



DILLON
CONSULTING

2693642 Ontario Inc.

Natural Heritage Evaluation

107 Ridge Road, Town of Aurora, Ontario

Table of Contents

1.0	Introduction	1
2.0	Planning Context	3
2.1	Provincial Policy Statement, 2024	4
2.2	Endangered Species Act, 2007	5
2.3	Lake Simcoe Protection Plan, 2009	6
2.4	Greenbelt Plan, 2017	6
2.5	Growth Plan for the Greater Golden Horseshoe, 2020	7
2.6	Oak Ridges Moraine Conservation Plan, 2017	7
2.7	York Region Official Plan, 2022	8
2.8	Town of Aurora Official Plan, 2024	8
2.9	Lake Simcoe Region Conservation Authority (Ontario Regulation 41/24)	9
3.0	Natural Heritage Background Review	10
3.1	Aquatic Environment	10
3.1.1	Watershed Summary	10
3.2	Terrestrial Environment	10
3.2.1	Landforms, Soils and Geology	10
3.2.2	Woodlands	11
3.2.3	Valleylands	11
3.2.4	Significant Wildlife Habitat	11
3.2.5	Species at Risk	12
4.0	Methodology of Biophysical Investigation	14
4.1	Woodland Feature Staking	14
4.2	Tree Inventory	14
4.3	Ecological Land Classification	15
4.4	Vegetation Inventory	15
4.5	Bat Habitat Assessment	15
4.6	Breeding Bird Survey	15
4.7	Incidental Wildlife	16
5.0	Results of Biophysical Investigation	17
5.1	Ecological Land Classification	17

5.2	Vegetation	20
5.3	Wetlands	20
5.4	Woodlands	20
5.4.1	Tree Inventory	21
5.5	Breeding Bird Surveys	22
5.6	Significant Wildlife Habitat	23
5.7	Species at Risk	23
5.8	Incidental Wildlife	24
6.0	Ecological Function	25
7.0	Description of Proposed Development	26
8.0	Impact Assessment	28
8.1	Potential Direct Impacts	28
8.1.1	Diversion of Stormwater Flows / Erosion and Sedimentation of Natural Features	28
8.1.2	Tree and Vegetation Removal	28
8.1.3	Loss of and/or Disturbance to Wildlife and Wildlife Habitat	29
8.2	Potential Indirect Impacts	29
8.2.1	Anthropogenic Disturbance	29
8.2.2	Colonization of Non-native and/or Invasive Species	29
9.0	Mitigation and Enhancement Opportunities	30
9.1	Stormwater Management Plan	30
9.2	Erosion and Sediment Control	31
9.3	Natural Heritage Feature Buffers	31
9.4	Landscaping and Planting Plan	32
9.5	Wildlife Impact Mitigation Plan	32
9.6	Environmental Monitoring Plan	32
10.0	Policy Conformity	34
11.0	Summary and Next Steps	36

Figures

Figure 1: Project Location and Designated Natural Features.....	2
Figure 2: Ecological Land Classification	18
Figure 3: Proposed Development Plan	27

Tables

Table 1: Policies, Legislation and Background Resources Searched	3
Table 2: Species of Conservation Concern with potential to occur within the Study Area	11
Table 3: Species at Risk with potential to occur within the Study Area.....	12
Table 4: Timing and Weather Conditions of Field Surveys.....	14
Table 5: Ecological Land Classification	19
Table 6: Breeding Bird Survey Results.....	22
Table 7: Incidental Wildlife Observations	24
Table 8: Policy Conformity Table.....	34

Appendices

A	Terms of Reference
B	Official Plan Mapping
C	LSRCA Mapping
D	Site Photos
E	Vegetation Inventory

References

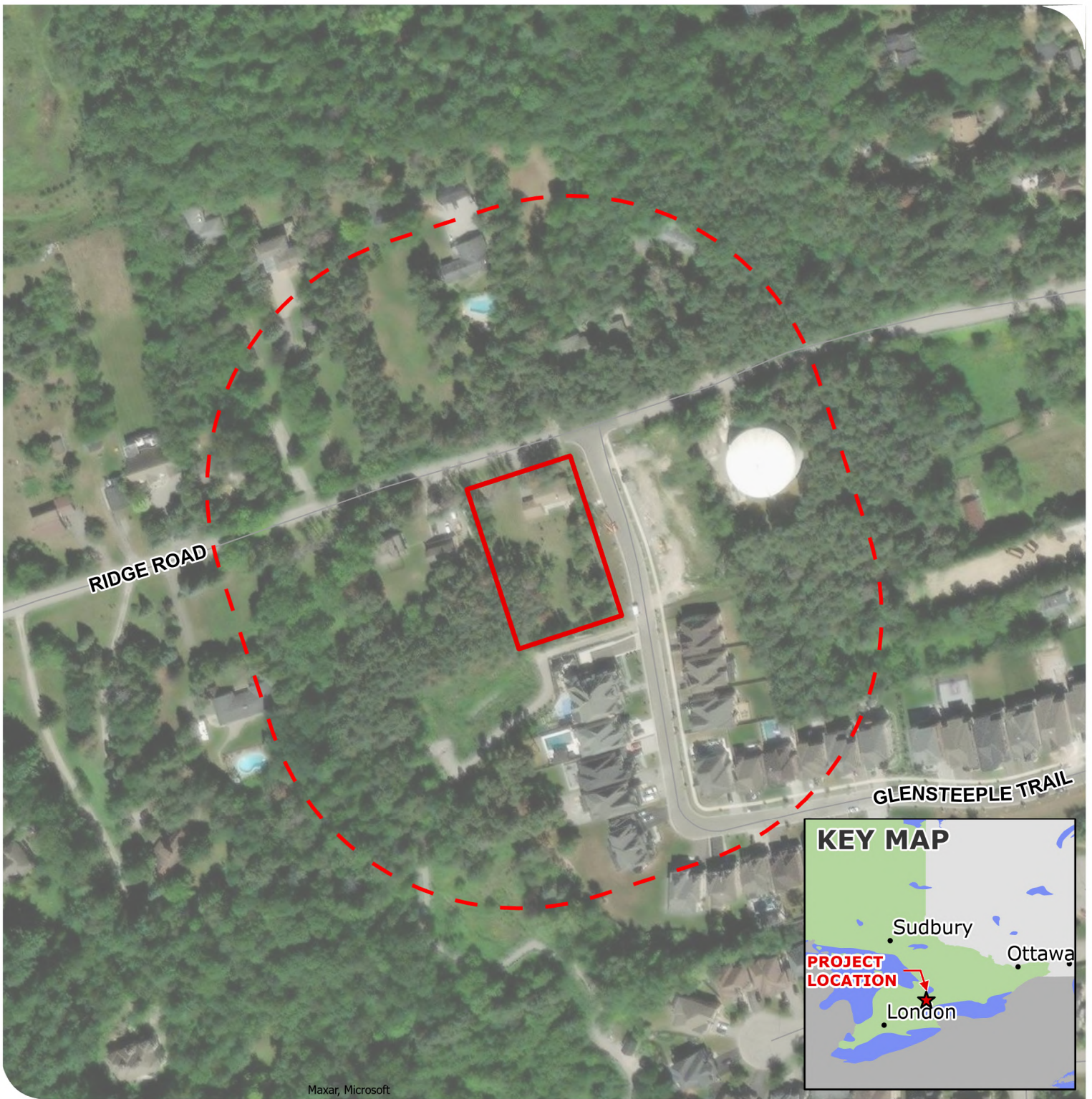
Introduction

Dillon Consulting Limited (Dillon) was retained by 2693642 Ontario Inc. to complete a Natural Heritage Evaluation (NHE) for a proposed development at 107 Ridge Road (the 'Project Boundary', **Figure 1**), in the Town of Aurora (the 'Town'), Ontario. The Study Area includes the Project Boundary and an 120 metre (m) buffer, and currently contains several single detached residential properties with pockets of woodlands. In order to develop the Study Area, an NHE has been requested by the Town in order to address potential impacts to natural features within and adjacent to the Study Area.




This NHE serves to do the following:

- Document existing conditions of the natural environment;
- Determine the potential limits of development;
- Evaluate the potential for environmental impacts associated with the proposed development; and,
- Recommend mitigation, restoration, enhancement measures, and/or compensation measures, where necessary, to avoid impacts to the natural environment.

This NHE has been prepared in general accordance with the guidelines outlined in the NHE section of the Town of Aurora's Official Plan (OP) (2010), and in accordance with the Terms of Reference (TOR) established in consultation with Town on June 11, 2024 (**Appendix A**).



107 RIDGE ROAD TOR

-  Project Boundary
-  Study Area (120 m Setback)
-  Minor Road

2693642 ONTARIO INC.

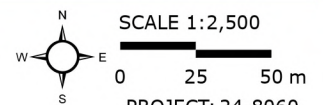
PROJECT LOCATION

FIGURE 1



MAP DRAWING INFORMATION:
DATA PROVIDED BY

MAP CREATED BY: -DU
MAP CHECKED BY: -AC
MAP PROJECTION: NAD 1983 CSRS UTM Zone 17N



PROJECT: 24-8060
STATUS: DRAFT
DATE: 2025-03-26

2.0

Planning Context

The following sections have been prepared to identify the applicable land use planning policies related to the natural environment. Various regulatory agencies and legislative authorities have established a number of policies with the purpose of protecting ecological features and functions. **Table 1** lists the policies and legislation that apply to the protection of natural heritage features within the York Region Area, as well as supporting guidance documents and resources respective to each policy. This table also includes additional background information sources used to help identify and define natural heritage features within the province of Ontario, and Eco-region 6E specifically. This section is not intended to constitute a complete land use planning assessment as it focuses on the relevant environmental policies and regulations. The documents referenced below can be read in their entirety for a more detailed understanding of the land use policy framework applicable to the Study Area (Project Boundary +120 m buffer).

Table 1: Policies, Legislation and Background Resources Searched

POLICY	GUIDELINES AND SUPPORTING DOCUMENTS
PROVINCE OF ONTARIO	
<p><i>Planning Act, 1990:</i> Provincial Policy Statement (2024)</p>	<p>Policies within Section 4.1 and Section 4.2 related to natural heritage features</p> <hr/> <p>MNRF Natural Heritage Information Centre (NHIC) Square #'s: 17PJ2369</p> <ul style="list-style-type: none"> • Species of Conservation Concern; • Species at Risk; and, • Natural heritage features. <p>MNRF Significant Wildlife Habitat Technical Guide (2000)</p> <ul style="list-style-type: none"> • Significant Wildlife Habitat Eco-region 6E Criterion Schedules, 2015. <hr/> <p>Natural Heritage Reference Manual, Second Edition, March 2010</p> <hr/> <p>Ecological Land Classification for Southern Ontario, Second Approximation, 2008</p> <hr/> <p>Ontario Wetland Evaluation System, Southern Manual, Fourth Edition, 2022</p> <hr/> <p>MNRF Species at Risk in Ontario (SARO) List (O. Reg. 230/08), January 2024</p>
<p><i>Endangered Species Act (2007)</i></p>	<p>MNRF Natural Heritage Information Centre (NHIC) Square #'s: 17PJ2369: <i>Species at Risk occurrence records</i></p> <hr/> <p>Fisheries and Oceans Canada (DFO) Aquatic Species at Risk Map, 2024</p> <hr/> <p>Ontario Breeding Birds Atlas (OBBA)- online data accessed September 2024</p> <hr/> <p>Ontario Reptile and Amphibian Atlas- online data accessed September 2024</p> <hr/> <p>Ontario Butterfly Atlas- online data accessed September 2024</p> <hr/> <p>Mammals of the Western Hemisphere v3.0, released in 2007 and compiled in 2010</p>

POLICY	GUIDELINES AND SUPPORTING DOCUMENTS
Lake Simcoe Protection Plan (2009)	<ul style="list-style-type: none"> Schedule 1
Greenbelt Plan (2017)	<ul style="list-style-type: none"> Section 4, Schedule 1
Places to Grow Act, 2005: A Place to Grow: Growth Plan for the Greater Golden Horseshoe (2020)	<ul style="list-style-type: none"> Section 4, Schedule 1, Schedule 2
Oak Ridges Moraine Conservation Act, 2001: Oak Ridges Moraine Conservation Plan (2017)	<ul style="list-style-type: none"> Map 3
REGIONAL MUNICIPALITY OF YORK	
York Region Official Plan (2022)	<ul style="list-style-type: none"> Chapter 3, Maps 1, 2, 4, 5
TOWN OF AURORA	
Town of Aurora Official Plan (2010)	<ul style="list-style-type: none"> Section 12, Schedule A, Schedule F1, G
CONSERVATION AUTHORITY	
<i>Conservation Authorities Act, 1990: Ontario Regulation 41/24</i>	Lake Simcoe Region Conservation Authority <ul style="list-style-type: none"> LSRCA Regulated Area mapping East Holland River Subwatershed Plan (2010)

Policies within each document that relate to the natural environment and apply to the Study Area are outlined in subsequent sections.

2.1 Provincial Policy Statement, 2024

The Provincial Policy Statement, 2024 (PPS) provides overall policy direction on matters of provincial interest related to land use planning and development in Ontario. The PPS sets forth a vision for Ontario's land use planning system by managing and directing land use to achieve efficient development and land use patterns, wise use and management of resources, and protecting public health and safety. This report deals specifically with Policy 4.1, Natural Heritage, and Policy 4.2, Water, which provides for the protection and management of natural heritage and water resources, which include the following:

- Significant wetlands;
- Significant coastal wetlands;
- Significant woodlands;
- Significant valleylands;
- Significant wildlife habitat;
- Significant areas of natural and scientific interest (ANSIs);
- Fish habitat;
- Sensitive surface water features; and,
- Sensitive ground water features.

The PPS defines “significant” to mean:

- In regard to wetlands, coastal wetlands and areas of natural and scientific interest, an area identified as provincially significant by the Ontario Ministry of Natural Resources using evaluation procedures established by the Province, as amended from time to time;
- In regard to woodlands, an area which is ecologically important in terms of features such as species composition, age of trees and stand history; functionally important due to its contribution to the broader landscape because of its location, size or due to the amount of forest cover in the planning area; or economically important due to site quality, species composition, or past management history. These are to be identified using criteria established by the Ontario Ministry of Natural Resources; and,
- In regard to other features and areas in policy in 4.1, ecologically important in terms of features, functions, representation or amount, and contributing to the quality and diversity of an identifiable geographic area or natural heritage system”.

The PPS defines “sensitive” to mean:

- In regard to surface water features and ground water features, means areas that are particularly susceptible to impacts from activities or events, including, but not limited to, water withdrawals, and additions of pollutants.

Potential significance of natural heritage features may be evaluated based on size, age, presence of rare or sensitive species, species diversity, and linkage functions, taking into consideration factors such as adjacent land use and degree of disturbance. Criteria for determining significance follow guidance outlined in the Natural Heritage Reference Manual (MNRF, 2010) and the Significant Wildlife Habitat Technical Guide Eco-Region 6E Criterion Schedules (MNRF, 2015), where applicable.

2.2 Endangered Species Act, 2007

In June 2008, the *Endangered Species Act, 2007* (ESA) came into effect in Ontario. The purpose of the ESA is to identify Species at Risk (SAR) based on the best available scientific information; to protect SAR and their habitats, to promote the recovery of SAR; and to promote stewardship activities to assist in the protection and recovery of SAR in Ontario. There are two applicable regulations under the ESA; *Ontario Regulation 230/08* (the SARO List); and, *Ontario Regulation 242/08* (General). These regulations serve to identify which species and habitat receive protection and provide direction on the current implementation of the ESA by the Ministry of Environment, Conservation and Parks (MECP).

The potential for SAR and SAR habitat to be found within the Study Area is discussed further in **Section 3.2.5** of this report.

2.3 Lake Simcoe Protection Plan, 2009

The Lake Simcoe Protection Plan (LSPP) was established under the *Lake Simcoe Protection Act*, 2008, with the purpose of protecting and restoring the ecological health of the Lake Simcoe Watershed (LSPP, 2009). The LSPP includes key natural heritage feature and key hydrologic feature policies pertaining to development and site alteration. Under the LSPP, key natural heritage features are *wetlands*, *significant woodlands*, *significant valleylands* and natural areas abutting Lake Simcoe. Key hydrologic features are *wetlands*, *permanent* and *intermittent streams*, and *lakes* other than Lake Simcoe.

