

SCOPED ENVIRONMENTAL IMPACT STUDY
7525 GARNER ROAD
CITY OF NIAGARA FALLS

Prepared for:

Madan CPA Professional Corporation

Prepared by:

Colville Consulting Inc.

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

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1.0 INTRODUCTION

Colville Consulting Inc. was retained by Madan CPA Professional Corporation to prepare an Environmental Impact Study (EIS) for a proposed multi-unit residential development on the property located at 7525 Garner Road, in the City of Niagara Falls. The property, hereafter called the Subject Property, is generally located southwest of the intersection of McLeod Road and Garner Road. (see Figure 1).

We understand an EIS has been requested by the City of Niagara Falls to assess potential impacts the proposed development may have on mapped natural heritage features present on and adjacent to the property. 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. This EIS is intended to present the results of our field investigations and assessments of any potential impacts. A summary of our assessment is included below

1.1 Description of the Subject Property

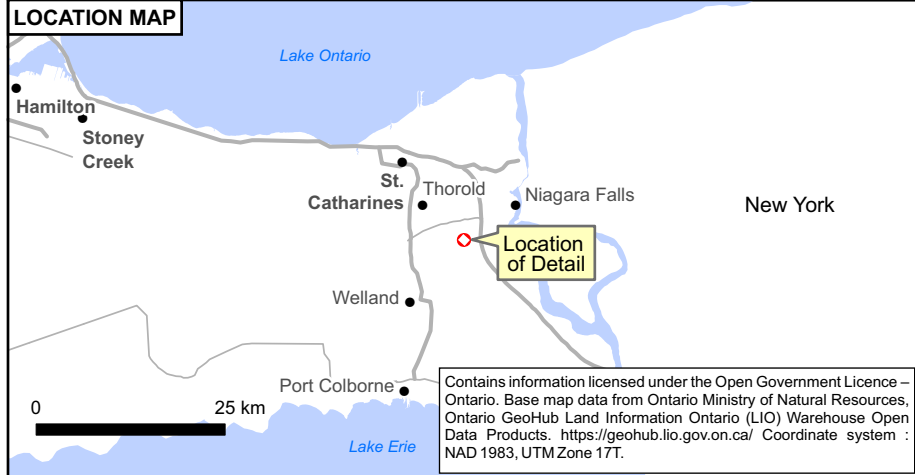
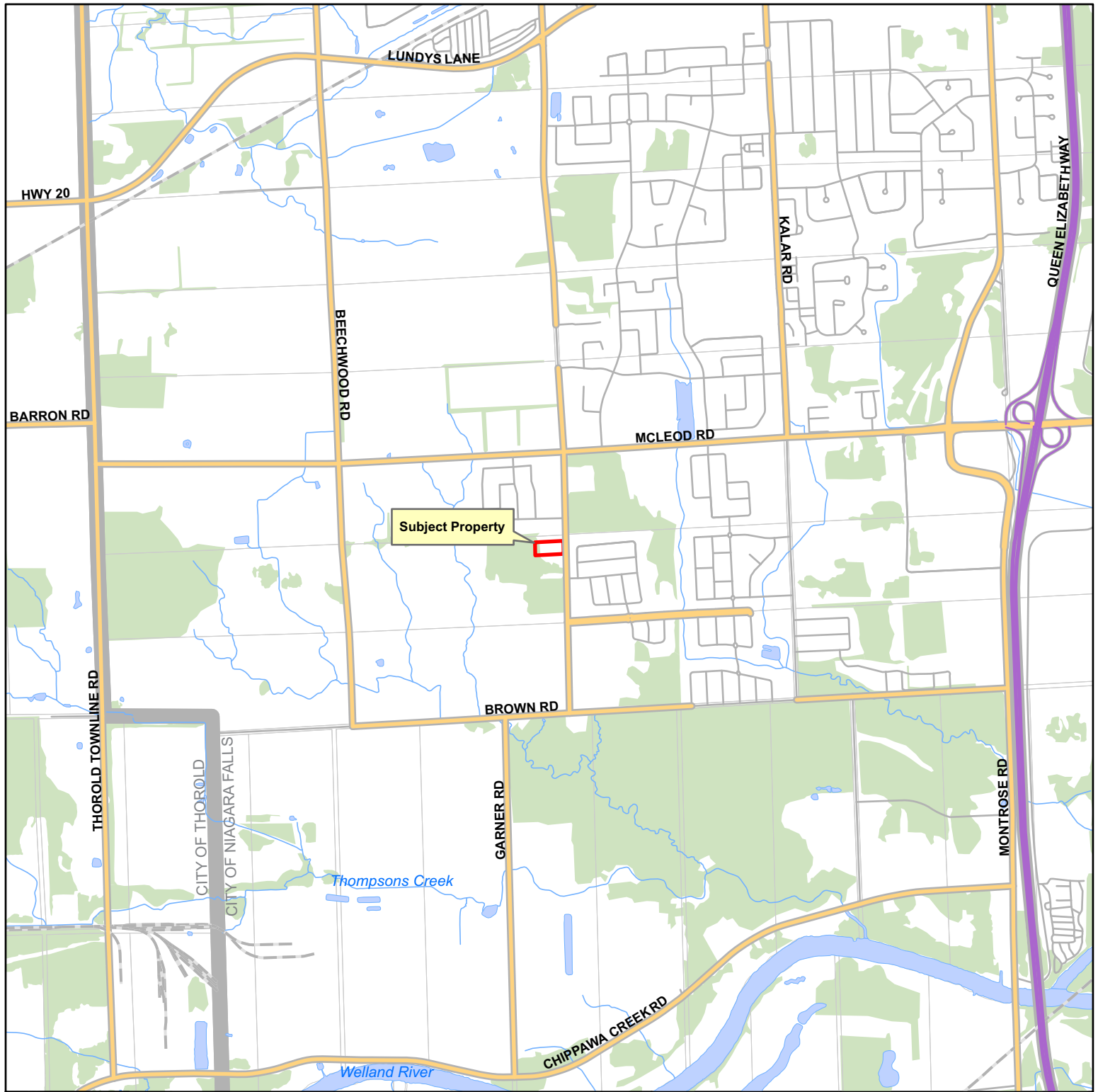
The property is rectangular in shape and measures approximately 0.79 ha (1.95 acres) in size. The existing residence, workshop and outdoor storage areas are located on the central and eastern portions of the Subject Property. Aerial photos reviewed for the property indicate that the eastern portion of the site has been used for residential use since at least 1954. The property is generally flat with some general sloping eastward towards Garner Road, south to the drainage ditch along the southern property boundary, and west towards the wetland feature on and adjacent the property. Land uses in the vicinity of the property are generally residential to the north, south and east, and natural heritage to the west.



A review of background information available from the Niagara Region and the City of Niagara Falls indicates that mapped natural heritage features on the property consist of a portion of the Thompson Creek Provincially Significant Wetland Complex (PSW), Significant Woodland and deer wintering area as shown on Figure 2 below. The majority of these woodland and wetland features are located west of the Subject Property, however small portions of these features extend onto the western portion of the parcel.

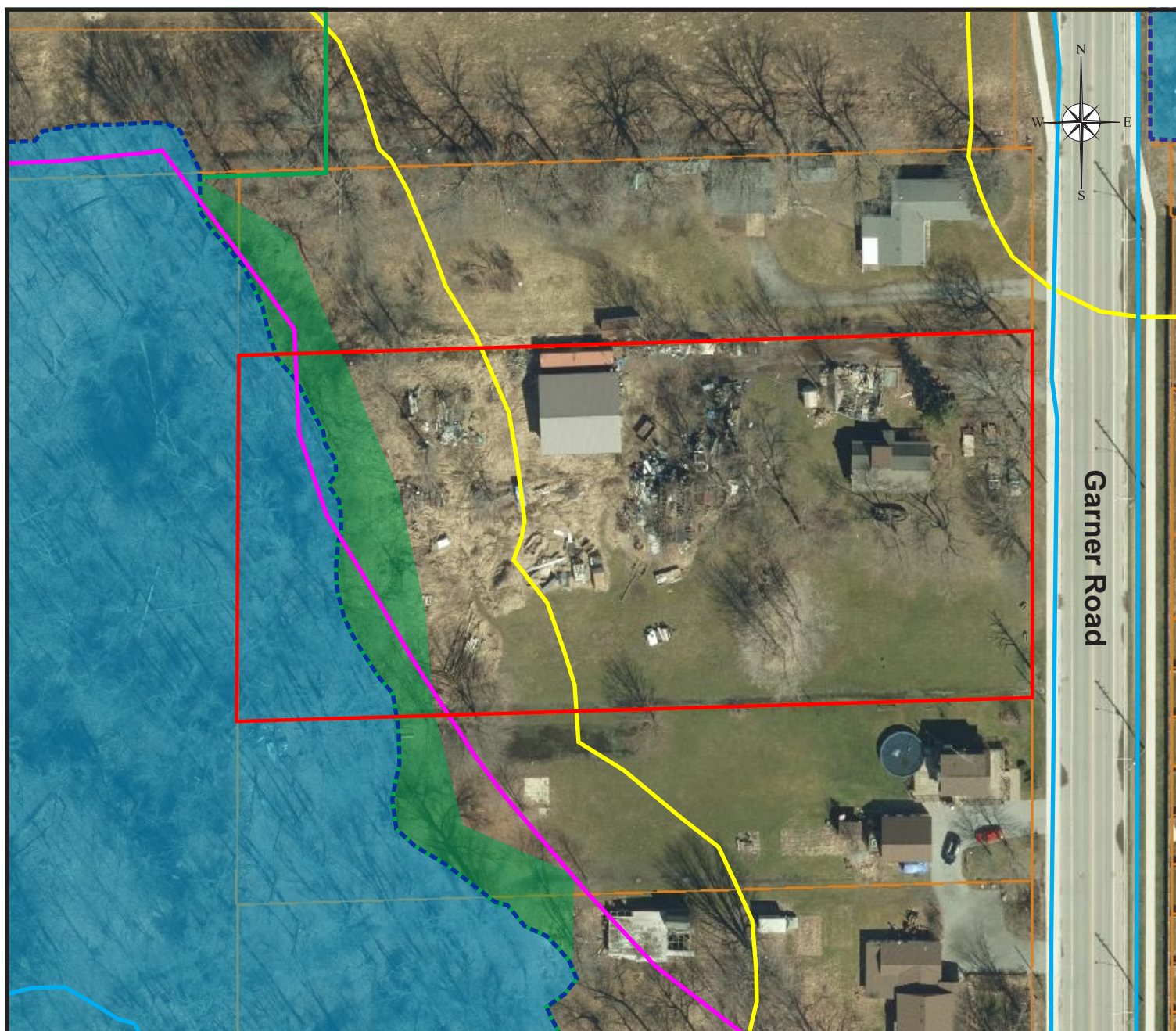
As mapping indicates that natural heritage features are located on and adjacent to the Subject Property, any development within or adjacent to these features will be subject to policies of the Niagara Region, City of Niagara Falls and the Niagara Peninsula Conservation Authority (NPCA). These policies generally require that the proposed development not impact the ecological functions of the woodland or impact the ecological and hydrological functions of the wetlands.

1.2 Description of Proposed Development

Proposed development on this property will involve the construction of three stacked townhouse blocks, with 17 dwelling units per block, for a total of 51 dwelling units. The proposed development also includes surface parking areas, driveways and amenity space. A 3m road widening Road on the east side of the Subject Property is also proposed as part of the development. The proposed site plan is provided in Appendix A.



