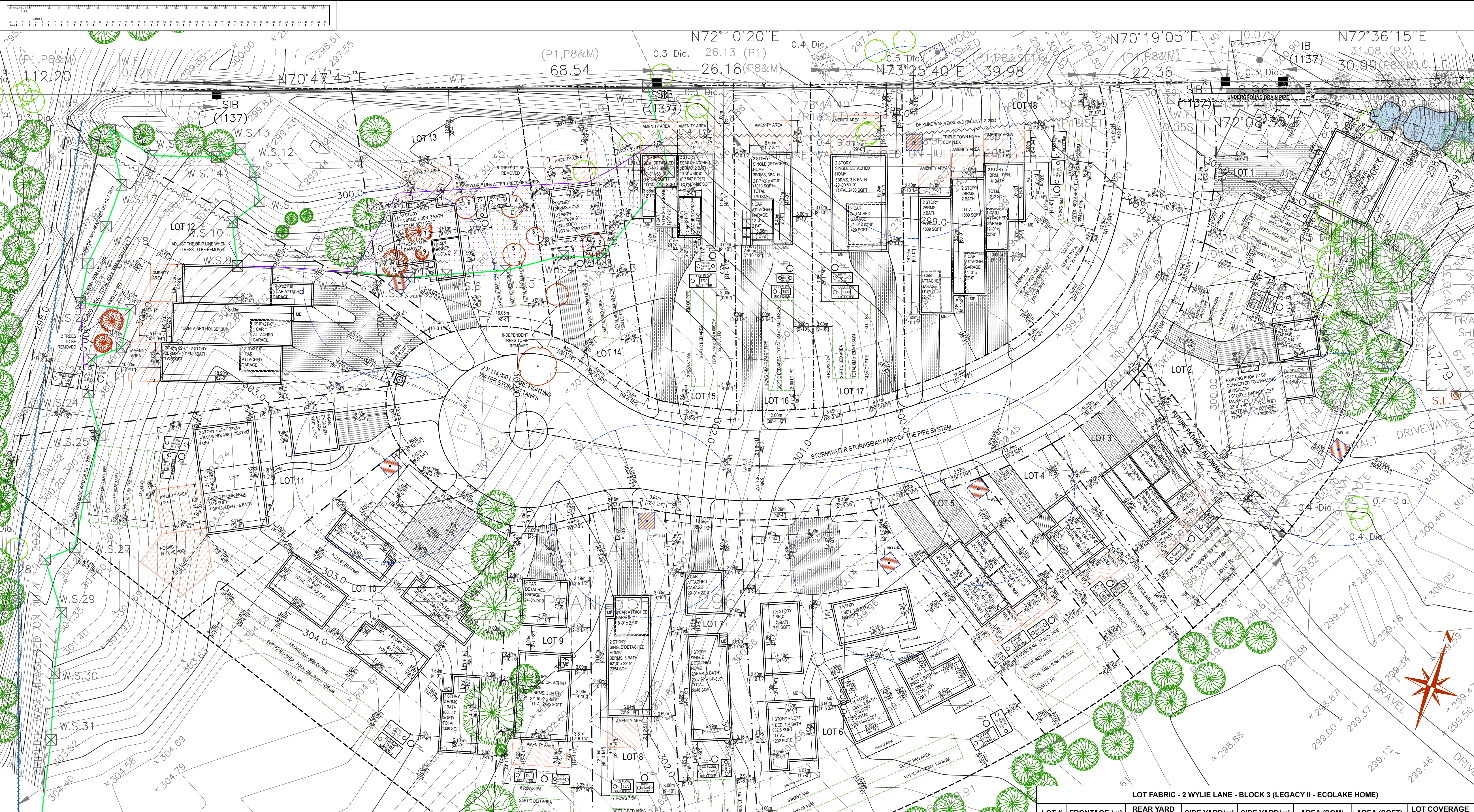
Table 2: ORMCP Technical Paper Series #7 – Identification and Protection of Significant Woodlands Evaluation

