



September 15, 2023

488-23

**Via Digital Upload**

Attn: Honourable Paul Calandra  
Minister of Municipal Affairs and Housing

c/o

Mr. Dellarue Howard  
Community Planning and Development  
Exter Road Complex 2<sup>nd</sup> Floor  
659 Exeter Road  
London, ON N6E 1L3

**RE: Request to Facilitate the Proposed Redesignation of the Subject Lands  
476234 Third Line, Melancthon, ON  
ERO No. 019-7419**

UrbanSolutions Planning & Land Development Consultants Inc. (UrbanSolutions) is the authorized planning consultant acting on behalf of AJGL Group Inc., the owner of the subject lands municipally known as 476234 Third Line, Melancthon, in the County of Dufferin.

On June 21, 2023, the Ministry of Municipal Affairs and Housing (MMAH) initiated an invitation for public consultation on Official Plan Amendment No. 2 (OPA 2) to the Dufferin County Official Plan. This amendment represents the first phase of the County's ongoing Municipal Comprehensive Review (MCR) and contains policy updates which establish intensification targets and allocate land for residential, commercial, and employment uses to the County's lower-tier municipalities; in keeping with the findings of a Land Needs Assessment prepared by WSP. On August 18, 2023, UrbanSolutions made a submission to the Ministry via ERO 019-7119 (Comment ID: 92806) recommending specific schedule changes to the DCOP to better align with the goals and objectives of the Province.

On August 16, 2023, the Province initiated a subsequent invitation for public consultation on the proposed Official Plan Amendment No. 3 (OPA 3) to the DCOP, which constitutes the second phase of the County's Municipal Comprehensive Review. OPA 3 was adopted by County Council on July 13, 2023 via By-law No. 2023-43 and contains corresponding policy and land use schedule updates which implement the aforementioned Land Needs Assessment. The subject lands, as described below, are well-suited for future growth as will be discussed throughout the remainder of this Letter. In keeping with our office's previous submission to the Ministry via ERO 019-7119, this Letter will conclude with specific changes recommended to OPA 3 to better align with the goals and objectives of the Province.

## Site & Surrounding Context

The subject lands have a total area of approximately 45.9 hectares (113.5 acres) and are comprised of vacant agricultural lands, single detached dwellings, and a cemetery. The lands are bounded by vacant agricultural lands to the north and east, Highway 10 and an existing Urban Settlement Area boundary directly to the south, and vacant agricultural land to the west.

It should be noted that while a large portion of the subject lands comprises a parcel currently owned by the proponent (as indicated by the red-shaded area in Figure 1), four (4) additional parcels spanning the easterly and southerly boundary are not currently owned by the proponent (as indicated by the yellow-shaded area in Figure 1). In taking a comprehensive approach to planning matters associated with this submission, both parcels collectively comprise the “subject lands”, as described herein.

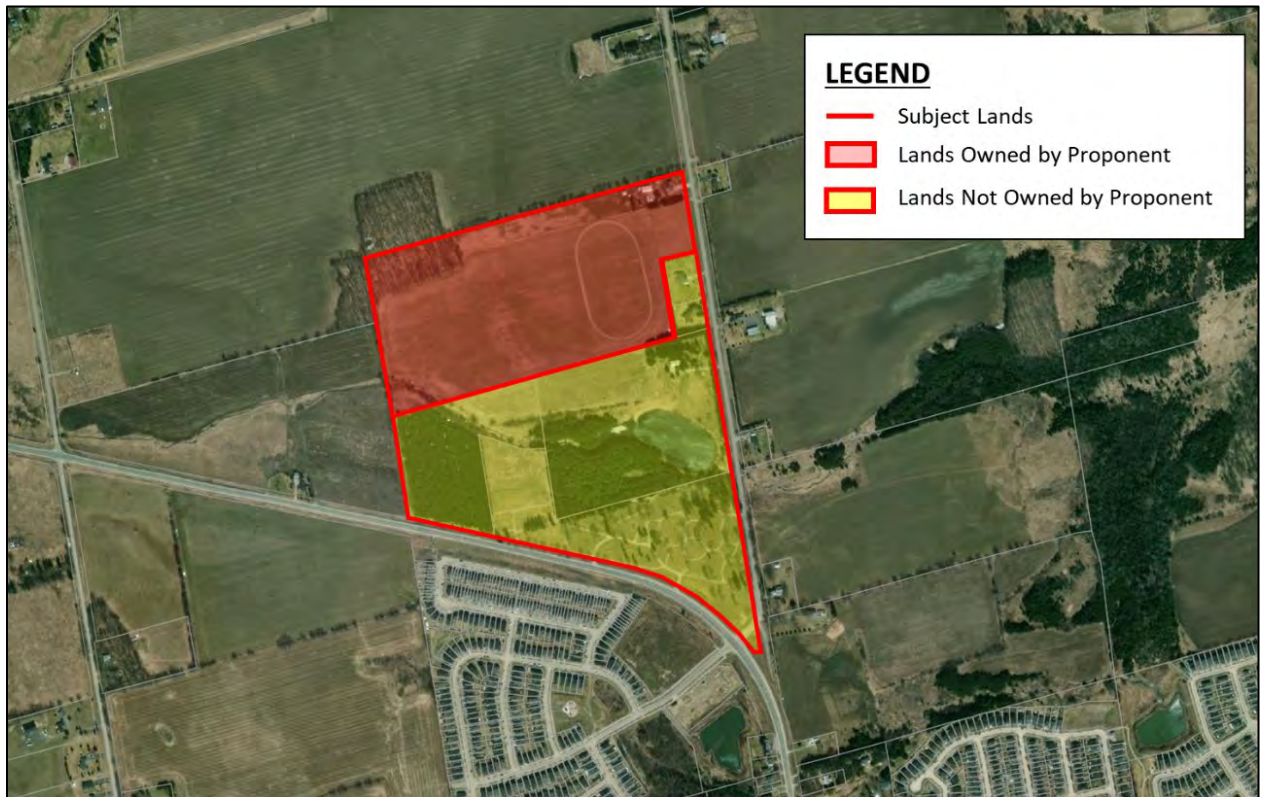


Figure 1 – Subject Lands and Surrounding Context Map

As previously noted, the subject lands are located directly northwest of the existing Urban Settlement Area Boundary, as outlined in Figure 2 below.



Figure 2 – Subject Lands in Proximity to the existing Urban Settlement Area Boundary

The lands located directly south of the subject lands within the existing Urban Settlement Area are comprised of a newly constructed low-rise residential subdivision, beyond which is a grocery store; elementary school; high school; community centre; numerous public parks; and a variety of other urban commercial and retail uses.

### **Existing Planning Policy Framework**

#### *Province of Ontario*

To address current housing supply concerns, the Province of Ontario has established the Housing Supply Action Plan and the *More Homes Built Faster Act*; which has been given Royal Assent. This Plan is part of a long-term strategy to help build more homes and make life more affordable for families across Ontario.

#### *Dufferin County Official Plan*

The subject lands are currently designated 'Countryside Area' on Schedule B – Community Structure of the Dufferin County Official Plan (DCOP). It should be noted that the portions of the site currently designated 'Countryside Area' on Schedule B are also designated 'Agricultural Area (S. 4.2)' on Schedule C – Agricultural Area and Rural Lands of the Dufferin County Official Plan.

#### *Township of Melancthon Official Plan*

The subject lands are currently designated 'Agricultural', 'Rural', and 'Environmental Conservation' on Schedule A-1 – Land Use and Roads Plan of the Township of Melancthon Official Plan.

## *Township of Melancthon Zoning By-law No. 12-1979*

The subject lands are currently zoned 'Development', 'General Agricultural', and 'Open Space Conservation' in the Township of Melancthon Zoning By-law No. 12-1979.

### **Background Studies**

#### *Natural Heritage Constraints Analysis*

The Natural Heritage Constraints Analysis prepared by GeoProcess Research Associates enclosed within Appendix A identifies several natural features as potentially occurring within the Study Area limits. The Analysis concludes that an Environmental Impact Study (which will be secured through the future Draft Plan of Subdivision and Zoning By-law Amendment application processes) will be required to finalize the limits of such identified natural features and confirm the ultimate development limits of the subject lands.

#### *Site Servicing Investigation Letter*

A Site Servicing Investigation Letter prepared by SCS Consulting Group Ltd. is enclosed within Appendix B. The Letter concludes that the subject site can either be serviced from the existing municipal water and wastewater system located south of the site (subject to confirmation of capacity and allocation by the Town of Shelburne), or by having a new wastewater treatment facility constructed on the subject lands. In both scenarios, the Letter confirms that a future Hydraulic Analysis will be necessary to confirm the appropriate infrastructure sizing and configuration required to provide adequate supply and pressure to service future development and to confirm that the existing water storage and supply infrastructure is adequate to service the subject lands.

### **Planning Merit**

As previously noted, OPA 3 was approved by Council on July 13, 2023 via By-law No. 2023-43. This amendment constitutes Phase II of the County's ongoing Municipal Comprehensive Review and is intended to update the policies and land use schedules of the Official Plan to conform with the County's population and employment growth projections contained in Schedule 3 of the Growth Plan – which is forecasted to reach a total of 95,000 residents and 39,000 jobs by 2051.

On July 13, 2022, WSP completed a Land Needs Analysis (LNA) in support of the Dufferin County Municipal Comprehensive Review to allocate the forecasted population and employment growth to each of the County's eight (8) lower-tier municipalities, and ultimately determine whether (and to what extent) settlement area expansions are necessary. Using growth estimates generated by Metro Economics, as well as the findings of a high-level review of building permit data, the Analysis projects that the County will require an additional 10,339 dwelling units to accommodate forecasted population growth to 2051 (26,700 people). Of this total, the Analysis allocates 94% (9,757 units) to existing settlement areas and the remaining 6% (582 units) to rural areas outside of settlement areas (Table 1):

	<b>Total Dwelling Demand 2021 to 2051</b>	<b>% of Dwelling Units Outside Settlement Areas</b>	<b>Dwelling Units Outside Settlement Areas</b>	<b>Dwelling Units Inside Settlement Areas</b>
<b>Amaranth</b>	1,140	19%	216	924



<b>East Garafraxa</b>	354	26%	92	263
<b>Grand Valley</b>	2,445	0%	0	2,445
<b>Melancthon</b>	227	43%	99	129
<b>Mono</b>	180	55%	98	82
<b>Mulmur</b>	298	26%	79	219
<b>Orangeville</b>	3,620	0%	0	3,620
<b>Shelburne</b>	2,075	0%	0	2,075
<b>County Total</b>	<b>10,339</b>	<b>6%</b>	<b>582</b>	<b>9,757</b>

Table 1 – Exhibit 4 from Dufferin County’s Land Needs Assessment Report (July 13, 2022)

Based on the allocations outlined in Table 1, as well as the fact that the Growth Plan mandates a 40% County-wide intensification target within Delineated Built-up Areas, the Analysis concluded that the current density levels prescribed by the DCOP are insufficient to accommodate the allocated growth within the existing land supply. Accordingly, the Analysis recommends that each municipality update its minimum intensification targets in accordance with Table 2 below:

	<b>Current DCOP Minimum Intensification Target</b>	<b>Proposed OPA 2 Minimum Intensification Target</b>
<b>Grand Valley</b>	12%	40%
<b>Orangeville</b>	50%	60%
<b>Shelburne</b>	38%	48%

Table 2 – Current vs. Proposed Intensification Targets within Grand Valley, Orangeville, and Shelburne

The proposed minimum intensification targets outlined in Table 2 were then applied to the total forecasted unit demand (2021-2051) within Grand Valley, Orangeville, and Shelburne which produced a value of 4,146 units. Based on an estimate of remaining unit capacity within each municipality (as outlined in Appendix A of the Analysis), a capacity shortage of 2,187 units was identified across the County’s existing Delineated Built-up Area. Accordingly, the Analysis recommended that Grand Valley, Orangeville, and Shelburne increase their intensification targets beyond what is outlined in Table 2 to achieve forecasted growth. Similarly, the Analysis identified a 1,467 unit capacity shortage across the County’s Designated Greenfield Areas (lands within settlement areas and outside the delineated built boundary) based on forecasted growth, and recommended settlement area boundary expansions for Grand Valley and Shelburne accordingly.

While it is recognized that the above-noted strategy and recommendations are intended to accommodate the full extent of the County’s forecasted growth, it should be noted that such will be contingent on having each municipality achieve ambitious density targets. For reference, OPA 2 establishes an intensification target of 40% for Grand Valley’s delineated built-up area whereas the current DCOP prescribes a target of only 12% for the municipality (Table 2). Should the County be unable to accommodate 40% of growth within its Delineated built-up Areas, additional urban land will be required to accommodate forecasted growth.

In light of the current housing crisis and provincial directives outlined in the *More Homes Built Faster Act*, it is important to plan for additional urban residential land due to the inherent challenges associated with achieving a 40% County-wide intensification target (given historic development patterns within the County). As such, Appendices C through N of this Letter include recommended map changes to Draft

Schedules B, B1, C, E, and E1 of the New Dufferin County Official Plan (via OPA 3) which removes the subject lands' existing 'Countryside Area (S.4.0)' and 'Prime Agricultural (S.4.2)' designations and adds them to Urban Settlement Area designation. Subsequent map changes are also recommended to Schedules A, D, F, G, H, H1, and Appendix 3 of the County's current Official Plan, which are required to fully realize the recommended redesignation.

In keeping with the Provincial Housing Supply Action Plan, ERO No. 019-7419 presents an opportunity to further revise Dufferin County's Official Plan by adding the subject lands to the Urban Settlement Area designation in order to realize their full development potential. Further, the proponents have indicated the potential for the subject lands to be developed with affordable modular housing units which can be brought on stream quicker than traditional dwelling types; thus achieving the objectives of the Province's *More Homes Built Faster Act*.