<h2>Figure 1</h2> <h3>Location of Subject Property</h3>	
Environmental Impact Study for 7525 Garner Road	
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Legend

— Subject Property

Niagara Official Plan Mapping

--- Provincially Significant Wetland

— Significant Woodland

— Deer Wintering Area

City of Niagara Falls Official Plan

— Environmental Protection Area (EPA)

Niagara Peninsula Conservation Authority (NPCA) Mapping

— NPCA Regulated Area

— Provincially Significant Wetland

— Mapped Watercourse

Figure 2

Mapped Natural Heritage Features
on and adjacent to the Subject Property

Environmental Impact Study for 7525 Garner Road

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Madan CPA Professional Corporation

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DATE: May 2025

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2.0 ENVIRONMENTAL POLICY

2.1 Provincial Planning Statement

In 2022, the Province initiated a review on approaches for leveraging the housing supportive policies of the Provincial Policy Statement and A Place to Grow: Growth Plan for the Greater Golden Horseshoe (Growth Plan), removing barriers and continuing to protect the environment through a streamlined province-wide land use planning policy framework. The feedback from this review contributed to the development of the Provincial Planning Statement (PPS). The PPS was issued under Section 3 of the Planning Act and came into effect on October 20, 2024. The PPS replaces the policies of the Provincial Policy Statement and the Growth Plan.

The intent of the PPS is 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 ground water 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.

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 is not permitted in or adjacent to:

- ◆ significant woodlands and valleylands south and east of the Canadian Shield;
- ◆ significant wildlife habitat;
- ◆ significant fish habitat; and
- ◆ significant areas of natural and scientific interest.

Furthermore, development and site alteration shall not be 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 on their ecological functions.

2.2 Niagara Official Plan

The Niagara 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 provincially significant wetlands and significant woodlands. 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 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 Official Plan 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 3.1.9.5 of the Official Plan includes policies related to development and site alteration in Natural Heritage Features and Areas outside of the Provincial Natural Heritage System. Section 3.1.9.5.1 states:

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 3.1.9.5.2 states:

“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 3.1.9.5.4 states:

notwithstanding any other policies of this Plan, development and site alteration in, and adjacent to watercourses, provincially significant wetlands, and other wetlands that are regulated by the Conservation Authority, may also be subject to the regulations and land use planning policies of the Conservation Authority. When development or site alteration is proposed in or adjacent to any watercourse, provincially significant wetland, significant valleyland, or other wetland the applicant shall contact the Conservation Authority, at which time Conservation Authority staff will advise the applicant and the Region of the land use or regulatory policies that will apply.

Policies related to buffers in settlement areas are included 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.

Please note that as of March 31, 2025 the Niagara Official Plan is now considered an Official Plan of the local municipalities of Niagara. This plan will continue to be referred to as the Niagara Official Plan in this report.

2.3 City of Niagara Falls Official Plan

The City of Niagara Falls Official Plan has been drafted to complement the Niagara Official Plan and contains policies specific to the management of natural heritage systems. It is the intent of the Official Plan to designate lands that contribute to the natural environment of the city, either due to their ecological

significance, the areas being significant due to the natural heritage features present and/or having inherent physical hazards. The purpose of identifying these lands is not only to acknowledge the need to maintain and protect these areas, but also to control development in and around these areas due to their susceptibility.

Schedule A-1 of the City of Niagara Falls Official Plan illustrates that portions of the property have been designated Environmental Protection Area (EPA).

Environmental Protection Areas (EPA) include: Provincially Significant Wetlands, NPCA regulated wetlands greater than 2ha in size, Provincially Significant Life ANSIs, significant habitat of threatened and endangered species, floodways and erosion hazard areas and environmentally sensitive areas.

Environmental Conservation Areas (ECA) include: significant woodlands, significant valley lands, significant wildlife habitat, fish habitat, significant Life and Earth Science ANSIs, sensitive ground water areas, and locally significant wetlands or NPCA wetlands less than 2ha in size.

Section 11.1.17 of the Official Plan states that an EIS shall be required as part of a complete application under the Planning Act for site alteration or development on lands:

- a) within or adjacent to an Environment Protection Area or Environmental Conservation Area as shown on Schedule A or A- 1; or
- b) that contain or are adjacent to a natural heritage feature.

No development is permitted within any Provincially Significant Wetland.

2.3.1 Garner South Secondary Plan (2012)

The Garner South Secondary Plan (Secondary Plan) was approved on December 6, 2012 and has been adopted by the City of Niagara Falls. The intent of the Secondary Plan is to assist in providing a more detailed land use plan for development within the Secondary Plan area. The Secondary Plan covers approximately 225 ha of developable Greenfield land, but also includes a large number of heritage features including PSW's and significant woodlands. The objectives of the secondary plan are to not only protect, but enhance these natural heritage features and areas where possible.

The Subject Property is located within the Secondary plan and is designated a mix of Residential – Low Density and Environmental Protection Area (EPA).

Section 2.9.1.9 of the Secondary Plan requires that an EIS be completed as part of Planning Act application for site alteration or development on lands”

- a) within or adjacent to an Environment Protection Area or Environmental Conservation Area as shown on Schedule A-3; or
- b) that contain or are adjacent to a natural heritage feature.

Section 2.9.3.4 requires a minimum vegetated buffer established through the EIS Environmental Impact Study (EIS) that

“...shall be maintained around Provincially Significant Wetlands and Niagara Peninsula Conservation Area Wetlands greater than 2 ha in size. The precise extent of the vegetated buffer will be determined through an approved EIS and may be reduced or expanded. New development or site alteration within the vegetated buffer is not permitted. Expansion, alteration or the addition of an accessory use in relation to an existing use within the buffer may be permitted, subject to an approved EIS, where:

This EIS will assess the impacts to natural heritage features on and adjacent to the Subject Property and identify minimum vegetation buffers.

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.

The Subject Property is located within the Lower Thompson Creek Subwatershed Area, with regulated features on and adjacent to the property consisting of a portion of the Thompson Creek Provincially Significant Wetland Complex (PSW) and its associated 30m buffer. NPCA policies related to the management of wetland features are contained in Sections 8 of the policy document.

Section 8.2 outlines policies for planning and regulating development activities and interference with wetlands. Section 8.2.2.1 states that “Unless exempt by Section 3.5.4, no development activity and/or interference shall be permitted within any wetland.”

A site visit was conducted with NPCA staff on October 10, 2024, to refine wetland features on the Subject Property. Further discussion on the refinement is provided Section 5.4.

3.0 STUDY APPROACH

3.1 Background Review

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

- ◆ Niagara Official Plan (2022);
- ◆ City of Niagara Falls Official Plan (City of Niagara Falls, 2019);
- ◆ Garner South Secondary Plan (2012)
- ◆ NPCA Policy Document: Policies for Planning and Development in the Watersheds of the Niagara Peninsula Conservation Authority (2024);
- ◆ 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 2006-2009 (NPCA 2010);
- ◆ Ontario Reptile and Amphibians Atlas (Ontario Nature);
- ◆ Ontario Butterfly Atlas (Toronto Entomologists' Association);
- ◆ Atlas of Breeding Birds of Ontario (Birds Canada); and
- ◆ Recent and historical aerial photographic imagery.

3.2 Field Inventories

To assess the extent of potential natural heritage features on the property and assess potential impacts associated with this project, the following inventories and assessments were conducted on the Subject Property:

- 1) Two season botanical inventory of the Subject Property
- 2) Ecological Land Classification description and mapping of vegetation communities on and adjacent to the property;
- 3) Breeding bird surveys on and adjacent to the Subject Property;
- 4) Delineate and refine the extent of woodland and wetland features on the Subject Property with applicable agency staff;
- 5) Amphibian vocalization surveys using Marsh Monitoring Protocols, with surveys to be completed in early-April, early-May and mid-June;
- 6) Conduct an assessment of potential bat roosting habitat on the property using methods prepared by the Ministry of Natural Resources and Forestry;
- 7) Hand searches for reptiles that may be using the property;
- 8) Complete Species at Risk (SAR) and Significant Wildlife Habitat screening assessments for the Subject Property. Screening for Significant Wildlife Habitat will be consistent with the current

Significant Wildlife Habitat Technical Guide (SWHTG) and Significant Wildlife Habitat Criteria Schedule for Ecoregions 7E; and

- 9) Document incidental wildlife observations during site visits, including any species of insects that may be considered locally rare or species at risk.

For the purposes of field assessments, the study area for this assessment includes the entirety to the Subject Property and adjacent lands are considered the detectable area or surveyable lands adjacent to the Subject Property.

In addition to the scope of work above, a Wetland Water Balance (WWB) was prepared by Terra-Dynamics to assess the hydrologic function of the wetlands on the property and assess proposed wetland buffer widths. The WWB report has been submitted separately and is relied upon to inform conclusions drawn within this EIS.

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 completed on June 18 and October 3, 2024. Vegetation communities (ELC units – following Lee et al. 1998) were mapped and described, and a vascular plant checklist was compiled. Species status was assessed for Ontario (using NHIC information) and the Niagara Region (Oldham 2010).

Vegetation communities are described below and illustrated on Figure 3. A vascular plant checklist is provided in Appendix B and photos illustrating the vegetation conditions on the property are provided in Appendix C.

4.1.1 Botanical Inventories

A total of 98 plant species were documented on the Subject Property during our inventories. No species considered at risk in Ontario were identified on the property, and no provincially or locally rare species were observed.

4.1.2 Vegetation Communities

The central and eastern portion of the Subject Property contains a former residence and several outbuildings. Much of the property east of the woodland is also being used for storing an extensive collection of miscellaneous items including vehicles, construction materials and scrap metal. Vegetation over much of the central and eastern portions of the property consists of periodically mowed lawn, with scattered trees. The western portion of the outdoor storage area is less frequently mowed and supports a cultural meadow community. The western portion of the property supports a deciduous swamp, which also extends west of the property. Several vernal pools were identified on the adjacent property to the west during field inventories. The extent of vegetation communities is illustrated in Figure 3 and described below.



Legend

- Subject Property
- CUM1-1** Dry - Moist Old Field Meadow Type
- SWD3-1** Red Maple Mineral Deciduous Swamp
- Amphibian Monitoring Station
- Approximate Location of Eastern Wood-pewee

Figure 3
Extent of Vegetation Communities
on and adjacent to the Subject Property

Environmental Impact Study for 7525 Garner Road

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Dry - Moist Old Field Meadow Type (CUM1-1)/Mowed Lawn Area

The largest vegetation community on the property occurs over the east and central portions of the property and was described as Dry - Moist Old Field Meadow Type (CUM1-1) and periodically mowed meadow. Non-native, cool season grasses such as Orchard Grass, Kentucky Bluegrass, Quack Grass and Fescue dominate most areas in this vegetation community associated with former mowed lawns, while typical meadow forbs such as Tall Goldenrod, New England Aster, Panicked Aster, Wild Carrot, Knapweed, Thistles and Common Teasel also occur in the western portion of the community.

Red Maple Mineral Deciduous Swamp (SWD3-1)

The western portion of the property contains a vegetation community described as Red Maple Mineral Deciduous Swamp (SWD3-1).

The canopy of this vegetation community consists of mature and tall (20m+) trees, creating a forested swamp \ slough forest wetland complex. Swamp Maple dominates the canopy of this community, along with White Elm, Pin Oak and Swamp White Oak. Red Oak and Black Walnut also occur along the edge of the woodland and wetland. The dominant species in the swamp forest canopy are providing up to or greater than 60% cover. In the sub-canopy layer (2 to 10m in height), Red Ash and Swamp Maple are the dominant species, providing an additional 25 to 40% cover.

The moderately sparse understory layer (1 to 2m and 2 to 10m in height), is formed by Red \ Green Ash saplings, Glossy Buckthorn and Dogwood species. The ground layer contains species such as Fowl Manna Grass, sedge species and Panicked Aster. Several shallow vernal pools are located west of the property, with the nearest occurring approximately 10 meters west of the property.

