



Scoped Environmental Impact Study

130 Mountainview Road, Halton Hills, ON

Submitted to:

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Submitted by:

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1. Introduction

1.1 Project Overview

GEI Consultants Ltd. (GEI) has been contracted by Gilbach Real Estate Development to complete a Scoped Environmental Impact Study (EIS) for their property located at 130 Mountainview Road in Halton Hills, Ontario (herein referred to as the Subject Lands; **Figure 1, Appendix A**). The Subject Lands are generally bound by Mountainview Road to the east, Georgetown GO Line to the south, River Street to the north and an existing industrial development to the west. The Subject Lands presently consist of a vehicle storage located in the southwest portion of the property and a cultural woodland.

The proposed development application includes the construction of three larger buildings consisting of six towers (Towers A, B, C, D, E and F) , internal road, parking areas, and amenity spaces.

1.2 Purpose of the Report

A Scoped EIS is required to assess the potential impacts of the proposed development on the Subject Lands on natural heritage features and their associated functions. This EIS considers applicable policies of the Province of Ontario's Provincial Policy Statement (PPS; Ministry of Municipal Affairs and Housing; MMAH 2020) and associated provincial implementation guidance contained in the Natural Heritage Reference Manual (NHRM; MNR 2010) as well as the Town of Halton Hills Official Plan (OP; 2020 Consolidation), Halton Region's OP (2021 Consolidation) and the Credit Valley Conservation's (CVC) regulation and policies as presented within Section 2 of LGL Limited's (LGL) Natural Heritage Characterization Report (**Appendix C**). This Scoped EIS must be prepared to the satisfaction of all above noted reviewing agencies.

This report relies on the ecological data collected by LGL Limited, as illustrated within their Natural Heritage Characterization Report (**Appendix C**). The fieldwork was completed by LGL in accordance with the Terms of Reference (TOR) Checklist provided by Halton Region (as presented within Appendix D-2 of LGL's Natural Heritage Characterization Report).



2. Summary of Existing Findings

The following sections summarize the results from LGL's Natural Heritage Characterization Report (**Appendix C**).

2.1 Botanical Surveys and Ecological Land Classification

LGL completed a woodland stem density analysis in the winter of 2022, along with a summer botanical inventory and Ecological Land Classification survey in August 2022.

The Subject Lands consists of one Mineral Cultural Woodland (CUW1) community. The canopy of the woodland consisted of Black Walnut (*Juglans nigra*), Manitoba Maple (*Acer negundo*) and White Elm (*Ulmus americana*). The understory was dominated by Common Buckthorn (*Rhamnus cathartica*), Tartarian Honeysuckle (*Lonicera tartarica*) and Staghorn Sumac (*Rhus hirta*).

LGL determined through site specific investigations that the CUW1 community did not meet the significant woodland criteria presented within Part VI Definitions Section 277 of the Region of Halton's Official Plan (2021). This was further confirmed through the TOR scoping exercise with Halton Region, as presented within the comments section of the checklist (found within Appendix A of LGL's report; **Appendix C**).

A total of 45 plant species have been recorded within the Subject Lands. Of the 45 plants identified to species, 25 (66%) plant species identified are native to Ontario and 20 (44%) plant species are considered introduced and non-native to Ontario. No species at risk (SAR), locally or regionally rare plants were identified during LGL's botanical investigation.

2.2 Breeding Bird Survey

A total of 19 species of birds were recorded by LGL during two rounds of breeding bird surveys in June 2022. No SAR bird species were recorded; rather, all species are common and secure or apparently common and secure (S5 or S4) within Southern Ontario.

2.3 Breeding Amphibians

Despite no wetland habitat being recorded within the Subject Lands, three rounds of amphibian call count surveys were completed in the spring of 2022 within localized areas of pooling within the CUW1. LGL suggested within their report that the wetted area is present after rain events, is very short-lived, and provides "low quality anuran habitat which may not be suitable to support life stages and breeding of amphibians".

No amphibian species were identified by LGL during targeted surveys.



2.4 Bat Acoustic Monitoring

LGL completed both a bat habitat assessment in May 2022, and bat acoustic monitoring surveys in June 2022. The bat habitat assessment noted suitable bat habitat features within the CUW1 on the Subject Lands. A total of 3,690 recordings were made on all four bat detectors, of which seven bat species were recorded including three endangered bat species: Eastern Small-footed Myotis (*Myotis leibii*), Northern Myotis (*Myotis septentrionalis*) and Little Brown Myotis (*Myotis lucifugus*). Table 5 of LGL's report illustrates the breakdown of calls by species over the two weeks of recordings (**Appendix C**).

GEI is generally in agreement with LGL's findings that the limited number of calls (3.31 calls/night) recorded by SAR bat species would suggest a low probability of roosting by SAR bats within the Subject Lands. No rocky outcrops were specifically discussed within LGL's report suggesting that habitat for Eastern Small-footed Myotis is likely not present within the Subject Lands.



3. Secondary Source Review

3.1 Background Review

While LGL completed a general background review using the Natural Heritage Information Centre (NHIC; as presented within Section 3.4 of their report, **Appendix C**), a further secondary source review was completed to help inform the significance evaluation. Specifically, this evaluation will help inform whether Significant Wildlife Habitat (SWH) is present within the Subject Lands. GEI reviewed the following background material to determine existing natural heritage information for the site the proposed scope of work:

- Ministry of Natural Resources and Forestry's (MNR) NHIC database (2022);
- MNR's Land Information Ontario (LIO) database (2022);
- Bird Studies Canada's Atlas of the Breeding Birds of Ontario (BSC et al. 2008);
- Ontario Nature's Reptile and Amphibian Atlas (2019);
- Toronto Entomologists' Association's (TEA) Ontario Butterfly and Moth Atlases (2020, 2022);
- DFO's Aquatic SAR Map (2022); and
- Online citizen science databases (e.g., eBird and iNaturalist).

3.1.1 NHIC Database Results

The NHIC (MNR 2022) was searched for records of provincially significant plants, vegetation communities and wildlife on and in the vicinity of the Subject Lands. The database provides occurrence data by 1 km² area squares, with one square overlapping the Subject Lands (17NJ8734). The following are the species of interest:

- Redside Dace (*Clinostomus elongatus*)- Endangered in Ontario;
- Chimney Swift (*Chaetura pelagica*)- Threatened in Ontario;
- Snapping Turtle (*Chelydra serpentina*)- Special Concern in Ontario; and
- Eastern Ribbonsnake (*Thamnophis sauritus*)- Special Concern in Ontario.

3.1.2 Land Information Ontario Natural Features Results

Based on the MNR LIO geographic database, one feature was found within and adjacent to the Subject Lands: Woodlands. No other natural heritage features were identified within or immediately adjacent to the site.



3.1.3 Ontario Breeding Bird Atlas

The Ontario Breeding Bird Atlas (OBBA) contains detailed information on the population and distribution status of Ontario birds (Cadman et al. 2007). The data is presented on 100 km² area squares with one square overlapping the Subject Lands (17NJ83). It should be noted that the Subject Lands are a small component of the overall bird atlas square, and therefore it is unlikely that all bird species are found within the Subject Lands. Habitat type, availability and size are all contributing factors in bird species presence and use.

A total of 115 bird species were recorded in atlas square, with the following species of interest noted:

- Species listed as Threatened or Endangered on the Species at Risk in Ontario (SARO) List:
 - Bank Swallow (*Riparia riparia*) – Threatened;
 - Bobolink (*Dolichonyx oryzivorus*) – Threatened;
 - Chimney Swift – Threatened;
 - Eastern Meadowlark (*Sturnella magna*) – Threatened; and
 - Louisiana Waterthrush (*Parkesia motacilla*) – Threatened.
- Species of Conservation Concern (i.e., listed as Special Concern on the SARO List or identified as an S1–S3 species):
 - Eastern Wood-Pewee (*Contopus virens*) – Special Concern;
 - Grasshopper Sparrow (*Ammodramus savannarum*) – Special Concern;
 - Wood Thrush (*Hylocichla mustelina*) – Special Concern;
 - Golden-winged Warbler (*Vermivora chrysoptera*) – Special Concern;
 - Canada Warbler (*Cardellina canadensis*) – Special Concern; and
 - Barn Swallow (*Hirundo rustica*) – Special Concern.

3.1.4 Ontario Reptile and Amphibian Atlas Results

The Ontario Reptile and Amphibian Atlas contains detailed information on the population and distribution status of Ontario herpetofauna (Ontario Nature 2019). The data is presented on 100 km² area squares with one square overlapping the Subject Lands (17NJ83). It should be noted that the Subject Lands are a small component of the overall atlas square, and therefore it is unlikely that all herpetofauna species are found within the Subject Lands. Habitat type, availability and size are all contributing factors in herpetofauna species presence and use.

A total of 23 species were recorded in the atlas square that overlaps with the Subject Lands, of which five are salamander and lizard species, nine are frog and toad species, three are turtle species and six are snake species. Of these species, the following species of interest were noted:

- Species listed as Threatened or Endangered on the SARO List:
 - Jefferson Salamander (*Ambystoma jeffersonianum*) – Endangered.



- Species of Conservation Concern (i.e., listed as Special Concern on the SARO List or identified as an S1–S3 species):
 - Eastern Ribbonsnake – Special Concern; and
 - Snapping Turtle – Special Concern.

3.1.5 Ontario Butterfly and Moth Atlas Results

The Ontario Butterfly and Moth Atlases (Toronto Entomologists' Association 2020, 2022) contain detailed information on the population and distribution status of butterflies and moths in Ontario. The database provides occurrence data by 10 km x 10 km squares. The Subject Lands are located within the atlas square (17NJ83), which was used to determine a potential butterfly and moth species list for the area. The Subject Lands are a small component of the overall atlas square, and therefore all the butterfly and moth species listed for this atlas square may not be found within the property. Habitat type, availability, and size are all contributing factors to reptile and amphibian species presence and use.

A total of 99 species including 68 butterfly species and 31 moth species were recorded in atlas square. Of these reported species, the following species of interest is noted:

- Species of Conservation Concern (i.e., listed as Special Concern on the SARO List or identified as an S1–S3 species):
 - Monarch (*Danaus plexippus*) – Special Concern; and
 - Betrothed Underwing Moth (*Catocala innubens*) – S3 (vulnerable).

3.1.6 Aquatic SAR Distribution Mapping Results

The DFO Aquatic SAR Map (2022) was reviewed to identify any known occurrences of aquatic SAR, including fish and mussels, within the vicinity of the Subject Lands. No aquatic SAR was recorded within the general vicinity of the site.

3.1.7 Citizen Science Databases (eBird and iNaturalist)

The iNaturalist (2022) database is a large citizen science-based identification and data collection app. It allows any citizen to submit observations to be reviewed and identified by other naturalists and scientists to help provide accurate species observations. As the observations can be submitted by anyone, and the records are not officially vetted, the data obtained from this tool should not be used as a clear indicator of species presence, and species may be filtered out based on habitat and target survey efforts.

This online database was examined to identify observations made within the Subject Lands that were research grade. One species was found: Wood Thrush, which is listed as Special Concern in Ontario.



The eBird (2022) database is a large citizen science-based project with a goal to gather bird diversity information in the form of checklists of birds, archive it, and share it to power new data-driven approaches to science, conservation and education. As the observations can be submitted by anyone, and the records are not officially vetted, the data obtained from this tool should not be used as a clear indicator of species presence, and species may be filtered out based on habitat and target survey efforts. However, no significant species were found on the Subject Lands or within 120 meters of its boundaries.



4. Analysis of Ecological and Natural Heritage Significance

Eight types of natural features are identified in the PPS (MMAH 2020):

- Significant wetlands;
- Significant coastal wetlands;
- Significant woodlands;
- Significant valleylands;
- SWH;
- Fish habitat;
- Habitat of endangered and threatened species; and
- Significant ANSIs.

The presence/absence of these natural features on the Subject Lands are discussed in the subsequent sections of this EIS. The NHRM (MNR 2010), Halton Hills OP (2020 Consolidation), Halton Region OP (2021 Consolidation) and CVC O. Reg. 160/06 were referenced to assess the potential significance of other natural features, and their associated forms and functions on the landscape.

Where natural features are present on the Subject Lands, their sensitivities are discussed.

4.1 Significant Wetlands

Within Ontario, significant wetlands are identified by the MNRF or their designates. No PSWs were identified during the background review on or within the general vicinity of the Subject Lands. Further, no wetland units were identified by LGL on or immediately adjacent to the Subject Lands.

4.2 Significant Coastal Wetlands

Similar to significant wetlands, the MNRF or their designates identify significant coastal wetlands present on the landscape. Coastal wetlands are defined in the NHRM (MNR 2010) as:

- a) “any wetland that is located on one of the Great Lakes or their connecting channels (Lake St. Clair, St. Mary’s, St. Clair, Detroit, Niagara and St. Lawrence Rivers); or
- b) Any other wetlands that is on a tributary to any of the above-specified water bodies and lies, either wholly or in part, downstream of a line located two km upstream of the 1:100-year floodplain (plus wave run-up) of the large water body to which the tributary is connected.”

Significant coastal wetlands cannot be present on the Subject Lands given the distance from the waterbodies noted above.



4.3 Significant Woodlands

Significant woodlands are identified by the planning authority in consideration of criteria established by the MNRF. Under the NHRM (2010), woodlands are defined as:

“...treed areas that provide environmental and economic benefits to both the private landowner and the general public, such as erosion prevention, hydrological and nutrient cycling, provision of clean air and the long-term storage of carbon, provision of wildlife habitat, outdoor recreational opportunities, and the sustainable harvest of a wide range of woodland products. Woodlands include treed areas, woodlots or forested areas and vary in their level of significance at the local, regional and provincial levels.”

The Halton Region OP (2021; Section 295) defines woodland as:

Woodland means land with at least: 1000 trees of any size per ha, or 750 trees over 5cm in diameter per ha, or 500 trees over 12 cm in diameter per ha, or 250 trees over 20cm in diameter per ha but does not include an active cultivated fruit or nut orchard, a Christmas tree plantation, a plantation certified by the Region, a tree nursery, or a narrow linear strip of trees that defines a laneway or a boundary between fields. For the purpose of this definition, all measurements of the trees are to be taken at 1.37m from the ground and trees in regenerating fields must have achieved that height to be counted.

The Halton Region OP (2021; Section 277) defines significant woodlands as:

Significant Woodland means a Woodland 0.5 ha or larger determined through a Watershed Management Plan, a Subwatershed Study or a site-specific Environmental Impact Assessment to meet one or more of the four following criteria:

- the Woodland contains forest patches over 99 years old;
- the patch size of the Woodland is 2 ha or larger if it is located in the Urban Area, or 4 ha or larger if it is located outside the Urban Area but below the Escarpment Brow, or 10 ha or larger if it is located outside the Urban Area but above the Escarpment Brow;
- the Woodland has an interior core area of 4 ha or larger, measured 100 m from the edge; or,
- the Woodland is wholly or partially within 50 m of a major creek or certain headwater creek or within 150 m of the Escarpment Brow.

The Town of Halton Hills OP (2020) Part B Section B1.3.5 is consistent with the above significant woodland definition presented within Halton Region’s OP (2021).

As previously discussed, the CUW1 community is not a significant woodland in accordance with Halton Region’s criteria. This analysis was completed by LGL (**Appendix D**) and was reviewed through the TOR process by the Region (**Appendix C**). GEI agrees with the significant woodland evaluation completed by LGL given their characterization of the existing conditions of the feature.



4.4 Significant Valleylands

Significant valleylands are defined and designated by the planning authority. General guidelines for determining significance of these features are presented in the NHRM (MNR 2010) for Policy 2.1 of the PPS. Recommended criteria for designating significant valleylands includes prominence as distinctive landform, degree of naturalness, and importance of its ecological functions, restoration potential and historical and cultural values.

There are no valleylands within the Subject Lands.

