SCOPED ENVIRONMENTAL IMPACT STUDY
524 YORK ROAD (PHASE 2)
TOWN OF NIAGARA-ON-THE-LAKE

PREPARED FOR:

Niagara York Road Inc.

PREPARED BY:

COLVILLE CONSULTING INC.
432 Niagara Street, Unit 2
St. Catharines, Ontario L2M 4W3

C24059
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1.0 INTRODUCTION

Colville Consulting Inc. was retained by Niagara York Road Inc. to prepare an Environmental Impact Statement (EIS) to assess potential ecological impacts associated with the development of a hotel on the property located at 524 York Road, Niagara-on-the-Lake (see Figure 1). The property is located between the end of Glendale Avenue to the west, Counsell Street to the east, and York Road to the south.

This EIS has been prepared to assess potential impacts the proposed development may have on natural heritage features located on and adjacent to the Subject Property.

1.1 Description of the Subject Property

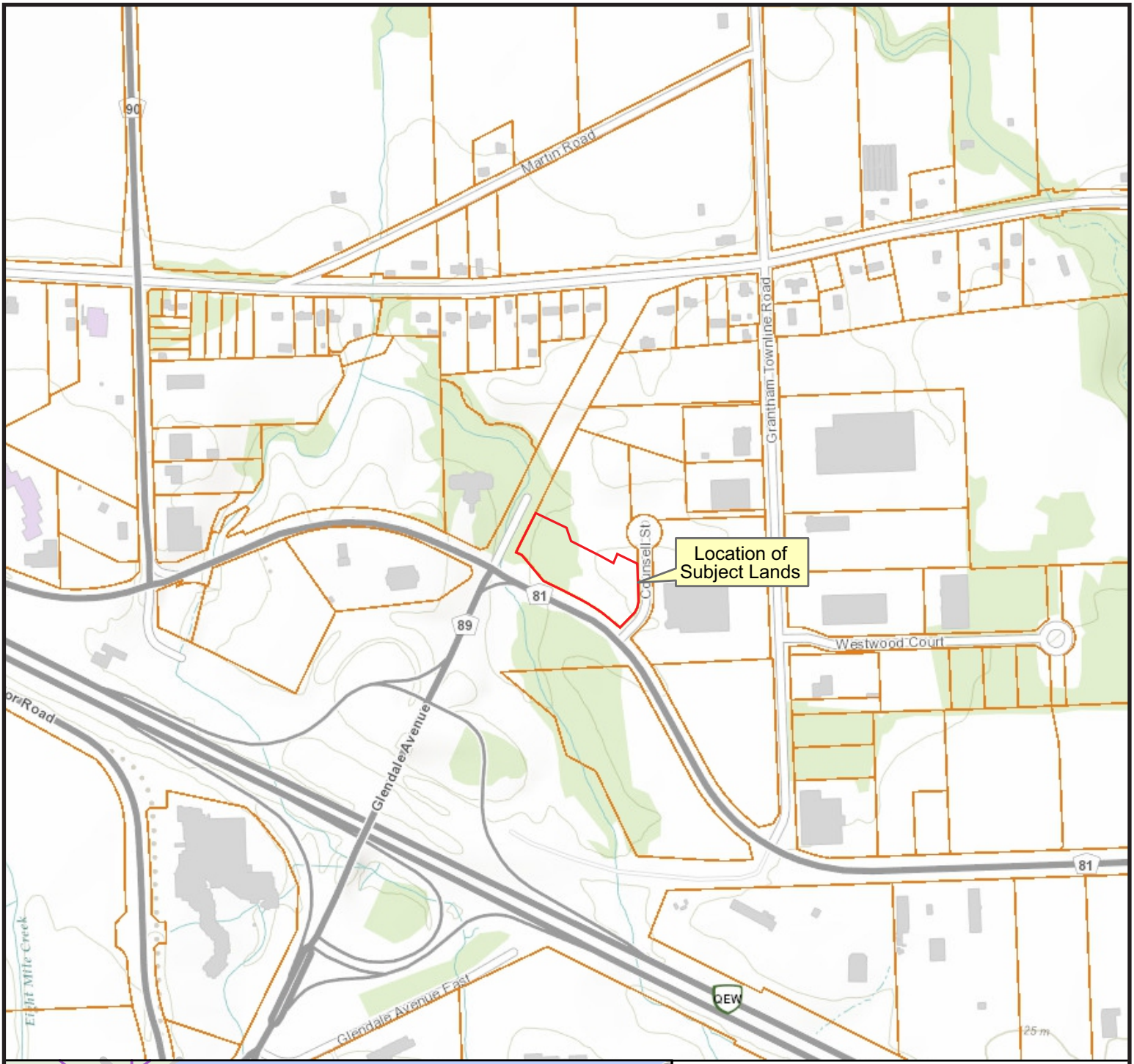
The property is located within the Glendale Area included in Schedule F of the Niagara-on-the-Lake Official Plan. The Subject Property measures approximately 2.84 hectares (7.02 acres) in size.

A review of background air photos ranging from 1934 to present indicates that a majority of the Subject Property has been historically used for agricultural purposes, which appears to have been abandoned after 1965. According to historical air photos, there has also been a small node of woodland on the southern corner of the property. The former agricultural lands have since been mostly maintained as a mix of manicured lawn and regularly mowed meadow lands, with the northern side of the property being developed into a hotel sometime between 2015 and 2018.

The treed area on the Subject Property is currently designated as other woodland. This treed portion of the property occurs as a woodland fragment between an area identified as significant woodland south of York Road and an other woodland north of the current access from Glendale Avenue. The extend of these natural heritage features are shown in Figure 2.

1.2 Description of Proposed Development

Proposed development on this property consists of the creation of a 10-storey dual hotel, consisting of 207 total rooms, associated parking, amenities, as well as two detached restaurants. The entirety of the proposed development is approximately 1.25 ha (3.08 acres). A proposed concept plan is provided in Appendix A.



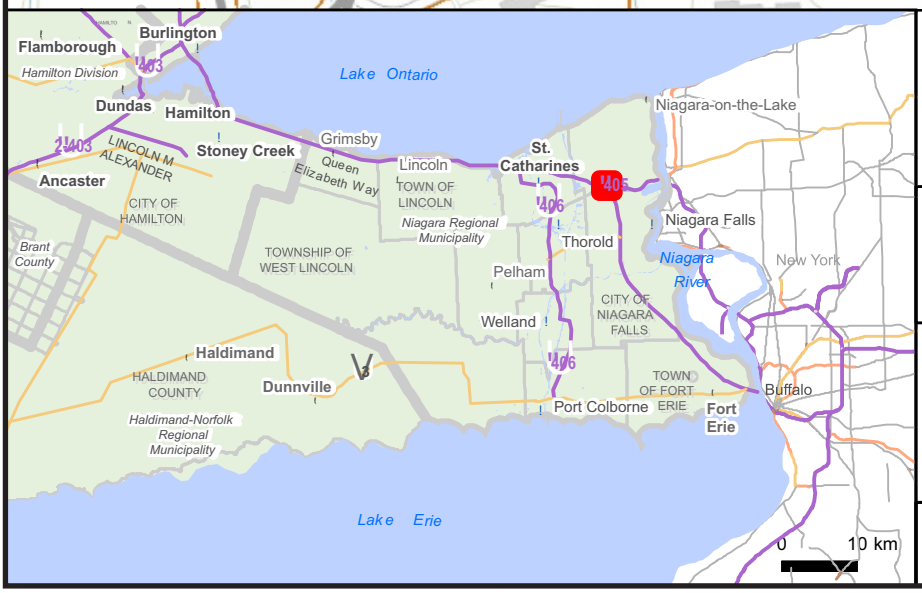


Figure 1
Location Map

Scoped Environmental Impact Study
524 York Road (Phase 2), NOTL

Prepared for: Niagara York Road Inc.

Prepared by: COLVILLE CONSULTING INC.

DATE: January 2025

FILE: C24059

Legend

- Subject Property
- Watercourse
- Significant Woodland
- Other Woodland
- Non-Provincially Significant Wetland

0 40 Meters

1:1,950

Figure 2
Mapped Natural Heritage Features on the Subject Property

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2.0 ENVIRONMENTAL POLICY

2.1 Provincial Policy Statement

The Provincial Policy Statement (PPS) was issued under Section 3 of the Planning Act and came into effect on May 22, 1996. The PPS was updated in 1997, 2005, 2014, and most recently in 2024. It applies to all applications submitted after May 1, 2020, and states that decisions affecting planning matters "shall be consistent with" policy statements issued under the Act. This EIS has been prepared in compliance with Policy 4.1 of the PPS, which deals specifically with the long-term protection and management of natural heritage features and areas.

The PPS intends to ensure that natural features and areas be protected for the long term. The PPS indicates that diversity and connectivity of natural features in an area, and the long-term ecological function and biodiversity of natural heritage systems, should be maintained, restored or, where possible, improved, recognizing linkages between and among natural heritage features and areas, surface water features and groundwater features.

Natural heritage features and areas are defined in the PPS as those which are important for their environmental and social values as a legacy of the natural landscapes of an area and include: significant wetlands, significant coastal wetlands, fish habitat, significant woodlands south and east of the Canadian Shield, significant valleylands south and east of the Canadian Shield, significant habitat of endangered species and threatened species, significant wildlife habitat and significant areas of natural and scientific interest.

Development and site alteration is not permitted in:

- significant wetlands in Ecoregions 5E, 6E, and 7E; and
- significant coastal wetlands

Unless it can be demonstrated that there will be no negative impacts on the natural heritage features or their ecological functions, development and site alteration are not permitted in:

- significant wetlands north of Ecoregions 5E, 6E, and 7E;
- significant woodlands and valleylands south and east of the Canadian Shield;
- significant wildlife habitat;
- significant areas of natural and scientific interest; and
- coastal wetlands in Ecoregions 5E, 6E, and 7E.

In addition, development and site alteration is not permitted in fish habitat or the habitat of endangered and threatened species, except in accordance with provincial and federal requirements.

Furthermore, development and site alteration are not permitted on adjacent lands to the natural heritage features identified above, unless the ecological function of the adjacent lands has been evaluated and it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions.

2.2 Regional Niagara Official Plan

The Niagara Region Official Plan was updated in 2022 and is intended to provide a strategic planning framework to assist with managing growth in the Region. Chapter 3 of the Official Plan outlines the objectives and policies for a Regional natural heritage system and water resource system. The natural heritage system is comprised of features such as wetlands, woodlands, valleylands, and wildlife habitat, as well as components such as linkages, buffers, supporting features and areas, and enhancement areas. The intent of the natural heritage system is to preserve and enhance the biodiversity, connectivity, and long-term ecological function of natural systems in the Region.

The water resource system is made up of both groundwater features and surface water features and areas. The intent of the water resource system is to protect the ecological and hydrological integrity of water resources and the various watersheds in the Region. The natural heritage and water resource systems are ecologically linked, rely on and support each other, and have many overlapping components.

The features and components of the natural environment system are listed in Schedule L and include significant woodlands, other woodlands, provincially significant wetlands, other wetlands and non-provincially significant wetlands, earth and life science areas of natural and scientific interest, permanent and intermittent streams, buffers, linkages and supporting areas. Schedule L includes the definitions and criteria for each of the features and components.

Mapped features on and adjacent to the Subject Property include significant woodland, other woodland, other wetland, and an intermittent watercourse. Not all of the features and components that make up the natural environment system can, or have been mapped, as part of the schedules to the Official Plan. Where features or components of the natural environment system listed in Schedule L are not mapped, detailed area-specific or site-specific studies such as an environmental impact study, hydrological evaluation, or sub-watershed study are required for their identification.

Where through the review of an application for development or site alteration, or through the completion of a sub-watershed study, it is found that there are features or components of the natural environment system or related ecological and/or hydrologic functions that have not been adequately mapped, evaluated, or protected, the applicant shall have an evaluation prepared by a qualified professional in consultation with the Region, the Local Area Municipality and, where appropriate, the Conservation Authority. If the evaluation finds one or more natural heritage features and areas, key natural heritage features, or key hydrologic features, the policies of this Plan will be applied to the lands under application as appropriate.

Section 3.1.4 of the OP includes policies related to the refinement of Natural Environment System components. Section 3.1.4.1 states that changes to the limits or classification of individual features or components of the natural environment system identified through regional criteria may be considered through the submission of an environmental impact study and/or hydrological evaluation based on a terms of reference approved by the Region, in accordance with the policies of this Plan, and in consultation with the Conservation Authority as appropriate.

Section 3.1.4.2 goes on to state that if the change to the limit or classification of an individual feature or component of the natural environment system identified through regional criteria can be justified to the satisfaction of the Region, an amendment to this Plan shall not be required.

Section 3.1.9.6 of the OP includes policies related to development and site alteration in Natural Heritage Features and Areas outside of the Provincial Natural Heritage System. Section 3.1.9.6.1 states that development and site alteration shall not be permitted in the following natural heritage features and areas:

a) provincially significant wetlands
b) significant coastal wetlands; and
c) significant woodlands.