Designation of lands as outside of existing settlement areas or within settlement areas, determines which LSPP key natural heritage/hydrologic feature policies apply. The Study Area falls within an Urban Residential Area in Schedule A (see **Appendix B**) of the Town Official Plan (“OP”), and therefore policies 6.33 – 6.34 of the LSPP apply; that state the following:

“6.33- An application for development or site alteration shall, where applicable:

- a. increase or improve fish habitat in streams, lakes and wetlands, and any adjacent riparian areas;*
- b. include landscaping and habitat restoration that increase the ability of native plants and animals to use valleylands or riparian areas as wildlife habitat and movement corridors;*
- c. seek to avoid, minimize and/or mitigate impacts associated with the quality and quantity of urban run-off into receiving streams, lakes and wetlands; and*
- d. establish or increase the extent and width of a vegetation protection zone adjacent to Lake Simcoe to a minimum of 30 metres where feasible.*

6.34- Where, through an application for development or site alteration, a buffer is required to be established as a result of the application of the PPS, the buffer shall be composed of and maintained as natural self-sustaining vegetation.”

2.4 Greenbelt Plan, 2017

The Greenbelt Plan, 2017, prepared and approved under the Greenbelt Act, 2005, builds upon the policy framework established in the PPS to protect a broad area of land and provide direction regarding where and how future growth should be accommodated. While providing permanent agricultural and environmental protection, the Greenbelt also contains important natural resources and supports a wide range of recreational and tourism uses, areas and opportunities together with a vibrant and evolving agricultural and rural economy (MMAH, 2005).

The Greenbelt Plan identifies areas where urbanization is prohibited in order to provide permanent protection to the agricultural land base and the ecological features and functions occurring throughout the landscape. The Protected Countryside lands identified by the Greenbelt Plan are intended to enhance the spatial extent of agriculturally and environmentally protected lands while improving linkages between these areas and the surrounding major lake systems and watersheds.

The Study Area falls within the Towns and Villages designation outside the Greenbelt, and therefore the policies of the Greenbelt do not apply. The Greenbelt Plan defers to municipal official plans for detailed delineation of settlement boundaries and to govern land use within these areas.

2.5 Growth Plan for the Greater Golden Horseshoe, 2020

Pursuant to the Places to Grow Act, 2005, the Growth Plan for the Greater Golden Horseshoe, 2020 (Growth Plan) came into effect on August 28, 2020. The Growth Plan replaces the Growth Plan for the Greater Golden Horseshoe, 2017.

The Growth Plan requires the identification of water resource systems and the protection of key hydrologic features and key hydrologic areas, similar to the level of protection provided in the Greenbelt (MMAH, 2020). This provides a consistent framework for water protection across the Greater Golden Horseshoe (GGH) and builds on existing plans and policies. The Growth Plan also provides for the identification and protection of natural heritage systems in the GGH outside of the Greenbelt Area and settlement areas in order to provide consistent and long-term protection for natural heritage systems across the GGH (MMAH, 2020).

The Greater Golden Horseshoe Growth Plan Section 4.2.2 states *“The Natural Heritage System mapping will exclude lands within settlement area boundaries that were approved and in effect as of July 1, 2017”*. As per Section 4.2.2 (Section 6), *“Beyond the Natural Heritage System, including within settlement areas, the municipality:*

- a. will continue to protect any other natural heritage features in a manner that is consistent with the PPS; and*
- b. may continue to protect any other natural heritage system or identify new systems in a manner that is consistent with the PPS.”*

2.6 Oak Ridges Moraine Conservation Plan, 2017

The Oak Ridges Moraine Conservation Plan (ORMCP), 2017, was developed as part of a comprehensive strategy for the ORM, which included passing of the Oak Ridges Moraine Conservation Act, 2001 on December 13, 2001. As stated in the Plan, the purpose of the ORMCP is to provide land use and resource management planning direction to provincial ministers, ministries, and agencies, municipalities, municipal planning authorities, landowners and other stakeholders on how to protect the Moraine’s ecological and hydrological features and functions (MMAH, 2017b).

The ORMCP divides the Moraine into four land use designations;

- *Natural Core Areas-* protect those lands with the greatest concentrations of key natural heritage features which are critical to maintaining the integrity of the Moraine as a whole;
- *Natural Linkage Areas-* protect critical natural and open space linkages between the Natural Core Areas and along rivers and streams;

- *Countryside Areas*- provide an agricultural and rural transition and buffer between the Natural Core Areas and Natural Linkage Areas and the urbanized Settlement Areas; and,
- *Settlement Areas*- reflect a range of existing communities planned by municipalities to reflect community needs and values (MMAH, 2017b).

Under the ORMCP, the Study Area falls within Settlement Area (**Appendix B**). Within Settlement Areas urban uses and development as set out in municipal official plans are allowed, subject to the provisions of the ORMCP (MMAH, 2017b).

2.7 York Region Official Plan, 2022

The Region of York Official Plan (ROP) was adopted in June 2022 and approved by the Minister of Municipal Affairs and Housing in November 2022. The policies of the official plan guide new planning and development in York Region.

The Study Area is designated in Regional Structure Map 1 as occurring within an Urban Area. In addition, the south to southwest portion of the Project Boundary contains woodlands which are identified Map 5 of the ROP (**Appendix B**). Additional designated areas related to natural heritage are depicted in Maps 4 (Key Hydrologic Features, **Appendix B**). No wetlands (PSW or other evaluated) are depicted as Key Hydrologic Features within the Study Area as indicated by Map 4.

2.8 Town of Aurora Official Plan, 2024

The Town of Aurora Official Plan (OP) was approved by the Ministry of Municipal Affairs January 2024. The OP is the Town's primary tool to direct actions of the local government, shape development decisions and manage growth in the short term and long-term.

The majority of lands within the Study Area have been designated as either Residential or Environmental Protection (Schedule A, **Appendix B**). Section 12.0 of the OP discusses the establishment of an interconnected Greenlands System that includes policies and mapping to protect key natural heritage features and key hydrologic features. More specifically, Schedule F1 identifies the woodlands located at the southern portion of the Study Area. Each of these key natural heritage features are designated as Environmental Protection Areas and are subject to protection by a minimum 30 m vegetation protection zone.

Official Plan Amendment No. 48 was approved by the Ministry of Municipal Affairs on October 22, 2003. The purpose of the amendment was to bring the Town's OP into conformity with the Oak Ridges Moraine Conservation Plan. Section 3.13.5 (d) (Item 7) defines the minimum vegetation zone as it relates to Significant Woodlands as *"all land within 30 metres of the base of outermost tree trunks within the woodland"*. Section 3.13.5 (c) provides that *"where lands are designated as Settlement area, a minimum vegetation protection zone greater or less than that specified in the Table set out in subsection*

3.13.5 (d) of this Plan may be permitted where the applicable official plan or zoning by-law were adopted on the basis of environmental studies...". Therefore, within the Study Area, the determination for buffers from Significant Woodlands will be based on the results of an NHE report.

2.9 Lake Simcoe Region Conservation Authority (Ontario Regulation 41/24)

In accordance with Section 28 of the Conservation Authorities Act, 1990, the LSRCA is authorized to implement and enforce the Prohibited Activities, Exemptions and Permits (Ontario Regulation 41/24). Section 2(1) of this Regulation lists areas within LSRCA's jurisdiction where development is prohibited without proper permissions from the LSRCA. Such areas include, but are not limited to, river or stream valleys, hazardous lands, and wetlands, including areas within 120 m of all provincially significant wetlands ("PSW").

In participating in the review of applications under the Planning Act, LSRCA ensures that applicants and approval authorities are aware of any Section 28 Regulation requirements under the Conservation Authorities Act, where applicable.

A review of available mapping from the LSRCA indicates that the Study Area is not located within the LSRCA's Regulated Area (**Appendix C**). Therefore, it is anticipated that permit from the LSRCA will not be required prior to construction.

3.0

Natural Heritage Background Review

A desktop review of aerial imagery indicates that the Study Area is primarily comprised of single-family residential home with a woodland in the southern portion. The Study Area is bounded to the north by Ridge Road, to the east by Glensteeple Trail, to the south by residential homes and Glensteeple Trail, and to the west by woodlands and a residential home. LSRCA compiled available data and conducted Ecological Land Classification (ELC) within its jurisdiction in 2005 (**Appendix C**). A review of ELC codes assigned to the Study Area confirms previous land use assumptions above; specifically, that the majority of the Study Area is characterized by urban development.

3.1 Aquatic Environment

3.1.1 Watershed Summary

The Lake Simcoe Watershed includes the municipal communities of York Region, Durham Region, Simcoe County, Barrie, Orillia and Kawartha Lakes. It is comprised of multiple sub-watersheds which contain 18 major river systems that flow into Lake Simcoe (LRSCA, n.d.). The majority of land use within the Lake Simcoe Watershed is agricultural (36%) with 8% being urban; natural heritage resources within the watershed comprise of an equal amount of wetland (13%) and forests (13%) (LRSCA, n.d.).

The Study Area is located within the East Holland River Subwatershed. The East Holland River Subwatershed Plan (LSRCA, 2010) describes the subwatershed as one of the most urbanized subwatersheds in the Lake Simcoe basin with over 17% of the land use being urban area (LSRCA, 2010). The largest land use is designated as natural heritage features at approximately 33%; the second largest land use designation is intensive and non-intensive agriculture at 31% (LSRCA, 2010). The East Holland River subwatershed is drained by the East Holland River, which flows generally in a northerly direction and drains into Cook's Bay. It is also one of five major tributaries that account for 60% of the total drainage to Lake Simcoe. The headwaters originate from discharge springs and seepages along the northern flanks of the Oak Ridges Moraine.

No watercourses and wetlands are found in the Project Boundary or within the Study Area (**Figure 1**).

3.2 Terrestrial Environment

3.2.1 Landforms, Soils and Geology

The Study Area is located at the border of the Oak Ridges Moraine (ORM) physiographic region and the Newmarket Till, which is characterized by sandy silt to silt with a moderate to high matrix carbonate content and clast content (GEMS, 2025a). The bedrock underlying the Study Area is part of the Blue Mountain Foundation composed primarily of shale and limestone. The topography of the land is uneven with a general downward inclination from the southeast to the northwest corner of the site (GEMS,

2025b). The natural topography of the Study Area has been altered to accommodate the existing residential neighborhood currently located here.

This Study Area is located within the Lake Simcoe Eco-region, within the Mixedwood plains ecozone. Surface geology mapping by the Ontario Geological Survey (2003) shows that the entire property is covered by low permeability clay and silt glaciolacustrine deposits.

A desktop review of aerial imagery indicates that the area is primarily comprised of low-density residential development with single family dwellings, hedgerows, and landscape plantings. Natural features such as woodlands are located at the south to southwestern portion of the Project Boundary.

3.2.2 Woodlands

Woodlands were identified on the south to southwestern portion of the Project Boundary, which corresponds with the Woodland designation in Schedule E1 of the Aurora OP.

Woodlands are discussed further in **Section 5.4**.

3.2.3 Valleylands

No significant valleylands were identified within or adjacent to the Project Boundary through background review. As noted in **Section 3.2.1**, the topography of the Project Boundary is uneven with a general downward inclination from the southeast to the northwest corner of the site.

3.2.4 Significant Wildlife Habitat

The Significant Wildlife Habitat Technical Guide (MNRF, 2000) defines Species of Conservation Concern as globally, nationally, provincially, regionally, or locally rare (S-Rank of S2 or S3); as well as species listed as endangered or threatened federally; but do not include SAR (listed as endangered or threatened under the ESA, 2007). The Species of Conservation Concern listed in **Table 2** were identified with the potential to occur within or adjacent to the Study Area based on a background review. These species have been considered in determining the potential for SWH within the Study Area, as defined by the Eco-region 6E Criterion Schedules (MNRF, 2015).

Table 2: Species of Conservation Concern with potential to occur within the Study Area

Scientific Name	Common Name	SARA ¹	ESA ²	S-RANK ³	Information Source ⁴
BIRDS					
<i>Ammodramus savannarum</i>	Grasshopper Sparrow	SC	SC	S4B	OBBA
<i>Coccothraustes vespertinus</i>	Evening Grosbeak	---	SC	S4B	CBC, OBBA
<i>Hylocichla mustelina</i>	Wood Thrush	THR	SC	S4B	OBBA
<i>Contopus virens</i>	Eastern Wood-pewee	SC	SC	S4B	OBBA

Scientific Name	Common Name	SARA ¹	ESA ²	S-RANK ³	Information Source ⁴
<i>Progne subis</i>	Purple Martin	---	---	S3B	OBBA
<i>Hirundo rustica</i>	Barn Swallow	SC	SC	S4B	OBBA
LEPIDOPTERA					
<i>Danaus plexippus</i>	Monarch	SC	SC	S2N,S4B	OBA
HERPTILES					
<i>Chelydra serpentina</i>	Snapping Turtle	SC	SC	S3	OHA
<i>Thamnophis sauritus</i>	Eastern Ribbonsnake (Great Lakes population)	SC	SC	S3	OHA
<i>Graptemys geographica</i>	Northern Map Turtle	SC	SC	S3	OHA

¹Federal Species at Risk Act (THR= threatened, SC= special concern); ²Ontario Endangered Species Act (SC= Special Concern);

³Ontario SRank; S4= apparently secure; S3 = vulnerable; S2 = imperilled; ⁴Information sources include: OHA = Ontario Herpetofaunal Atlas, OBA = Ontario Butterfly Atlas; --- denotes no information or not applicable, CBC=Christmas Bird Count.

Based on this list and the project's background review, there is potential for the following SWH to be present within and adjacent to the Study Area:

- Bat Maternity Colonies; and
- Special Concern and Rare Wildlife Species.

The potential for SWH within the Study Area is further discussed in **Section 5.6**.

3.2.5

Species at Risk

Based on the background review, several SAR listed as endangered and threatened under the ESA were identified as having the potential to occur within the vicinity of the Study Area (see **Table 3**).

Table 3: Species at Risk with potential to occur within the Study Area

Scientific Name	Common Name	SARA ¹	ESA ²	S-RANK ³	Information Source ⁴
BIRDS					
<i>Dolichonyx oryzivorus</i>	Bobolink	THR	THR	S4B	OBBA
<i>Sturnella magna</i>	Eastern Meadowlark	THR	THR	S4B	OBBA
ODONATA					
<i>Gomphus quadricolor</i>	Rapids Clubtail	END	END	S1	Reg. by Municipality
HERPTILES					
<i>Ambystoma jeffersonianum</i>	Jefferson Salamander	END	END	S2	OHA, Reg. by Municipality
<i>Emydoidea blandingii</i>	Blanding's Turtle	THR	THR	S3	OHA

Scientific Name	Common Name	SARA ¹	ESA ²	S-RANK ³	Information Source ⁴
MAMMALS					
<i>Lasiurus borealis</i>	Eastern Red Bat	---	END*	S3	MWH
<i>Lasionycteris noctivagans</i>	Silver-haired Bat	---	END*	S3	MWH
<i>Lasiurus cinereus</i>	Hoary Bat	---	END*	S3	MWH
<i>Myotis leibii</i>	Eastern Small-footed Myotis	---	END	S2S3	MWH
<i>Myotis lucifugus</i>	Little Brown Myotis	END	END	S4	MWH
<i>Myotis septentrionalis</i>	Northern Myotis	END	END	S3	MWH
<i>Pipistrellus subflavus</i>	Tri-colored Bat	END	END	S3?	MWH
FISH					
<i>Clinostomus elongatus</i>	Redside Dace	END	END	S2	Reg. by Municipality
VASCULAR PLANTS					
<i>Platanthera leucophaea</i>	Eastern Prairie Fringed-orchid	END	END	S2	Reg. by Municipality
<i>Julgans nigra</i>	Butternut	END	END	S2?	NHIC

¹Federal Species at Risk Act (END= endangered, THR= threatened); ²Ontario Endangered Species Act (END= endangered, THR= threatened); ³Ontario SRank; S4= apparently secure; S3 = vulnerable; S2 = imperilled; ⁴Information sources include: NHIC= Provincially Tracked Species; OBBA = Ontario Breeding Bird Atlas.