POLICY	CRITERIA	IS THE CRITERIA SATISFIED BASED ON SITE?	COMMENTS REGARDING CRITERIA
Identification of Significant Woodlands For the purposes of applying the policies of the ORMCP, significant woodlands shall mean woodlands that have either: (a) a tree crown cover of over 60% of the ground, determinable from aerial photography (“forest” of Lee et al. 1998); or (b) a tree crown cover of over 10% of the ground, determinable from aerial photography (“treed community” of Lee et al. 1998), together with on-ground stem estimates of: • 1,000 trees of any size per hectare, or • 750 trees measuring over five cm in diameter, per hectare, or • 500 trees measuring over 12 cm in diameter, per hectare, or • 250 trees measuring over 20 cm in diameter, per hectare (based on the Forestry Act of Ontario, 1998). Treed portions with less than the required stocking level will be considered part of the woodland as long as the combination of all treed units in the overall connected treed area meets the required stocking level. Woodlands experiencing changes such as harvesting, blowdown or other tree mortality are still considered woodlands. Such changes are considered temporary whereby the forest still retains its long-term ecological value. And, which have a minimum average width of 40 m or more measured to crown edges. And, which are: (c) 4 ha or larger in size located in the Countryside or Settlement Areas of the ORMCP; or (d) 0.5 ha or larger in size located in the Natural Core or Natural Linkage Areas of the ORMCP; or (e) 0.5 ha or larger located within or intersecting with a key natural heritage feature or hydrologically sensitive feature or their VPZ.	Tree Crown Cover	Yes	From review of aerial imagery, the tree crown cover is most likely approximately 60% of the ground within the immediate area of the Site as the tree canopy appears relatively extensive including contiguous canopy off-site.
	Minimum Average Width	Yes	Based on aerial imagery measurements, it appears the average width of the contiguous woodland approximately ranges between 1300 m to 1500 m which meets the minimum average width (i.e., 40 m) required.
	Size	Yes	The woodland is larger than 0.5 ha and the woodland area is located in the designated Natural Core Areas of the ORMCP.
Exceptions Notwithstanding the above, significant woodlands do not include: • a plantation managed for production of fruits, nuts, Christmas trees or nursery stock; or • a plantation managed for tree products with an average rotation of less than 20 years (e.g. hybrid poplar or willow); or • a plantation established and continuously managed for the sole purpose of complete removal at rotation, as demonstrated with documentation acceptable to the planning authority or the MNRF, without a forest restoration objective. Additional exclusions may be considered for communities which are dominated by the invasive non-native tree species buckthorn (<i>Rhamnus species</i>) or Norway maple (<i>Acer platanoides</i>) that threaten good forestry practices and environmental management. Such exceptions may be considered where native tree species cover less than 10% of the ground and are represented by less than 100 stems of any size per hectare.	Exceptions	No	As the woodland appears to be a naturalized feature, it is not considered a plantation. Based on vegetation inventories, the woodland areas within the Study Area are dominated by Eastern White Cedar (Unit 1 – FOCS3-1) or White Ash, Black Walnut and Trembling Aspen (Unit 2 – WOD). While European Buckthorn can be found within the understory of these communities, as these woodlands are not entirely dominated by invasive plant species would not meet the exclusion criteria to be considered a non-significant woodland in the ORMCP.



APPENDIX I:

Lot Site Plan



LEGACY II

RE-IMAGINED

MIXED SIZE HOME SUBDIVISION PLAN
AFFORDABLE HOMES TO MODEST ESTATES

4 WYLIE LANE,
WHITCHURCH-STOUFFVILLE, ON L4A 7X3

57 ROSEHILL DR., STOUFFVILLE, ON, L4A 2Y3
E: JAMESTOTHENET@GMAIL.COM
P: (647) 987-7871

eco lake homes

DATE: _____ SCALE: **3 : 1** DRAWN BY: _____

FILE: _____ REV: _____ CHECKED BY: _____

DRAWING TITLE: **LEGACY II - SITE PLAN** DRAWING #: **SP-1**

KEYS TO SUCCESSFUL 35-36 HOME PLAN

- 17 METER ROAD ALLOWANCE (NOT 20) TOWN STILL ADOPTS ROAD
JUSTIFICATION: NO TOWN WATER OR SEWERS REQUIRED, 20m NOT NEEDED
RESULT: ADDS 2 LOTS AND 3 HOMES
- FIRE FIGHTING TANKS UNDER TRAFFIC OVAL, AND STORM WATER INLINE WITH ROAD ALLOWANCE
JUSTIFICATION: IT IS COMMON PRACTICE AND IS USED BY MANY TOWNS
RESULT: SAVE 1 LARGE LOT (#1) 2 ADDITIONAL HOMES

