

Environmental Conditions Report

0 & 8673 8TH LINE, HALTON HILLS

Prepared for

Maple Mist Development Corp.

c/o Trinison Management Corp.
8600 Dufferin Street
Vaughn, ON L4K 3L7

June 26, 2025
Project No. P2024-902

Prepared by



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June 26, 2025

Maple Mist Development Corp.
c/o Trinison Management Corp.
8600 Dufferin Street
Vaughn, ON L4K 3L7

Re: 0 & 8673 8th Line, Halton Hills, EIS, Maple Mist Development Corp., Environmental Conditions Report

Dear Maple Mist Development Corp. c/o Trinison Management Corp.,

GeoProcess Research Associates Inc. (GeoProcess) is pleased to present the following Scoped Environmental Impact Study for the proposed settlement boundary expansion at 0 and 8673 8th Line, Halton Hills, Ontario herein referred to as the "Subject Property". This report functions as a Natural Heritage Evaluation, as required by the Halton Region Official Plan and Town of Halton Hills Official Plan due to the Subject Property's proximity to Key Natural Heritage Features. In addition, the Subject Property is subject to the Halton Region Conservation Authority (HRCA) policies for the administration of the *Prohibited Activities, Exemptions and Permits (Ont. Reg. 41/24)*.

This report summarizes the findings from both in-field and desktop assessments conducted by GeoProcess and identifies the necessary environmental conditions and the limits of the natural heritage system.

Please do not hesitate to let us know if you have any questions regarding this report.

Regards,

GEOPROCESS RESEARCH ASSOCIATES INC

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Executive Summary

The following Environmental Conditions Report was completed by GeoProcess Research Associates (GeoProcess) in accordance with the Halton Region Official Plan, Town of Halton Hills Official Plan and Halton Region Conservation Authority regulations (HRCA).

Based on Halton Region Official Plan's *Map 1 - Regional Structure*, the Subject Property has been designated as Agricultural Area but falls outside of the existing urban boundary. Development and/or site alteration applications within 120 m of the RNHS trigger the need for an EIS under Section 118.3.1. In addition, Key Features were mapped on *Map 1G – Key Features within the Greenbelt and Regional Natural Heritage System*. Two unevaluated wetlands as well as one watercourse within the HRCA's regulation limits that is connected to a significant woodland were observed within the Study Area.

GeoProcess conducted a desktop natural heritage evaluation and a field reconnaissance visit in summer 2024 to characterize the natural heritage system for the Study Area. A review of all relevant policies and applicable existing background information was included in the scope of the report.



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1. Introduction



GeoProcess Research Associates Inc. (GeoProcess) been retained by Maple Mist Development Corp. to complete an Environmental Conditions Report (ECR) in support of an Official Plan Amendment application for a settlement boundary Expansion for employment uses to include the lands at 0 and 8673 8th Line in Halton Hills, Ontario, herein referred to as the “Subject Property”. The Subject Property is approximately 41 hectares (ha) in size and contains a straightened watercourse. The “Study Area” is defined as the Subject Property with an additional 120 m zone of adjacent accessible lands. Refer to Map 1 for these boundaries and the property location. Adjacent properties contain woodland and wetland features that have natural heritage buffers that extend onto the Subject Property.

1.1. Site Description

The Subject Property is presently located outside of the town’s urban boundary. According to Schedule A1; “Land Use Plan” of the Town of Halton Hills Official Plan (HHOP), the Subject Property is currently designated as an Agricultural Area and within the Halton Peel Boundary Area Transportation Study (HPBATS)/GTA West Corridor Protection Area, with the protection area beginning approximately 0.5 km northeast from 8th Line N.

Two Woodland parcels (>0.5ha) are identified on the HHOP Plan mapping in *Appendix X1A – Environment Natural Areas*. In addition, a watercourse/drainage feature is mapped on the HHOP in *Appendix X1B – Environment Water Resource Areas*. This watercourse is also mapped on Halton Region Conservation Area’s hazard mapping which includes the feature’s floodplain as well as wetland hazards associated with two large woodland parcels just outside of the Subject Property but within the Study Area. These wetland features are listed as unevaluated according to the MNRF’s Natural Heritage Information Centre (NHIC).

2. Policy Context

Municipal, provincial, and federal natural heritage policies applicable to the subject property have been reviewed and described below.

2.1. Provincial Planning Statement (2024)

The Provincial Planning Statement (PPS), 2024 is administered under Section 3 of the *Planning Act*. It became effective October 20, 2024, and replaces the Provincial Policy Statement that came into effect May 1, 2020. The PPS applies to planning decisions made on or after that date. It provides policy direction for land use and development within the Province of Ontario and provides for appropriate development while protecting resources of provincial interest, public health and safety, and the quality of the natural and built environment. The policies of the PPS may be complemented by provincial and municipal plans and policies.

The PPS defines eight natural heritage features and provides planning policies for each, listed below. The function of Natural Heritage Features and Areas is further clarified by the definition of a Natural Heritage System, which is “a system made up of natural heritage features and areas, and linkages intended to provide connectivity (at the regional or site level) and support natural processes which are necessary to maintain

biological and geological diversity, natural functions, viable populations of indigenous species, and ecosystems.”.

- Significant wetlands
- Coastal wetlands
- Fish habitat
- Significant woodlands
- Significant valleylands
- Habitat of endangered species and threatened species
- Significant Wildlife Habitat
- Significant Areas of Natural and Scientific Interest (ANSIs)

Sections 4.0 and 5.0 of the PPS deal with development and site alteration, and where these activities shall not be permitted. Section 4.0 policies surround the conservation of biodiversity, and protection of the health of the Great Lakes, natural heritage, water, agricultural, mineral and cultural heritage and archaeological resources for their economic, environmental, and social benefits. Section 5.0 directs development away from areas of natural or human-made hazards to mitigate risks to public health or safety, and property damage from natural hazards, including the risks that may be associated with the impacts of a changing climate.

