February 9, 2021

MTE File No.: 46666-100

Mike Frijia 75 Blackfriars Street London, ON N6H 1K8

Dear Mike:

Re: Environmental Impact Study: 3095 Bostwick Road, London, ON

Introduction

MTE has been retained to complete biological surveys and subsequently an Environmental Impact Study (EIS) to support the proposed re-zoning of a property in southwest London to bring the parcel into conformity with the Official Plan. The site is located at 3095 Bostwick Road, Part Lot 76, Concession east of the north branch of Talbot Rd, Block 172, City of London [Figure 1]. The entire property in question is herein referred as the Legal Parcel. An EIS scoping meeting was held on April 6, 2020 with respect to the Legal Parcel.

However, for this submission, an 11.8 ha phase of development is currently being proposed for approval, referred to in this report as the Subject Lands. This phase has avoided the natural heritage issues identified for consideration in the EIS Scoping Meeting for the Legal Parcel.

This EIS provides a summary of potential natural heritage considerations and recommended future studies (if necessary) that are needed to adequately evaluate potential direct and indirect impacts of site alteration to support the zoning amendment of the Subject Lands to permit future development

Area of Proposed Work

General Background

The topography of the Legal Parcel is relatively flat, sloping downwards gently towards the southeast. The site is covered by a low-permeable silty clay till overlaying a sandy silt and sand aquifer, typically covered by a layer of topsoil. The site is not classified as a Highly Vulnerable Aquifer, nor is it located within a Significant Groundwater Recharge Area (EXP, 2021).

Historically, the site has been used for agriculture; serving as pastureland for livestock from at least 1954 until 2019. During that time, a dug pond was created in the southwest of the Legal Parcel, outside of the Subject Lands (Inclusion a), as a water source for the livestock. The pond was later filled in 2017, and in 2019, the land was transitioned from pasture to row crop production [Appendix B].

The Legal Parcel was subject to a comprehensive study as part of the North Talbot Community Planning process and received Official Plan Amendments to permit development as part of that process. The Internal primary and secondary collector roads were established including connection to Southdale Road to the north. Stub road connections to approved and developed phases to the west and south have already been provided.

Land Use

City of London Official Plan, 2016 Consolidation

The Subject Lands are designated as Multi-Family, Medium Density Residential and Low Density Residential by the City of London Official Plan (Schedule A, Map 7, 2016 Consolidation) [Figure 3]. Adjacent Lands within 120m are similarly designated; Low Density Residential is the predominant land use designation, with areas of Multi-family, Medium Density Residential (City of London Official Plan, 2016 Consolidation). No natural heritage features are identified within the Subject Lands by the City of London (Schedule B1, Map 7, 2016 Consolidation) [Figure 2].

City of London Zoning By-Law, 2011 Consolidation

The Legal Parcel, including the Subject Lands, are currently zoned as Urban Reserve (UR3) by the City of London. This zoning provision applies to largely undeveloped lands within the City boundaries and is intended to prevent premature subdivision and development in order to provide for future comprehensive development on those lands. Zoning of Adjacent Lands is primarily Residential, with areas of Open Space to the north (Southwest Optimist Park), west (Talbot Park and Vandelinder Parkette) and south. The elementary school to the southwest is zoned Neighbourhood Facility.

Upper Thames River Conservation Authority (UTRCA) Regulation Limit

Portions of the Subject Lands are within the regulation area of the Upper Thames River Conservation Authority (URTCA). In the south of the Subject Lands, a URTCA-regulated area is associated with an intermittent ephemeral waterway that occasionally flows through the agricultural fields in Subject Lands.

In the northwest corner, a regulation area associated with units of the North Talbot Wetlands PSW is within the Subject Lands. The small (~0.3ha and ~0.1ha) wetland features that comprise the units of PSW are isolated from other natural areas by agricultural land and >90m away from the proposed development area.

Although it isn't mapped by the UTRCA, the pond at the northeast corner of the Subject Lands (Inclusion d) is also regulated by the Conservation Authority based on the text of Ontario Regulation 157/06. This feature will be impacted by the Southdale Road widening by the City and is the location of the previously approved subdivision connection to Southdale Road from the North Talbot Community.

A Regulation of Development, Interference with Wetlands, and Alterations to Shorelines and Watercourses permit may be required.