4.5 Significant Wildlife Habitat

SWH is one of the more complex natural heritage features to identify and evaluate. There are several provincial documents that discuss identifying and evaluating SWH including the NHRM (MNR 2010), the Significant Wildlife Habitat Technical Guide (MNR 2000), and the SWH Eco-Region Criterion Schedule (MNR 2015). The Subject Lands are located in Eco-Region 6E and were therefore assessed using the 6E Criterion Schedule (MNR 2015).

There are four general types of SWH:

- Seasonal concentration areas;
- Rare or specialized habitats;
- Habitat for species of conservation concern; and
- Animal movement corridors.

General descriptions of these types of SWH are provided in the following sections.

Seasonal Concentration Areas

Seasonal concentration areas are those sites where large numbers of a species gather together at one time of the year, or where several species congregate. Seasonal concentration areas include: deer yards; wintering sites for snakes, bats, raptors and turtles; waterfowl staging and molting areas, bird nesting colonies, shorebird staging areas, and migratory stopover areas for passerines or butterflies. Only the best examples of these concentration areas are usually designated as SWH.

Rare or Specialized Habitats

Rare and specialized habitat are two separate components. Rare habitats are those with vegetation communities that are considered rare in the province. SRANKS are rarity rankings applied to species at the 'state', or in Canada at the provincial level, and are part of a system developed under the auspices of the Nature Conservancy (Arlington, VA). Generally, community types with SRANKS of S1 to S3 (extremely rare to rare-uncommon in Ontario), as defined by the NHIC (2022), could qualify. It is to be assumed that these habitats are at risk and that they are also likely to support additional wildlife species that are considered significant. Specialized habitats are microhabitats that are critical to some wildlife species. The NHRM (MNR 2010) defines specialized habitats as those that provide for species with highly specific habitat requirements, areas with exceptionally high species diversity or community diversity, and areas that provide habitat that greatly enhances species' survival.



Habitat for Species of Conservation Concern

Species of conservation concern include those that are provincially rare (S1 to S3), provincially historic records (SH) and Special Concern species. Several specialized wildlife habitats are also included in this SWH category, including Terrestrial Crayfish habitat, and significant breeding bird habitats for marsh, open country and early successional bird species.

Habitats of species of conservation concern do not include habitats of endangered or threatened species as identified on the SARO List (O.Reg. 230/08). Endangered and threatened species are discussed in **Section 4.7**.

Animal Movement Corridors

Animal movement corridors are areas that are traditionally used by wildlife to move from one habitat to another. This is usually in response to different seasonal habitat requirements, including areas used by amphibians between breeding and summer/over-wintering habitats, called amphibian movement corridors.

SWH Summary

Table 1 (Appendix B) evaluates whether any SWH was present within the Subject Lands and determined that no SWH types are present within the property.

4.6 Fish Habitat

Fish habitat, as defined in the federal *Fisheries Act*, c. F-14, means “spawning grounds and nursery, rearing, food supply, and migration areas on which fish depend directly or indirectly in order to carry out their life processes.” Fish, as defined in S.2 of the *Fisheries Act*, c. F-14, includes “parts of fish, shellfish, crustaceans, marine animals and any parts of shellfish, crustaceans or marine animals, and the eggs, sperm, spawn, larvae, spat and juvenile stages of fish, shellfish, crustaceans and marine animals.”

No waterbodies (watercourses, drainage features, wetlands) were identified within the Subject Lands; no fish habitat is present within the Subject Lands.

4.7 Habitat for Endangered and Threatened Species

As noted within **Section 2** (above), the only SAR recorded on the Subject Lands were species of SAR bats, where it was determined based on the low number of recorded calls and the absence of activity in the pre-dawn period that the only use of the Subject Lands was for the purposes of foraging, and not roosting habitat.

Table 2 (below) discusses the potential for other endangered and threatened species and their associated habitat to be present within the Subject Lands. This list is based on the species identified through the background wildlife atlas search (**Section 3.0**).



Species Name	SARO Ranking	Habitat Preferences	Habitat Potential within Subject Lands?
Bobolink	Threatened	Tall grasslands, undercut pastures, overgrown fields and meadows.	No – Grassland habitat is not present within the Subject Lands.
Eastern Meadowlark	Threatened	Tall grasslands, undercut pastures, overgrown fields and meadows.	No – Grassland habitat is not present within the Subject Lands.
Bank Swallow	Threatened	Vertical cliffs or banks along natural bluffs or eroding streamside banks.	No – Eroded vertical cliffs or banks are not present within the Subject Lands.
Louisiana Waterthrush	Threatened	Steep, forested ravines with fast-flowing streams, deciduous swamps	No – Swamp habitat is not present within the Subject Lands.
Chimney Swift	Threatened	Chimneys, hollow large trees	No – No suitable breeding habitat (i.e., mature, large hollow trees or chimneys) is present within the Subject Lands.
Redside Dace	Endangered	Streams and headwaters with a gravel bottom	No – No watercourses or headwater drainage features are present.
Jefferson Salamander	Endangered	Woodlands and swamps	No – No vernal pools or wetlands were recorded within the CUW1.

4.8 Significant Areas of Natural and Scientific Interest

No ANSIs were identified on or within 120 m of the Subject Lands.



4.9 CVC Regulated Features

Pursuant to Ontario Regulation 160/06, CVC has the authority to regulate development within its regulated areas. The CVC regulates the following features:

- Lands adjacent to or close to the shoreline of the Great Lakes-St. Lawrence River System that may be a river or stream valleys that have depressional features associated with a river or stream, whether or not they contain a watercourse;
- Hazardous lands;
- Wetlands; and
- Other areas where development could interfere with the hydrologic function of a wetland, including areas up to 120 m of all PSWs and wetlands greater than 2 ha in size, and areas within 30 m of wetlands less than 2 ha in size.

The CVC Regulation Mapping (2023) indicates that there are no regulated features located within the Subject Lands. This is consistent with LGL's observations.

4.10 Halton Region

In addition to the above noted key features that comprise portions of the Regional NHS, other components of consideration include:

- Enhancements to the Key Features;
- Linkages;
- Buffers;
- Watercourses within a Conservation Authority Regulation Limit or that Provide Linkage provide a linkage to a wetland or a significant woodland;
- Wetlands other than those considered significant;
- Escarpment Natural Areas and Escarpment Protection Areas; and
- Regulated Floodplains.

As illustrated on Map 1G of the Halton Region OP, no enhancement areas, linkages and buffers were identified within the Subject Lands. This is consistent with field data collected by LGL within the Subject Lands.

Given the location of the Subject Lands within a developed landscape (residential/industrial areas adjacent to the GO Line), it is unlikely that this area would be considered a linkage. Linkages within the immediate vicinity of the Subject Lands would be associated with the Credit River (east of the Subject Lands).

As noted previously, the Subject Lands are outside of the CVC Regulated Area, and does not contain wetlands or regulated floodplains. Further the Subject Land are not located within the Niagara Escarpment Plan Area.



4.11 Summary of Ecological and Natural Heritage Significance

No provincially or regionally significant natural heritage features were identified within the Subject Lands. One non-significant woodland community (CUW1) vegetation community is present within the property which provides wildlife habitat for common species of urban environments. Moreover, no regulated features are present within the site.



5. Impact Assessment

This Scoped EIS presents and discusses the natural heritage features and associated functions that occur on and/or adjacent to the Subject Lands. While no provincially or regionally significant natural features were identified within the Subject Lands, one non-significant woodland (CUW1) is present. This impact assessment will focus on potential impacts associated with the removal of this community in support of the proposed residential development.

A total of 2.35 ha of woodland habitat is proposed for removal from the Subject Land. As noted within LGL's botanical investigation, the understory within the CUW1 was comprised of several non-native and invasive species such as Manitoba Maple and Common Buckthorn. The removal of the CUW1 will eradicate these species from this property. Best management practices should be undertaken to avoid spreading of invasive species to other adjacent properties, such as regular cleaning of construction equipment. All plant material removed from the Subject Lands should be taken to a landfill, not a composting facility, to avoid spreading of invasive and non-native material to other properties.

The woodland was found to support common, generalist wildlife species. No significant ecological functions were identified associated with the CUW1. Some localized loss of wildlife habitat may occur for some of the identified wildlife species; however, most of the species recorded are common in urban environments and would be expected to remain in the immediate vicinity following development. Alternate woodland habitats are available in the surrounding landscape.

Though no roosting of SAR bats was confirmed from the Subject Lands, some evidence of potential SAR foraging around the Subject Land was recorded. It is recommended that the final design considers incorporation of landscaping measures that may promote insect availability for forage for species of SAR bats. Alternate foraging habitats are available within the local landscape given the proximity to the Credit River.

GEI will engage with the Ministry of Environment, Conservation and Parks (MECP) through the Information Gathering Form (IGF) process to confirm their approval of the findings outlined within the EIS regarding the habitat of Endangered and Threatened Species, particularly bat foraging areas. MECP approval will be obtained prior to any vegetation removal, construction, or development activities, ensuring compliance with Section 118 (2)a of the Regional Official Plan and Section 2.1.7 of the Provincial Policy Statement.

Trees should be removed in accordance with Halton Region's Tree Cutting By-Law (121-05). Arboricultural best management practices should be undertaken to prevent damage to retained trees. Tree removals should be completed outside of the migratory bird breeding period (early April to end of August) and outside of the bat active period (April 1 to September 30), where possible.

As noted by LGL, some level of water retention following rain events occurs on the Subject Lands. An erosion and sediment control plan should be prepared prior to construction to ensure sediment-laden stormwater is retained on the Subject Lands and not discharged to the storm sewer network where it may impact receiving waterbodies.



6. Conclusions and Recommendations

This Scoped EIS was prepared to evaluate the presence of natural heritage features and associated functions on and adjacent to the Subject Lands. This report was informed by field investigations that were completed by LGL. Their Characterization Report is included within **Appendix C**.

No provincially or regionally significant natural features were identified within the Subject Lands. Moreover, no regulated features were identified within the Subject Lands.

One CUW1 (2.35 ha) was identified within the Subject Lands. Field investigations completed by LGL determined that this vegetation community generally supported common wildlife species that are known to be tolerant of urbanized landscapes. The CUW1 appeared to be degraded given the abundance of non-native and invasive species within the vegetation community.

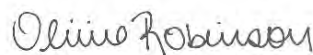
Several mitigation measures were identified when removing the non-significant woodland from the landscape. The MECP will be engaged through the IGF process with respect to the findings presented herein regarding the habitat of Endangered and Threatened Species prior to any vegetation removal. The woodlot should be removed in accordance with Halton Region's Tree Cutting By-Law. No construction or post-construction monitoring is warranted given the proposed site plan.

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Appendix A

Figures





Project 2201796

NOTES:
 1. Coordinate System: NAD 1983 UTM Zone 17N.
 2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2024.
 3. Orthoimagery © First Base Solutions, 2024. Imagery taken in 2023.

- Legend**
- Subject Lands
 - Highway
 - Road
 - Railway
 - Watercourse
 - Waterbody
 - Wooded Area

130 Mountainview Road North, Georgetown
 Gilbach Real Estate Development

Figure 1
 Location of Subject Lands

0 100 m
 1:10,000





Project 2201796

NOTES:
 1. Coordinate System: NAD 1983 UTM Zone 17N.
 2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2024.
 3. Orthoimagery © First Base Solutions, 2024. Imagery taken in 2023.

Legend

- Subject Lands
 - Ecological Land Classification
- ELC Legend**
- CUW1, Mineral Cultural Woodland
 - DIST, Disturbed

130 Mountainview Road North, Georgetown
 Gilbach Real Estate Development

Figure 2
 Concept Plan

0 20 m
 1:1,500



Appendix B

Tables



Table 1: Significant Wildlife Habitat Assessment

SIGNIFICANT WILDLIFE HABITAT (SWH) TYPE	ELC ECOSITE(S) PRESENT	HABITAT CRITERIA MET	TARGETED FIELD STUDIES REQUIRED	DEFINING CRITERIA MET <small>(MINIMUM ABUNDANCES AND/OR DIVERSITY REQUIRED TO CONFIRM SWH)</small>	SWH TYPE PRESENT
1. SEASONAL CONCENTRATION AREAS					
Waterfowl Stopover and Staging Areas (terrestrial)	No – CUM and CUT vegetation communities are not present within the Subject Lands.	No	No	N/A	No – SWH type is not present
Waterfowl Stopover and Staging Areas (aquatic)	No – MAS, SA and SWD vegetation communities are not present within the Subject Lands.	No	No	N/A	No – SWH type is not present
Shorebird Migratory Stopover Areas	No – BB, SDO, SDS, SDT and MAM vegetation community is not present within the Subject Lands.	No	No	N/A	No – SWH type is not present
Raptor Wintering Areas	No – One CUW vegetation community is present within the Subject Lands but not in combination with a forested vegetation community.	No	No	N/A	No – SWH type is not present
Bat Hibernacula	No – Vegetation communities are not present within the Subject Lands.	No	No	N/A	No – SWH type is not present

Table 1: Significant Wildlife Habitat Assessment

SIGNIFICANT WILDLIFE HABITAT (SWH) TYPE	ELC ECOSITE(S) PRESENT	HABITAT CRITERIA MET	TARGETED FIELD STUDIES REQUIRED	DEFINING CRITERIA MET (MINIMUM ABUNDANCES AND/OR DIVERSITY REQUIRED TO CONFIRM SWH)	SWH TYPE PRESENT
Bat Maternity Colonies	No – Forested (FO, SW) vegetation communities are not present within the Subject Lands.	No	No	N/A	No – SWH type is not present
Turtle Wintering Areas	No – SW, MA, OA and SA vegetation communities are not present within the Subject Lands.	No	No	N/A	No – SWH type is not present
Colonial Bird Nesting Sites (bank/cliff)	No – CUM, BL, CL and CUT vegetation communities are not present within the Subject Lands.	No	No	N/A	No – SWH type is not present
Colonial Bird Nesting Sites (tree/shrubs)	No – SWD, SWM and FET vegetation communities are not present within the Subject Lands.	No	No	N/A	No – SWH type is not present
Colonial Bird Nesting Sites (ground)	No – No rocky islands or peninsulas are not present within the Subject Lands.	No	No	N/A	No – SWH type is not present
Reptile Hibernacula	Yes – ecosites are present on the Subject Lands.	No – Rock outcrops, old foundations, abandoned wells or natural/naturalized features were identified within the Subject Lands.	No	N/A	No – SWH type is not present

Table 1: Significant Wildlife Habitat Assessment

SIGNIFICANT WILDLIFE HABITAT (SWH) TYPE	ELC ECOSITE(S) PRESENT	HABITAT CRITERIA MET	TARGETED FIELD STUDIES REQUIRED	DEFINING CRITERIA MET (MINIMUM ABUNDANCES AND/OR DIVERSITY REQUIRED TO CONFIRM SWH)	SWH TYPE PRESENT
Migratory Butterfly Stopover Areas	No – Field and forest vegetation communities are not present within the Subject Lands.	No	No	N/A	No – SWH type is not present
Migratory Landbird Stopover Areas	No – FOC, FOM, SWC, SWM, and SWD vegetation communities are not present within the Subject Lands.	No	No	N/A	No – SWH type is not present
Deer Yarding Areas/Winter Congregation Areas	No – Mapping from the MNRF LIO database did not depict any deer wintering areas on or adjacent to the Subject Lands.	As identified by MNRF	No	N/A	No – SWH type is not present
2. RARE VEGETATION COMMUNITIES OR SPECIALIZED HABITAT FOR WILDLIFE					
2a. Rare Vegetation Communities					
Rare Vegetation Types (cliffs, talus slopes, sand barrens, alvars, old-growth forests, savannahs, and tallgrass prairies)	No – Rare vegetation communities are present within the Subject Lands.	No	No	N/A	No – SWH type is not present

