

Memo

To: Ontario Ministry of the Environment, Conservation and Parks

From: Jaimie Bortolotti, Dillon Consulting Limited

cc: Brad McLeod, Dillon Consulting Limited
Karl Tanner, Dillon Consulting Limited

Date: November 23, 2022

Subject: Species at Risk Considerations for the proposed North Neighbourhood Phase 7 development north of Wyandotte Street East, City of Windsor, Essex County

Our File: 22-4866

Introduction

Dillon Consulting Limited ('Dillon') has been retained by 1027458 Ontario Inc. (the 'proponent') for natural environment consulting services in support of obtaining an Official Plan and Zoning By-law Amendment for the site located on the north side of Wyandotte Street East and south of Riverside Drive East, between the future extensions of Clover Avenue and Lublin Avenue (the 'Project Location') in the City of Windsor. The proposed development for the Project Location is herein referred to as "North Neighbourhood – Phase 7".

The purpose of this memo is to summarize the natural environment existing conditions and the potential for Species at Risk (SAR) to occur within the Project Location.

Study Area

The Project Location is located on the north side of Wyandotte Street East and south of Riverside Drive East, between the future extensions of Clover Avenue and Lublin Avenue in the City of Windsor, east of the Riverside Sportsmen Club (Attachment A; Figure 1). For the purposes of documenting the natural environment existing conditions, the Study Area includes the Project Location, as well as the area 120 metres (m) outside of the Project Location (the 'Study Area').

Methodology

Background Information

The background information reviewed included a combination of existing published data, information made available through various public agencies, and web-based mapping programs. The information collected as part of the background review process was used to inform the scoping of field investigations as a mechanism to document the existing natural environment conditions, identify potential constraints,

and support future potential permits and approvals for the project. Information sources reviewed as part of the background data collection process are listed below in Table 1.

TABLE 1: LIST OF BACKGROUND INFORMATION, LITERATURE, AND SECONDARY SOURCES

Record Source	Records Requested and/or Reviewed
Government of Canada	
Environment Canada	<ul style="list-style-type: none"> Species at Risk Registry: Accessed to determine the at-risk status of wildlife species under Schedule 1 of the Species at Risk Act (SARA; 2002)
Fisheries and Oceans Canada (DFO)	<ul style="list-style-type: none"> Aquatic Species at Risk Map: Accessed to determine aquatic at-risk occurrences
Government of Ontario	
Ministry of the Environment, Conservation and Parks (MECP)	<ul style="list-style-type: none"> Endangered Species Act (ESA; 2007) Species at Risk in Ontario (SARO) List (O. Reg. 230/08) Client's Guide to Preliminary Screening for Species at Risk (2019)
Ministry of Natural Resources and Forestry (MNRF)	<ul style="list-style-type: none"> Natural Heritage Information Centre (NHIC) database (Squares: 17LG4288; MNRF, 2022) MNRF Make a Map: Natural Heritage Areas (MNRF, 2022) Technical Memo: Aylmer District MNRF Guidance on Identifying Activities/Areas not Likely to Contravene the Endangered Species Act, 2007 in the County of Essex & City of Windsor (2016)
Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA)	<ul style="list-style-type: none"> Agricultural Information Atlas (OMAFRA, 2022); reviewed area drains
Municipal Government(s)	
City of Windsor	<ul style="list-style-type: none"> Official Plan (2013)
Additional Sources	
Wildlife Atlases and Distribution Data	<ul style="list-style-type: none"> Ontario Breeding Bird Atlas (OBBA; Cadman et al., 2008). Second Atlas (2001-2005) – data for square 17TLG48 – grid based on 10 km² system.
	<ul style="list-style-type: none"> Christmas Bird Count (CBC; Birds Canada, 2022). Count circle North Shore (ONNS) – Historical Records from 2000 – 2021.
	<ul style="list-style-type: none"> Rare Vascular Plants of Ontario (Fourth Edition; Oldham and Brinker, 2009). Distribution data for rare vascular plants.
	<ul style="list-style-type: none"> Ontario Reptile and Amphibian Atlas (ORAA; Ontario Nature, 2022). List of reptile and amphibian species occurrences for square 17TLG48.

Record Source	Records Requested and/or Reviewed
	<ul style="list-style-type: none"> <li data-bbox="880 254 1468 338">• Ontario Butterfly Atlas (OBA; Toronto Entomologists Association, 2022). List of butterfly species occurrences for square 17TLG48. <li data-bbox="880 348 1468 411">• Atlas of the Mammals of Ontario (Dobbyn, 1994). Distribution data for mammals. <li data-bbox="880 422 1468 478">• Bumble Bees of North America (Williams et al., 2014). Distribution data for bumble bees.

Field Investigation

Field investigations were conducted on May 24 and September 22, 2022 by a Dillon biologist from within the extents of the Study Area to document existing natural heritage features, if present, and assess the Project Location for potential SAR occurrences and/or SAR habitat. A high-level vegetation community reconnaissance was also completed using Ecological Land Classification (ELC). The ecological community boundaries were first determined based on review of aerial imagery using the ELC System for Southern Ontario (Lee et al., 2008) with 2008 updates (Lee, 2008) in order to classify and map ecological communities to the vegetation level, and subsequently refined based on field investigations. Specific surveys, including confirmation of the presence or absence of wildlife, SAR, and/or their habitats were not part of the field investigation.

Results

Background Information

Designated Natural Features

A search and analysis of the records outlined in Table 1 did not identify any provincial parks or conservation reserves/areas, Area of Natural and Scientific Interest (ANSI), Life Science, or Earth Science, or Provincially Significant Wetlands (PSW) within the Study Area. Some Fencerow communities within the Project Location are designated as MNRF Woodland.

The Project Location falls within the Eastern Lake St. Clair Important Bird Area (IBA).

City of Windsor Official Plan Designations

The City of Windsor OP (2013) identifies lands designated as Environmental Policy Area A (Schedule C) across the road from the southwest part of the Project Location. The Project Location is designated as Residential (Schedule D; Attachment B).

Field Investigation

Ecological Land Classification

Vegetation communities were assessed and classified using ELC, where the ELC classifications assigned were used to identify potential natural heritage features within the Study Area. Communities observed within the Study Area are detailed in Table 2 and shown on Figure 2 (Attachment A). Refer to Attachment C for representative site photographs. Plant and wildlife observations made during the field investigation are listed in Attachment D.

TABLE 2: ECOLOGICAL LAND CLASSIFICATION RESULTS WITHIN THE STUDY AREA

ELC Community	Location	Dominant Plant Species
Natural ELC Communities		
Forb Meadow (MEF)	This community is located in the southwest part of the Study Area (outside of the Project Location).	Eastern Cottonwood (<i>Populus deltoides</i> ssp. <i>deltoides</i>), Eastern Late Goldenrod (<i>Solidago altissima</i> ssp. <i>altissima</i>), and Great Ragweed (<i>Ambrosia trifida</i>).
Cultural ELC Communities		
Fencerow with European Common Reed Inclusion (TAGM5)	This community is located southwest of the Project Location.	Eastern Cottonwood, Freeman's Maple (<i>Acer x freemanii</i>), and European Common Reed (<i>Phragmites australis</i> ssp. <i>australis</i>).
Open Agriculture (OAGM1)	This community is located throughout the Project Location and in the western and southern parts of the Study Area.	Soy Bean (<i>Glycine max</i>) in the recent past.
Commercial and Institutional (CVC)	This community is located in the western part of the Study Area associated with the Riverside Sportsmen Club.	Regularly-maintained grass with landscape trees.
Green Lands (CGL)	This community is located in the northern part of the Study Area and is associated with a multi-use trail.	Regularly-maintained grass with landscape trees.
Residential (CVR)	This community is located in the northern and northwestern parts of the Study Area.	Regularly-maintained grass with landscape trees.
Transportation and Utilities (CVI)	Community type outlines current roads in the Study Area.	N/A

Species at Risk Habitat Screening

A review of the information included in Table 1 identified several SAR with the potential to be within and/or in proximity (i.e. within 1 km) to the Project Location. However, given that the Project Location is largely associated with anthropogenic disturbances and activities (i.e. agriculture), limited potential SAR and/or their habitat was considered to occur in the Project Location and surrounding Study Area. Based on Dillon's experience in the general area, a review of aerial imagery, and existing natural features identified through the site visits conducted on May 24 and September 22, SAR identified during background review with potential to occur was refined to the species included in Table 3.

TABLE 3: SAR WITH THE POTENTIAL TO OCCUR WITHIN THE STUDY AREA

Scientific Name	Common Name	SARA ¹	ESA ²	SRank ³
Birds				
<i>Dolichonyx oryzivorus</i>	Bobolink	THR	THR	S4B
<i>Melanerpes erythrocephalus</i>	Red-headed Woodpecker	END	END	S3
<i>Sturnella magna</i>	Eastern Meadowlark	THR	THR	S4B
Reptiles				
<i>Pantherophis gloydi</i>	Eastern Foxsnake	END	END	S2
<i>Thamnophis butleri</i>	Butler's Gartersnake	END	END	S2
Mammals				
<i>Myotis leibii</i>	Eastern Small-footed Myotis	---	END	S2S3
<i>Myotis lucifugus</i>	Little Brown Myotis	END	END	S4
<i>Myotis septentrionalis</i>	Northern Myotis	END	END	S3
<i>Pipistrellus subflavus</i>	Tri-colored Bat	END	END	S3?

¹Federal Species at Risk Act (SARA) Registry Status (END = Endangered, THR = Threatened); ²Ontario ESA SAR List Status (END = Endangered, THR = Threatened); ³Provincial Conservation Rank (SRank) is an indicator of commonness in the Province of Ontario. A scale between 1 and 5, with 5 being very common and 1 being the least common. --- denotes no information or not applicable.

The list of SAR identified during the background review is listed in Attachment E.

Bobolink and Eastern Meadowlark – These grassland bird species typically nest in open grassland and forage crops with a mixture of grasses and broad-leaved forbs (COSEWIC, 2010). Eastern Meadowlark may nest in more disturbed grassland areas of fields, meadows, pastures, alfalfa fields, roadsides, and other open areas (MNR, 2018). Potential nesting habitat for these species may occur in the meadow communities (MEF) and agricultural communities (OAGM1) within the Project Location, however, the sizes of these communities are small and therefore would not represent suitable habitat.