*Assessed as endangered by the Committee on the Status of Species at Risk in Ontario (COSSARO).

Based on the habitat present within the Study Area (woodlands), there is potential for the above listed SAR to be present; however, it should be noted that, due to the existing residential development, the potential for certain SAR is limited within the proposed development area. There are no wetlands, rivers or grasslands located in the Study Area, so no SAR associated with these habitats (i.e., Bobolink, Eastern Meadowlark, Rapids Clubtail, Jefferson Salamander, Blanding's Turtle, Eastern Prairie Fringed-orchid, Redside Dace) are anticipated to be present.

The potential for SAR and SAR habitat to be present within the Study Area is discussed further in **Section 5.7**.

4.0 Methodology of Biophysical Investigation

The following sub-sections outline the methodologies that were implemented in preparation of this NHE. The results of the background review were also used to assist in scoping the field program that was implemented in 2024 and is outlined below (**Table 4**). Fieldwork conducted for the NHE included woodland dripline staking, a single season ELC and botany survey and breeding bird surveys based on the TOR established with the Town. The following sub-sections outline the survey methodologies used in the NHE.

Table 4: Timing and Weather Conditions of Field Surveys

Date	Weather Conditions	Air Temp (°C)	Purpose of Visit
June 6, 2024	Mostly cloudy, no precipitation	19	Breeding Bird Survey and Bat Habitat Assessment
June 17, 2024	Partly cloudy, no precipitation	17	Breeding Bird Survey
July 9, 2024	Sunny	20	Woodland Feature Staking
August 9, 2024	Partly cloudy	24	Tree Inventory, Botany and ELC

4.1 Woodland Feature Staking

A feature staking exercise was conducted on July 9, 2024 by members of the project team and representatives from LSRCA, during which the woodland in the Study Area were staked.

4.2 Tree Inventory

A Tree Inventory was conducted in the Study Area by a Dillon ISA-certified arborist. Trees subject to the inventory were those with a Diameter at Breast Height (DBH) of 10 cm or greater. Detailed methods can be found in the Arborist Report provided under separate cover.

The basic qualitative visual health assessment completed for trees within the Study Area includes a detailed visual inspection of the tree and surrounding area to obtain a professional opinion of the health condition of each tree. It includes a non-invasive inspection of each tree – looking at the site conditions as well as the root taper, trunk, and scaffold branch arrangement at the union as well as the condition of the secondary branches and leaves.

This basic qualitative visual health assessment is the standard assessment that is performed by arborists, but only includes conditions that are detected from the ground. The results from a basic qualitative visual health assessment should not be relied on for internal, below-ground, and/or upper-crown condition or defects as these areas may be impossible to see or difficult to assess from ground-level.

The hazard potential of the tree was assessed using the method outlined in the International Society of Arboriculture publication *A Photographic Guide to the Evaluation of Hazard Trees in Urban Area - 2nd Edition* (Matheny and Clark, 1994).

Results are summarized in **Section 5.4.1**.

4.3 Ecological Land Classification

ELC studies were completed in conjunction with summer vegetation surveys on August 9, 2024. During the field investigations, vegetation and soils on site were characterized in order to classify and map ecological communities to the vegetation level. The ecological community boundaries were determined through the review of aerial photography and initial assessment and then further refined through on site vegetation surveys including soil sampling in each of the communities.

Results are summarized in **Section 5.1**.

4.4 Vegetation Inventory

The summer vegetation survey consisted of wandering transects and/or area searches to determine the presence, richness and abundance of floral species within the Study Area as well as presence/absence of botanical SAR and provincially rare vegetation species. Species nomenclature recorded is based on the Ontario Plant List (Newmaster et al., 1998).

Results are summarized in **Section 5.2**.

4.5 Bat Habitat Assessment

SAR bats use large trees with features such as cracks, crevices, knot holes, or loose bark (snag trees) or Oak and Maple trees with clusters of dead leaves as roosting habitat. Searches for these features were completed as part of the ELC and vegetation inventory for potential SAR bat tree habitat.

4.6 Breeding Bird Survey

Diurnal breeding bird surveys were conducted within the Study Area and followed the methods outlined in the Ontario Breeding Bird Atlas Guide for Participants (Ontario Breeding Bird Atlas, 2001). Specifically, survey will consisted of point counts generally conducted between dawn and five hours after sunrise to establish quantitative estimates of bird abundance in suitable habitat types within the Study Area. During the surveys evidence of breeding behaviour were recorded which generally includes, but is not limited to, males singing, nest building, egg incubation, territorial defence, carrying food, and feeding their young.

To supplement the surveys, area searches of the habitat were completed using binoculars to observe species presence and breeding activity between point counts. Area searches involved noting all individual bird species and their corresponding breeding evidence while traversing the habitat on foot.

Results are summarized in **Section 5.5**.

4.7 **Incidental Wildlife**

Incidental observations of wildlife will be noted, as well as other wildlife evidence such as dens, tracks, and scat throughout the 2024 field season. For each observation, notes, and when possible, photos will be taken.

Results are summarized in **Section 5.7**.

5.0

Results of Biophysical Investigation

A biophysical inventory of natural features within the Study Area was conducted in the 2024 field season in accordance with the methods detailed in **Section 4.0**. The analysis of data collected from secondary source information (**Section 3.0**) and during field studies in 2024 has been used to evaluate the significance of natural heritage features within the Study Area within this section of the report.

5.1

Ecological Land Classification









A total of three ecological communities were observed within the Study Area during ELC surveys, one of which is considered natural vegetation communities despite being dominated by non-native species: Dry-Fresh Scotch Pine Plantation. The location, type, and boundaries of these communities are delineated on **Figure 2**. All vegetation communities surveyed within the Study Area are considered common in Ontario. **Table 5** outlines the communities documented during ELC surveys and summarizes the dominant vegetation cover. Reference photos for each of the plant communities observed can be found in **Appendix D**.

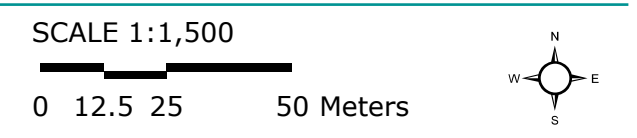
Within the Study Area, the natural vegetation communities showed a moderate level of disturbance and contained invasive species and noxious species including, but not limited to, Common Buckthorn (*Rhamnus cathartica*) and Scotch Pine (*Pinus sylvestris*).



107 RIDGE ROAD NHE
2693642 ONTARIO INC.

FIELD INVESTIGATIONS
FIGURE 2

-  Project Boundary
 -  Study Area (120 m Setback)
 -  Dripline Staked with Municipality on July 9, 2024
 -  Breeding Bird Survey
- Ecological Land Classification
-  CV1: Transportation
 -  CVR3: Single Family Residential
 -  FOCM6-3: Dry - Fresh Scotch Pine Naturalized Coniferous Plantation
 -  TAGM5: Hedgerow



MAP DRAWING INFORMATION:
DATA PROVIDED BY MNR
AERIAL IMAGERY BY ESRI

MAP CREATED BY: -DU
MAP CHECKED BY: -MB
MAP PROJECTION: NAD 1983 CSRS UTM Zone 17N



PROJECT: 24-8060
STATUS: DRAFT
DATE: 2025-03-20

Table 5: Ecological Land Classification

Polygon Code	ELC Code	Classification	Vegetation	Photo Appendix D
1	TAGM5	Hedgerow	The hedgerow was dominated by Eastern White Cedar (<i>Thuja occidentalis</i>) and abundant Virginia Creeper (<i>Parthenocissus quinquefolia</i>) with the occasional Canada Goldenrod (<i>Solidago canadensis</i> var. <i>canadensis</i>) and Common Buckthorn (<i>Rhamnus cathartica</i>).	1
2	CVR_3	Single Family Residential	Single Family Residential with Kentucky Bluegrass (<i>Poa pratensis</i> ssp. <i>pratensis</i>), Alsike Clover (<i>Trifolium hybridum</i>), Common Dandelion (<i>Taraxacum officinale</i>), Wood Sorrell (<i>Oxalis stricta</i>), and White Clover (<i>Trifolium repens</i>).	2
3	FOCM6-3	Dry-Fresh Scotch Pine Plantation	The plantation is dominated by Scotch Pine (<i>Pinus sylvestris</i>) with the rare Eastern White Cedar (<i>Thuja occidentalis</i>). The understory consisted of Canada Goldenrod (<i>Solidago canadensis</i> var. <i>canadensis</i>), Spinulose Wood Fern (<i>Dryopteris carthusiana</i>), Lily-of-the-Valley (<i>Convallaria majalis</i>), and Virginia Creeper (<i>Parthenocissus quinquefolia</i>).	3
4	CVI	Transportation	Ridge Road	N/A

5.2 Vegetation

A total of 32 plant species were documented during 2024 field studies. Of the 32 species 59% are listed as native species considered to be common (S4) to very common (S5) in the province of Ontario; and approximately 41% are listed as introduced species, therefore a status ranking is not applicable as the species is not a suitable target for conservation activities (SE or SNA rank).

The Co-efficient of Conservatism (CC) provides additional information on the nature of the vegetation communities within the Study Area. The CC values range from 0 to 10 and represent an estimated probability that a plant is likely to occur in a landscape that is relatively unaltered or is in a pre-settlement condition. For example, a CC of 0 is given to plants such as Manitoba Maple that demonstrate little fidelity to any remnant natural community, i.e. may be found almost anywhere. Similarly, a CC of 10 is applied to plants like Shrubby Cinquefoil (*Potentilla fruticosa*) that are almost always restricted to a pre-settlement remnant, i.e. a high-quality natural area. Introduced plants were not part of the pre-settlement flora, so no CC values have been applied to these species.

Of the 32 species identified within the Study Area, the average CC value recorded is 2.4 which is typical of an altered landscape (i.e. residential development); although several species were recorded with CC values of 5 or greater, including Red Baneberry (*Actaea rubra*), Spinulose Wood Fern (*Dryopteris carthusiana*), Black Walnut (*Juglans nigra*), Virginia Creeper (*Parthenocissum quinquefolia*), and White Spruce (*Picea glauca*). No SAR vegetation were identified within the Study Area. A full list of the vegetation species observed within the Study Area has been included in **Appendix E**.

5.3 Wetlands

No wetlands are located in within the Study Area. No vernal pools were located within the adjacent woodland.

5.4 Woodlands

Woodlands were investigated as part of ELC surveys in 2024. The staked dripline of the woodland is shown on **Figure 3**. Only a small portion of this larger woodland is found within the Project Boundary, with the majority falling along the western perimeter and southwest corner of the Study Area. The woodland present consists off Dry Fresh Scotch Pine Naturalized Coniferous Plantation (FOCM6-3) as described in **Table 5**.

In accordance with the policies of the ORMCP, within Settlement Areas, urban uses and development as set out in municipal official plans are allowed subject to the provisions of the ORMCP (MMAH, 2017). The woodlands are designated as Environmental Protection in the Aurora OP Schedule A (**Appendix B**). The Town of Aurora OP (2024) defines Significant Woodlands as meeting one of the criteria in the policy 3.4.30 of the York Region OP (2022). Significant Woodlands are to be verified on the site to meet one of the following criteria:

- a. *Is 0.5 ha or larger and:*
 - i. *Directly supports globally or provincially rare plants, animals or communities as assigned by the Natural Heritage Information Centre; or*
 - ii. *Directly supports threatened or endangered species with the exception of specimens deemed not requiring protection by the Province; or*
 - iii. *Is within 30 m of a provincially significant wetlands or wetland, waterbody, permanent stream or intermittent stream;*
- b. *Is 2 ha or larger and:*
 - i. *Is located outside of the Urban Area, Towns and Villages, Hamlets and is within 100 m of Life Science Area of Natural and Scientific Interest, a provincially significant wetland, significant valleyland, or fish habitat; or*
 - ii. *Occurs within the Regional Greenlands System.*

The woodland within and adjacent to the Property Boundary is >2 ha but has not met the criteria listed in Policy 3.4.30. Therefore, according to the York Region OP (2022), the woodland does not meet the criteria to be considered a Significant Woodland.

To further confirm whether this woodland has met significance, Table 7-2 in the Natural Heritage Reference Manual (NHRM; MNRF, 2010) was referred to. The following was determined:

- The Town of Aurora has > 28% canopy cover (Town of Aurora, 2024). The NHRM Table 7-2 states that “Where woodland cover is about 15–30% of the land cover, woodlands 20 ha in size or larger should be considered significant.” The woodland feature in the Study Area is under 2 ha in size; it also does not contain interior habitat that measures more than 100 m from the edge.
- Additionally, Table 7-2 states that “Woodlands should be considered significant if: a portion of the woodland is located within a specified distance (e.g., 30 m) of a significant natural feature or fish habitat likely receiving ecological benefit from the woodland and the entire woodland meets the minimum area threshold.” Since the woodland does not meet the minimum area threshold, the presence of a significant natural feature or fish habitat does not trigger significance.

Therefore, the woodland did not meet the criteria for significance provided in the NHRM (MNRF, 2010) as it was <20 ha in size and does not contain significant natural features or fish habitat. The woodland within the Project Boundary does not meet any other criteria in Table 7-2 of the NHRM.

Potential impacts related to woodlands and other vegetation communities within the Study Area are included in **Section 8.1.2** and **8.1.3**.

5.4.1 Tree Inventory

A tree inventory and condition assessment was conducted on August 9, 2024 to document the trees found within the Project Boundary. Majority of the trees inventoried were Scotch Pine (*Pinus sylvestris*).

Twenty-three (23) of the 38 trees are proposed for removal to accommodate the proposed development.

Detailed tree inventory results, including species, diameter at breast height, condition, estimated total number of removals, and other relevant information recorded during the assessment has been provided under separate cover.

5.5 Breeding Bird Surveys

A total of 17 bird species were observed during breeding bird surveys in 2024 (Table 6). Of the 17 species observed, all are considered secure (S4) to very common (S5) in the province of Ontario. Of these species, one species of Special Concern, Eastern-Wood Pewee was observed singing within the woodland in the southern portion of the Study Area.

Table 6: Breeding Bird Survey Results

Scientific Name	Common Name	SARA ²	ESA ³	SRank ¹	Breeding Evidence ⁴
<i>Agelaius phoeniceus</i>	Red-winged Blackbird	---	---	S5	S
<i>Bombycilla cedrorum</i>	Cedar Waxwing	---	---	S5	S
<i>Cardinalis cardinalis</i>	Northern Cardinal	---	---	S5	S
<i>Contopus virens</i>	Eastern Wood-pewee	SC	SC	S4B	S
<i>Corvus brachyrhynchos</i>	American Crow	---	---	S5	S
<i>Cyanocitta cristata</i>	Blue Jay	---	---	S5	S
<i>Dryobates pubescens</i>	Downy Woodpecker	---	---	S5	S
<i>Melospiza melodia</i>	Song Sparrow	---	---	S5	S
<i>Molothrus ater</i>	Brown-headed Cowbird	---	---	S5	S
<i>Poecile atricapillus</i>	Black-capped Chickadee	---	---	S5	S
<i>Sitta canadensis</i>	Red-breasted Nuthatch	---	---	S5	S
<i>Sitta carolinensis</i>	White-breasted Nuthatch	---	---	S5	S
<i>Spinus tristis</i>	American Goldfinch	---	---	S5	S
<i>Spizella passerina</i>	Chipping Sparrow	---	---	S5B	S
<i>Troglodytes aedon</i>	House Wren	---	---	S5B	S
<i>Turdus migratorius</i>	American Robin	---	---	S5	S
<i>Vireo olivaceus</i>	Red-eyed Vireo	---	---	S5B	S

¹Ontario SRank; S5 = secure; S4= apparently secure; S3 = vulnerable; S2 = imperilled; SX = Extirpated; SH = Possibly Extirpated; SNA = non-native or exotic species to Ontario; ²Federal Species at Risk Act (END= endangered, THR= threatened); ³Ontario Endangered Species Act (END= endangered, THR= threatened).

⁴Observed

X Species observed in its breeding season (no breeding evidence)

Possible

H Species observed in its breeding season in suitable nesting habitat

S Singing male(s) present, or breeding calls heard, in suitable nesting habitat in breeding season

Probable

P Pair observed in suitable nesting habitat in nesting season

T Permanent territory presumed through registration of territorial song, or the occurrence of an adult bird, at the same place, in breeding habitat, on at least two days a week or more apart, during its breeding season.