Table 1: Significant Wildlife Habitat Assessment

SIGNIFICANT WILDLIFE HABITAT (SWH) TYPE	ELC ECOSITE(S) PRESENT	HABITAT CRITERIA MET	TARGETED FIELD STUDIES REQUIRED	DEFINING CRITERIA MET <small>(MINIMUM ABUNDANCES AND/OR DIVERSITY REQUIRED TO CONFIRM SWH)</small>	SWH TYPE PRESENT
Other Rare Vegetation Types (S1 to S3 communities)	No – All vegetation communities identified within the Subject Lands are culturally influenced.	No	No	N/A	No – SWH type is not present
2b. Specialized Wildlife Habitat					
Waterfowl Nesting Area	No – MAS, MAM, SWT, and SWD vegetation communities are not present within the Subject Lands.	No	No	N/A	No – SWH type is not present
Bald Eagle and Osprey Habitats	No – FOD, FOM, FOC, SWD, SWM, and SWC, vegetation communities are not present within the Subject Lands.	No	No	N/A	No – SWH type is not present
Woodland Raptor Nesting Habitat	No – Forested ecosites and CUP3 vegetation communities are not present within the Subject Lands.	No	No	N/A	No – SWH type is not present
Turtle Nesting Areas	No – MAS vegetation communities are not present within the Subject Lands.	No	No	N/A	No – SWH type is not present

Table 1: Significant Wildlife Habitat Assessment

SIGNIFICANT WILDLIFE HABITAT (SWH) TYPE	ELC ECOSITE(S) PRESENT	HABITAT CRITERIA MET	TARGETED FIELD STUDIES REQUIRED	DEFINING CRITERIA MET (MINIMUM ABUNDANCES AND/OR DIVERSITY REQUIRED TO CONFIRM SWH)	SWH TYPE PRESENT
Seeps and Springs	No – Forested ecosites are not present within the Subject Lands. No headwater drainage features were identified within LGL's report	No	No	N/A	No – SWH type is not present
Woodland Amphibian Breeding Habitats (within or < 120m from woodland)	No – Forested ecosites are not present within the Subject Lands.	No	No	N/A	No – SWH type is not present
Wetland Amphibian Breeding Habitats (wetland >120m from woodland)	No – Wetland vegetation communities are not present within the Subject Lands.	No	No	N/A	No – SWH type is not present
Woodland Area-Sensitive Bird Breeding Habitat	No – Forested ecosites are not present within the Subject Lands.	No	No	N/A	No – SWH type is not present
3. SPECIES OF CONSERVATION CONCERN					
Marsh Bird Breeding Habitat	No – MAM, SA, SW, CUM1, FEO and BOO vegetation communities are not present within the Subject Lands.	No	No	N/A	No – SWH type is not present

Table 1: Significant Wildlife Habitat Assessment

SIGNIFICANT WILDLIFE HABITAT (SWH) TYPE	ELC ECOSITE(S) PRESENT	HABITAT CRITERIA MET	TARGETED FIELD STUDIES REQUIRED	DEFINING CRITERIA MET <small>(MINIMUM ABUNDANCES AND/OR DIVERSITY REQUIRED TO CONFIRM SWH)</small>	SWH TYPE PRESENT
Open Country Bird Breeding Habitat	No – CUM vegetation communities are not present within the Subject Lands.	No	No	N/A	No – SWH type is not present
Shrub/Early Successional Bird Breeding Habitat	Yes – One CUW vegetation community is present within the Subject Lands.	No – Minimum size criteria is not met (>10 ha).	No	N/A	No – SWH type is not present
Terrestrial Crayfish	No – MAM, MAS, SWT, SWM and SWD vegetation communities are not present within the Subject Lands.	No	No	N/A	No – SWH type is not present
Special Concern and Rare Wildlife Species					
(i) Snapping Turtle (<i>Chelydra serpentina</i>)	N/A	No – Wetland vegetation communities are not present within the Subject Lands.	No	N/A	No – SWH type is not present
(ii) Eastern Wood-Pewee (<i>Contopus virens</i>)	N/A	Yes – One CUW is present within the Subject Lands.	Yes	Two rounds of breeding bird surveys were conducted by LGL Limited. There was no evidence of Eastern Wood-Pewee being present on the Subject Lands.	No – SWH type is not present

Table 1: Significant Wildlife Habitat Assessment

SIGNIFICANT WILDLIFE HABITAT (SWH) TYPE	ELC ECOSITE(S) PRESENT	HABITAT CRITERIA MET	TARGETED FIELD STUDIES REQUIRED	DEFINING CRITERIA MET <small>(MINIMUM ABUNDANCES AND/OR DIVERSITY REQUIRED TO CONFIRM SWH)</small>	SWH TYPE PRESENT
(iii) Grasshopper Sparrow <i>(Ammodramus savannarum)</i>	N/A	No – Grassland habitats are not present within the Subject Lands.	No	N/A	No – SWH type is not present
(iv) Wood Thrush <i>(Hylocichla mustelina)</i>	N/A	Yes – One CUW is present within the Subject Lands.	Yes	Two rounds of breeding bird surveys were conducted by LGL Limited. Wood Thrush was not recorded within the Subject Lands. It is recognized that Wood Thrush had been noted within the site within iNaturalist (identified by call). The CUW is small with no interior forest habitat. The CUW appears to be highly compromised forest quality based on the plant list provided by LGL; and therefore, it is unlikely that this species recorded within iNaturalist was breeding rather it was likely transiting through or foraging within the site.	No – SWH type is not present

Table 1: Significant Wildlife Habitat Assessment

SIGNIFICANT WILDLIFE HABITAT (SWH) TYPE	ELC ECOSITE(S) PRESENT	HABITAT CRITERIA MET	TARGETED FIELD STUDIES REQUIRED	DEFINING CRITERIA MET (MINIMUM ABUNDANCES AND/OR DIVERSITY REQUIRED TO CONFIRM SWH)	SWH TYPE PRESENT
(v) Golden-winged Warbler (<i>Vermivora chrysoptera</i>)	N/A	Yes – One CUW is present within the Subject Lands.	Yes	Two rounds of breeding bird surveys were conducted by LGL. Golden-winged Warbler was not recorded during these targeted surveys.	No – SWH type is not present
(vi) Canada Warbler (<i>Cardellina canadensis</i>)	N/A	Yes – One CUW is present within the Subject Lands.	Yes	Two rounds of breeding bird surveys were conducted by LGL. Canada Warbler was not recorded during these targeted surveys.	No – SWH type is not present
(vii) Eastern Ribbonsnake (<i>Thamnophis sauritus</i>)	N/A	No – Marsh habitat is no present within the Subject Lands.	No	N/A	No – SWH type is not present
(viii) Monarch (<i>Danaus plexippus</i>)	N/A	No – No CUM vegetation communities and large congregations of Milkweed (<i>Asclepias</i> sp.) are present within the Subject Lands.	No	N/A	No – SWH type is not present
(ix) Betrothed Underwing Moth (<i>Catocala innubens</i>)	N/A	No – The primary caterpillar host plant is Honey Locust (<i>Gledisia triacanthos</i>) (Metalmark Web and Data 2023) .	No	N/A	No – SWH type is not present

Table 1: Significant Wildlife Habitat Assessment

SIGNIFICANT WILDLIFE HABITAT (SWH) TYPE	ELC ECOSITE(S) PRESENT	HABITAT CRITERIA MET	TARGETED FIELD STUDIES REQUIRED	DEFINING CRITERIA MET (MINIMUM ABUNDANCES AND/OR DIVERSITY REQUIRED TO CONFIRM SWH)	SWH TYPE PRESENT
		Honey Locust was not recorded during LGL's targeted botanical inventory within the Subject Lands.			
(x) Barn Swallow (<i>Hirundo rustica</i>)	N/A	No – Suitable nesting habitats (e.g., structures (barns, sheds, bridges etc.) was not present within the Subject Lands.	No	N/A	No – SWH type is not present
4. ANIMAL MOVEMENT CORRIDORS					
Amphibian Movement Corridors	N/A	No – Amphibian breeding SWH types are not present within the Subject Lands.	No	N/A	No – SWH type is not present
Deer Movement Corridors	N/A	No – Deer Yarding Areas/Winter Congregation Areas are not present within the Subject Lands.	No	N/A	No – SWH type is not present

Appendix C

LGL's Natural Heritage Characterization Report



NATURAL HERITAGE EXISTING CONDITIONS REPORT

130 MOUNTAINVIEW ROAD HALTON HILLS

prepared for:



prepared by:



OCTOBER 2022

LGL FILE TA9202



NATURAL HERITAGE EXISTING CONDITIONS REPORT

130 MOUNTAINVIEW ROAD HALTON HILLS

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OCTOBER 2022
LGL Project # TA9202

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APPENDICES

- Appendix A. Scoping and Terms of Reference Checklist
- Appendix B. Vascular Plant List
- Appendix C. Species Rank Definitions and Acronyms

1.0 INTRODUCTION

LGL Limited was retained by Mr. Max Harris of The Harris Group, Remax Realty Services, to complete a Natural Heritage Existing Conditions Report for the proposed development located at 130 Mountainview Road, Town of Halton Hills, Ontario. The 3.125 ha property is bordered by Mountainview Road on the east, Georgetown GO line on the south, existing industrial development (self-storage units) on the west and River Street on the north. The southwest portion of the property is being used for vehicle storage, while the balance of the property is vegetated. The property was previously owned by Domtar Pulp and Paper. A key plan showing the location of the property is presented in **Figure 1**.

There are no natural heritage or hydrological features identified on the property or within 120 m of the property based on a review of the Halton Region Official Plan, Town of Halton Hills Official Plan and Town of Halton Hills Zoning By-law. However, the property is vegetated, so a more detailed assessment of the property was considered warranted by the Town and Region, particularly a screening for Species at Risk and an analysis of “Significant Wildlife Habitat.” The intent of the landowner is to build out the property fully with four condo buildings and 12 townhouse units, roads, parking areas and amenity spaces.

This Natural Heritage Existing Conditions Report was prepared in response to a Scoping and Terms of Reference Checklist prepared by Halton Region following the submission of a “Significant Woodlands” analysis prepared by LGL Limited and submitted to the Town and Region. The “Significant Woodlands” analysis determined that the woodland did not meet the criteria for “significance,” a conclusion that was supported by the Region. The Scoping and Terms of Reference Checklist for the Natural Heritage Existing Conditions Report is included in **Appendix A**.

The Natural Heritage Existing Conditions Report describes the natural heritage features and areas located on and adjacent to the property. Information presented is based on a review of background data and field investigations conducted in 2022. A Natural Heritage Report, that will present the results of impact analysis, will be prepared and submitted at a later date.

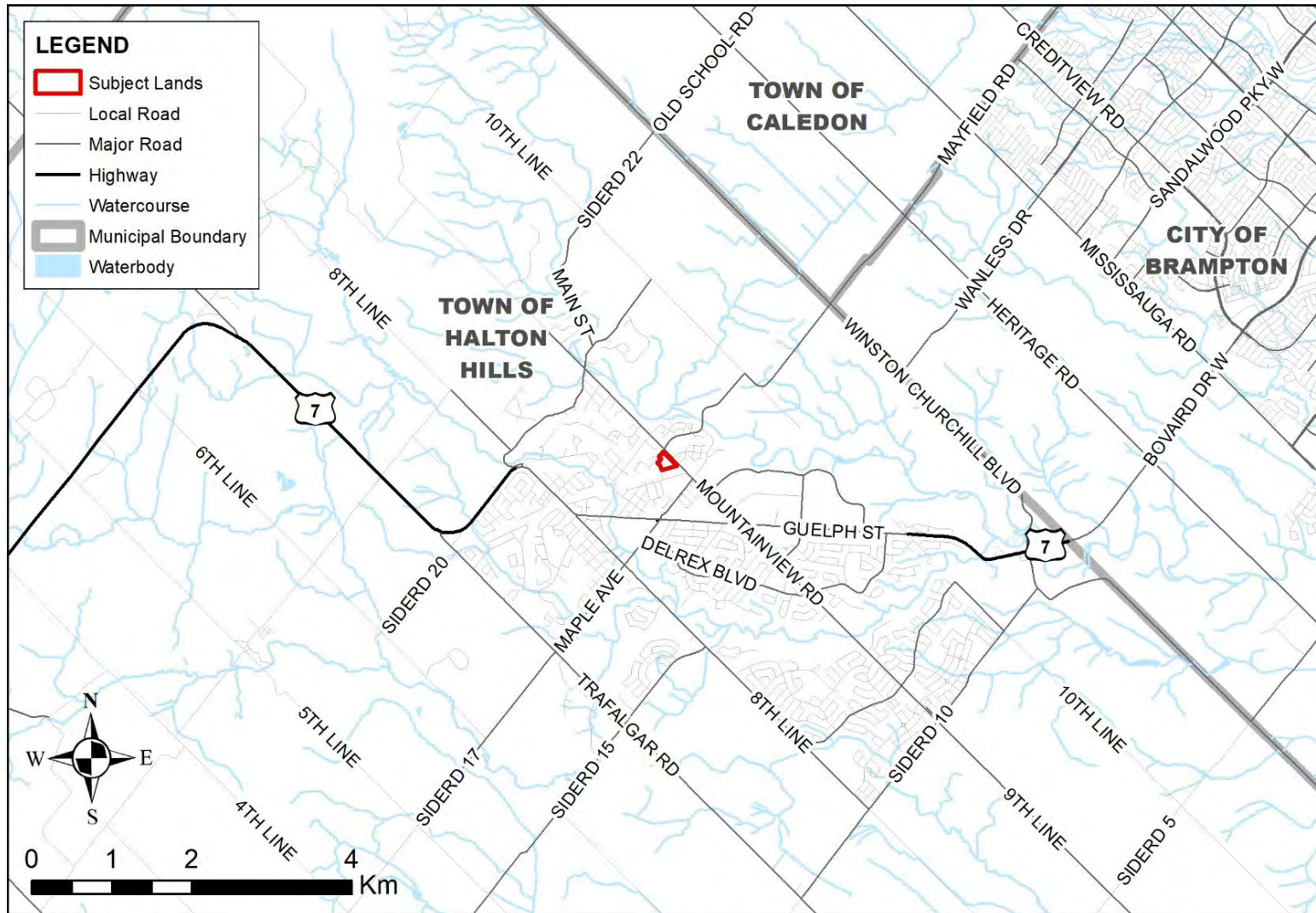


FIGURE 1. KEY PLAN

2.0 EXISTING REGULATORY POLICIES

This section outlines the various policies, plans, and legislation related to natural heritage and land use applicable to the property.

2.1 Species at Risk Act

The federal *Species at Risk Act* (SARA) outlines the responsibilities of agencies in the listing of species at risk, the preparation of recovery strategies and action plans for endangered, threatened and extirpated species, the preparation of management plans for special concern species, and the protection of critical habitat. The Act prohibits:

- kill, harm, harass, capture or take of an individual of a species listed under Schedule 1 of SARA as endangered, threatened or extirpated;
- possess, collect, buy, sell or trade an individual of a species listed under Schedule 1 of SARA as endangered, threatened or extirpated; or,
- damage or destroy the residence of one or more individuals of a species listed under Schedule 1 of SARA as endangered, threatened or extirpated, if a recovery strategy has recommended the reintroduction of that extirpated species.

These prohibitions apply to all federal lands (where present). On private land, these prohibitions apply to all aquatic species listed in Schedule 1 as endangered, threatened or extirpated, as well as migratory birds protected under the *Migratory Birds Convention Act*.

2.2 Migratory Birds Convention Act

The *Migratory Birds Convention Act* is administered by the Canadian Wildlife Service of Environment Canada. The *Migratory Birds Convention Act* enables regulations that require authorization for designs which cause permanent destruction/disturbance of migratory bird habitat and authorization for killing/removing migratory bird fledglings, eggs, nests, or for other harmful activity to migratory birds to enable bridge construction/demolition, construction access and construction work areas. The property falls within Environment Canada's Nesting Zone C2 (Nesting Period: end of March – end of August).

2.3 Endangered Species Act

The Ontario *Endangered Species Act* (ESA 2007) outlines the conservation, protection, restoration, and propagation of species of fauna and flora of the Province of Ontario that are threatened with extinction. The ESA (2007) outlines the responsibilities of the Committee on the Status of Species at Risk in Ontario (COSSARO) in the listing of species at risk, the preparation of recovery strategies for endangered or threatened species, and the preparation of management plans for special concern species. The

Species at Risk in Ontario List (O. Reg. 230/08) under the ESA lists the species and their status.