Section 3.1.9.6.2 states that development and site alteration shall not be permitted in the following natural heritage features and areas unless it has been demonstrated through the preparation of an environmental impact study that there will be no negative impacts on the natural features or their ecological functions:

a) other woodlands;
b) significant valleylands;
c) significant wildlife habitat; and
d) areas of natural and scientific interest.

Section 3.1.9.6.7 states that where an other wetland in a settlement area has been identified, and it is determined that it is not regulated by the Conservation Authority:

a) the Region shall require that an evaluation be undertaken through an environmental impact study, and if required, a wetland evaluation using the Ontario Wetland Evaluation System, and/or hydrological evaluation as part of an application for development or site alteration, or through a sub-watershed study to determine the appropriate classification and protection or management of the feature;
b) outcomes of the evaluation completed with Policy 3.1.9.6.7 a) could include the in-situ protection with appropriate buffers or incorporation of the hydrologic function into the design of the development in accordance with the following:

i. if the other wetland is a treed community with a canopy coverage greater than 25 per cent, and the other criteria for other woodlands are met, the other woodland policies of this Plan shall apply;
ii. if the other wetland is a treed community with a canopy coverage greater than 60 per cent, and the other criteria for significant woodlands are met, the significant woodland policies of this Plan shall apply;
iii. no negative impact on the ecological function of the other wetland; and
iv. maintain the hydrologic function of the other wetland;

Polices related to buffers in settlement areas are include in section 3.1.9.10. Section 3.1.9.10.1 states that within settlement areas, mandatory buffers from natural heritage features and areas are required. The width of an ecologically appropriate buffer would be determined through an environmental impact study and/or hydrological evaluation at the time an application for development or site alteration is made, or through the completion of a sub-watershed study in support of a secondary plan or other large-scale development. The width of the buffer would be based on the sensitivity of the ecological functions from the proposed development or site alteration, and the potential for impacts to the feature and ecological functions as a result of the proposed change in land use.

Section 3.1.9.10.2 states that development or site alteration shall not be permitted in the mandatory buffer, with the exception of that described in Policy 3.1.9.6.3 or infrastructure serving the agricultural sector unless it has been demonstrated through the preparation of an environmental impact study that there will be no negative impacts and the buffer will continue to provide the ecological function for which it was intended.

Polices related to the management of other woodlands are included in section 3.1.11 of the OP. Section 3.1.11.2 states that development or site alteration shall not be permitted in other woodlands unless it has been demonstrated through the preparation of an environmental impact study that there will be no negative impacts on the other woodland or its ecological functions.

Policies related to the management of fish habitat are included in section 3.1.12. Section 3.1.12.1 states that development or site alteration shall not be permitted in fish habitat except in accordance with Federal and Provincial requirements. In order to determine whether fish habitat is present, proponents of development or site alteration shall be required to screen for the presence of fish habitat to the satisfaction of the Region.

Section 3.1.12.2 goes on to state that if fish habitat is determined to be present, a fish habitat assessment undertaken by a qualified professional shall be required for development or site alteration within or adjacent to fish habitat. Development or site alteration may be exempt from this requirement provided that:

a) the development satisfies Federal and Provincial requirements or has been specifically authorized by the appropriate approval authority; and
b) the regulated setback, vegetated shoreline, stormwater management, and slope related policies of this Plan are met and the proposal is not for major development.

2.3 Town of Niagara-on-the-Lake Official Plan

The entirety of the Subject Property is designated as Prestige Industrial. Policies related to the management of Conservation Lands and Wetlands are outlined in Section 16 of the Town of Niagara-on-the-Lake Official Plan (Town of Niagara-on-the-Lake 2004). The Conservation/Wetland designation applies to lands considered environmentally significant or where lands are considered unsuitable for buildings purposes and require special attention to avoid loss of life and property damage. Features included within this designation are Provincially Significant Wetlands, flood prone and shoreline erosion areas, Areas of Natural and Scientific Interest, woodlots and fish habitats.

The goals and objectives of policies in Section 16 are:

(1) To protect wetlands from incompatible activities.

(2) To encourage the retention of woodlots and the reforestation of low capability farmland.

(3) To protect areas of natural and scientific interest.

(4) To control development within the 100-year erosion limit of Lake Ontario.

(5) To petition the senior levels of government for physical and financial assistance in stabilizing the Lake Ontario shoreline.

(6) To increase public access to the Niagara River and Lake Ontario and to prevent damage to the shoreline.

(7) To delineate and regulate development on all lands having inherent physical environmental hazards such as flood susceptibility, poor drainage or other physical conditions which act as a constraint to development in order to prevent loss of life and to minimize property damage and social disruption.

(8) To preserve and enhance the amenities and natural resources offered by waterways, wetlands and natural areas in the Town.

(9) To preserve and protect provincially significant wetlands in accordance with provincial policy statements.

From our review of Schedule F of the Official Plan, no portion of the Subject Property has been designated as Conservation. However, there is Conservation designation lands adjacent to the Subject Property to the west.

2.4 Niagara Peninsula Conservation Authority

The Niagara Peninsula Conservation Authority (NPCA) is responsible for the administration of Ontario Regulation 41/24 and the Conservation Authorities Act, which provides the NPCA jurisdiction to regulate development activities within and adjacent to flood and erosion hazards, valleys, watercourses and wetlands. The guiding principle of this regulation is to ensure any development work proposed within regulated areas will have no adverse impact on flooding, erosion, dynamic beaches unstable soils and bedrock.

To assist with reviewing development applications, the NPCA has created a document titled Policies for Planning and Development in the Watersheds of the Niagara Peninsula Conservation Authority (NPCA 2024). The purpose of the document is to provide guidance for reviewing development applications that are located within regulated areas.

Regulated features on and adjacent to the property include a small watercourse and associated slope on the western edge of the Subject Lands, and non-provincially significant wetland approximately 28 metres to the south of the Subject Lands. NPCA policies related to the management of watercourses are contained in Section 9 of the policy document. This section states that in general interference with a watercourse is not permitted, except in accordance with the policies included in the policy NPCA document.

Section 9.2.5 contains policies related to watercourse buffer composition and indicates that where development and site alterations are proposed adjacent to a watercourse, the NPCA shall require the establishment of a natural buffer in accordance with the following requirements:

a) A 30 metre buffer shall be provided where the watercourse contains permanent flow. Notwithstanding this requirement, the buffer may be reduced where supported by technical study in accordance with the NPCA Procedural Manual, but in no case shall the buffer be reduced below 15 metres.
b) A 15 metre buffer shall be provided for watercourses containing intermittent flow. Notwithstanding this requirement, the buffer may be reduced where supported by a technical study in accordance with the NPCA Procedural Manual.

Polices related to the management of valleylands are included in section 5.2, with policies related to development on the valley wall included in section 5.2.4. Section 5.2.4.d states that new structures associated with erosion control, passive recreation, stairs, are subject to the following policies:

i. A geotechnical study may be required to be completed by a qualified professional to determine the risk of the proposed work. The study will include an assessment of the stability of the valley wall, rate of erosion or recession of the valley wall, access issues and an assessment of the construction technique on the valley wall. The design of any works must ensure that the long-term stability of the valley wall is maintained and that no risk to life or property damage is anticipated.
ii. There is no change in land use and no increase in the number of dwelling units.
iii. A re-vegetation plan is submitted for review and approval by the NPCA demonstrating there is no net loss of natural vegetation.
iv. Fill placement and site alteration is limited to only what is necessary to erect approved structures or to provide suitable material for plantings.

3.0 STUDY APPROACH

3.1 Background Review

Before the commencement of primary field inventories, a site visit and the review of background material available for the Subject Property and the surrounding area were conducted. Some of the background information reviewed included:

- Niagara Region Official Plan (2022);
- Town of Niagara-on-the-Lake Official Plan (2017);
- Data available from the Natural Heritage Information Center (NHIC);
- Background data available from the NPCA and Ministry of Natural Resources and Forestry (MNRF);
- Niagara Natural Areas Inventory (NPCA 2010);
- Ontario Reptile and Amphibian Atlas, 2009-2019 (Ontario Nature 2023);
- Ontario Breeding Bird Atlas (OBBN); and
- Recent and historical aerial photographic imagery.

3.2 Field Inventories

To assess potential impacts associated with this project, the following inventories and assessments were conducted for a previous study on the Adjacent Property and the Subject Property:

a) Two-season botanical inventory of the property;
b) Ecological Land Classification description and mapping of the Subject Property;
c) Breeding bird surveys on and adjacent to the property;
d) Complete an assessment of potential bat roosting habitat on the property using methods established by the Ministry of Natural Resources and Forestry;
e) An assessment of the watercourse feature on the western edge of the property; and
f) Document incidental wildlife observations during site visits, including any species of insects that may be considered locally rare of species at risk.

The methods employed for each of the above components are provided in the appropriate sections below.

4.0 STUDY FINDINGS

4.1 Botanical Inventories and Vegetation Mapping

Botanical inventories of the Subject Property were conducted on July 27 and October 20, 2024. Vegetation communities (ELC units – following Lee et al. 1998) were mapped and described, and a list of botanical species was compiled. Species status was assessed for Ontario (Oldham and Brinker 2009) and Niagara Region (Oldham 2010).

Vegetation communities are described below and illustrated in Figure 3.

4.1.1 Botanical Inventories

Sixty (60) plant species were documented on the property during our inventories. No rare or locally uncommon plant species were observed during assessments. A vascular plant checklist is provided in Appendix B. It was noted that the Hackberry, Red Maple, and Norway Spruce found on the Subject Lands are roadside plantings that have integrated into the edge of the west side of the forest and are not native to the treed area itself. This is evidenced by old t-bars that were installed and never removed.

4.1.2 Vegetation Communities

A majority of the tablelands on the Subject Property consist of former orchards and agricultural lands that have succeeded to mix of meadow, thicket and woodland. The western edge of the site has been treed since at least 1934 according to air photos and was once contiguous with a larger woodland area located north and south of the property. Site conditions suggest that the woodland on the property has historically gone through multiple bouts of forestry maintenance leading to colonization by invasive plant species. Sometime between 2016 and 2018, approximately half of the former meadow on the property had been removed in association with the construction of the hotel to the north. For the purposes of this assessment, this area has been described as disturbed. Further description of vegetation communities on the property are provided below and illustrated in Figure 3. Photos illustrating the vegetation conditions on the property are provided in Appendix C.

Dry-Fresh Red Oak Woodland Type (WODM3-1)

The largest non-disturbed vegetation community on the property consists of a Dry – Fresh Oak Deciduous Woodland. Red Oak and Shagbark Hickory dominate the canopy, with some Bur Oak, Sugar Maple, Red Maple, Norway Maple, White Oak and Cherry species occurring in both the canopy and subcanopy. Canopy cover is variable throughout the community and appears to average approximately 50-55% canopy coverage. The sub-canopy is dominated by Shagbark Hickory and regenerating canopy species. The shrub layer contains a mix of Shagbark Hickory, Common Buckthorn, Gray Dogwood and Staghorn Sumac, as well as young Oak, Maple and Ash species.

Ground covers on the woodland floor include various native grasses and wildflowers, however the presence of ground covers is variable and related to available light. There are several non-native species that have colonized this vegetation community over the years, including Norway Maple, Common Buckthorn, European Privet, Multiflora Rose, Curly Dock and multiple clover and vetch species.

Buckthorn Deciduous Shrub Thicket Type (THDM2-6) complexed with Dry – Moist Old Field Meadow Type (CUM1-1)

Vegetation on the central portion of the property between the woodland and disturbed area of the site was described as a complex of Buckthorn Deciduous Shrub Thicket Type (THDM2-6) and Cultural Meadow (CUM1-1). This vegetation community supports very few trees, forming less than 10% tree cover. This community contains several invasives and escaped planted species indicative of a highly disturbed site adjacent to high urban activity.

Thickets of Common Buckthorn and Staghorn Sumac occur along the woodland edge ranging between 10-30% cover. In the dense understory layer (forming greater than 60% cover) are shrubs of Gray Dogwood, Common Buckthorn and Hawthorn species, with Staghorn Sumac and Multiflora Rose occurring to a lesser extent. Non-native, cool season grasses and Canada Goldenrod co-dominate the ground layer. In some areas the ground layer is sparse and heavily shaded by woody vegetation from the adjacent woodland, while other areas are interspersed with numerous meadow openings and almost completely vegetated with grasses and forbs. There are also bare patches throughout this community which are likely from fill material from the adjacent disturbed portion of the site.

Legend

- Property Boundaries
- **WODM3-1** Dry - Fresh Red Oak Woodland Type
- **THDM2-6** Buckthorn Deciduous Shrub Thicket Type
- **CUM1-1** Dry - Moist Old Field Meadow Type
- **WOD** Deciduous Woodland
- **FOD** Deciduous Forest
- **SWD** Deciduous Swamp
- Location of Acoustic Monitoring Station

ELC communities off site not fully evaluated, some assumptions have been made regarding off site ELC designations based off Regional mapping

Figure 3
Vegetation Communities on the Subject Properties

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4.2 Wildlife and Wildlife Habitat

4.2.1 Breeding Bird Survey

Breeding bird surveys were conducted on June 17 and July 7, 2024, to inventory breeding birds on and adjacent to the Subject Property. Surveys were completed at least 15 days apart, under suitable weather conditions with little to no wind or precipitation. A thorough search of the Subject Property was completed during both surveys between dawn and no later than 10:00 am. All birds seen or heard calling were recorded and the highest breeding evidence per species was determined in accordance with the criteria of the Atlas of the Breeding Birds of Ontario (Cadman et al. 2007).