In considering the expansion or creation of a new settlement area through a municipal comprehensive review process, Section 1.1.3.8 of the Provincial Policy Statement states that the following must be demonstrated:

- a) sufficient opportunities to accommodate growth and to satisfy market demand are not available through intensification, redevelopment and designated growth areas to accommodate the projected needs over the identified planning horizon;
- b) the infrastructure and public service facilities which are planned or available are suitable for the development over the long term, are financially viable over their life cycle, and protect public health and safety and the natural environment;
- c) in prime agricultural areas:
  1. the lands do not comprise specialty crop areas;
  2. alternative locations have been evaluated, and
    - i. there are no reasonable alternatives which avoid prime agricultural areas; and
    - ii. there are no reasonable alternatives on lower priority agricultural lands in prime agricultural areas;
- d) the new or expanding settlement area is in compliance with the minimum distance separation formulae; and
- e) impacts from new or expanding settlement areas on agricultural operations which are adjacent to or close to the settlement area are mitigated to the extent feasible.

The above-noted policies relating to existing prime agricultural areas are satisfied in that the subject lands represent a natural extension of the existing Urban Settlement Area boundary located directly to the south of the site. Additionally, the future Draft Plan of Subdivision and Zoning By-law Amendment applications will provide the necessary tools to mitigate any impacts of the proposed urban uses on any nearby agricultural operations. This includes ensuring compliance with the minimum distance separation formulae established by the Province. Further, the enclosed Site Servicing Investigation Letter prepared by SCS Consulting Group Ltd. concludes that the subject site can be serviced by the existing municipal water and wastewater system located to the south of the site (subject to confirmation of capacity and allocation by the Town of Shelburne), or by having a new municipal system constructed on the subject lands; thus, satisfying the above policies relating to infrastructure.

As previously noted, the Land Needs Assessment completed by WSP as a part of Dufferin County's Municipal Comprehensive Review identified specific intensification targets (and subsequent settlement

area boundary expansions) that would be required to accommodate population and employment growth targets established by the Growth Plan. We believe that achieving these intensification targets will prove difficult given historic development trends within the County and that it is therefore important to plan for additional residential land. The recommended redesignation of the subject lands in the County's New Official Plan will support the Province's goal of building 1.5 million homes over the next 10 years.

### **Recommended Changes to Dufferin County's New and Current Official Plan**

Based on the above, UrbanSolutions recommends the following map changes to Dufferin County's New Official Plan via OPA 3:

1. To amend Draft Schedule B of OPA 3, being 'Draft Schedule B – Community Structure and Land Use' by redesignating the subject lands from 'Countryside Area (S.4.0)' to 'Urban Settlement Area' as shown in Appendix C.
2. To amend Draft Schedule B1 of OPA 3, being 'Draft Schedule B1 – Community Structure and Land Use' by redesignating the subject lands from 'Countryside Area (S.4.0)' to 'Urban Settlement Area' as shown in Appendix D.
3. To amend Draft Schedule C of OPA 3, being 'Draft Schedule C – Prime Agricultural Areas and Rural Lands' by redesignating the subject lands from 'Prime Agricultural Area (S.4.2)' to 'Urban Settlement Area' as shown in Appendix E.
4. To amend Draft Schedule E of OPA 3, being 'Draft Schedule E – Natural Heritage Features' by adding the subject lands to the 'Urban Settlement Area' designation as shown in Appendix F.
5. To amend Draft Schedule E1 of OPA 3, being 'Draft Schedule E1 – Natural Heritage System' by adding the subject lands to the 'Urban Settlement Area' designation as shown in Appendix G.

Additionally, the following subsequent map changes to Dufferin County's current Official Plan would also be required to implement the above-noted map changes to the County's New Official Plan via OPA 3:

1. To amend Schedule A of the Dufferin County Official Plan, being 'Schedule A – Provincial Plan Areas' by adding the subject lands to the 'Urban Settlement Area' designation as shown in Appendix H.
2. To amend Schedule D of the Dufferin County Official Plan, being 'Schedule D – Mineral Aggregate Resource Areas' by adding the subject lands to the 'Urban Settlement Area' designation as shown in Appendix I.
3. To amend Schedule F of the Dufferin County Official Plan, being 'Schedule F – Human-Made Hazards' by adding the subject lands to the 'Urban Settlement Area' designation as shown in Appendix J.
4. To amend Schedule G of the Dufferin County Official Plan, being 'Schedule G – Transportation' by adding the subject lands to the 'Urban Settlement Area' designation as shown in Appendix K.

5. To amend Schedule H of the Dufferin County Official Plan, being 'Schedule H – Active Transportation' by adding the subject lands to the 'Urban Settlement Area' designation as shown in Appendix L.
6. To amend Schedule H1 of the Dufferin County Official Plan, being 'Schedule H2 – Active Transportation' by adding the subject lands to the 'Urban Settlement Area' designation as shown in Appendix M.
7. To amend Appendix 3 of the Dufferin County Official Plan, being 'Appendix 3 – Potential Forest Hazard Classification for Wildland Fire' by adding the subject lands to the 'Urban Settlement Area' designation as shown in Appendix N.

Thank you for the opportunity to provide these comments. Please feel free to contact the undersigned to discuss the matter further.

Kind Regards,  
**UrbanSolutions**



Matt Johnston, MCIP, RPP  
*Principal*



Matthew LeBlanc, M.PL, BA (Hons)  
*Planner*

cc: AJGL Group Inc. (via email)



## Appendix A – Natural Heritage Constraints Analysis

Prepared by GeoProcess Research Associates

# Natural Heritage Constraints Analysis

## MELANCTHON, ON

Prepared for

### **AJGL Group Inc.**

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August 18, 2023  
Project No. P2023-769

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## Table of Contents

List of Tables .....	ii
List of Maps .....	ii
1. Introduction.....	1
2. Policy Context.....	1
2.1. Provincial Policy Statement.....	1
2.2. Endangered Species Act (2007) .....	3
2.3. Town of Melancthon Official Plan.....	4
2.4. Dufferin County Official Plan .....	7
2.5. Nottawasaga Valley Conservation Authority.....	8
2.6. Grand River Conservation Authority .....	8
3. Natural Heritage System .....	8
3.1. Watercourses .....	8
3.2. Wetlands.....	9
3.3. Woodlands.....	9
4. Species at Risk Screening.....	9
4.1. Screening Results .....	9
4.2. Species Assessment.....	15
5. Development Limit.....	15
6. Closing.....	16
Maps.....	18
Appendix Species at Risk Screening Resources .....	21



## List of Tables

Table 1. Applicable Policies of the Provincial Policy Statement..... 2  
Table 2. NH Features and Environmental and Conservation designations as per the Town of Melancthon Official Plan found on each of the four properties. .... 4  
Table 3. NH Features as identified within the Dufferin County Official Plan found on each of the four Study Area properties. .... 7  
Table 4. Potential Species at Risk within Study Area..... 10

## List of Maps

Map 1. NH Constraints..... 19  
Map 2. NH Constraints..... 20

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## 1. Introduction

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This report provides the results of a natural heritage constraints analysis completed by GeoProcess Research Associates Inc. (GeoProcess) for four properties located at 158567 Highway 10, 198602 2<sup>nd</sup> Line N.E., 199022 2<sup>nd</sup> Line N.E, and 476234 3<sup>rd</sup> Line in Melancthon (Dufferin County) Ontario (herein referred to as the Study Area). Based on a review of background data and a desktop analysis, a natural heritage constraints analysis was conducted based on applicable natural heritage policies and regulations and on the existing ecological conditions as best understood through aerial imagery and background review information.

The properties are located in two separate watersheds, each with its own Conservation Authority, with three properties regulated by the Grand River Conservation Authority (addresses 158567 Highway 10, 198602 2<sup>nd</sup> Line N.E., and 199022 2<sup>nd</sup> Line N.E) and one regulated by the Nottawasaga Valley Conservation Authority (476234 3<sup>rd</sup> Line). Regulation mapping from the two conservation authorities (CA) was used to help define the overall natural heritage system (NHS) presented for each of the properties.

This assessment is based only on a desktop review of available background information sources. A site visit was not part of the scope of this assessment, and as such, the results of this assessment are considered to be high level and can only be used as a preliminary assessment of the natural heritage features found within the Study Area and the constraints assigned to them. Due to the lack of direct field data, a conservative approach has been taken when determining which features should be included in the natural heritage system (NHS) and applicable setbacks.

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## 2. Policy Context

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The following sections provide a review of the policies and regulations that are relevant to the Study Area.

### 2.1. Provincial Policy Statement

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The Provincial Policy Statement (PPS), 2020 is administered under Section 3 of the *Planning Act*. It became effective May 1, 2020 and replaces the 2014 PPS. 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 polices 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.”

1. Significant wetlands;
2. Coastal wetlands;
3. Fish habitat;
4. Significant woodlands;
5. Significant valleylands;



6. Habitat of endangered species and threatened species;
7. Significant Wildlife Habitat; and,
8. Significant Areas of Natural and Scientific Interest (ANSIs).

Section 2.0 and 3.0 of the PPS deal with development and site alteration, and where these activities shall not be permitted. Section 2.0 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 3.0 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 2.1 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
(2.1 - Natural Heritage)	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> .
2.1.2	
2.1.3	<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> .
2.1.4	<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> .
2.1.5	<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 2.1.4(b) unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions.
2.1.6	<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> .
2.1.7	<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> .
2.1.8	<i>Development</i> and site alteration shall not be permitted on <i>adjacent lands</i> to the <i>natural heritage features and areas</i> identified in policies 2.1.4, 2.1.5 and 2.1.6 unless the <i>ecological function</i> of the <i>adjacent lands</i> has been evaluated and it has been demonstrated that there will be no <i>negative impacts</i> on the natural features or on their <i>ecological functions</i> .

Policy Number	Policy
(2.2 - Water) 2.2.2	<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. Mitigative measures and/or alternative development approaches may be required in order to protect, improve or restore sensitive surface water features, sensitive ground water features, and their hydrologic functions.</i>
(3.1 - Natural Hazards) 3.1.1	Development shall generally be directed, in accordance with guidance developed by the Province (as amended from time to time), to areas outside of: a) <i>hazardous lands adjacent to the shorelines of the Great Lakes - St. Lawrence River System and large inland lakes which are impacted by flooding hazards, erosion hazards and/or dynamic beach hazards;</i> b) <i>hazardous lands adjacent to river, stream and small inland lake systems which are impacted by flooding hazards and/or erosion hazards;</i> and c) <i>hazardous sites.</i>
3.1.3	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 (2007)

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. Town of Melancthon Official Plan

The Town of Melancthon Official Plan (OP) was prepared and adopted by the Council of the Corporation of the Township of Melancthon under By-law No. 38-2014 in accordance with Section 17 of the Planning Act, R. S. O. 1990, c. P. 13, as amended to March, 2014, on the 14<sup>th</sup> day of August 2014.

As per Schedule A-1, the Study Area contains Environmental Protection and Environmental Conservation overlays and Niagara Escarpment Development Control Areas. In addition, per Schedules D & E – Natural Heritage, the Study Area contains Provincially Significant Wetlands (PSW), Locally Significant Wetlands (LSW)/Unevaluated Wetlands, Significant Woodlands, and Watercourses. See Table 2 below for a detailed breakdown of which Official Plan natural heritage features and Protection and Conservation overlays are found on the individual properties within the Study Area.

*Table 2. NH Features and Environmental and Conservation designations as per the Town of Melancthon Official Plan found on each of the four properties.*

Location	Wetlands	Significant Woodlands	Watercourses	Environmental Protection Designation	Environmental Conservation Designation
158567 Highway 10	A PSW and LSW are located in the eastern corner of the property.	A Significant Woodland is located on the within the PSW/LSW on the eastern portion of this parcel.	Two watercourses traverse the property. One in the eastern corner, within the PSW, and one in the western corner of the property.	The eastern corner of this parcel is designated as Environmental Protection.	Designations of Environmental Conservation exist along the eastern portion of the parcel, and within the watercourse located on the western corner of the parcel.
198602 2 <sup>nd</sup> Line N.E.	A continuation of the above-noted PSW and LSW is located on the southern corner of the property.	A continuation of the above-noted Significant Woodland is located on the southern corner of this parcel.	One watercourse exists on this property: a continuation of the above-noted watercourse which transects the PSW located on the southeastern portion of the property.	The southern corner of this parcel is designated as Environmental Protection.	Environmental Conservation designations are noted within the watercourse and the LSW.



Location	Wetlands	Significant Woodlands	Watercourses	Environmental Protection Designation	Environmental Conservation Designation
199022 2 <sup>nd</sup> Line N.E.	No wetlands are noted within this parcel; however, two PSW/LSWs are located adjacent to the north and northwest of the property.	No woodlands are noted within this parcel. However, one Significant Woodland is located adjacent to the west of the parcel.	Two watercourses bisect this property: one on the eastern portion of the property and one on the western portion of the property.	No Environmental Protection Areas are noted within this parcel; however, two are located adjacent to the north and northwest of the property.	Environmental Conservation designations are noted within the watercourse.
476234 3 <sup>rd</sup> Line	A LSW is noted within the northern portion of this parcel.	One Significant Woodland is located on the northwestern corner of this parcel.	One watercourse traverses the southwestern corner of this parcel.	No Environmental Protection Areas are noted within this parcel.	Environmental Conservation designations are noted within the watercourse and along the northwestern corner of this parcel.

Section 5.1 of the OP notes that Environmental Protection Areas include PSWs; Section 5.5 defines Environmental Conservation Areas as *important natural heritage features and areas and well as lands and sites that are potentially hazardous*. Natural heritage features and areas is further defined within the OP as:

- *Locally significant and unevaluated wetlands*
- *Significant woodlands*
- *Significant wildlife habitat*
- *Significant areas of natural or scientific interest*
- *Habitat of endangered species and threatened species*
- *Fish habitat*

Section 5.5 (c) explains that hazardous lands and sites are *those adjacent to rivers and streams which may be impacted by flooding hazards or erosion hazards*.