Section 9 of the ESA prohibits similar activities as the *Species at Risk Act* (SARA), such as prohibitions on the kill, harm, harass, capture or take of a living species at risk, or to possess, transport, collect, buy, sell, lease, trade a species at risk (living or dead). Section 10 of the ESA prohibits the damage or destruction of habitat of endangered, threatened, or extirpated species. Permits may be issued under Section 17 (2) of the ESA should a project result in a contravention of Section 9 and/or 10 of the ESA. As part of the permit process, an “overall benefit” to the impacted species must be included in the compensation package. It should be noted that the ESA was previously administered by the Ministry of Natural Resources and Forestry (MNR) but is now under the jurisdiction of the Ministry of Environment, Conservation and Parks (MECP).

2.4 Ontario Regulation 160/06: Credit Valley Conservation Authority: Development, Interference with Wetlands and Alterations to Shorelines and Watercourses

Ontario Regulation 160/06 regulates work taking place within valley and stream corridors, wetlands and associated areas of interference. Consequently, any works undertaken within the regulation limit will require a permit from the Credit Valley Conservation Authority. The property does not fall within a regulated area; therefore, *Ontario Regulation 160/06* does not apply.

2.5 Provincial Policy Statement

The Provincial Policy Statement (PPS) (Ministry of Municipal Affairs and Housing, 2020) is issued under Section 3 of the *Planning Act*. The PPS provides for development that protects resources of provincial interest, public health and safety, and the quality of the natural and built environment. All planning decisions under the Halton Region Official Plan and Town of Halton Hills Official Plan shall conform to provincial plans and be consistent with the PPS. Section 2.1 contains policies on protecting natural heritage features. The PPS states that the diversity and connectivity of natural features in an area, and the long-term ecological function and biodiversity of a natural heritage system should be maintained, restored or, where possible, improved, which includes improving connectivity of natural features in an area, recognizing linkages between and among natural heritage features, surface water features and ground water features (subsection 2.1.2).

There are two categories of natural heritage features and areas specified in the PPS for protection. Areas where no development or site alteration is permitted, including:

- provincially significant wetlands (PSW) (in Ecoregions 5E, 6E and 7E); and,

- provincially significant coastal wetlands (subsection 2.1.4).

The second category of natural heritage areas specified in the PPS are areas where development and site alteration may be permitted if it can be demonstrated that no negative impacts will occur on the natural features or their ecological functions. These areas include:

- significant woodlands;
- significant valleylands;
- significant wildlife habitat;
- significant Areas of Natural and Scientific Interest (ANSIs); and,
- coastal wetlands (subsection 2.15).

Subsections 2.1.6 and 2.1.7 indicate that fish habitat and habitat of endangered and threatened species shall not be permitted except in accordance with provincial and federal requirements.

Development and site alteration on adjacent lands to natural heritage features noted above (subsections 2.1.4, 2.1.5 and 2.1.6) shall not be permitted 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 (subsection 2.1.8).

2.6 Halton Region Official Plan

The purpose of the Halton Region Official Plan (*HR*OP) is to guide economic, environmental, and community building decisions to manage growth. Chapter 2.0 Sustainable Natural Environment contains policies that are intended to protect key natural heritage features and key hydrological features, and the adjacent lands necessary to maintain these features in a linked system. Map 1 – Regional Structure (**Figure 2**) identifies the property within an “Urban Area” and Map 1G – Key Features Within the Greenbelt and Regional Natural Heritage Systems does not identify any key features on or adjacent to the property.

2.7 Town of Halton Hills Official Plan

The purpose of the Town of Halton Hills Official Plan (HHOP) is to manage and direct changes on the spatial, economic and natural environment within the municipality. The property is designated as “High Density Residential/Mixed Use Area 1” and a “Redevelopment Site” within the Georgetown GO Station Area Land Use Plan as shown in Schedule H3 of the HHOP. The northeast corner of the property is also identified as

a "Gateway" due to its strategic location near the Georgetown GO Station. There are no "Greenlands Features" located on or adjacent to the property as shown in Schedule H3.

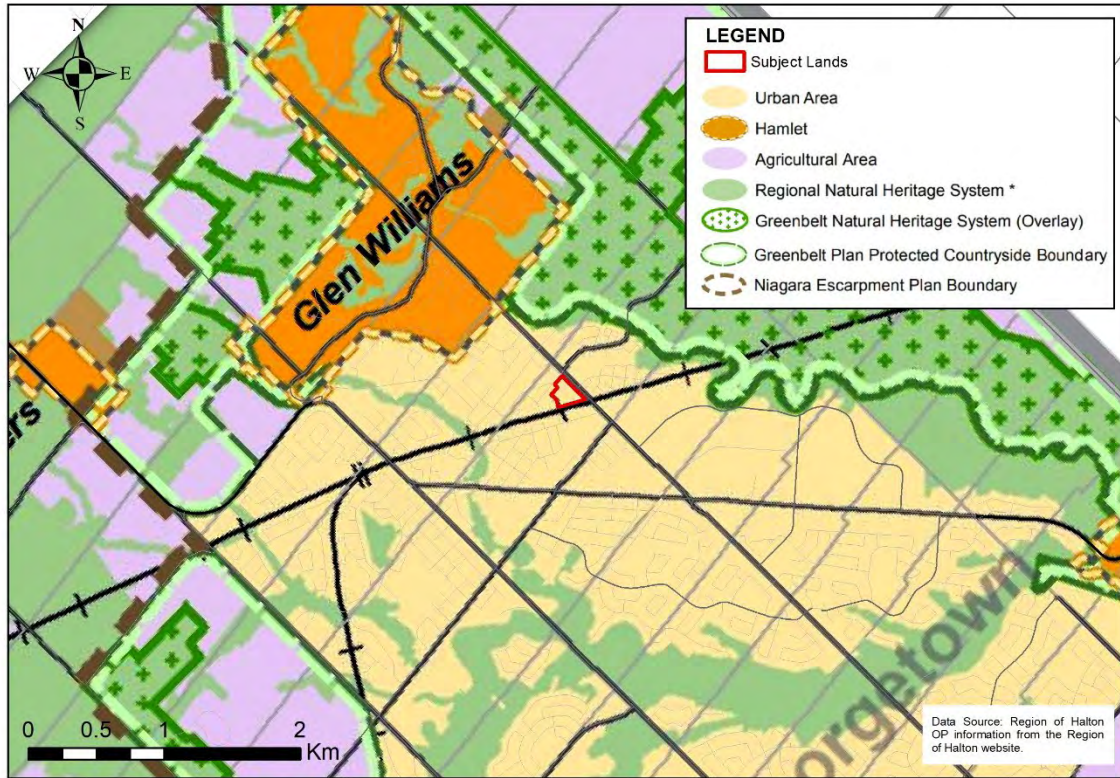


FIGURE 2. HALTON REGION OFFICIAL PLAN MAP 1 – REGIONAL STRUCTURE

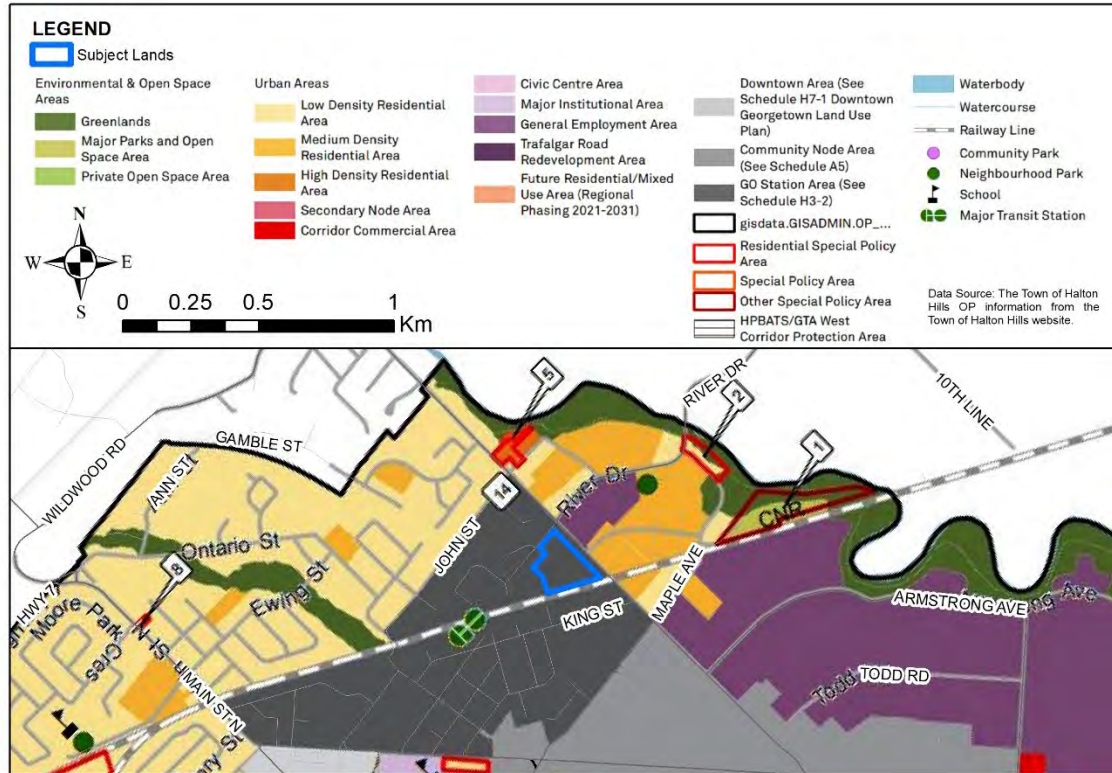


FIGURE 3. TOWN OF HALTON HILLS OFFICIAL PLAN SCHEDULE H3 – GEORGETOWN GO STATION AREA LAND USE PLAN

2.8 Town of Halton Hills Comprehensive Zoning By-law 2010-0050

The purpose of the Town of Halton Hills Comprehensive Zoning By-law 2010-0050 is to regulate land use and buildings. The property is zoned ‘Development’ in the Comprehensive Zoning By-law 2010-0050 (**Figure 4**). There are no “Environmental Protection” zones on or adjacent to the property.

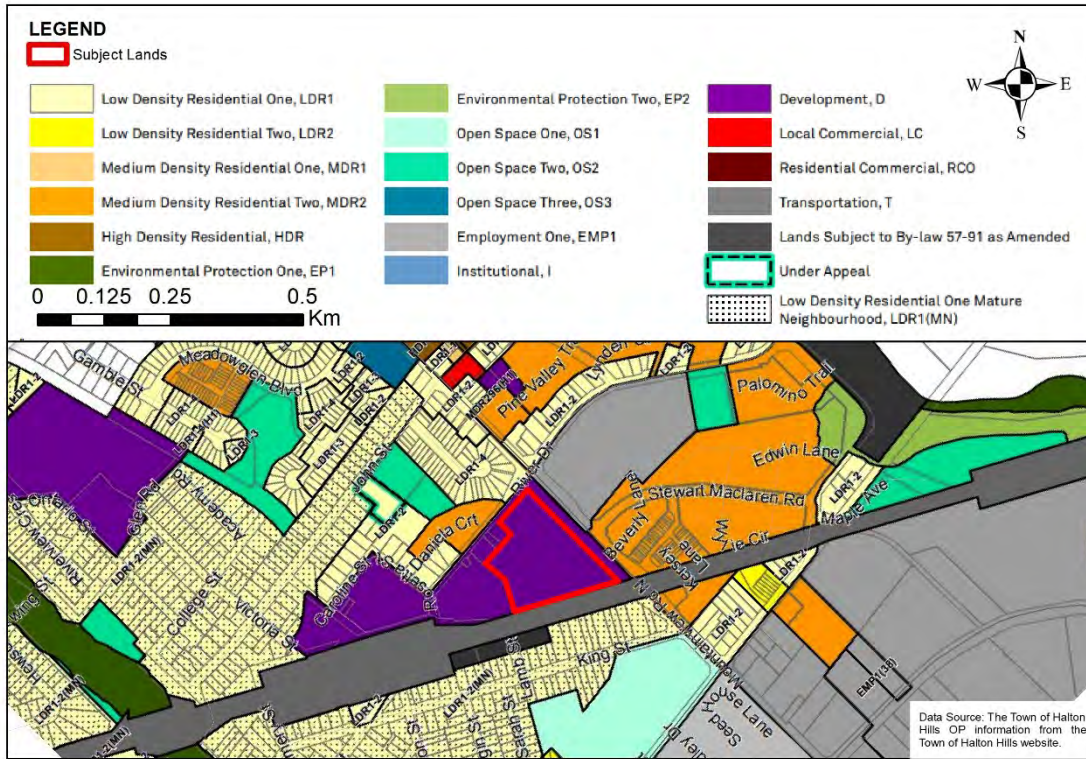


FIGURE 4. TOWN OF HALTON HILLS COMPREHENSIVE ZONING BY-LAW 2010-0050

3.0 EXISTING CONDITIONS

Existing conditions on and adjacent to the property were identified through review of background information and multiple site visits conducted in 2022.

3.1 Physiography and Geology

The property is split between two physiographic landforms, the northeastern portion is drumlinized till plain of the South Slope physiographical region and the southwestern portion is spillway of the Niagara Escarpment physiographic region. The underlying bedrock is Upper Ordovician in age, comprising shale, limestone, dolostone and siltstone of the Queenston Formation. Surficial geology comprises Halton Till, which is predominantly silt to silty clay matrix, high in matrix carbonate content and clast poor. The property is relatively flat.

3.2 Fish and Fish Habitat

No fish or fish habitat is located on or within 120 m adjacent to the property.

3.3 Vegetation and Vegetation Communities

The geographical extent, composition, structure, and function of vegetation communities were identified through air photo interpretation and field investigations. Air photos were interpreted to determine the limits and characteristics of vegetation communities. A field investigation of the vegetation communities within the subject property was undertaken on August 8, 2022.

Vegetation communities were classified according to the *Ecological Land Classification for Southern Ontario: First Approximation and Its Application* (Lee *et al.* 1998). The communities were sampled using a plotless method for the purpose of determining general composition and structure of the vegetation. Plant species status was reviewed for Ontario (Oldham 2009) and Halton Region (Varga 2000 and Riley 1989). Vascular plant nomenclature follows Newmaster *et al.* (1998) with a few exceptions that have been updated to Newmaster *et al.* (2007).

The property consists of a Mineral Cultural Woodland (CUW1) community. The canopy of the woodland is comprised of a number of deciduous tree species including: black walnut (*Juglans nigra*), Manitoba maple (*Acer negundo*), and white elm (*Ulmus americana*). The understory of the community largely supports common buckthorn (*Rhamnus cathartica*), Tartarian honeysuckle (*Lonicera tartarica*), and staghorn sumac (*Rhus hirta*). Several large gaps were observed in the canopy of the woodland, as well as a large amount of woody debris was observed throughout. Overall, the cultural woodland supports moderate to low quality habitat. Mineral Cultural Woodland communities are widespread and common in Ontario and are secure globally. The limits of the cultural woodland community are presented on **Figure 5** and described in **Table 1**.

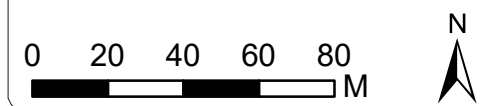


LEGEND

- Subject Property
- Subject Property - 120m Buffer
- Railway
- Road
- Anuran Call Survey
- Bat Detector Unit
- Vegetation Community Boundary (LGL)
- CUW1 Mineral Cultural Woodland

Data Source: LGL Field Survey. Contains information licensed under the Open Government Licence - Ontario. Produced by LGL Limited under License with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2022.

Imagery Service Layer Credits Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community.