A total of 21 species of birds were observed or heard on or above the Subject Property and 1 additional species on adjacent lands. According to Ontario conservation status rank (S-rank) designations, except for 2 non-native species, all other recorded species are considered to be "secure" (S5 - common, widespread and abundant) or "apparently secure" (S4 - uncommon but not rare) in the province of Ontario. The recorded species are also considered to be very common to common permanent or summer residents in the Niagara Region except for the uncommon summer residents; Willow Flycatcher, Red-tailed Hawk and Ruby-throated Hummingbird (Niagara Natural Areas Inventory, 2010).

The Barn Swallow observed flying and calling over the Subject Lands on the first and second site visit are listed as Special Concern in Ontario and are also designated as Special Concern in Canada.

Below is a table summarizing the bird species heard and/or seen on or adjacent to the Subject Property during both site visits.

Table 1. List of bird species documented on and adjacent to the Subject Property.

Species	S Rank	Niagara Status*	Meadow/ Thicket	Woodland	Adjacent Lands	Highest Breeding Evidence**	Breeding Code***
American Goldfinch	S5	C R	X	X		PO	S
American Robin	S5	VC R	X	X		PO	S
Barn Swallow	S4B	VC R	X			OBS	X
Blue Jay	S5	VC P		X		PO	H
Cedar Waxwing	S5	C R		X		PO	H
Chipping Sparrow	S5B	C R	X	X		PO	S
Common Grackle	S5	VC R		X		PO	H
European Starling	SNA	VC P	X	X		PO	S
Gray Catbird	S5B	C R		X		PO	S
House Sparrow	SNA	VC P	X	X		PO	S
Indigo Bunting	S5B	C R		X		PO	S
Killdeer	S5B	C R		X		CO	FY
Mourning Dove	S5	VC R		X		PO	S
Northern Cardinal	S5	C P		X		PR	A
Northern Flicker	S5	C R			X	PO	H
Red-tailed Hawk	S5	U R		X		PO	H
Red-winged Blackbird	S5	VC R	X	X		PO	S
Ring-billed Gull	S5	VC R	X			OBS	X
Ruby-throated	S5B	U R		X		PO	H
Song Sparrow	S5	VC R	X	X		PO	S
Spotted Sandpiper	S5B	C R	X			CO	DD
Willow Flycatcher	S4B	U R	X			PO	S

* VC – very common; C – common; U – uncommon; UR – Uncommon to rare; O – Occasional; R –Rare
P – permanent resident; R – summer resident; S – Straggler; DD-Data Deficient (Niagara Natural Areas Inventory, 2010)
** OBS – observed, no evidence of breeding; PO – possible breeding; PR – probable breeding; CO - confirmed breeding
*** X – observed in its breeding season, no evidence of breeding
H – species observed in its breeding season in suitable nesting habitat
S – singing male present in its breeding season in suitable nesting habitat
P – pair observed in their breeding season in suitable nesting habitat
A – agitated behavior or anxiety calls of an adult
D – courting or display between a male and female or two males
N – nest building or excavation of nest hole
T – permanent territory presumed through registration of territorial song or presence of adult bird in breeding habitat on at least 2 days, one week or more apart at the same place
DD- distraction display or feigning injury
AE – Adults leaving or entering nest site in circumstances indicating occupied nest
FS – adult carrying fecal sac
FY – recently fledged young
CF – adult carrying food for young
NE – nest containing eggs
NY – nest with young

4.2.2 Assessment of Potential Bat Roosting Habitat

During the summer, the Little Brown Myotis, Northern Myotis and Tri-colored Bats are found in a variety of forested habitats, as well as abandoned buildings, barns and attics. In forested habitats, cavities in trees, loose bark, foliage and other cover objects are used for roosting. These species forage in a variety of habitats where flying insects and spiders are present, often in association with wetlands, ponds and streams. Overwintering typically occurs in caves.

An assessment of potential bat roosting habitat was conducted on ~~November 19, and~~ June 17, 2024 using methods described by the MNRF (2017). Two cavity trees were identified during the assessment. Both cavity trees were observed on the western side of the existing woodland on the Subject Lands.

Based on the results of this assessment, acoustic bat monitoring was conducted at the property to determine potential use by bats. A passive acoustic monitor was deployed on June 18, 2024 and recovered on July 1, 2024 for a total of 13 monitoring days. The location of the bat monitor is illustrated in Figure 3.

One passive acoustic monitoring device was used at the center of the woodland during the monitoring period. The site was monitored using an SM4Bat Full spectrum monitor and SMM-U1 Omni-directional ultrasonic microphone developed by Wildlife Acoustics Inc. All bat calls that were recorded by the equipment were analyzed using the Kaleidoscope Pro auto-identification program and confirmed for accuracy through manual review. Table 2 below illustrates the total number of bat passes identified to species detected at the monitor during the deployment and a more detailed summary is provided in Appendix D.

Table 2. Summary of Bat Acoustic Monitoring Results.

	Big Brown Bat (EPFU)	Eastern Red Bat (LABO)	Hoary Bat (LACI)	Silver-haired Bat (LANO)	Eastern Small Footed Bat (MYLE)	Little Brown Bat (MYLU)	Northern Long Eared Bat (MYSE)	Tri-colored Bat (PESU)	Monitor Totals
Unit B	87	-	16	20	-	-	-	-	123
Total Passes	87	0	16	20	0	0	0	0	123

*Bat passes do not equal the actual number of bats. Individual bats can make multiple passes significantly skewing the results.

A total of 123 identifiable to species bat passes were recorded over the duration of the monitoring period. Most recordings were identified as Big Brown Bats, with Silver-haired Bats and Hoary Bats also detected during the monitoring period. Further discussion is provided in Section 5.2.1 below. Recordings collected during the monitoring period also included audio files that were identified as non-Chiroptera and categorized as noise (i.e. anthropogenic, atmospheric, other wildlife, etc.). These recordings were selected at random for review to ensure auto identification software was functioning correctly. These noise recordings were expected due to the monitors proximity to heavy traffic roadways adjacent to the Subject Lands.

4.2.3 Incidental Wildlife Observations

Wildlife observations were conducted during each site visit, including on June 17, June 18, July 1, July 27, October 20, and November 19, 2024. Observations of wildlife not documented in other sections of this report were limited to Eastern Chipmunk, Eastern Cottontail, and Grey Squirrel.

4.3 Aquatic Habitat Assessment

As illustrated on Figure 2, there is a single watercourse located on the Subject Lands. For ease of description, this watercourse has been assigned a numerical identifier, which is illustrated in Figure 3.

Watercourse 1

Watercourse 1 (WC1) is located on the western edge of the Subject Lands. This watercourse is a part of the Four Mile Creek and NOTL quaternary watershed area according to the Niagara Watershed Plan – Volume 2: Niagara Watershed Management. A review of historical air photos suggests that a portion of this watercourse adjacent to the Subject Lands was excavated and re-aligned as part of the extending of Glendale Avenue to the west. The channel of this watercourse on the property is approximately 1m in width and approximately 30cm deep. Flow in this watercourse is intermittent and associated primarily with snow melt and major precipitation events. This watercourse dries completely in the summer and does not appear to be providing any significant direct fish habitat functions.

5.0 ASSESSMENT OF SIGNIFICANT NATURAL HERITAGE FEATURES

5.1 Species at Risk

5.1.1 Significant Habitat of Endangered and Threatened Species

Endangered species documented on the property were limited to periodic detections of Hoary Bat and Silver-haired Bat. The number of detections indicates that these species were incidentally foraging in the vicinity of the acoustic monitor, however roosting is not expected because of the variable use.

No Threatened species were observed during our assessment of the property.

As part of our assessment of this property we completed a search of background information available from the Natural Heritage Information Center (NHIC), as well as completed a species at risk screening based on species known to occur in the Town of Niagara-on-the-Lake (see Appendix E). Based on site conditions, suitable significant habitat for Endangered and Threatened species is not present on the property.

Data available from the Natural Heritage Information Center (NHIC) indicates that Endangered and Threatened species known to occur in the vicinity of the Subject Property are limited to Cucumber Tree and Northern Bobwhite (Appendix F). Based on our assessments, the property is not providing habitat for Northern Bobwhite nor Cucumber Tree.

5.1.2 Other Potential Species of Conservation Concern

One Species of Special Concern, Barn Swallow, was documented on the property during our survey work. A single Barn Swallow was observed flying and calling over the woodland. There are no structures suitable

for nesting on the Subject Property, however it is possible that outbuildings or structures on adjacent properties could be providing nesting opportunities for this species. Based on these observations, it is not likely that Barn Swallows are nesting on the Subject Property.

Eastern Wood-pewee and Wood Thrush were not documented during breeding bird surveys. It is probable that the woodland area is too small to provide significant potential habitat for these species. As Eastern Wood-pewee and Wood Thrush were not documented on the property, the woodland is not providing habitat for these species.

5.2 Significant Wildlife Habitat

The SWH Criteria Schedule for Ecoregion 7E (OMNRF 2015) identifies four main types of significant wildlife habitat (SWH): seasonal concentrations areas, rare vegetation communities, specialized wildlife habitats, and habitats of Species of Conservation Concern. These are discussed below in relation to the natural features on the property and a summary is provided in Appendix G.

5.2.1 Seasonal Concentration Areas

The Significant Wildlife Habitat Criteria Schedules for Ecoregion 7E identify 14 types of seasonal concentrations of animals that may be considered significant wildlife habitats. These include, but are not limited to:

- Waterfowl Stopover and Staging Areas (Aquatic and Terrestrial);
- Shorebird Migratory Stopover Area;
- Raptor Wintering Area;
- Bat Hibernacula;
- Bat Maternity Colonies;
- Turtle Wintering Areas;
- Reptile Hibernaculum;
- Colonially -Nesting Bird Breeding Habitat (Bank and Cliff);
- Colonially -Nesting Bird Breeding Habitat (Tree/Shrubs);
- Colonially -Nesting Bird Breeding Habitat (Ground);
- Migratory Butterfly Stopover Areas;
- Landbird Migratory Stopover Areas; and
- Deer Winter Congregation Areas.

Seasonal concentration areas are typically designated as significant wildlife habitat if an area supports a species at risk or a large population may be lost if the habitat is destroyed.

A total of 87 passes by Big Brown Bats over the course of the 13 day acoustic monitoring period. The average amount of passes per night is 6.69, ranging from 3-11 per night. Based on these numbers, the property is not being utilized by any bat species for maternal colonies.

Our assessment of the property indicates that it is unlikely that snake hibernacula are located within the meadow/thicket portion of the property. As this portion of the property is generally high and will not likely maintain suitable soil moisture conditions over the winter, this portion of the Subject Lands is not likely

being used by snakes for overwintering. It is also directly adjacent to the disturbed portion of the property, which has little to no suitable snake habitat.

No wildlife use consistent with seasonal concentrations were documented during our observations of the property.

5.2.2 Rare Vegetation Communities

Rare vegetation communities often contain rare species, which depend on such habitats for their survival and cannot readily move to or find alternative habitats. Those areas that qualify as rare habitats are assigned an SRank of S1, S2 or S3 by the Natural Heritage Information Center (NHIC).

The Significant Wildlife Habitat Criteria Schedules for Ecoregion 7E identify seven specialized habitats that may be considered significant wildlife habitats. They are:

- Cliffs and Talus Slopes;
- Sand Barren;
- Alvar;
- Old Growth Forest;
- Savannah;
- Tallgrass Prairie; and
- Other Rare Vegetation Communities.

No rare vegetation communities are located on or adjacent to the Subject Property.

5.2.3 Specialized Habitats of Wildlife considered SWH

Some wildlife species require specialized habitat types for their long-term survival and many wildlife species require substantial areas of suitable habitat for successful breeding. Their populations are at risk of decline when their habitat becomes fragmented or reduced in size.

Specialized habitats for wildlife include:

- Waterfowl Nesting Area;
- Bald Eagle and Osprey Nesting, Foraging and Perching Habitat;
- Woodland Raptor Nesting Habitat;
- Turtle Nesting Areas;
- Seeps and Springs;
- Amphibian Breeding Habitat (Woodland);
- Amphibian Breeding Habitat (Wetlands); and
- Woodland Area-Sensitive Bird Breeding Habitat.

Based on our assessments, there is no areas of the Subject Lands that would meet the criteria of specialized habitat for wildlife. It is therefore our conclusion that no portion of the property is providing specialized habitat for wildlife.

5.2.4 Habitats of Species of Conservation Concern considered SWH

Habitat of Species of Conservation Concern includes wildlife species that are listed as Special Concern or rare, that are declining or are featured species. Habitats of Species of Conservation Concern do not include

habitats of Endangered or Threatened species as identified by the Endangered Species Act. The following habitats are considered candidate SWH:

- Marsh Breeding Bird Habitat;
- Open Country Bird Breeding Habitat;
- Shrub/Early Successional Bird Breeding Habitat;
- Terrestrial Crayfish; and
- Special Concern and Rare Wildlife Species.