Policies in Section 4.1, 4.2 and 5.2 are particularly relevant as they surround development and site alteration in and adjacent to natural heritage features. These policies and select others are outlined below, in Table 1.

Table 1. Applicable Policies of the Provincial Policy Statement

Policy Number	Policy
(4.1 - Natural Heritage)	
4.1.2	The diversity and connectivity of natural features in an area and the long-term <i>ecological function</i> and biodiversity of <i>natural heritage systems</i> should be maintained, restored or where possible, improved, recognizing linkages between and among <i>natural heritage features and areas, surface water features and ground water features</i> .
4.1.3	<i>Natural heritage systems</i> shall be identified in Ecoregions 6E & 7E, recognizing that <i>natural heritage systems</i> will vary in size and form in <i>settlement areas, rural areas, and prime agricultural areas</i> .
4.1.4	<i>Development</i> and site alteration shall not be permitted in: a) <i>significant wetlands</i> in Ecoregions 5E, 6E and 7E; and, b) <i>significant coastal wetlands</i> .
4.1.5	<i>Development</i> and site alteration shall not be permitted in: a) <i>significant wetlands</i> in the Canadian Shield north of Ecoregions 5E, 6E and 7E; b) <i>significant woodlands</i> in Ecoregions 6E and 7E (excluding islands in Lake Huron and St. Marys River); c) <i>significant valleylands</i> in Ecoregions 6E and 7E (excluding islands in Lake Huron and St. Marys River); d) <i>significant wildlife habitat</i> ; e) <i>significant areas of natural and scientific interest</i> ; and f) <i>coastal wetlands</i> in Ecoregions 5E, 6E and 7E that are not subject to policy 4.1.4(b) unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions.
4.1.6	<i>Development</i> and site alteration shall not be permitted in <i>fish habitat</i> except in accordance with <i>provincial and federal requirements</i> .
4.1.7	<i>Development</i> and site alteration shall not be permitted in <i>habitat of endangered species and threatened species</i> , except in accordance with <i>provincial and federal requirements</i> .

Policy Number	Policy
4.1.8	<i>Development and site alteration shall not be permitted on adjacent lands to the natural heritage features and areas identified in policies 4.1.4, 4.1.5 and 4.1.6 unless the ecological function of the adjacent lands has been evaluated and it has been demonstrated that there will be no negative impacts on the natural features or on their ecological functions.</i>
(4.2 - Water) 4.2.2	<i>Development and site alteration shall be restricted in or near sensitive surface water features and sensitive ground water features such that these features and their related hydrologic functions will be protected, improved or restored, which may require mitigative measures and/or alternative development approaches.</i>
(5.2 - Natural Hazards) 5.2.1	Planning authorities shall, in collaboration with conservation authorities where they exist, identify <i>hazardous lands</i> and <i>hazardous sites</i> and manage development in these areas, in accordance with provincial guidance.
5.2.2	Development shall generally be directed to areas outside of: a) <i>hazardous lands</i> adjacent to the shorelines of the <i>Great Lakes - St. Lawrence River System</i> and <i>large inland lakes</i> which are impacted by <i>flooding hazards</i> , <i>erosion hazards</i> and/or <i>dynamic beach hazards</i> ; b) <i>hazardous lands</i> adjacent to <i>river, stream</i> and <i>small inland lake systems</i> which are impacted by <i>flooding hazards</i> and/or <i>erosion hazards</i> ; and c) <i>hazardous sites</i> .
5.2.4	Planning authorities shall prepare for the impacts of a changing climate that may increase the risk associated with natural hazards

2.2. Endangered Species Act

The Endangered Species Act (ESA) (2007) provides protection to species designated as Threatened or Endangered on the Species at Risk in Ontario list (MECP 2019). The habitat of some species at risk is also protected under the ESA. Protected habitat is habitat identified as essential for life processes including breeding, rearing, feeding, hibernation and migration.

The ESA (Subsection 9(1)) states that:

"No person shall,

- (a) kill, harm, harass, capture or take a living member of a species that is listed on the Species at Risk in Ontario List as an extirpated, endangered or threatened species;*
- (b) possess, transport, collect, buy, sell, lease, trade or offer to buy, sell, lease or trade,*
 - (i) a living or dead member of a species that is listed on the Species at Risk in Ontario List as an extirpated, endangered or threatened species,*
 - (ii) any part of a living or dead member of a species referred to in subclause (i),*
 - (iii) anything derived from a living or dead member of a species referred to in subclause (i); or*
- (c) sell, lease, trade or offer to sell, lease or trade anything that the person represents to be a thing described in subclause (b) (i), (ii) or (iii)."*

Clause 10 (1)(a) of the ESA also states that:

"No person shall damage or destroy the habitat of a species that is listed on the Species at Risk in Ontario list as an endangered or threatened species."

An authorization or permit between the proponent and the MECP is required to authorize activities that would otherwise be prohibited by subsection 9(1) and 10(1) of the ESA.

There are three applicable regulations under the ESA, 2007; O. Reg. 230/08 - the Species at Risk in Ontario (SARO) List, O. Reg. 242/08 (General), and O. Reg 830/21 (Exemptions – Barn Swallow, Bobolink, Eastern Meadowlark and Butternut). These regulations serve to identify which species and habitats receive protection and provide direction on the current implementation of the ESA.

2.3. Halton Region Official Plan

The Official Plan for the Regional Municipality of Halton under the Planning Act is based on The Regional Plan (1995), which was adopted by Council of the Corporation of the Regional Municipality of Halton on March 30, 1994, through By-law 49-94. This report references the consolidated version of the Official Plan that was last updated on May 16, 2024. As of July 1, 2024, the Halton Region Official Plan (HROP) is no longer a Regional Plan, rather it is now a Local Plan, until such time it is revoked or amended by the respective municipality.