**130 Mountainview
EXISTING
CONDITIONS**



Project TA9202	Figure 5
Date September 16, 2022	Prepared By: AM
Scale 1:2,000	Verified By: GNK

TABLE 1.
SUMMARY OF ECOLOGICAL LAND CLASSIFICATION VEGETATION COMMUNITIES

ELC Code	Vegetation Type	Species Association	Community Characteristics
Terrestrial/Cultural			
CUW1	Mineral Cultural Woodland		
CUW1	Mineral Cultural Woodland	<p>Canopy: includes black walnut (<i>Juglans nigra</i>), Manitoba maple (<i>Acer negundo</i>) and, white elm (<i>Ulmus americana</i>).</p> <p>Understory: includes common buckthorn (<i>Rhamnus cathartica</i>), Tartarian honeysuckle (<i>Lonicera tatarica</i>), chokecherry (<i>Prunus virginiana</i> var. <i>virginiana</i>) and, Manitoba maple.</p> <p>Ground cover: includes avens (<i>Geum</i> spp.), lily-of-the-valley (<i>Convallaria majalis</i>), yellowish enchanter's nightshade (<i>Circaea lutetiana</i> ssp. <i>canadensis</i>) and, dame's rocket (<i>Hesperis matronalis</i>).</p>	<ul style="list-style-type: none"> • Cultural community resulting from, or maintained by, cultural or anthropogenic-based disturbance (CU). • 35% < tree cover < 60% (W). • This community can occur on a wide range of soil moisture regimes (Dry-Moist (-1)). • Pioneer community resulting from, or maintained by, anthropogenic-based influences.

Winter surveys conducted for the “significant woodland” analysis identified several potentially wet areas located within the CUW1 community (e.g. wetland inclusions). Based on several site visits conducted in 2022, these wet areas are considered very short-lived and do not provide wetland habitat.

3.3.1 Flora

A total of 45 plant species have been recorded within the subject property. Of the 45 plants identified to species, 25 (66%) plant species identified are native to Ontario and 20 (44%) plant species are considered introduced and non-native to Ontario. A list of vascular plants is presented in **Appendix B**. Definitions of the acronyms and species ranks used in **Appendix B** are described in **Appendix C**.

3.3.2 Species at Risk/Locally Rare Plant Species

No plant species that are regulated under the Ontario *Endangered Species Act* or the Canada *Species at Risk Act* were encountered during LGL’s botanical investigation. A review of the MNR Natural Heritage Information Centre (2022) indicates that there are no historic records of plant species at risk within the property. In addition, no plant species that are considered rare in Halton Region were identified within the property.

3.4 Wildlife and Wildlife Habitat

Field investigations were conducted with the purpose of documenting wildlife and wildlife habitat and to characterize the nature, extent, and significance of wildlife usage within the study area. Field investigations were conducted during several visits to the property in 2022.

Secondary source data from the MNR (NHIC/LIO) was reviewed to screen for wildlife, wildlife habitat and records of species at risk found within the study area.

3.4.1 Breeding Birds

Breeding bird surveys were conducted on June 13 and 21, 2022. A traveling survey methodology was used wherein the field biologist traversed the entire site noting bird observations. These observations consisted of vocalizations (calls and songs), visual observations (interactions, sex, life stage), and/or sign (whitewash, pellets, etc.). Breeding bird evidence was recorded in accordance with the Ontario Breeding Bird Protocol used for the Ontario Breeding Bird Atlas (April 2021 update). Surveys occurred between sunrise and four hours after sunrise on each day. Weather conditions were ideal for the surveys with clear/sunny skies, moderate temperatures (16°C and 17°C, respectively) and light winds (6 km/h out of NW and 3 km/h out of W, respectively). Another advantage of the traveling survey methodology is that it increases the chance of behavioural observations and the potential for finding nests and other bird signs, or for finding cryptic species that do not vocalize during daylight hours.

Results

A total of 19 species of birds were observed within or directly adjacent to the property during the two breeding bird surveys (**Table 2**). All are common species within southern Ontario that utilize a variety of habitats. None of the species are listed as species at risk. Of the 19 species, 14 are protected under the *Migratory Birds Convention Act* (MBCA) and one is 'protected' under the *Fish and Wildlife Conservation Act* (FWCA). The remaining four species are afforded no protection under current legislation.

**TABLE 2
 WILDLIFE SPECIES OBSERVED JUNE 2022**

Common Name	Species Name	Global Rank	Provincial Rank	SARA status	ESA status	FWCA	MBCA	Breeding Evidence
Birds								
American Goldfinch	<i>Spinus tristis</i>	G5	S5	-	-	-	X	S
American Robin	<i>Turdus migratorius</i>	G5	S5	-	-	-	X	H
Baltimore Oriole	<i>Icterus galbula</i>	G5	S5	-	-	-	X	S
Black-capped Chickadee	<i>Poecile atricapillus</i>	G5	S5	-	-	-	X	S
Blue Jay	<i>Cyanocitta cristata</i>	G5	S5	-	-	P	-	S
Brown-headed Cowbird	<i>Molothrus ater</i>	G5	S4	-	-	-	-	S

TABLE 2
WILDLIFE SPECIES OBSERVED JUNE 2022

Common Name	Species Name	Global Rank	Provincial Rank	SARA status	ESA status	FWCA	MBCA	Breeding Evidence
Chipping Sparrow	<i>Spizella passerina</i>	G5	S5	-	-	-	X	S
Downy Woodpecker	<i>Picoides pubescens</i>	G5	S5	-	-	-	X	S
European Starling	<i>Sturnus vulgaris</i>	G5	SNA	-	-	-	-	H
Great Crested Flycatcher	<i>Myiarchus crinitus</i>	G5	S4	-	-	-	X	S
Gray Catbird	<i>Dumetella carolinensis</i>	G5	S4	-	-	-	X	S
House Sparrow	<i>Passer domesticus</i>	G5	SNA	-	-	-	-	S
House Wren	<i>Troglodytes aedon</i>	G5	S5	-	-	-	X	S
Indigo Bunting	<i>Passerina cyanea</i>	G5	S4	-	-	-	X	S
Mourning Dove	<i>Zenaidura macroura</i>	G5	S5	-	-	-	X	S
Northern Cardinal	<i>Cardinalis cardinalis</i>	G5	S5	-	-	-	X	S
Red-winged Blackbird	<i>Agelaius phoeniceus</i>	G5	S4	-	-	-	-	S
Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>	G5	S4	-	-	-	X	S
Song Sparrow	<i>Melospiza melodia</i>	G5	S5	-	-	-	X	S
Mammals								
Coyote	<i>Canis latrans</i>	G5	S5	-	-	F	-	-
Eastern Chipmunk	<i>Tamias striatus</i>	G5	S5	-	-	P	-	-
Red Squirrel	<i>Tamiasciurus hudsonicus</i>	G5	S5	-	-	F	-	-

G-Rank (Global Rank): assigned by a consensus of the network of Conservation Data Centres (CDCs), scientific experts and The Nature Conservancy to designate a rarity rank based on the range-wide status of species, subspecies or variety, according to the following.

G5-very common; demonstrably secure under present conditions

S-Rank (Provincial or Subnational ranks): used by the Natural Heritage Information Centre to set protection priorities for rare species and natural communities. Provincial ranks are assigned in a manner similar to that described for global ranks, but consider only those factors within the political boundaries of Ontario.

S4-apparently secure; uncommon but not rare; some cause for long-term concern due to declines or other factors
 S5-secure; common, widespread and abundant

SNA-not applicable; a conservation status rank is not applicable because species is not a suitable target for conservation activities

FWCA – *Fish and Wildlife Conservation Act*

P protected species

F furbearing species

MBCA (*Migratory Birds Convention Act*)

Breeding Bird Evidence

Possible Breeding:

- H Species observed in its breeding season in suitable nesting habitat.
- S Singing male present in its breeding season in suitable nesting habitat.

3.4.2 Breeding Amphibians

Methodologies outlined in the Marsh Monitoring Program (2000) were applied to confirm the presence of anuran species, document potential breeding habitat/areas, and confirm the nature, extent and significance of amphibian usage. One station was strategically placed on the property where amphibian breeding habitat could be present based on one low-lying area with potentially wet conditions observed during early field reconnaissance. Each survey was conducted beginning one half hour after sunset and concluding just prior to midnight. Surveys were targeted to be conducted during periods of peak anuran breeding activity and vocalization. Anuran surveys were conducted on three separate occasions during the spring of 2022 (see **Table 3**). The first anuran survey was conducted under less-than-ideal conditions.

Results

Anuran breeding evidence was not documented for any amphibian species during the 2022 surveys. Overall, the suitability of habitat for amphibian mating and breeding was not present throughout the study area. In early spring, a singular low-lying, wetted area was identified to have the potential to support breeding anuran habitat; however, as observed during subsequent visits, the area was dry and standing water was absent. It is likely that this wetted area is present within this location after rain events, providing low quality anuran habitat which may not be suitable to support life stages and breeding of amphibians, with the presence of standing water being very short-lived.

TABLE 3.
SUMMARY OF DATE OF WILDLIFE INVENTORY, TASK, WEATHER AND PERSONNEL

Date of Inventory	Task	Weather	Personnel Involved
March 29, 2022	Anuran survey, general wildlife survey	Clear, 4°C, wind 0 km/h	David Smith (LGL)
May 19, 2022	Anuran survey	Clear, 20°C, wind 6 km/h S	Jordan Pietroniro (LGL) Justin Brodeur (LGL) Hanna Gingerich (LGL)
June 15, 2022	Anuran survey	Clear, 21°C, wind 15 km/h SE	Jordan Pietroniro (LGL) Justin Brodeur (LGL)

As noted above, no amphibian species were identified by LGL during the 2022 field investigations. Though site conditions likely do not provide ideal habitat for amphibian breeding activities, some amphibian species which are tolerant of anthropogenic influences are expected to be present within the lands examined.

3.4.3 Mammals

Three mammal species were recorded through incidental observations including coyote, eastern chipmunk and red squirrel. Other mammals that are generally acclimatized to urban environments are expected to occupy the cultural woodland community.

Bat presence/absence surveys were conducted in spring/summer 2022. A snag/cavity tree survey was completed on May 18, 2022 as leaves were emerging, but prior to full leaf out. A total of 14 survey plots (12.6 m radius) were completed during field investigations. Two of the 14 survey plots had no snags. In total, 36 snags were identified for an overall density of 14.81 snags/ha. The density of snags/ha falls above the ten or more snags/ha criterion for an ELC polygon to be considered high quality potential maternity roost habitat (MNR 2017). As such, this site is considered to be “candidate” SWH.

Four bat detectors were set up in the study area as shown in **Figure 5**. Equipment deployed were four Wildlife Acoustics Song Meter SM4BAT automated 16-bit full-spectrum autonomous recording devices (hereafter ‘bat detectors’). The bat detectors were installed with the microphones positioned at a height of approximately 2 m off the ground. Each unit was programmed to record ultrasonic calls starting at half an hour before sunset to half an hour after sunrise. Acoustic monitoring was undertaken from May 30 to June 14, 2022 for a period of 16 nights (**Table 4**). Under ideal conditions, the units will detect bats in an airspace of 30 to 100 m from the microphone, with bats emitting higher frequencies (e.g., *Myotis* species) detected more often in the 30 m zone and bats emitting lower frequencies (e.g., *L. noctivagans* and *A. cinereus*) detected at distances up to ~100 m from the microphone. Openings in the forest within 30 m of quality snag trees with little surrounding brush were the preferred deployment locations as sound travels uninterrupted in these locations compared to dense forest areas where there is more sound attenuation.

TABLE 4.
DETAILS OF DEPLOYMENT FOR EACH BAT DETECTOR

Deployment	Dates	Microphone Direction	Location	Area Description
SM4-3	May 30- June 14	SE	Located along western limit of the Subject Property, adjacent to River Road	Tree on hill facing potential roost trees, habitat is less open and adjacent to road
SM4-4	May 30- June 14	E	Located in center of Subject Property, east of Mountainview Road North and north of railway	Cultural woodlands, closed in on top but open area inside canopy
SM4-5	May 30- June 14	S	Located at southwestern edge of Subject Property, adjacent to storage facility	Open area of trees, potential habitat within tree nearby and microphone is facing that tree
SM4-6	May 30- June 14	NW	Located at northeastern limit of Subject Property, adjacent to Mountainview Road North	Cultural woodlands, semi closed in area

Potential bat species were determined using the automated classification software Kaleidoscope Pro v5.4.8 (Wildlife Acoustics, Inc.). The software uses classifiers developed from libraries of species-verified recordings to generate complex algorithms used in the automated identification process. Only classifiers for the eight bat species found in Ontario from the classifier library (Bats of North America v5.4.0) were used in the automated classification process. Environmental (e.g., rain, wind, surface echoes, temperature changes, etc.) and biological (e.g., number of bats present, distance of bats, etc.) factors can affect the recording quality of bats obtained by the bat detectors. In addition, the acoustic signatures of many bat species overlap in their frequency ranges, making it difficult to confidently identify the species for every bat call recorded.

The neutral sensitivity setting was used to classify bat calls to species level. During processing, the software picks up signals created by background noise such as rain or wind and labels them as 'noise'. These noise files were screened out and excluded from analysis. Only files containing bat call characteristics were retained for classification analysis. The software outputs the classification results in a ".csv" file which was then imported into RStudio to visualize the results.

In RStudio the results were visualized using an hourly time spectrum to show activity patterns through the night for high frequency and low frequency bats. High-frequency bats (HiF) are bats in the myotis genus, Tri-colored bats, or Eastern Red Bats, whereas Low-Frequency bats (LoF) are Hoary Bats, Silver-Haired Bats, or Big Brown Bats. Bat activity is measured in 'passes per night'. A bat pass is a sequence of pulses emitted by a bat as it flies by a microphone, equivalent to a recording of a species for up to 15 seconds, it provides an index of activity but cannot be directly equated to an abundance estimate for that species.

Results

A total of 3,690 recordings were made on all four bat detectors. 1,062 recordings were identified as bats by Kaleidoscope's automated ID process, and the remaining were categorized as either 'no ID' (1,239 recordings) or 'noise' (1,389 recordings). When potential bat calls do not meet classification thresholds, they get assigned as 'no ID'. Seven of the eight bat species found in Ontario were identified in the study area, three of which are endangered bat species. Eastern Small-footed Myotis (*Myotis leibii*) were detected at SM4-3a and SM4-4a, Northern Myotis (*Myotis septentrionalis*) were detected at SM4-4a, and Little Brown Myotis (*Myotis lucifugus*) were recorded at all four bat detector locations. Of all the bat species recorded, Big Brown Bat had the most activity, with a total of 683 bat passes (**Table 5**). Silver-haired bats had 151 passes, followed by Hoary Bats (122 passes), Little Brown Myotis (61 passes), Eastern Red Bat

(30 passes), Eastern Small-footed Myotis (7 passes) and the Northern Myotis only had two passes detected (**Table 5**).

TABLE 5. TOTAL PASSES PER BAT SPECIES ACROSS ALL NIGHTS OF RECORDINGS

Station	Big Brown Bat	Eastern Red Bat	Hoary Bat	Silver Haired Bat	Eastern Small Footed Myotis	Little Brown Myotis	Northern Myotis
SM4-3a	98	7	42	47	3	1	0
SM4-4a	203	10	25	33	4	53	2
SM4-5a	311	10	23	37	0	2	0
SM4-6a	71	3	32	34	0	5	0
Total bat passes	683	30	122	151	7	61	2

Hourly bat activity shows generally higher activity for the low frequency bats that can include Hoary, Big Brown and Silver-haired bats (**Figure 6**). High frequency bats include the SAR bats from the Myotis genus (Little Brown, Eastern Small-footed and Northern Myotis); the results indicate that there are likely SAR bats present but activity was lower for these high frequency bats than for the low frequency bats (**Figure 6**). The hourly activity pattern shows higher activity in the hours following sunset and very low activity levels in the hours prior to sunrise for high frequency bats which is more representative of foraging behaviour (**Figure 6**). The presence of a roost is typically evidenced by much higher activity levels at sunset and sunrise when bats are leaving or returning to their roost. The results do not provide conclusive evidence of a maternity roost for high frequency bats, given the low number of total passes.