Based on our assessments, there is no Species of Conservation Concern, and therefore no habitats of Species of Conservation Concern considered SWH.

5.2.5 Animal Movement Corridors

The SWHTG defines animal movement corridors as elongated, naturally vegetated parts of the landscape used by animals to move from one habitat to another. To qualify as significant wildlife habitats, these corridors should be a critical link between habitats that are regularly used by wildlife.

Based on our review of background mapping, it appears that the portion of the Subject Property associated with woodland fragment may be acting as a marginal movement corridor. This area is marginal due to the amount of roadway fragmentation and heavy human usage that is already impeding the ability of wildlife to move to adjacent vegetated landscapes. Due to the proposed development only affecting approximately half of the currently vegetated area of the Subject Lands, any corridor functions will remain. Based on the proposed development on the Subject Property, there will be no impact on this movement corridor.

5.3 Significant Areas of Natural and Scientific Interest

No Areas of Natural and Scientific Interest are located on or adjacent to the Subject Property.

5.4 Significant and Other Wetlands

No significant wetlands or other wetlands are mapped on the Subject Lands. Based on our assessments, we support the current mapping regarding wetlands.

The non-provincially significant wetland mapped to the south of York Road will not be impacted by the proposed development due to both proximity and the existing physical buffer of the roadway. The wetland is approximately 28 metres away from the closest point of the proposed development and is hydrologically up gradient from the Subject Lands.

5.5 Significant Woodlands and Other Woodlands

Significant Woodlands

As illustrated in Figure 2, while there is an area currently designated as other woodland, there is no portion of the Subject Property has been designated as Significant Woodland by the Niagara Region. The existing woodland community on the Subject Property is approximately 0.41 hectares (1.02 acres).

To be designated as significant, Schedule L of the Niagara Region Official Plan states that a woodland must meet the Ecological Land Classification definition of a forest (i.e. 60% or greater canopy cover) and meet one or more of the following criteria:

a) Two hectares or greater in size;
b) One hectare or greater in size meeting at least one of the following criteria:
    i. Naturally occurring (i.e, not planted) trees
    ii. Treed areas planted with the intention of restoring woodland;
    iii. 10 or more trees per hectare greater than 100 years old or 50 cm or more in diameter;
    iv. Wholly or partially within 30m of a provincially significant wetland or habitat of an endangered or threatened species;
    v. Overlapping or abutting one or more of the following features: permanent streams or intermittent streams, fish habitat and/or significant valleylands;
c) 0.5 hectares or greater in size meeting at least one of the following criteria:
    i. A provincially rare treed vegetation community with an S1, S2 or S3 in its ranking by the MNRF's N.H.I.C;
    ii. Habitat of a woodland plant species with an S1, S2 or S3 in its ranking or an 8, 9, or 10 in its Southern Ontario Coefficient of Conservatism by the NHIC, consisting of 10 or more individual stems or 100 or more sqm of leaf coverage;
    iii. Any woodland overlapping or abutting one or more of the following features: significant wildlife habitat, habitat of threatened species and endangered species and/or non-provincially significant wetlands
d) Any size overlapping or abutting one or more of the following features:
    i. Provincially significant wetland; and
    ii. Life science area of natural and scientific interest (ANSI)

From our surveys and assessments, the WODM3-1 community on the property (see Figure 3) does not satisfy the canopy cover criteria required to be designated as a forest community. It also doesn't meet any Significant Woodland criteria mentioned above except proximity to a watercourse (See Table 4 below).

Table 3. Assessment of Significant Woodland criteria

Criteria	Representation on Property	Criteria Met
Size	The woodland on and adjacent to the Subject Property forms part of a larger woodland that is greater than 2 hectares in size.	Criteria not Satisfied
Naturally occurring trees	Woodland on the property is comprised of a mix of naturally occurring trees supplemented with plantings, woodland maintenance and invasives.	Criteria not Satisfied
Planted to restore woodland	No portion of the property appears to have been planted with the intention of restoring woodland.	Criteria not Satisfied
Older Growth	The western half of the woodland has been in the landscape for over 100 years but has been highly disturbed and manicured with via mechanical maintenance. Noticeable forestry activities. Does not constitute as old growth.	Criteria not Satisfied
Proximity to PSW or Endangered or Threatened Species	Woodland is not located near a provincially significant wetland or a species considered Threatened or Endangered.	Criteria not Satisfied
Proximity to water or valleylands	Woodland adjacent to a small watercourse on the western edge. However, woodland is under 1 hectare in size and thus this criteria is not applicable.	Criteria not Satisfied
Rare vegetation communities	The woodland does not contain any rare vegetation communities.	Criteria not Satisfied
Rare plant species	The woodland does not contain any rare vegetation communities.	Criteria not Satisfied
Proximity to other natural heritage features	Woodland separate from any other natural heritage features	Criteria not Satisfied
Proximity to PSW or ANSI	Woodland not located near a provincially significant wetland or Area of Natural and Scientific Interest	Criteria not Satisfied

Based on our assessment, no portion of the Subject Lands can be considered a Significant Woodland.

Other Woodlands

The Niagara Region Official Plan defines Other Woodlands as woodlands determined to be ecologically important in terms of features, functions, representation, or amount, and contributing to the quality and diversity of an identifiable geographic area or natural heritage system. Other woodlands include all terrestrial treed vegetation communities where the percent tree cover is >25 per cent. Other woodlands would not include woodlands meeting the criteria as significant woodlands.

To be identified as an Other Woodland, a terrestrial treed area must have ≥ 25 per cent tree cover and meet one or more of the following criteria:

a) an average minimum width of 40 m and is ≥ 0.3 ha, measured to crown edges; or
b) any size abutting a significant woodland, wetland or permanent stream.

Treed areas that "abut" a significant woodland, wetland or permanent stream are considered adjacent when located within 20 m of each other.

Due to the size and canopy cover in the woodland community on the western side of the property, this area is considered to meet the criteria to be considered Other Woodland.

The dripline of this woodland community has been refined by Colville staff. The refined extent of other woodlands are illustrated in Figure 4.

Legend

- Subject Property
- Watercourse
- Significant Woodland
- Other Woodland
- Non-Provincially Significant Wetland

Figure 4
Refined Extent of Natural Heritage Features on the Subject Property

Scoped Environmental Impact Study
524 York Road (Phase 2), NOTL

Prepared for: Niagara York Road Inc.

Prepared by: COLVILLE CONSULTING INC.

DATE: January 2025

FILE: C24059

6.0 POTENTIAL ECOLOGICAL IMPACTS

Currently proposed development on this property consists of a 10 storey dual hotel, with 207 total rooms and associated parking and amenities, as well as two detached restaurants. The entirety of the proposed development is approximately 1.25 ha (3.08 acres). A proposed concept plan is provided in Appendix A and has been overlayed on Figure 5.

6.1 Significant Habitat of Endangered and Threatened Species

Endangered species documented on the property were limited to Hoary Bat and Silver-haired Bat. The number of detections indicates that these species were incidentally foraging in the vicinity of the acoustic monitor, however roosting is not expected because of the variable use. Because use of this property by Hoary Bat and Silver-haired Bat is incidental, the proposed development will not impact the continued use of this area.

No Threatened species were observed during our assessment of the property and habitat on the property does not appear to be suitable for use by Threatened species known from the area.

Based on our assessment, no portion of the proposed development will impact significant habitat of Endangered or Threatened species.

6.2 Species of Special Concern

Only one Species of Special or Conservation Concern (Barn Swallow) was documented on and adjacent to the property during our survey work.

As discussed above, Barn Swallows were documented flying over the Subject Lands. Since there is no suitable breeding habitat for Barn Swallows on the property, and any potential foraging is incidental and will continue after construction, the proposed development will not impact Barn Swallow use of the property.

Based on the above, it is our assessment that the proposed development will not impact habitat of Species of Special or Conservation Concern.

Legend

- Subject Property
- Watercourse
- 10m Watercourse Setback
- Significant Woodland
- Other Woodland
- Non-Provincially Significant Wetland

0 40 Meters

1:1,950

Figure 5
Extent of Proposed Development on the Subject Property

Scoped Environmental Impact Study
524 York Road (Phase 2), NOTL

Prepared for: Niagara York Road Inc.

Prepared by: Colville Consulting Inc.

DATE: January 2025

FILE: C24059

6.3 Locally Rare and Uncommon Species

No locally rare or uncommon botanical species were observed during our assessment of the property.

Several locally rare and/or uncommon bird species (Red-tailed Hawk, Ruby-throated Hummingbird and Willow Flycatcher) were documented on the property during inventories. Red-tailed Hawk and Ruby-throated Hummingbird were documented in the woodland on the property, with the Willow Flycatcher exclusively documented calling over the thicket associated with the watercourse. As Red-tailed Hawk and Ruby-throated Hummingbird use is not limited by woodland patch size and there will be a sizeable portion of the woodland retained following development, the proposed project will not impact woodland habitat of these species.

Willow Flycatchers are typically associated with shrubby areas near standing or running water. Because the proposed development will not impact habitat associated with the watercourse, Willow Flycatcher is expected to continue to use available habitats on and adjacent to the property.

6.4 Significant Woodlands & Other Woodlands

Significant Woodlands

As discussed above in section 5.5, the woodland community on the Subject Lands do not meet the criteria to be considered significant woodland. The refined extent of the significant woodland is illustrated in Figures 4.

The closest portion of lands designated as significant woodland to the south is approximately 26 metres away from the Subject Lands and is bisected by York Road. Due to the existing roadway and proximity from development, there will be no negative impacts on this woodland from the proposed development.

Other Woodlands

To facilitate development, it is anticipated that approximately 0.2 hectares (0.49 acres) of the woodland community on the Subject Property will be removed. This will leave approximately 0.21 hectares (0.52 acres) of woodland to be retained on site.

Our assessments indicated that this woodland area is functioning as a small woodland fragment, with none of the wildlife species using the woodland limited by woodland size. Although the proposed development will remove a portion of this woodland, the remaining woodland area and composition will be sufficient to maintain document habitat functions.

Based on the proposed development plan, a new woodland edge will be established, as illustrated in Figure 5. This new woodland edge will be consistent with the woodland edge to the north, south and west of the property. Vegetation in the vicinity of the new woodland edge consists mainly of Oak species and Shagbark Hickory, along with a shrub layer consisting of Oak and Maple saplings, Gray Dogwood and Common Buckthorn.

Typically, potential impacts to a woodland edge adjacent to the development include increased light penetration and changes in microclimate related to a potential increase in wind exposure. Because of the

already small size of this woodland, it is not expected that microclimates in the retained woodland will be impacted significantly by this project.

Similarly, since all wildlife species in this woodland are adapted to urbanized settings, increased ambient light on the property is not likely to affect habitat use by wildlife in the area. It is also likely that an increase in shrubs and ground covers will occur along the woodland edge for the first 1-2 years following construction due to increased light. This increase in cover may mitigate some of the anticipated increase in ambient light in the woodland.

Based on our assessment, the removal of approximately 0.2 hectares of woodland from the property will not impact ecological functions of this woodland. Although the project will not impact the functions of this woodland, it is recommended that trees to be removed from the woodland be replaced in the area in accordance with Niagara-on-the-Lake Tree By-Law requirements. This could include installing trees on adjacent lands in proximity to existing and more high functioning natural areas, which would provide a potential ecological benefit beyond retention in-situ. Opportunities for replanting should be discussed with Town of Niagara-on-the-Lake staff.

6.5 Watercourses

As illustrated in Figure 4, one watercourse is located on the property. Due to proximity of the proposed development, no impact to this watercourse will occur as a result of the proposed development.

Our assessment indicates that Watercourse 1 on the western edge of the property is functioning as a stormwater conveyance channel, conveying water from the hotel to the west of the property, as well as the surrounding roadways (both York Rd and Glendale Ave). As this watercourse has little ecological functions, it is recommended that a buffer of 10m be maintained from this watercourse.

7.0 MITIGATION MEASURES

Based on our assessment, it is our expectation that the proposed development will have no impact on the ecological functions of the natural heritage features on the property or negatively impact any significant natural heritage features in the area. To assist in avoiding any impacts associated with the proposed development, it is recommended that the following mitigation measures be implemented during final design and future construction of the proposed development:

- Appropriate sediment and erosion control measures should be installed at the limit of excavation and grading to delineate the work area and help minimize impacts to adjacent vegetation.
- Sediment and erosion controls should be inspected regularly to ensure proper function.
- A silt fence is recommended to be installed to reduce any offsite movement of silt and help prevent wildlife movement into work areas.
- The removal of trees and vegetation should be timed to minimize impacts on any wildlife species. It is recommended that tree removal be completed prior to April 1 or after October 31 to minimize impacts to bird and bat species that may be utilizing trees on the property.
- A survey for active bird nests should be conducted prior to any vegetation removal or site alteration planned to occur between April 1 and October 31. This nest sweep should be valid for

the next 48 hours of clearing works. If additional clearing works must occur past that 48 hour period, another nest sweep should be conducted.