As per Section 5.4, uses permitted within the Environmental Protection designation include:

- *Legally existing uses*
- *Low impact and passive recreation uses such as walking trails that do not involve the use of motorized vehicles*
- *Forest, wildlife, and fisheries management and archaeological works and activities but not commercial forestry*



- *Essential public watershed management and flood or erosion control works*
- *Essential transportation and utility facilities as authorized under an environmental assessment process.*

Further to Section 5.4.,

- *Development and site alteration shall not be permitted in areas designated Environmental Protection except in connection with the permitted uses listed in subsection 5.4.1.*
- *New development related to the permitted uses shall generally be sited and designed to be in harmony with the area's landscape character and shall be sensitive to the natural environment.*
- *An Environmental Impact Study shall be required for any development or site alteration in any area designated Environmental Protection.*
- *Development and site alteration shall not be permitted in fish habitat except in accordance with provincial and federal requirements.*

In addition, per Section 5.5.1, the following are permitted uses within the Environmental Conservation designation:

- *Legally existing uses*
- *Low impact and passive recreation uses such as walking trails that do not involve the use of motorized vehicles*
- *Forest, wildlife, and fisheries management and archaeological works and activities but not commercial forestry*
- *Essential public watershed management and flood or erosion control works*
- *Essential transportation and utility facilities as authorized under an environmental assessment process*
- *Existing public and private parks, fairgrounds sport fields and campgrounds*
- *Agricultural uses*
- *Uses permitted in the underlying land use designation, provided that it has been demonstrated that there will be no negative impacts on the natural heritage features and areas or their ecological functions and that in floodplains or other hazardous lands the use is in compliance with Sections 3.5 and 5.5.3.*

Lastly, it should be noted that, as per Schedule A-1 of the OP, the south and southwestern portions of the parcel located at 158567 Highway 10 is subject to Section 3.10 (f) of the OP. As such, the following policies apply to this portion of the parcel:

- Unless there is agreement on the part of the Town of Shelburne concerning a specific development proposal, all non-farm development will be prohibited within approximately 1 kilometre of the boundary of that municipality in the area shown on Schedule A-5.*
- Unless there is agreement on the part of the Township of Southgate concerning a specific development proposal, in the area as shown on Schedule A-1 all non-farm development will be prohibited within approximately 0.5 kilometres of the community of Dundalk as delineated in the planning documents of the Township of Southgate.*
- Notwithstanding the above policies, within the areas referenced in clauses i and ii above a detached dwelling may be erected on an existing lot in accordance with the applicable land use designations and policies of this Plan.*



- iv. *The purpose of the above policies is to maintain a clear separation between rural and urban uses, to prevent inappropriate development near municipal boundaries, and to prevent sprawl adjacent to these urban areas while providing for and encouraging intermunicipal cooperation in the planning and development of such areas.*

## 2.4. Dufferin County Official Plan

The Official Plan for the County of Dufferin (County OP) provides over-arching policy direction on matters of County significance. The County Official Plan directs County growth management and land use decisions by providing upper-tier land use planning guidance for the County’s eight local municipalities. Detailed land use planning and local decision making is managed and administered locally through the local municipal official plans which will conform to the policies of this Plan.

As per Schedules E – Natural Heritage Features, the Study Area contains PSWs, woodlands, and watercourses. See Table 3 below for a detailed breakdown of which of these features are located within the Study Area:

*Table 3. NH Features as identified within the Dufferin County Official Plan found on each of the four Study Area properties.*

Location	PSW	Woodlands	Watercourses
158567 Highway 10	A PSW is located in the eastern corner of the property.	Two woodlands are located on the property: one in the northern corner and one in the eastern corner, extending from the PSW.	Two watercourses traverse the property. One in the eastern corner, transecting the PSW and woodland, and one in the western corner.
198602 2 <sup>nd</sup> Line N.E.	A continuation of the above-noted PSW is located on the southern corner of the property.	Two woodlands exist on this property: one which is a continuation of the woodland located within the PSW, and one that appears to be a hedgerow, located on the southern edge of the property limits.	One watercourse exists on this property: a continuation of the watercourse which transects the PSW located on the southeastern portion of the property.
199022 2 <sup>nd</sup> Line N.E.	No PSWs are noted within this parcel; however, two PSWs are located adjacent to the north and northwest of the property.	No woodlands are noted within this parcel; however, a woodland is located on the property adjacent to the southwestern corner.	Two watercourses bisect this property: one on the eastern portion of the property and one on the western portion of the property.
476234 3 <sup>rd</sup> Line	Not applicable. This property is not noted within the County’s OP.		



As per Policy 5.3.9 of the County's OP, no development or site alteration will be permitted within 120 m of Significant Woodland or PSWs unless the ecological function of the lands within the 120 m buffer have been evaluated, and it has been demonstrated through an EIS that there will be no negative impact on the natural features or their ecological functions.

It should be noted that the County's OP does not contain criteria to determine whether woodlands shown on Schedule E are significant, and as such their determination will be based on criteria provided in the Natural Heritage Reference Manual (NHRM). Per the NHRM, a woodland is deemed significant based on its ecological importance in terms of species composition, age, history, location and size.

## 2.5. Nottawasaga Valley Conservation Authority

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The Nottawasaga Valley Conservation Authority (NVCA) is responsible for O. Reg 172/06 – Development, Interference with Wetlands and Alterations to Shorelines and Watercourses, a regulation under the Conservation Authorities Act, 1990. This regulation prohibits development within the Regulation Limits set by the NVCA and applies to shorelines, rivers, stream valleys, hazardous lands, wetlands or areas adjacent to a wetland. A NVCA regulated watercourse is located along the southwest corner of the property located at 476234 3<sup>rd</sup> Line. As such, the proposed development will be subject to a permit review.

## 2.6. Grand River Conservation Authority

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The Grand River Conservation Authority (GRCA) is responsible for O. Reg 150/06 – Development, Interference with Wetlands and Alterations to Shorelines and Watercourses, a regulation under the Conservation Authorities Act, 1990. This regulation prohibits development within the Regulation Limits set by the GRCA and applies to shorelines, rivers, stream valleys, hazardous lands, wetlands or areas adjacent to a wetland. GRCA regulated watercourses are noted within the boundaries of the properties located at 158567 Highway 10, 198602 2<sup>nd</sup> Line N.E., 199022 2<sup>nd</sup> Line N.E. As such, the proposed development will be subject to a permit review.

## 3. Natural Heritage System

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The following sections provides a summary of the potential natural heritage features identified through background desktop reviews found within the Study Area.

### 3.1. Watercourses

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All watercourses observed on the four properties appear to be small and functioning as agricultural drains. Based on aerial interpretation, riparian vegetation appears to be lacking and the channels generally have a straightened planform (shape when looking down from above). Due to the lack of field assessments, conservative assumptions include:

- Watercourses are permanently flowing.
- Watercourses support fish habitat.
- Watercourses have regulatory floodplains.
- Watercourses will need to be retained as open features in a future development scenario, however, they can be realigned for all portions located outside of existing natural features such as woodlands and wetlands.
- Fisheries setbacks of 15 m from the edge of bank will likely be applied.

- All watercourses are regulated by either the GRCA or NVCA and a permit will need to be secured for any work proposed within the regulated limits of the watercourse.
- If channel works are proposed within the high-water mark, a review of the proposed works by the Department of Fisheries and Oceans will be required.

### 3.2. Wetlands

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As this assessment is desktop based, confirmation of the significance of each wetland can not be confirmed, rather their level of significance reflects what is shown in the OP schedules and CA mapping. As such, a 30 m setback has been applied to all wetlands. The 30 m setback could potentially be reduced for non-PSW wetlands if it can be supported through an EIS.

### 3.3. Woodlands

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All woodland designations are based on OP classifications. Woodlands that have not been assigned a designation of significance within the OP schedules are identified as 'other woodlands' in this assessment. It is assumed that all woodlands will need to be retained within future development scenarios. The removal of a woodland would need to be supported within an EIS. All significant woodlands have been assigned a 15 m setback and all other woodlands a 10 m setback. Final setbacks are to be determined through an EIS.

## 4. Species at Risk Screening

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Existing information regarding Species at Risk (SAR) within the study area is summarized from data collected through a desktop review. A desktop background review was conducted using the Natural Heritage Information Center database, Fisheries and Ocean Canada Aquatic Species at Risk Maps and the surrounding areas SAR lists. The Natural Heritage Information Center (NHIC), operated by the Ontario Ministry of Natural Resources and Forestry (MNRF), 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 is of valued assistance for the purpose of this report. 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 vicinity of the proposed works location. The database also identifies environmental designations which provide insight into habitat potential including wetland, areas of natural and scientific interests and woodlands. Results from the Fisheries and Ocean Aquatic Species at Risk Maps and SAR lists from surrounding areas were combined with this information to assess the suitability of habitat within the vicinity of the proposed works.

The findings of the SAR screening are presented in Table 3, providing an assessment of the required habitat of potential SAR, the presence or absence of that habitat and the likelihood of the species being present.

### 4.1. Screening Results

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Details of the desktop SAR screening include an amalgamation of historical occurrence records within the vicinity of the proposed works as per current NHIC database records, Fisheries and Oceans Canada Aquatic Species at Risk Maps, the Ontario Breeding Bird Atlas, and the screening of a list of SAR present in Ontario. A review of the applicable SAR screening resources (noted above) indicated records of Species at Risk included below, in Table 4.

Subnational ranks (SRanks) of conservation statuses for Ontario are provided and each species is also classified under one of the three following Ontario species at risk (SARO) statuses:

- Endangered (END) lives in the wild in Ontario but is facing imminent extinction or extirpation.
- Threatened (THR) lives in the wild in Ontario, is not endangered, but is likely to become endangered if steps are not taken to address factors threatening it.
- Special Concern (SC) lives in the wild in Ontario, is not endangered or threatened, but may become threatened or endangered due to a combination of biological characteristics and identified threats.

Table 4. Potential Species at Risk within Study Area

Common Name	Scientific Name	S-RANK	Habitat Requirements	Potential Habitat in the Study Area	Rationale
<b>Endangered</b>					
Prothonotary warbler	<i>Protonotaria citrea</i>	S1B	Flooded woodlands or swamps. Silver maple, ash, yellow birch with holes used for nesting.	Potential	As per a desktop background review, the Study Area contains a forested wetland. Further studies (i.e., site reconnaissance and breeding bird survey) are advised to confirm the presence/absence of this species.
Red-headed woodpecker	<i>Melanerpes erythrocephalus</i>	S3	Open woodland and woodland edges, and is often found in parks, golf courses and cemeteries.	Potential	As per a desktop background review, the Study Area contains a wooded features and edges. Further studies (i.e., site reconnaissance and breeding bird survey) are advised to confirm the presence/absence of this species.
Yellow-breasted chat	<i>Icteria virens</i>	S1B	Lives in thickets and scrubs, especially locations where clearings have become overgrown.	Potential	A site reconnaissance was not part of this high-level constraints analysis. As such, thickets may be present within the Study Area. Further studies (i.e., site reconnaissance and breeding bird survey) are advised to confirm the presence/absence of this species.
King rail	<i>Rallus elegans</i>	S1B	Densely vegetated freshwater marshes	Unlikely	Based on a desktop background review, habitat is



Common Name	Scientific Name	S-RANK	Habitat Requirements	Potential Habitat in the Study Area	Rationale
			with open shallow water that merges with shrubby areas. Prefer larger, coastal wetlands.		likely not within the Study Area.
Acadian flycatcher	<i>Empidonax vireescens</i>	S1B	Mature, shady forests with ravines, or in forested swamps with lots of maple and beech trees.	Potential	As per a desktop background review, the Study Area contains watercourses which flow through woodlands. Further studies (i.e., site reconnaissance and breeding bird survey) are advised to confirm the presence/absence of this species.
Northern bobwhite	<i>Colinus virginianus</i>	S1?	Grassland, prairie or hay fields with woody cover in form of thickets, tangles of vines, shrubs; fence rows or woodland edges; abandoned farm fields; well-drained sandy or loamy soil; pond edges.	Potential	As per a desktop background review, the Study Area contains agricultural lands. In addition, thickets may also be present within the Study Area. Further studies (i.e., site reconnaissance and breeding bird survey) are advised to confirm the presence/absence of this species.
<b>Threatened</b>					
Least bittern	<i>Ixobrychus exilis</i>	S4B	Wetland habitats, cattail marshes with a mix of open pools and channels.	Unlikely	Based on a desktop background review, habitat is likely not within the Study Area.
Bobolink	<i>Dolichonyx oryzivorus</i>	S4B	The preferred breeding habitat for Bobolink consists of hayfields, pastures, and meadows which are dominated by a mixture of grasses and broad-leaved forbs (e.g., red clover, dandelion, timothy). It	Potential	As per a desktop background review, the Study Area contains agricultural lands. Further studies (i.e., site reconnaissance and breeding bird survey) are advised to confirm the presence/absence of this species.