The HROP outlines the policies and guidelines regulating development and associated activities within the regional boundary. The HROP aims to execute the regional responsibilities designated by the *Planning Act*, *Municipal Act*, and other provincial legislation including the sustenance of an integrated natural heritage system to preserve and enhance ecological functions and biological diversity. The Regional Natural Heritage System (RNHS) is a systems approach to protecting and enhancing natural features and functions. *Section 115.3* defines the components of the RNHS as Key Features, and include:

- Significant habitat or endangered or threatened species
- Significant wetlands
- Significant coastal wetlands
- Significant woodlands
- Significant valley lands
- Significant wildlife habitat
- Significant areas of natural or scientific interest
- Fish habitat
- Linkages
- Buffers
- Watercourses that are within Conservation Authority regulation limits or that provide a linkage to a wetland or a significant woodland
- Wetlands other than considered significant under Section 115.3(1)b)

Where a proposal has the potential to negatively affect Key Features, the proponent must demonstrate through an EIS that the proposal will result in no negative impact on the Key Features or their ecological function for which the area is identified.

Policy 77 sections 7, 8, 9, and 10 outline policies for urban boundary expansions. Section 8d requires that any proposed expansion avoids hydrologic areas and the Growth Plan Natural Heritage System, where possible. Section 8h requires the proposed expansion be consistent with the Provincial Policy Statement and conforms to the Growth Plan for the Greater Golden Horseshoe.

As per the HROP's *Map 1- Regional Structure*, the Subject Property has been designated as Agricultural Area with some sections of Regional Natural Heritage System (RNHS) and is located outside the Regional Urban Boundary. Development and/or site alterations applications within 120 m of the RNHS trigger the need for an EIS under *Section 118.3.1*. In addition, Key Features are also mapped on *Map 1G – Key Features within the Greenbelt and Regional Natural Heritage System*. As per *Section 139.3.7(4)* of the HROP, a minimum vegetation protection zone of 30 m is required of wetlands, seepage areas and springs, fish habitat, permanent and intermittent streams, lakes, and significant woodland from the outside boundary of the Key Feature.

2.4. Town of Halton Hills Official Plan

The Town of Halton Hills Official Plan (HHOP) was adopted by Town Council in September 2006, approved by Halton Region in March 2008, and last consolidated on April 30, 2024. The Official Plan sets out the Town's policies for growth and development through to 2031. The Urban Land Use Policies were used in this report based on the proposed Settlement Area Boundary Expansion, which would add these lands to the Urban Boundary.

D3.5.3.4 Cultural and Natural Heritage

Schedule A8 to this Plan identifies buildings that have historic significance. These structures provide important reference points to the local history of the Town. In any proposal to redevelop these properties, consideration should be given to incorporating these buildings and the surrounding landscaping into the new development as well as providing opportunities for the public to interpret their former role and function in the Corridor.

Woodlots and tree rows within the Corridor perform not only environmental functions but are also important physical links to the agricultural heritage of the area. It is an important objective of this Plan to retain these features wherever possible.

D3.5.3.5 Protection and Restoration of Valleylands and Natural Features

Valleylands that have been identified as flood susceptible, adjacent woodlots and unstable slope areas are designated as Greenlands on Schedule A8 to this Plan. These areas are recognized as unsuitable for development given their importance to the ecosystem as well as in terms of protecting human health and property from flooding.

- a) limitations on permitted uses;*
- b) the provision of lot line and building setback requirements; and,*
- c) the application of restoration techniques for watercourses, wetlands, riparian areas, unstable slopes, and other natural areas discussed within the Scoped Subwatershed Plan for the 401 Corridor.*

Where development is proposed adjacent to lands identified on Schedule A8 to this Plan as "Potentially Unstable Slopes" a geotechnical study will be required to define the erosion hazards limit.

Lands not designated Greenlands may still have valuable natural features that should be considered for protection and enhancement. This is especially true for the wooded areas throughout the Corridor. These

wooded areas perform important ecological functions both individually and as a whole that assists in erosion control, mitigates the impacts of wind and dust, provides habitat for local fish and wildlife and improves the area's aesthetics. Applications for Site Plan and Subdivision Approval must therefore be accompanied by a strategy to address the protection and compensation of the wooded areas identified within the Scoped Subwatershed Plan.

2.5. Halton Region Conservation Authority (HRCA/CH)

Under *Ontario Regulation 41/24 (Prohibited Activities, Exemptions and Permits, April 2024)*, prior permission through the issuance of a permit is required from Halton Region Conservation Authority for any development within a floodplain, valleyland, wetland, or other hazardous lands. A permit is also required for any alteration to a river, creek, stream, or watercourse or any interference with the hydrological function of a wetland.

The Subject Property is located within HRCA regulated areas. Any development and/or site alteration within the jurisdiction of the Authority and in, on or adjacent to natural heritage features must be in accordance with the policies and guidelines in Section 2 & 3 of the Conservation Halton Land Use Planning Policy Document (2024) and be completed to the satisfaction of the Authority.

As per the CH Regulated Areas Mapping tool, a tributary of Sixteen Mile Creek traverses the Subject Property and portions of the Subject Property are located within a HRCA-Regulated area (regulated watercourse, floodplain hazard, headwater floodplain hazard, and wetland hazard). The Subject Property also contains wetlands and adjacent regulated areas.

The following vegetation protection zones are required by HRCA and may pertain to the subject property:

- Provincially Significant Wetland: 30 m
- Wetland > 2 ha in size: 30 m
- Wetland < 2 ha in size: 15 m
- Floodplains and Meander Belts (where valley is apparent): 15 m
- Floodplains and Meander Belts (where valley is not apparent): 7.5 m
- Coldwater/Coolwater watercourse: 30 m

3. Methodology

The following provides the methodologies followed to complete the background and desktop studies in addition to a field reconnaissance visit designed to characterize the natural heritage features within and adjacent to the Subject Property at a high level.