A total of 70 passes were recorded for high frequency bat species (Myotis species), all of which are protected bat species, over the 16 nights that data was recorded. This equates to 1.1 passes/night/monitor, which is considered a very low level of activity and does not indicate the presence of a bat maternity roost, rather foraging patterns. However, 53 of the Little Brown Myotis passes were recorded at one bat monitoring station (SM4-4a), indicating a higher level of activity (3.31 passes/night). A total of 3.31 passes/night represents a very low number of passes and is not indicative of a maternity roost located nearby.

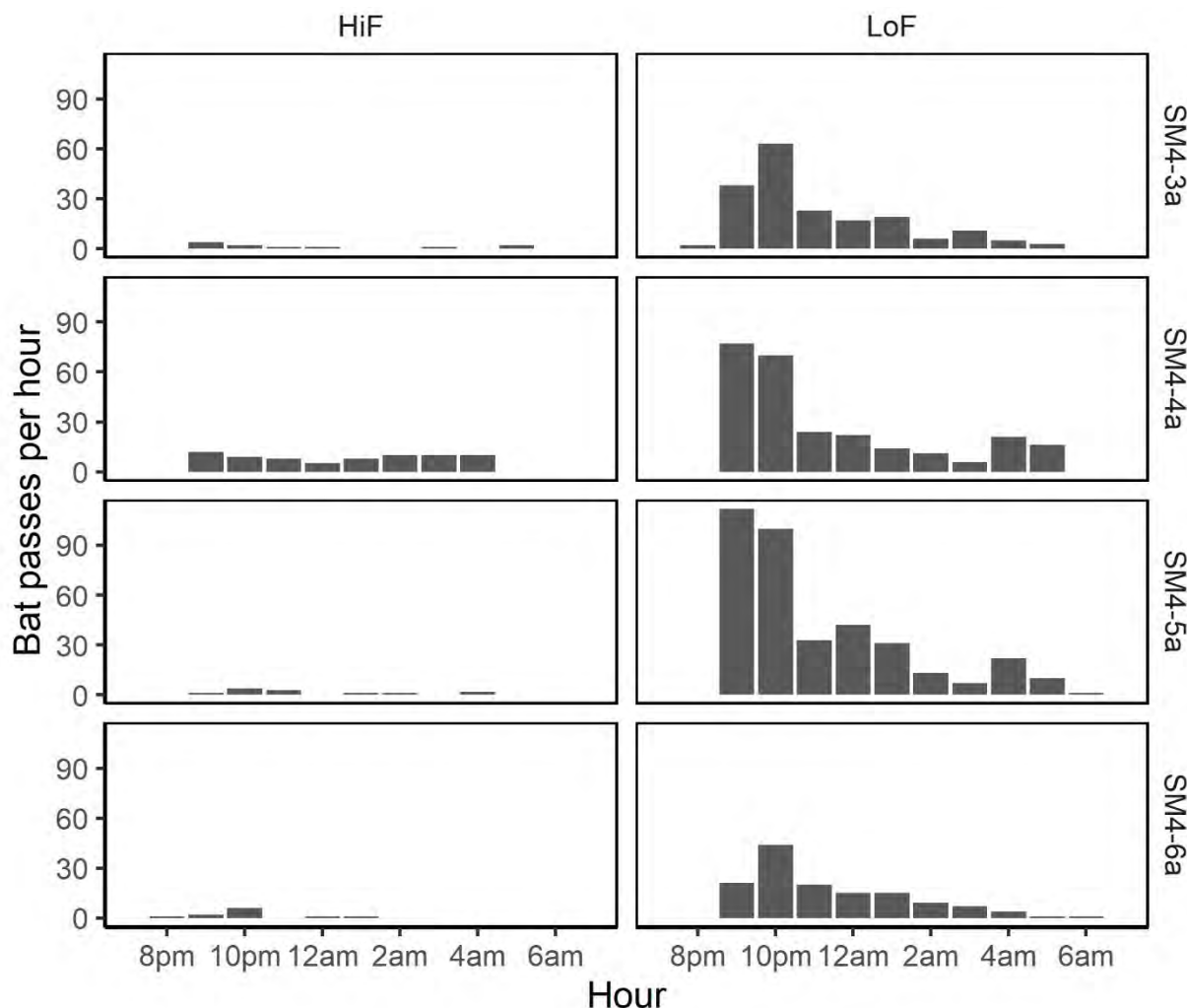


FIGURE 6. HOURLY BAT ACTIVITY (NUMBER OF PASSES PER HOUR) FOR HIGH FREQUENCY (HiF) BAT SPECIES (MYOTIS GENUS, TRI-COLORED BATS, OR EASTERN RED BATS) AND LOW FREQUENCY (LoF) BAT SPECIES (HOARY BATS, SILVER-HAIRED BATS, OR BIG BROWN BATS) FOR THE SURVEY PERIOD FROM MAY 30 TO JUNE 14, 2022.

The bat species most frequently recorded with a total of 683 passes was Big Brown Bat. The majority of these recordings were observed at two monitoring stations (see **Figure 6**): SM4-4a with 203 passes and SM4-5a with 311 passes (see **Table 5** above). The higher activity in the hours following sunset followed by a slight increase in activity in the hours just prior to sunrise suggest that these two stations may have the potential to be located in the vicinity of a maternity roost. Using the number of passes recorded at these two bat monitoring stations over the 16 nights of monitoring, this equates to 16 passes/night/monitor, or two passes/hour/monitor. This level of activity falls well below what would be expected if a maternity roost were located nearby. For example, Ecological Services (2021) monitored a Big Brown Bat maternity roost that varied from seven to 12 individuals and determined that bat passes averaged about 100 passes/hour. Although acoustic monitoring units cannot quantify the number of bat

individuals, one would expect a much higher number of bat passes/hour if a maternity roost containing a significant number of bats were located nearby.

3.4.4 Wildlife Habitat

Wildlife habitat within the study area was composed of a cultural woodland community approximately 2.43 ha in size. The study area is found in a highly disturbed setting, surrounding by residential development, industry, and a rail line. The cultural woodland community was found to be dominated by deciduous tree species and is expected to provide limited function as habitat for anthropogenic-tolerant wildlife species. No aquatic habitat types were identified within the lands examined.

3.4.5 Species at Risk

Endangered and threatened species are identified by the MNRF using procedures established by the Committee on the Status of Species at Risk in Ontario (COSSARO). Species designated as 'Endangered' or 'Threatened' and their habitats are protected under the *Endangered Species Act, 2007*. In order to address the most current species at risk (SAR) requirements, LGL completed a SAR habitat screening, whereby available data for the area was screened for SAR occurrences.

The MNRF 'Make a Map' (MNRF 2022) online utility has identified five species at risk, one of which is regulated under the Ontario *Endangered Species Act, 2007* (ESA). In addition, based on a review of available habitats identified during LGL's field surveys, four species at risk bats, Little Brown Myotis (*Myotis lucifugus*), Northern Myotis (*Myotis septentrionalis*), Eastern Small-Footed Bat (*Myotis leibii*), and Tri-coloured Bat (*Perimyotis subflavus*) have the potential to be present within the study area. The presence of three species at risk bats were confirmed through acoustic bat surveys.

Eastern Milksnake

As noted above, MNRF 'Make a Map' (MNRF 2022) online utility has a record of Milksnake (*Lampropeltis triangulum*) near the study area. Milksnake is listed as Special Concern (Schedule 1) under the federal Species at Risk Act (SARA); however, this species has no status under the Ontario ESA. Eastern Milksnake occupy habitats such as rocky outcrops, fields and forest edge; the species is often found in highly anthropogenic habitat types. Field investigations conducted by LGL noted that treed communities associated with the study area were generally not considered suitable to support this species. Additionally, the fragmented nature of the study area, because of extensive anthropogenic development/roads, also limit the suitability of the habitats found within the study area. No targeted survey or permitting requirement is anticipated to address potential impacts to this species.

Eastern Ribbonsnake

As noted above, MNRF 'Make a Map' (MNRF 2022) online utility has a record of Eastern Milksnake (*Thamnophis sauritus*) near the study area. Eastern Ribbonsnake is listed as Special Concern on the Species at Risk in Ontario (SARO) list; however, this species has no status/protection under the Ontario ESA. Eastern Ribbonsnake are typically described as residents of aquatic habitats, such as wetlands and the shorelines of lakes and rivers, generally near dense cover. Field investigations conducted by LGL noted that upland treed communities associated with the study area were generally not considered suitable to support this species. Additionally, the fragmented nature of the study area, because of extensive anthropogenic development/roads, also limit the suitability of the habitats found within the study area. No targeted survey or permitting requirement is anticipated to address potential impacts to this species.

Midland Painted Turtle

As noted above, MNRF 'Make a Map' (MNRF 2022) online utility has a record of Midland Painted Turtle (*Chrysemys picta marginata*) near the study area. Midland Painted Turtle is listed as Special Concern (Schedule 1) under the federal Species at Risk Act (SARA); however, this species has no status under the Ontario ESA. Midland Painted Turtle are typically described as residents of aquatic habitats, such as ponds, marshes, lakes and slow-moving creeks. The species is often observed basking on logs, rocks and other features. Field investigations conducted by LGL noted that upland treed communities associated with the study area were not considered suitable to support this species. Additionally, the fragmented nature of the study area, because of extensive anthropogenic development/roads, also limit the suitability of the habitats found within the study area. No targeted survey or permitting requirement is anticipated to address potential impacts to this species.

Snapping Turtle

As noted above, MNRF 'Make a Map' (MNRF 2022) online utility has a record of Snapping Turtle (*Chelydra serpentina*) near the study area. Snapping Turtle is listed as Special Concern (Schedule 1) under the federal Species at Risk Act (SARA). Eastern Ribbonsnake is listed as Special Concern on the Species at Risk in Ontario (SARO) list; however, this species has no status/protection under the Ontario ESA. Snapping Turtle are typically described as residents of aquatic habitats, such as ponds, marshes, lakes and slow-moving creeks. Field investigations conducted by LGL noted that upland treed communities associated with the study area were not considered suitable to support this species. Additionally, the fragmented nature of the study area, because of extensive anthropogenic development/roads, also limit the suitability of the habitats found within the study area. No targeted survey or permitting requirement is anticipated to address potential impacts to this species.

Western Chorus Frog

As noted above, MNR 'Make a Map' (MNR 2022) online utility has a record of Western Chorus Frog - Great Lakes / St. Lawrence - Canadian Shield population (*Pseudacris triseriata*) near the study area. Western Chorus Frog is listed as Threatened (Schedule 1) under the federal Species at Risk Act (SARA); however, this species has no status under the Ontario ESA. Western Chorus Frog are typically described as residents of marshes, wooded wetlands and meadows. This species typically breeds in ephemeral wetlands. Field investigations conducted by LGL noted that upland treed communities associated with the study area were not generally considered suitable to support this species and wet pockets are short-lived. Additionally, the fragmented nature of the study area, because of extensive anthropogenic development/roads, also limit the suitability of the habitats found within the study area. No amphibian species were recorded during anuran surveys and no targeted survey or permitting requirement is anticipated to address potential impacts to this species.

Bats

There are currently four bat species regulated as 'Endangered' under the Ontario ESA, including: Eastern Small-footed Myotis, Little Brown Myotis, Northern Myotis and Tri-coloured Bat. The ESA affords protection for individuals of these species (subsection 9(1)) and their habitat (subsection 10(1)). Given that species-specific habitat regulations have not yet been developed for SAR bats, habitat is protected according to the general definition provided in the ESA. Specifically, according to section 2(1), the Act protects "an area, on which the species depends, directly or indirectly, to carry on its life processes, including processes such as reproduction, rearing, hibernation, migration or feeding." A general description of the habitat requirements of each of the four bat species is provided below.

Little Brown Myotis and Northern Myotis will use cavities in the trees or exfoliating bark, while Tri-coloured Bat roosts in clumps of leaves in the foliage. Little Brown Myotis will frequently use buildings and the other three endangered bat species will use buildings, but far less frequently. Eastern Small-footed Myotis is a saxicolous (rock-loving) species and will frequently roost in rock piles, talus or crack and crevices in rock outcrops. No buildings, structures or rock piles were identified within the lands examined.

4.0 DESIGNATED NATURAL AREAS

Designated natural areas include areas that have been identified for protection by the Ontario MNRF, Credit Valley Conservation Authority, the Halton Region, and the Town of Halton Hills.

4.1 Provincially Significant Wetlands (PSWs)

There are no Provincially Significant Wetlands (PSWs) or unevaluated wetlands located on or within 120 m of the property.

4.2 Areas of Natural and Scientific Interest (ANSIs)

There are no Areas of Natural or Scientific Interest (ANSIs) located on or within 120 m of the property.

4.3 Environmentally Significant Areas (ESAs)

There are no Environmentally Significant Areas (ESAs) located on within 120 m of the property.

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APPENDICES

APPENDIX A

SCOPING AND TERMS OF REFERENCE CHECKLIST

Appendix D-2

Scoping and Terms of Reference Checklist

The **Scoping Checklist** provides a brief summary of components to be considered in the preparation of an EIA Terms of Reference. Scoping is to be completed in consideration of the following:

- Scope and scale of the proposed *development* or *site alteration*;
- Scope and scale of potential impacts resulting from the proposed *development* or *site alteration*;
- Sensitivity or complexity of the features on or adjacent to the proposed project to land use change and specific impacts associated with the proposed project;
- Surrounding land use context (e.g., existing *development*);

Depending on the items above, not all elements listed below will necessarily be required. Large projects, those with a higher risk of potential impact, and those with complex natural heritage features and functions will generally require a more comprehensive set of assessments, analyses, etc. Smaller scale projects with lower potential impacts and where natural heritage features and functions are less complex are suitable for a scoped EIA and a greater number of items may be 'scoped out' (i.e., not required). In all cases, some items listed below may not be required depending on the specific site conditions and project.

Who Prepares the Checklist: The checklist is to be completed by the Lead Planning Agency (or by their delegate or assign) with input from other agencies with jurisdiction within the subject property or features that triggered the EIA requirement.

Who Uses the Checklist: The scoping checklist is to be used by the EIA practitioner who will be preparing the EIA to inform the preparation of a Terms of Reference for submission, review and approval.

When is the Checklist Completed? The scoping checklist may be completed through Step 2 of the EIA Process (Scoping the EIA).

Part 1 – Project Information

1-A | General Information

Project Name: _____

Proponent: _____

Primary Contact: _____

Contact Information: E: _____

P: _____

Project Location: _____
(Street Address or Lot and Concession)

Consultant: _____

Consultant Lead: _____

Contact Information: E: _____

P: _____

1-B | Project Type

- | | |
|---|---|
| <input type="checkbox"/> <i>Agricultural building</i> or structure within building cluster | <input type="checkbox"/> Re-build – same footprint |
| <input type="checkbox"/> <i>Agricultural building</i> or structure outside building cluster | <input type="checkbox"/> Re-build – larger or altered footprint |
| <input type="checkbox"/> Lot Severance for <i>single detached dwelling</i> | <input type="checkbox"/> Addition to existing dwelling / structure |
| <input type="checkbox"/> New <i>single detached dwelling</i> on an existing lot | <input type="checkbox"/> Accessory re- <i>development</i> or modification (e.g., swimming pool, driveway) |
| <input type="checkbox"/> New accessory structure (garage, shed, etc.) | <input type="checkbox"/> Septic system or other servicing |
| <input type="checkbox"/> New accessory <i>development</i> (e.g., swimming pool, driveway) | <input type="checkbox"/> Other <i>development</i> or <i>site alteration</i> . Specify: |

Part 2 – Scoping of Inventories and Delineations

Project Area
Adjacent Lands

This section provides general guidance on what types of field inventories and feature delineations are anticipated to be required for the EIA. The proponent (or consultant) is to provide detailed description(s) of the proposed approach (survey type, specific methods, seasons, etc.), rationale and locations for surveys as part of a Draft Terms of Reference.