D Courtship or display, including interaction between a male and a female or two males, including courtship feeding or copulation

V Visiting probable nest site

A Agitated behaviour or anxiety calls of an adult

B Brood Patch on adult female or cloacal protuberance on adult male

N Nest-building or excavation of nest hole, except by a wren or a woodpecker

Confirmed

NB Nest-building or excavation of nest hole by a species other than a wren or a woodpecker

DD Distraction display or injury feigning

NU Used nest or egg shells found (occupied or laid within the period of the survey)

FY Recently fledged young (nidicolous species) or downy young (nidifugous species), including incapable of sustained flight

AE Adult leaving or entering nest sites in circumstances indicating occupied nest

FS Adult carrying fecal sac

CF Adult carrying food for young

NE Nest containing eggs

NY Nest with young seen or heard

Potential impacts to wildlife are discussed in **Section 8.1.3**.

5.6 Significant Wildlife Habitat

No snags or bat habitat was observed within the Project Boundary through the 2024 field program. Therefore, woodlands in the Study Area are not considered Candidate SWH for Bat Maternity Colonies.

As discussed above in **Section 5.5**, a single Eastern Wood-pewee (*Contopus virens*) was heard singing in the Dry-Fresh Scotch Pine Plantation during the breeding season. Although the species is listed as Special Concern in Ontario, it is Dillon's opinion that it is common in southern Ontario, and that a single record of Eastern Wood-Pewee would not be considered significant. Additionally, given that habitat for the species is not limiting within the surrounding area, there is a large amount of available habitat for this bird within the landscape.

5.7 Species at Risk

It was flagged during the background review (Section 3.0) that SAR Bats and Butternut (*Juglans cinerea*) could occur within the Study Area. Specific surveys for bat maternity colonies were conducted as part of this NHE, which resulted in no bat maternity colonies being observed in the Study Area. As the existing building within the Project Boundary is well maintained, the likelihood for SAR bats to be utilizing that structure is low.

No Butternut or other SAR plants were recorded during flora surveys in the 2024 field program.

No other SAR or SAR habitat was identified within the Study Area during 2024 surveys.

Potential impacts to wildlife are discussed in **Section 8.1.3**.

5.8 Incidental Wildlife

Incidental wildlife species observed within the Study Area are listed in **Table 7** below. All species observed are common in the Town of Aurora and have an S-Rank of S4 or S5, except for the Cabbage White.

Table 7: Incidental Wildlife Observations

Scientific Name	Common Name	SARA ¹	ESA ²	SRANK ³
BIRDS				
<i>Colaptes auratus</i>	Northern Flicker	---	---	S4B
<i>Picoides pubescens</i>	Downy Woodpecker	---	---	S5
<i>Poecile atricapillus</i>	Black-capped Chickadee	---	---	S5
<i>Sitta canadensis</i>	Red-breasted Nuthatch	---	---	S5
<i>Vireo olivaceus</i>	Red-eyed Vireo	---	---	S5B
<i>Zenaida macroura</i>	Mourning Dove	---	---	S5
MAMMALS				
<i>Sciurus carolinensis</i>	Eastern Gray Squirrel	---	---	S5
LEPIDOPTERA				
<i>Pieris rapae</i>	Cabbage White	---	---	SNA

¹Federal Species at Risk Act; ²Ontario Endangered Species Act; ³Ontario SRank; S5= secure; S4= apparently secure; B = breeding population; --- denotes no information

6.0

Ecological Function

Natural features within the Study Area were analyzed to determine their ecological function. At the larger landscape scale, the Study Area lies within the East Holland River subwatershed which is part of the larger Lake Simcoe watershed within the region known as the Simcoe Lowlands. The Study Area is primarily composed of several single detached residential properties, surrounded by a woodland.

Woodlands within the Study Area provides limited ecological function, providing cover, foraging, refuge, and nesting habitat for urban terrestrial wildlife. It does not contain Significant natural features, such as SWH or SAR habitat.

7.0

Description of Proposed Development

The proposed development at 107 Ridge Road, Aurora consists of 5-single family dwellings. The two homes will be accessed from Glensteeple Trail and three homes will be accessed from Ridge Road. **(Figure 3)**.

Construction of the proposed development would include the removal of trees and vegetation from the development area, construction of dwellings and placement of hardscape (driveways, sidewalks). Landscaping would include, but is not limited to, installation of patios, fencing, sod, and tree plantings.

The potential impacts of the development and the mitigation measures will be discussed in **Sections 8.0** and **9.0**.

RIDGE ROAD

GLENSTEETLE TRAIL

107 RIDGE ROAD NHE

2693642 ONTARIO INC.

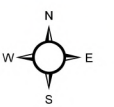
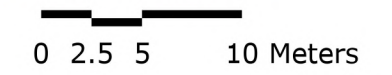
SITE PLAN

FIGURE 3

- Project Boundary
- Study Area (120 m Setback)
- Proposed Site Plan
- Addition (70.98 m²)
- Encroachment (70.55 m²)
- Staked Dripline
- Limit of Development (Limit of Construction & Limit of Grading)
- Setback 5 m
- Setback 7 m



SCALE 1:375



MAP DRAWING INFORMATION:
 DATA PROVIDED BY MNR
 AERIAL IMAGERY BY ESRI

NOT A LEGAL SURVEY

MAP CREATED BY: -DU
 MAP CHECKED BY: -MB/AC
 MAP PROJECTION: NAD 1983 CSRS UTM Zone 17N



PROJECT: 24-8060
 STATUS: DRAFT
 DATE: 2025-03-26

Maxar, Microsoft

8.0 Impact Assessment

8.1 Potential Direct Impacts

Potential direct impacts are those that are immediately evident as a result of a development. Typically, the adverse effects of potential direct impacts are most evident during the site preparation and construction phase of a development. Potential direct impacts of the proposed development include the following:

- Diversion of Stormwater flows;
- Erosion and sedimentation into natural features (woodland);
- Tree and vegetation removal;
- Loss of/ disturbance to wildlife and wildlife habitat.

8.1.1 Diversion of Stormwater Flows / Erosion and Sedimentation of Natural Features

Construction activity, especially operations involving the handling of earthen material, increases the availability of sediment for erosion and transport via surface drainage. Potential impacts to natural features may include, but are not limited to disturbance to or loss of additional vegetation due to the deposition of dust and/or overland mobilization of soil.

Development of an area also affects the natural water balance. The most significant difference is the addition of impervious surfaces (roads, parking lots, driveways). Impervious surfaces prevent infiltration of water into the soils and the removal of the vegetation removes the evapotranspiration component of natural water balance.

These potential impacts are preventable with the use of best construction practices, an erosion and sediment control plan and monitoring, which has been further detailed in **Sections 9.1 – 9.2**.

8.1.2 Tree and Vegetation Removal

The proposed development plan indicates tree and ground vegetation removal limited to the development area as shown on **Figure 3** to facilitate grading and construction of the development.

As the trees to be removed within the Project Boundary are located within the manicured lawn of the residence, tree removal will result in a minor reduction of tree cover, marginal wildlife habitat loss, and alteration of soil conditions. On a site level, the impacts of tree and vegetation removal may include:

- Decreased floral species richness and abundance;
- Altered soil conditions and water availability;
- Alteration of microclimate;
- Loss of native seed banks; and,

- Physical injury, root damage, and compaction of trees not intended for removal that may result from construction operations.

Refer to **Section 9.0** for mitigation and enhancement opportunities.

8.1.3 Loss of and/or Disturbance to Wildlife and Wildlife Habitat

Flora and fauna may be impacted due to vegetation clearing during construction within the Project Boundary. Habitat for flora and fauna may be impacted by construction in the following ways:

- Displacement, injury, or death resulting from contact with heavy equipment during clearing and grading activities;
- Disturbance to wildlife as a result of noise associated with construction activities, particularly during breeding periods; and,
- Loss of wildlife and wildlife habitat.

Related mitigation measures for wildlife and their habitat have been recommended for the development area and are included in **Section 9.0**, with specific measures found in **Section 9.5**.

8.2 Potential Indirect Impacts

Potential indirect impacts are those that do not always manifest in the core development area, but in lands adjacent to the development. Indirect impacts can begin in the construction phase; however, they can continue post-construction. Potential indirect impacts of the proposed development include anthropogenic disturbance and colonization of non-native and/or invasive species.

8.2.1 Anthropogenic Disturbance

Disturbance to local wildlife communities due to indirect impacts on the lands adjacent to the proposed development could result if left unmitigated. Noise, light, vibration and human presence are indirect impacts that can adversely influence the population size and breeding success of local wildlife. Although lands within the Study Area are already disturbed with residential development, mitigation measures that further address anthropogenic disturbance have been included in **Section 9.0**.

8.2.2 Colonization of Non-native and/or Invasive Species

Physical site disturbance may increase the likelihood that non-native and/or invasive flora species will be introduced to the surrounding vegetation communities. Invasive flora can establish in disturbed sites more efficiently than native flora and can then encroach into adjacent undisturbed areas.

This is already occurring as many invasive and non-native species were recorded within the Project Boundary, which is typical of altered landscapes. The majority of the property is currently residential development and so the colonization of invasive species is possible if left in its current state.

Mitigation measures relating to invasive species have been included in **Section 9.4**.

9.0 Mitigation and Enhancement Opportunities

Mitigation involves the avoidance or minimization of developmental impacts through good design, construction practices and/or restoration and enhancement activities. The feasibility of mitigation options has been evaluated based on the natural features within and adjacent to the Project Boundary. The impact assessment highlighted four potential direct impacts: diversion of surface water flows, erosion and sedimentation of natural features, tree and vegetation removal, and loss of and/or disturbance to wildlife and wildlife habitat.

A variety of mitigation techniques can be used to minimize or eliminate the above-mentioned impacts. These measures include implementation of Stormwater Management Plan, Erosion and Sediment Control Plan, Natural Heritage Buffers, Landscaping and Planting Plan, Wildlife Management and an Environmental Monitoring Plan. Mitigation measures recommended for the proposed development are introduced below.

9.1 Stormwater Management Plan

A Servicing and Stormwater Management Report was prepared by SITEPLANTECH Inc. in March 2025 which was utilized for this section of the NHE Report.

An existing 300 mm PVC storm sewer is located near the west side of Glensteeple Trail and drains south before turning west to an existing stormwater management pond located approximately 20 m south-west of the Project Boundary. Surface water generally flows in a north-west direction towards Ridge Road, some of which passes through the adjacent private property on the way to Ridge Road. A ditch located just north of the property line carries water collected from a ditch inlet catch basin at the southeast corner of Glensteeple Trail and Ridge Road. This water flows through a cross-culvert beneath Glensteeple Trail and continues through another cross-culvert beneath Ridge Road, draining from the south side to the north side.

In the area that is heavily treed and vegetated, where development is not proposed, the drainage pattern will remain untouched having the surface water from this area flow in a north-west direction towards Ridge Road and some of it passing through the adjacent private property on the way to Ridge Road. The other area will be directed towards a trench that will be sized to infiltrate the flow generated from this catchment area and will outlet to Glensteeple Trail and ultimately draining into the adjacent stormwater management control pond located just beyond the south Project Boundary.

Peak runoff rates for the proposed development were designed to match the pre-development flows, event-to-event and will be achieved by implementing on-site infiltration trenches. A total storage volume of 22.3 m³ is required to meet quantity controls and water balance.

In order to mitigate loss of/ and or impacts to surface water and hydrological functions within the Project Boundary, a combination of standard SWM measures and LID design techniques are recommended to replicate the existing hydrological functions. LID techniques can (and should) also be integrated into developments to ensure that post-development flows match pre-development flows and that no negative impact would result from a proposed development.

As mentioned by SITETECH Inc. in their servicing report (2025), infiltration trenches are proposed to capture the controlled runoff, and therefore quality control assessment is not required.

Please refer to the Servicing and Stormwater Management Report (SITEPLANTECH Inc., 2025) for further details.

9.2 Erosion and Sediment Control

An Erosion and Sediment Control Plan has been included in SITEPLANTECH Inc.'s Servicing and Stormwater Management Report (2025) within Section 7.0. To ensure stormwater runoff during construction does not transport sediment to the existing municipal infrastructure, temporary catchbasin sediment control devices are proposed on Glensteeple trail along the site. A temporary sediment control fence will be around the site perimeter and a temporary construction access (mud mat) will be built at the construction entrance on Ridge Road to minimize sediment loading to the adjacent properties and municipal right-of way. The measures will be designed and constructed in accordance to the "Erosion and Sediment Control Guideline for Urban Construction" document (TRCA,2019).

9.3 Natural Heritage Feature Buffers

The small portion of the adjacent woodland which falls within the Project Boundary will be protected from development with a 7 m variable buffer. The remainder of the proposed development area provides limited ecological function and thus, the removal of select trees and other vegetation will result in little overall habitat loss, reduction of natural cover in the area, and reduction in ecological function within the Study Area.

The proposed development area will be limited to the boundaries shown on **Figure 3**, with a variable 7 m buffer, with at least 5 m of buffer between the proposed development and the edge of tree staked dripline of the woodland. The encroachment into the 7 m buffer accounts for 70.61 m², while the buffer that extends past the 7 m buffer is 71.05 m². To support the prevention of invasive species colonization within the buffer, planting of native species is recommended. Plantings will also increase the quality of habitat within the buffer and provide better protection to wildlife and the adjacent natural features. As a result, a Landscaping and Planting Plan has been drafted (see **section 9.4**).

9.4 Landscaping and Planting Plan

The proposed development plan will require the removal of select trees, shrubs, wildflowers and grasses within the Project Boundary. As a result, a Landscaping and Planting Plan has been prepared by Landscape Planning Ltd. (2025) for the proposed development to help support the off-set any vegetation removal using native tree and shrub species. The exact number of compensation plantings and / or cash in lieu payment is to be determined through further consultation with the Town upon their review and approval of the Arborist Report (Dillon, 2025).

The following monitoring and maintenance measures may also be recommended:

- Removal of invasive tree and shrubs, where applicable;
- Watering and weeding of newly planted areas as required for proper establishment of plantings; and
- Replacement of dead material from previous year's planting.

9.5 Wildlife Impact Mitigation Plan

The establishment of the a 7 m variable buffer from the woodland is expected to minimize potential impacts to wildlife. Strategies to mitigate these potential, minimal impacts to general wildlife prior to and during construction are proposed. These may include (but are not limited to):

- Clearing trees and vegetation outside the breeding bird season (April 1st to August 31st). Should any clearing be required during the breeding bird season, nest searches conducted by a qualified person must be completed 48 hours prior to clearing activities. If nests are found, work within 10 m of the tree should cease until the nest has fledged. If no nests are present, clearing may occur. This is in accordance with the federal *Migratory Birds Convention Act*;
- Clearing trees and buildings outside the active bat season (May through October);
- Where possible, maximize the distance of construction equipment used from the woodland edge to avoid disturbing wildlife;
- Limit the use of lighting where possible. Avoid light effects entering the woodland (eliminate light trespass) where possible;
- Construction crews working on site should be educated on local wildlife and take appropriate measures for avoiding wildlife; and,
- Should an animal be injured or found injured during construction they should be transported to an appropriate wildlife rehabilitation center.

9.6 Environmental Monitoring Plan

The Environmental Monitoring Plan (EMP) may be carried out through the duration of construction activities on-site to ensure that the erosion and sediment control measures operate effectively and to monitor the potential impact, if any, upon the natural environment. The duration of construction is defined as the period of time from the beginning of earthworks until the site is stabilized. Site

stabilization is defined as the point in time when the roads have been paved, buildings have been built, lawns have been sodded and restoration plantings have been completed.

The EMP should consist of monitoring the erosion and sediment measures and the restoration/compensation plantings. Erosion and sediment control measures would be regularly monitored and they will require periodic cleaning (e.g. removal of accumulated silt), maintenance and/or re-construction. Inspections of all of the erosion and sediment controls on the construction site should be undertaken by a certified sediment and erosion control monitor. If damaged control measures are found they should be repaired and/or replaced promptly. Site inspection staff and construction managers should refer to the *Erosion and Sediment Control Guide for Urban Construction* (TRCA, 2019) prepared for the Greater Golden Horseshoe Area Conservation Authorities. This guide provides information related to the inspection reporting, problem response and proper installation techniques.