Natural Heritage Features and Function

Biological investigations and vegetation community assessments, completed by MTE between 2017 and 2020, have been used to assess the Subject Lands and Adjacent Lands for natural heritage significance with respect to the proposed residential development.

Vegetation Communities

An Ecological Land Classification (ELC) survey was completed on July 18th, 2018, and reviewed in 2020 by Will Huys, certified to complete ELC in Ontario. The survey was conducted within the area of the Legal Parcel, including the Subject Lands.

Subject Lands

The Subject Lands are primarily composed of active agriculture, currently under a row crop rotation. One vegetation community and four small (<0.5ha) vegetation inclusions were mapped within the Legal Parcel, one of which is partially located within the Subject Lands. Inclusion d, a small (~0.25ha) Submerged Shallow Marsh inclusion (SAS1), is situated at the northeast corner of the Subject Lands and extends into the parcel adjacent to the north. White Willow, along with Creeping Bent and Common Beggar-ticks dominate the pond's edge.

A fencerow is present along the southern edge of the agricultural field within the Legal Parcel and Subject Lands. This area is vegetated by deciduous species typical of agricultural fencerows, such as European Buckthorn and Hawthorne species, with occasional dead Ash and Bitternut Hickory.

Adjacent Lands

The vegetation immediately adjacent to the Subject Lands within the Legal Parcel is primarily row crops. Wetland features, discussed above, are present >90m west of the proposed development, as well as a vegetation patch of trees and a Meadow Marsh inclusion (~0.2ha) >54m to the west. Lands adjacent to the Legal Parcel are primarily residential, with subdivision present to the west and south. Southwest Optimist Park is to the north, across Southdale Road, and an agricultural property is to the east.

Development Proposal

The proponent has proposed the severance of the Legal Parcel and subsequent re-zoning of the Subject Lands area as Medium and Low density residential [Figure 7].

Potential Impacts and Mitigation Recommendations

The Subject Lands do not contain habitat for Protected Species or significant natural heritage features, other than the pond inclusion on the northeast boundary. The northeast pond will be removed as a result of the Southdale Road widening and the approved Southdale Road connection and will not be considered in this EIS. Based on the completed site investigations and relevant policies, natural heritage features identified within the Subject Lands and adjacent to the Subject Lands within 120m that need to be considered with respect to the development are:

- Habitat of Endangered or Threatened Species
- Candidate Significant Wildlife Habitat
- Provincially Significant Wetland
- UTRCA Regulation Area

Habitat of Endangered or Threatened Species

Prior to 2019, portions of the Subject Lands were used as pasture for livestock and supported nesting of Bobolink [THR] and Eastern Meadowlark [THR]. In 2019, the land was converted into row crop production, an activity that is exempt under Section 4.1 of O. Reg. 242/08 of the ESA (2007), such that the Subject Lands no longer support nesting of protected grassland birds.

Based on the review of the Natural Heritage Information Centre (NHIC) database, there is no suitable habitat for any other identified species protected under the Endangered Species Act (2007) within the Subject Lands. As such, it is our opinion that the proposed lot severance and future development within the Subject Lands will avoid impacts to species protected under the *ESA* (2007).

Significant Wildlife Habitat

Candidate Significant Wildlife Habitat is identified based on vegetation communities and specific criteria outlined in the Significant Wildlife Habitat Criteria Schedules (MNRF, 2015). If threshold criteria are met, candidate SWH becomes confirmed.

Candidate SWH was identified within the Subject Lands associated with the SAS1 pond inclusion located on the north boundary and extending into Adjacent Lands. However, the SAS1 was reviewed and will be removed as a result of the Southdale Road widening EA and approved Southdale Road connection. This habitat has not been considered for this EIS.

Other ELC Communities within the Legal Parcel which could potentially contain Candidate SWH are located greater than 50m from the proposed development and will be reviewed at a later phase of development.

Direct impacts to other features within 120m of the Adjacent Lands will be avoided as the severance of the Legal Parcel and proposed development of the Subject Lands will not encroach onto the Adjacent Lands. Mitigation measures for potential indirect impacts will be implemented as a condition for future development.