Species at Risk

- Screening Assessment¹⁹
 - Targeted surveys are anticipated to be required. To be confirmed through Screening Assessment and/ or in consultation with MECP, as appropriate
- All of the above**

Significant Wildlife Habitat

- Screening Assessment²⁰
 - Field program to address assessment of *Significant Wildlife Habitat*, as appropriate
- All of the above**

Terrestrial

- Ecological Land Classification (ELC)
- Botanical Inventory
- Significant woodland assessment²¹
- Avifauna (Birds)
 - In-Field Habitat Assessment
 - Incidental / General Observations²²
 - Detailed or Targeted Survey(s)
- Herpetofauna (Amphibians and Reptiles)

¹⁹ The Terms of Reference (TOR) is to include a preliminary Species at Risk (SAR) screening assessment to identify if any SAR have potential to occur within or adjacent to the study area within a distance appropriate to determine impacts to the species or influence of species presence on the proposed *development* or *site alteration*. This may include species listed Provincially (ESA 2007) or federally (SARA 2004), as applicable to the species type and project.

²⁰ A Screening Assessment for *Significant Wildlife Habitat* (SWH) includes a desktop and secondary-source level assessment of habitats present against criteria for SWH in the applicable Ecoregion Criteria Schedule for the Project. This assessment approach is suitable for identifying most candidate habitat areas (e.g., by vegetation community); for most SWH types this approach is not enough to confirm presence or absence. Where candidate areas may be impacted, additional field surveys to confirm will be required.

²¹ A significant woodland assessment may require targeted field surveys to inform the assessment of significance (e.g., prism sweeps, forest patch age).

²² This survey approach should be limited to only those projects with low risk of impact to this species group and where the potential presence of Species at Risk or *Significant Wildlife Habitat* is very low.

-
- In-Field Habitat Assessment
 - Incidental / General Observations²¹
 - Detailed or Targeted Survey(s)
 - Mammals
 - In-Field Habitat Assessment
 - Incidental / General Observations
 - Detailed or Targeted Survey(s)
 - Terrestrial Crustaceans (e.g., chimney crawfish)
 - In-Field Habitat Assessment
 - Incidental / General Observations
 - Detailed or Targeted Survey(s)
 - Insects
 - In-Field Habitat Assessment
 - Incidental / General Observations
 - Detailed or Targeted Survey(s)

All of the above

- Aquatic
 - In-Field Habitat Assessment / General Assessment
 - Detailed / Targeted Survey(s)

All of the above

- Delineation of Features²³
 - Woodland (If determined to be a *significant woodland*)
 - Wetland
 - Valleyland (Top of Bank / Slope)
 - Other: _____

All of the above

Notes:

Part 3 – Other Studies²⁴

²³ Where Species at Risk are found to occur, delineation of habitat will also be required, but cannot be known at the scoping stage. Delineation of habitat is to be done in consultation with, or be approved by the MECP, as appropriate.

²⁴ These studies are generally prepared as stand-alone reports. Relevant information on the interaction of these processes and functions with natural heritage features and functions is to be addressed in the EIS. It is strongly encouraged that the programs for these studies be integrated with the EIA Terms of Reference to ensure information appropriate to informing the EIA is collected.

-
- Geotechnical
 - Secondary Source
 - Study Required
 - Hydrogeological
 - Secondary Source
 - Study Required
 - Geomorphological
 - Secondary Source
 - Study Required
 - Surface Water (e.g. hydrologic review, fluvial geomorphology)
 - Secondary Source
 - Study Required
 - Natural Hazard(s)²⁵
 - Secondary Source
 - Study Required
 - Wetland Water Balance
 - Other (specify): _____

All of the above

- Secondary Source
 - Study Required
-

Part 4 – Terms of Reference Requirements

- Introduction
 - Description of Subject Property
 - Description of proposed *development* or *site alteration*
 - Description of known site history pertinent to the EIA (e.g., former land use(s), grading, filling)
 - Description of landscape context
 - Map:** location of subject property, orthophotography base.
 - Planning Context
 - Legislative, regulatory and policies applicable to the property and the proposed *development* or *site alteration*.
 - Current land use designation and zoning
 - Proposed land use designation and zoning to support proposed *development*
 - Background Review
 - List relevant natural heritage information secondary sources (e.g., species atlases, databases);
 - List relevant existing studies, plans, etc. (if / as available).
 - Map:** location of subject property, mapped feature(s), orthophotography base.
 - Biophysical Inventory
 - Define and provide rationale for study area.
 - Detailed study approach and methods for all identified inventories and delineations identified in **Part 2**. Where there is rationale to exclude a specific feature or area from assessment, provide rationale for consideration. Appropriate justification /
-

²⁵ This includes slopes, valleylands, steep and oversteep slopes, etc.

rationale for single-season or multi-season surveys shall be provided (e.g., vegetation community / ELC, wetland delineation, etc.)

- Map:** location of proposed surveys, subject property, proposed study area, orthophotography base.

- Biophysical Analysis**

Describe the general approach and anticipated approach and/or method(s) of analyses for the following:

- Species at Risk:**
 - Preliminary screening assessment to be provided as part of the TOR. This will inform the field program.
- Significant Wildlife Habitat:**
 - Preliminary screening assessment to be provided as part of the TOR. This will inform the field program.
- Evaluation of significance for natural heritage species, features and/or areas within the study area against appropriate policies and guidelines²⁶;
- Linkage* Assessment;
- Enhancement Area(s);
- Natural Hazards within the study area;
- Buffer* assessment;

- Alternative Assessment**

Outline approach to identifying or assessing alternatives to avoid or minimize impacts.

- Impact Assessment**

Confirm scope includes an impact assessment that will consider direct, indirect (including induced) and cumulative impacts and provide general approach to impact assessment.

- Mitigation**

Confirm scope includes identification of mitigation measures that effectively address anticipated impacts resulting from the proposed development or site alteration. Mitigation is to include recommendations for enhancement or restoration.

- Monitoring Program**

If a monitoring program may be required, confirm that consideration and recommendations for a monitoring plan (or rationale that one is not required) will be included in the EIA.

- Recommendations and Conclusions**

Confirm that recommendations and conclusions with respect to the 'no negative impact' test will be included in the EIA.

- Maps and Figures**

Outline anticipated maps and figures to be prepared for and included in the EIA to document and support assessment(s), recommendations and conclusions.

Note: Maps / figures may be combined for ease of production and review. The maps / figures listed are provided to illustrate the information that is to be included as part of the TOR submission.

²⁶ This may include local municipal, regional, provincial, federal legislation, policies, plans and guidance documents, as appropriate and applicable to the study area, project type, species and features.

CHECKLIST COMPLETION RECORD

A record of the individuals who complete the checklist is provided below.

COMPLETED BY:			
Name:	_____	Name:	_____
Position	_____	Position	_____
Agency:		Agency:	
Contact Information:		Contact Information:	
Date:	_____	Date:	_____

CHECKLIST COMPLETION RECORD (Continued)

COMPLETED BY (Continued):			
Name:	_____	Name:	_____
Position	_____	Position	_____
Agency:		Agency:	
Contact Information:		Contact Information:	
Date:	_____	Date:	_____

APPENDIX B
VASCULAR PLANT LIST

**Appendix B.
Vascular Plant List**

Scientific Name	Common Name	GRank	SRank	MNR	COSEWIC	Halton	CUW1
RANUNCULACEAE	BUTTERCUP FAMILY						
<i>Thalictrum dioicum</i>	early meadow-rue	G5	S5			X	X
PAPAVERACEAE	POPPY FAMILY						
* <i>Chelidonium majus</i>	celandine	G?	SE5			X	X
ULMACEAE	ELM FAMILY						
<i>Ulmus americana</i>	white elm	G5?	S5			X	X
* <i>Ulmus pumila</i>	Siberian elm	G?	SE3			X	X
MORACEAE	MULBERRY FAMILY						
* <i>Morus alba</i>	white mulberry	G?	SE5			X	X
JUGLANDACEAE	WALNUT FAMILY						
<i>Juglans nigra</i>	black walnut	G5	S4			X	X
CARYOPHYLLACEAE	PINK FAMILY						
* <i>Saponaria officinalis</i>	bouncing-bet	G?	SE5			X	X
GUTTIFERAE	ST. JOHN'S-WORT FAMILY						
* <i>Hypericum perforatum</i>	common St. John's-wort	G?	SE5			X	X
VIOLACEAE	VIOLET FAMILY						
<i>Viola sp.</i>	violet						X
SALICACEAE	WILLOW FAMILY						
<i>Populus tremuloides</i>	trembling aspen	G5	S5			X	X
BRASSICACEAE	MUSTARD FAMILY						
* <i>Alliaria petiolata</i>	garlic mustard	G5	SE5			X	X
* <i>Hesperis matronalis</i>	dame's rocket	G4G5	SE5			X	X
GROSSULARIACEAE	GOOSEBERRY FAMILY						
<i>Ribes americanum</i>	wild black currant	G5	S5			X	X
ROSACEAE	ROSE FAMILY						
<i>Fragaria virginiana</i> ssp. <i>virginiana</i>	scarlet strawberry	G5T?	SU			X	X
<i>Geum aleppicum</i>	yellow avens	G5	S5			X	X
<i>Geum canadense</i>	white avens	G5	S5			X	X
<i>Prunus serotina</i>	black cherry	G5	S5			X	X
<i>Prunus virginiana</i> var. <i>virginiana</i>	choke cherry	G5T?	S5			X	X
<i>Rubus idaeus</i> ssp. <i>strigosus</i>	wild red raspberry	G5T	S5			X	X

**Appendix B.
Vascular Plant List**

Scientific Name	Common Name	GRank	SRank	MNR	COSEWIC	Halton	CUW1
FABACEAE	PEA FAMILY						
* <i>Robinia pseudo-acacia</i>	black locust	G5	SE5			X	X
* <i>Vicia cracca</i>	tufted vetch	G?	SE5			X	X
ONAGRACEAE	EVENING-PRIMROSE FAMILY						
<i>Circaea lutetiana</i> ssp. <i>canadensis</i>	yellowish enchanter's nightshade	G5T5	S5			X	X
RHAMNACEAE	BUCKTHORN FAMILY						
* <i>Rhamnus cathartica</i>	common buckthorn	G?	SE5			X	X
VITACEAE	GRAPE FAMILY						
<i>Parthenocissus vitacea</i>	inserted Virginia-creeper	G5	S5			X	X
<i>Vitis riparia</i>	riverbank grape	G5	S5			X	X
ACERACEAE	MAPLE FAMILY						
<i>Acer negundo</i>	Manitoba maple	G5	S5			X	X
* <i>Acer platanoides</i>	Norway maple	G?	SE5			X	X
<i>Acer saccharinum</i>	silver maple	G5	S5			X	X
<i>Acer saccharum</i> var. <i>saccharum</i>	sugar maple	G5T?	S5			X	X
ANACARDIACEAE	SUMAC FAMILY						
<i>Rhus hirta</i>	staghorn sumac	G5	S5			X	X
APIACEAE	PARSLEY FAMILY						
* <i>Daucus carota</i>	wild carrot	G?	SE5			X	X
VERBENACEAE	VERVAIN FAMILY						
<i>Verbena urticifolia</i>	white vervain	G5	S5			X	X
LAMIACEAE	MINT FAMILY						
* <i>Leonurus cardiaca</i> ssp. <i>cardiaca</i>	common motherwort	G?T?	SE5			X	X
PLANTAGINACEAE	PLANTAIN FAMILY						
* <i>Plantago lanceolata</i>	ribgrass	G5	SE5			X	X
OLEACEAE	OLIVE FAMILY						
<i>Fraxinus americana</i>	white ash	G5	S5			X	X
CAPRIFOLIACEAE	HONEYSUCKLE FAMILY						
* <i>Lonicera tatarica</i>	Tartarian honeysuckle	G?	SE5			X	X
ASTERACEAE	ASTER FAMILY						
<i>Aster lateriflorus</i> var. <i>lateriflorus</i>	calico aster	G5T5	S5				X
<i>Solidago canadensis</i>	Canada goldenrod	G5	S5			X	X

**Appendix B.
Vascular Plant List**

Scientific Name	Common Name	GRank	SRank	MNR	COSEWIC	Halton	CUW1
<i>Solidago nemoralis</i> var. <i>nemoralis</i>	gray goldenrod	G5T?	S5				X
<i>Symphotrichum novae-angliae</i>	New England aster	G5	S5			X	X
* <i>Taraxacum officinale</i>	common dandelion	G5	SE5			X	X
POACEAE	GRASS FAMILY						
* <i>Bromus inermis</i> ssp. <i>inermis</i>	awnless brome	G4G5T ?	SE5			X	X
* <i>Elymus repens</i>	quack grass	G?	SE5			X	X
LILIACEAE	LILY FAMILY						
* <i>Convallaria majalis</i>	lily-of-the-valley	G5	SE5			X	X
* <i>Hemerocallis fulva</i>	orange day-lily	G?	SE5			X	X

APPENDIX C

SPECIES RANK DEFINITIONS AND ACRONYMS

Appendix C. Species Rank

G-Rank Global Rank

Global ranks are assigned by a consensus of the network of Conservation Data Centres, scientific experts, and the Nature Conservancy to designate a rarity rank based on the range-wide status of a species, subspecies or variety.

The most important factors considered in assigning global ranks are the total number of known, extant sites world-wide, and the degree to which they are potentially or actively threatened with destruction. Other criteria the number of known populations considered to be securely protected, the size of the various populations, and the ability of the taxon to persist at its known sites. The taxonomic distinctness of each taxon has also been considered. Hybrids, introduced species, and taxonomically dubious species, subspecies and varieties have not been included.

- G1 Extremely rare; usually 5 or fewer occurrences in the overall range or very few remaining individuals; or because of some factor(s) making it especially vulnerable to extinction.
- G2 Very rare; usually between 5 and 20 occurrences in the overall range or with many individuals in fewer occurrences; or because of some factor(s) making it vulnerable to extinction.
- G3 Rare to uncommon; usually between 20 and 100 occurrences; may have fewer occurrences, but with a large number of individuals in some populations; may be susceptible to large-scale disturbances.

- G4 Common; usually more than 100 occurrences; usually not susceptible to immediate threats.
- G5 Very common; demonstrably secure under present conditions.
- GH Historic, no records in the past 20 years.
- GU Status uncertain, often because of low search effort or cryptic nature of the species; more data needed.

- GX Globally extinct. No recent records despite specific searches.
- ? Denotes inexact numeric rank (i.e. G4?).
- G" " A "G" (or "T") followed by a blank space means that the NHIC has not yet obtained the Global Rank from The Nature Conservancy.

- G? Unranked, or, if following a ranking, rank tentatively assigned (e.g. G3?).
Denotes that the taxonomic status of the species, subspecies, or variety is
- Q questionable.
- T Denotes that the rank applies to a subspecies or variety.

SRANK Provincial Rank

Provincial (or Sub-national) ranks are used by the Ontario Ministry of Natural Resources Natural Heritage Information Centre (NHIC) to set protection priorities for rare species and natural communities. These ranks are not legal designations. Provincial ranks are assigned in a manner similar to that described for global ranks, but consider only those factors within the political boundaries of Ontario. By comparing the global and provincial ranks, the status, rarity, and the urgency of conservation needs can be ascertained. The NHIC evaluates provincial ranks on a continual basis and produces updated lists at least annually.

- S1 **Critically Imperiled** in Ontario because of extreme rarity (often 5 or fewer occurrences) or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation.