3.1. Background Studies

Background planning policy documentation and information sources relevant to the Study Area were reviewed and evaluated to identify natural heritage features and constraints. A list of documents and information sources consulted to support this study are provided below:

- Halton Region Official Plan (2024)
- Town of Halton Hills Official Plan (2024)
- Halton Region Conservation Authority Regulation Mapping
- Natural Heritage Information Centre (NHIC) Database, 1 km x 1 km square 17NJ9127
- Ontario Breeding Bird Atlas (OBBA) and eBird
- Ontario Reptile and Amphibian Atlas
- Ontario Butterfly and Moth Atlases
- iNaturalist- NHIC Rare Species of Ontario
- Fisheries and Oceans Canada (DFO) Aquatic Species at Risk Map
- Google Earth Pro
- Ontario Regulation 230/08 Species at Risk in Ontario List
- Ontario Regulation 41/24: Prohibited Activities, Exemptions and Permits (April 2024)

3.2. Field Reconnaissance

GeoProcess Research Associates conducted a site reconnaissance visit to characterize the natural heritage features of the Subject Property and surrounding landscape. This included a high-level ELC community confirmation visit to verify features evident in official plan maps and aerial imagery.

3.3. Species at Risk Screening and Assessment

An assessment and screening of potential Species at Risk was conducted for the Property based on Federal and Provincial status. Following the MECP (2019) Client's Guide to Preliminary SAR Screening, this screening was based on a review of the Natural Heritage Information Centre, the regional species list, atlases (breeding bird, butterfly and moth) citizen science databases (i.e. iNaturalist), and any additional lists provided by the MECP. The preliminary screening was submitted as a memo to sar@ontario.ca for assignment to a management biologist for review. The Species at Risk assessment results are detailed in Section 5.

For the purpose of the screening, SAR are defined as:

- Endangered and Threatened species that are on the Species at Risk in Ontario (SARO) list and protected by the provincial Endangered Species Act, 2007 (ESA)
- Endangered and Threatened aquatic species that are listed on Schedule 1 of the federal Species at Risk Act, 2002 (SARA) and protected by the SARA

Species of Conservation Concern (SOCC) are defined as:

- Special Concern species on the SARO list
- Endangered, Threatened and Special Concern terrestrial species listed on Schedule 1 of SARA, but not protected by the ESA

- Species with provincial ranks of S1 to S3. Provincial ranks (S ranks) are used by the NHIC to set protection priorities for rare species and vegetation communities. They are based on the number of occurrences in Ontario and are not legal designations. Provincial S ranks are defined as follows:

S1: Critically imperiled; usually fewer than 5 occurrences

S2: Imperiled; usually fewer than 20 occurrences

S3: Vulnerable; usually fewer than 100 occurrences

S4: Apparently secure; uncommon but not rare, usually more than 100 occurrences

S5: Secure, common, widespread and abundant

? S-rank followed by a "?" indicates the rank is uncertain

4. Existing Conditions

4.1. General Landscape Position

The Subject Property is situated approximately 2.5 km north of Highway 401 in the southeast end of Halton Hills, Ontario. Located about 2 km north of Steeles Avenue and 1 km south of 5 Side Road, the Subject Property is bounded by Eighth Line on the west. Located within the Mid East Branch subwatershed of the Sixteen Mile Creek Watershed, it is surrounded entirely by agricultural lands with unevaluated wetlands directly to the north and south. The Subject Property contains a tributary of Sixteen Mile Creek regulated by Conservation Halton with an unevaluated wetland that traverses through the centre of the property. Fragmented woodlands occur directly to the north, south, and west of the Subject Property.

4.2. Physiography and Geology

Glacial activity during the last ice age created various physiographic regions. The Subject Property is within the Peel Plain physiographic region that features a relatively flat terrain gradually sloping towards Lake Ontario with silt and clay deposits overlaying sandy-silt to clayey-silt till (Conservation Halton, 2024). The Subject Property contains clay to silt-textured till derived from glaciolacustrine deposits or shale with a portion traversing the centre of the Subject Property consisting of sandy glaciofluvial deposits (Chapman and Putnum, 1984).

4.3. Natural Heritage Systems

4.3.1. Tributary of Sixteen Mile Creek Watercourse

A tributary of Sixteen Mile Creek runs west to east for 752 metres across the Subject Property and is regulated by the HRCA. Given the watercourse is not contained within a valley feature, the watercourse likely receives a 15 m setback from the meander belt or floodplain (whichever is larger) on either side of the creek.

4.3.2. Wetlands

Within the Study Area, two unevaluated wetlands were identified according to the Natural Heritage Information Centre mapping overseen by the Ministry of Natural Resources and Forestry (MNRF). The HROP requires a minimum vegetation protection zone of 30 m for wetlands in the Study Area since they are considered Key Features within the Regional Natural Heritage System. Wetland No. 1 is located within a

woodland outside of the Subject Property along the northwestern border and is approximately 3.5 ha in size. Given the proximity of wetland No.1 to the Subject Property. Wetland No.2 is located in the middle of the site and is aligned along the tributary of Sixteen Mile Creek that crosses the property. This wetland is approximately 0.67 ha. The hazard buffers associated with this feature are encompassed within the floodplain hazard applied by the HRCA. See Map 3 for the buffers associated with these features.

4.3.3. Woodlands

Two Significant Woodland features (>0.5 ha) are present within the Study Area. According to Section E.2.5.3.3 of the HHOP, significant woodlands shall receive a minimum vegetation protection zone of 30 metres measured from the outside of the boundary of the Key Natural Heritage or Hydrologic Feature.

Final delineation of natural heritage feature system limits is expected to occur through a future subwatershed study. This will include the staking of wetland and woodland limits to determine their final location and the extent of the associated setbacks.

5. Species at Risk Screening

The Endangered Species Act, 2007, S.O. 2007 was passed to protect the biodiversity of Ontario by using the best available scientific, community and indigenous traditional knowledge and the precautionary principle as its doctrine. The purpose of the Act is to identify species at risk, protect species at risk and their habitats, and to promote the recovery of species at risk and stewardship activities which assist in these goals. The Committee on the Status of Species at Risk in Ontario (COSSARO) functions to maintain an up-to-date database of information pertaining to species in Ontario and their classification. COSSARO advises the Minister of Natural Resources and Forestry, who makes and files a regulation that lists all plant and animal species classified by COSSARO as extirpated, endangered, threatened, or of special concern. This regulation is the Species at Risk in Ontario List (Ontario Regulation 230/08). Ontario Regulation 242/08 provides general policies concerning exemptions and habitat specifications for those listed SAR species.