Common Name	Scientific Name	S-RANK	Habitat Requirements	Potential Habitat in the Study Area	Rationale
			also occurs in wet prairie, graminoid peatlands, abandoned fields, no-till cropland, small-grain fields, and reed beds.		
Eastern meadowlark	<i>Sturnella magna</i>	S4B, S3N	This species primarily resides south of the Boreal Forest within mid-height meadows and open areas including agricultural crops (hay and alfalfa), pastures, orchards, fallow fields and other similar ecosites.	Potential	The Study Area likely contains mixed grasses which has the potential to support this species at risk.
Chimney swift	<i>Chaetura pelagica</i>	S3B	Urban settlements where they nest and roost in chimneys or other manmade structures.	Unlikely	Lack of required structures within the Study Area
Bank swallow	<i>Riparia riparia</i>	S4B	It nests in a wide variety of naturally and anthropogenic vertical banks, which often erode and change over time including aggregate pits and the shores of lakes and rivers.	Unlikely	Based on a desktop background review, habitat is likely not within the Study Area.
Short-eared owl	<i>Asio flammeus</i>	S4?B, S2S3	Open areas such as grasslands, marshes and tundra where it nests on the ground and hunts for small mammals, especially voles.	Unlikely	Based on a desktop background review, habitat is likely not within the Study Area.
<b>Special Concern</b>					



Common Name	Scientific Name	S-RANK	Habitat Requirements	Potential Habitat in the Study Area	Rationale
Midland painted turtle	<i>Chrysemys picta marginata</i>	S4	Midland painted turtles prefer waterbodies that have soft bottoms, abundant basking sites, and aquatic vegetation such as ponds, marshes, lakes, and slow-moving creeks.	Unlikely	Based on a desktop background review, habitat is likely not within the Study Area.
Snapping turtle	<i>Chelydra serpentina</i>	S4	Most of their lives are spent in shallow waters. However during the breeding season, females travel overland in search of gravel or sandy sites to lay their eggs.	Unlikely	Based on a desktop background review, habitat is likely not within the Study Area.
Monarch	<i>Danaus plexippus</i>	S2N, S4B	Monarch caterpillars feed exclusively on milkweed plants; therefore, their preferred breeding habitat is meadows and open areas. Adult butterflies can be found in more diverse habitats where they feed on nectar from a variety of wildflowers.	Potential	A site reconnaissance was not part of this high-level constraints analysis. As such, milkweed may be present within the Study Area. Further studies (i.e., site reconnaissance) are advised to confirm the presence/absence of this species.
Bald eagle	<i>Haliaeetus leucocephalus</i>	S4	Variety of habitats and forest types, but almost always near a major lake or river.	Unlikely	Based on a desktop background review, habitat is likely not within the Study Area.
Common nighthawk	<i>Chordeiles minor</i>	S4B	Open areas with little to no ground vegetations, such as logged or burned-over areas, forest clearings, rock barrens, peat bogs,	Unlikely	Based on a desktop background review, habitat is likely not within the Study Area.



Common Name	Scientific Name	S-RANK	Habitat Requirements	Potential Habitat in the Study Area	Rationale
			lakeshores and mine tailings.		
Eastern wood-pewee	<i>Contopus virens</i>	S4B	Mid-canopy layer of forest clearings and edges of deciduous and mixed forests.	Potential	Use woodland habitat for nesting.
Barn swallow	<i>Hirundo rustica</i>	S4B	This species uses almost exclusively human-made structures to mount their cup-shaped nests on.	Potential	Use barns and other open structures for nesting.
Wood thrush	<i>Hylocichla mustelina</i>	S4B	Mature deciduous and mixed forests.	Potential	As per a desktop background review, the Study Area contains forested areas. Further studies (i.e., ecological land classification and breeding bird survey) are advised to confirm the presence/absence of this species.
Black tern	<i>Chlidonias niger</i>	S3B, S4M	Black Terns build floating nests in loose colonies in shallow marshes, especially in cattails.	Unlikely	Based on a desktop background review, habitat is likely not within the Study Area.
Peregrine falcon	<i>Falco peregrinus</i>	S4	Nests on tall, steep cliff ledges close to large bodies of water. They also have adapted to urban settlements, nesting in tall buildings.	Unlikely	Based on a desktop background review, habitat is likely not within the Study Area.



## 4.2. Species Assessment

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The SAR screening has identified a number of SAR that could potentially be found within the Study Area. The habitat for these species falls within three general types:

- Existing natural areas such as woodlots, wetlands and stream corridors
- Pasture lands for grassland breeding birds such as bobolink and Eastern meadowlark
- Barns and open structures for bird nesting

Final determination as to whether SAR or their habitat is present within the Study Area will have to be determined through an EIS, as SAR or their habitat cannot be determined definitively through a desktop assessment. While the SAR screening cannot determine if any of the species are found within the Study Area, it demonstrated that there are numerous species potentially present within the Study Area and as such, the screening information has been used to inform/verify that existing features such as wetland and woodlands should be retained until such time that field studies can determine otherwise.

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## 5. Development Limit

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Natural heritage constraints to development have been determined based on existing policies and aerial imagery and fall into the following three categories:

- Wetlands
- Woodlands
- Stream corridors (watercourse, floodplain and riparian zone)

Setbacks have been assigned to each of the constraint categories and are as follows:

- Provincially Significant Wetlands – 30 m
- Locally Significant Wetlands – 30 m
- Significant woodlands – 15 m
- Other woodlands – 10 m
- Fisheries setback – 15 m from edge of bank

In addition to the natural heritage constraints listed above, hazard constraints must also be considered and will be administered by the Conservation Authorities. The primary hazard constraint that needs to be considered is the Regulatory Flood Limit, which is provided through the Conservation Authorities. GRCA mapping provides regulatory limits; however, the NVCA mapping does not provide the regulated flood limits.

Based on the lack of in-field confirmatory surveys, and the conservative approach taken within this assessment, all regulated watercourses have been identified as features to be retained as open features. It is assumed that all regulated watercourses provide direct fish habitat functions. However, based on a review of aerial imagery, many watercourses appear to be functioning as agricultural drains; they generally appear to have been straightened and no longer support natural planforms. As a result, it is likely that while the watercourses are to be retained, they can mostly likely be realigned if natural channel principals are followed.

Maps 1 and 2 provide the natural heritage constraints with their setbacks as defined above.

Areas identified as regulated by the Conservation Authorities will require a permit for any site alteration or development. They do not represent areas of no development, however portions of the regulated areas which are deemed to be hazard lands (such as flood zones and wetlands) are undevelopable.

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## 6. Closing

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A desktop natural heritage constraints analysis has been completed for four properties located within the Town of Melancthon in Dufferin County. The constraints analysis was based on local and county policies in addition to federal and provincial regulations. Through desktop background reviews, several natural heritage features were brought forward as potentially occurring within the Study Area limits. Mapping which outlines these natural heritage development constraints, and their applicable setbacks was also prepared. It is important to note, this assessment did not include confirmatory fieldwork, inventories or characterizations to verify the ecological quality of any identified natural heritage features. As such, this assessment cannot be used to definitely determine the limits of the natural heritage constraints and to set final development limits. An EIS will be required to finalize the limits of the natural features and the development limits of the Study Area.

Regards,

**GEOPROCESS RESEARCH ASSOCIATES INC**

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# Natural Heritage Constraints Analysis

Prepared for AJGL Group Inc.

August 18, 2023

Prepared by:



Brittany Quesnel, B.A., CERPIT  
Ecologist

Reviewed by:



Ken Glasbergen, M.Sc., ERPG  
Principal, Senior Ecologist

## 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.

This report was prepared exclusively for AJGL Group Inc. by GeoProcess Research Associates. The report may not be relied upon by any other person or entity without our written consent and that of AJGL Group Inc. Any uses of this report or its contents by a third party, or any reliance on decisions made based on it, are the sole responsibility of that party. GeoProcess Research Associates accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions taken based on this report.

Project Number P2023-769

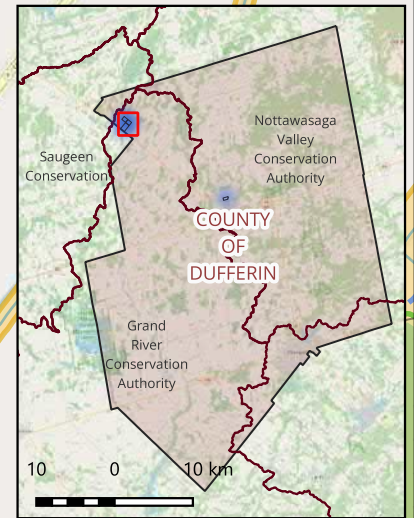
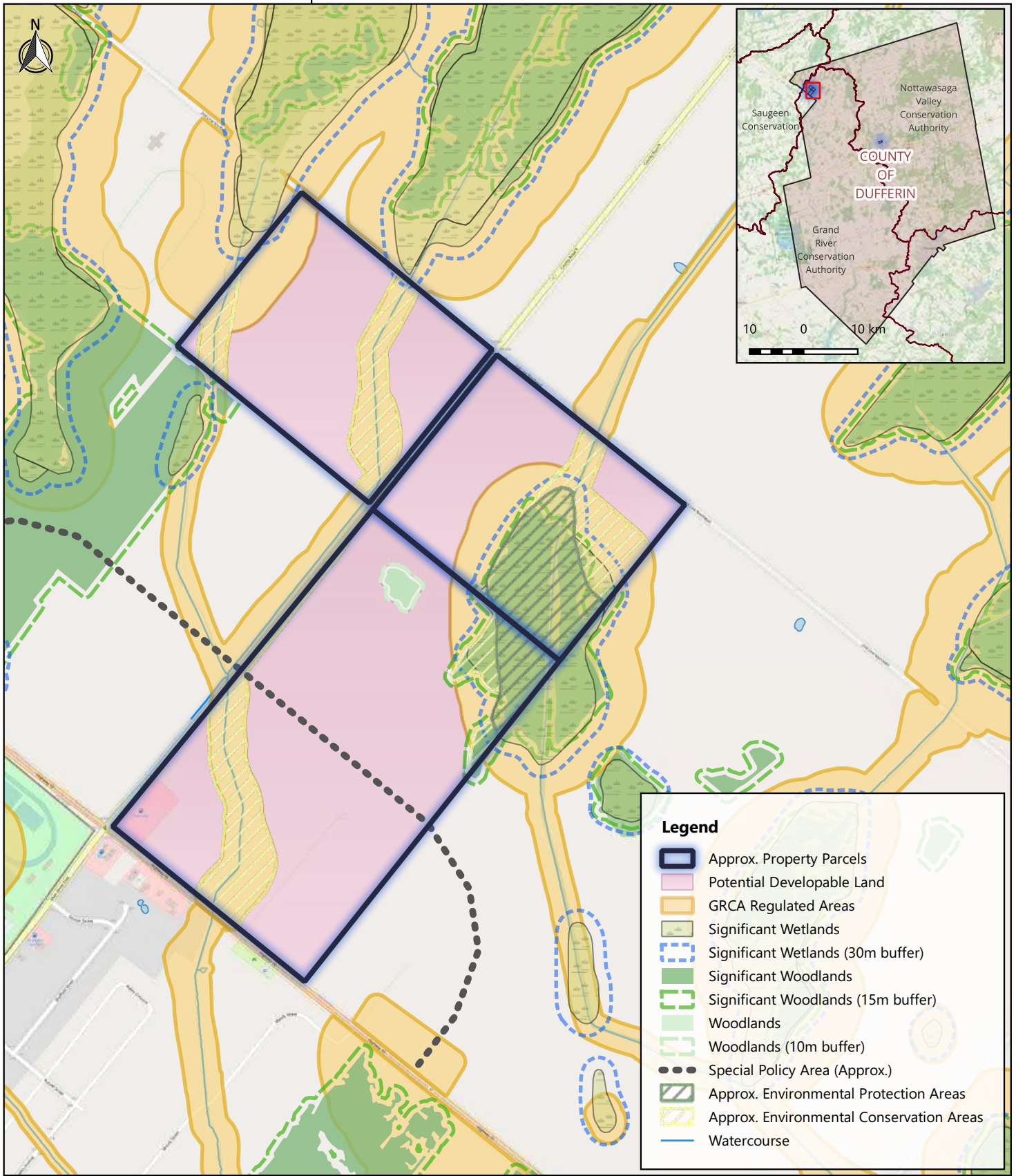


## Maps

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550000



**Legend**

- Approx. Property Parcels
- Potential Developable Land
- GRCA Regulated Areas
- Significant Wetlands
- Significant Wetlands (30m buffer)
- Significant Woodlands
- Significant Woodlands (15m buffer)
- Woodlands
- Woodlands (10m buffer)
- Special Policy Area (Approx.)
- Approx. Environmental Protection Areas
- Approx. Environmental Conservation Areas
- Watercourse

550000



0 250 500 m

NAD83 / UTM zone 17N (EPSG:26917)

Notes:

- [1] Significant Wetlands and Woodlands approximate Dufferin County and Town of Melancthon Official Plan data using Land Information Ontario layers
- [2] Property parcel(s) are approximate based on data provided to GRA
- [3] Base map is from Open Street Map

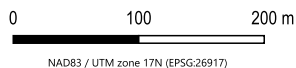
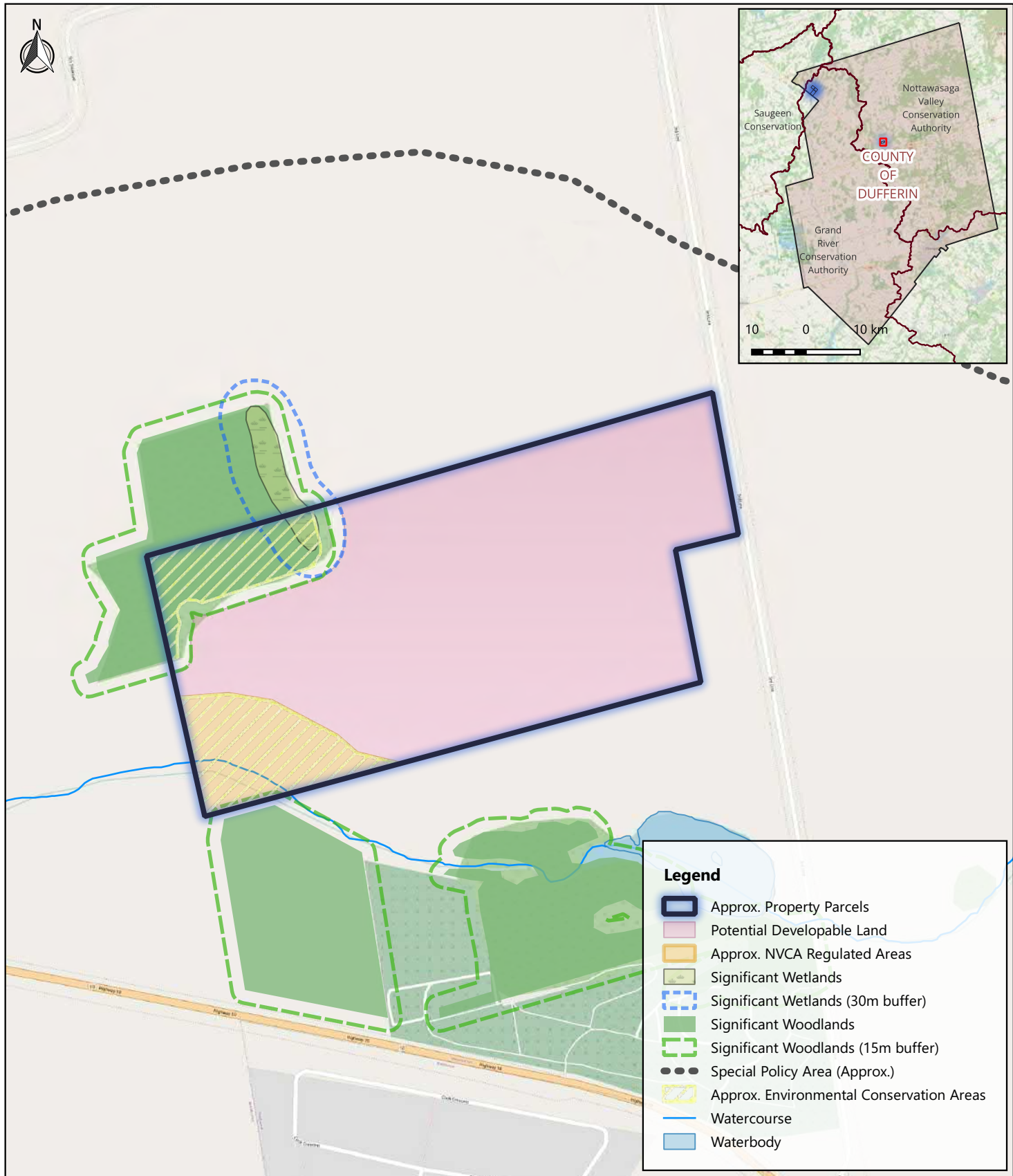
**Map 1.**

158567 Highway 10, 198602 2nd Line N.E.,  
and 199022 2nd Line N.E.

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 CHECKED BY: KG DATE: Aug 18, 2023

**Natural Heritage Constraints Analysis**

AJGL Group Inc.