- CLUSTER HOMES
2 ESTATE SIZE LOTS
5 SMALL CONDO CLUSTER
HOMES WITH COMMON PARKING

JUSTIFICATION: OPPORTUNITY TO SAVE ON INFRASTRUCTURE AND BUILDING COST
RESULTING IN 5-6 ADDITIONAL AFFORDABLE HOMES

* FINAL KEY, THIS PLAN ALLOWS LESS LOTS OF RECORD WHILE HELPING SEPTIC LOADING APPROVALS

- USE NEW O.P.A ALLOWANCE FOR SHARED WELLS UP TO 5 HOMES PER WELL. PRIVATE ROAD PORTAL CONDO WILL MAINTAIN WELLS.

LOT FABRIC - 2 WYLIE LANE - BLOCK 3 (LEGACY II - ECOLAKE HOME)						
LOT #	FRONTAGE (m)	REAR YARD (m)	SIDE YARD(m)	SIDE YARD(m)	AREA (SQM)	AREA (SQFT)
1	21.50	12	13.46	2.4	963.80	10374.19
2	20.84	12	2.73	2	948.42	10208.73
3	16.39	12	3	2.4	590.52	6356.26
4	12.29	12	3	2.4	451.27	4857.41
5	17.55	12	3	2.4	681.00	7330.17
6	20.77	12	3	2.4	1634.26	17591.01
7	11.65	12	3	2.4	658.17	7084.51
8	12.02	12	3	2.4	781.53	8412.26
9	12.53	12	3	2.4	825.66	8887.27
10	21.33	12	3	2.4	1703.79	18339.46
11	10.11	12	3	2.4	1214.52	13072.95
12	10.28	12	3	2.4	1727.04	18589.68
13	16.05	12	3	2.4	930.53	10016.10
14	17.79	11	3	2.4	598.36	6440.63
15	13.84	11	3	2.4	841.27	9055.37
16	12	11	3	2.4	613.00	6598.30
17	14.6	11	3	2.4	704.08	7578.69
18	62.92	11	3	2.4	1202.23	12940.63
TOTAL					17069.43	18373.62



APPENDIX J:

Photo Page



PHOTO 1: Looking northeast towards Unit 3 - CU (Cultural Catchall Community) during the September 8, 2023 fall vegetation community survey.



PHOTO 2: Looking west towards Unit 5 - OAGM1 (Organic Annual Row Crop) during the April 16, 2024 amphibian survey.



PHOTO 3: Looking west towards Unit 1 - FOCS3-1 (Dry White Cedar Calcareous Bedrock Coniferous Forest Type) during the June 7, 2024 spring vegetation community survey.

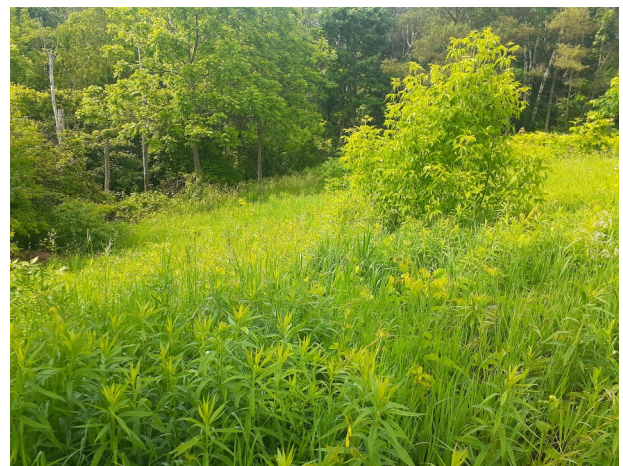


PHOTO 4: Looking north towards Unit 2a - MEM (Mixed Meadow) during the June 7, 2024 spring vegetation community survey.



PHOTO 5: Looking north towards Unit 5 - OAGM1 (Organic Annual Row Crop) during the June 7, 2024 spring vegetation community survey.



PHOTO 6: Looking southeast towards Unit 5 - OAGM1 (Organic Annual Row Crop) and Unit 6 - Hedgerow during the June 7, 2024 spring vegetation community survey.



PHOTO 7: Looking west towards materials stored in Unit 3 - CU (Cultural Catchall Community) during the June 7, 2024 spring vegetation community survey.