4.2 Wildlife and Wildlife Habitat

4.2.1 Breeding Birds

Breeding bird surveys were conducted on May 24 and June 22, 2024 to inventory breeding birds on the subject property. Surveys were completed at least 10 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 22 species of birds were observed or heard on or above the Subject Property and 4 additional species on adjacent lands. According to Ontario conservation status ranks (S-rank) designations, with the exception of 2 non-native species (SNA), and 1 “vulnerable” species (S3), 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 with the exception of the uncommon permanent resident; Carolina Wren, Hairy Woodpecker, Red-bellied Woodpecker and rare permanent resident Tufted Titmouse (Niagara Natural Areas Inventory, 2010).

The Eastern Wood-pewee heard calling in the adjacent woodlands west of the Subject Property on the first and second site visit are designated as Special Concern in Ontario (Species at Risk in Ontario) and are also designated as Special Concern in Canada by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC).

Table 1: List of Bird Species Documented on and Adjacent to the Subject Property.

Species	S Rank	Niagara Status*	Woodland	Adjacent Lands	Highest Breeding Evidence**	Breeding Code***
American Crow	S5	C R	X	X	PO	H
American Goldfinch	S5	C R	X		PO	H
American Robin	S5	VC R	X		PR	A
Baltimore Oriole	S4B	C R	X	X	PO	S
Blue Jay	S5	VC P	X	X	PO	H
Brown-headed Cowbird	S5	VC R	X		PR	D
Carolina Wren	S4	U P	X		PO	S
Cedar Waxwing	S5	C R	X		PO	H
Chipping Sparrow	S5B	C R	X	X	PO	S
Common Grackle	S5	VC R	X		CO	FY
Downy Woodpecker	S5	C P	X	X	PO	S
Eastern Wood-pewee	S4B	C R		X	PO	S
European Starling	SNA	VC P	X		CO	FY
Gray Catbird	S5B	C R	X		PO	S
Great Crested Flycatcher	S5B	C R	X	X	PR	T
Hairy Woodpecker	S5	U P	X		PO	S
House Sparrow	SNA	VC P	X	X	PO	S
House Wren	S5B	C R	X		PO	S
Mourning Dove	S5	VC R	X	X	PO	S
Northern Cardinal	S5	C P	X		PO	S
Northern Flicker	S5	C R		X	PO	S
Red-bellied Woodpecker	S5	U P		X	PO	S
Red-winged Blackbird	S5	VC R		X	PO	S
Ring-billed Gull	S5	VC R	X		OBS	X
Song Sparrow	S5	VC R	X	X	PO	S
Tufted Titmouse	S3	R P	X	X	PO	S

* VC – very common; C – common; U – uncommon; UR – Uncommon to rare; O – Occasional; ER – Extremely 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

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

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, bat species often roost in a variety of treed habitats, as well as abandoned buildings, barns and attics. In treed habitats, cavities in trees, loose bark, foliage and other cover objects are used for roosting. Bats typically forage in a variety of habitats where flying insects and spiders are present, often in association with wetlands, ponds and streams. Local overwintering typically occurs in caves.

An assessment of potential bat roosting habitat was conducted on January 3, 2024 using methods described in MNRF (2017). From our observations, several potential roost trees were identified in the woodland and wetland communities on the west side of the property. As trees in these areas are proposed to be retained as part of development on the property, no impact to potential roost trees will occur as part of this project.

4.2.3 Amphibian Call Surveys

A portion of the Thompson Creek Provincially Significant Wetland Complex on and west of the property was identified as potential amphibian breeding habitat. To assess use of vernal pools in this area, one monitoring station was established on the property. The location of the amphibian survey station is illustrated in Figure 3.

Amphibian call surveys were conducted in the spring of 2024. The survey station was surveyed for a period of three minutes, between one half-hour after sunset, and midnight. All species of calling amphibians were recorded along with a calling code (0 – no calling; 1- calls not overlapping, can be discretely counted; 2 – calls overlapping, but numbers of individuals can still be estimated; 3 – full chorus, numbers of individuals cannot be estimated), along with an estimate of the number of individual amphibians where possible.

The first amphibian survey was conducted on April 1, 2024 and commenced at 22:10, while the air temperature was 10°C, winds were light and sky was partly cloudy. The May 9, 2024 visit commenced at 21:25. Conditions were partly cloudy, with an air temperature of 11°C and slight breeze. The final amphibian survey was completed on June 20, 2024 beginning at 21:40. Conditions were partly cloudy, with an air temperature of 20°C and a gentle breeze. The results of surveys are presented in Table 2.

Table 2: Results of Amphibian Call Surveys.

	Visit 1 April 1, 2024	Visit 2 May 9, 2024	Visit 3 June 20, 2024
Western Chorus Frog	3	1-2	---
Spring Peepers	1-3	---	---
Gray Tree Frog	---	1-3	---

*Numbers in cells represent (calling code – estimated numbers).

4.2.4 Reptile Surveys

In order to assess snake and reptile species that may be utilizing the Subject Property, active hand searches were conducted on May 2, May 24, June 18, June 22, July 23 and October 3, 2024 and May 12, 2025, generally following methods described in OMNRF (2016). These searches resulted in the observation of two Eastern Gartersnakes around stored material on the west side of the property.

4.2.5 Incidental Wildlife Observations

Incidental wildlife observations including signs were recorded during each visit to the Subject Property and included Eastern Chipmunk, Meadow Vole, Green Frog and Grey Squirrel, as well as sign associated with Eastern Cottontail and White-tailed Deer.

Incidental insect observations include Emerald Ash Borer (*Agrilus planipennis*), Mosquito (*Culicidae*), Moth (*Lepidoptera*), and Spittlebug (*Cercopidae*).

5.0 Assessment of Significant Natural Heritage Features

5.1 Species at Risk

5.1.1 Significant Habitat of Endangered and Threatened Species

No Endangered or Threatened species were documented on the property during our assessments.

Although potential habitat for various bat species is present in the woodland, no impact to potential significant roost trees will occur as a result of this project and therefore surveys were not conducted to verify use by bats.

As part of our assessment of this property we completed a search of the Natural Heritage Information Center (NHIC) database (see Appendix D) and completed a species at risk screening (see Appendix E) based on species known to occur in the City of Niagara Falls. The NHIC search indicated that Black Ash and Round Hickorynut (Endangered) and Deerberry, Round-leaved Greenbrier, Eastern Meadowlark, Bobolink, and Least Bittern (Threatened) are known to occur historically in the vicinity of the Subject Property (Appendix D). None of these species were documented on or adjacent to the property during our assessments.

Round Hickorynut is primarily found in rivers and shallow lakes with firm sand bottoms. Suitable habitat for Roundnut Hickory is not present on the property

Black Ash is considered an obligate wetland species. Suitable habitat for Black Ash is present in the wetland on the west side of the property and on the adjacent lands. Black Ash was not observed during botanical inventories on or adjacent to the property. Any potential habitat for Black Ash will be maintained as part of the proposed development.

Round-leaved Greenbrier is often found in moist woodlands with sandy soils. Round-leaved Greenbrier was not observed during botanical inventories.

Deerberry is found predominately in dry open woods on sandy and well-drained soils growing under oaks, Pitch Pine or White Pine. Potential habitat for this species is not present on the property.

Eastern Meadowlark breed in meadows, pastures and agricultural fields and are considered an obligate meadow species. Suitable habitat for Eastern Meadowlark is not present on or adjacent to the property and this species was not observed during breeding bird surveys.

Bobolinks are considered an obligate grassland species, breeding in a variety of natural grassland habitat types, including remnant prairies, savannahs and alvar grasslands (McCracken et al. 2013). Suitable habitat

for Bobolink is not present on or adjacent to the property and this species was not observed during breeding bird surveys.

Least Bittern prefer pools and open bodies of water in large swamps and marshes dominated by cattail and other emergent plants. Suitable habitat for this species is not present on the Subject Property.

A species at risk screening based on species known to occur in the City of Niagara Falls was also undertaken. Based on this assessment, suitable habitats for various species of bats is present in the woodland on the property. Further discussion regarding bats is provided in Section 6.1 below.

5.1.2 Other Potential Species of Conservation Concern

Special Concern species observed on the property were limited to Eastern Wood-pewee. Eastern Wood-pewee were heard calling within the woodland west of the Subject Property. Eastern Wood-pewee were heard calling during each of the breeding bird surveys and appear to be using the woodland for breeding.

Data available from the NHIC indicates that two Species of Special Concern (Eastern Pondmussel and Grass Pickerel) is known to occur in the vicinity of the property. Potential habitat for these species is not present on or adjacent to the Subject Property.

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 habitat, habitats of species of Conservation Concern, and animal movement corridors. These are discussed below in relation to the natural features on and adjacent to the site and an assessment table is provided in Appendix F.

5.2.1 Seasonal Concentration Areas

The Significant Wildlife Habitat Criteria Schedules for Ecoregion 7E identifies 14 types of seasonal concentrations of animals that may be considered significant wildlife habitat. 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.

NHIC data reviewed indicated that a Mixed Wader Nesting Colony has historically been identified in the vicinity of the Subject Property. These areas are indicative of candidate Colonially- Nesting Bird Breeding Habitat (Tree/Shrubs). Although candidate ecosite (SWD3) is present on and adjacent the Subject property, no indicator species or evidence of use were observed during breeding bird surveys or other field inventories. Based on our assessment, the Subject Property is not being used for Colonially Nesting Bird Breeding Habitat (Tree/Shrubs).

No other wildlife use consistent with seasonal concentrations were documented during our observations of the property. Although no detailed surveys were completed, it is possible that isolated trees within the woodland are providing potential maternal roost habitat for bats. Since no trees from the woodland will be impacted by development on the property, no impact to potential maternal roost habitat will occur as a result of this project.

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 identifies 7 specialized habitats that may be considered significant wildlife habitat. 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 known to occur in the vicinity of the 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 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.

Our observations indicated that three species of frogs were using the vernal pools in the wetland feature adjacent to the property. Although amphibian breeding use of this vernal pool does not meet the thresholds for consideration as significant wildlife habitat, no impacts are anticipated to these features as part of the proposed development.

No other specialized habitats for wildlife are present on the Subject Property.

5.2.4 Habitats of Species of Conservation Concern considered SWH

Habitats of Species of Conservation Concern include 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.

For the purpose of this assessment, it is assumed that Eastern Wood-pewee are utilizing the woodland community on the western portion of the Subject Property for breeding. Therefore, this portion of the woodland is also considered to be significant wildlife habitat for the purposes of this assessment.

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 habitat, these corridors should be a critical link between habitats that are regularly used by wildlife.

Based on our review of the background mapping and aerial photographic imagery, the Subject Property is primarily surrounded by a mix urban land uses to the north and east, and natural heritage to the south and west. As a result, this property does provide some limited linkage function between natural areas.

As illustrated in Figure 2 woodland and wetlands are located along the western portion of the Subject Property and on adjacent lands. Our assessments indicate that some local movement of wildlife occurs through the wetland and woodland features on the western portion of the property, connecting the other areas of the Thompson Creek Provincially Significant Wetland Complex to the south. This movement is considered to be localized and not part of a migration corridor. Existing movement corridors will be maintained as part of the proposed development.

5.3 Significant Areas of Natural and Scientific Interest

The PPS defines Areas of natural and scientific interest (ANSI's) to mean areas of land and water containing natural landscapes or features that have been identified as having life science or earth science values related to protection, scientific study or education. Provincial ANSI's are identified and assessed by the Ministry of Natural Resources and Forestry (MNRF), while Regional ANSI's are identified by local municipalities.

No Areas of Natural and Scientific Interest (ANSI) are located on or adjacent to the Subject Property. The nearest ANSI is the Niagara River Bedrock Gorge Earth Science ANSI is located approximately 5.8 kilometers northeast of the Subject property.