Notes:  
 [1] Significant Wetlands and Woodlands approximate Dufferin County and Town of Melancthon Official Plan data using Land Information Ontario layers  
 [2] Property parcel(s) are approximate based on data provided to GRA  
 [3] Base map is from Open Street Map

Map 2.

476234 3rd Line

**Natural Heritage Constraints Analysis**

AJGL Group Inc.

CREATED BY: FM PROJECT NO.: P2023-769  
 CHECKED BY: KG DATE: Aug 18, 2023



## Appendix

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### 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. Atlasers 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.

## Appendix B – Site Servicing Investigation Letter

Prepared by SCS Consulting Group Ltd.

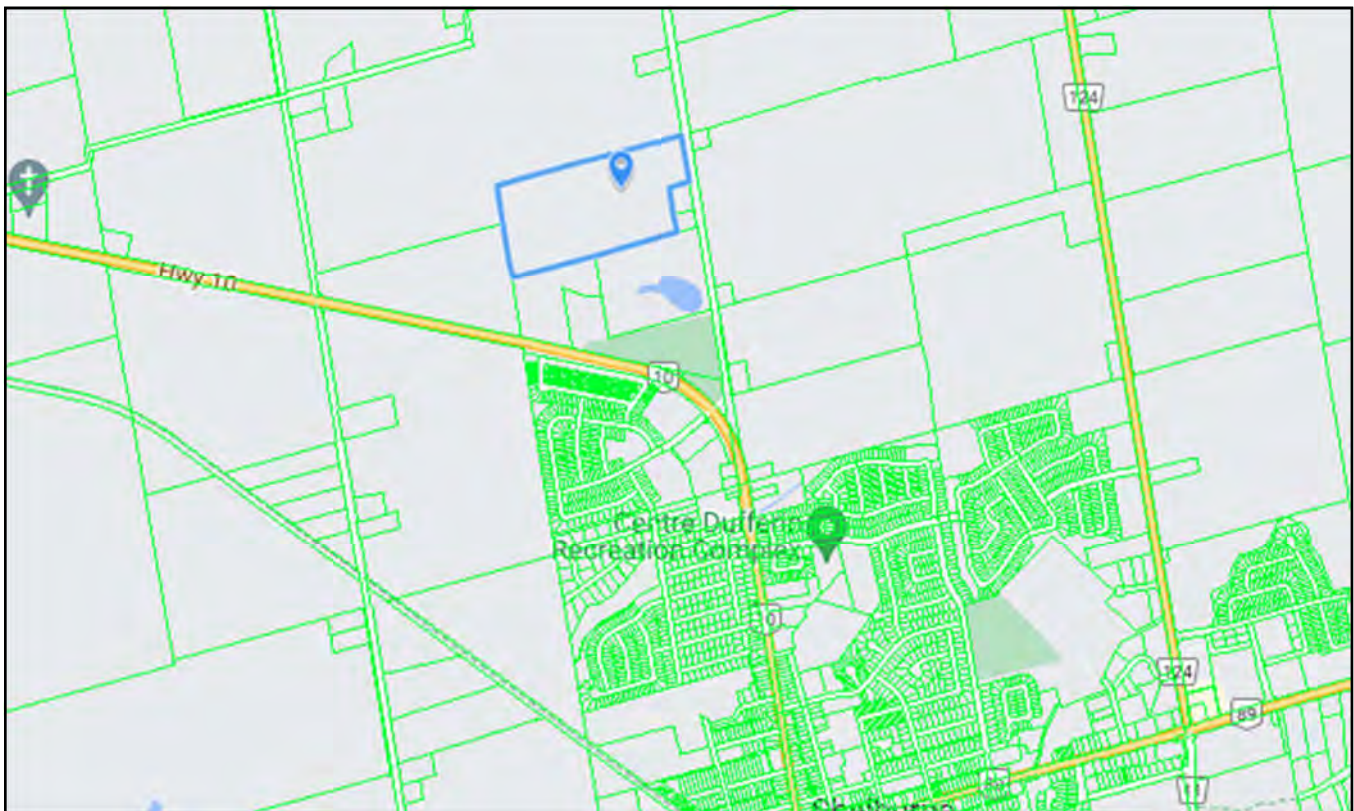


**Mr. Eric Silverberg**  
Roxborough Developments Ltd.  
5734 Yonge Street, Suite 508  
Toronto, Ontario, M2M 4E7

Dear Mr. Silverberg:

Re: **Proposed Site Servicing for  
476234 3<sup>rd</sup> Line, Township of Melancthon  
County of Dufferin, Ontario**

We are writing to provide a preliminary overview of the servicing potential for the lands at 476234 3<sup>rd</sup> Line in the Township of Melancthon, County of Dufferin. The subject lands are immediately north of the Town of Shelburne Municipal Boundary (refer to **Figure 1** below). The subject lands are west of the 3<sup>rd</sup> Line, north of Highway 10. The approximate site area is 19.8 ha (49.4 acres).



**Figure 1 – Site Location (Geowarehouse, 2023)**

## Existing Topography

The figure below shows that the site generally falls southward, towards the Cague Municipal Drain. There is a high point at an approximate elevation of 495m in the northwest corner of the site within the wooded area. The remaining areas of the site generally fall to the south boundary of the site with an elevation of approximately 485m.



Figure 2 – Existing Topography (*Dufferin County Interactive Map, 2023*)





## Generic Regulation Mapping and Preliminary Natural Heritage Review

The subject parcel is in the jurisdiction of the Nottawasaga Valley Conservation Authority (NVCA). The site is located in the Nottawasaga River Watershed, approximately 1.8 km northeast of the Upper Grand River Watershed. The site includes a regulated area for the Cague Municipal Drain that crosses the property's southwest corner. The nature of the regulated feature and associated impacts on developable area will be subject to further study and coordination with NVCA.

The initial assessment was undertaken in conjunction with a preliminary review of environmental constraints and opportunities prepared by Palmer (refer to **Figure 3** below).

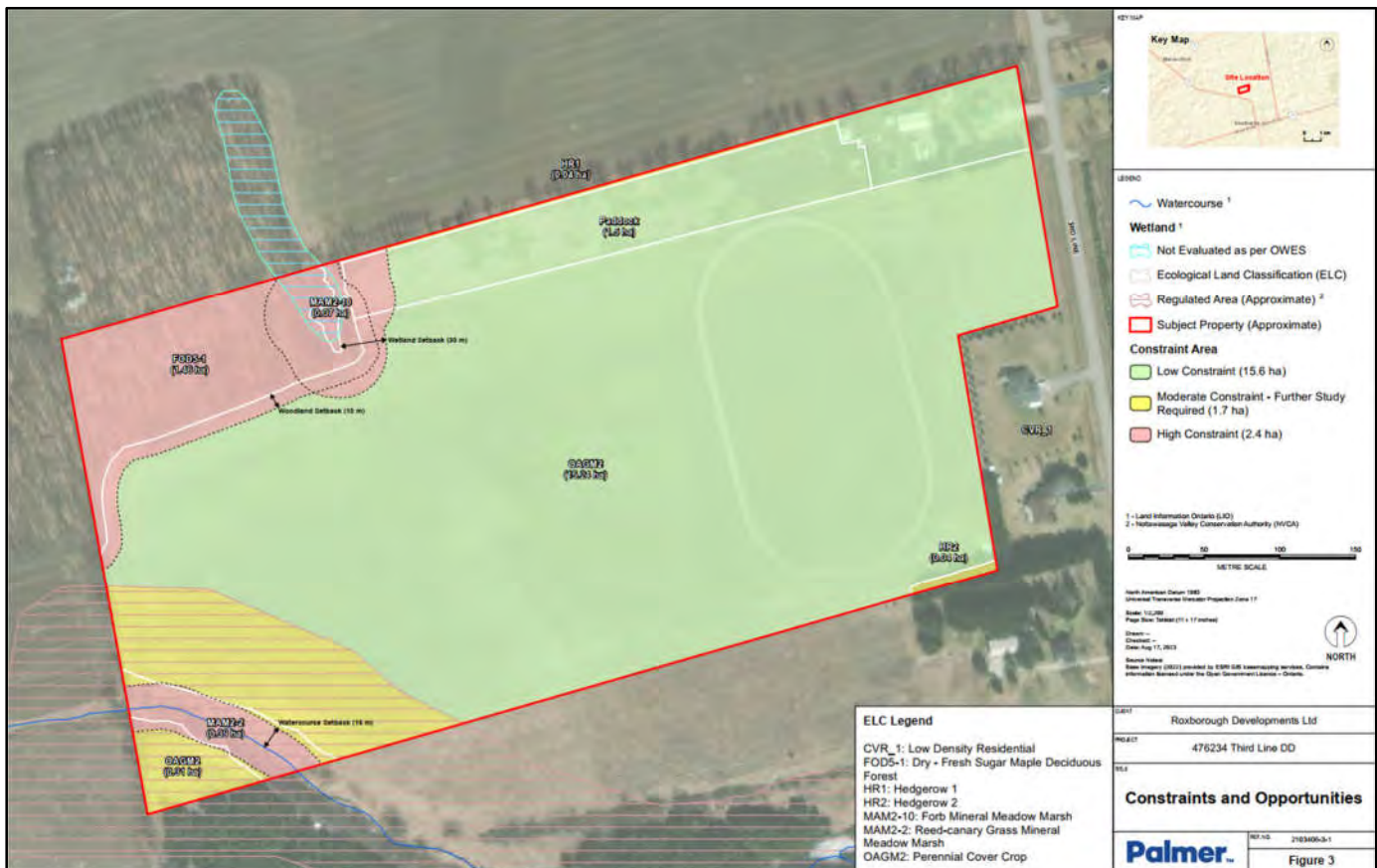


Figure 3 – Constraints and Opportunities (Palmer, 2023)



## Proposed Sanitary Servicing

The subject parcel is immediately north of the Town of Shelburne. An agreement to service from the Town of Shelburne with the Township of Melancthon would allow this site to be serviced by connecting to the north end of the Colonel Philips Drive Sanitary Sewer, located south of Highway 10. The existing 375mm dia. sanitary sewer's elevation is higher (490m) than the existing elevation of the subject property. Therefore, the development would require a sanitary pumping station to pump flows via a 1km forcemain connecting to the existing Colonel Philips Drive sewer (refer to **Figure 4** below).



**Figure 4 – Shelburne Sanitary Sewer System: Alternative 1 (Town of Shelburne, 2019)**

Alternatively, the site could be connected further south where a sanitary gravity main crosses Highway 10 north of the Susan Street intersection, immediately south of Walter's Creek. The existing 450mm dia. sanitary sewer's elevation is lower than the existing elevation of the subject property. However, it would still need to cross the high point at the Colonel Philips Drive intersection (490m) and cross Walter's Creek. Therefore, the development would require a sanitary pumping station to pump flows via a 1.2km forcemain connecting at Highway 10 and Walter's Creek sewer (refer to **Figure 5** below).







Figure 5 – Shelburne Sanitary Sewer System: Alternative 2 (Town of Shelburne, 2019)

Ultimately, the site would discharge to the existing Shelburne Wastewater Treatment Plant (WWTP). This servicing solution is subject to confirmation of capacity in the downstream system by the Town of Shelburne.

Alternatively, if it is determined that inter-municipal servicing is not accepted or that there is insufficient capacity in the Shelburne WWTP, the Site could be serviced via an on-site Wastewater Treatment Facility outletting to either to the on-site watercourse (subject to an assimilative capacity assessment) or an on-site effluent bed for sub-surface discharge in accordance with provincial guidelines. The sizing and location of the effluent bed will be confirmed at the subsequent study stage based on contributing flow, topography, soil types, groundwater depths, and the soil hydraulic conductivity characteristics.

## Proposed Water Servicing

The subject parcel is immediately north of the Town of Shelburne. An agreement to service from the Town of Shelburne with the Township of Melancthon would allow this site to be serviced by connecting to the eastern end of the Colonel Philips Drive watermain. The existing 300mm dia. PVC watermain must be extended 1km east along Colonel Philips Drive, cross Highway 10, and continue north along the 3<sup>rd</sup> Line to the south property limits (refer to **Figure 6** below). If required, a dual watermain feed could be provided for security purposes.