The EMP should be implemented during active construction periods in the development area with the following frequency:

- On a bi-weekly basis; and/or,
- After every 10 mm or greater rainfall event.

10.0

Policy Conformity

Based on the information presented in this NHE report, applicable provincial and municipal policies related to natural heritage features have been met. Each of the applicable policies outlined in **Section 2.0** have been summarized in **Table 8**, below:

Table 8: Policy Conformity Table

Policy	Demonstrated?	Required Actions
Provincial Policy Statement (2024)	No encroachment within natural heritage features) is proposed. Further, a variable 7 m buffer will be added to protect features from adjacent impacts (Figure 3).	No action required.
Endangered Species Act (2007)	SAR and their habitat have not been located within the Project Boundary.	No action required.
Lake Simcoe Protection Plan (2009)	An NHE was completed for the development application that addresses the natural environment. Buffers have been established from natural features and will be planted with native vegetation species as per Policy 6.34.	No action required.
Greenbelt Plan (2017)	The Study Area falls within the Towns and Villages designation outside the Greenbelt, and therefore the policies of the Greenbelt do not apply.	No action required.
Growth Plan for the Greater Golden Horseshoe (2020)	The Study Area falls within “Settlement Area” as per the ORMCP. Natural heritage features within and adjacent to the Study Area are being protected, and are not anticipated to be impacted by development, as outlined in this NHE.	No action required.
Oak Ridges Moraine Conservation Plan (2017)	Proposed development adheres to policies regarding Settlement areas as outlined in the ORMCP.	No action required.
York Region OP (2022)	The woodland found on and adjacent to the Project Boundary are considered woodlands as identified on Regional Map 5. As outlined in this NHE, the woodlands are not expected be impacted by the proposed development provided the recommendations in this report are implemented.	No action required

Policy	Demonstrated?	Required Actions
Town of Aurora OP (2024)	<p>The proposed development falls primarily within Urban Residential lands. As detailed in this NHE, all woodlands will remain protected as part of the proposed development.</p> <p>Per Section 3.13.5 (c) of OPA 48, for “lands designated as Settlement area, a minimum vegetation protection zone greater or less than that specified” is permitted. Based on this policy, and the results of this NHE it was determined that a variable 7 m vegetation protection zone for the woodland will be provided, in lieu of the 30 m buffer outlined in the Town’s OP due to the presence of the invasive Scotch Pine trees that dominate the feature.</p>	No action required
LSRCA:	The Study Area for the proposed development falls outside the regulated limits of the LSRCA.	No action required

11.0

Summary and Next Steps

This NHE was prepared in support of a proposed development within the property located at 107 Ridge Road, in the Town of Aurora, Ontario. The NHE was required due to the presence of woodlands, on and adjacent to the Project Boundary which have the potential to be impacted by development activities. This NHE has been completed through the use of desktop background review and field studies: botanical inventory, ELC, bat habitat assessment and breeding bird surveys.

The majority of lands within the Study Area are primarily comprised of low-density residential development with single family dwellings, hedgerows, and landscape plantings. Natural features such as woodlands are located at the south to southwestern portion of the Project Boundary. The natural features may be used as cover, foraging, refuge, nesting habitat for urban wildlife; prevention of erosion and runoff, improved soil, water and air quality. Due to the ecological importance of these features, a variable 7 m buffer has been proposed with native species to protect the woodland is from the development.

Potential ecological impacts of development are anticipated to be minimal, but may include tree and vegetation removal, diversion of surface water flows, sedimentation of forest areas, and loss of potential wildlife habitat. These impacts are expected to be avoided or minimized by implementing the mitigation, restoration, and management measures described in this report.

Appendix A

Terms of Reference



MEMO

TO: Lawrence Kuk, Town of Aurora
Adam Robb, Town of Aurora
David Ruggle, Lake Simcoe Region Conservation Authority

FROM: Anna Cunningham, Dillon Consulting Limited
Steve Greidanus, Dillon Consulting Limited

CC: Tony Khani, Ryther Developments
Jim Kotsopoulos, JKO Planning

DATE: May 7, 2024

SUBJECT: Natural Heritage Evaluation Terms of Reference for the proposed development at 107 Ridge Road, Aurora

OUR FILE: 24-8060

Introduction

Dillon Consulting Limited (Dillon) has been retained by 2693642 Ontario Inc. c/o Ryther Developments to undertake environmental studies for a proposed development project at 107 Ridge Road, in the Town of Aurora (the Town) (the Property; Figure 1). As such, Dillon is taking a pro-active approach to environmental-first planning and undertaking the appropriate environmental studies that are required to complete a Natural Heritage Evaluation (NHE).

In keeping with the general policies of the Town of Aurora's Heritage Impact Assessments and Conservation Plans Guides (2017), we have prepared the following Draft Terms of Reference (ToR). Below, we present the ToR in a check-list format to ensure that the required work and/or studies are known and agreed to prior to the commencement of work, to facilitate a stream-lined and timely review process.

The Property is currently developed (single detached family homes) and is surrounded by woodlands. The woodlands are designated as Woodland in Schedule E1 of the Town's Official Plan, which also show a 30 m Minimum Protection Zone buffer around the feature. The Property is also located within a designated Settlement Area as per the Oak Ridges Moraine Conservation Plan. The proposed development will remove the woodlands on the Property. During previous consultation between the client and the Town, it was agreed that woodlands can be removed for developments, pending approval of the development application from the Town. It is Dillon's understanding that reviewing agencies are in general support of woodland removal on the Property. One of the outcomes of the NHE is to assess the significance of this woodland in order to provide support for this activity.

Terms of Reference

General Policies

- The NHE must be undertaken by a qualified professional in environmental or related sciences to the satisfaction of the Town.

- A visit to the site may be required by the Town prior to, during, or upon receipt of the NHE.
- The staking of significant natural features (i.e., woodlands, top of bank, etc.) by the Town may be required. Staking will generally occur between the end of May and the end of October. Any staking that occurs outside of this time may require a confirmatory visit between May and October.

Existing Conditions

- The existing conditions of the Property must be clearly described and clearly mapped on aerial photographs.
- The description must include the zoning and all designations of all Official Plan(s) (OP) on the Property. This includes any land use designations from other municipal planning documents, such as Secondary Plans.
- Land use designations from any other applicable planning documents (i.e., Oak Ridges Moraine Conservation Plan, Greenbelt Plan), if applicable, must be clearly described and the limits identified in the mapping.
- The NHE shall identify the components of the Town's Natural Heritage System (should it be located on the Property). The boundaries of the Town's Natural Heritage System shall be confirmed in the field by the proponent, mapped on a figure in the report and approved by the Town.
- All designated environmental features must be identified in the mapping and described in the report. These features include provincial or regional Areas of Natural and Scientific Interest (ANSIs), Provincially Significant Wetlands (PSWs), Environmentally Significant Areas (ESAs), etc.
- A description of the soils, landforms and surficial geology based on a review of available mapping and literature must be described in the report.
- Hydrological and hydrogeological resources and issues, including surface water features, recharge/discharge zones, groundwater quality and quantity, area specific infiltration groundwater elevations and flow directions, and connections between groundwater and surface water features will be identified based on the information available from the consulting team (i.e. stormwater management report, hydrogeological report, etc.) and potential impacts and mitigation measures related to the natural environment will be incorporated in the NHE report.
- The vegetation communities must be identified using the Ecological Land Classification (ELC) system to vegetation type, where possible. The communities must be identified in the mapping, using the appropriate ELC codes, as well as described in the text. As a component of the ELC, a plant list must be included as an appendix. The list must include an analysis for the presence of federal, provincial, regional and/or watershed rare, threatened or endangered species.

- A single-season (summer) plant survey is required and must be included as an appendix. The list must include an analysis for the presence of federal, provincial, regional and/or watershed rare, threatened or endangered species.
- The NHE requires a breeding bird survey. The survey must be conducted during the breeding bird season at an appropriate time of day in appropriate weather conditions and by a qualified professional. A minimum of two surveys are required and they must follow generally accepted scientific protocols, not necessarily atlasing methods. A list of the breeding birds is required as an appendix. The list must include an analysis for the presence of federal or provincial rare, threatened or endangered species.
- The NHE requires a breeding amphibian/reptile survey. The survey must be conducted during the breeding amphibian season and by a qualified professional. For calling amphibians a minimum of three surveys are required. These surveys must span the full amphibian breeding season to ensure that the peak periods of activity for early and late breeding species are accounted for. For non-calling amphibians, appropriate methodology must be used. A list of the breeding amphibians is required as an appendix. The list must include an analysis for the presence of federal, provincial, threatened or endangered species.

Note: Wetlands and/or vernal pools have not been identified within the area for the property or adjacent parkland, therefore, a breeding amphibian/reptile survey is not proposed.

- A fisheries assessment shall be provided due to the presence of potential suitable fish habitat. Existing data regarding fish species shall be obtained from TRCA and/or the Ministry of Environment, Conservation, and Parks (MECP) and used for the fisheries assessment. The assessment shall include a description of watercourses or other fish habitat on and/or adjacent to the Property (where site access is permitted).

Note: No watercourses have been identified within the area for the property or adjacent parklands, therefore, a fisheries assessment is not proposed.

- The fisheries assessment will include community sampling through electrofishing and/or netting during the appropriate season, under a collection permit issued by the Ministry of Natural Resources and Forestry (MNRF).

Note: Fish community sampling is not proposed.

- All incidental wildlife observed shall be reported on and listed in an appendix. The list must include an analysis for the presence of federal or provincial rare, threatened or endangered species.

- ☒ A functional assessment of the Property describing the ecology of the natural heritage features and functions (including components of the natural heritage system) within and adjacent to the Property should be provided. The functional assessment may include ecological function, wetland functions, natural heritage features and landscapes, benefits of importance to humans, and corridors and linkages, as required.

Evaluation of the Ecological Impacts

- ☒ Mapping showing both existing conditions and the property (at a minimum) shall consist of the following:
 - a) All mapping must have a title, figure number, north arrow, legend and scale or scale bar.
 - b) A site location map that provides the regional or watershed context of the Property.
 - c) The extent of the Town's Greenland System / Natural Heritage System and its components; including significant natural areas must be clearly demarcated on an air photo base, if applicable.
 - d) The locations of all watercourses and waterbodies and an indication of their flow and thermal regimes, if applicable.
 - e) Vegetation communities must be delineated and identified using ELC.
 - f) The location of any rare, threatened or endangered species and/or populations shall be identified, if appropriate.
 - g) The location of any important wildlife features (i.e., hibernacula, den, stick nest, etc.) shall be identified.
- ☒ The potential impacts to the features and functions of natural areas shall be identified and discussed.
- ☒ An assessment of the potential impact on wildlife at a local, watershed and provincial (if applicable) level shall be provided.
- ☒ In the case of significant natural features (as confirmed through field studies), the NHE must demonstrate that there is no development or site alteration within the feature with the exception of uses as specified in the OP and/or prior approvals. The NHE must determine appropriate buffers from significant natural features.
- ☒ If applicable, a description of the natural features proposed for removal shall be provided. The quantity of removal shall also be included.

Recommendations and Mitigation Measures

- Avoidance of any Greenlands System feature is the preferred approach to mitigation unless otherwise specified in the OP and/or prior approvals.
- Determine adequate buffers through the identification of the critical function and protection zones of any identified natural areas.
- Where avoidance of a feature is not feasible or possible, mitigation approaches/techniques must be provided. These may include edge management plans, buffer plantings, fencing, low impact designs (LID), etc.
- In cases where a Linkage area has been identified on a property, the NHE must demonstrate how it will be integrated into the proposed development plan.
- Recommendations for Best Management Practices during construction will be provided. This may include silt fencing, tree protection, soil compaction, fencing, identification of timing and/or seasonal constraints to construction or restoration, etc.
- Mitigation for negative impacts on the natural features or their ecological functions (or to achieve no net negative impact) may include, at the discretion of the Town, approaches to replace lost areas or functions.
- If monitoring is required, the details of a monitoring program must be agreed to in writing by the Town and other parties.

Conclusions

The NHE will consider the following:

- Conformity with the policies and requirements of the Town of Aurora's Official Plan.
- Conformity with the policies and requirements of other applicable planning documents (i.e., PPS, Natural Heritage Reference Manual, etc.)
- Conformity with the requirements of the Town.

Species at Risk

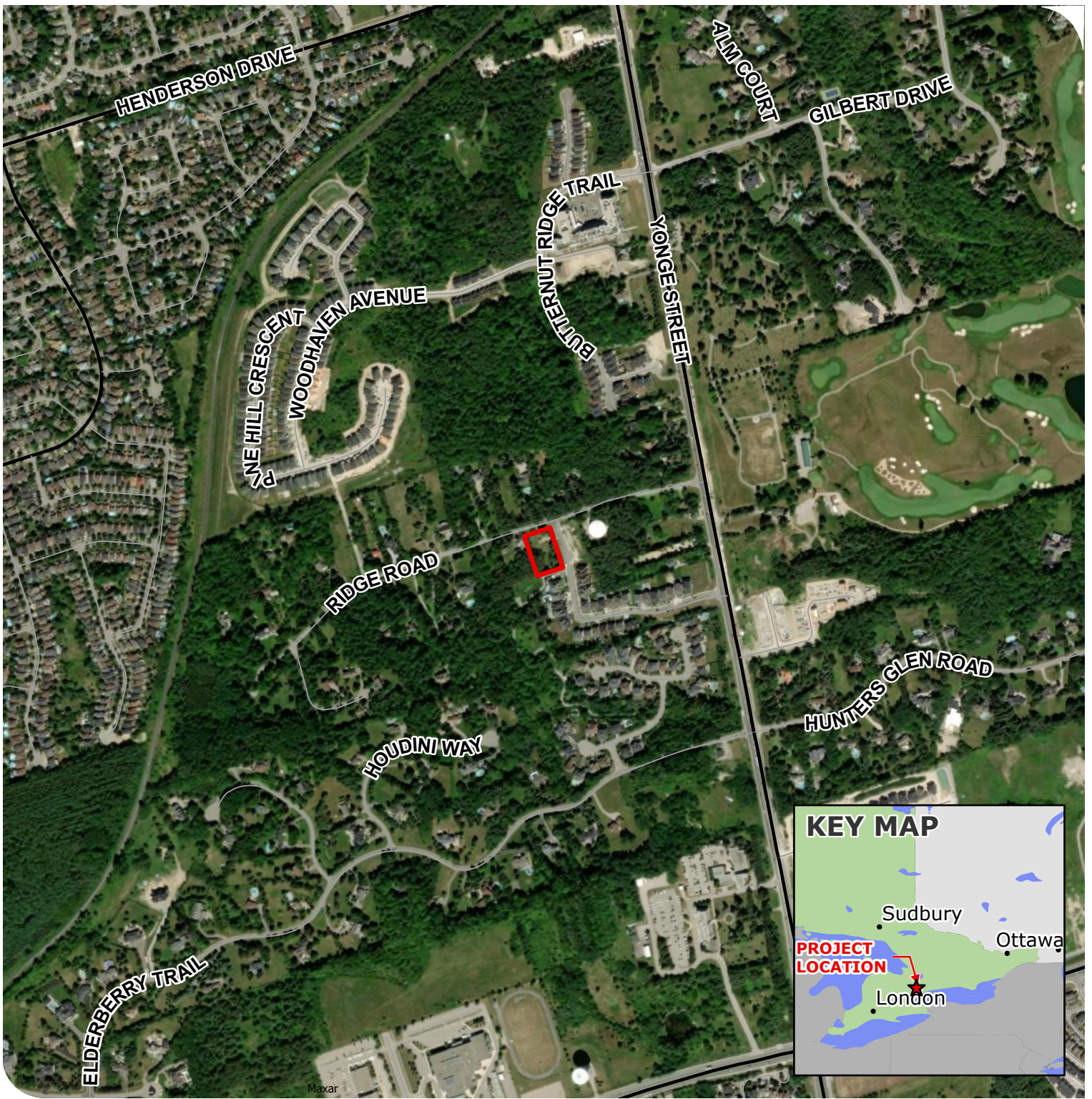
Should any Species at Risk or their habitat be identified during the NHE process and confirmed in the field, the MECP will be notified and we will address any Species at Risk requirements as outlined in the *Endangered Species Act, 2007* under separate cover with MECP. The Town will be informed of MECP approvals that are acquired.