5.4 Significant and Other Wetlands

As illustrated in Figure 2, mapping available from the Ministry of Natural Resources and Forestry (MNRF) indicates that a portion of the Thompson Creek Provincially Significant Wetland Complex is located along the western portion of the Subject Property. MNRF data indicates that the wetland complex is made up of several individual wetland features and has a total area of 129.74 ha (320.59 acres). The portion of the Thompson Creek Provincially Significant Wetland Complex on and adjacent the Subject Property measures approximately 8.58 ha (21.22 acres) in size. The portion on the western edge of the Subject Property measures approximately 0.10 ha (0.26 acres) in size.

Our assessment confirmed the presence of a swamp vegetation community on the west side of the Subject Property. The PSW was refined by Colville Consulting Inc. and NPCA staff on October 10, 2024 (See Figure 4). The SWD3-1 vegetation community on the Subject Property is bounded to the east by cultural meadow and mowed lawn.

Additionally, a portion of the Warren Creek Provincially Significant Wetland Complex is mapped northeast of the Subject Property as shown in Figure 2. This PSW is separated from the Subject Property by Garner Road with no surface hydrologic linkages present.

5.5 Significant and Other Woodlands

As illustrated on Figure 2, Woodlands on and adjacent to the property have been designated as Significant Woodland in the Niagara and City of Niagara Falls Official Plans. To be designated as significant, Schedule L of the Niagara 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 (PSW) 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 woodland community on and adjacent to the property is larger than 2ha in size and contain a portion of a PSW. As such, the woodlands on and adjacent to the property are confirmed to be Significant Woodland.

The extent of the woodland was refined with Niagara Region staff on February 7, 2024. The extent of the refined woodland boundary is illustrated in Figure 4.

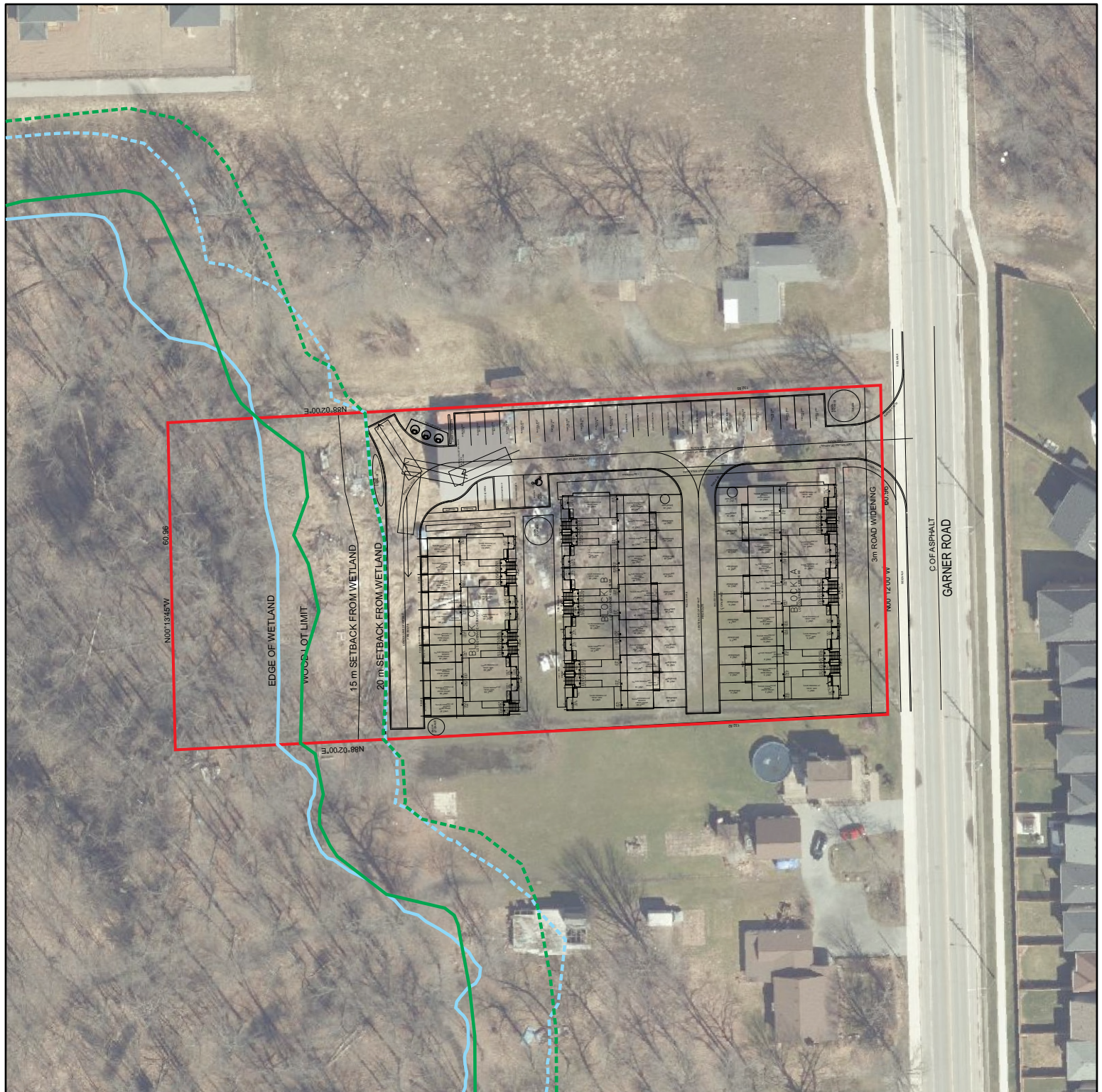
All trees greater than 10cm Diameter at Breast Height (DBH) were surveyed as part of the Tree Inventory and Preservation Plan (TIPP) prepared by Kuntz Forestry Consulting Inc. for the development. Trees to be retained or removed to facilitate development have been identified in the TIPP. Further information on tree retention and removal is provided in the TIPP report.

No Other Woodlands were designated on the Subject Property or identified through field inventories.

5.6 Watercourses and Drainage Features

As shown on Figure 2, no watercourses are mapped on the Subject Property. Side yard swales were identified during field inventories along the northern and southern limits of the property. No flow was observed during field inventories, but topographical mapping indicates that flow is generally directed east towards Garner Road. Curb and gutter drainage systems have been installed on both sides of Garner Road east of the property.

NPCA mapping also identified a watercourse approximately 70m west of the Subject Property. This watercourse is well removed from the Subject Property and was not assessed as part of field inventories.



Legend

- Subject Property
- Refined Extent of Provincially Significant Wetland
- 20m Setback from Provincially Significant Wetland
- Refined Extent of Significant Woodland
- 12m - 15m Setback from Significant Woodland

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

Environmental Impact Study for 7525 Garner Road

Prepared for: Madan CPA Professional Corporation

Prepared by: COLVILLE CONSULTING INC. 

0 25 M
1:1,000



File: C23114
DATE: July 2025

6.0 POTENTIAL ECOLOGICAL IMPACTS

Proposed development on this property will involve the construction of three stacked townhouse blocks, with 17 dwelling units per block, for a total of 51 dwelling units. The proposed development also includes surface parking areas, driveways and amenity space. A 3m road widening Road on the east side of the Subject Property is also proposed as part of the development. The proposed site plan is provided in Appendix A.

The entirety of the proposed development has been designed to be located within the mowed lawn and cultural meadow portion of the Subject Property and incorporate buffers from woodland and wetland areas. An assessment of potential impacts to the various natural heritage features on and adjacent to the property is included below.

6.1 Significant Habitat of Endangered and Threatened Species

No Endangered species were documented on the property during our surveys. As described previously in this report, our assessment indicates that it is possible that scattered trees in the woodland are providing potential roosting habitat for endangered bats. As no trees in the woodland will be removed to facilitate development on the property, acoustic monitoring was not completed in this area to confirm use of this feature. For the purposes of this assessment, it is presumed that species at risk bats are utilizing the woodland feature on and adjacent to the Subject Property.

It is our assessment that the proposed project will have no impact on potential bat roosting habitat or on significant habitat of other Endangered or Threatened Species.

6.2 Species of Special Concern

One Species of Special Concern (Eastern Wood-pewee) was documented during our survey work. Eastern Wood-pewee was heard calling within the woodland on the west side of the Subject Property. The approximate observed location of this species is illustrated in Figure 3.

Eastern Wood-pewee is one of the most common and widespread songbirds associated with North America's eastern forests (COSEWIC 2012). This species breeds in virtually every type of wooded habitat, from urban shade trees, roadsides, woodlots, and orchards to mature forests (McCarty 1996). Breeding territories of Eastern Wood-pewee in Southern Ontario are reported to range from 1.37ha to 2.03ha in size (COSEWIC 2012). Eastern Wood-pewee is still considered common in southern Ontario, however the declining population of this species has prompted the federal and provincial governments to designate this species as Special Concern.

Eastern Wood-pewee were heard calling from the woodland adjacent the west side of Subject Property during both breeding bird surveys, suggesting that the woodland is being used as breeding habitat. Based on our observations, Eastern Wood-pewee were utilizing the interior portions of the woodland on the west side of the property, with the nearest detection approximately 50m from the woodland edge.

As illustrated in Figure 4, no portion of the refined woodland will be directly affected by the proposed development. Based on the proximity of Eastern Wood-pewee to the proposed development and the

understanding that Eastern Wood-pewee are somewhat tolerant to urban land uses, the proposed development will have no impact on habitat of Eastern Wood-pewee.

6.3 Significant and Other Woodlands

As stated above, the woodland on this property has been refined to follow the Red Maple Swamp ELC community. During our assessment it was noted that the portion of the woodland on and adjacent to the property was providing habitat for bird and wildlife species which are generally common in the vicinity of the property.

Based on the results of our observations, development was recommended to incorporate a minimum 10m buffer. To be consistent with proposed wetland setbacks, a variable buffer has been incorporated into the design with setbacks ranging from 12m to 15m from the extent of the woodland on this property. The recommended buffer will be sufficient to avoid directly impacting trees in the woodland, as well as avoiding any impacts to species using the woodland area.

No trees within the woodland feature are proposed for removal. The TIPP identified 25 trees on and within six metres of the property. Of these 25 trees, 16 are required for removal to accommodate the proposed development. Mitigation measures to protect trees to be retained are discussed within the TIPP.

Based on our assessment, the proposed development adjacent to the woodland will have no impact on ecological functions of the Significant Woodland on and adjacent to the Subject Property. Despite the above conclusion, it is recommended that the mitigation measures included below be incorporated during future construction on the Subject Property.

6.4 Wetlands

Our assessment confirmed the presence of a wetland feature on the west side of the Subject Property. For the purposes of this assessment, the refined extent of the Thompson Creek Provincially Significant Wetland Complex generally follows the extent of the SWD3-1 community on the western portion of the property. The refined extent of wetlands on this property are illustrated in Figure 4.

As illustrated in Figure 4, no portion of the development is proposed to be located within the wetland. Based on our assessment of the wetland on the west side of the property, a 20m buffer from the wetland is recommended to maintain any ecological functions of this wetland. It is our assessment that development associated with the proposed lots will not impact wildlife habitat in the wetland.

As part of the assessment of this property, a wetland water balance was completed by Terra-Dynamics to assess potential impacts development of the property may have on adjacent wetlands. The intent of the report was to confirm that the proposed wetland buffer widths are sufficient to maintain the hydrological function of the wetlands. This assessment indicates that grading within the proposed development areas will not pose a hydrologic impact to adjacent wetland areas.

It is our assessment that the proposed development and anticipated future grading required for these lots will not impact the observed ecological functions of the wetland. Additionally, it is expected that development will have no effect on the hydrological functions of wetland on this property. Despite this

conclusion, it is recommended that the mitigation measures included below be incorporated during future construction on the Subject Property.