5.1. SAR List

A list of potential SAR was developed for the Study Area based on Provincial and Federal status. Following the MECP Client's Guide to Preliminary SAR Screening (2019), this screening was based on a review of the Natural Heritage Information Centre (NHIC) database (Atlas ID: 17NJ9127), the regional species list, atlases (Ontario Breeding Bird, Butterfly, Moth, Reptile and Amphibian; Atlas Square: 17NJ92), citizen science databases (i.e. iNaturalist and eBird), and any additional sources provided by the MECP. Descriptions of the various data sources are included in Appendix A. Observations of SAR within these squares do not necessarily represent observations within the boundaries of the Study Area. The SAR Long List is provided in Table 2 below for data sources acquired on September 30, 2024.

Table 2. SAR Screening Results

Species		Status		
Common Name	Scientific Name	S_Rank	SARO	SARA
Birds				

Common Name	Species		Status		
	Scientific Name	S_Rank	SARO	SARA	
Bobolink ¹	<i>Dolichonyx oryzivorus</i>	S4B	THR	THR	
Chimney Swift ²	<i>Chaetura pelagica</i>	S3B	THR	THR	
Bald Eagle ²	<i>Haliaeetus leucocephalus</i>	S4	SC	-	
Red-headed Woodpecker ²	<i>Melanerpes erythrocephalus</i>	S3	END	END	
Peregrine Falcon ²	<i>Falco peregrinus</i>	S4	SC	-	
Eastern Wood-pewee ²	<i>Contopus virens</i>	S4B	SC	SC	
Barn Swallow ²	<i>Hirundo rustica</i>	S4B	SC	THR	
Wood Thrush ²	<i>Hylocichla mustelina</i>	S4B	SC	THR	
Eastern Meadowlark ²	<i>Sturnella magna</i>	S4B, S3N	THR	THR	
Amphibians and Reptiles					
Snapping Turtle ^{1,3,7}	<i>Chelydra serpentina</i>	S4	SC	SC	
Eastern Milksnake ^{3,7}	<i>Lampropeltis triangulum</i>	S4	NAR	SC	
Midland Painted Turtle ³	<i>Chrysemys picta marginata</i>	S4	-	SC	
Insects					
Monarch ⁵	<i>Danaus plexippus</i>	S2N,S4B	SC	SC	
West Virginia White ⁵	<i>Pieris virginiensis</i>	S3	SC	-	
Plants					
Butternut ⁷	<i>Juglans cinerea</i>	S2?	END	END	

Sources: ¹ NHIC Database, ² OBBA, ³ Ontario Reptile and Amphibian Atlas, ⁴ eBird Database, ⁵ Ontario Butterfly Atlas, ⁶ DFO Aquatic SAR Map, ⁷ iNaturalist

5.2. Assessment

Based on the screening, in combination with desktop evaluation of vegetation communities and other environmental features observed during field reconnaissance, the following species were identified as possibly occurring in the Study Area and may require future evaluation:

Possibly Occurring

- Eastern meadowlark
- Red-headed woodpecker
- Wood thrush

Confirmed Presence

- Barn swallow

- Bobolink
- Eastern wood-pewee
- Monarch

6. Significant Wildlife Habitat Screening

Significant Wildlife Habitat (SWH) is considered a natural heritage feature and is protected as per Section 2.1 of the Provincial Policy Statement, 2014. The Significant Wildlife Habitat Technical Guide (OMNRF, 2000) aids in land use planning by providing the identification, description, and prioritization of significant wildlife habitat in Ontario. The associated Ecoregion Criteria Schedules are used to further provide detailed criteria for assessing and confirming SWH within Ontario. This section will provide a screening in the form of a summary table followed and an assessment of the potentially or confirmed occurring SWH.

Significant (and/or sensitive) Wildlife Habitat features and functions as described within the OMNRF Significant Wildlife Habitat Ecoregion Criteria Schedule for Region 7E (OMNRF, 2015) were reviewed and evaluated for the Study Area. The documented groups wildlife habitat into five main categories:

- Seasonal concentration areas of animals
- Rare vegetation communities or specialized habitats for wildlife
- Specialized Habitat for Wildlife
- Habitat for species of conservation concern
- Animal movement corridors

A full screening was not conducted as it would require a detailed vegetation community evaluation that includes refined ELC codes and habitat criteria for candidate SWH.

6.1. Screening

The results of the assessment indicated the potential presence of candidate and confirmed SWH within two of the five categories, including:

- Seasonal concentration areas of animals
- Habitat for species of conservation concern

6.1.1. Seasonal Concentration Areas of Animals

Bat Maternity Colonies – The woodland and swamp communities located on the property may provide suitable habitat for Bat Maternity Colonies. These features are located outside of the Subject Property but within the study area and could contain bat maternity habitat.

6.1.2. Habitat for Species of Conservation Concern

Terrestrial Crayfish - Terrestrial crayfish tunnels were observed along the southern portion of the subject property. Four different burrows were observed near the MAM ELC polygons.

7. Delineation of the Natural Heritage System

The desktop and field investigations set out to delineate the boundaries of the natural heritage system within the Subject Property and the Study Area. The proposed development limits associated with these natural heritage features are illustrated in Map 6 and are summarized in the table below. These limits are based on the setbacks prescribed in the policies of the Halton Region and Town of Halton Hills Official Plans and the policies of the HRCA. These limits are currently based on field observations and desktop review and will be further refined through a future subwatershed study which would include staking of natural heritage system limits.