Information Request

At this time we are requesting any of the following background information, if available:

- Natural environment studies in and/or adjacent to the Property;
- Regionally or locally significant/rare flora, fauna, vegetation communities; and,
- Any additional natural environment data you may have for the indicated area.

In addition to the background information listed above, we note that a data request will be submitted to the LSRCA for the property in order to supplement data collected during the proposed 2024 field studies.



107 RIDGE ROAD TOR

- Project Boundary
- Major Road
- Minor Road

2693642 ONTARIO INC.

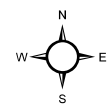
PROJECT LOCATION

FIGURE 1



MAP DRAWING INFORMATION:
DATA PROVIDED BY

MAP CREATED BY: -DU
MAP CHECKED BY: -SG
MAP PROJECTION: NAD 1983 CSRS UTM Zone 17N



SCALE 1:10,000

0 100 200 Meters

PROJECT: 24-8060

STATUS: DRAFT

DATE: 2024-04-29

Appendix B

Official Plan Mapping























AURORA OFFICIAL PLAN

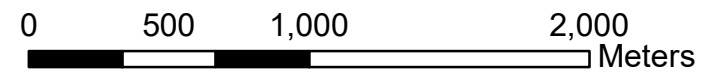
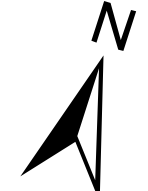
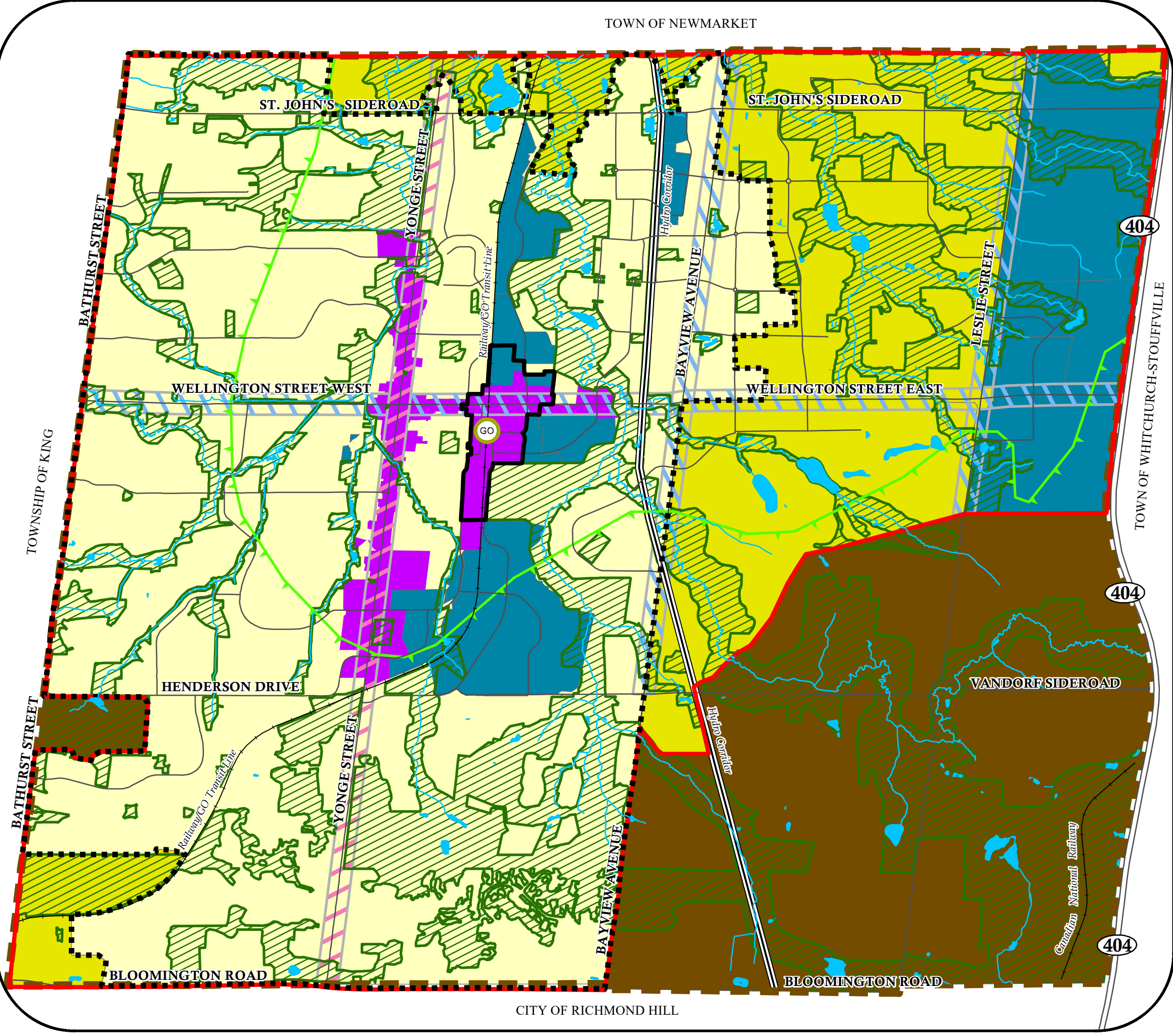
PLAN

SCHEDULE 'A'

Town Structure

Legend

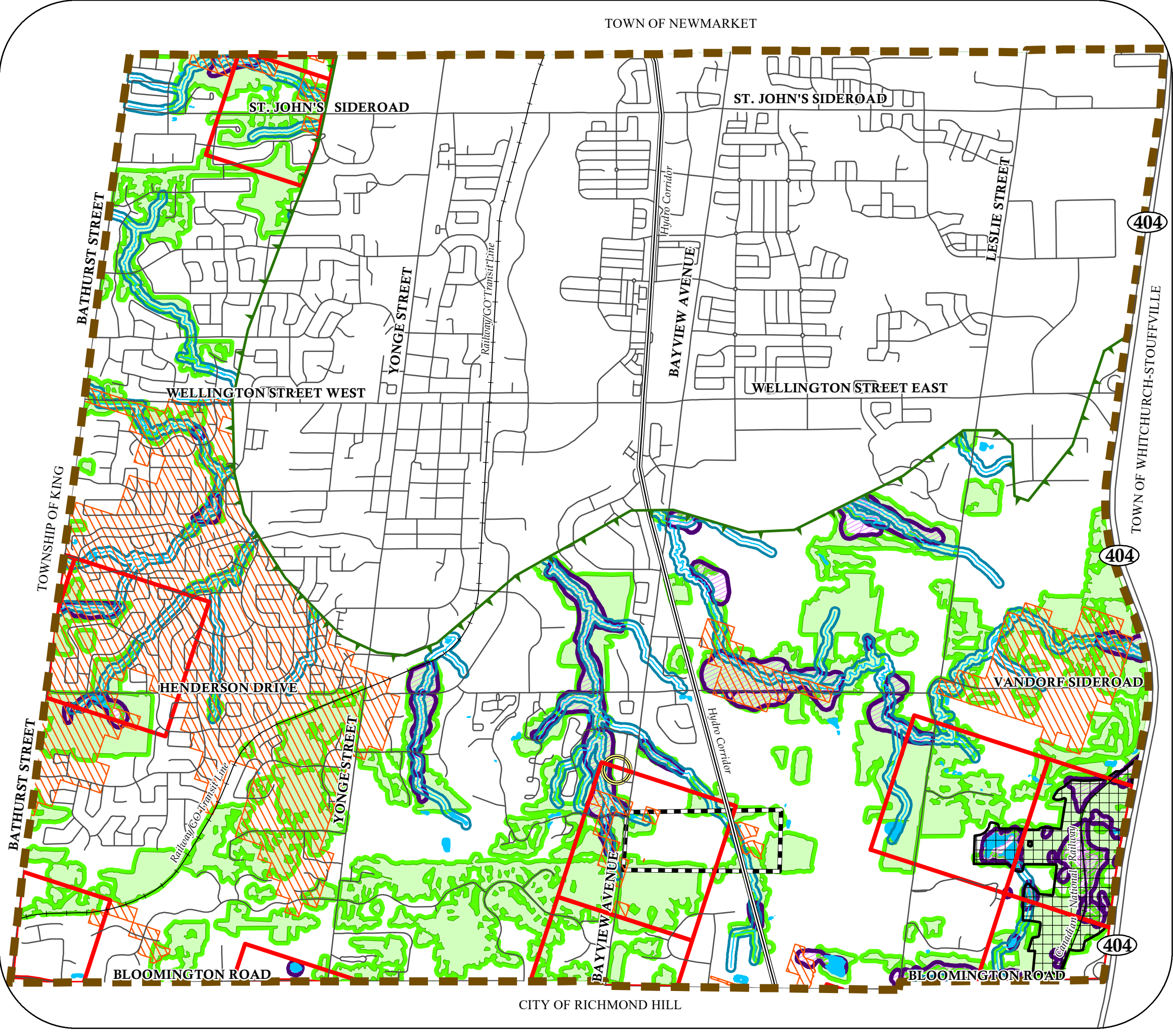
-  Municipal Boundary
-  Oak Ridges Moraine Boundary
 -  Boundary of Oak Ridges Moraine Conservation Plan Area Ontario Regulation 140/02
 -  Boundary of Oak Ridges Moraine Area Ontario Regulation 01/02
-  Urban Boundary
-  Built Boundary
-  Road
-  MTSA Boundary
-  Natural Heritage System
-  Watercourse/Waterbody
-  Railway
-  Hydro Corridor
-  GO Station
-  Agricultural System
-  Residential Designated Greenfield Area
-  Residential Neighbourhood
-  Employment Area
- Strategic Growth Area**
 -  Local Corridor
 -  Regional Corridor
 -  The Aurora Promenade and Aurora GO Station Major Transit Station Area





AURORA OFFICIAL PLAN SCHEDULE 'F1'

Environmental Designations On ORM (See OPA 48)

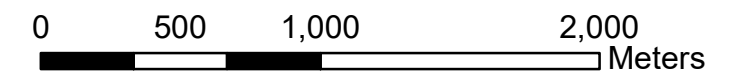


Legend

- Municipal Boundary
- Road
- Hydro Corridor
- Railway
- Oak Ridges Moraine Boundary
- Boundary of Oak Ridges Moraine Conservation Plan Area Ontario Regulation 140/02
- Boundary of Oak Ridges Moraine Area Ontario Regulation 01/02

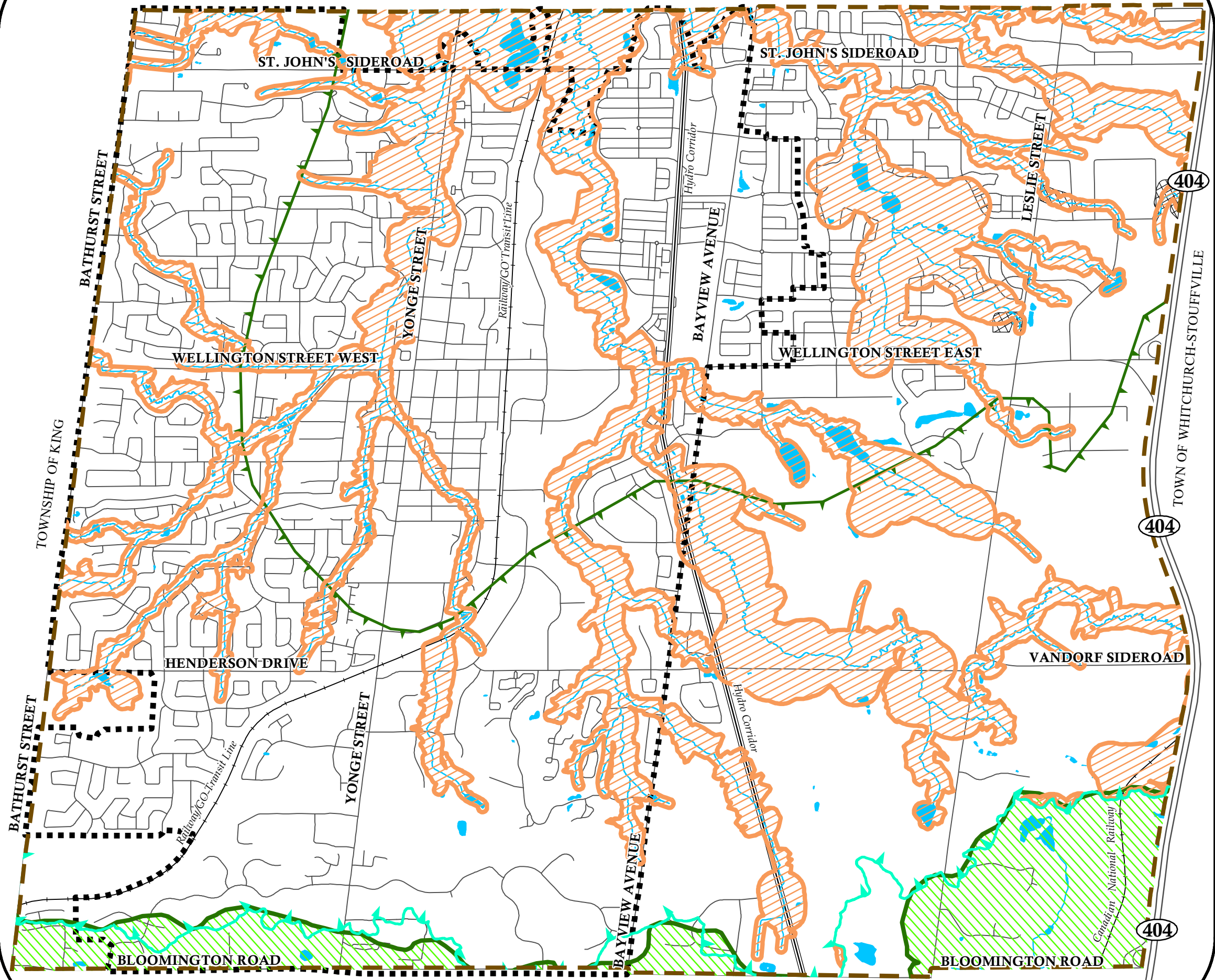
Environmental Features

- ORM - Endangered, Rare and Threatened Species
- Waterbodies
- Watercourse
- Watercourse - Minimum Vegetation Protection Zone (30m)
- Wetlands
- Wetlands - Minimum Vegetation Protection Zone (30m)
- Woodlands
- Woodlands - Minimum Vegetation Protection Zone (30m)
- Areas of Natural and Scientific Interest
- Highly Vulnerable Aquifer
- Former Waste Site
- Former York Sanitation Site No. 1



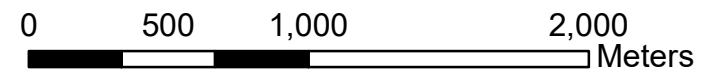
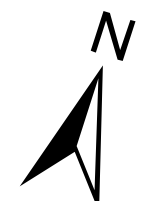


AURORA OFFICIAL PLAN SCHEDULE 'G' Conservation Authority Regulated Area










Legend

- Municipal Boundary
- Road
- Hydro Corridor
- Railway
- Oak Ridges Moraine Boundary
- Boundary of Oak Ridges Moraine Conservation Plan Area Ontario Regulation 140/02
- Boundary of Oak Ridges Moraine Area Ontario Regulation 01/02
- Built Boundary
- Waterbody
- Watercourse
- Regulation Limits**
- Lake Simcoe Region Conservation Authority
- Toronto Region Conservation Authority
- Lake Simcoe Protection Plan Watershed Boundary



MAP 1


REGIONAL STRUCTURE

-  Regional Centre
-  Regional Corridor
-  Urban Area
-  Towns and Villages
-  Agricultural System
-  Regional Greenlands System
-  Subject to Minister's Order February 3, 2015 and special provision policy 5.3.4