6.5 Significant Wildlife Habitat

For the purposes of this assessment, it is assumed that the woodland feature is providing significant wildlife habitat. Our assessment indicates that it is possible that scattered trees in the woodland are providing potential roosting habitat for bats. As no trees in the woodland areas will be removed to facilitate development on the property, potential bat roosting habitat on this property will not be impacted.

Eastern Wood-pewee was heard calling during both breeding bird surveys from the woodland west of the property. For the purposes of this assessment, the woodland on the western portion of the property is considered to be Eastern Wood-pewee habitat and also considered Significant Wildlife Habitat. Because potential habitat of Eastern Wood-pewee on the property will not be altered and development setbacks from the woodland will be sufficient to avoid impacts to this species, the proposed development will not affect potential significant wildlife habitat in the woodland.

6.6 Indirect Impacts

In addition to the direct impacts discussed above, it is anticipated that the proposed development may result in indirect impacts which may affect the ecological functions of the woodland and wetland features. Potential indirect impacts that could occur as part of this project include increases in ambient light and noise.

It is anticipated that security and decorative lighting will be installed on the proposed residences and street lighting, which could increase the existing ambient lighting in the area. As the area north and east of the Subject Property is already urbanized and most of the species observed utilizing the woodland adjacent to the development are common in association with residential land uses, it is not anticipated that the expected increase in ambient lighting will pose an impact to wildlife species using the woodland. To minimize any increases in ambient light to lands adjacent to the development, it is recommended that security lighting be directed away from the woodland and wetland areas. It is also recommended that shades be installed on lighting to avoid direct lighting upwards, which may adversely influence bird behaviors.

Although it is not anticipated that noise levels on the property will significantly increase as a result of everyday living activities, it is anticipated that an increase in noise may result for a short period of time during construction activities on the property. This increase in noise has the potential to temporarily disrupt wildlife in close proximity to the development, however based on the species observed, impacts are not anticipated to be significant.

7.0 MITIGATION MEASURES

As discussed above, it is our expectation that the proposed development will have no impact on the ecological functions of the significant woodland and wetlands on and adjacent to the Subject Property. To assist in avoiding any impacts associated with the proposed residential development, it is recommended

that the following mitigation measures be implemented during detailed design and construction of residences on these properties.

- ◆ Any required vegetation removal should be conducted in a manner to avoid impacts to nesting birds that may be utilizing habitats on the property. The breeding bird period for this area is generally March 15 to August 31. A survey for active bird nests should be conducted prior to any vegetation removal or site alteration planned to occur during this window.
- ◆ Any grading or filling to be conducted on the Subject Property should be designed where possible to maintain existing overland flow patterns to help avoid hydrological and sedimentation impacts to the woodland and wetland.
- ◆ It is recommended that roof drains and runoff from impervious surfaces be directed towards the wetland and woodland where possible and the use of low impact development features be considered to assist with maintaining water infiltration. Any surface water diverted to the wetland should be done following recommendations of the wetland water balance.
- ◆ Appropriate sediment and erosion controls should be installed prior to any grading, construction or site alteration works on the Subject Property to prevent sediment transfer to the wetland feature.
- ◆ Any silt fences should be properly embedded (as per Ontario Provincial Standard Specification 805) into the ground to reduce any offsite movement of silt.
- ◆ Native tree and shrub species should be incorporated into future landscape plans where possible.
- ◆ Any exterior lighting should be directed away from the Significant Woodland and wetland on and adjacent to the property where possible.
- ◆ Snow storage is not permitted within the wetland and woodland buffers. Snow storage should incorporate appropriate design elements to ensure runoff is directed away from natural heritage features and associated buffer areas.
- ◆ Recommendations for tree protection within the TIPP should be adhered to prior to, during and post development as required to minimize impacts to trees identified for preservation.
- ◆ A board fence should be installed between the rear street and woodland and wetland buffer on the west side of the property to limit light impacts on the wetland and deter pedestrian traffic into natural heritage features.
- ◆ It is recommended that a buffer enhancement plan be prepared following detailed design, with this plan to outline works to enhance buffers adjacent to the woodland and wetland and complement these features.

8.0 CONCLUSIONS AND RECOMMENDATIONS

Colville Consulting Inc. was retained to complete an Environmental Impact Study to assess the extent of potential natural heritage features on the property located at 7525 Garner Road City of Niagara Falls, as well as assess potential impacts associated with the construction of a residential development on the property. Our assessment of the property verified that natural heritage features located on or adjacent to the property include wetland and woodland features and areas likely functioning as significant wildlife

habitat. The woodland and wetland features have been delineated and suitable buffers applied to prevent potential negative impacts from the proposed development.

Based on our observations of the property and adjacent areas, it is our conclusion that the proposed development will have no impact on ecological function of natural heritage features on and adjacent to the Subject Property. To assist with avoiding impacts, it is recommended that the above noted mitigation measures be implemented as required during detailed design, construction and post construction on the property. It is our conclusion that the proposed development is consistent with applicable policies of the Niagara Official Plan, City of Niagara Falls Official Plan and NPCA land use policies.

Respectfully submitted by:



Brett Espensen, B.A. (Hons) EMA
Colville Consulting Inc.



Ian Barrett, M.Sc.
Colville Consulting Inc.

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Appendix A
Proposed Site Plan

KEY PLAN
N.T.S.

MCLEOD RD

NO. 7525

GARNER RD

KALAR RD

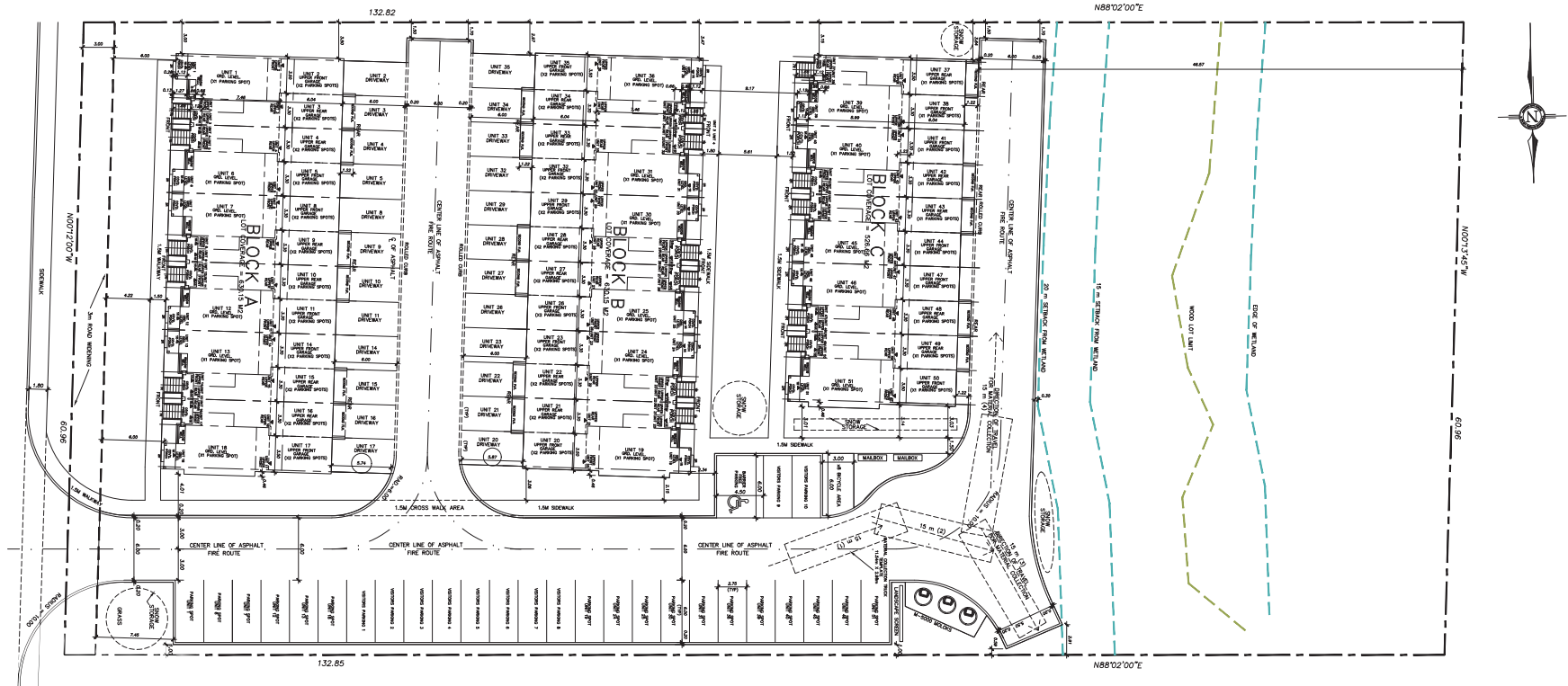
QUEEN ELIZABETH HWY

BROWN RD

PROJECT:
7525 GARNER ROAD
NIAGARA FALLS, ON

▶ ENTRY POINTS INTO BUILDING

- ☐ = BLOCK A, B, C
- ☐ = LANDSCAPING
- ☐ = PARKING (NOT INCLUDING INDOOR GARAGE PARKING)
- ☐ = PEDESTRIAN WALKWAYS
- ☐ = DRIVING AISLES



Compliance Chart for Niagara Falls Zoning By-law 79-200				
7529 Garner Road				
Total Lot Area = 6,92.65 m ²				
Net Lot Area (Net of Road Widening, Environmental Buffer and Buffer) = 5,537.56 m ²				
51 Stacked Townhouse Units - Density = 82.11 Units per Hectare				
Section	Item	Requirement	Proposed	Comply Y/N
Section 4 – General Provisions				
4.19.1 (Table 1)	Parking requirements	1.4 spaces per dwelling unit	1.66 parking spaces per unit, including 11 visitor parking spaces (13 visitor spaces required)	✓
4.27 (Table 1)	Road allowance requirements	13m minimum distance from centreline of original road allowance	3m road widening provided	✓
4.44.1	Armeny area	Minimum area of 20 m ² per dwelling unit	28.44 m ²	✓
Section 7.11 – Residential Apartment TB5 Density Zone (R5B)				
7.11.1	Permitted uses	A stacked townhouse dwelling	Stacked townhouse dwellings	✓
7.11.2 a)	Minimum unit area	133m ² per dwelling unit	106.7 m ² per dwelling unit (based on net lot area of 5,537.56 m ²)	✗
7.11.2 b)	Minimum lot frontage	30m	60.96m	✗
7.11.2 c)	Minimum front yard depth	7.5 m plus any applicable distance specified in section 4.27.1	7.12m	✗
7.11.2 d)	Minimum rear yard depth	10 m plus any applicable distance specified in section 4.27.1	47.79m	✓
7.11.2 e)	Minimum rear side yard height	one-half the height of the building	TBD based on Elevations	TBD
7.11.2 f)	Maximum rear side yard height	30%	33.53%	✗
7.11.2 g)	Maximum height of building or structure	10m Subject to section 4.7	TBD based on Elevations	TBD
7.11.2 h)	Parking and storage requirements	in accordance with section 4.19.1	See above	✓
7.11.2 i)	Minimum landscape open space	35% of the lot area	26.28%	✗
7.11.2 j)	Minimum amenity space (per apartment)	in accordance with section 4.44	See above	✓