- S2 **Imperiled** in Ontario because of rarity due to very restricted range, very few populations (often 20 or fewer occurrences) steep declines or other factors making it very vulnerable to extirpation.
- S3 **Vulnerable** in Ontario due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation.
- S4 **Apparently Secure**—Uncommon but not rare; some cause for long-term concern due to declines or other factors.
- S5 **Secure**—Common, widespread, and abundant in Ontario.
- SX **Presumed Extirpated** – Species or community is believed to be extirpated from Ontario.
- SH **Possibly Extirpated** – Species or community occurred historically in Ontario and there is some possibility that it may be rediscovered.
- SNR **Unranked**—Conservation status in Ontario not yet assessed
- SU **Unrankable**—Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.
- SNA **Not Applicable** —A conservation status rank is not applicable because the species is not a suitable target for conservation activities.
- S#S# **Range Rank** —A numeric range rank (e.g., S2S3) is used to indicate any range of uncertainty about the status of the species or community. Ranges cannot skip more than one rank (e.g., SU is used rather than S1S4).

COSEWIC (Committee on the Status of Endangered Wildlife in Canada):		OMNR (Ontario Ministry of Natural Resources):	
END	Endangered	END	Endangered
THR	Threatened	THR	Threatened
SC	Special Concern	SC	Special Concern
Local Status: Durham (Varga <i>et al.</i> 2000)		Legal Status:	
U	Uncommon	SARA	<i>Species at Risk Act</i> – Schedules (1), (2), (3)
R1-R10	Rarity Status (1-10 denotes number of stations at which a locally rare species is found) (Varga <i>et al.</i> 2000)	ESA	<i>Endangered Species Act</i>
Toronto Region Conservation Authority			
L1-L3	Species of Concern (see below)		

RANK	LEVEL OF CONSERVATION CONCERN OF FLORA AND FAUNA IN TRCA REGION (TRCA 2020)
L5	Able to withstand high levels of disturbance; generally secure throughout the jurisdiction, including the urban matrix. May be of very localized concern in highly degraded areas.
L4	Able to withstand some disturbance; generally secure in rural matrix; of concern in urban matrix.
L3	Able to withstand minor disturbance; generally secure in natural matrix; considered to be of regional concern.
L2	Unable to withstand disturbance; some criteria are very limiting factors; generally occur in high-quality natural areas, in natural matrix; probably rare in the TRCA jurisdiction; of concern regionally.
L1	Unable to withstand disturbance; many criteria are limiting factors; generally occur in high-quality natural areas in natural matrix; almost certainly rare in the TRCA jurisdiction; of concern regionally.
LX	Extirpated from our region with remote chance of rediscovery. Presumably highly sensitive.
LH	Hybrid between two native species. Usually not scored unless highly stable and behaves like a species (e.g. <i>Equisetum x nelsonii</i>)
L+	Exotic. Not native to TRCA jurisdiction. Includes hybrids between a native species and an exotic
L+?	Origin uncertain or disputed, i.e. may or may not be native.

Appendix D

LGL's Evaluation of Woodlot Significance



April 5, 2022

Mr. Arik Auerbach, LLB
Principal
Gilbach Real Estate Development
Yonge & Richmond Centre
151 Yonge Street, Suite 1100
Toronto, ON, M5C 2W7

Dear Mr. Auerbach:

**Re: 130 Mountainview Road, Town of Halton Hills, ON
Evaluation of Woodlot Significance**

Introduction

The property located at 130 Mountainview Road in the Town of Halton Hills is being considered for purchase for future development. Since much of the property is covered by woodlot, an evaluation is required to determine if the woodlot meets the criteria as a “significant woodland” in accordance with the Provincial Policy Statement (2020), the Halton Region Official Plan (2021 Office Consolidation), the Halton Region Tree By-law 121-05 (2005), the Halton Hills Official Plan (2019 Office Consolidation) and the Halton Hills Comprehensive Zoning By-law 2010-0050. The property is designated ‘High Density Residential/Mixed Use Area 1’, a ‘Redevelopment Site’ and ‘Rail Buffer’ in Schedule H3 – Georgetown GO Station Area Land Use Plan of the Halton Hills Official Plan. The corner of Mountainview Road and River Drive is also identified as a ‘Gateway’ to the Georgetown GO Station. The property is zoned for ‘Development’ in Schedule A3-2 - Georgetown to Comprehensive Zoning By-law 2010-0050. The property is identified as Urban Area in Map 1 – Regional Structure of the Halton Region Official Plan. No natural heritage features have been designated on or adjacent to the property in official plans or zoning by-laws. The location of the property is shown in **Figure 1**.

Field Investigations

A reconnaissance-level field investigation was conducted on March 17, 2022 to evaluate the significance of the woodlot located at 130 Mountainview Road in the Town of Halton Hills. Based on the results of the reconnaissance-level field investigation, it was determined that a detailed field investigation was required to conduct a more rigorous evaluation of the significance of the woodlot. The second field investigation

was conducted on March 29, 2022. Both field investigations were performed outside of the growing season. The purpose of the field investigations was to collect sufficient data to determine if the woodlot meets the criteria for “significance” within the Town of Halton Hills.

Site Conditions

Semi-natural features were identified within the property according to the Ecological Land Classification for Southern Ontario: First Approximation and Its Application (ELC, Lee et al. 1998). The primary vegetation community consisted of mineral cultural woodland (CUW1), as presented in **Figure 2**.

A range of tree species were identified including sugar maple (*Acer saccharum*), Manitoba maple (*Acer negundo*), black walnut (*Juglans nigra*), ash (*Fraxinus* sp.) and white elm (*Ulmus americana*). Ash trees were often in a state of decline or dead likely due to impacts associated with the Emerald Ash Borer (*Agrilus planipennis*). Shrub and woody vine species included common buckthorn (*Rhamnus cathartica*), Tatarian honeysuckle (*Lonicera tatarica*), staghorn sumac (*Rhus typhina*) and riverbank grape (*Vitis riparia*). Woody debris, either dead snags or deadfall ranged from occasional to abundant in areas. Several gaps across the cultural woodland were observed, including within the central portion of the property where woody species have occasionally colonized. There were several small, wet inclusions that also interrupted the canopy cover.

Determination of “Woodland” and “Significance”

The Halton Region Official Plan (2021, November 10), Section 277(2), indicates that a woodland that is 2 ha or greater within the Urban Area is considered “significant.” A “woodland” is defined under the *Forestry Act* (R.S.O. 1998, c.F26) and the Regional Municipality of Halton Tree By-Law No. 121-05, as:

- (a) 1,000 trees, of any size, per hectare;
- (b) 750 trees, measuring over five centimetres in diameter, per hectare;
- (c) 500 trees, measuring over 12 centimetres in diameter, per hectare; or,
- (d) 250 trees, measuring over 20 centimetres in diameter, per hectare.

Based on this definition, a woodlot must meet both the “size” and “woodland” criteria to be considered “significant.” In other words, a woodlot must meet the definition of a “woodland” and be at least 2 ha in size to be considered “significant.”

The first site visit was used to classify the woodlot following the Ecological Land Classification for Southern Ontario (Lee *et al.* 1998) and to delineate the geographical

extent of the woodlot. During this site visit, a total of four random circular plots ($r = 5.64$ m) were established within the woodlot (see **Figure 2**). All trees within each plot were counted by class size according to tree DBH (i.e., diameter at breast height). All trees were tallied that measured 1.37 m and greater in height except for those species on the Halton Region exclusion list. The results of the inventory within each sample plot were extrapolated to determine the number of trees of any size and the number of trees within each size class within one hectare. One sample plot met the density threshold, and three others did not. However, given the size of the woodlot on the property, these preliminary results were considered inconclusive, and a more robust survey of the property would be necessary. The site visit determined that the ELC was Cultural Woodland (CUW1) and GIS analysis determined that the Cultural Woodland was 2.43 ha in size.

The second site visit following a more rigorous, scientific approach to determine if the criteria for “significance” was met. A 30 m² grid pattern was overlaid on the woodlot and at the intersection of each grid line, a 10 m² x 10 m² (100 m²) sample plot was established. The reason for laying out a grid pattern was to avoid potential bias associated with the use of random sample plots. A total of 25 sample plots were established, which was considered a reasonable sample size given the size of the woodlot. Within each sample plot, all trees were counted and dbh was measured.

Calculations were performed for each sample plot by counting the total number of trees of any size and the number of trees in each size class (> 5 cm dbh, > 12 cm dbh and > 20 cm dbh). The total number of trees of any size and the number of trees in each size class was then multiplied by 100 to determine the total number of trees of any size and the number of trees in each size class per hectare. Based on these calculations, it was determined that 13 sample plots do not meet the criteria for “woodland” and 12 sample plots meet the criteria for “woodland.” The summary of woodlot sample plot data and the results of the analysis are presented in **Table 1**.

Given the following results of the evaluation:

- sample plots were laid out in systematic manner over the entire woodlot to avoid the introduction of potential bias;
- the number and size of sample plots is considered reasonable given the size of the woodlot;
- < 50 % of the plots did not meet the definition of “woodland” in accordance with the *Forestry Act*; and,

- at least 80 % of the plots would need to meet the definition of “woodland” to approximately approach the 2 ha size criterion;

it is our professional opinion that the woodlot does not meet the criteria as a “significant woodland” based on size and tree density criteria.

Since the property is zoned for development and the woodlot does not meet the criteria as a “significant woodland,” nor is the property identified as a natural heritage feature/area by the Town, Region or Province, the property is not considered constrained for development.

I trust that this letter is satisfactory for your purposes. If you have any further requirements, please contact me.

Yours sincerely,

LGL Limited
environmental research associates



Grant N. Kauffman, M.E.S.
Vice President, Ontario Region
Senior Planning Ecologist

cc. 1273679 Ontario Inc. c/o Mr. Max Harris

LEGEND

-  Subject Lands
-  Local Road
-  Major Road
-  Highway
-  Watercourse
-  Municipal Boundary
-  Waterbody

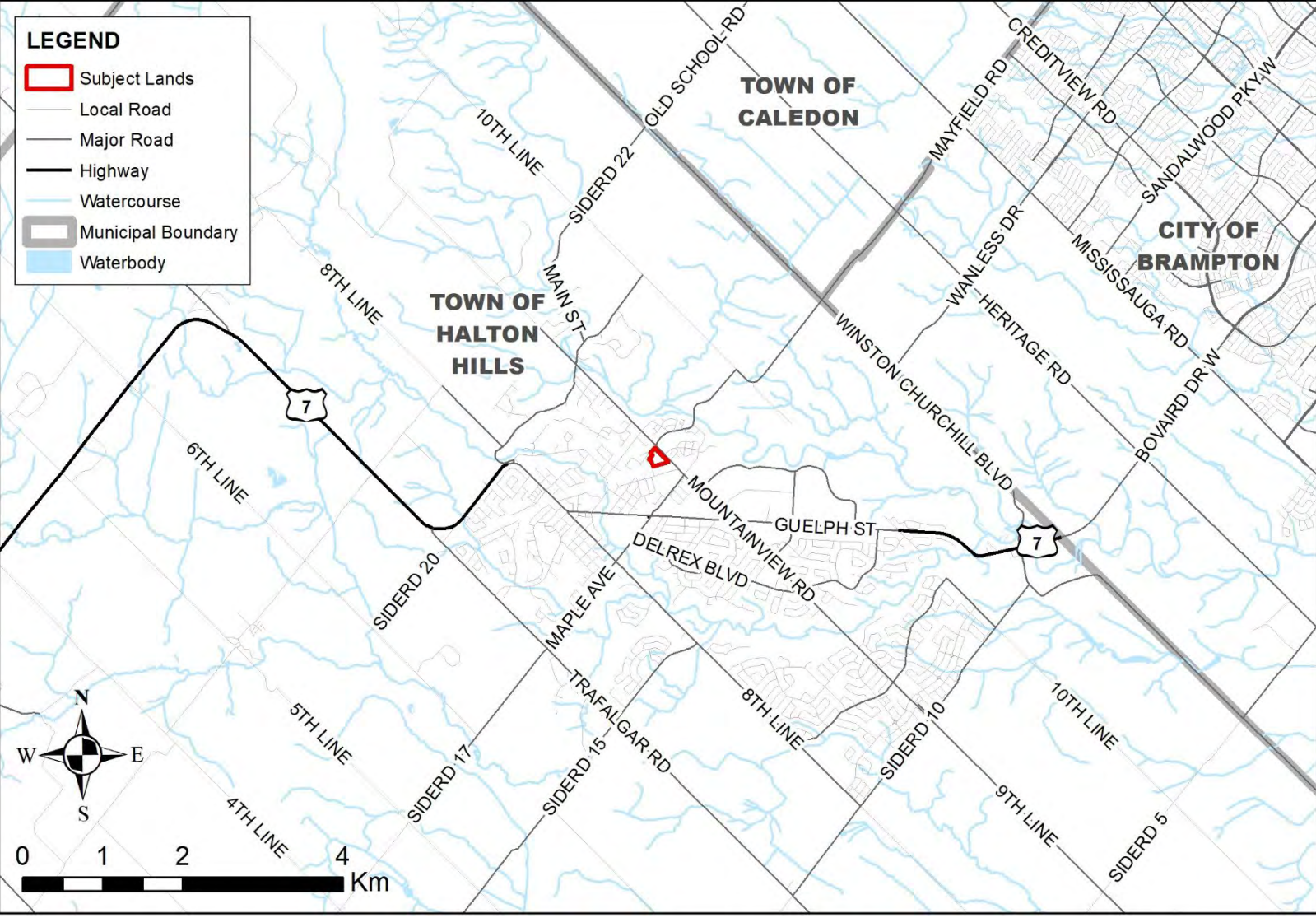


TABLE 1: SUMMARY OF WOODLOT SAMPLE PLOTS

	Tree Size Class (dbh)	# of Trees Identified							Total Number of Trees	Plot meets Woodland Criteria (Yes/No)	
		Acer negundo	Acer platanoides	Juglans nigra	Ulmus americana	Ulmus sp.	Populus grandifolia	Acer saccharum			Fraxinus sp.
Plot 1	≤5			2					3	5	Yes
	>5 ≤12			2					2		
	>12 ≤20	1		1					2		
	>20	2	1						3		
Plot 2	≤5			1					1	1	No
	>5 ≤12			2				1	3		
	>12 ≤20								0		
	>20								0		
Plot 3	≤5	1	1					2	4	4	Yes
	>5 ≤12	2		1					3		
	>12 ≤20								0		
	>20	3							3		
Plot 4	≤5	2		1				2	5	5	No
	>5 ≤12	2							2		
	>12 ≤20								0		
	>20			1					1		
Plot 5	≤5				1			1	2	2	Yes
	>5 ≤12	1	1					1	3		
	>12 ≤20		1						1		
	>20	3	1						4		
Plot 6	≤5	1		1	1			3	6	6	Yes
	>5 ≤12		1	1				1	4		
	>12 ≤20								0		
	>20	3							3		
Plot 7	≤5	1		2					3	3	No
	>5 ≤12	2							2		
	>12 ≤20								0		
	>20								0		
Plot 8	≤5			2				1	3	3	No
	>5 ≤12			2					2		
	>12 ≤20			2					2		
	>20			1					1		
Plot 9	≤5								0	0	No
	>5 ≤12			1					1		
	>12 ≤20	2		2					4		
	>20	1		1					2		
Plot 10	≤5								0	0	Yes
	>5 ≤12	1							1		
	>12 ≤20	4							4		
	>20	5							5		

TABLE 1: SUMMARY OF WOODLOT SAMPLE PLOTS

	Tree Size Class (dbh)	# of Trees Identified							Total Number of Trees	Plot meets Woodland Criteria (Yes/No)
		Acer negundo	Acer platanoides	Juglans nigra	Ulmus americana	Ulmus sp.	Populus grandifolia	Acer saccharum		
Plot 21	≤5	2							2	No
	>5 ≤12			2			1		3	
	>12 ≤20								0	
	>20	1							1	
Plot 22	≤5								0	No
	>5 ≤12	2							2	
	>12 ≤20								0	
	>20								0	
Plot 23	≤5								0	No
	>5 ≤12	3						1	4	
	>12 ≤20			1					1	
	>20								0	
Plot 24	≤5	1						1	2	No
	>5 ≤12						1	2	3	
	>12 ≤20			3					3	
	>20								0	
Plot 25	≤5			2				3	5	No
	>5 ≤12								0	
	>12 ≤20	1							1	
	>20	1		1					2	