Table 3: Summary of NHS Features within the Study Area

Natural Heritage Feature	Policy Document	Associated NHS Buffer
Unevaluated Wetland	<i>Halton Region OP</i>	30 m Vegetation Protection Zone
	<i>Town of Halton Hills OP</i>	30 m Vegetation Protection Zone
	<i>Ontario Regulation 41/24 (Prohibited Activities, Exemptions and Permits)</i>	30 m hazard buffer
Regulated Watercourse	<i>Halton Region OP</i>	30 m Vegetation Protection Zone
	<i>Town of Halton Hills OP</i>	Feature Protection – Buffer distance not specified.
	<i>Ontario Regulation 41/24 (Prohibited Activities, Exemptions and Permits)</i>	Floodplain and meander belt where valley is not apparent 15 m
Significant Woodland	<i>Halton Region OP</i>	30 m Vegetation Protection Zone
	<i>Town of Halton Hills OP</i>	30 m Vegetation Protection Zone

Should a boundary expansion be permitted, future comprehensive studies (e.g., SWS; Subwatershed Impact Study, etc.) will be required to determine feature and hazard management strategies and appropriate development setbacks/buffers before land use plans and policies can be established.

Any future EIS will evaluate the potential boundary expansion for consistency with PPS Natural Hazards policies and the ability for future development to meet CH regulatory requirements.

8. Closing



This Environmental Conditions Report conducted desktop surveys to document the existing ecological conditions and completed a policy review. An outline of the applicable policies, including federal, provincial, and municipal protection and planning policies and regulations, relative to the Study Area was provided in this report. In conformity with the policies identified within the Halton Region Official Plan, Town of Halton Hills OP and HRCA regulations, an evaluation of how the Study Area provided a high-level delineation of the natural heritage features on site and their associated buffers. These buffers will need to be considered and adhered to in future land use approval processes, should development be proposed for the Subject Property.



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Environmental Conditions Report – 0 & 8763 8th Line, Halton Hills

Prepared for Maple Mist Development Corp.

June 26, 2025

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Disclaimer

We certify that the services performed by GeoProcess Research Associates were conducted in a manner consistent with the level of care, skill and diligence to be reasonably exercised by members of the engineering and science professions.

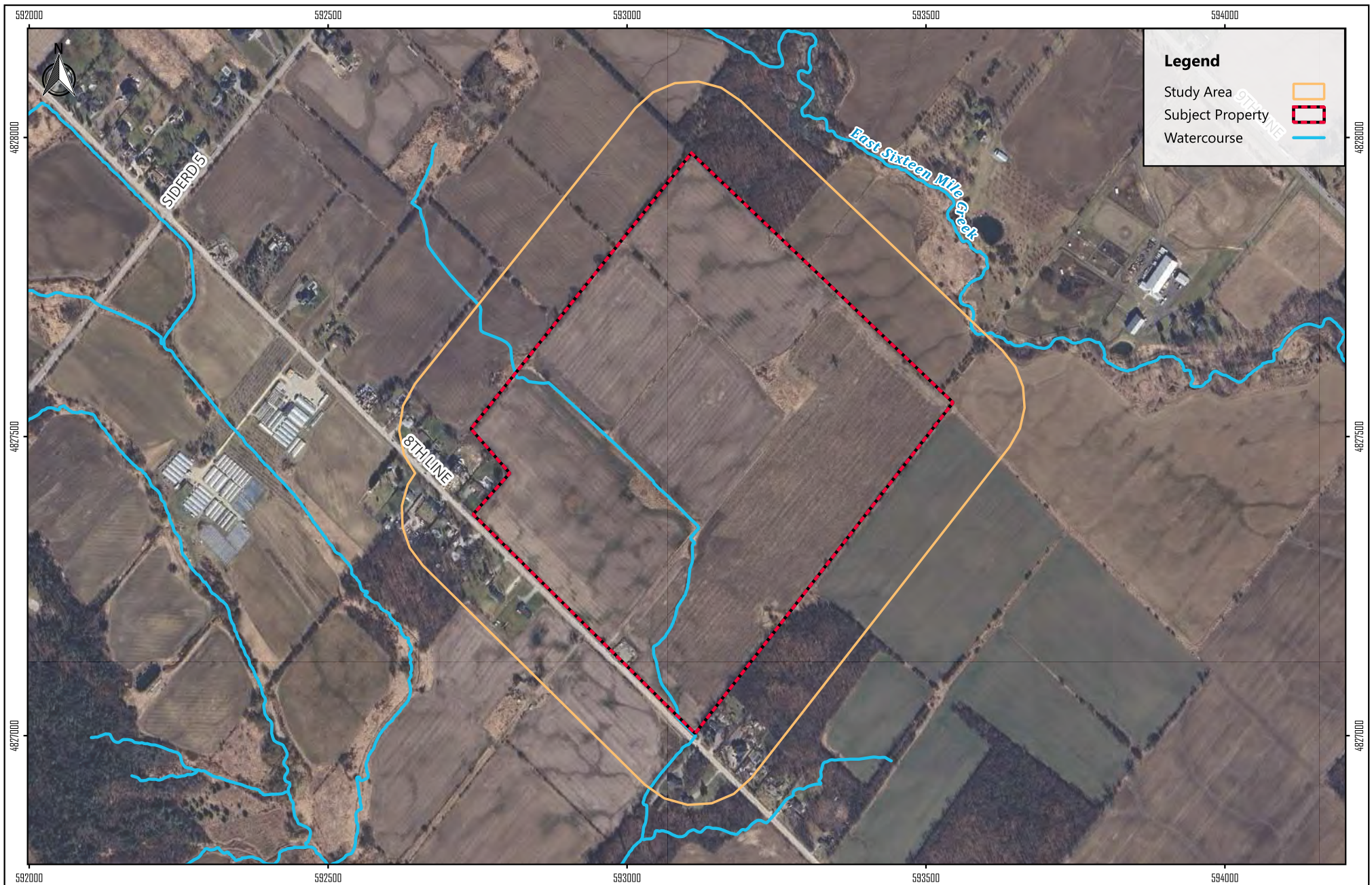
Information obtained during the site investigations or received from third parties does not exhaustively cover all possible environmental conditions or circumstances that may exist in the study area. If a service is not expressly indicated, it should not be assumed that it was provided. Any discussion of the environmental conditions is based upon information provided and available at the time the conclusions were formulated.