LOT AREA	8,092.65 M2
LOT AREA AFTER ROAD WIDENING	7,909.20 M2
LOT AREA AFTER ROAD WIDENING	5,537.58 M2
DENSITY:	
STAKED TOWNS = 51 UNITS	7,908.80 M2
(1 UNIT = 15.00 M ² PER ROAD UNIT)	(7.0099) M2
STAKED TOWNS = 64.56 UNITS	
(1 UNIT = 15.00 M ² PER ROAD UNIT)	
LOT AREA AFTER ROAD WIDENING	5,537.58 M2
(1 UNIT = 15.00 M ² PER ROAD UNIT)	(0.8537) M2
LOT COVERAGE:	
BLOCK A	654.80 M2
BLOCK B	654.80 M2
BLOCK C	547.79 M2
TOTAL LOT COVERAGE	1,857.39 M2
LOT COVERAGE PROPOSED:	
LOT AREA AFTER ROAD WIDENING	(23.47%)
LOT COVERAGE PROPOSED:	
LOT AREA AFTER ROAD WIDENING	(33.53%)
AND METLANS	
LANDSCAPING	
DEVELOPABLE AREA	5,537.58 M2
(1 UNIT = 15.00 M ² PER ROAD UNIT) (1 UNIT = 15.00 M ² PER ROAD UNIT)	
SOFT LANDSCAPING	1,455.17 M2
(1 UNIT = 15.00 M ² PER ROAD UNIT) (1 UNIT = 15.00 M ² PER ROAD UNIT)	(26.28%)
HARDSCAPE	2,629.32 M2
(1 UNIT = 15.00 M ² PER ROAD UNIT) (1 UNIT = 15.00 M ² PER ROAD UNIT)	(47.41%)
TOTAL AREA	5,537.58 M2
MINUS DUPLICATE AREA	-71.73 M2
TOTAL AREA	5,537.58 M2

LANDSCAPED OPEN SPACE FRONT & REAR BALCONIES (DOES NOT INCLUDE FRONT PORCHES)	1216.92 M2 233.60 M2
TOTAL AMENITY AREA (DIVIDED BY UNIT NUMBER)	1450.52 M2
28.44 M2 AMENITY AREA PER UNIT	
AMENITY AREAS	
(LANDSCAPED OPEN SPACES, BALCONIES AND PORCHES)	
LANDSCAPED OPEN SPACE FRONT & REAR BALCONIES FRONT PORCHES & STEPS	1216.92 M2 233.60 M2 85.60 M2
TOTAL AMENITY AREA (DIVIDED BY UNIT NUMBER)	1536.12 M2
30.12 M2 AMENITY AREA PER UNIT	

(LANDSCAPED OPEN SPACES, BALCONIES AND PORCHES)	
LANDSCAPED OPEN SPACE	1216.92 M2
FRONT & REAR BALCONIES	233.60 M2
FRONT PORCHES & STEPS	85.60 M2
TOTAL AMENITY AREA	1536.12 M2
(DIVIDED BY UNIT NUMBER)	
30.12 M2 AMENITY AREA PER UNIT	

X10 SPOTS FOR GROUND FLOOR UNIT BLOCK A, B & C (10 in column 4 and 5)	X17 SPOTS
X2 SPOTS FOR UPPER FRONT UNIT BLOCK A & B (2 in column 4 and 5)	X24 SPOTS
X2 SPOTS FOR UPPER REAR UNIT BLOCK C (2 in column 4 and 5)	X24 SPOTS
X1 SPOT FOR UPPER FRONT UNIT BLOCK C (1 in column 4)	X5 SPOTS
X1 SPOT FOR UPPER REAR UNIT BLOCK C (1 in column 4)	X5 SPOTS
UNIT PARKING RATE = X75 SPOTS FOR UNITS = 1.47 PER UNIT AVERAGE	
VISITOR PARKING = X10 SPOTS = X1 BARRIER FREE SPOT	
UNIT PARKING RATIO = X11 PARKING SPOTS = 0.21 PER UNIT AVERAGE	
TOTAL PARKING PROVIDED:	
UNIT PARKING RATIO = X75 SPOTS FOR UNITS	
VISITOR PARKING = X11 PARKING SPOTS	
BARRIER FREE PARKING = X1 SPOT	
TOTAL PARKING SPOTS = 1.56 PER UNIT AVERAGE	

I, JEFF JANSEN, DECLARE THAT I HAVE REVIEWED AND TAKE DESIGN RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF JANSEN CONSULTING UNDER DIVISION C, SUBSECTION 3.2.5 AND 3.2.4 OF THE BUILDING CODE. I AM QUALIFIED AND THE FIRM IS REGISTERED SET OUT BY THE O.S.C. QUALIFIED DESIGNER BCIN - 30272 FIRM BCIN - 110042

DATE: NOV 11 24 SIGNATURE: 



78 Main Street N., P.O. Box 38
Campbellville, ON, L0P 1B0
Ph: 905-854-9696
Fax: 905-854-9559
Cell: 905-875-3438
EMAIL: joffjannendesign@gmail.com

TYPE : N-035

PROJECT :
7525 GARNER ROAD

LOCATION :
NIAGARA FALLS, ON

OWNERS INFORMATION:

| SITE PLAN

		SCALE		DATE		PROJECT NO.	
		1/200		NOV 11 24		2024-035	
		DRAWN BY		CHECKED BY			
		AB		JJ			
NO. DATE		DESCRIPTION		FILE NAME		DRAWING NO.	
REVISIONS						S1	

FEB. 12/2025

METRIC DISTANCES AND/OR COORDINATES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048.

Appendix B

Vascular Plant Checklist

Plant List for 7525 Garner Road Property, Niagara Falls, ON

ScientificName	CommonNames	Coe. Cons.	Coe. Wet.	Grank	COSEWIC	COSSARO	SRank	Lrank	Notes
<i>Acalypha virginica</i> var. <i>rhomboidea</i>	Three-seeded Mercury	0	3	G5			S5		
<i>Acer negundo</i>	Manitoba Maple	0	-2	G5			S5		
<i>Acer platanoides</i>	Norway Maple	0	5	G?			SE5		
<i>Acer saccharinum</i>	Silver Maple	5	-3	G5			S5		
<i>Acer saccharum</i> ssp. <i>saccharum</i>	Sugar Maple	4	3	G5			S5		
<i>Acer X freemanii</i>	Freeman's Maple			G?			S5		
<i>Agrostis stolonifera</i>	Creeping Bent Grass	0	-3	G5			S5		
<i>Alliaria petiolata</i>	Garlic Mustard	0	0	G?			SE5		
<i>Allium</i> sp	Onion Species								
<i>Amaranthus</i> sp	Pigweed Species								
<i>Ambrosia artemisiifolia</i>	Common Ragweed	0	3	G5			S5		
<i>Apocynum</i> sp	Dogbane Species								
<i>Arctium minus</i> ssp. <i>minus</i>	Common Burdock	0	5	G?			SE5		
<i>Asclepias syriaca</i>	Common Milkweed	0	5	G5			S5		
<i>Aster lanceolatus</i> ssp. <i>lanceolatus</i>	Panicked Aster	3	-3	G5			S5		
<i>Aster novae-angliae</i>	New England Aster	2	-3	G5			S5		
<i>Calystegia sepium</i> ssp. <i>angulata</i>	Hedge Bindweed	2	0	G5			S5		
<i>Carex granularis</i>	Meadow Sedge	3	-4	G5			S5		
<i>Carex</i> spp	Sedge Species								
<i>Carpinus caroliniana</i>	Blue Beech	6	0	G5			S5		
<i>Carya ovata</i>	Shagbark Hickory	6	3	G5			S5		
<i>Centaurea jacea</i>	Brown Knapweed	0	5	G?			SE5		
<i>Chrysanthemum leucanthemum</i>	Ox-eye Daisy	0	5	G?			SE5		
<i>Cichorium intybus</i>	Chicory	0	5	G?			SE5		
<i>Cirsium arvense</i>	Canada Thistle	0	3	G?			SE5		
<i>Cirsium vulgare</i>	Bull Thistle	0	4	G5			SE5		
<i>Cornus amomum</i> ssp. <i>obliqua</i>	Silky Dogwood	5	-4	G5			S5		
<i>Cornus foemina</i> ssp. <i>racemosa</i>	Grey Dogwood	2	-2	G5			S5		
<i>Crataegus mollis</i>	Downy Hawthorn	4	-2	G5			S5		
<i>Crataegus punctata</i>	Dotted Hawthorn	4	5	G5			S5		
<i>Cyperus</i> sp	Fiat Sedge Species								
<i>Dactylis glomerata</i>	Orchard Grass	0	3	G?			SE5		
<i>Daucus carota</i>	Wild Carrot	0	5	G?			SE5		
<i>Dipsacus fullonum</i> ssp. <i>sylvestris</i>	Common Teasel	0	5	G?			SE5		
<i>Elymus repens</i>	Quack Grass	0	3	G5			SE5		
<i>Epilobium</i> sp	Willow-herb Species								
<i>Erigeron annuus</i>	Daisy Fleabane	0	1	G5			S5		
<i>Eupatorium perfoliatum</i>	Common Boneset	2	-4	G5			S5		
<i>Euthamia graminifolia</i>	Grass-leaved Goldenrod	2	-2	G5			S5		
<i>Festuca rubra</i>	Red Fescue		1	G5			S5		
<i>Fragaria virginiana</i> ssp. <i>virginiana</i>	Common Strawberry	2	1	G5			S5		
<i>Fraxinus pennsylvanica</i>	Red Ash	3	-3	G5			S5		
<i>Fraxinus americana</i>	White Ash	2	3	G5			S5		
<i>Galinsoga quadriradiata</i>	Quick Weed	0	5	G?			SE5		
<i>Geum canadense</i>	White Avens	3	0	G5			S5		
<i>Glechoma hederacea</i>	Ground Ivy	0	3	G?			SE5		
<i>Glyceria striata</i>	Fowl Manna Grass	3	-5	G5			S5		
<i>Hypericum perforatum</i>	Common St. John's-wort	0	5	G?			SE5		
<i>Juglans nigra</i>	Black Walnut	5	3	G5			S4		
<i>Juncus tenuis</i>	Path Rush	0	0	G5			S5		
<i>Juniperus virginiana</i>	Eastern Red Cedar	4	3	G5			S5		
<i>Leersia oryzoides</i>	Rice Cut Grass	3	-5	G5			S5		
<i>Ligustrum vulgare</i>	Common Privet	0	1	G?			SE5		
<i>Lonicera tatarica</i>	Tartarian Honeysuckle	0	3	G?			SE5		
<i>Lotus corniculatus</i>	Bird's-foot Trefoil	0	1	G?					