**Figure 6 – Shelburne Water Distribution Network (Town of Shelburne, 2021)**

A future hydraulic analysis will be necessary to confirm the appropriate infrastructure sizing and configuration to provide adequate supply and pressure to service the proposed development and to confirm that the existing water storage and supply infrastructure is adequate to service the subject lands.



Re: | **Proposed Site Servicing for  
476234 3rd Line, Township of Melancthon  
County of Dufferin, Ontario**

File #: 2596  
August 22, 2023  
Page 7 of 7

## Summary

In summary, the site can be serviced from the existing municipal water and wastewater systems located south of the site, subject to the Town of Shelburne's confirmation of capacity and allocation. A servicing agreement must be in place between the Town of Shelburne and the Township of Melancthon.

Alternatively, an on-site wastewater treatment plan can be considered.

Please contact the undersigned if you have any questions or require additional information.

Sincerely,

**SCS Consulting Group Ltd.**



Steve Schaefer, P. Eng.

Principal

sschaefer@scsconsultinggroup.com

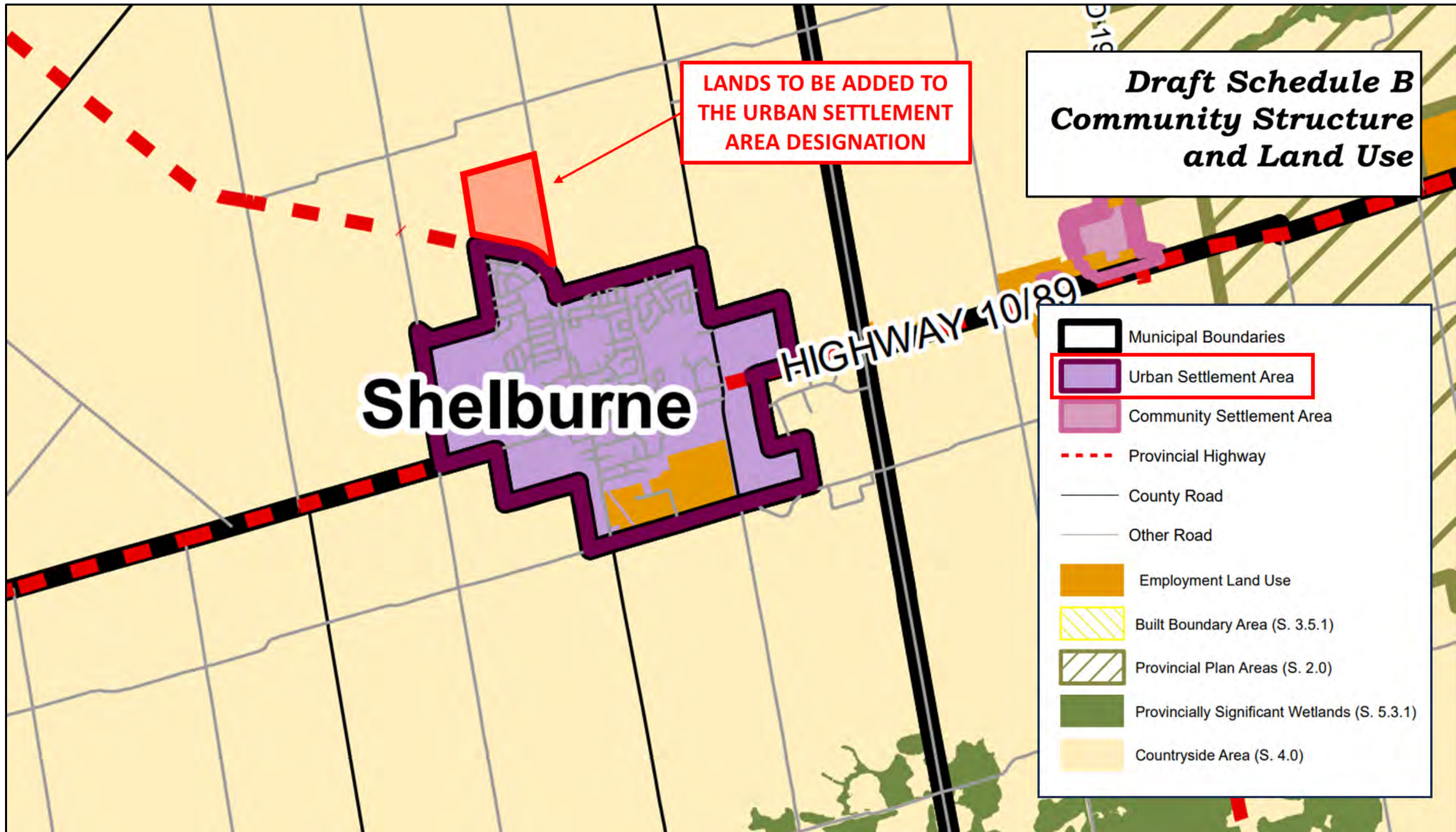
P:\2596 Melancthon 4th Line and Highway 10 (Shelburne)\Design\Reports\Servicing Investigation\476234 3rd Line, Melancthon\2023 08(Aug) 21 - Rev. Prelim. Servicing Brief\2596-cew-Site Servicing Investigation Letter-476234 3rd Line, Melancthon-21Aug23.docx



## Appendix C – Draft Schedule B of OPA 3

Proposed Changes to Draft Schedule B – Community Structure of OPA 3

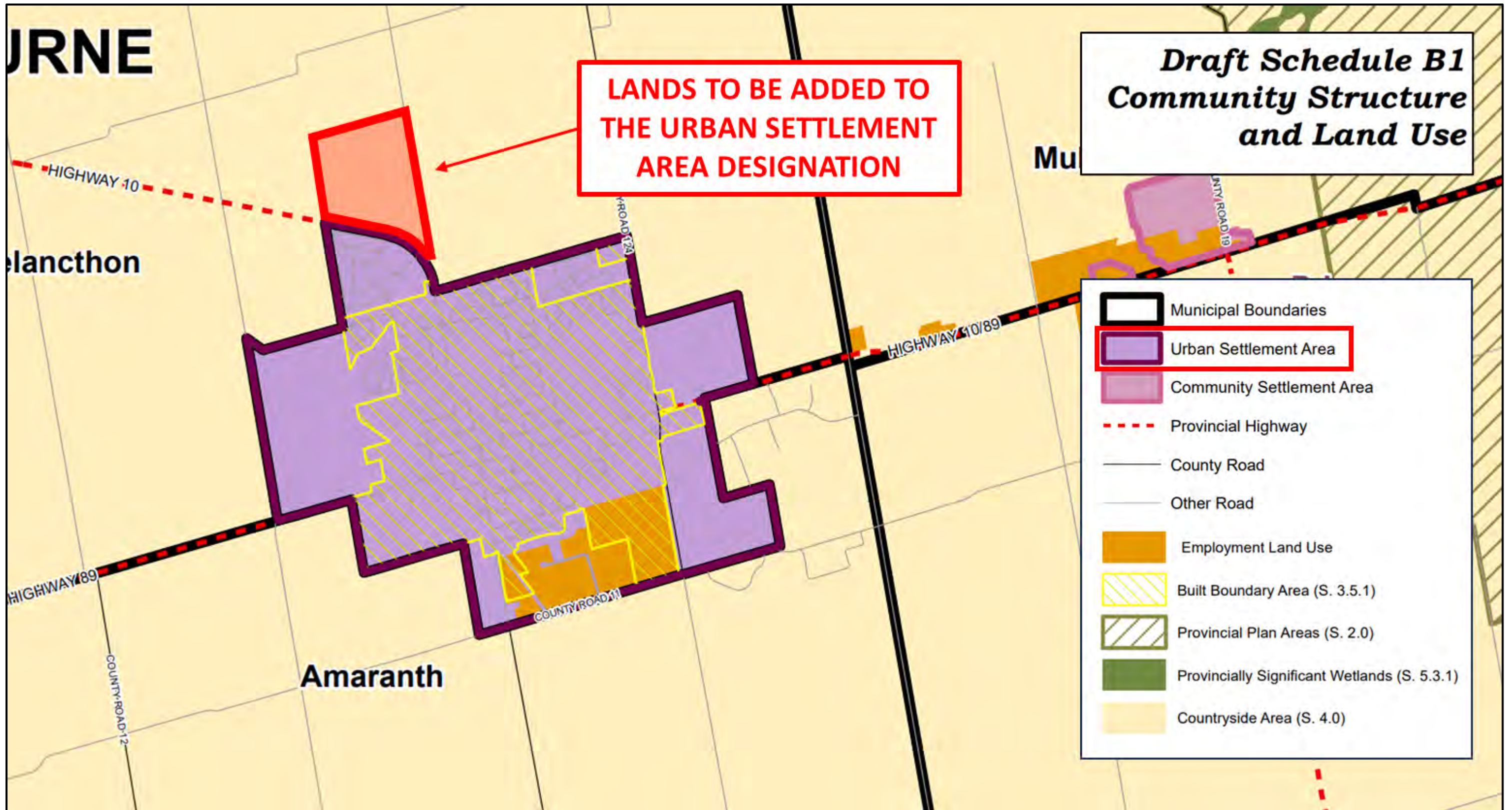






## Appendix D – Draft Schedule B1 of OPA 3

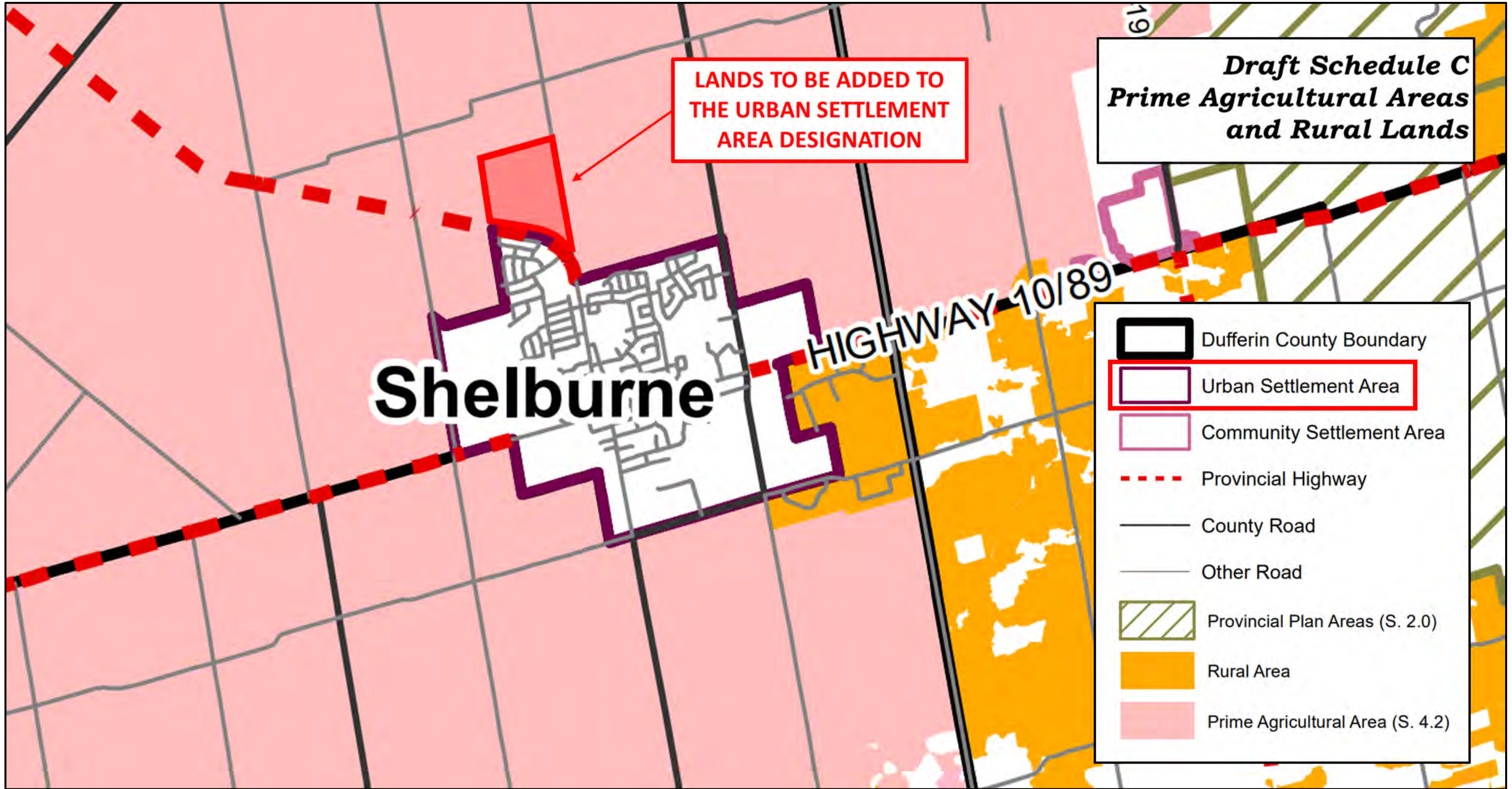
Proposed Changes to Draft Schedule B1 – Community Structure and Land Use of OPA 3



## Appendix E – Draft Schedule C of OPA 3

Proposed Changes to Draft Schedule C – Prime Agricultural Areas and Rural Lands of OPA 3