PHOTO 8: Looking north towards the Butternut tree during the Butternut Health Assessment on July 12, 2024.



PHOTO 9: Looking west towards a snag tree on February 8, 2024 during the bat habitat suitability assessment.



APPENDIX K:

Terms of Reference

August 8, 2023

Project #: 23-0462

Town of Whitchurch-Stouffville
111 Sandford Drive
Stouffville, Ontario, L4A 08Z

Attention: Town of Whitchurch-Stouffville Development Services

Sent via email: developmenthelp@townofws.ca

SUBJECT: TERMS OF REFERENCE, WYLIE LANE, WHITCHURCH-STOUFFVILLE, ONTARIO

EnVision Consultants Ltd. (EnVision) was retained by Eco Lake Home Inc. (the 'Client') to conduct an Environmental Impact Study (EIS) to support the proposed subdivision at Wylie Lane, Whitchurch-Stouffville, Ontario (the 'Site'). This document proposes the Terms of Reference for the EIS.

The Site is located approximately 75 m southwest of Musselman Lake and is bounded by rural residential dwellings of the Musselman community to the north and east, along with woodland and naturalized areas to the west and south. Overall, the Site is primarily comprised of agricultural crop fields, separated by small, scattered treed features. The Site is composed of two locations for proposed development. One location occupies an approximate area of 2.41 hectares (5.96 acres) and currently contains one (1) garage with the remaining area as crop fields separated by a hedgerow feature. While the other area occupies an approximate area of 0.79 hectares (1.96 acres), currently contains no developments and consists of scattered trees along with a wetland feature.

In terms of Natural Heritage features, to the west of the Site is a large woodland with an area identified as an a provincially significant Area of Natural Scientific Interest (ANSI) – Life Science and a Provincially Significant Wetland (PSW). A portion of this woodland is found within the northwest corner of the Site, while a smaller PSW feature is also located within the southwest corner of the Site.

We will use the Official Plans of York Region (2023) and the Town of Whitchurch-Stouffville (2023) and the Ballantrae-Musselman Lake and Environs Secondary Plan (2023); as the guiding policy documents to complete the required EIS.



REVIEW OF BACKGROUND INFORMATION

Relevant information resources will be reviewed in order to identify regulated natural heritage features and functions present on the site, and provide information related to Significant Wildlife Habitat (SWH) and Species at Risk (SAR) that have potential to occur on the Site or within the surrounding area (within 120 m of the Site). The resources to be reviewed are listed below:

- Aerial Photographs and Satellite Imagery;
- Atlas of the Breeding Birds of Ontario internet site (Bird Studies Canada, 2006);
- Ballantrae-Musselman Lake and Environs Secondary Plan (Town of Whitchurch-Stouffville, 2023);
- Conservation Authorities Act, Ontario Regulation 179/06 Lake Simcoe Region Conservation Authority;
- Correspondence with Lake Simcoe Region Conservation Authority (LSRCA), the Ministry of Natural Resources and Forestry (MNRF), and the Ministry of Environment, Conservation and Parks (MECP) staff;
- Greenbelt Plan (Government of Ontario, 2017);
- Lake Simcoe Protection Plan (LSPP) (Government of Ontario, 2009);
- Natural Heritage Areas Mapping, including Natural Heritage Information Centre (NHIC) data (MNRF, 2022);
- Natural Heritage Reference Manual for Natural Heritage Policies of the Provincial Policy Statement, 2005 (OMNR, 2010);
- Oak Ridges Moraine Conservation Plan (Government of Ontario, 2017);
- Ontario Reptile and Amphibian Atlas (Ontario Nature, 2019);
- Provincial Policy Statement (OMMAH, 2020);
- Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E (MNRF, 2015b);
- Significant Wildlife Habitat: Technical Guide (OMNR, 2000);
- Species at Risk in Ontario (SARO) List, Ontario Regulation 230/08 (Government of Ontario, 2018);
- Species at Risk Public Registry (Government of Canada, 2015);
- The Town of Whitchurch-Stouffville Official Plan (2000) (office consolidation January 2023);
- York Region Official Plan (2022) (office consolidation June 2023); and,
- 3rd DRAFT New Town of Whitchurch-Stouffville Official Plan (June 2023).