Red-headed Woodpecker – This species is found in wooded areas, including open forests and treed hedgerows in agricultural areas. Potential nesting habitat may occur in the treed hedgerows within the Project Location, however, the size of this community is small and therefore would not represent suitable habitat.

Butler's Gartersnake – This species prefers moist, open habitats close to small wetlands, where the preferred food source of earthworms and leeches may be in abundance (MNR, 2018). Hibernacula typically occur in old rodent or crayfish burrows, but can also be located in stone walls and foundations. Potential habitat for this species may occur in the meadow (MEF) community adjacent to the Project Location, however, the habitat is fragmented by Wyandotte Street, restricting safe movement.

Eastern Foxsnake – This species is known to occur in deciduous woodlands, hedgerows of deciduous trees or shrubs, drainage ditches, fallow areas, old fields, native grasslands or wetlands. Presence of these habitats generally increase the likelihood of Eastern Foxsnake occurrences. Supporting features would include, but are not limited to: brush piles, branch prunings, rotting logs, log piles, stone piles, concrete,

box culverts, large rocks, abandoned farm machinery, and stone foundations (COSEWIC, 2008). Suitable habitat for this species may occur in the meadow (MEF) community; however, the habitat is fragmented by Wyandotte Street, restricting safe movement.

Potential impacts to Butler's Gartersnake and Eastern Foxsnake are not anticipated if the following mitigation measures are adhered to:

- Any species listed as Endangered or Threatened on the Species at Risk in Ontario (SARO) List that is encountered at the Project Location must be protected from all harm and harassment;
- All on-site personnel must be made aware of the potential presence of SAR and/or SAR habitat in the area and the protection afforded under the Endangered Species Act, 2007;
- Any Species at Risk incidentally encountered must be protected from harm and harassment. If a SAR is encountered, it should be given adequate time to leave the area before starting work. Activities within 30 m must cease until the individual disperses. If a SAR must be moved, a qualified biologist should be contacted for advice/help before it is moved;
- Any SAR individual that is present at the project site should be reported to MECP within 48 hours of the observation or the next working day, whichever comes first;
- If an injured or deceased SAR is found, the individual must be placed in a non-airtight container that is maintained at an appropriate temperature and an Authorized Wildlife Custodian (authorized under the Fish and Wildlife Conservation Act) in the area should be contacted and the MECP notified within 48 hours of the observation or the next working day, whichever comes first;
- If vegetation removal is to be completed during the active season (i.e. March to November), the area to be excavated/cleared of vegetation should be walked and visually surveyed for the presence of SAR snakes and breeding birds each day, prior to initiating these activities. Vegetation should be trimmed initially using handheld devices while visually surveying for SAR snakes, prior to removal with heavy machinery and excavation/grading activities. Vegetation removal should occur on sunny days when air temperatures are between 15 and 30 °C, when SAR snakes are most active and can flee the disturbance area;
- Prior to development commencement, heavy-duty, wildlife exclusion fencing should be installed around the perimeter of the work areas. The use of mesh or netting type stabilization material must not be used for erosion control measures due to the risk of entanglement of SAR snakes;
- Erection of exclusionary fencing around the construction footprint will follow the direction provided in Reptile and Amphibian Exclusion Fencing (OMNR, 2013) and Best Management Practices for Mitigating the Effects of Roads on Amphibians and Reptile Species at Risk in Ontario (OMNRF, 2016);
- Construction and vegetation clearing equipment that is left idle for over one hour or is parked overnight on the property should be surveyed for the presence of SAR snakes before (re)ignition. This visual examination should include all lower components of the machinery, including operational extensions and running gear;
- During the active season for snake species (March 15 to November 30), individuals may find and occupy materials and equipment stored on site. Care should be taken to maintain a clean, debris-free

work site and avoid the creation of debris stockpiles (e.g. storage of plywood, rubber mats, topsoil, lumber, bricks, and other construction materials should be avoided).

Bats – SAR bat species are either migratory or resident species, commonly found near waterbodies, in buildings, attics, roof crevices, loose bark on trees, under bridges, or upland forests typically foraging for aerial insects in forest understory (COSEWIC, 2013). Solitary roosting may occur in individual standing trees, and trees composing a naturalized community (such as, but not limited to, forest, woodland, and wetland). Suitable habitat for SAR bat species may occur in mature trees in the Project Location and Study Area, including wooded hedgerows. Negative impacts to SAR bats are not anticipated if the following mitigation measures are adhered to:

- Clearing of individual trees within the Project Location will occur outside of the active period for bats (i.e. April 1 – September 30).

Summary

The Study Area does not contain provincial parks or conservation reserves/areas, Area of Natural and Scientific Interest (ANSI), Life Science, or Earth Science, Provincially Significant Wetlands (PSW), or unevaluated wetlands. In general, the Study Area is predominately comprised of cultural communities (i.e. active agriculture), and as a result, has been mostly disturbed. There is a low likelihood for the Study Area to provide wildlife habitat in general and habitat for SAR.

Based on the results included herein, we anticipate a low potential to impact SAR habitat. Potential impacts can generally be avoided through appropriate mitigation measures and best management practices (e.g. timing windows, exclusionary fencing, etc.) as discussed in the previous section. We anticipate a low likelihood that the proposed works would contravene Sections 9 and 10 of the ESA through the application of appropriate mitigation measures.

Attachments:

Attachment A: Figures

Attachment B: Background Mapping

Attachment C: Site Photographs

Attachment D: Plant and Wildlife Observations

Attachment E: SAR Habitat Screening Assessment

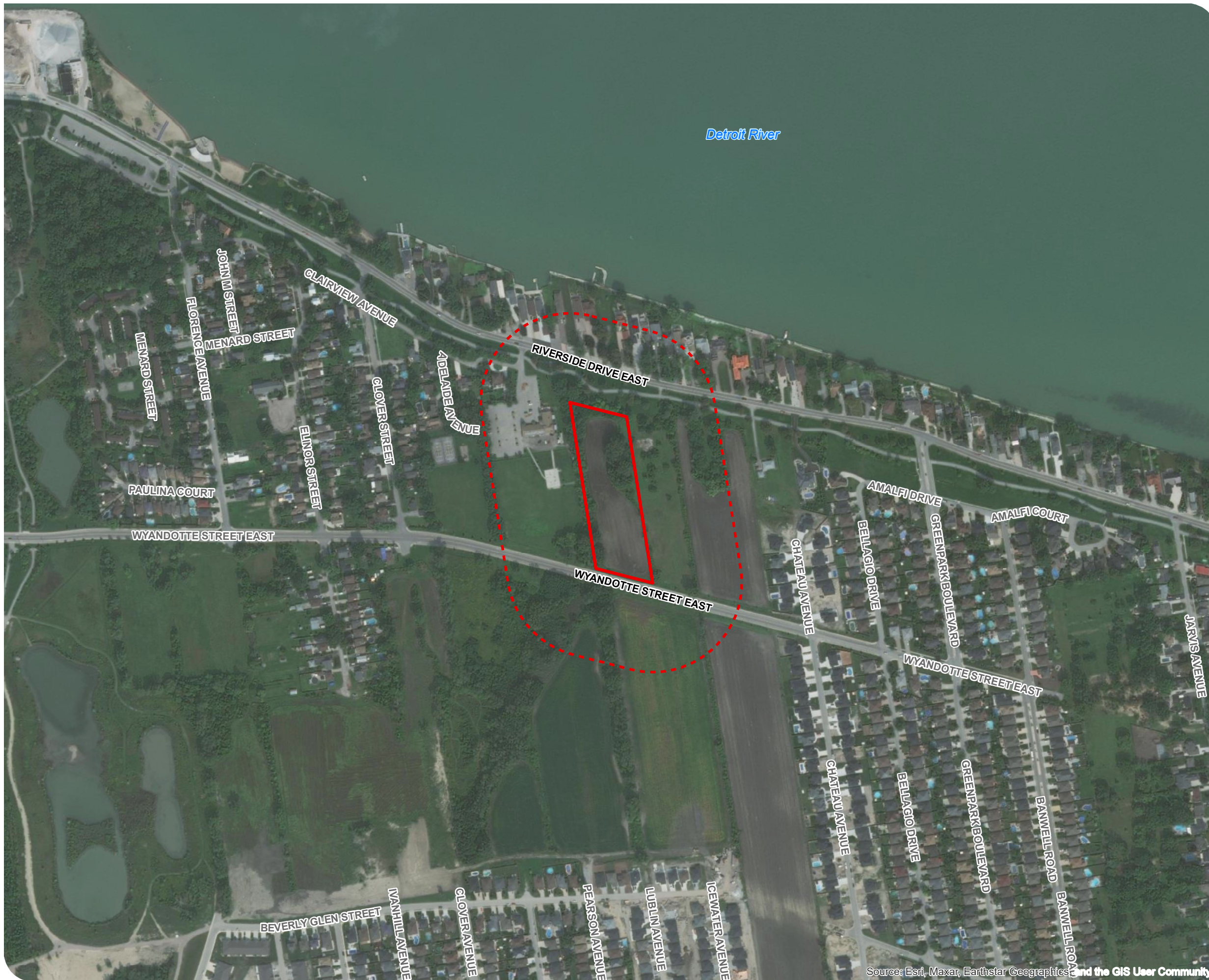
References

- Birds Canada. 2022. The 123th Christmas Bird Count.
- Cadman, M.D., D.A. Sutherland, G.G. Beck, D. Lapage, and A.R. Couturier. 2008. Atlas of the Breeding Birds of Ontario. Bird Studies Canada.
- City of Windsor. 2013. City of Windsor Official Plan and Schedules.
- COSEWIC. 2008. COSEWIC Assessment and Update Status Report on the Eastern Foxsnake *Elaphe gloydi*. Committee on the Status of Endangered Wildlife in Canada. Ottawa.
- COSEWIC. 2013. COSEWIC assessment and status report on the Little Brown Myotis *Myotis lucifugus*, Northern Myotis *Myotis septentrionalis* and Tri-colored Bat *Perimyotis subflavus* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. xxiv + 93 pp.
- Dobbyn, J. 1994. Atlas of the Mammals of Ontario. Federation of Ontario Naturalists.
- Endangered Species Act, 2007. (S.O. 2007, C-6). <https://www.ontario.ca/laws/statute/07e06>. Accessed 2022.
- Fisheries and Oceans Canada. 2022. Aquatic Species at Risk Map. <http://www.dfo-mpo.gc.ca/species-especies/sara-lep/map-carte/index-eng.html>. Accessed 2022.
- Lee, H.T., W.D. Bakowsky, J. Riley, J. Bowles, M. Puddister, P. Uhlig, and S. McMurray. 1998. Ecological Land Classification for Southern Ontario: First Approximation and Its Application. Ontario Ministry of Natural Resources, Southcentral Science Section, Science Development and Transfer Branch. SCSS Field Guide FG-02.
- Lee, H. 2008. Southern Ontario Ecological Land Classification – Vegetation Type List. London, Ontario.
- Oldham, M.J. and S.R. Brinker. 2009. Rare Vascular Plants of Ontario, Fourth Edition. Natural Heritage Information Centre, Ontario Ministry of Natural Resources. Peterborough, Ontario.
- Ontario Butterfly Atlas. 2022. <https://www.ontarioinsects.org/atlas/>. Accessed 2022.
- Ontario Ministry of Agriculture, Food and Rural Affairs. 2022. Agricultural Information Atlas. <http://www.gisapplication.lrc.gov.on.ca/AIA/Index.html?viewer=AIA.AIA&locale=en-US>. Accessed 2022.
- Ontario Ministry of Environment, Conservation and Parks. 2019. Client's Guide to Preliminary Screening for Species at Risk.