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Project Number P2024-902



Maps



GeoProcess
RESEARCH ASSOCIATES

CREATED BY: DH PROJECT NO.: P2024-902
CHECKED BY: IR DATE: Jan 31, 2025

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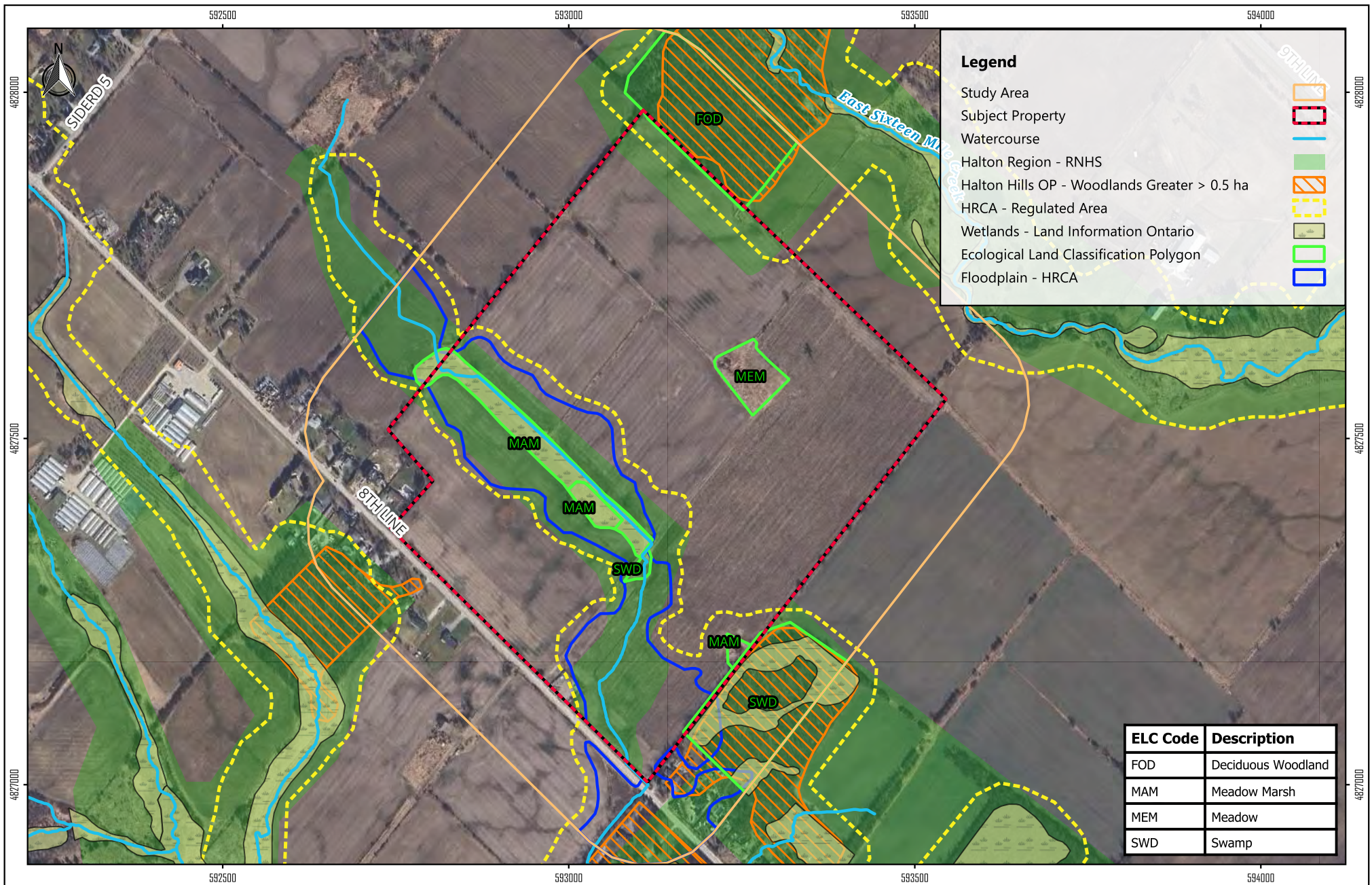
NAD83 / UTM zone 17N (EPSG:26917)

Notes:
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Map 1.

Key Map

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0 & 8673 8th Line, Halton Hills
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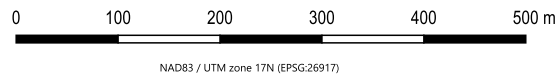


ELC Code	Description
FOD	Deciduous Woodland
MAM	Meadow Marsh
MEM	Meadow
SWD	Swamp