Greenbelt Plan

-  Greenbelt Plan Boundary



Oak Ridges Moraine Conservation Plan

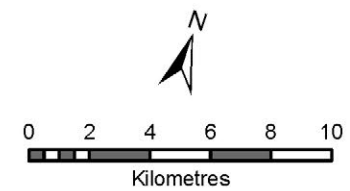
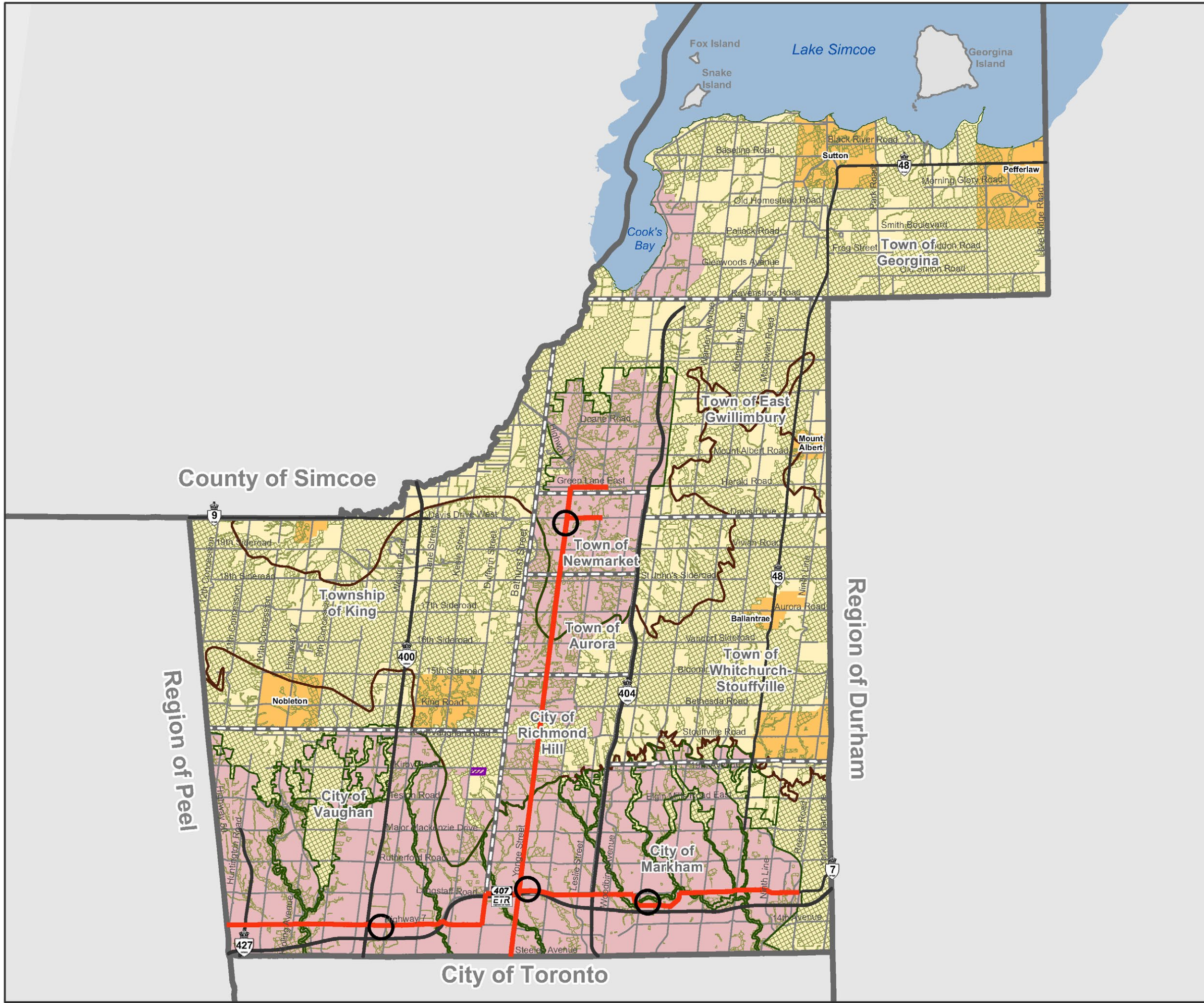
-  Oak Ridges Moraine Conservation Plan Boundary

Provincial Highways

-  Existing

Municipal Boundaries

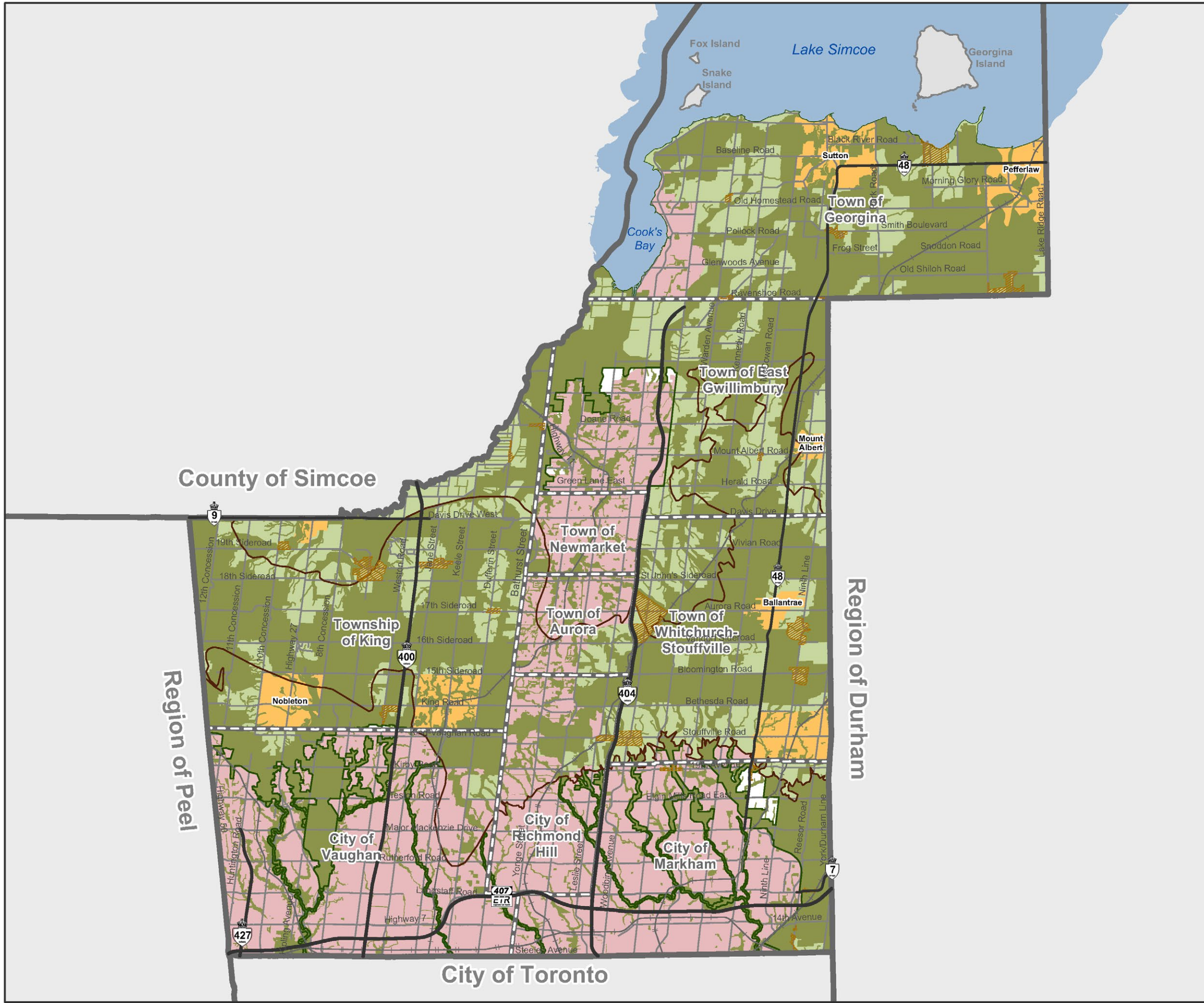
-  Regional Municipal Boundary
-  Local Municipal Boundary



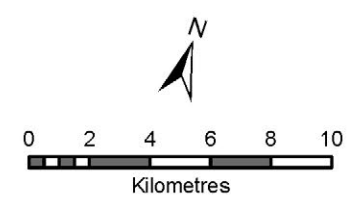
Produced by: The Regional Municipality of York
 Planning and Economic Development Branch, Corporate Services Department, 2024
 Data: The Regional Municipality of York, The Regional Municipalities of Durham and Peel,
 County of Simcoe, City of Toronto
 Queen's Printer for Ontario 2003-2024, Includes Greenbelt and Oak Ridges Moraine
 Boundaries and Water Features
 Based on best available data and may contain minor errors or omissions.

MAP 2

REGIONAL GREENLANDS SYSTEM



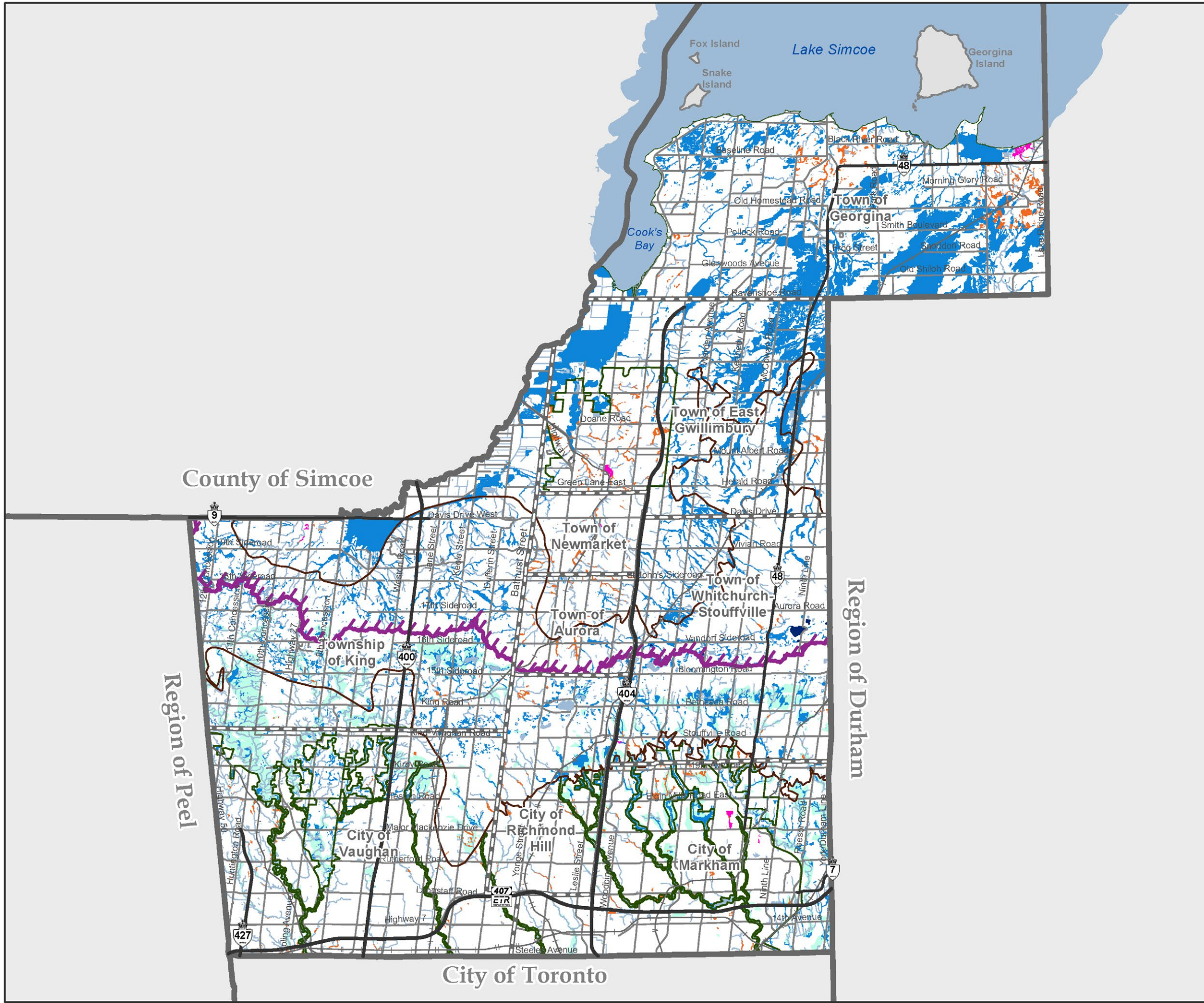
-  Regional Greenlands System
 -  Urban Area
 -  Towns and Villages
 -  Hamlets
- Greenbelt Plan**
-  Greenbelt Plan Boundary
 -  Protected Countryside
 -  Urban River Valley
- Oak Ridges Moraine Conservation Plan**
-  Oak Ridges Moraine Conservation Plan Boundary
 -  Countryside
- Provincial Highways**
-  Existing
- Municipal Boundaries**
-  Regional Municipal Boundary
 -  Local Municipal Boundary



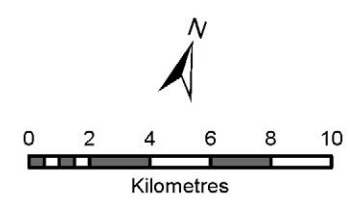
Produced by: The Regional Municipality of York
 Planning and Economic Development Branch, Corporate Services Department, 2024
 Data: The Regional Municipality of York, The Regional Municipalities of Durham and Peel,
 County of Simcoe, City of Toronto
 Queen's Printer for Ontario 2003-2024. Includes Greenbelt and Oak Ridges Moraine
 Boundaries and Water Features
 Based on best available data and may contain minor errors or omissions.

MAP 4

KEY HYDROLOGIC FEATURES



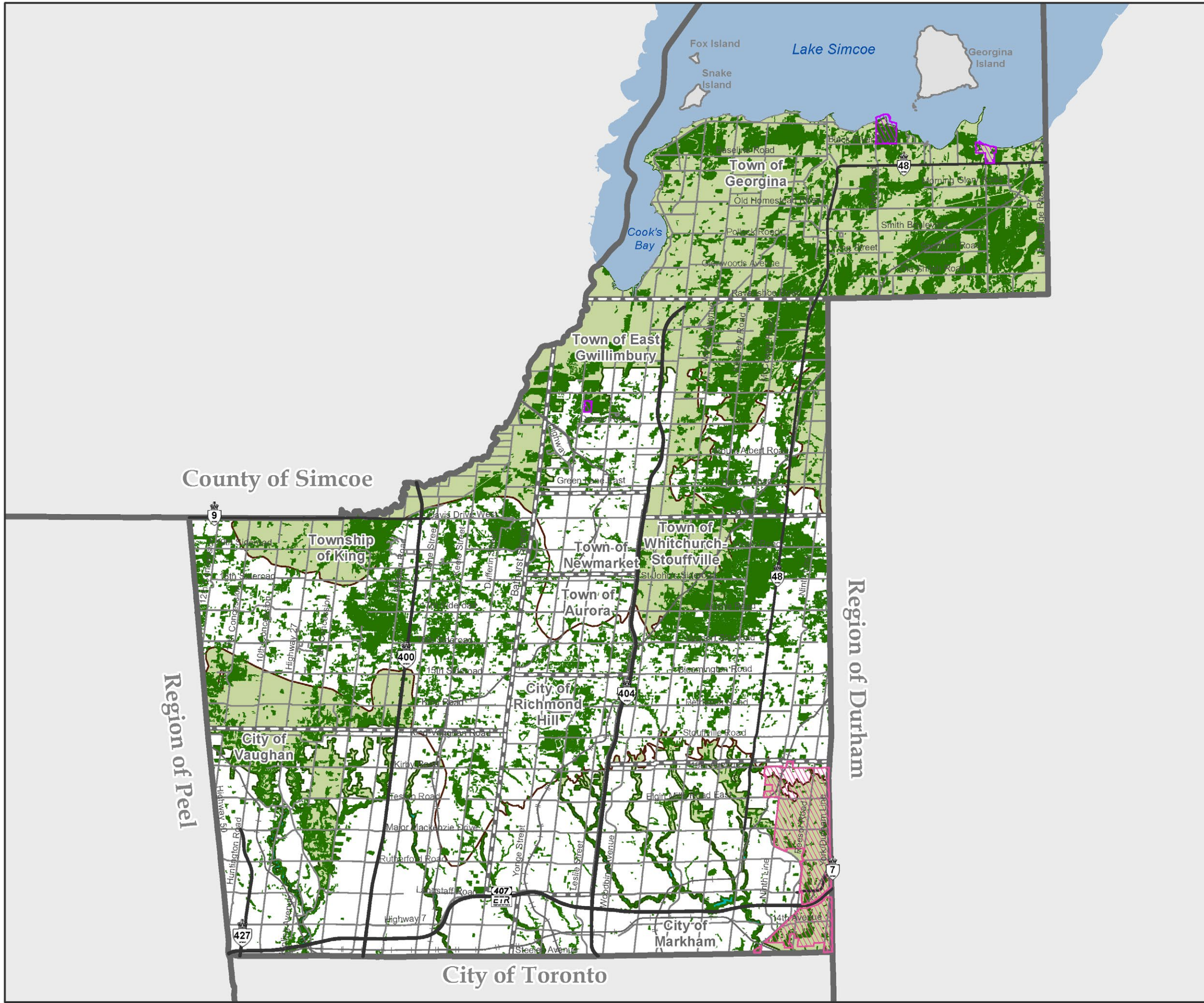
-  Area Subject to the Lake Simcoe Protection Plan
- Key Hydrologic Features**
 -  Provincially Significant and Provincial Plan Area Wetlands
 -  Other Evaluated Wetlands
 -  Wetlands not evaluated per Ontario Wetland Evaluation System
 -  Lakes
 -  Permanent or Intermittent Stream
 -  Seepage Areas and Springs (Toronto and Region Conservation Authority)
 -  Kettle Lakes
- Greenbelt Plan**
 -  Greenbelt Plan Boundary
 -  Urban River Valley
- Oak Ridges Moraine Conservation Plan**
 -  Oak Ridges Moraine Conservation Plan Boundary
- Provincial Highways**
 -  Existing
- Municipal Boundaries**
 -  Regional Municipal Boundary
 -  Local Municipal Boundary