- Ontario Ministry of Natural Resources. 2013. Reptile and Amphibian Exclusion Fencing: Best Practices, Version 1.0. Species at Risk Branch Technical Note. Prepared for the Ontario Ministry of Natural Resources, Peterborough, Ontario. 11 pp.
- Ontario Ministry of Natural Resources and Forestry. 2016. Best Management Practices for Mitigating the Effects of Roads on Amphibians and Reptile Species at Risk in Ontario. Queen's Printer for Ontario. 112 pp.
- Ontario Ministry of Natural Resources and Forestry. 2016. Technical Memo: Aylmer District MNRF Guidance on Identifying Activities/Areas Not Likely to Contravene the Endangered Species Act, 2007 in the County of Essex & City of Windsor.
- Ontario Ministry of Natural Resources and Forestry. 2022. Make a Map: Natural Heritage Areas. http://www.gisapplication.lrc.gov.on.ca/mamnh/Index.html?site=MNR_NHLUPS_NaturalHeritage&viewer=NaturalHeritage&locale=en-US. Accessed 2022.
- Ontario Reptile and Amphibian Atlas. 2022. <https://www.ontarioinsects.org/herp/index.html>. Accessed 2022.
- Species at Risk Act, 2002. (S.C. 2002, C. 29). <https://laws.justice.gc.ca/eng/acts/S-15.3/>. Accessed 2022.
- Williams, P.H., R.W. Thorp, L.L. Richardson, and S.R. Colla. 2014. Bumble Bees of North America. Princeton University Press.

Attachment A

Figures



Detroit River

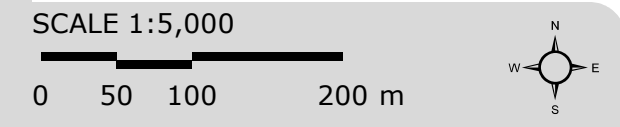
NORTH NEIGHBOURHOOD PHASE 7

1027458 Ontario Inc.

PROJECT LOCATION

FIGURE 1

- Project Location (1.64 ha)
- Study Area (120 m Setback)



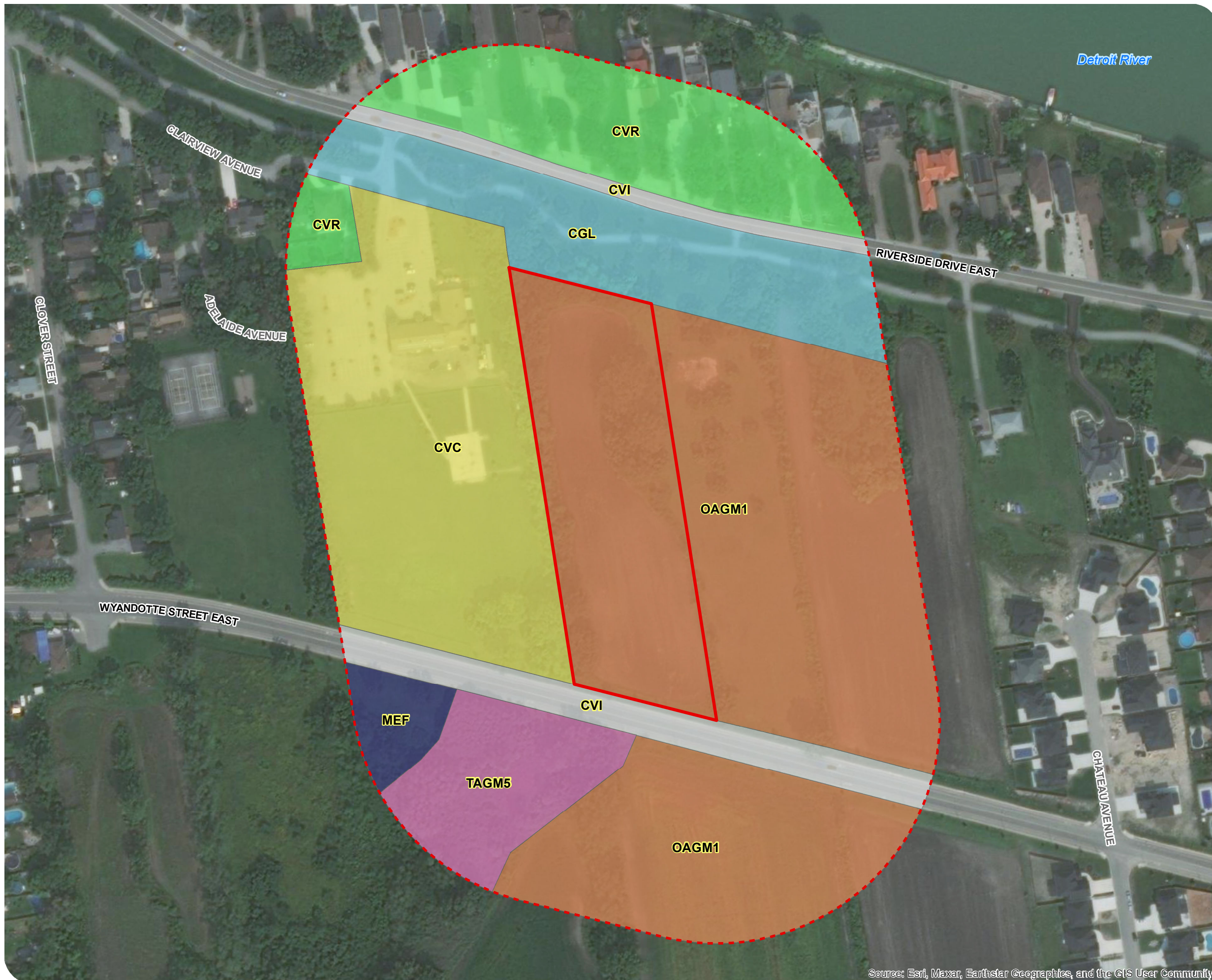
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DATA PROVIDED BY MNR, DILLON CONSULTING
AERIAL IMAGERY PROVIDED BY ESRI

MAP CREATED BY: DU
MAP CHECKED BY: JB
MAP PROJECTION: NAD 1983 UTM Zone 17N



PROJECT: 22-4866
STATUS: DRAFT
DATE: 2022-10-24

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



NORTH NEIGHBOURHOOD PHASE 7

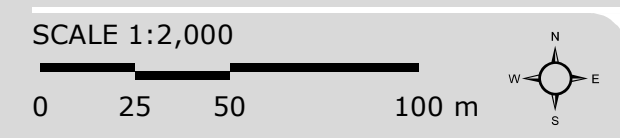
1027458 Ontario Inc.

ECOLOGICAL LAND CLASSIFICATION FIGURE 2

- Project Location (1.64 ha)
- Study Area (120 m Setback)

Ecological Land Classification

- CGL - Green Lands
- CVC - Commercial and Institutional
- CVI - Transportation and Utilities
- CVR - Residential
- MEF - Forb Meadow
- OAGM1 - Annual Row Crops
- TAGM5 - Fencerow with European Common Reed Inclusion



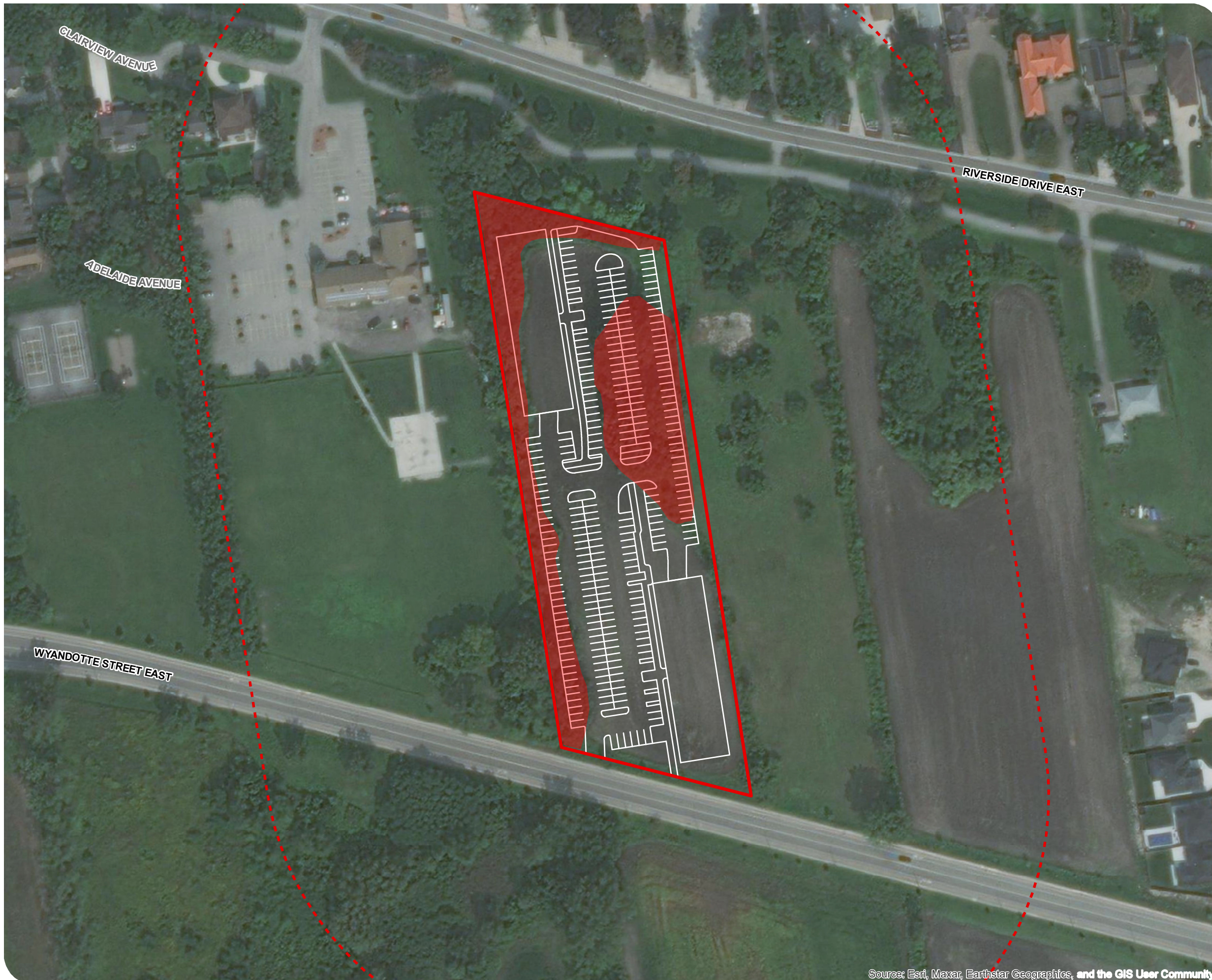
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AERIAL IMAGERY PROVIDED BY ESRI