FIELD PROGRAM

VEGETATION COMMUNITY DESCRIPTION AND MAPPING

The vegetation on the Site will be inspected and details pertaining to the species and frequency of occurrence on the Site will be recorded. Additionally, details including the presence of any SAR plants, surficial soil types, and indication of human disturbance will be noted. Vegetation communities on the Site will be recorded, mapped, and classified based on the Ecological Land Classification (ELC) for Southern Ontario (Lee et al. 1998).



VEGETATION INVENTORY

The Site will be visited on two (2) occasions, once in summer 2023 and once in spring 2024, to conduct vegetation inventories. All species at the Site will be recorded, and the location of any SAR plants will be documented with a handheld GPS unit. This information will be used in the classification of ELC polygons on the Site.

BREEDING BIRD SURVEYS

The Site will be visited on two (2) occasions, between late May and early July, to conduct breeding bird surveys. The surveys will be conducted in accordance with the protocols detailed in the Ontario Breeding Bird Atlas (OBBA) (Bird Studies Canada, 2001) and the Forest Bird Monitoring Protocol (FBMP), including:

- Surveys to be completed within five (5) hours after sunrise;
- Surveys will occur a minimum of ten (10) days apart;
- Standardized point counts will be used to survey for breeding birds;
- In addition to the point counts, an active search will be completed which will include looking and listening for birds while moving between the different habitats on the Site; and,
- Standard breeding evidence codes to be recorded on accordance OBBA.

Breeding bird surveys were undertaken on June 13 and July 4, 2023, following the above-noted protocol. As breeding bird surveys are considered complete, no further surveys are proposed.

AMPHIBIAN CALLING SURVEYS

The Site will be visited on three (3) occasions during the amphibian breeding season. Amphibian breeding activity will be assessed using the Marsh Monitoring Program (MPP) Amphibian Calling Survey Protocol (Bird Studies Canada, 2008). Surveys will be completed by qualified, experienced staff under appropriate conditions and include:

- Surveys will be completed at dusk / early evening;
- Nighttime air temperatures will be $\geq 5^{\circ}\text{C}$ for the 'first' survey, $\geq 10^{\circ}\text{C}$ for the 'second' survey and $\geq 17^{\circ}\text{C}$ for the 'third' survey;
- Surveys will be at least ten (10) days apart; and,
- During the surveys, the species heard over the course of the 3-minute survey period will be documented, in addition to the call level code.

BAT HABITAT ASSESSMENT

The Site will be assessed for any bat habitat and will be visited during leaf-off conditions to conduct a tree snag survey to determine whether the trees onsite have the potential to be utilized as bat habitat.

The survey was completed in accordance with the MECP's protocol guidance documents including Maternity Roost Surveys (Forest/Woodlands) and Bat Survey Response which are both based off MNRF's Bat and Bat Habitat: Guidelines for Wind Power Projects (2011).



SIGNIFICANT HABITAT ASSESSMENT AND WILDLIFE DOCUMENTATION

The Site will be assessed for SWH and presence of or habitat for SAR, and any pertinent findings will be documented, photographed, and the location will be georeferenced using a handheld GPS unit. All incidental wildlife observations or evidence of wildlife will be recorded during each visit to the Site.

REPORTING

The findings from the field program will be included in an EIS report, along with relevant figures and regulatory communications. An assessment of the potential impacts of the proposed development to the natural heritage features and other communities on the Site will be conducted and included in the report. The report will also include recommendations for mitigation of impacts and the monitoring of these mitigations, and list enhancement opportunities on the Site. The report will be submitted to the Town of Whitchurch-Stouffville for review.

CLOSING

This Terms of Reference, was prepared for the account of Eco Lake Home Inc.. EnVision has completed this assessment in accordance with generally accepted professional practises and procedures applicable at the time of preparation. These services are not subject to any express or implied warranties, and none should be inferred. The material in this memo reflects EnVision's judgement in light of the information available at the time of preparation. Any use, which a Third Party not noted above makes of this report, or nay reliance on decisions to be made based on it, are the responsibility of such Third Parties. EnVision accepts no responsibility for damages, if any, suffered by a Third Party as a result of decisions made or actions based on this report.

We thank you for allowing us to take part in your project. Should you have any questions or wish to review the contents of this letter in more detail, please do not hesitate to contact the undersigned.

Yours sincerely,

EnVision Consultants Ltd.

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