- It is recommended that re-planting of trees be conducted as required by the Town of Niagara-on-the-Lake Tree By-Law. Details regarding any required re-plantings are recommended to be discussed with Town staff.
- It is recommended that coarse wood debris from tree removals be scattered throughout the retained woodland to create additional wildlife habitat.
- Tree removal required as part of this project should be conducted by a forestry professional to help avoid impacts to trees to remain on site.
- Any exterior lighting should be directed away from the woodland on the property to minimize impacts on wildlife. Shades should be installed on exterior lighting to prevent light from being directed upward or towards natural areas.

8.0 CONCLUSIONS AND RECOMMENDATIONS

Colville Consulting Inc. was retained to complete an Environmental Impact Study to identify potential impacts associated with the development of a ten-storey dual hotel on the property located at 524 York Road, in the Town of Niagara-on-the-Lake. This EIS has been prepared with the intention of identifying the extent of any natural heritage features on the property and assessing impacts associated with the proposed development. Based on our assessment, the construction of the proposed development will result in no impact to the significant natural heritage features adjacent to the property.

Based on this assessment, we conclude that the proposed development is meeting the intent of natural heritage policies of the Niagara Region Official Plan and the Niagara-on-the-Lake Official Plan. The proposed development also satisfies the intent of NPCA regulatory policies. It is recommended that the mitigation measures included above be considered during detailed design and future construction on the property.

Please do not hesitate to contact the undersigned at 905-935-2161 should you have any questions regarding the contents of this EIS.

Respectfully submitted by:

Ian Barrett, M.Sc.
Colville Consulting Inc.

Nash Colville, B.A., CERP-IT, CISEC-IT
Colville Consulting Inc.

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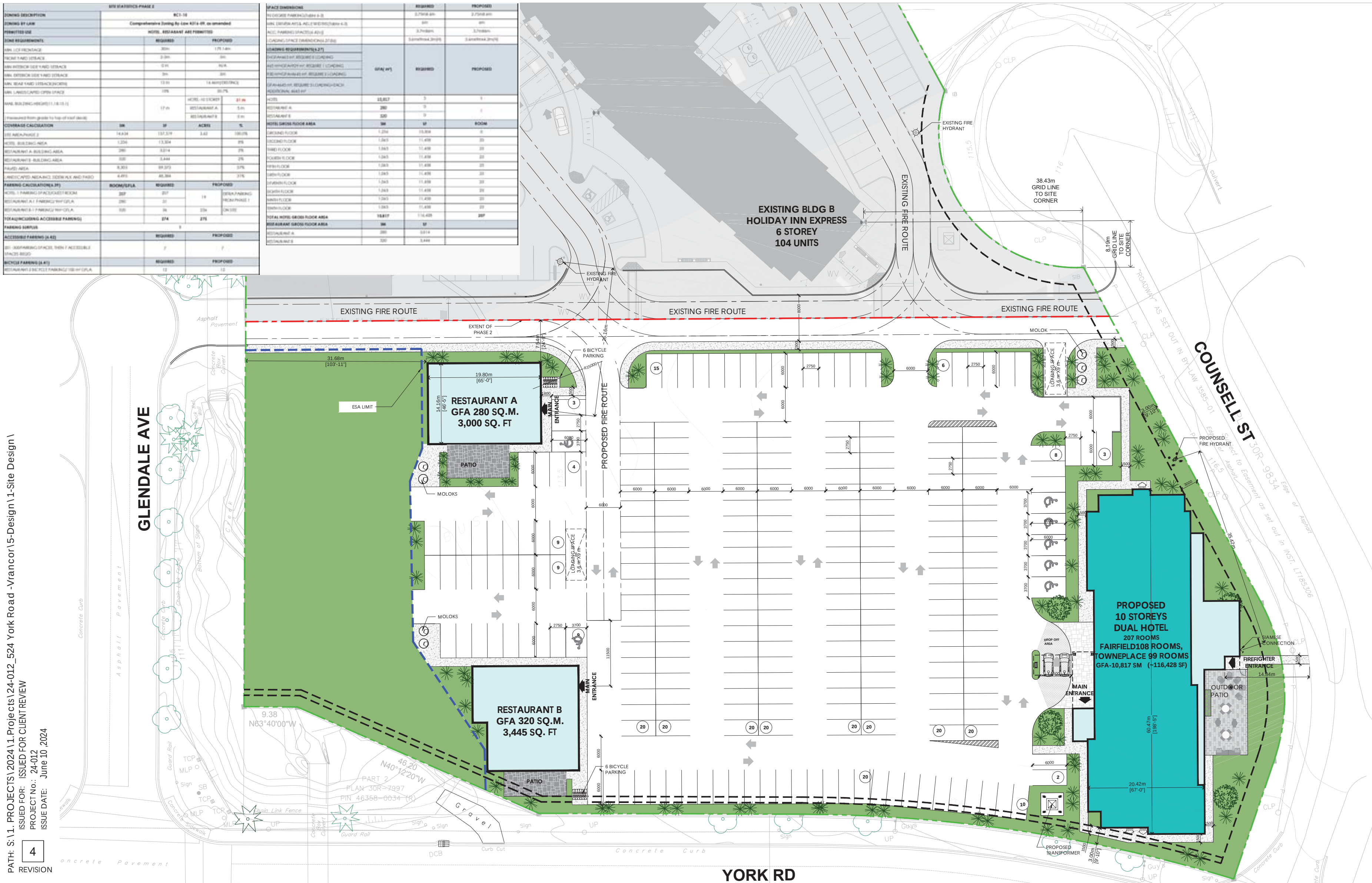
Appendix A:

Conceptual Site Plan

SITE STATISTICS-PHASE 2				
ZONING DESCRIPTION	RC1-10			
ZONING BY-LAW	Comprehensive Zoning By-Law 4316-09, as amended			
PERMITTED USE	HOTEL, RESTAURANT ARE PERMITTED			
ZONE REQUIREMENTS		REQUIRED	PROPOSED	
MIN. LOT FRONTAGE		30m	179.14m	
FRONT YARD SETBACK		3.0m	3m	
MIN INTERIOR SIDE YARD SETBACK		0 m	N/A	
MIN. EXTERIOR SIDE YARD SETBACK		3m	3m	
MIN. REAR YARD SETBACK(NORTH)		12 m	14.46m(DISTANCE)	
MIN. LANDSCAPED OPEN SPACE		10%	30.7%	
MAX. BUILDING HEIGHT(11.18.15.1)		17 m	HOTEL-10 STOREY	37 m
			RESTAURANT A	5 m
(measured from grade to top of roof deck)			RESTAURANT B	5 m
COVERAGE CALCULATION	SM	SF	ACRES	%
SITE AREA-PHASE 2	14,634	157,519	3.62	100.0%
HOTEL BUILDING AREA	1,236	13,304		9%
RESTAURANT A-BUILDING AREA	280	3,014		2%
RESTAURANT B -BUILDING AREA	320	3,444		2%
PAVED AREA	8,303	89,373		57%
LANDSCAPED AREA-INCL SIDEWALK AND PATIO	4,495	48,384		31%
PARKING CALCULATION(6.39)	ROOM/GFLA	REQUIRED	PROPOSED	
HOTEL 1 PARKING SPACE/GUEST ROOM	207	207	19	EXTRA PARKING FROM PHASE 1
RESTAURANT A 1 PARKING/9 m² GFLA	280	31		
RESTAURANT B 1 PARKING/9 m² GFLA	320	36	256	ON SITE
TOTAL(INCLUDING ACCESSIBLE PARKING)		274	275	
PARKING SURPLUS	1			
ACCESSIBLE PARKING (4.40)		REQUIRED	PROPOSED	
201-300PARKING SPACES, THEN 7 ACCESSIBLE SPACES REQD		7	7	
BICYCLE PARKING (4.41)		REQUIRED	PROPOSED	
RESTAURANT 2 BICYCLE PARKING/100 m² GFLA		12	12	

SPACE DIMENSIONS		REQUIRED	PROPOSED
90 DEGREE PARKING(Table 6-3)		2.75mX6.0m	2.75mX6.0m
MIN. DRIVEW AYS & ACC. WIDTHS(Table 6-3)		6m	6m
ACC. PARKING SPACES(6.40(c))		3.7mX6m	3.7mX6m
LOADING SPACE DIMENSIONS(6.27(b))		3.5m(width)x6.0m(l)	3.5m(width)x6.0m(l)
LOADING REQUIREMENTS(6.27) GFA<465 m², REQUIRE 0 LOADING 465 m²≤GFA≤929 m², REQUIRE 1 LOADING 930 m²≤GFA≤4645 m², REQUIRE 2 LOADING GFA>4645 m², REQUIRE 3 LOADING+EACH ADDITIONAL 4645 m²	GFA(m²)	REQUIRED	PROPOSED
HOTEL	10,817	3	1
RESTAURANT A	280	0	1
RESTAURANT B	320	0	
HOTEL GROSS FLOOR AREA	SM	SF	ROOM
GROUND FLOOR	1,236	13,304	0
SECOND FLOOR	1,065	11,458	23
THIRD FLOOR	1,065	11,458	23
FOURTH FLOOR	1,065	11,458	23
FIFTH FLOOR	1,065	11,458	23
SIXTH FLOOR	1,065	11,458	23
SEVENTH FLOOR	1,065	11,458	23
EIGHTH FLOOR	1,065	11,458	23
NINTH FLOOR	1,065	11,458	23
TENTH FLOOR	1,065	11,458	23
TOTAL HOTEL GROSS FLOOR AREA	10,817	116,428	207
RESTAURANT GROSS FLOOR AREA	SM	SF	
RESTAURANT A	280	3,014	
RESTAURANT B	320	3,444	



PATH: S:\1. PROJECTS\2024\1.Projects\24-012_524 York Road -Vrancor\5-Design\1-Site Design\

ISSUED FOR: ISSUED FOR CLIENT REVIEW
PROJECT No.: 24-012
ISSUE DATE: June 10, 2024

4
REVISION

SITE PLAN

TOWNEPLACE SUITES BY MARRIOTT
Fairfield BY MARRIOTT

Client: VRANCOR HOSPITALITY

Vrancor HOSPITALITY

mataj
MATAJ ARCHITECTS INC.
418 Iroquois Shore Road Unit 206
OAKVILLE, ON
L6H 0X7
T 416.897.2867
E info@matajarchitects.com
MATAJ ARCHITECTS INC

Project Contact:
Artan Mataj
artan@matajarchitects.com
289.259.6269

PROJECT NORTH
TRUE NORTH

TOWNEPLACE /FAIRFIELD COMBO HOTEL

524 YORK RD., NIAGARA ON THE LAKE

A.101
1:300

Appendix B:

Vascular Plant Checklist

Glendale Area Property 5 Vascular Plant List - July 2024

FAMILY	SCIENTIFIC_NAME	ENGLISH_COMMON_NAME	S_RANK	COSEWIC_S	SARA_SCH	SARO_STA	G_RANK	N_RANK	EXOTIC_ST
Aceraceae	Acer platanoides	Norway Maple	SNA				GNR	NNA	SE5
Aceraceae	Acer rubrum	Red Maple	S5				G5	N5	
Aceraceae	Acer saccharum	Sugar Maple	S5				G5	N5	
Ranunculaceae	Anemonastrum canadense	Canada Anemone	S5				G5	N5	
Asteraceae	Arctium minus	Common Burdock	SNA				GNR	NNA	SE5
Brassicaceae	Brassica nigra	Black Mustard	SNA				GNR	NNA	SE5
Juglandaceae	Carya cordiformis	Bitternut Hickory	S5				G5	N5	
Juglandaceae	Carya ovata	Shagbark Hickory	S5				G5	N5	
Ulmaceae	Celtis occidentalis	Common Hackberry	S4				G5	N4	
Asteraceae	Centaurea stoebe	Spotted Knapweed	SNA				GNR	NNA	SE5
Asteraceae	Cichorium intybus	Chicory	SNA				GNR	NNA	SE5
Asteraceae	Cirsium arvense	Canada Thistle	SNA				G5	NNA	SE5
Cornaceae	Cornus racemosa	Gray Dogwood	S5				G5	N5	
Rosaceae	Crataegus punctata	Dotted Hawthorn	S5				G5	N5	
Apiaceae	Daucus carota	Wild Carrot	SNA				GNR	NNA	SE5
Elaeagnaceae	Elaeagnus umbellata	Autumn Olive	SNA				GNR	NNA	SE3
Celastraceae	Euonymus obovatus	Running Strawberry Bush	S4				G5	N5	
Rosaceae	Fragaria virginiana	Wild Strawberry	S5				G5	N5	
Oleaceae	Fraxinus americana	White Ash	S4				G5	N5	
Rosaceae	Geum aleppicum	Yellow Avens	S5				G5	N5	
Balsaminaceae	Impatiens capensis	Spotted Jewelweed	S5				G5	N5	
Asteraceae	Lactuca serriola	Prickly Lettuce	SNA				GNR	NNA	SE5
Oleaceae	Ligustrum vulgare	European Privet	SNA				GNR	NNA	SE5
Scrophulariaceae	Linaria vulgaris	Butter-and-eggs	SNA				GNR	NNA	SE5
Fabaceae	Lotus tenuis	Narrow-leaved Bird's-foot Trefoil	SNA				GNR	NNA	SE1
Lythraceae	Lythrum salicaria	Purple Loosestrife	SNA				G5	NNA	SE5
Liliaceae	Maianthemum racemosum	Large False Solomon's Seal	S5				G5	N5	
Rosaceae	Malus pumila	Common Apple	SNA				G5	NNA	SE4
Vitaceae	Parthenocissus quinquefolia	Virginia Creeper	S4?				G5	N4N5	
Poaceae	Phragmites australis	Common Reed	S4?				G5	N5	
Pinaceae	Picea abies	Norway Spruce	SNA				G5	NNA	SE3
Salicaceae	Populus deltoides	Eastern Cottonwood	S5				G5	N5	
Salicaceae	Populus tremuloides	Trembling Aspen	S5				G5	N5	
Rosaceae	Prunus avium	Sweet Cherry	SNA				GNR	NNA	SE4
Fagaceae	Quercus macrocarpa	Bur Oak	S5				G5	N5	
Fagaceae	Quercus palustris	Pin Oak	S4				G5	N4	
Fagaceae	Quercus rubra	Northern Red Oak	S5				G5	N5	
Rhamnaceae	Rhamnus cathartica	Common Buckthorn	SNA				GNR	NNA	SE5
Anacardiaceae	Rhus typhina	Staghorn Sumac	S5				G5	N5	
Rosaceae	Rosa multiflora	Multiflora Rose	SNA				GNR	NNA	SE5
Rosaceae	Rubus allegheniensis	Allegheny Blackberry	S5				G5	N5	
Polygonaceae	Rumex crispus	Curly Dock	SNA				GNR	NNA	SE5
Salicaceae	Salix alba	White Willow	SNA				G5	NNA	SE4
Salicaceae	Salix discolor	Pussy Willow	S5				G5	N5	
Salicaceae	Salix interior	Sandbar Willow	S5				GNR	NNR	
Fabaceae	Securigera varia	Common Crown-vetch	SNA				GNR	NNA	SE5
Asteraceae	Solidago canadensis	Canada Goldenrod	S5				G5	N5	
Asteraceae	Symphyotrichum ericoides	White Heath Aster	S5				G5	N5	
Tiliaceae	Tilia americana	American Basswood	S5				G5	N5	
Anacardiaceae	Toxicodendron radicans	Poison Ivy	S5				G5	N5	
Fabaceae	Trifolium pratense	Red Clover	SNA				GNR	NNA	SE5
Fabaceae	Trifolium repens	White Clover	SNA				GNR	NNA	SE5
Ulmaceae	Ulmus americana	American Elm	S5				G5	N5	
Scrophulariaceae	Veronica officinalis	Common Speedwell	SNA				G5	NNR	SE5
Fabaceae	Vicia cracca	Tufted Vetch	SNA				GNR	NNA	SE5
Vitaceae	Vitis riparia	Riverbank Grape	S5				G5	N5	

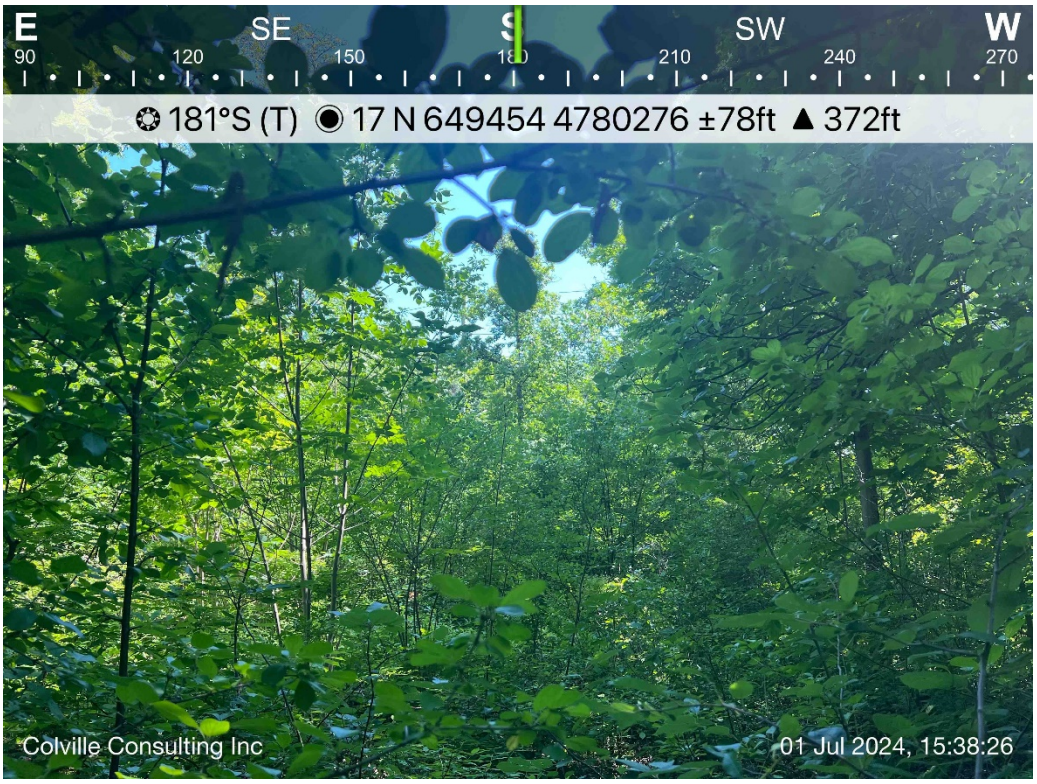
Glendale Area Property 5 Vascular Plant List - October 2024

FAMILY	SCIENTIFIC_NAME	ENGLISH_COMMON_NAME	S_RANK	COSEWIC_S	SARA_SCH	SARO_STA	G_RANK	N_RANK	EXOTIC_ST
Aceraceae	Acer platanoides	Norway Maple	SNA				GNR	NNA	SE5
Aceraceae	Acer rubrum	Red Maple	S5				G5	N5	
Aceraceae	Acer saccharum	Sugar Maple	S5				G5	N5	
Ranunculaceae	Anemonastrum canadense	Canada Anemone	S5				G5	N5	
Asteraceae	Arctium minus	Common Burdock	SNA				GNR	NNA	SE5
Brassicaceae	Brassica nigra	Black Mustard	SNA				GNR	NNA	SE5
Juglandaceae	Carya cordiformis	Bitternut Hickory	S5				G5	N5	
Juglandaceae	Carya ovata	Shagbark Hickory	S5				G5	N5	
Ulmaceae	Celtis occidentalis	Common Hackberry	S4				G5	N4	
Asteraceae	Centaurea stoebe	Spotted Knapweed	SNA				GNR	NNA	SE5
Asteraceae	Cichorium intybus	Chicory	SNA				GNR	NNA	SE5
Asteraceae	Cirsium arvense	Canada Thistle	SNA				G5	NNA	SE5
Cornaceae	Cornus racemosa	Gray Dogwood	S5				G5	N5	
Rosaceae	Crataegus punctata	Dotted Hawthorn	S5				G5	N5	
Apiaceae	Daucus carota	Wild Carrot	SNA				GNR	NNA	SE5
Elaeagnaceae	Elaeagnus umbellata	Autumn Olive	SNA				GNR	NNA	SE3
Celastraceae	Euonymus obovatus	Running Strawberry Bush	S4				G5	N5	
Rosaceae	Fragaria virginiana	Wild Strawberry	S5				G5	N5	
Oleaceae	Fraxinus americana	White Ash	S4				G5	N5	
Rosaceae	Geum aleppicum	Yellow Avens	S5				G5	N5	
Balsaminaceae	Impatiens capensis	Spotted Jewelweed	S5				G5	N5	
Asteraceae	Lactuca serriola	Prickly Lettuce	SNA				GNR	NNA	SE5
Oleaceae	Ligustrum vulgare	European Privet	SNA				GNR	NNA	SE5
Scrophulariaceae	Linaria vulgaris	Butter-and-eggs	SNA				GNR	NNA	SE5
Fabaceae	Lotus tenuis	Narrow-leaved Bird's-foot Trefoil	SNA				GNR	NNA	SE1
Lythraceae	Lythrum salicaria	Purple Loosestrife	SNA				G5	NNA	SE5
Liliaceae	Maianthemum racemosum	Large False Solomon's Seal	S5				G5	N5	
Rosaceae	Malus pumila	Common Apple	SNA				G5	NNA	SE4
Vitaceae	Parthenocissus quinquefolia	Virginia Creeper	S4?				G5	N4N5	
Poaceae	Phragmites australis	Common Reed	S4?				G5	N5	
Pinaceae	Picea abies	Norway Spruce	SNA				G5	NNA	SE3
Salicaceae	Populus deltoides	Eastern Cottonwood	S5				G5	N5	
Salicaceae	Populus tremuloides	Trembling Aspen	S5				G5	N5	
Rosaceae	Potentilla reptans	Creeping Cinquefoil	SNA				GNR	NNA	SE2
Rosaceae	Prunus avium	Sweet Cherry	SNA				GNR	NNA	SE4
Fagaceae	Quercus macrocarpa	Bur Oak	S5				G5	N5	
Fagaceae	Quercus palustris	Pin Oak	S4				G5	N4	
Fagaceae	Quercus rubra	Northern Red Oak	S5				G5	N5	
Rhamnaceae	Rhamnus cathartica	Common Buckthorn	SNA				GNR	NNA	SE5
Anacardiaceae	Rhus typhina	Staghorn Sumac	S5				G5	N5	
Rosaceae	Rosa multiflora	Multiflora Rose	SNA				GNR	NNA	SE5
Rosaceae	Rubus allegheniensis	Allegheny Blackberry	S5				G5	N5	
Polygonaceae	Rumex crispus	Curly Dock	SNA				GNR	NNA	SE5
Salicaceae	Salix alba	White Willow	SNA				G5	NNA	SE4
Salicaceae	Salix discolor	Pussy Willow	S5				G5	N5	
Salicaceae	Salix interior	Sandbar Willow	S5				GNR	NNR	
Fabaceae	Securigera varia	Common Crown-vetch	SNA				GNR	NNA	SE5
Asteraceae	Solidago altissima	Tall Goldenrod	S5				G5	N5	
Asteraceae	Solidago canadensis	Canada Goldenrod	S5				G5	N5	
Asteraceae	Solidago rugosa	Rough-stemmed Goldenrod	S5				G5	N5	
Asteraceae	Symphyotrichum ericoides	White Heath Aster	S5				G5	N5	
Asteraceae	Symphyotrichum novae-angliae	New England Aster	S5				G5	N5	
Tiliaceae	Tilia americana	American Basswood	S5				G5	N5	
Anacardiaceae	Toxicodendron radicans	Poison Ivy	S5				G5	N5	
Fabaceae	Trifolium pratense	Red Clover	SNA				GNR	NNA	SE5
Fabaceae	Trifolium repens	White Clover	SNA				GNR	NNA	SE5
Ulmaceae	Ulmus americana	American Elm	S5				G5	N5	
Scrophulariaceae	Veronica officinalis	Common Speedwell	SNA				G5	NNR	SE5
Fabaceae	Vicia cracca	Tufted Vetch	SNA				GNR	NNA	SE5
Vitaceae	Vitis riparia	Riverbank Grape	S5				G5	N5	

Appendix C:

Site Photographs


W
N
NE
E
SE
330
0
30
60
90
120
51°NE (T) 17 N 649471 4780272 ±9ft ▲ 412ft
Colville Consulting Inc
17 Jun 2024, 12:53:48