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PROJECT: 22-4866
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
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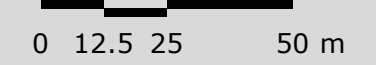
NORTH NEIGHBOURHOOD PHASE 7

1027458 Ontario Inc.

PROPOSED DEVELOPMENT PLAN AND VEGETATION REMOVAL FIGURE 3

-  Project Location (1.64 ha)
-  Study Area (120 m Setback)
-  Proposed Development
-  Vegetation Removal (0.5 ha)

SCALE 1:1,500



MAP DRAWING INFORMATION:
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AERIAL IMAGERY PROVIDED BY ESRI

MAP CREATED BY: DU
MAP CHECKED BY: JB
MAP PROJECTION: NAD 1983 UTM Zone 17N














PROJECT: 22-4866
STATUS: DRAFT
DATE: 2022-10-24

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Attachment B

Background Mapping



- ### Legend
-  Assessment Parcel
 - ANSI
 -  Earth Science Provincially Significant/sciences de la terre d'importance provinciale
 -  Earth Science Regionally Significant/sciences de la terre d'importance régionale
 -  Life Science Provincially Significant/sciences de la vie d'importance provinciale
 -  Life Science Regionally Significant/sciences de la vie d'importance régionale
 - Evaluated Wetland
 -  Provincially Significant/considérée d'importance provinciale
 -  Non-Provincially Significant/non considérée d'importance provinciale
 - Unevaluated Wetland
 -  Woodland
 -  Conservation Reserve
 -  Provincial Park
 -  Natural Heritage System

0 0.2 Kilometres

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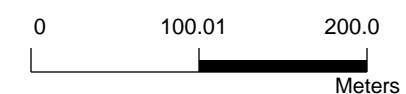
Projection: Web Mercator



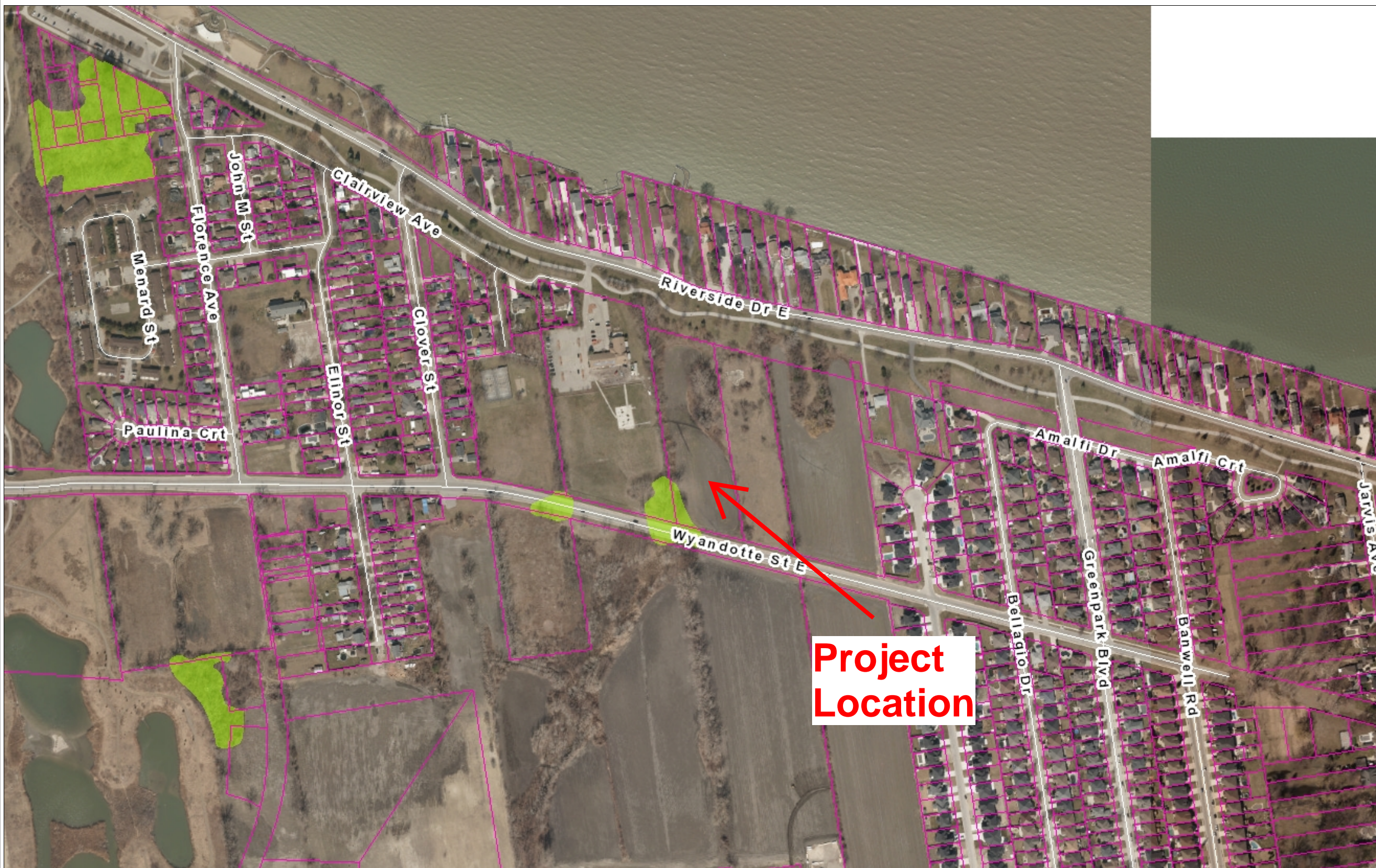
Legend

- COE.ERCA.wms_MunicipalDrains_ERCA - Larg
 - ▶ Natural
 - ▶ Municipal Drain (Open)
 - ▶ Municipal Drain (Closed)
 - ▶ Unknown/Other Status (Open)
 - ▶ Unknown/Other Status (Closed)
 - ▶ Private/Roadside (Open)
 - ▶ Private/Roadside (Closed)
- Parcel Fabric - City
- Parcel Fabric - County
- ★ Conservation Areas
- Provincially Significant Wetland (PSW)
- Area of Natural & Scientific Interest (ANSI)
- Environmentally Significant Area (ESA)
- Significant Valley Land (SVL)
- Existing Natural Feature (ERNHSS Report, 201
 - Open Water
 - Marsh
 - Swamp
 - Forest
 - Other Terrestrial Natural Feature
- Limit of Regulated Area