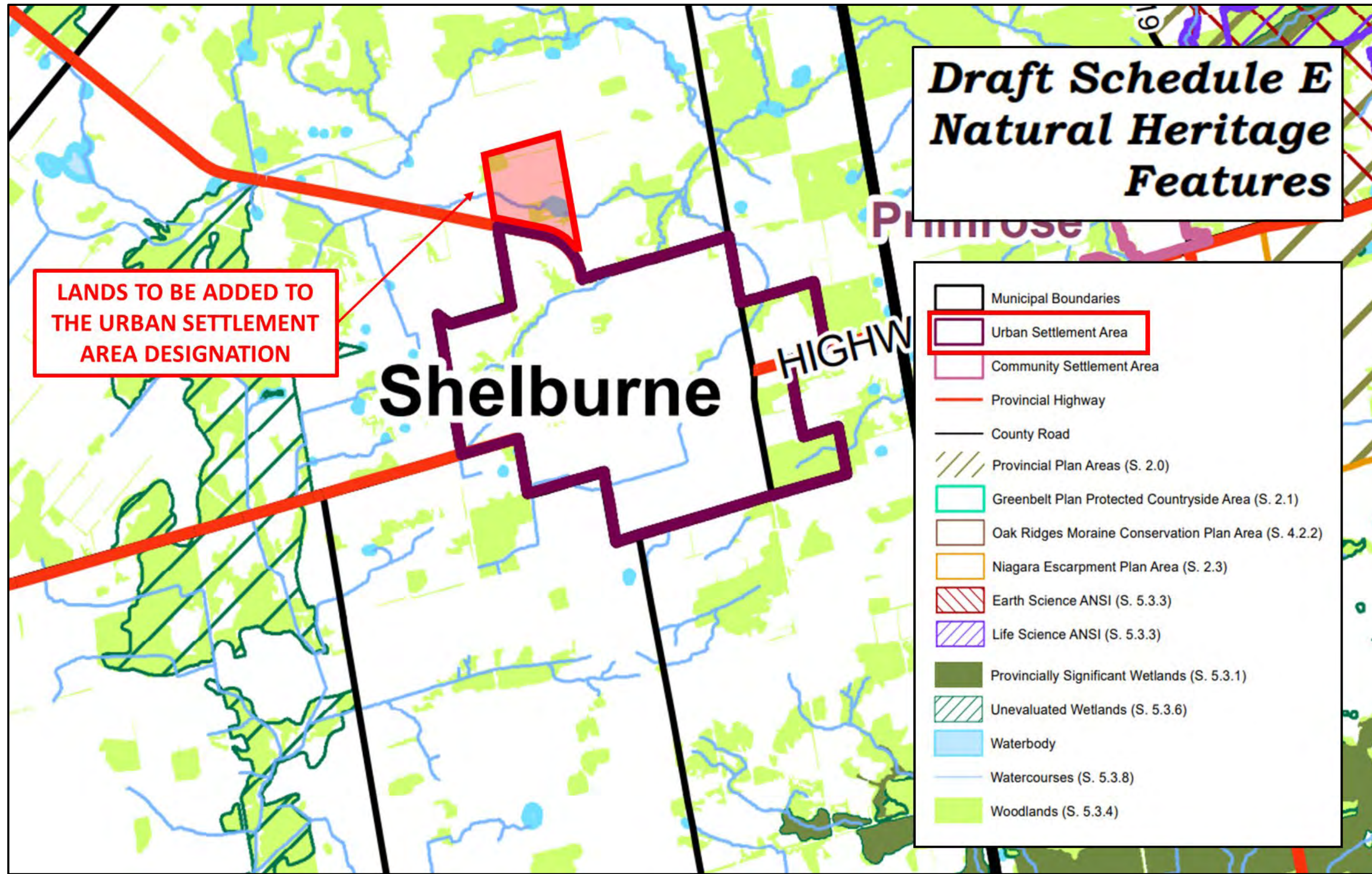




## Appendix F – Draft Schedule E of OPA 3

Proposed Changes to Draft Schedule E – Natural Heritage Features of OPA 3

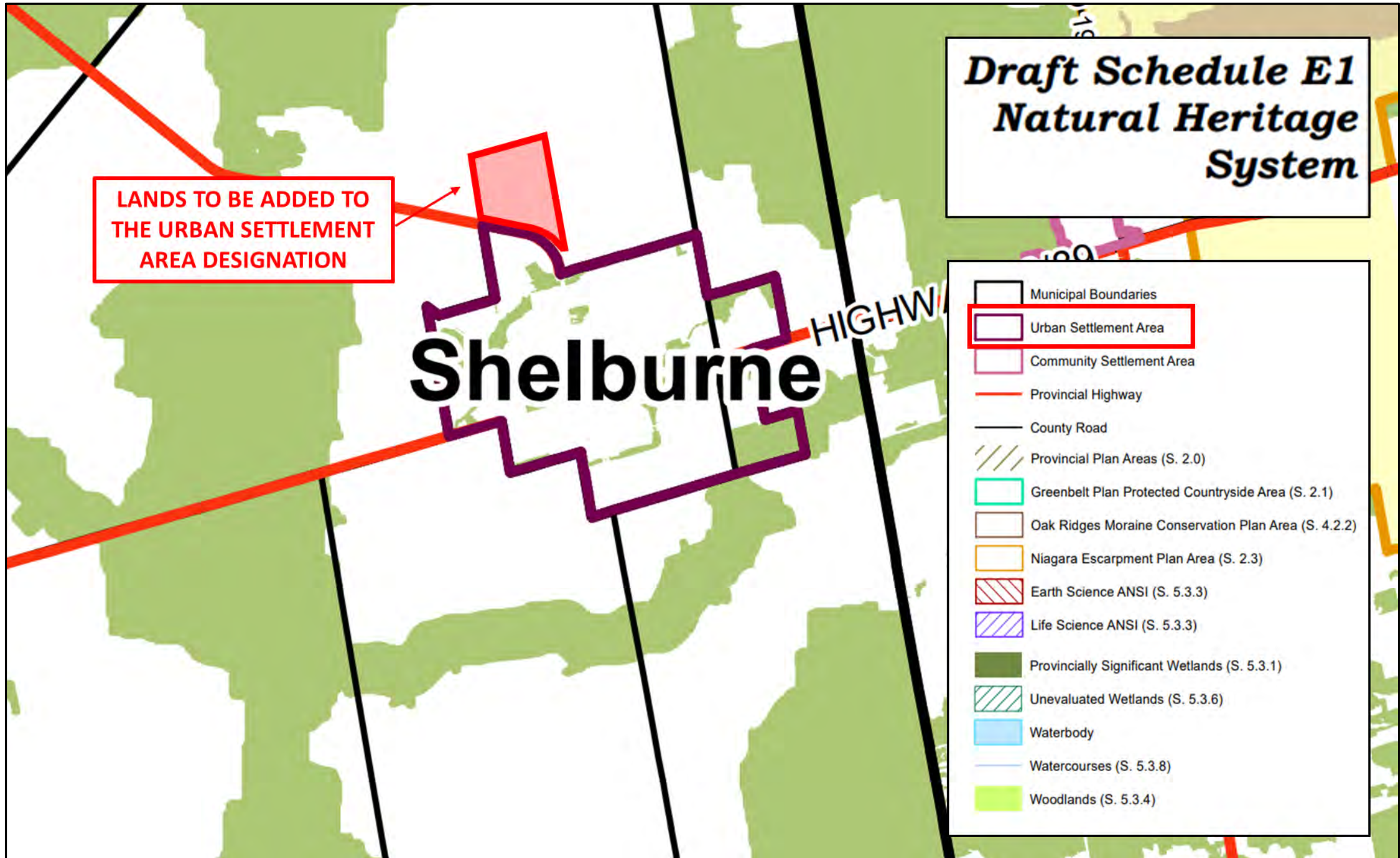




## Appendix G – Draft Schedule E1 of OPA 3

Proposed Changes to Draft Schedule E1 – Natural Heritage System of OPA 3

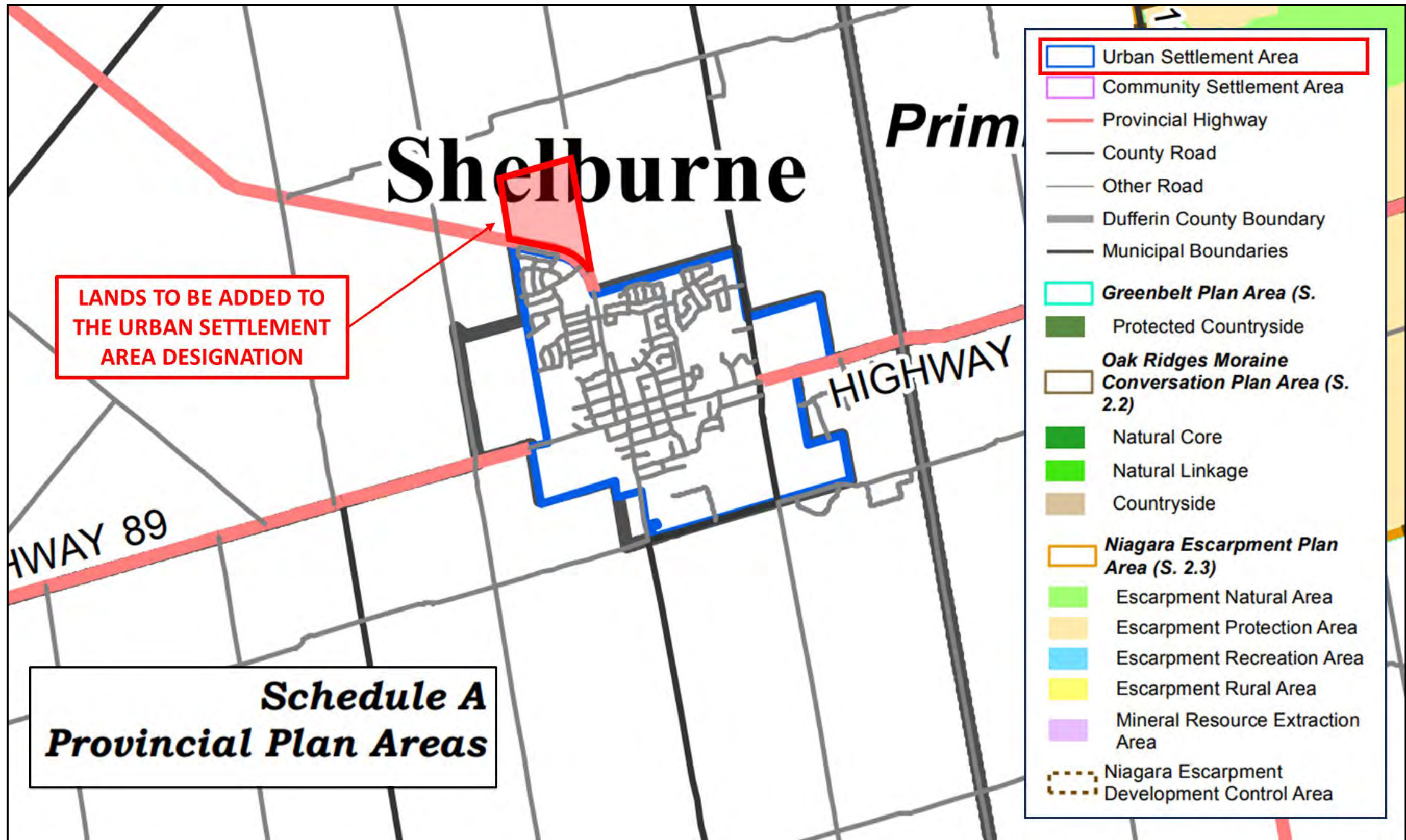




## Appendix H – Schedule A of the Dufferin County Official Plan

Proposed Changes to Schedule A – Provincial Plan Areas of the Dufferin County Official Plan

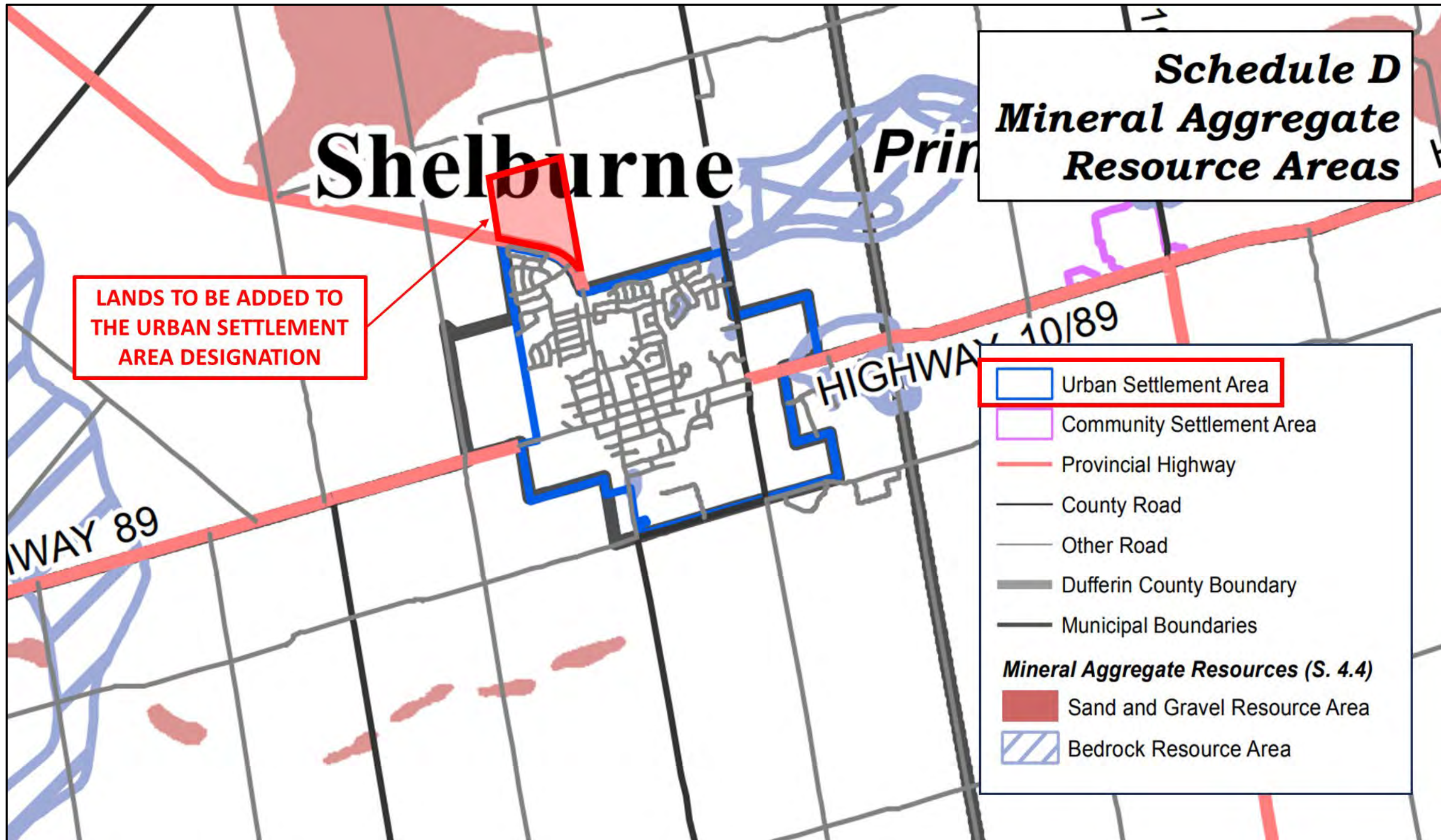




## Appendix I – Schedule D of the Dufferin County Official Plan

Proposed Changes to Schedule D – Mineral Aggregate Resource Areas of the Dufferin County Official  
Plan