ScientificName	CommonNames	Coe. Cons.	Coe. Wet.	Grank	COSEWIC	COSSARO	SRank	Lrank	Notes
<i>Lycopus uniflorus</i>	Northern Water-horehound	5	-5	G5			S5		
<i>Lysimachia nummularia</i>	Moneywort	0	-4	G?			SE5		
<i>Lythrum salicaria</i>	Purple Loosestrife	0	-5	G5			SE5		
<i>Melilotus alba</i>	White Sweet-clover	0	3	G5			SE5		
<i>Panicum dichotomiflorum</i>	Fall Panic Grass	0	-2	G5			SE5		
<i>Parthenocissus inserta</i>	Thicket Creeper	3	3	G5			S5		
<i>Phalaris arundinacea</i>	Reed Canary Grass	0	-4	G5			S5		
<i>Phragmites australis</i>	Common Reed	0	-4	G5			S5		
<i>Phytolacca americana</i>	Pokeweed	3	1	G5			S4		
<i>Picea glauca</i>	White Spruce	6	3	G5			S5		
<i>Plantago lanceolata</i>	Ribgrass	0	0	G5			SE5		
<i>Plantago major</i>	Common Plantain	0	-1	G5			SE5		
<i>Poa pratensis ssp. pratensis</i>	Kentucky Blue Grass	0	1	G?			S5		
<i>Polygonum aviculare (complex)</i>	Common Knotweed	0	1	G?			SE5		
<i>Polygonum lapathifolium</i>	Pale Smartweed	2	-4	G5			S5		
<i>Polygonum persicaria</i>	Lady's Thumb	0	-3	G?			SE5		
<i>Populus deltoides ssp. deltoides</i>	Eastern Cottonwood	4	-1	G5			S5		
<i>Potentilla recta</i>	Rough-fruited Cinquefoil	0	5	G?			SE5		
<i>Prunella vulgaris ssp. lanceolata</i>	Heal-all	5	5	G5			S5		
<i>Prunus virginiana ssp. virginiana</i>	Choke Cherry	2	1	G5			S5		
<i>Pyrus communis</i>	Common Pear	0	5	G5			SE4		
<i>Quercus alba</i>	White Oak	6	3	G5			S5		
<i>Quercus bicolor</i>	Swamp White Oak	8	-4	G5			S4		
<i>Quercus palustris</i>	Pin Oak	9	-3	G5			S4		
<i>Quercus rubra</i>	Red Oak	6	3	G5			S5		
<i>Rhamnus cathartica</i>	Common Buckthorn	0	3	G?			SE5		
<i>Rhamnus frangula</i>	Glossy Buckthorn	0	-1	G?			SE5		
<i>Rhus radicans ssp. negundo</i>	Climbing Poison-ivy	5	-1	G5			S5		
<i>Rhus typhina</i>	Staghorn Sumac	1	5	G5			S5		
<i>Robinia pseudo-acacia</i>	Black Locust	0	4	G5			SE5		
<i>Rubus idaeus ssp. melanolasius</i>	Wild Red Raspberry	0	-2	G5			S5		
<i>Rubus occidentalis</i>	Black Raspberry	2	5	G5			S5		
<i>Rudbeckia hirta</i>	Black-eyed Susan	0	3	G5			S5		
<i>Rumex crispus</i>	Curly Dock	0	-1	G?			SE5		
<i>Solanum dulcamara</i>	Bittersweet Nightshade	0	0	G?			SE5		
<i>Solidago altissima var. altissima</i>	Tall Goldenrod	1	3	G?			S5		
<i>Solidago juncea</i>	Early Goldenrod	3	5	G5			S5		
<i>Sonchus sp</i>	Sow-thistle Species								
<i>Taraxacum officinale</i>	Common Dandelion	0	3	G5			SE5		
<i>Thlaspi arvense</i>	Field Penny-cress	0	5	G?			SE5		
<i>Tussilago farfara</i>	Coltsfoot	0	3	G?			SE5		
<i>Ulmus americana</i>	White Elm	3	-2	G5?			S5		
<i>Vitis riparia</i>	Riverbank Grape	0	-2	G5			S5		

Legend

CoeCons. - Coefficient of Conservatism. Scores for each species range from 0 (low conservatism) to 10 (high conservatism).

A conservatism value of 0 indicates species is widespread. A value of 8, 9 or 10 indicates that a species is a habitat specialist.

CoeWet. - Coefficient of Wetness

5 - Almost always occur in upland areas

4, 3, 2 - Usually occur in upland areas

1, 0, -1 - Found equally in upland and wetland areas

-2, -3, -4 Usually occur in wetlands

-5 Almost always occur in wetlands

ScientificName	CommonNames	Coe. Cons.	Coe. Wet.	Grank	COSEWIC	COSSARO	SRank	Lrank	Notes
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Grank - Global Rank G1 — Critically Imperiled, G2 — Imperiled, G3 — Vulnerable, G4 — Apparently Secure, G5 — Secure

COSEWIC - Committee on the Status of Endangered Wildlife in Canada

COSSARO - Committee on the Status of Species at Risk in Ontario

Srank - Subnational Rank

S1 — Critically Imperiled - Critically imperiled in the province because of extreme rarity, (often 5 or fewer occurrences)

S2 — Imperiled - Imperiled in the province because of rarity due to very restricted range, very few populations (often 20 or fewer)

S3 — Vulnerable - Vulnerable in the province due to a restricted range, relatively few populations (often 80 or fewer)

S4 — Apparently Secure - Uncommon but not rare

S5 — Secure - Common, widespread, and abundant in the province

SE — Exotic

Lrank - Local Rank

R - Rare

U - Uncommon

Appendix C
Site Photographs



Photo 1. Example of vegetation conditions near the former residence on the east side of the property.



Photo 2. Example of vegetation conditions in the CUM1-1 community on the west end of the property .



Photo 3. Example of vegetation conditions adjacent to the SWD3-1 community on the west end of the property.



Photo 4. Example of vegetation conditions adjacent to the SWD3-1 community on the west end of the property.



Photo 5. Example of vegetation and site conditions adjacent to the SWD3-1 community on the west end of the property.



Photo 6. Example of vegetation in the SWD3-1 community on the west end of the property.



Photo 7. Example of vegetation in the SWD3-1 community west of the property.



Photo 8. Example of vegetation in the SWD3-1 community west of the property.

Appendix D

NHIC Data

NHIC Data

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

OGF ID	Element Type	Common Name	Scientific Name	SRank	SARO Status	COSEWIC Status	ATLAS NAD83 IDENT	COMMENTS
1037443 SPECIES		Round Hickorynut	Obovaria subrotunda	S1	END	END	17PH5069	
1037443 SPECIES		Timber Rattlesnake	Crotalus horridus	SX	EXP	EXP	17PH5069	
1037443 SPECIES		Deerberry	Vaccinium stamineum	S1	THR	THR	17PH5069	
1037443 SPECIES		Eastern Pondmussel	Ligumia nasuta	S1	SC	SC	17PH5069	
1037443 SPECIES		Black Ash	Fraxinus nigra	S4	END	THR	17PH5069	
1037443 SPECIES		Round-leaved Greenbrier	Smilax rotundifolia	S2	THR	THR	17PH5069	
1037443 SPECIES		Greater Redhorse	Moxostoma valenciennesi	S3			17PH5069	
1037443 SPECIES		Grass Pickerel	Esox americanus	S3	SC	SC	17PH5069	
1037443 SPECIES		Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17PH5069	
1037443 SPECIES		Bobolink	Dolichonyx oryzivorus	S4B	THR	SC	17PH5069	
1037443 SPECIES		Least Bittern	Botaurus exilis	S4B	THR	THR	17PH5069	
1037443 WILDLIFE CONCENTRATION AREA		Mixed Wader Nesting Colony	Mixed Wader Nesting Colony				17PH5069	

Appendix E
Species at Risk Screening

Niagara Falls

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*)

Suspected to occur

Species and General Habitat Protection

Generally found near forested brooks, 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.

Breeding and overwintering habitat not present on property.

Northern Dusky Salamander
(*Desmognathus fuscus*)

Suspected to occur

Species and General Habitat Protection

Generally prefer rocky woodland streams, seepages, and springs where water is running or trickling

Breeding and overwintering habitat not present on property.

BIRDS

ESA Protection

Key Habitats Used By Species

Subject Property

Acadian Flycatcher
(*Empidonax virescens*)

Suspected 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

Suitable breeding habitat not present on property.

Bald Eagle
(*Haliaeetus leucocephalus*)

Suspected to Occur

N/A

Prefers deciduous and mixed-deciduous forest; and habitat close to water bodies such as lakes and rivers. They roost in super canopy trees such as Pine.

Suitable breeding habitat not present on property.

Bank Swallow
(*Riparia riparia*)

Suspected to Occur

Species and General Habitat Protection

It nests in a wide variety of naturally and anthropogenically created vertical banks, which often erode and change over time including aggregate pits and the shores of large lakes and rivers.

Suitable breeding habitat not present on property.

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.

Suitable breeding habitat not present on property. Potential foraging habitat present, but species not observed during assessments.

Bobolink
(*Dolichonyx oryzivorus*)

Suspected 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 breeding habitat not present on property.

Chimney Swift
(*Chaetura pelagica*)

Suspected 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

Suitable breeding habitat not present on property.

Common Nighthawk
(*Chordeiles minor*)

Suspected 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)

Suitable breeding habitat not present on property.

Eastern Meadowlark
(*Sturnella Magna*)

Suspected 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 breeding habitat not present on property.

Eastern Whip-poor-will
(*Caprimulgus vociferus*)

Suspected to Occur

Species and General Habitat Protection

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.

Suitable breeding habitat not present on property.

Eastern Wood-Pewee
(*Contopus virens*)

Suspected 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.

Suitable breeding habitat present on adjacent property. Detected during both breeding bird surveys.

Golden-winged Warbler (<i>Vermivora chrysoptera</i>)	Suspected to Occur	N/A	Generally prefer areas of early successional vegetation, found primarily on field edges, hydro or utility right-of-ways, or recently logged areas.	Suitable breeding habitat not present on property.
Henslow's Sparrow (<i>Ammodramus henslowii</i>)	Suspected to Occur	Species and General Habitat Protection	Generally found in old fields, pastures and wet meadows. They prefer areas with dense, tall grasses, and thatch, or decaying plant material	Suitable breeding habitat not present on property.
Northern Bobwhite (<i>Colinus virginianus</i>)	Suspected to Occur	Species and General Habitat Protection	Generally inhabits a variety of edge and grassland type - habitats including nonintensively farmed agricultural lands.	Suitable breeding habitat not present on property.
Peregrine Falcon (<i>Falco peregrinus</i>)	Known to Occur	N/A	Generally nest on tall, steep cliff ledges adjacent to large waterbodies; some birds adapt to urban environments and nest on ledges of tall buildings, even in densely populated downtown areas.	Suitable breeding habitat not present on property.
Red-Headed Woodpecker (<i>Melanerpes erythrocephalus</i>)	Suspected to Occur	N/A	Generally prefer open oak and beech forests, grasslands, forest edges, orchards, pastures, riparian forests, roadsides, urban parks, golf courses, cemeteries, as well as along beaver ponds and brooks	Suitable breeding habitat not present on property.
Short Eared Owl (<i>Asio flammeus</i>)	Known to Occur	N/A	Grasslands, open areas or meadows that are grassy or bushy; marshes, bogs or tundra; both diurnal and nocturnal habits; ground nester; destruction of wetlands by drainage for agriculture is an important factor in the decline of this species; home range 25 -125 ha; requires 75-100 ha of contiguous open habitat	Suitable breeding habitat not present on property.
Wood Thrush (<i>Hylocichla mustelina</i>)	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.	Suitable breeding habitat not present on property.
Yellow-breasted Chat (<i>Icteria virens</i>)	Suspected to Occur	Species and General Habitat Protection	Generally prefer dense thickets around wood edges, riparian areas, and in overgrown clearings	Suitable breeding habitat not present on property.

MOLLUSKS

Round Hickorynut (<i>Obovaria subrotunda</i>)	Suspected to Occur	Species Protection and Habitat Regulation	Generally found in rivers with clay, sand, or gravel bottoms, and shallow lake areas with firm sand. Prefers moderately fast moving water. Suspected to be associated with Greenside darter and Eastern sand darter as larval hosts.	Potential habitat not present on property.
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FISH

Key Habitats Used By Species

Subject Property

American Eel (<i>Anguilla rostrata</i>)	Suspected 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.
Grass Pickerel (<i>Esox americanus vermiculatus</i>)	Suspected to Occur	N/A	Generally occur in wetlands with warm, shallow water and an abundance of aquatic plants; occur in the St. Lawrence River, Lake Ontario, Lake Erie, and Lake Huron	Potential habitat not present on property.
Lake Chubsucker (<i>Erimyzon sucetta</i>)	Suspected to Occur	Species and General Habitat Protection	Generally prefer marshes, wetlands and lakes with clear, still waters and abundant aquatic plants	Potential habitat not present on property.
Lake Sturgeon (<i>Acipenser fulvescens</i>)	Suspected 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 (<i>Danaus plexippus</i>)	Suspected to Occur	N/A	Exist primarily wherever milkweed and wildflowers exist; abandoned farmland, along roadsides, and other open spaces	Potential habitat present on property. Not observed during assessments.
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Rusty-patched Bumble Bee (<i>Bombus affinis</i>)	Suspected to Occur	Species and General Habitat Protection	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	Suitable habitat not present on property.
West Virginia White (<i>Pieris virginianensis</i>)	Suspected to Occur	N/A	Generally prefer moist, deciduous woodlands. The larvae feed only on the leaves of the two-leaved toothwort (<i>Cardamine diphylla</i>), which is a small, spring-blooming plant of the forest floor.	Suitable habitat not present on property.