Location



1: 4,500 11/16/2022

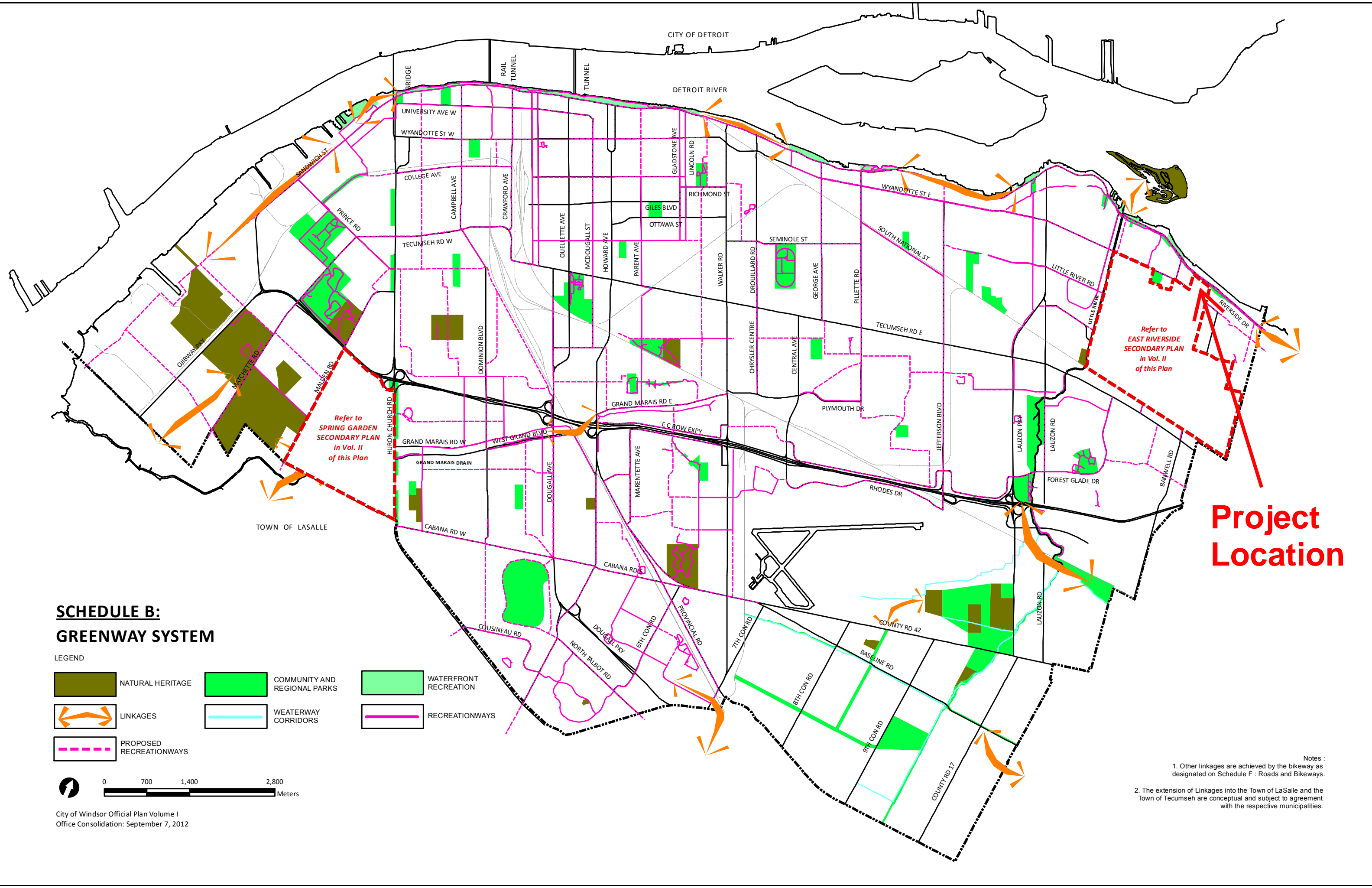


**Project
Location**

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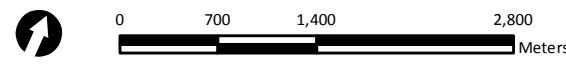
Notes



**SCHEDULE B:
GREENWAY SYSTEM**

LEGEND

	NATURAL HERITAGE		COMMUNITY AND REGIONAL PARKS		WATERFRONT RECREATION
	LINKAGES		WATERWAY CORRIDORS		RECREATIONWAYS
	PROPOSED RECREATIONWAYS				

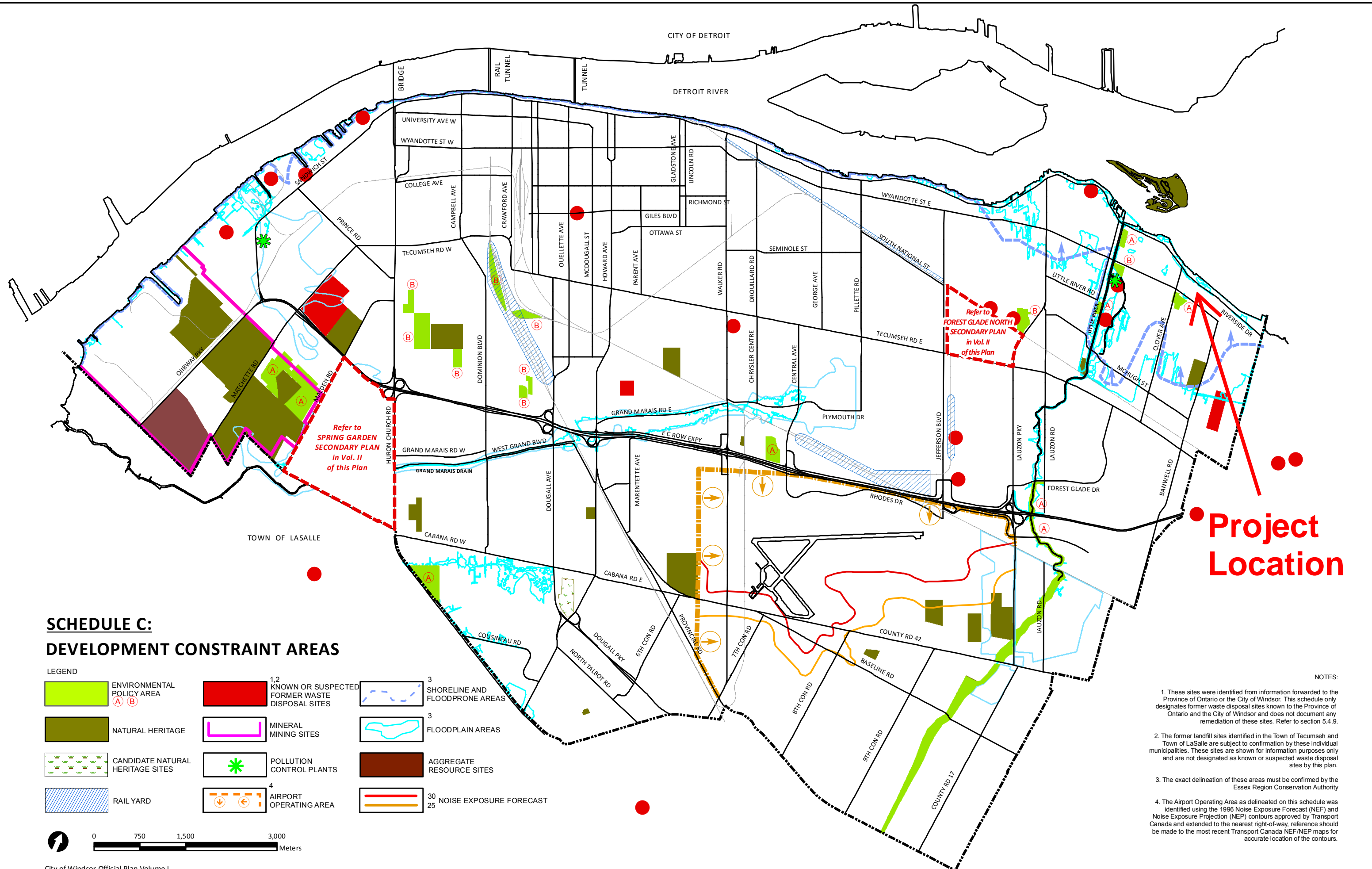


Project Location

Refer to
SPRING GARDEN
SECONDARY PLAN
in Vol. II
of this Plan





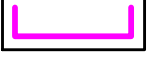


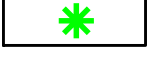




Refer to
EAST RIVERSIDE
SECONDARY PLAN
in Vol. II
of this Plan

- Notes :
1. Other linkages are achieved by the bikeway as designated on Schedule F : Roads and Bikeways.
 2. The extension of Linkages into the Town of LaSalle and the Town of Tecumseh are conceptual and subject to agreement with the respective municipalities.



**SCHEDULE C:
DEVELOPMENT CONSTRAINT AREAS**

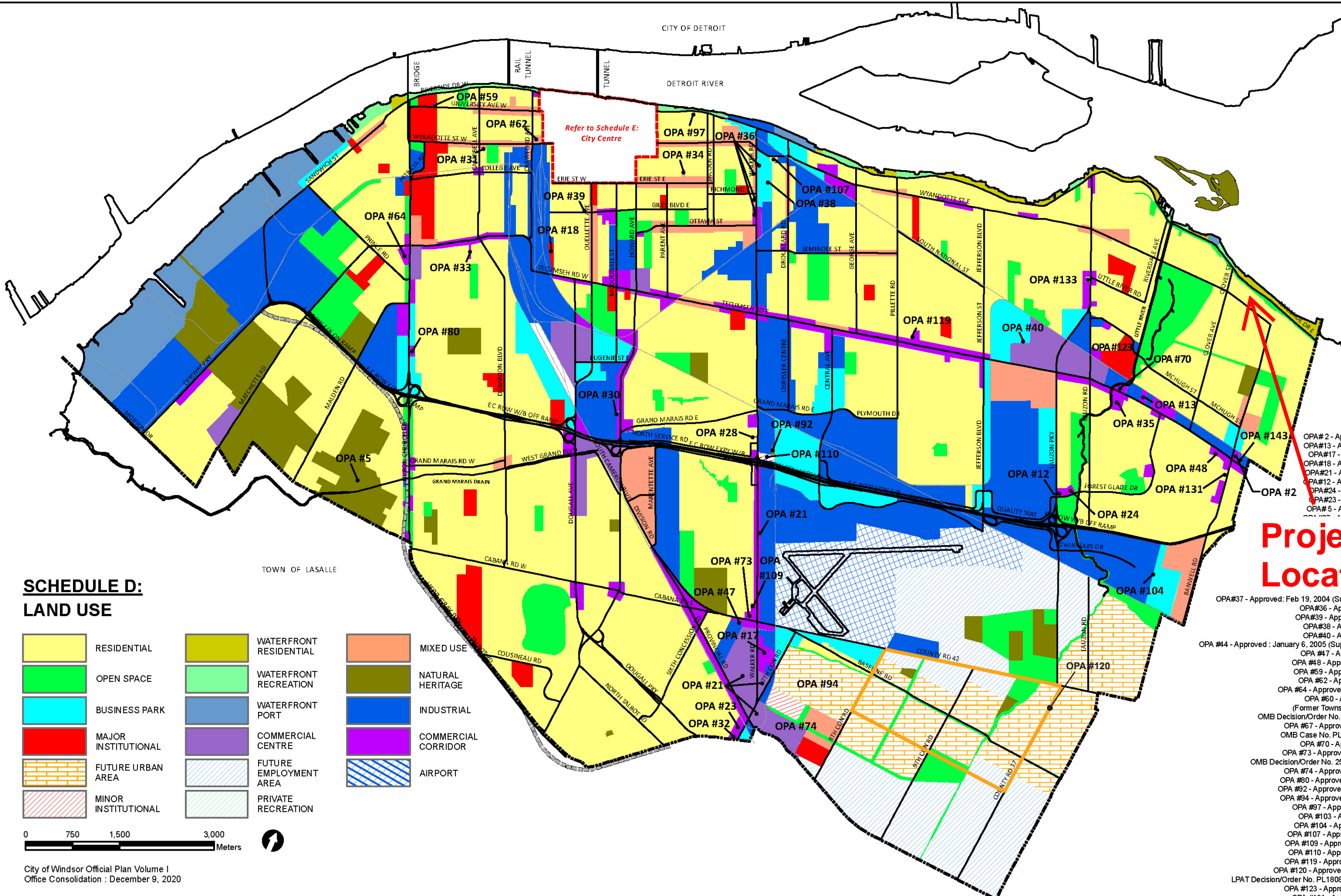
LEGEND

	ENVIRONMENTAL POLICY AREA (A) (B)		1,2 KNOWN OR SUSPECTED FORMER WASTE DISPOSAL SITES		3 SHORELINE AND FLOODPRONE AREAS
	NATURAL HERITAGE		MINERAL MINING SITES		3 FLOODPLAIN AREAS
	CANDIDATE NATURAL HERITAGE SITES		POLLUTION CONTROL PLANTS		AGGREGATE RESOURCE SITES
	RAIL YARD		4 AIRPORT OPERATING AREA		30 25 NOISE EXPOSURE FORECAST

- NOTES:
1. These sites were identified from information forwarded to the Province of Ontario or the City of Windsor. This schedule only designates former waste disposal sites known to the Province of Ontario and the City of Windsor and does not document any remediation of these sites. Refer to section 5.4.9.
 2. The former landfill sites identified in the Town of Tecumseh and Town of LaSalle are subject to confirmation by these individual municipalities. These sites are shown for information purposes only and are not designated as known or suspected waste disposal sites by this plan.
 3. The exact delineation of these areas must be confirmed by the Essex Region Conservation Authority
 4. The Airport Operating Area as delineated on this schedule was identified using the 1996 Noise Exposure Forecast (NEF) and Noise Exposure Projection (NEP) contours approved by Transport Canada and extended to the nearest right-of-way, reference should be made to the most recent Transport Canada NEF/NEP maps for accurate location of the contours.