Provincially Significant Wetland

Inclusion b, a Mineral Shallow Marsh inclusion (MAS2), and Inclusion c, a Maple Mineral Deciduous Swamp Ecosite (SWD3) are units of the North Talbot PSW and are respectively located ~93m and ~113m away from the Subject Lands [Figure 6, Figure 8]. The wetland units are isolated from the proposed development by cropland, which is actively cropped up to the boundary of the wetland features. Based on the account of the previous landowner, the wetland units formed as a result of grade changes on adjacent lands and not through natural processes [Appendix B].

Because the Subject Lands are entirely outside of the catchment boundary of the wetland features, and drainage patterns and topography indicate that there is no flow from the Subject Lands to the PSW (Hydrogeological Assessment, EXP, 2021), direct impacts to the PSW will be avoided. A Wetland Risk Assessment conducted by EXP found that low magnitude of potential hydrogeological change due to the proposed development.

UTRCA Regulation Area

Within the Subject Lands, three UTRCA regulation areas are present; the SAS1 pond inclusion adjacent to Southdale Road, an ephemeral flow path in the southern region, and an area in the MTE Consultants | 46666-100 | Topping Lands EIS | February 9, 2021

northwest corner associated with units of the North Talbot PSW within the Legal Parcel, discussed above [Figure 5].

The SAS1 pond inclusion, as previously discussed, will be removed as part of the Southdale Road widening and construction of the approved Southdale Road access.

The regulation area in the southeast portion of the Subject Lands delineates an erosion hazard associated with an ephemeral flow path and not a significant natural heritage features.

Recommendation 1:

Prior to dewatering the pond at the approved Southdale Road access location, fish and wildlife will be salvaged and relocated as guided by the Southdale Road EA. The logical and most accessible release location is the Southwest Optimist Stormwater Management Pond, immediately across Southdale Road. Alternatively, the salvaged wildlife could be moved to the PSW to the southwest within the North Talbot Community. Non-native species will be destroyed.

Recommendation 2:

Prior to construction works, sediment and erosion control fencing will be installed around the limits of the development. Barrier fencing will keep construction equipment and stockpiles within the phased development area and prevent erosion and sedimentation.

Recommendation 3:

Vehicle Barriers will be installed at stub roads that direct westward to prevent vehicle access to retained wetland features. Barriers may include chain and bollard access points to allow for farm equipment movement into the west field.

Recommendation 4:

A tree preservation report should be prepared to protect any retainable trees in the fencerows within the Subject Lands.

Recommendation 5:

The flood and erosion hazard area in the southeast UTRCA Regulation Area will be managed through Stormwater Management considerations. An interim Stormwater Management plan will be developed to guide the construction phase and protect the wetland features within Adjacent Lands.

Recommendation 6:

The requirements to protect the regulated features from this phase of development will be discussed with the UTRCA. Based on the surrounding land use, hydrology, and distance between the proposed development and the regulated area (>90m), a Section 28 permit may not be required. Requirements for Section 28 approval established by the UTRCA during discussions, if any, will be fulfilled.

Summary

Southside Group (the Proponent) is proposing a Medium and Low-density residential development on the at 3095 Bostwick Road. The site plan has been modified since the EIS Scoping Meeting took place, and the proposed development avoids impacts to all natural heritage features discussed for consideration in the EIS Scoping Meeting. Site-specific mitigation and avoidance recommendations have been provided to address any potential impacts to identified natural heritage features within the Adjacent Lands. These recommendations have been provided above.

Conclusion

We have evaluated the proposed development and the natural heritage significance of the Subject Lands and the Adjacent Lands. No natural heritage features are present within the Subject Lands, and potential impacts to natural heritage features on the Adjacent Lands have been avoided or will be mitigated through the above recommendations. Provided that the recommendation measures are followed during all stages of the development process, no significant impacts to natural heritage features are expected. MTE seeks comments from the City of London and the Upper Thames River Conservation Authority concerning the contents of this report. Formal comments can be submitted on behalf of the client to MTE. Should any additional materials be required, or if any clarifications, questions, or issues arise during the review of this report, please do not hesitate to contact us.

Yours Truly,

MTE Consultants Inc.