MAMMALS		ESA Protection	Key Habitats Used By Species	Subject Property
Gray Fox (<i>Urocyon cinereoargenteus</i>)	Suspected to Occur	Species and General Habitat Protection	Generally prefers deciduous forests, marshes, swampy areas, and urban areas	Suitable habitat not present on property. Not detected during inventories,
Eastern small-footed Myotis (<i>Myotis leibii</i>)	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 (<i>Myotis lucifugus</i>)	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).	Potential roosting and maternal habitat present in woodland on property. No impact to potential habitat will occur as a result of the proposed development.
Northern Myotis (<i>Myotis septentrionalis</i>)	Suspected to Occur	Species and General Habitat Protection	Overwintering habitat: Caves and mines that remain above 0 degrees Celsius Maternal Roosts: Often associated with cavities of large diameter trees (25-44 cm dbh). Occasionally found in structures (attics, barns etc.)	Potential roosting and maternal habitat present in woodland on property. No impact to potential habitat will occur as a result of the proposed development.
Tri-colored Bat (<i>Perimyotis subflavus</i>)	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.	Potential roosting and maternal habitat present in woodland on property. No impact to potential habitat will occur as a result of the proposed development.
Eastern Red Bat (<i>Lasiurus borealis</i>)	Known to occur	Species and General Habitat Protection	Overwintering habitat: Migratory Maternal Roosts: Solitary rooster in tree and shrub foliage. Maternal roosts often in super-canopy trees.	Potential roosting and maternal habitat present in woodland on property. No impact to potential habitat will occur as a result of the proposed development.
Hoary Bat (<i>Lasiurus cinereus</i>)	Known to occur	Species and General Habitat Protection	Overwintering habitat: Migratory Maternal Roosts: Solitary rooster in tree and shrub foliage. Maternal roosts often in super-canopy trees.	Potential roosting and maternal habitat present in woodland on property. No impact to potential habitat will occur as a result of the proposed development.
Silver-haired Bat (<i>Lasionycteris noctivagans</i>)	Known to occur	Species and General Habitat Protection	Overwintering habitat: Migratory Maternal Roosts: Roosts in small colonies under sheets of exfoliating bark or in tree cavities.	Potential roosting and maternal habitat present in woodland on property. No impact to potential habitat will occur as a result of the proposed development.

PLANTS		ESA Protection	Key Habitats Used By Species	Subject Property
American Chestnut (<i>Castanea dentata</i>)	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 detected during botanical inventory.
American Ginseng (<i>Panax quinquefolius</i>)	Suspected to Occur	Species and General Habitat Protection	Grows in rich, moist, undisturbed and relatively mature deciduous woods in areas of neutral soil (such as over limestone or marble bedrock).	Potential habitat not present on property. Not detected during botanical inventory.
American Water-willow (<i>Justicia americana</i>)	Suspected to Occur	Species and General Habitat Protection	Generally grows along shorelines and sometimes in nearby wetlands, as well as along streams where the bottom is composed of gravel, sand or organic matter.	Potential habitat not present on property. Not detected during botanical inventory.
Black Ash (<i>Fraxinus nigra</i>)	Known to Occur	Species and General Habitat Protection	Generally found in treed wetland communities, floodplains and areas of prolonged soil saturation.	Typical habitat present in wetland. Species not detected during botanical inventory.
Broad Beech Fern (<i>Phegopteris hexagonoptera</i>)	Known to Occur	N/A	Rich, moist soil in mature deciduous forests	Potential habitat not present on property. Not detected during botanical inventory.

Butternut (<i>Juglans cinerea</i>)	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	Suitable habitat not present on property. Not detected during botanical inventory.
Common Hoptree (<i>Ptelea trifoliata</i>)	Suspected to Occur	N/A	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.	Suitable habitat not present on property. Not detected during botanical inventory.
Deerberry (<i>Vaccinium stamineum</i>)	Suspected to Occur	Species and General Habitat Protection	Generally occurs on sandy and well-drained soil, often in dry open woodlands (Niagara Gorge)	Suitable habitat not present on property. Not detected during botanical inventory.
Drooping Trillium (<i>Trillium flexipes</i>)	Suspected to Occur	Species and General Habitat Protection	Generally grows in dry, sandy loam, non-acidic soils of mature, deciduous woodlands that are usually associated with watercourses.	Suitable habitat not present on property. Not detected during botanical inventory.
Eastern Flowering Dogwood (<i>Cornus florida</i>)	Suspected 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 detected during botanical inventory.
Pink Milkwort (<i>Polygala incarnata</i>)	Suspected to Occur	Species Protection and Habitat Regulation	Generally grows in moderately moist to dry, sandy prairie habitats. Associated with Little Bluestem Grass (<i>Schizachyrium scoparium</i>)	Suitable habitat not present on property. Not detected during botanical inventory.
Red Mulberry (<i>Morus rubra</i>)	Suspected to Occur	Species Protection and Habitat Regulation	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	Suitable habitat not present on property. Not detected during botanical inventory.
Round-leaved Greenbrier (<i>Smilax rotundifolia</i>)	Known to Occur	Species Protection and Habitat Regulation	Generally grows in open moist to wet woodlands, often growing on sandy soils. Habitat is variable.	Typical habitat not present on property. Not detected during botanical inventory.
Shumard Oak (<i>Quercus shumardii</i>)	Suspected to Occur	N/A	Generally grows in deciduous forests, where the soils are poorly drained clay and clay loam. Requires full sunlight.	Suitable habitat not present on property. Not detected during botanical inventory.
Spotted Wintergreen (<i>Chimaphila maculata</i>)	Suspected to Occur	Species and General Habitat Protection	Generally grow in sandy habitats in dry-mesic oak-pine woods. In Canada, they grow very close to the Great Lakes	Potential habitat not present on property. Not detected during botanical inventory.
Swamp Rose-mallow (<i>Hibiscus moscheutos</i>)	Suspected to Occur	N/A	Generally grows in open, coastal marshes, but it is also sometimes found in open wet woods, thickets and drainage ditches	Potential habitat not present on property. Not detected during botanical inventory.
White Wood Aster (<i>Eurybia divaricata</i>)	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.	Potential habitat not present on property. Not detected during botanical inventory.

REPTILES		ESA Protection	Key Habitats Used By Species	Subject Property
Blanding's Turtle (<i>Emydonidea blandingii</i>)	Suspected to Occur	Species and General Habitat Protection	Generally occur in freshwater lakes, permanent or temporary pools, slow-flowing streams, marshes and swamps. They prefer shallow water that is rich in nutrients, organic soil and dense vegetation. Adults are generally found in open or partially vegetated sites, and juveniles prefer areas that contain thick aquatic vegetation including sphagnum, water lilies and algae. They dig their nest in a variety of loose substrates, including sand, organic soil, gravel and cobblestone. Overwintering occurs in permanent pools that average about one metre in depth, or in slow-flowing streams.	Suitable habitat not present on property. Not detected on property.
Eastern Musk Turtle (<i>Sternotherus odoratus</i>)	Suspected to Occur	Species and General Habitat Protection	Generally prefer habitats with sandy, well-drained soil and open vegetative cover, such as open woods, brushland, fields, forest edges and disturbed sites. The species is often found near water.	Suitable habitat not present on property. Not detected on property.

Eastern Ribbonsnake (<i>Thamnophis sauritus</i>)	Suspected 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.	Suitable habitat not present on property. Not detected on property.
Northern Map Turtle (<i>Graptemys geographica</i>)	Known to Occur	N/A	Large bodies of water with soft bottoms, and aquatic vegetation; basks on logs or rocks or on beaches and grassy edges, will bask in groups; uses soft soil or clean dry sand for nest sites; may nest at some distance from water; home range size is larger for females (about 70 ha) than males (about 30 ha) and includes hibernation, basking, nesting and feeding areas; aquatic corridors (e.g. stream) are required for movement; not readily observed	Suitable habitat not present on property. Not detected on property.
Snapping Turtle (<i>Chelydra serpentina</i>)	Suspected 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.	Suitable habitat not present on property. Not detected on property.

Appendix F

Significant Wildlife Habitat Summary

Assessment of SWH for 7525 Garner Road – Niagara Falls.

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 Property
Shorebird Migratory Stopover Area	Absent	Suitable habitat not present on Subject Property
Raptor Wintering Area	Absent	Suitable habitat not present on Subject Property
Bat Hibernacula	Absent	Suitable overwintering habitat not present on Subject Property
Bat Maternity Colonies	Potentially Present	Candidate habitat present in woodland on and adjacent to property. Not impact to potential roosting habitat to occur as part of this project.
Turtle Wintering Areas	Absent	Suitable overwintering habitat not present on Subject Property.
Reptile Hibernaculum	Absent	Suitable overwintering habitat not observed on Subject Property.
Colonially -Nesting Bird Breeding Habitat (Bank and Cliff)	Absent	Colonial nesting birds not present on Subject Property
Colonially -Nesting Bird Breeding Habitat (Tree/Shrubs)	Absent	Colonial nesting birds not present on Subject Property
Colonially -Nesting Bird Breeding Habitat (Ground)	Absent	Suitable habitat not present on Subject Property.
Migratory Butterfly Stopover Areas	Absent	Suitable habitat not observed on Subject Property
Landbird Migratory Stopover Areas	Absent	Suitable habitat not present on Subject Property.
Deer Winter Congregation Areas	Absent	Suitable winter concentration habitat not present on Subject Property.
RARE VEGETATION COMMUNITIES		
Cliffs and Talus Slopes	Absent	Habitat type not present on Subject Property
Sand Barren	Absent	Habitat type not present on Subject Property
Alvar	Absent	Habitat type not present on Subject Property
Old Growth Forest	Absent	Habitat type not present on Subject Property
Savannah	Absent	Habitat type not present on Subject Property
Tallgrass Prairie	Absent	Habitat type not present on Subject Property
Other Rare Vegetation Communities	Absent	No rare vegetation communities present on Subject

		Property
SPECIALIZED HABITATS OF WILDLIFE CONSIDERED SWH		
Waterfowl Nesting Area	Absent	Suitable habitat not present on Subject Property
Bald Eagle and Osprey Nesting, Foraging and Perching Habitat	Absent	Suitable habitat not present on Subject Property
Woodland Raptor Nesting Habitat	Absent	Suitable habitat not present on Subject Property
Turtle Nesting Areas	Absent	Suitable habitat not present on Subject Property
Seeps and Springs	Absent	Suitable habitat not present on Subject Property
Amphibian Breeding Habitat (Woodland)	Absent	Suitable habitat not present on Subject Property
Amphibian Breeding Habitat (Wetlands)	Absent	Suitable habitats present within vernal pools west of the Subject Property. Calling not consistent with SWH.
Woodland Area-Sensitive Bird Breeding Habitat	Absent	Potential habitat not present on Subject Property
HABITATS OF SPECIES OF CONSERVATION CONCERN CONSIDERED SWH		
Marsh Breeding Bird Habitat	Absent	Suitable habitat not present on Subject Property
Open Country Bird Breeding Habitat	Absent	Suitable habitat not present on Subject Property
Shrub/Early Successional Bird Breeding Habitat	Absent	Suitable habitat not present on Subject Property
Terrestrial Crayfish	Absent	Suitable habitat not present on Subject Property
Special Concern and Rare Wildlife Species	Present	Eastern Wood-pewee detected west of the Subject Property.
ANIMAL MOVEMENT CORRIDORS		
Amphibian Movement Corridors	Absent	Suitable habitat not present on Subject Property
Bat Migratory Stopover Area	Absent	Suitable habitat not present on Subject Property

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.