E
SE
S
SW
W
90
120
150
180
210
240
270
181°S (T) 17 N 649454 4780276 ±78ft ▲ 372ft
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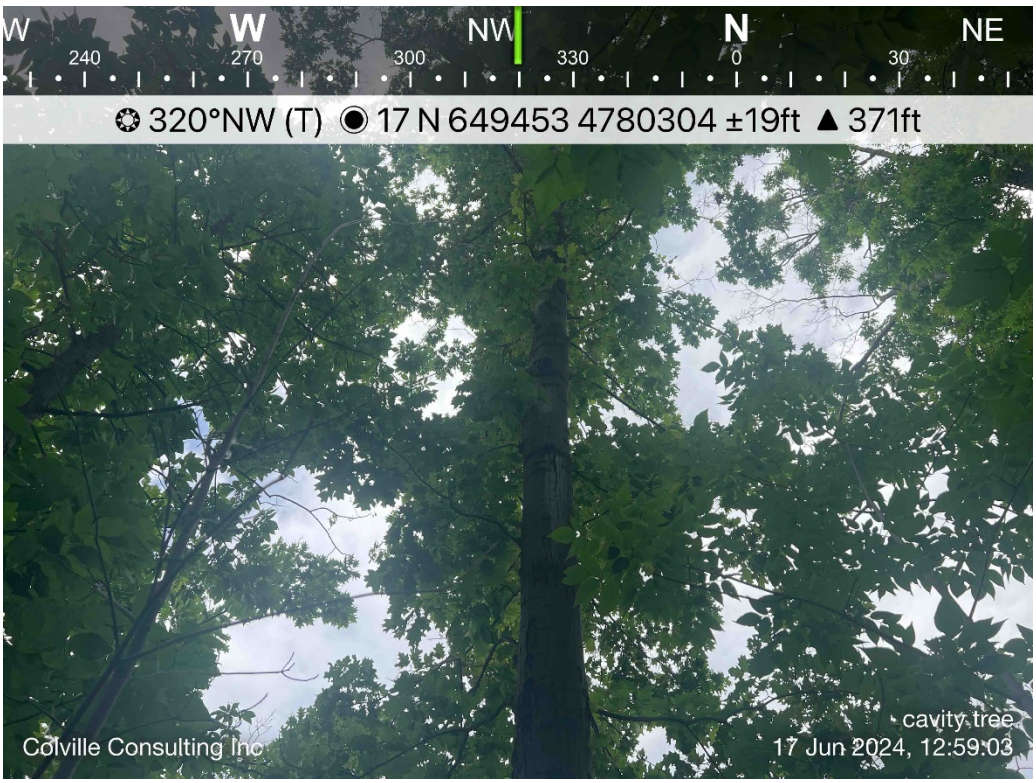
W 240 W 270 300 NW 330 N 0 30 NE
320°NW (T) 17 N 649453 4780304 ±19ft 371ft
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cavity tree
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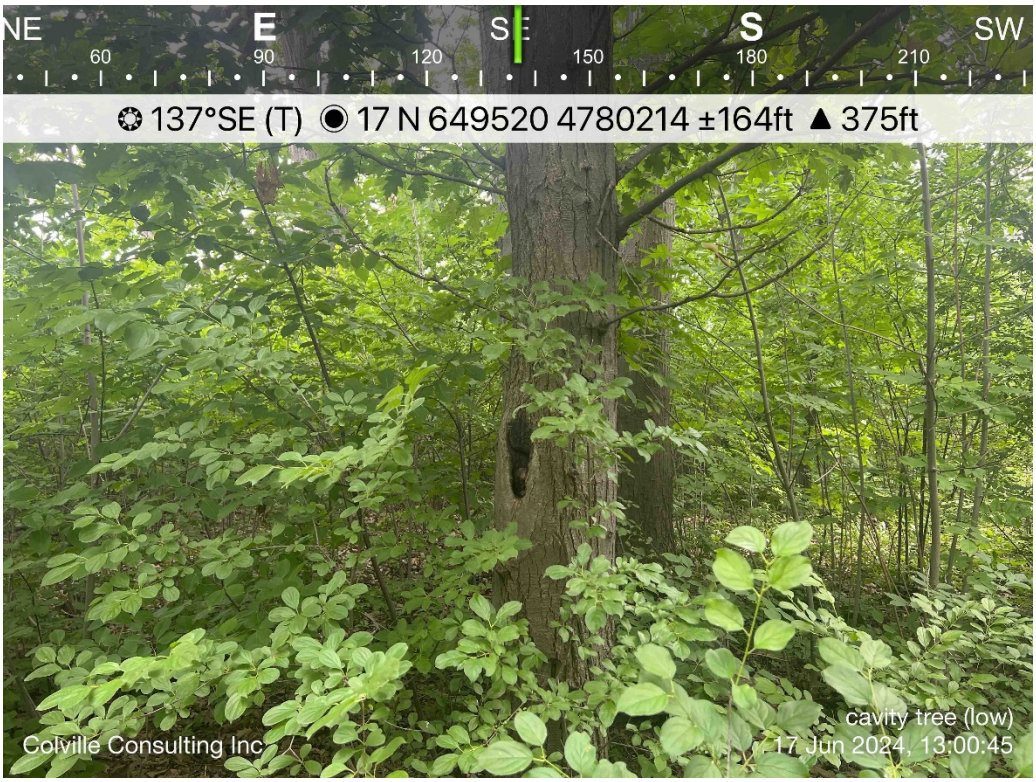
NE 60 E 90 120 SE 150 S 180 210 SW
137°SE (T) 17 N 649520 4780214 ±164ft 375ft
Colville Consulting Inc
cavity tree (low)
17 Jun 2024, 13:00:45


SE
S
SW
W
120
150
180
210
240
270
207°SW (T)
17 N 649486 4780278 ±13ft
373ft
Colville Consulting Inc.
27 Jan 2025, 15:07:24


NE
E
SE
S
30
60
90
120
150
180
103°E (T)
17 N 649522 4780221 ±141ft
384ft
Colville Consulting Inc.
27 Jan 2025, 15:11:20

Appendix D:

Bat Monitoring Data

KALEIDOSCOPE 5.6.8

Bats of North America 5.4.0 S/A: 0

Date	EPTFUS	LASBOR	LASCIN	LASNOC	MYOLEI	MYOLUC	MYOSEP	PERSUB	Column2	NOID	NOISE
Total	87		16	20						54	83
20240618	6		2	8						9	13
20240619	7			2						3	21
20240620	7		2	3						9	9
20240621	4		3							1	6
20240622	11		2	1						2	12
20240623	9		1	1						3	5
20240624	6									5	4
20240625	5		2	2						2	1
20240626	10		2	1						3	2
20240627	3									3	4
20240628	7			1						8	5
20240629	9		2	1						5	1
20240630	3									1	0

Presence P-Values:

EPTFUS	LASBOR	LASCIN	LASNOC	MYOLEI	MYOLUC	MYOSEP	PERSUB
0	1	0.0001516	0.5739803	1	1	1	1
0.0127849	1	0.3320011	0.0023005	1	1	1	1
0.0000198	1	1	0.7433958	1	1	1	1
0.0001036	1	0.2179019	0.5546409	1	1	1	1
0.0017244	1	0.0098614	1	1	1	1	1
0	1	0.3262402	1	1	1	1	1
0.0000001	1	0.765949	1	1	1	1	1
0.0000044	1	1	1	1	1	1	1
0.001419	1	0.1294978	0.7808911	1	1	1	1
0	1	0.2860489	1	1	1	1	1
0.0020903	1	1	1	1	1	1	1
0.0000039	1	1	1	1	1	1	1
0.0000001	1	0.2464473	1	1	1	1	1
0.0020903	1	1	1	1	1	1	1

Appendix E:

Significant Wildlife Habitat Screening

Niagara-on-the-Lake

Species At Risk Designations	
ENDANGERED	
THREATENED	
SPECIAL CONCERN	
EXTIRPATED	

AMPHIBIANS		ESA Protection	Key Habitats Used By Species	Subject Property
Allegheny Mountain Dusky Salamander (*Desmognathus ochrophaeus*)	**Known to Occur**	*Species Protection and* ***Habitat Regulation***	generally found near forested brooks, mountain cascades, springs, or seeps. It uses this habitat to forage, as well as for overwintering and brooding. It nests in springs and seeps. Shelter is provided in wet cavities along stream edges or seeps, or under stones, leaf litter, or logs.	Potential habitat not present on property.

BIRDS		ESA Protection	Key Habitats Used By Species	Subject Property
Acadian Flycatcher (*Empidonax virescens*)	**Known to Occur**	*Species and General Habitat Protection*	generally requires large areas of mature, undisturbed forest; avoids the forest edge; often found in well wooded swamps and ravines	Typical habitat not present on property. Not detected during breeding bird surveys.
Bank Swallow (*Riparia riparia*)	**Known to Occur**	*Species and General Habitat Protection*	prefers farmland; lake/river shorelines; wooded clearings; urban populated areas; rocky cliffs; and wetlands. They nest inside or outside buildings; under bridges and in road culverts; on rock faces and in caves etc.	Typical habitat not present on property. Not detected during breeding bird surveys.
Barn Owl (*Tyto alba*)	**Known to Occur**	*Species Protection and* ***Habitat Regulation***	generally prefer low-elevation, open country; often associated with agricultural lands, especially pasture. Nests are located in buildings, hollow trees and cavities in cliffs.	Typical habitat not present on property. Not detected during breeding bird surveys.
Barn Swallow (*Hirundo rustica*)	**Known to Occur**	*Species and General Habitat Protection*	prefers farmland; lake/river shorelines; wooded clearings; urban populated areas; rocky cliffs; and wetlands. They nest inside or outside buildings; under bridges and in road culverts; on rock faces and in caves etc.	Typical habitat not present on property. Not detected during breeding bird surveys.
Bobolink (*Dolichonyx oryzivorus*)	**Known to Occur**	*Species and General Habitat Protection*	generally prefers open grasslands and hay fields. In migration and in winter uses freshwater marshes and grasslands	Typical habitat not present on property. Not detected during breeding bird surveys.
Canada Warbler (*Cardellina canadensis*; formerly *Wilsonia canadensis*)	**Known to Occur**	*N/A*	Generally prefers wet coniferous, decediuous and mixed forest types, with a dense shrub layer. Nests on the ground, on logs or hummocks, and uses dense shrub layer to conceal the nest.	Typical habitat not present on property. Not detected during breeding bird surveys.
Chimney Swift (*Chaetura pelagica*)	**Known to Occur**	*Species and General Habitat Protection*	historically found in deciduous and coniferous, usually wet forest types, all with a welldeveloped, dense shrub layer; now most are found in urban areas in large uncapped chimneys	Typical habitat not present on property. Not detected during breeding bird surveys.
Common Nighthawk (*Chordeiles minor*)	**Known to Occur**	*N/A*	generally prefer open, vegetation-free habitats, including dunes, beaches, recently harvested forests, burnt-over areas, logged areas, rocky outcrops, rocky barrens, grasslands, pastures, peat bogs, marshes, lakeshores, and river banks. This species also inhabits mixed and coniferous forests. Can also be found in urban areas (nest on flat roof-tops)	Typical habitat not present on property. Not detected during breeding bird surveys.
Eastern Meadowlark (*Sturnella Magna*)	**Known to Occur**	*Species and General Habitat Protection*	generally prefers grassy pastures, meadows and hay fields. Nests are always on the ground and usually hidden in or under grass clumps.	Typical habitat not present on property. Not detected during breeding bird surveys.
Eastern Whip-poor-will *(Caprimlugus vociferus)*	**Known to Occur**	*N/A*	generally prefer semi-open deciduous forests or patchy forests with clearings; areas with little ground cover are also preferred; In winter they occupy primarily mixed woods near open areas.	Typical habitat not present on property. Not detected during breeding bird surveys.
Eastern Wood-Pewee (*Contopus virens*)	**Known to Occur**	*N/A*	Associated with deciduous and mixed forests. Within mature and intermediate age stands it prefers areas with little understory vegetation as well as forest clearings and edges.	Typical habitat not present on property. Not detected during breeding bird surveys.
Peregrine Falcon *(Falco peregrinus)*	**Known to Occur**	*N/A*	grassland type - habitats including nonintensively	Typical habitat not present on property. Not detected during breeding bird surveys.
Red-Headed Woodpecker *(Melanerpes erythrocephalus)*	**Known to Occur**	*N/A*	farmed agricultural lands.	Typical habitat not present on property. Not detected during breeding bird surveys.

Wood Thrush (*Hylocichla mustelina*)	**Known to Occur**	*N/A*	Nests mainly in second-growth and mature deciduous and mixed forests, with saplings and well-developed understory layers. Prefers large forest mosaics, but may also nest in small forest fragments.	Typical habitat not present on property. Not detected during breeding bird surveys.

FISH			**Key Habitats Used By Species**	**Subject Property**
American Eel *(Anguilla rostrata)*	**Known to Occur**	*Species and General Habitat Protection*	all fresh water, estuaries and coastal marine waters that are accessible to the Atlantic Ocean; 12-mile creek watershed and Lake Ontario	Potential habitat not present on property.
Lake Sturgeon (Acipenser fulvescens)	**Known to Occur**	*Species and General Habitat Protection*	generally inhabits the bottoms of shallow areas of large freshwater lakes and rivers	Potential habitat not present on property.

INSECTS		ESA Protection	**Key Habitats Used By Species**	**Subject Property**
Monarch Butterfly *(Danaus plexippus)*	**Known to Occur**	*N/A*	exist primarily wherever milkweed and wildflowers exist; abandoned farmland, along roadsides, and other open spaces	No Milkweed found on Subject Property during botanicals. Habitat not obesrved during assessments.
Rusty-patched Bumble Bee (*Bombus affinis*)	**Formerly Occurred and May Still Occur**	*Species and General Habitat Protection June 27, 2014*	generally inhabits a range of diverse habitats including mixed farmland, sand dunes, marshes, urban and wooded areas. It usually nests underground in abandoned rodent burrows	Typical habitat not present on property.
West Virginia White (*Pieris virginiensis*)	**Known to Occur**	*N/A*	generally prefer moist, deciduous woodlands. The larvae feed only on the leaves of the two-leaved toothwort (Cardamine diphylla), which is a small, spring-blooming plant of the forest floor.	Typical habitat not present on property.