Project Location



**SCHEDULE D:
LAND USE**

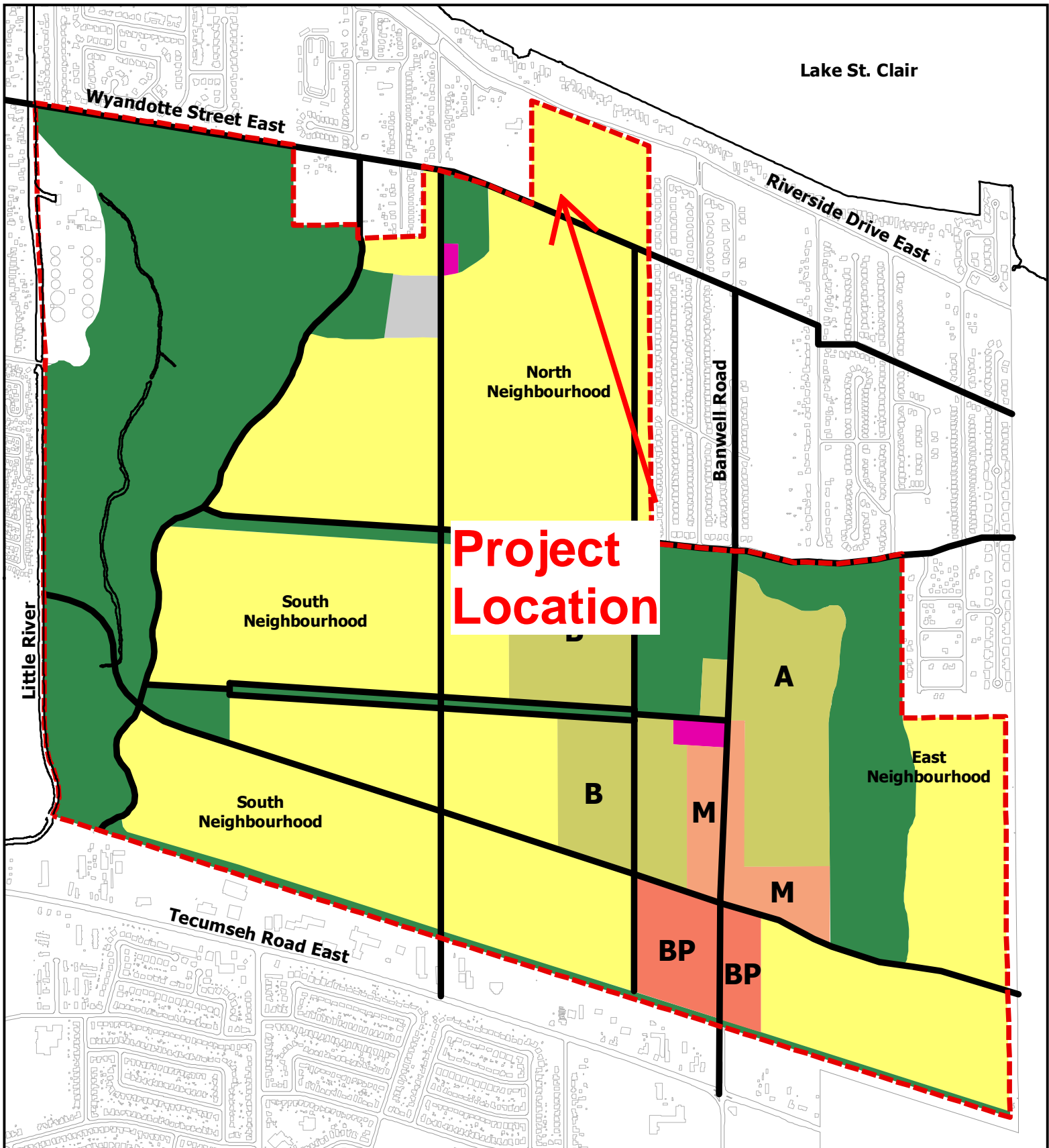
	RESIDENTIAL		WATERFRONT RESIDENTIAL		MIXED USE
	OPEN SPACE		WATERFRONT RECREATION		NATURAL HERITAGE
	BUSINESS PARK		WATERFRONT PORT		INDUSTRIAL
	MAJOR INSTITUTIONAL		COMMERCIAL CENTRE		COMMERCIAL CORRIDOR
	FUTURE URBAN AREA		FUTURE EMPLOYMENT AREA		AIRPORT
	MINOR INSTITUTIONAL		PRIVATE RECREATION		



City of Windsor Official Plan Volume I
Office Consolidation : December 9, 2020

**Project
Location**

- AS AMENDED BY:
- OPA#2 - Approved: Dec. 11, 2000
 - OPA#13 - Approved: Nov. 22, 2001
 - OPA#17 - Approved: Jan. 3, 2002
 - OPA#18 - Approved: Mar. 15, 2002
 - OPA#21 - Approved: July 16, 2002
 - OPA#12 - Approved: Aug. 21, 2002
 - OPA#24 - Approved: Oct. 7, 2002
 - OPA#23 - Approved: Oct. 9, 2002
 - OPA#5 - Approved: Oct. 29, 2002
 - OPA#40 - Approved: 2002
 - OPA#143 - Approved: 2002
 - OPA#37 - Approved: Feb 19, 2004 (Superseded by OPA #40)
 - OPA#36 - Approved: March 3, 2004
 - OPA#39 - Approved: March 26, 2004
 - OPA#38 - Approved: July 21, 2004
 - OPA#40 - Approved: July 21, 2004
 - OPA#44 - Approved: January 6, 2005 (Superseded by OPA #131)
 - OPA#47 - Approved: May 10, 2005
 - OPA#48 - Approved: August 18, 2005
 - OPA#59 - Approved: March 27, 2007
 - OPA#62 - Approved: June 15, 2007
 - OPA#64 - Approved: September 20, 2007
 - OPA#60 - Approved: May 7, 2007 (Former Township of Sandwich South)
 - OMB Decision/Order No. 2667 - October 5, 2007
 - OPA#67 - Approved: December 4, 2015
 - OMB Case No. PL080049 - April 26, 2016
 - OPA#70 - Approved: April 20, 2009
 - OPA#73 - Approved: September 7, 2006
 - OMB Decision/Order No. 2513 - February 12, 2009
 - OPA#74 - Approved: December 4, 2009
 - OPA#80 - Approved: November 22, 2010
 - OPA#92 - Approved: September 19, 2016
 - OPA#94 - Approved: December 21, 2016
 - OPA#97 - Approved: October 6, 2014
 - OPA#103 - Approved: June 1, 2015
 - OPA#104 - Approved: June 24, 2015
 - OPA#107 - Approved: August 15, 2016
 - OPA#109 - Approved: February 6, 2017
 - OPA#110 - Approved: August 22, 2016
 - OPA#119 - Approved: October 15, 2018
 - OPA#120 - Approved: September 17, 2018
 - LPAT Decision/Order No. PL180842 - December 3, 2019
 - OPA#123 - Approved: January 21, 2020
 - OPA#131 - Approved: August 4, 2020
 - OPA#133 - Approved: November 9, 2020
 - OPA#143 - Approved: June 13, 2022



Lake St. Clair

Wyandotte Street East

Riverside Drive East

North Neighbourhood

Banwell Road

Project Location

South Neighbourhood

A

East Neighbourhood

B

M

South Neighbourhood

M

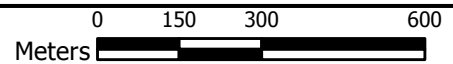
Tecumseh Road East

BP

BP

EAST RIVERSIDE PLANNING AREA

SCHEDULE ER1-2 : LAND USE PLAN



- | | | |
|----------------------------------|--|---------------------------|
| Residential Neighbourhood | M Banwell Road Mixed Use Corridor | School Site |
| A Core Residential Area A | BP Business Park | Open Space |
| B Core Residential Area B | Institutional | Boundary of Planning Area |

Lake St. Clair

Wyandotte Street East

Riverside Drive East

Banwell Road

Little River

Project Location

RP1

NP2

NP1

LP1

LP2

LP3

CP2

RP2

NP4

NP3

LP4

RP4

LP5

RP4

LP6

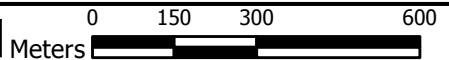
RP3

RP4

Tecumseh Road East

EAST RIVERSIDE PLANNING AREA

SCHEDULE ER1-3 : GREENWAY SYSTEM PLAN



- RP Regional Park
- CP Community Park
- NP Neighbourhood Park
- LP Local Park
- Boundary of Planning Area

Attachment C

Site Photographs

Photo 1

Northwest
corner of the
Project
Location,
facing east.



Photo 2

Northwest
corner of the
Project
Location,
facing south.



Photo 3

Northwest corner of the Project Location, facing southeast.



Photo 4

West side of the Project Location, facing east.



Photo 5

Southeast corner of the Project Location, facing north.



Photo 6

Southeast corner of the Project Location, facing northwest.



Photo 7

Southeast corner of the Project Location, facing south.



Photo 8

Southeast corner of the Project Location, facing west.