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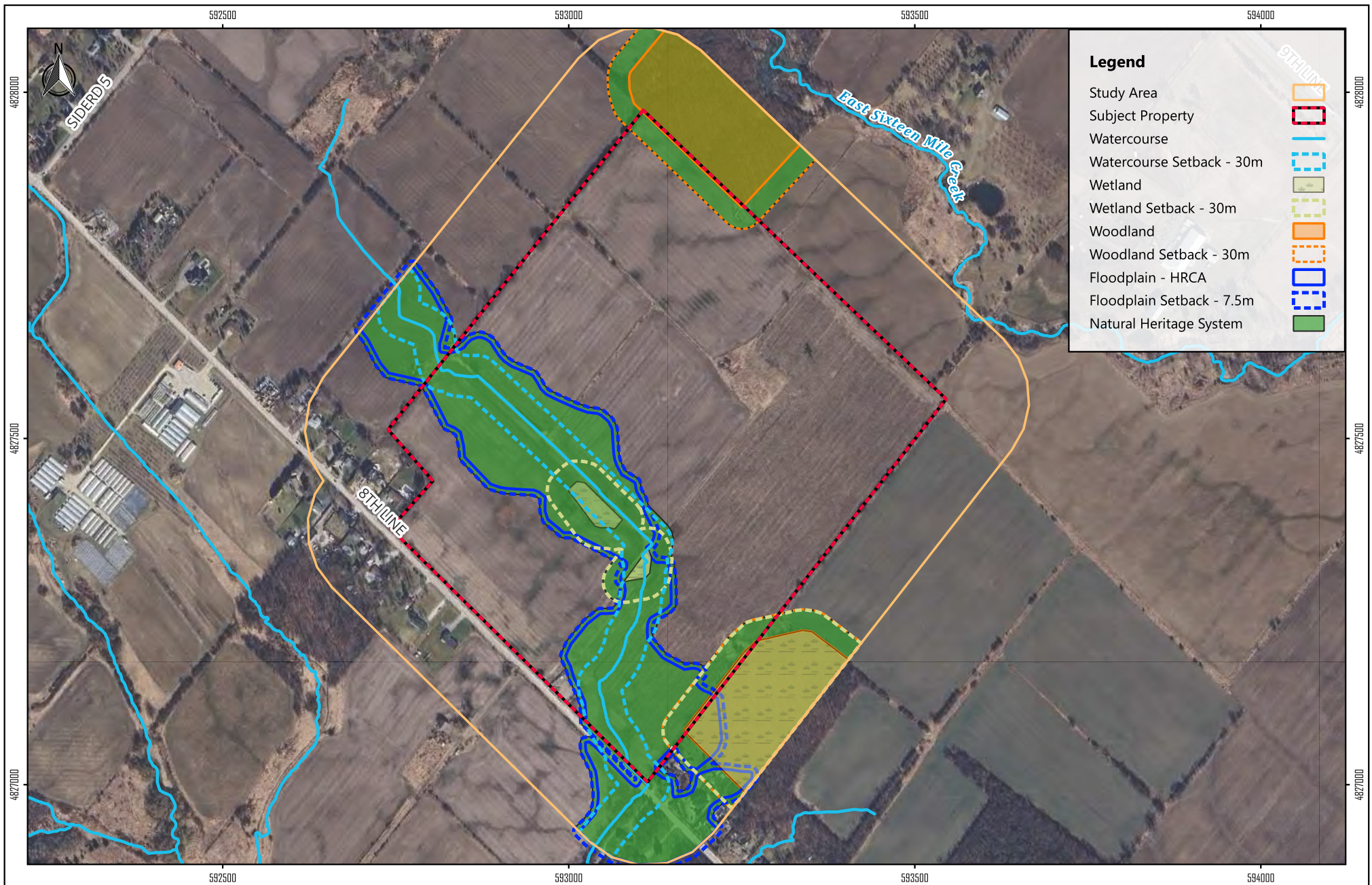
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Map 2.

Existing Conditions

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Appendix A

Species at Risk Screening Resources

Table A 1. SAR screening resources

Screening Resource	Description
Natural Heritage Information Center (NHIC)	The Natural Heritage Information Center (NHIC), operated by the Ontario Ministry of Natural Resources and Forestry, collects, reviews, manages and distributes information on Ontario's biodiversity. Data distributed by the NHIC is used in conservation and natural resource management decision making and was a primary resource for this report. Through the NHIC Make-a-Map tool, data on species, plant communities, wildlife concentration areas and natural areas is made accessible to the public and professionals using generalized 1-kilometer grid units to protect sensitive information. The mapping interface provides current and historical occurrences of SAR within the specified grid unit. The database also identifies environmental designations which provide insight into habitat potential including wetland, areas of natural and scientific interests and woodlands.
Breeding Bird Atlas	The atlas divides the province into 10×10 km squares and then birders find as many breeding species as possible in each square. Atlassers who know birds well by song complete 5-minute "Point Counts", 25 of which are required to provide an index of the abundance of each species in a square. Data from every square are mapped to show the distribution of each species. Point count data from each square show how the relative abundance of each species varies across the province.
eBird	eBird data document bird distribution, abundance, habitat use, and trends through checklist data collected within a simple, scientific framework. Birders enter when, where, and how they went birding, and then fill out a checklist of all the birds seen and heard during the outing. eBird's free mobile app allows offline data collection anywhere in the world, and the website provides many ways to explore and summarize your data and other observations from the global eBird community. eBird hotspots that are within 1 km of the Study Area are selected for species review.
Ontario Moth Atlas	The Ontario Moth Atlas is a project of the Toronto Entomologists' Association. The atlas currently covers about 250 species from 7 of the best-known families. The atlas presently includes 62,000 records. The last update of the atlas was in April 2020. The atlas is updated at least every 3 months. Most atlas data come from iNaturalist records. However, there is some data from Chris Schmidt of Agriculture Canada, the BOLD (Barcode of Life Datasystems) project of the University of Guelph, and from other records submitted directly to the TEA. The atlas uses the same 10×10 km squares at the Breeding Bird Atlas.
Ontario Butterfly Atlas	The Ontario Butterfly Atlas is a project of the Toronto Entomologists' Association (TEA). The TEA has been accumulating records and publishing annual seasonal summaries (Ontario Lepidoptera) for 50 years, with the first edition appearing in 1969. Atlas data comes from eButterfly records, iNaturalist records, BAMONA records, and records submitted directly to the TEA. The atlas uses the same 10×10 km squares at the Breeding Bird Atlas.
i-Naturalist	i-Naturalist is a nature app that helps public identify plants and animals. Using algorithms as well as scientists and taxonomic experts' multiple observations can be identified at a research scale. This data generated by the iNat community can be used in science and conservation. The program actively distributes the data in venues where scientists and land managers can find it. I-Naturalist has a project group for (NHIC) Rare species of Ontario. GeoProcess only records observations with-in 1 km of the Study Area.
Fisheries and Ocean Aquatic Species at Risk Maps	The DFO has compiled critical habitat and distribution data for aquatic species listed under the Species at Risk Act (SARA). The interactive map is intended to provide an overview of the distribution of aquatic species at risk and the presence of their critical habitat within Canadian waters. The official source of information is the Species at Risk Public Registry. Using this map, a 1 km radius circle is outlined around aquatic features located within the Study Area.