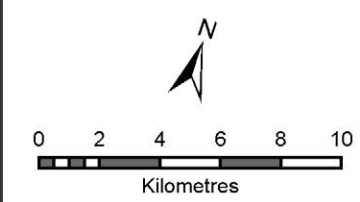
Produced by: The Regional Municipality of York
 Planning and Economic Development Branch, Corporate Services Department, 2022
 Data: The Regional Municipality of York, The Regional Municipalities of Durham and Peel,
 County of Simcoe, City of Toronto
 Queen's Printer for Ontario 2003-2022, Includes Greenbelt and Oak Ridges Moraine
 Boundaries and Water Features
 Based on best available data and may contain minor errors or omissions.

MAP 5

WOODLANDS



- Woodlands
 - Provincial Park
 - Rouge National Urban Park
- Greenbelt Plan**
- Greenbelt Plan Boundary
 - Protected Countryside
 - Urban River Valley
- Oak Ridges Moraine Conservation Plan**
- Oak Ridges Moraine Conservation Plan Boundary
- Provincial Highways**
- Existing
- Municipal Boundaries**
- Regional Municipal Boundary
 - Local Municipal Boundary



Produced by: The Regional Municipality of York
 Planning and Economic Development Branch, Corporate Services Department, 2022
 Data: The Regional Municipality of York, The Regional Municipalities of Durham and Peel,
 County of Simcoe, City of Toronto
 Queen's Printer for Ontario 2003-2022, Includes Greenbelt and Oak Ridges Moraine
 Boundaries and Water Features
 Based on best available data and may contain minor errors or omissions.

Appendix C

LSRCA Mapping

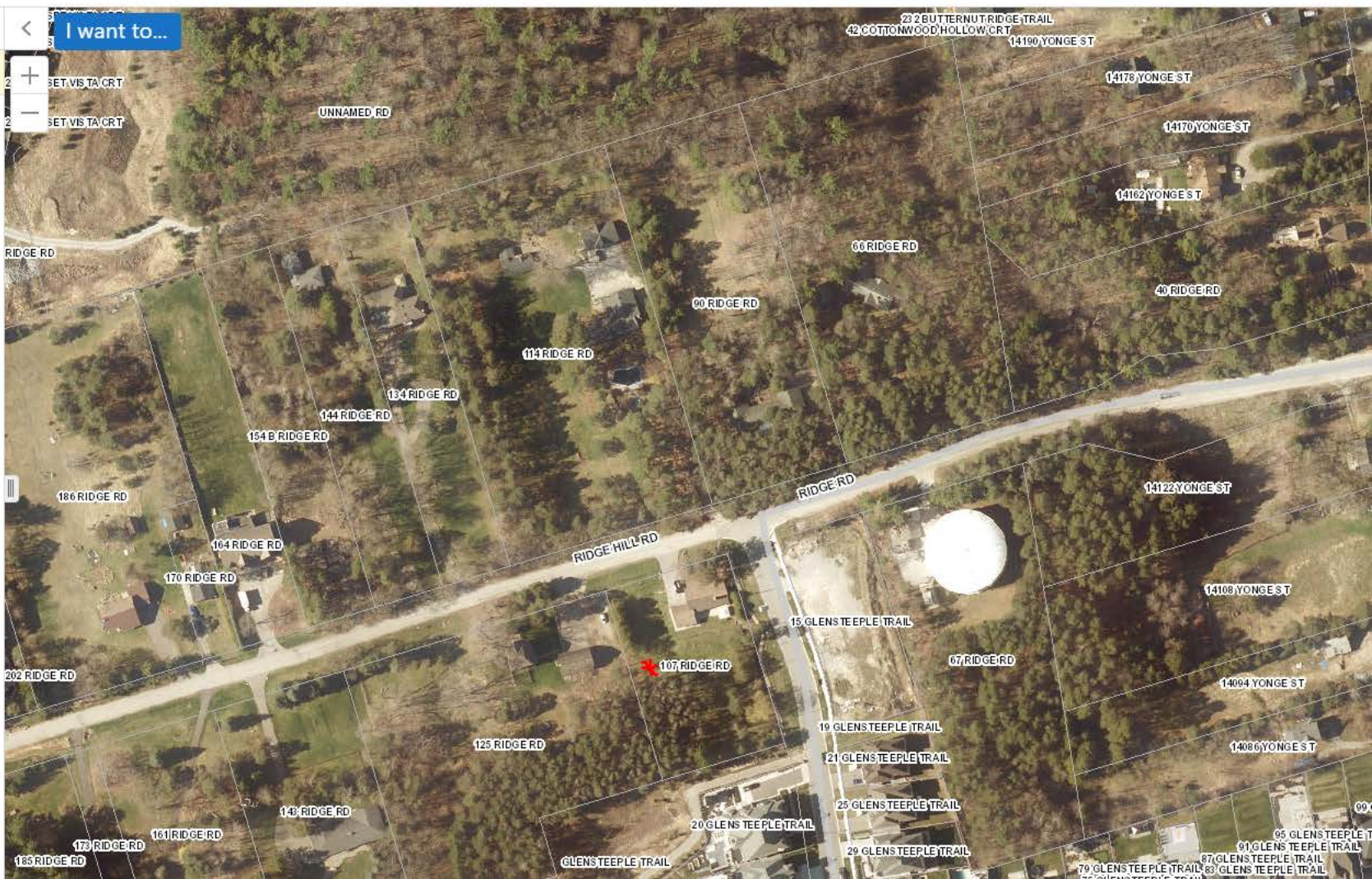


Search Results: 107 ridge road

I want to...

No results to display

Items appear after you perform a valid search or other task that returns results.



Appendix D

Site Photos

Photograph 1

June 6, 2024

TAGM5
Hedgerow

The hedgerow was dominated by Eastern White Cedar and abundant Virginia Creeper.



Photograph 2

June 6, 2024

CVR_3 Single
Family
Residential

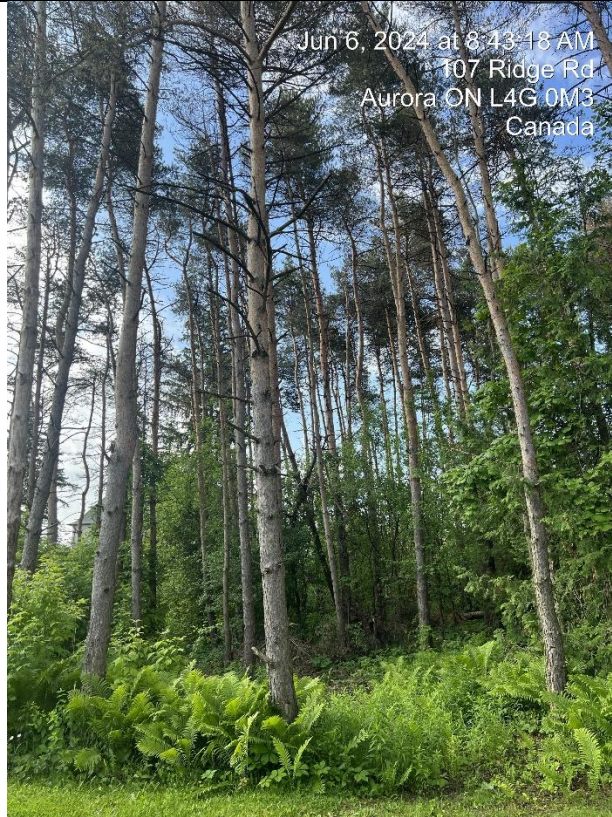


Photograph 3

June 6, 2024

FOCM6-3 Dry-Fresh Scotch Pine Plantation

The plantation is dominated by Scotch Pine with the rare Eastern White Cedar.



Appendix E

Vegetation Inventory

Table 1: Vegetation Observed within the Property

Scientific Name	Common Name	SARA ¹	ESA ²	Srank ³	CC ⁴
<i>Acer negundo</i>	Manitoba Maple	---	---	S5	0
<i>Actaea rubra</i>	Red Baneberry	---	---	S5	5
<i>Aralia nudicaulis</i>	Wild Sarsaparilla	---	---	S5	4
<i>Asclepias syriaca</i>	Common Milkweed	---	---	S5	0
<i>Circaea canadensis</i>	Broad-leaved Enchanter's Nightshade	---	---	S5	3
<i>Convallaria majalis</i>	European Lily-of-the-valley	---	---	SNA	---
<i>Daucus carota</i>	Wild Carrot	---	---	SNA	---
<i>Dryopteris carthusiana</i>	Spinulose Wood Fern	---	---	S5	5
<i>Fraxinus pennsylvanica</i>	Green Ash	---	---	S4	3
<i>Geranium robertianum</i>	Herb-Robert	---	---	S5	---
<i>Juglans nigra</i>	Black Walnut	---	---	S4	5
<i>Maianthemum racemosum</i>	False Solomon's-seal	---	---	S5	4
<i>Oxalis stricta</i>	Wood Sorrell	---	---	S5	0
<i>Parthenocissus quinquefolia</i>	Virginia Creeper	---	---	S4?	6
<i>Phalaris arundinacea</i>	Reed Canary Grass	---	---	S5	0
<i>Picea abies</i>	Norway Spruce	---	---	SNA	---
<i>Picea glauca</i>	White Spruce	---	---	S5	6
<i>Pinus sylvestris</i>	Scotch Pine	---	---	SNA	---
<i>Poa pratensis</i> ssp. <i>pratensis</i>	Kentucky Bluegrass	---	---	S5	0
<i>Prunella vulgaris</i> ssp. <i>vulgaris</i>	Self-heal	---	---	SNA	---
<i>Rhamnus cathartica</i>	Common Buckthorn	---	---	SNA	---
<i>Rubus idaeus</i> ssp. <i>idaeus</i>	Red Raspberry	---	---	SNA	---
<i>Silene vulgaris</i>	Bladder Champion	---	---	SNA	---
<i>Solidago canadensis</i> var. <i>canadensis</i>	Canada Goldenrod	---	---	S5	1
<i>Sonchus arvensis</i> ssp. <i>arvensis</i>	Field Sow-thistle	---	---	SNA	---
<i>Taraxacum officinale</i>	Common Dandelion	---	---	SNA	---
<i>Thuja occidentalis</i>	Eastern White Cedar	---	---	S5	4
<i>Toxicodendron rydbergii</i>	Poison Ivy	---	---	S5	0

Scientific Name	Common Name	SARA¹	ESA²	Srank³	CC⁴
<i>Trifolium hybridum</i>	Alsike Clover	---	---	SNA	---
<i>Trifolium repens</i>	White Clover	---	---	SNA	---
<i>Tussilago farfara</i>	Colt's-foot	---	---	SNA	---
<i>Vitis riparia</i>	Riverbank Grape	---	---	S5	0

Notes:

¹Federal Species at Risk Act, 2002.

²Provincial Endangered Species Act, 2007.

³Provincial Conservation ranking (SRank) where, S5= Secure, SNA = Unsuitable target for Conservation Activities.

⁴Coefficient of Conservationism (CC).

References

- Bird Studies Canada. 2009. Marsh Monitoring Program.
- Chapman and Putnam. 1984. Physiography of Southern Ontario; Ontario Geological Survey, Map P.2715. Scale 1: 600 000.
- Dillon Consulting. 2025. Arborist Report 107 Ridge Road Aurora, Ontario.
- Fisheries and Oceans Canada (DFO). 2017. Aquatic Species at Risk Map.
- Groundwater Environmental Management Services (GEMS). 2025a. Hydrogeological Report 107 Ridge Road, Aurora, Ontario. March 25, 2025.
- Groundwater Environmental Management Services (GEMS). 2025b. Geotechnical Investigation Report, 107 Ridge Road, Aurora, Ontario. March 13, 2025.
- Lake Simcoe Conservation Authority. East Holland River Subwatershed Plan. 2010.
- Lake Simcoe Conservation Authority. Lake Simcoe Protection Plan. 2009.
- Lake Simcoe Conservation Authority. 2024. Regulation Mapping.
- Land Information Ontario (LIO). 2024. Natural Heritage Area Map. Available from <https://www.ontario.ca/page/make-natural-heritage-area-map>
- Landscape Architects. 2025. 107 Ridge Road Landscape/Surface Materials Plan.
- Lee, H.T., W.D. Bakowsky, J. Riley, J. Bowles, M. Puddister, P. Uhlig and S. McMurray. 1998. Ecological Land Classification for Southern Ontario: First Approximation and Its Application.
- Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA). 2019. Available from <http://www.gisapplication.lrc.gov.on.ca/AIA/Index.html?viewer=AIA.AIA&locale=en-US>
- Ministry of Environment, Conservation and Parks. 2007. Endangered Species Act, S.O. 2007.
- Ministry of Municipal Affairs and Housing (MMAH). 2020. Provincial Policy Statement.
- Ministry of Municipal Affairs and Housing (MMAH). 2017. Greenbelt Plan.
- Ministry of Municipal Affairs and Housing (MMAH). 2017. Oak Ridges Moraine Plan.
- Ministry of Natural Resources and Forestry (MNRF). 2000. Significant Wildlife Habitat Technical Guide. 151pp.

Ministry of Natural Resources and Forestry (MNRF). 2010. Natural Heritage Reference Manual for Natural Heritage Policies of the Provincial Policy Statement, 2005, Second Edition

Ministry of Natural Resources and Forestry (MNRF). 2014. Ontario Wetland Evaluation System, Southern Manual.

Ministry of Natural Resources and Forestry (MNRF). 2015. Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E.

Ministry of Natural Resources and Forestry (MNRF). 2017a. Conservation Authorities Act, R.S.O. 1990.

Ontario Breeding Bird Atlas. Ontario Breeding Bird Atlas Guide for Participants. 2001.

Ontario Geological Survey. 1991. Bedrock geology of Ontario, southern sheet; Ontario Geological Survey, Map 2544, scale 1: 1 000 000.

The Regional Municipality of York. 2022. York Region Official Plan.

Toronto and Region Conservation Authority. 2019. Erosion and Sediment Control Guide For Urban construction. Available Online at: https://sustainabletechnologies.ca/app/uploads/2020/01/ESC-Guide-for-Urban-Construction_FINAL.pdf

Town of Aurora. 2024. Official Plan and Schedules.

SITEPLANTECH Inc. 2025. Servicing and Stormwater Management Report, 107 Ridge Road, Aurora. March 6, 2025.