Photo 9

North of the
Project
Location
(Ganatchio
Trail), facing
east.



Photo 10

North of the
Project
Location
(Ganatchio
Trail), facing
west.



Attachment D

Plant and Wildlife Observations

TABLE D-1: PLANT OBSERVATIONS

Scientific Name	Common Name	SARA ¹	ESA ²	S-Rank ³	CC ⁴
<i>Equisetum arvense</i>	Field Horsetail	---	---	S5	0
<i>Picea pungens</i>	Blue Spruce	---	---	SNA	---
<i>Carex vulpinoidea</i>	Fox Sedge	---	---	S5	3
<i>Dactylis glomerata</i>	Orchard Grass	---	---	SNA	---
<i>Phragmites australis</i> ssp. <i>australis</i>	European Common Reed	---	---	SNA	---
<i>Daucus carota</i>	Wild Carrot	---	---	SNA	---
<i>Pastinaca sativa</i>	Wild Parsnip	---	---	SNA	---
<i>Ambrosia trifida</i>	Great Ragweed	---	---	S5	0
<i>Erigeron philadelphicus</i>	Philadelphia Fleabane	---	---	S5	1
<i>Solidago altissima</i> ssp. <i>altissima</i>	Eastern Late Goldenrod	---	---	S5	1
<i>Symphyotrichum ericoides</i> var. <i>ericoides</i>	White Heath Aster	---	---	S5	4
<i>Symphyotrichum lanceolatum</i> ssp. <i>lanceolatum</i>	Panicled Aster	---	---	S5	3
<i>Symphyotrichum novae-angliae</i>	New England Aster	---	---	S5	2
<i>Taraxacum officinale</i>	Common Dandelion	---	---	SNA	---
<i>Brassica rapa</i>	Field Mustard/Turnip	---	---	SNA	---
<i>Hesperis matronalis</i>	Dame's Rocket	---	---	SNA	---
<i>Thlaspi arvense</i>	Field Penny-cress	---	---	SNA	---
<i>Lonicera tatarica</i>	Tartarian Honeysuckle	---	---	SNA	---
<i>Sambucus canadensis</i>	Common Elderberry	---	---	S5	5
<i>Dipsacus fullonum</i>	Fuller's Teasel	---	---	SE5	---
<i>Gleditsia triacanthos</i>	Honey-locust	---	---	S2	3
<i>Quercus rubra</i>	Northern Red Oak	---	---	S5	6
<i>Asclepias syriaca</i>	Common Milkweed	---	---	S5	0
<i>Asclepias tuberosa</i>	Butterfly Milkweed	---	---	S4	8
<i>Glechoma hederacea</i>	Ground Ivy	---	---	SNA	---
<i>Lycopus americanus</i>	American Water-horehound	---	---	S5	4
<i>Abutilon theophrasti</i>	Velvetleaf	---	---	SNA	---
<i>Oenothera biennis</i>	Common Evening Primrose	---	---	S5	0
<i>Rumex crispus</i>	Curly Dock	---	---	SNA	---
<i>Vitis riparia</i>	Riverbank Grape	---	---	S5	0
<i>Galium aparine</i>	Cleavers	---	---	S5	4
<i>Populus deltoides</i> ssp. <i>deltoides</i>	Eastern Cottonwood	---	---	S5	4
<i>Acer negundo</i>	Manitoba Maple	---	---	S5	0
<i>Acer platanoides</i>	Norway Maple	---	---	SNA	---

<i>Acer rubrum</i>	Red Maple	---	---	S5	4
<i>Acer saccharinum</i>	Silver Maple	---	---	S5	5
<i>Toxicodendron radicans</i>	Climbing Poison Ivy	---	---	S5	5
<i>Morus alba</i>	White Mulberry	---	---	SNA	---
<i>Ulmus americana</i>	American Elm	---	---	S5	3

¹Federal Species at Risk Act (Source: SARA Public Registry, 2007);

²Provincial Endangered Species Act (Source: MNRF website, 2007);

³SRank is an indicator of commonness in the province of Ontario. A scale between 1 and 5, with 5 being very common and 1 being the least common. S5 = Secure, S4 = Apparently Secure, S3 = Vulnerable, S2 = Imperiled, S1 = Critically Imperiled, SX = extirpated, SNA = unsuitable target for conservation activities, B = within the Species breeding range in Ontario;

⁴Co-efficient of Conservation

TABLE D-2: WILDLIFE OBSERVATIONS

Scientific Name	Common Name	SARA ¹	ESA ²	S-Rank ³
Birds				
<i>Charadrius vociferus</i>	Killdeer	---	---	S5B,S5N
<i>Chaetura pelagica</i>	Chimney Swift	THR	THR	S4B,S4N
<i>Vireo gilvus</i>	Warbling Vireo	---	---	S5B
<i>Turdus migratorius</i>	American Robin	---	---	S5B
<i>Sturnus vulgaris</i>	European Starling	---	---	SNA
<i>Spizella passerina</i>	Chipping Sparrow	---	---	S5B
<i>Cardinalis cardinalis</i>	Northern Cardinal	---	---	S5
<i>Agelaius phoeniceus</i>	Red-winged Blackbird	---	---	S4
<i>Icterus galbula</i>	Baltimore Oriole	---	---	S4B
<i>Molothrus ater</i>	Brown-headed Cowbird	---	---	S4B
<i>Carduelis tristis</i>	American Goldfinch	---	---	S5B
Mammals				
<i>Sciurus carolinensis</i>	Eastern Gray Squirrel	---	---	S5

¹Federal Species at Risk Act (Source: SARA Public Registry, 2007);

²Provincial Endangered Species Act (Source: MNRF website, 2007);

³SRank is an indicator of commonness in the province of Ontario. A scale between 1 and 5, with 5 being very common and 1 being the least common. S5 = Secure, S4 = Apparently Secure, S3 = Vulnerable, S2 = Imperiled, S1 = Critically Imperiled, SX = extirpated, SNA = unsuitable target for conservation activities, B = within the Species breeding range in Ontario

Attachment E

SAR Habitat Screening Assessment

Attachment E: Species at Risk identified during the background review

Family	Group	Scientific Name	Common Name	SARA Status ¹	ESA Status ²	SRank ³	Information Source ⁴	Regulated Habitat	Habitat Requirements ^{2,5}	Potential Habitat in the Study Area	Rationale for Potential to Occur
Birds											
Apodidae	Swifts	Chaetura pelagica	Chimney Swift	THR	THR	S4B,S4N	OBBA	FALSE	Commonly found in urban areas near buildings; nests in hollow trees, crevices of rock cliffs, chimneys; highly gregarious; feeds over open water.	No	The Study Area lacks suitable habitat for the species.
Ardeidae	Bitterns, Herons, and Allies	Ixobrychus exilis	Least Bittern	THR	THR	S4B	IBA	FALSE	Deep marshes, swamps, bogs; marshy borders of lakes, ponds, streams, ditches; dense emergent vegetation of cattail, bulrush, sedge; nests in cattails; intolerant of loss of habitat and human disturbance.	No	The Study Area lacks suitable habitat for the species.
Emberizidae	Emberizids	Ammodramus henslowii	Henslow's Sparrow	END	END	SHB	IBA	FALSE	Large, fallow, grassy area with ground mat of dead vegetation, dense herbaceous vegetation, ground litter and some song perches; neglected weedy fields; wet meadows; cultivated uplands; a moderate amount of moisture needed; requires a minimum tract of grassland of 40 ha, but usually in areas >100 ha.	No	The Study Area lacks suitable habitat for the species.
Hirundinidae	Swallows	Hirundo rustica	Barn Swallow	THR	THR	S4B	OBBA	FALSE	Farmlands or rural areas; cliffs, caves, rock niches; buildings or other man-made structures for nesting; open country near body of water.	No	The Study Area lacks suitable habitat for the species.
Hirundinidae	Swallows	Riparia riparia	Bank Swallow	THR	THR	S4B	OBBA	FALSE	Sand, clay or gravel river banks or steep riverbank cliffs; lakeshore bluffs of easily crumbled sand or gravel; gravel pits, road-cuts, grassland or cultivated fields that are close to water; nesting sites are limiting factor for species presence..	No	The Study Area lacks suitable habitat for the species.
Icteridae	Blackbirds	Dolichonyx oryzivorus	Bobolink	THR	THR	S4B	OBBA	FALSE	Large, open expansive grasslands with dense ground cover; hayfields, meadows or fallow fields; marshes; requires tracts of grassland >10 ha.	Yes	The Study Area has the potential to provide suitable habitat for the species.
Icteridae	Blackbirds	Sturnella magna	Eastern Meadowlark	THR	THR	S4B	OBBA	FALSE	Open, grassy meadows, farmland, pastures, hayfields or grasslands with elevated singing perches; cultivated land and weedy areas with trees; old orchards with adjacent, open grassy areas >10 ha in size.	Yes	The Study Area has the potential to provide suitable habitat for the species.
Picidae	Woodpeckers and Allies	Melanerpes erythrocephalus	Red-headed Woodpecker	END	END	S4B	NHIC	FALSE	Open woodland and woodland edges and is often found in parks, golf courses and cemeteries.	Yes	The Study Area has the potential to provide suitable habitat for the species.
Odontophoridae	New World Quail	Colinus virginianus	Northern Bobwhite	END	END	S1	IBA	FALSE	Grassland, prairie or hay fields with woody cover in form of thickets, tangles of vines, shrubs; fence rows or woodland edges; cropland growing corn, soybeans or small grains and clover or grass; well-drained sandy or loamy soil; pond edges.	No	The Study Area is outside the range for the species.
Parulidae	Wood-Warblers	Icteria virens virens	Yellow-breasted Chat	END	END	S2B	IBA	FALSE	Thickets, tall tangles of shrubbery beside streams, ponds; overgrown bushy clearings with deciduous thickets; nests above ground in bush, vines etc.	No	The Study Area lacks suitable habitat for the species.