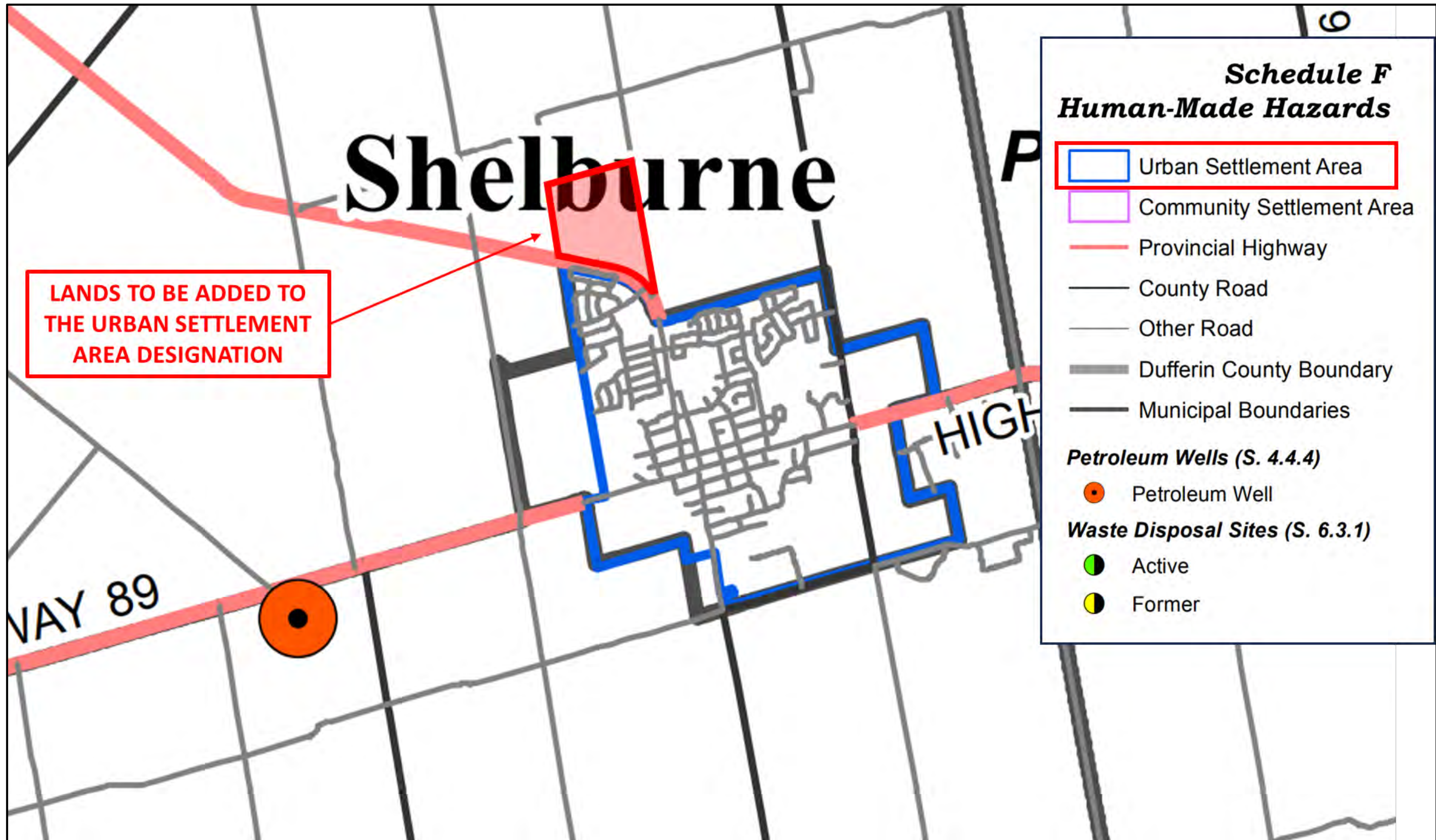




## Appendix J – Schedule F of the Dufferin County Official Plan

Proposed Changes to Schedule F – Human Made Hazards of the Dufferin County Official Plan

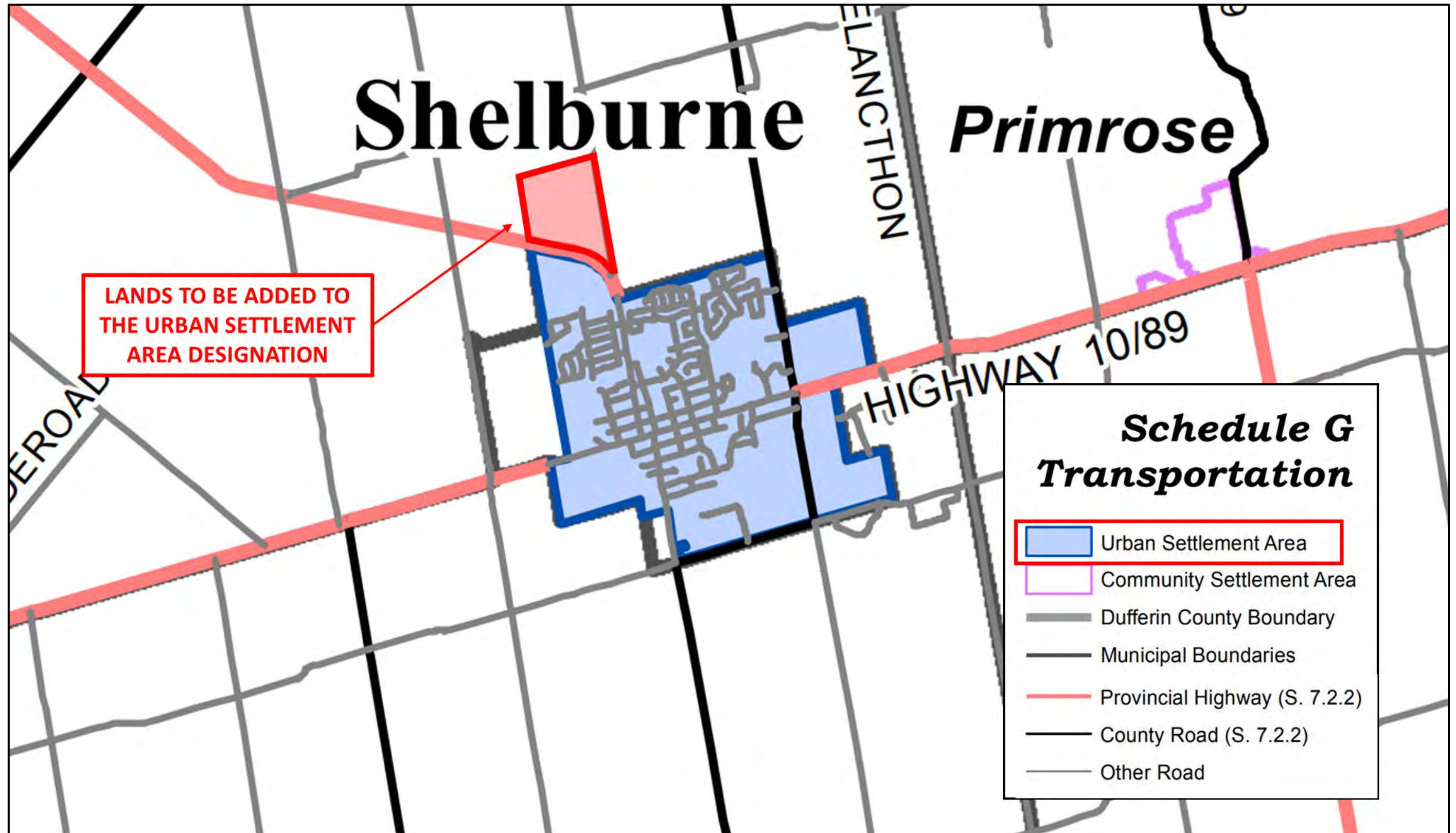






## Appendix K – Schedule G of the Dufferin County Official Plan

Proposed Changes to Schedule G –Transportation of the Dufferin County Official Plan



## Appendix L – Schedule H of the Dufferin County Official Plan

Proposed Changes to Schedule H – Active Transportation of the Dufferin County Official Plan



# Shelburne

## Primrose

### Schedule H Active Transportation

LANDS TO BE ADDED TO  
THE URBAN SETTLEMENT  
AREA DESIGNATION

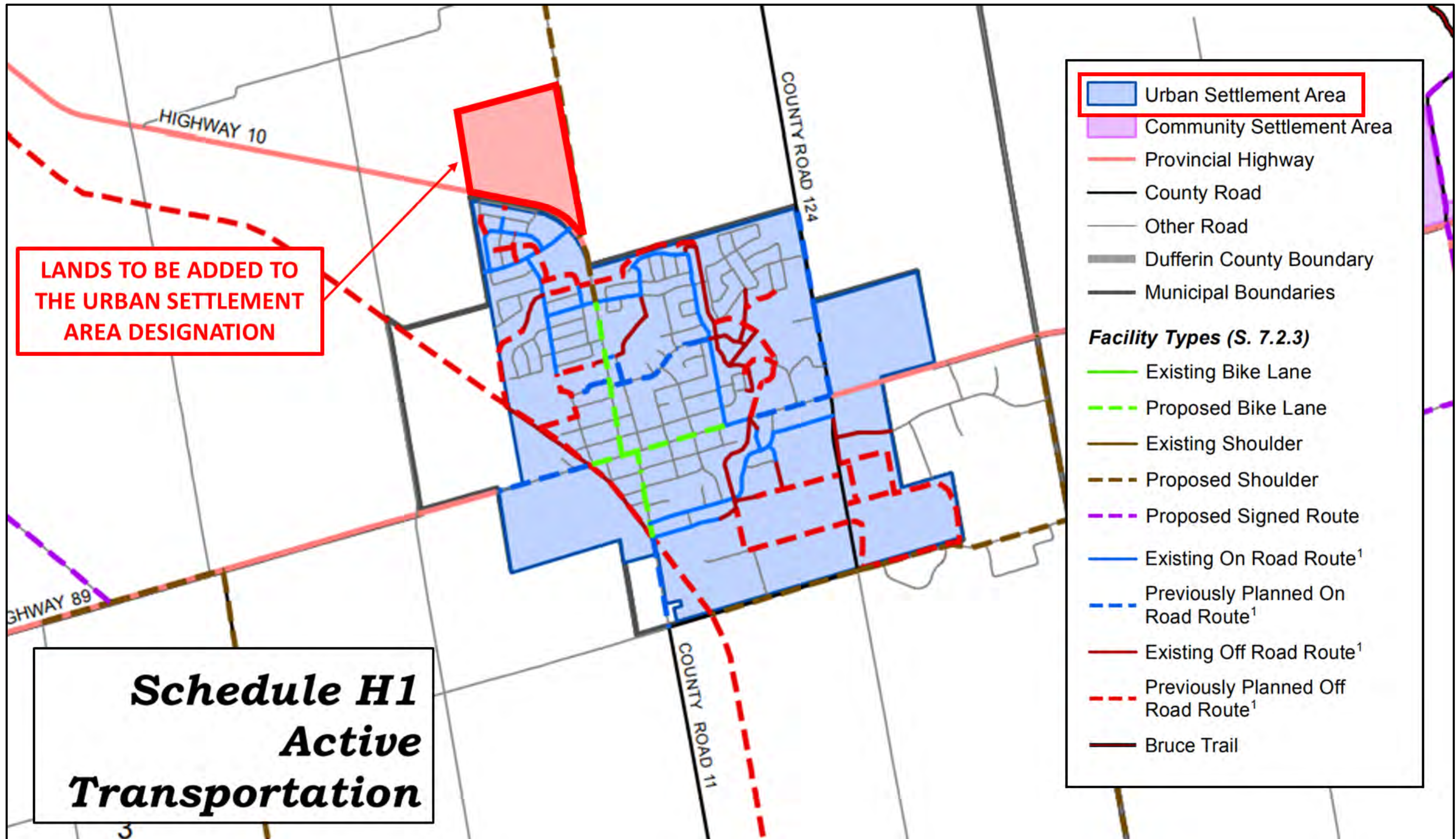
Refer to Schedule H

Urban Settlement Area	<b>Facility Types (S. 7.2.3)</b>	Existing On Road Route <sup>1</sup>
Community Settlement Area	Existing Bike Lane	Previously Planned On Road Route <sup>1</sup>
Provincial Highway	Proposed Bike Lane	Existing Off Road Route <sup>1</sup>
County Road	Existing Shoulder	Previously Planned Off Road Route <sup>1</sup>
Other Road	Proposed Shoulder	Bruce Trail
Dufferin County	Proposed Signed Route	
Municipal		



## Appendix M – Schedule H1 of the Dufferin County Official Plan

Proposed Changes to Schedule H1 – Active Transportation of the Dufferin County Official Plan



## Appendix N – Appendix 3 of the Dufferin County Official Plan

Proposed Changes to Appendix 3 – Potential Forest Hazard Classification for Wildfire of the Dufferin  
County Official Plan