MAMMALS		ESA Protection	**Key Habitats Used By Species**	**Subject Property**
Eastern small-footed Myotis (*Myotis leibii*)	**Suspected to Occur**	*Species and General Habitat Protection*	Overwintering habitat: Caves and mines that remain above 0 degrees Celsius Maternal Roosts: primarily under loose rocks on exposed rock outcrops, crevices and cliffs, and occasionally in buildings, under bridges and highway overpasses and under tree bark.	Typical habitat not present on property. Species not documented using property.
Little Brown Myotis (*Myotis lucifugus*)	**Suspected to Occur**	*Species and General Habitat Protection*	Overwintering habitat: Caves and mines that remain above 0 Maternal Roosts: Often associated with buildings (attics, barns etc.). Occasionally found in trees (25-44 cm dbh).	Species not detected during acoustic monitoring. Species not using potential habitat on Subject Property
Northern Myotis (*Myotis septentrionalis*)	**Suspected to Occur**	*Species and General Habitat Protection*	Overwintering habitat: Caves and mines that remain above 0 degrees Celsius Maternal Roosts: Often asssociated with cavities of large diameter trees (25-44 cm dbh). Occasionally found in structures (attics, barns etc.)	Species not detected during acoustic monitoring. Species not using potential habitat on Subject Property
Tri-colored Bat (*Perimyotis subflavus*)	**Suspected to Occur**	*Species and General Habitat Protection*	Overwintering habitat: Caves and mines that remain above 0 degrees Celsius Maternal Roosts: Can be in trees or dead clusters of leaves or arboreal lichens on trees. May also use barns or similar structures.	Species not detected during acoustic monitoring. Species not using potential habitat on Subject Property
Silver-haired Bat (*Lasionycteris noctivagans*)	**Suspected to Occur**	*Species and General Habitat Protection*	Overwintering habitat: Caves and mines that remain above 0 degrees Celsius Maternal Roosts: Often asssociated with cavities of large diameter trees (25-44 cm dbh). Occasionally found in structures (attics, barns etc.)	Species detected periodically during acoustic monitoring. Species use of property not significant.
Eastern Red Bat (*Lasiurus borealis*)	**Suspected to Occur**	*Species and General Habitat Protection*	Overwintering habitat: Caves and mines that remain above 0 degrees Celsius Maternal Roosts: Often asssociated with cavities of large diameter trees (25-44 cm dbh). Occasionally found in structures (attics, barns etc.)	Species not detected during acoustic monitoring. Species not using potential habitat on Subject Property
Hoary Bat (*Lasiurus cinereus*)	**Suspected to Occur**	*Species and General Habitat Protection*	Overwintering habitat: Caves and mines that remain above 0 degrees Celsius Maternal Roosts: Often asssociated with cavities of large diameter trees (25-44 cm dbh). Occasionally found in structures (attics, barns etc.)	Species detected periodically during acoustic monitoring. Species use of property not significant.

MOLLUSCS		ESA Protection	**Key Habitats Used By Species**	**Subject Property**

MOSSES		ESA Protection	Key Habitats Used By Species	Subject Property

PLANTS		ESA Protection	Key Habitats Used By Species	Subject Property
American Chestnut *(Castanea dentata)*	**Known to Occur**	*Species and General Habitat Protection*	found in deciduous forest communities; this tree prefers arid forests with acid and sandy soils.	Typical habitat not present on property. Not found on Subject Property during botanical inventories.
American Columbo *(Frasera caroliniensis)*	**Known to Occur**	*Species and General Habitat Protection*	most commonly associated with open deciduous forested slopes, thickets and clearings; grows in a variety of relatively stable habitats as well as on a wide variety of soils	Typical habitat not present on property. Not found on Subject Property during botanical inventories.
Broad Beech Fern *(Phegopteris hexagonoptera)*	**Known to Occur**	*N/A*	generally inhabits shady areas of beech and maple forests where the soil is moist or wet	Typical habitat not present on property. Not found on Subject Property during botanical inventories.
Butternut *(Juglans cinerea)*	**Known to Occur**	*Species and General Habitat Protection*	generally grows in rich, moist, and well-drained soils often found along streams. It may also be found on well-drained gravel sites, especially those made up of limestone. It is also found, though seldomly, on dry, rocky and sterile soils. In Ontario, the Butternut generally grows alone or in small groups in deciduous forests as well as in hedgerows	Typical habitat not present on property. Not found on Subject Property during botanical inventories.
Common Hoptree (*Ptelea trifoliata*)	**Known to Occur**	*Species and General Habitat Protection*	generally grows in sandy soils in areas with a lot of natural disturbance - such as the outer edge of shoreline vegetation, sand spits, and sand points.	Typical habitat not present on property. Not found on Subject Property during botanical inventories.
Deerberry (*Vaccinium stamineum*)	**Known to Occur**	*Species and General Habitat Protection*	generally occurs on sandy and well-drained soil, often in dry open woodlands (Niagara Gorge)	Typical habitat not present on property. Not found on Subject Property during botanical inventories.
Drooping Trillium (*Trillium flexipes*)	**Historically Known to Occur**	*Species and General Habitat Protection*	generally grows in dry, sandy loam, nonacidic soils of mature, deciduous woodlands that are usually associated with watercourses.	Typical habitat not present on property. Not found on Subject Property during botanical inventories.
Dwarf Hackberry (*Celtis tenuifolia*)	**Known to Occur**	*Species and General Habitat Protection*	Generally occurs on dry, sandy areas near lakeshores, inland dunes, ridge tops and limestone cliffs (Niagara Gorge)	Typical habitat not present on property. Not found on Subject Property during botanical inventories.
Eastern Flowering Dogwood *(Cornus florida)*	**Known to Occur**	*Species Protection and* ***Habitat Regulation***	generally grows in deciduous and mixed forests, in the drier areas of its habitat, although it is occasionally found in slightly moist environments; Also grows around edges and hedgerows	Typical habitat not present on property. Not found on Subject Property during botanical inventories.
Green Dragon (*Arisaema dracontium*)	**Known to Occur**	*N/A*	generally grows in damp deciduous forests and along streams.	Typical habitat not present on property. Not found on Subject Property during botanical inventories.
Red Mulberry *(Morus rubra)*	**Known to Occur**	*Species and General Habitat Protection*	generally grows in moist forest habitats. In Ontario, these include slopes and ravines of the Niagara Escarpment, and sand spits and bottom lands; Can grow in open areas such as hydro corridors	Typical habitat not present on property. Not found on Subject Property during botanical inventories.
Shumard Oak (*Quercus shumardii*)	**Known to Occur**	*N/A*	generally grows in deciduous forests, where the soils are poorly drained clay and clay loam. Requires full sunlight.	Typical habitat not present on property. Not found on Subject Property during botanical inventories.
Swamp Rose-mallow (*Hibiscus moscheutos*)	**Known to Occur**	*Species and General Habitat Protection*	generally grows in open, coastal marshes, but it is also sometimes found in open wet woods, thickets and drainage ditches	Typical habitat not present on property. Not found on Subject Property during botanical inventories.
White Wood Aster *(Eurybia divaricata)*	**Known to Occur**	*Species and General Habitat Protection*	generally grows in open, dry, deciduous forests. It has been suggested that it may benefit from some disturbance, as it often grows along trails.	Typical habitat not present on property. Not found on Subject Property during botanical inventories.

REPTILES		ESA Protection	Key Habitats Used By Species	Subject Property
Eastern Ribbonsnake *(Thamnophis sauritus)*	**Known to Occur**	*N/A*	generally occur along the edges of shallow ponds, streams, marshes, swamps, or bogs bordered by dense vegetation that provides cover. Abundant exposure to sunlight is also required, and adjacent upland areas may be used for nesting.	Typical habitat not present on property.
Snapping Turtle *(Chelydra serpentina)*	**Known to Occur**	*N/A*	generally inhabit shallow waters where they can hide under the soft mud and leaf litter. Nesting sites usually occur on gravely or sandy areas along streams. Snapping Turtles often take advantage of man-made structures for nest sites, including roads (especially gravel shoulders), dams and aggregate pits.	Typical habitat not present on property.

Appendix F:

NHIC Data

NHIC Data

Obtained on 20/01/2025

OGF ID	Element Type	Common Name	Scientific Name	SRank	SARO Status	COSEWIC Status	ATLAS NAD83 IDENT
1033124	WILDLIFE CONCENTRATION AREA	Colonial Waterbird Nesting Area	Colonial Waterbird Nesting Area	SNR			17PH4980
1033124	SPECIES	Blue-winged Teal	Spatula discors	S3B,S4M			17PH4980
1033124	SPECIES	Wood Thrush	Hylocichla mustelina	S4B	SC	THR	17PH4980
1033124	SPECIES	Eastern Wood-pewee	Contopus virens	S4B	SC	SC	17PH4980
1033124	SPECIES	Northern Bobwhite	Colinus virginianus	S1?	END	END	17PH4980
1033124	SPECIES	Timber Rattlesnake	Crotalus horridus	SX	EXP	EXP	17PH4980
1033124	SPECIES	Hairy Green Sedge	Carex hirsutella	S3			17PH4980
1033124	SPECIES	Pawpaw	Asimina triloba	S3			17PH4980
1033124	SPECIES	Cucumber Tree	Magnolia acuminata	S2	END	END	17PH4980

Appendix G:

Significant Wildlife Habitat Table

Assessment of potential Significant Wildlife Habitat – 524 York Road Property

Significant Wildlife Habitat (SWH) Type	Known or Candidate SWH present/absent	Rationale
SEASONAL CONCENTRATION AREAS OF ANIMALS		
Waterfowl Stopover and Staging Areas	Absent	Suitable habitat not present on Subject Lands
Shorebird Migratory Stopover Area	Absent	Suitable habitat not present on Subject Lands
Raptor Wintering Area	Absent	Suitable habitat not present on Subject Lands
Bat Hibernacula	Absent	Suitable overwintering habitat not present on Subject Lands.
Bat Maternity Colonies	Absent	Significant Potential roost habitat not present on the Subject Lands.
Turtle Wintering Areas	Absent	Suitable overwintering habitat not present on Subject Lands
Reptile Hibernaculum	Absent	No obvious hibernacula present on properties.
Colonially -Nesting Bird Breeding Habitat (Bank and Cliff)	Absent	Potential habitat not present on Subject Lands
Colonially -Nesting Bird Breeding Habitat (Tree/Shrubs)	Absent	No colonial nesting species present on Subject Lands.
Colonially -Nesting Bird Breeding Habitat (Ground)	Absent	No colonial nesting species present on Subject Lands.
Migratory Butterfly Stopover Areas	Absent	Suitable habitat not present on Subject Lands
Landbird Migratory Stopover Areas	Absent	Significant potential habitat no present on Subject Lands.
Deer Winter Congregation Areas	Absent	Suitable habitat not present on Subject Lands
RARE VEGETATION COMMUNITIES		
Cliffs and Talus Slopes	Absent	Habitat type not present on Subject Lands
Sand Barren	Absent	Habitat type not present on Subject Lands
Alvar	Absent	Habitat type not present on Subject Lands
Old Growth Forest	Absent	Habitat type not present on Subject Lands
Savannah	Absent	Habitat type not present on Subject Lands

Tallgrass Prairie	Absent	Habitat type not present on Subject Lands
Other Rare Vegetation Communities	Absent	No rare vegetation communities present on Subject Lands
SPECIALIZED HABITATS OF WILDLIFE CONSIDERED SWH		
Waterfowl Nesting Area	Absent	Suitable habitat not present on Subject Lands
Bald Eagle and Osprey Nesting, Foraging and Perching Habitat	Absent	Suitable habitat not present on Subject Lands
Woodland Raptor Nesting Habitat	Absent	Suitable habitat not present on Subject Lands
Turtle Nesting Areas	Absent	Suitable habitat not present on Subject Lands
Seeps and Springs	Absent	Suitable habitat not present on Subject Lands
Amphibian Breeding Habitat (Woodland)	Absent	Suitable habitat not present on Subject Lands
Amphibian Breeding Habitat (Wetlands)	Absent	Suitable habitat not present on Subject Lands
Woodland Area-Sensitive Bird Breeding Habitat	Absent	Suitable habitat not present on Subject Lands
HABITATS OF SPECIES OF CONSERVATION CONCERN CONSIDERED SWH		
Marsh Breeding Bird Habitat	Absent	Suitable habitat not present on Subject Lands
Open Country Bird Breeding Habitat	Absent	Suitable habitat not present on Subject Lands
Shrub/Early Successional Bird Breeding Habitat	Absent	Suitable habitat not present on Subject Lands
Terrestrial Crayfish	Absent	Suitable habitat not present on Subject Lands
Special Concern and Rare Wildlife Species	Absent	Subject Lands may be providing incidental foraging opportunities.
ANIMAL MOVEMENT CORRIDORS		
Amphibian Movement Corridors	Absent	Suitable habitat not present on Subject Lands
Bat Migratory Stopover Area	Absent	Suitable habitat not present on Subject Lands

Please note the above SWH criteria are based on guidance provided by the Significant Wildlife Habitat Criteria Schedules for Ecoregion 7E and modified to be specific for the Subject Property.