Family	Group	Scientific Name	Common Name	SARA Status ¹	ESA Status ²	SRank ³	Information Source ⁴	Regulated Habitat	Habitat Requirements ^{2,5}	Potential Habitat in the Study Area	Rationale for Potential to Occur
Parulidae	Wood-Warblers	<i>Protonotaria citrea</i>	Prothonotary Warbler	END	END	S1B	IBA	FALSE	Area sensitive species preferring 100 ha of flooded or swampy woodlands with standing or flowing water and more than 25% canopy cover with numerous stumps and snags; stream borders or flooded bottomlands; soft, dead trees with dbh >10 cm; Carolinian species.	No	The Study Area lacks suitable habitat for the species.
Parulidae	Wood-Warblers	<i>Setophaga kirtlandii</i>	Kirtland's Warbler	END	END	S1B	IBA	FALSE	Primary breeding habitat in jack pine plains; ground nesting bird on well-drained soil under low living branches of 8-20 year old jack pines.	No	The Study Area is outside the range for the species.
Rallidae	Rails, Gallinules, and Coots	<i>Rallus elegans</i>	King Rail	END	END	S2B	IBA	FALSE	Large, shallow, fresh water marshes, shrubby swamps, marshy borders of lakes and ponds with abundant vegetation; an 'edge' species; territories are 0.3 to 0.5 ha; loss of large marshes in the south is limiting to this species.	No	The Study Area lacks suitable habitat for the species.
Tyrannidae	Tyrant Flycatchers	<i>Empidonax virescens</i>	Acadian Flycatcher	END	END	S2S3B	IBA	FALSE	Mature, shady, deciduous forests; heavily wooded ravines; creek bottoms or river swamps; availability of good quality habitat is limiting factor; needs at least 30 ha of forest.	No	The Study Area lacks suitable habitat for the species.
Tytonidae	Barn Owls	<i>Tyto alba</i>	Barn Owl	END	END	S1	IBA	TRUE	Open areas such as fields, agricultural lands with scattered woodlots, buildings and/or orchards; grasslands, sedge meadows, marshes; snow-cover limits ability to catch prey; species has intolerance to severe cold; nests in hollow trees and live trees >46 cm dbh; also nests in barns, abandoned buildings.	No	The Study Area is outside the range for the species.
Lepidoptera											
Hesperiidae	Butterflies and Moths	<i>Erynnis martialis</i>	Mottled Duskywing	---	END	S2	OBA	FALSE	The mottled duskywing tends to live in dry habitats with sparse vegetation. These include open barrens, sandy patches among woodlands, and alvars. In Ontario, the mottled duskywing will only deposit their eggs on two closely-related plants: New Jersey Tea and Prairie Redroot.	No	The Study Area is outside the range for the species.
Fishes											
Acipenseridae	Fish and Eels	<i>Acipenser fulvescens</i> pop. 3	Lake Sturgeon (Great Lakes - Upper St. Lawrence River population)	---	END	S2	NHIC	FALSE	Larger rivers and lakes, with soft bottoms of mud, sand or gravel. They are usually found at depths of five to 20 metres. They spawn in relatively shallow, fast-flowing water (usually below waterfalls, rapids, or dams) with gravel and boulders at the bottom. However, they will spawn in deeper water where habitat is available. They also are known to spawn on open shoals in large rivers with strong currents.	No	The Study Area lacks suitable habitat for the species.
Cyprinidae	Fish and Eels	<i>Notropis anogenus</i>	Pugnose Shiner	END	THR	S2	NHIC	FALSE	Lakes and calm areas of rivers and creeks having clear water and bottoms of sand, mud, or organic matter. It prefers water bodies with plenty of aquatic vegetation.	No	The Study Area lacks suitable habitat for the species.
Ictaluridae	Fish and Eels	<i>Noturus stigmosus</i>	Northern Madtom	END	END	S1	NHIC	FALSE	Large creeks and rivers with a moderate to swift current and a sand, gravel, or mud bottom. Has also been captured in the deeper waters of Lake St. Clair and the Detroit River.	No	The Study Area lacks suitable habitat for the species.

Reptiles											
Colubridae	Snakes	Pantherophis gloydi pop. 2	Eastern Foxsnake (Carolinian population)	END	END	S2	ORAA, MECP Reg. Habitat	TRUE	Old fields, marshes, along hedgerows, drainage canals, and shorelines.	Yes	The Study Area has the potential to provide suitable habitat for the species.
Colubridae	Snakes	Thamnophis butleri	Butler's Gartersnake	END	END	S2	ORAA	FALSE	Open, moist habitats such as dense grasslands and old fields, with small wetlands where it can feed on leeches and earthworms.	Yes	The Study Area has the potential to provide suitable habitat for the species.
Trionychidae	Frogs and Toads	Apalone spinifera	Spiny Softshell	THR	END	S3	NHIC	FALSE	Highly aquatic turtles that rarely travel far from water. They are found primarily in rivers and lakes, but also in creeks and even ditches and ponds near rivers. Key habitat requirements are open sand or gravel nesting areas, shallow muddy or sandy areas to bury in, deep pools for hibernation, areas for basking, and suitable habitat for crayfish and other food species.	No	The Study Area lacks suitable habitat for the species.
Mammals											
Canidae	Dogs, Foxes and Wolves	Urocyon cinereoargenteus	Gray Fox	THR	THR	S1	MWH	FALSE	Hardwood forests with a mix of fields and woods; swamps; wooded, brushy or rocky habitats; woodland farmland edge; old fields with thickets; dens in hollow log or tree; individual has numerous winter dens throughout its range which is > 40 ha.	No	The Study Area is outside the range for the species.
Mustelidae	Weasels and Allies	Taxidea taxus jacksoni	American Badger (Southwestern Ontario population)	END	END	---	MWH	TRUE	Found in a variety of habitats, such as tallgrass prairie, sand barrens, and farmlands.	No	The Study Area is outside the range for the species.
Vespertilionidae	Plain-nosed Bats	Myotis leibii	Eastern Small-footed Myotis	---	END	S2S3	MWH	FALSE	Roosts in caves, mine shafts, crevices or buildings that are in or near woodland; hibernates in cold dry caves or mines; maternity colonies in caves or buildings; hunts in forests.	Yes	The Study Area has the potential to provide suitable habitat for the species.
Vespertilionidae	Plain-nosed Bats	Myotis lucifugus	Little Brown Myotis	END	END	S4	MWH	FALSE	Uses caves, quarries, tunnels, hollow trees or buildings for roosting; winters in humid caves; maternity sites in dark warm areas such as attics and barns; feeds primarily in wetlands, forest edges.	Yes	The Study Area has the potential to provide suitable habitat for the species.
Vespertilionidae	Plain-nosed Bats	Myotis septentrionalis	Northern Myotis	END	END	S3	MWH	FALSE	Hibernates during winter in mines or caves; during summer males roost alone and females form maternity colonies of up to 60 adults; roosts in houses, manmade structures but prefers hollow trees or under loose bark; hunts within forests, below canopy.	Yes	The Study Area has the potential to provide suitable habitat for the species.
Vespertilionidae	Plain-nosed Bats	Pipistrellus subflavus	Tri-colored Bat	END	END	S3?	MWH	FALSE	Can be found in a variety of forested habitats. They form day roosts and maternity colonies in older forest and occasionally in barns or other structures, and overwinter in caves. They forage over water and along streams in the forest.	Yes	The Study Area has the potential to provide suitable habitat for the species.
Molluscs											
Unionidae	Molluscs	Epioblasma torulosa rangiana	Northern Riffleshell	END	END	S1	NHIC	FALSE	Riffle areas within rivers or stream with rocky, sand, or gravel bottoms.	No	The Study Area lacks suitable habitat for the species.

Reptiles											
Unionidae	Molluscs	Ligumia nasuta	Eastern Pondmussel	END	THR	S1	NHIC	FALSE	Sheltered areas of lakes and in slow-moving areas of rivers and canals with sand or mud bottoms.	No	The Study Area lacks suitable habitat for the species.
Unionidae	Molluscs	Ptychobranthus fasciolaris	Kidneyshell	END	END	S1	NHIC	FALSE	Small to medium-sized rivers. It prefers shallow, clear, swift-moving water with gravel and sand.	No	The Study Area lacks suitable habitat for the species.
Unionidae	Molluscs	Truncilla donaciformis	Fawnsfoot	---	END	S2	NHIC	FALSE	Medium and large rivers with moderate to slow-flowing water. It usually inhabits shallow waters (one to five metres deep) with gravel, sand, or muddy bottoms.	No	The Study Area lacks suitable habitat for the species.
Plants											
Cornaceae	Dogwoods	Cornus florida	Eastern Flowering Dogwood	END	END	S2?	MECP Reg. Habitat	TRUE	Grows on soils varying from deep and moist along minor streams to light-textured and well-drained in the uplands. Grows well on flats and on lower or middle slopes, but not very well on upper slopes and ridges.	No	The Study Area lacks suitable habitat for the species.
Juglandaceae	Hickories	Juglans cinerea	Butternut	END	END	S3?	NHIC	FALSE	Usually grows alone or in small groups in deciduous forests. It prefers moist, well-drained soil and is often found along streams. It is also found on well-drained gravel sites and rarely on dry rocky soil. This species does not do well in the shade, and often grows in sunny openings and near forest edges.	No	The Study Area lacks suitable habitat for the species.
Orchidaceae	Orchids	Platanthera leucophaea	Eastern Prairie Fringed-orchid	END	END	S2	MECP Reg. Habitat	TRUE	Wetlands, fens, swamps, and tallgrass prairie. It has been found in ditches and railroad rights-of-way.	No	The Study Area lacks suitable habitat for the species.

1 – Status identified under the federal Species at Risk Act: END = Endangered, THR = Threatened; 2 – Status identified under the provincial Endangered Species Act: END = Endangered, THR = Threatened; 3 – SRank is an indicator of commonness in the Province of Ontario. A scale between 1 and 5: S5 = widespread and secure, S4 = common and apparently secure, S3 = rare to uncommon and vulnerable, S2 = very rare and imperiled, S1 = extremely rare and critically imperiled, SH = possibly extirpated (historical), SNR = unranked, SNA = not applicable, SX = extirpated, SU or ? = uncertain due to insufficient information, B = breeding, N = non-breeding, M = migrant; 4 – Information sources include: CBC = Christmas Bird Count, IBA = Important Bird Area, MECP Reg. Habitat = MECP Regulated Habitat (O. Reg. 242/08), MWH = Digital Distribution Maps of the Mammals of the Western Hemisphere, version 3.0, NHIC = MNR Natural Heritage Information Centre, OBA = Ontario Butterfly Atlas, OBBA = Ontario Breeding Bird Atlas, OOA = Ontario Odonata Atlas, ORAA = Ontario Reptile and Amphibian Atlas; 5 – MNR Significant Wildlife Technical Guide - Appendix G (2000); --- denotes no information or not applicable.