Lindsay McKay, B.Sc., M.E.S. 519-204-6510 ext. 2244 Windsor Field Office: 519-966-1645 Imckay@mte85.com

Reviewed By Dave Hayman, MSc Manager, Biological Sciences 519-204-6510 ext. 2241 dhayman@mte85.com

LMM:dh



Figure 1: Site Location (OMAFRA Ag Mapping, 2020)



1,000 Scale 1:50,000 Key Plan

Legend

Legal Parcel

Subject Lands

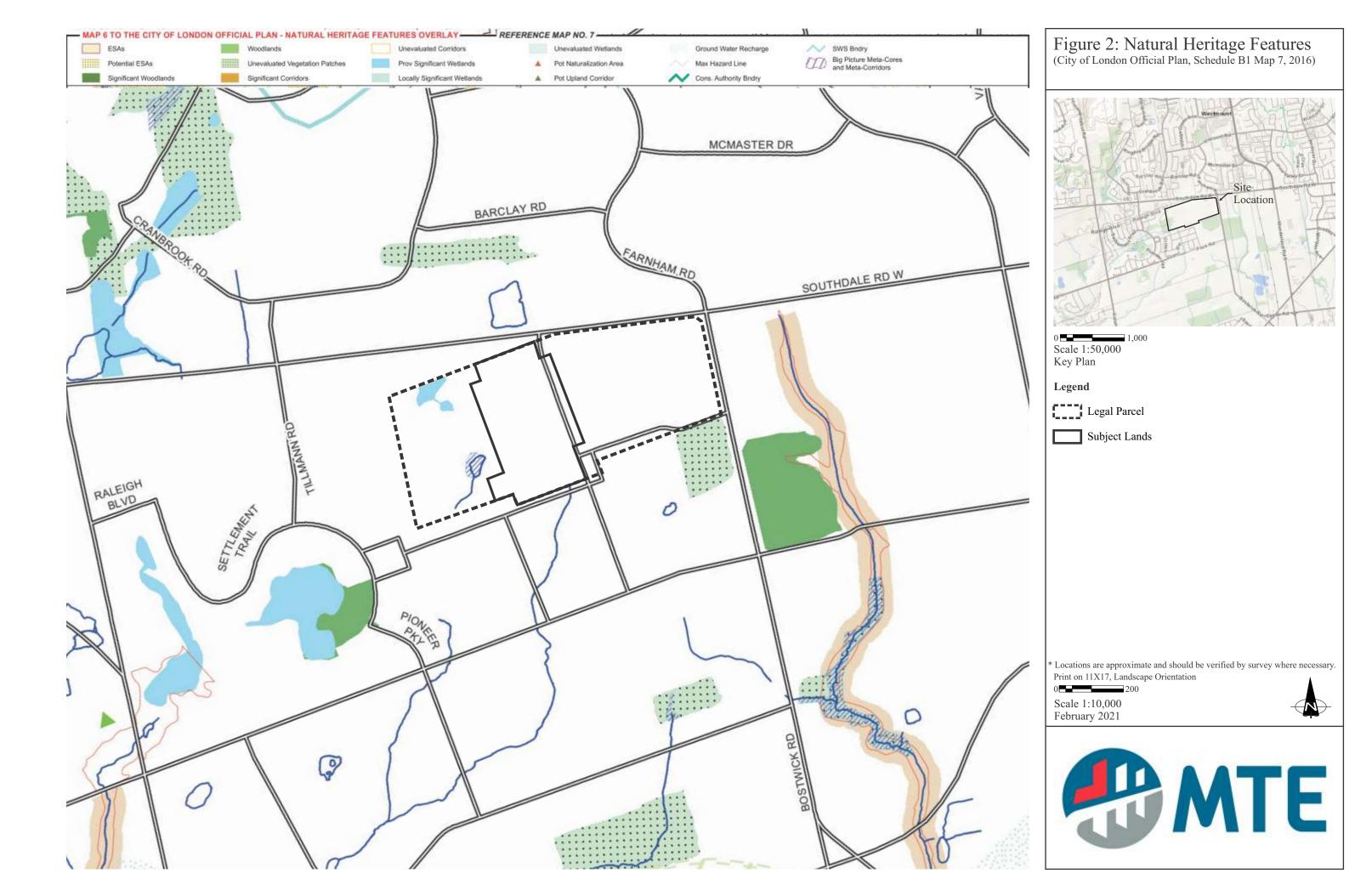
* Locations are approximate and should be verified by survey where necessary.

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Scale 1:7200 February 2021





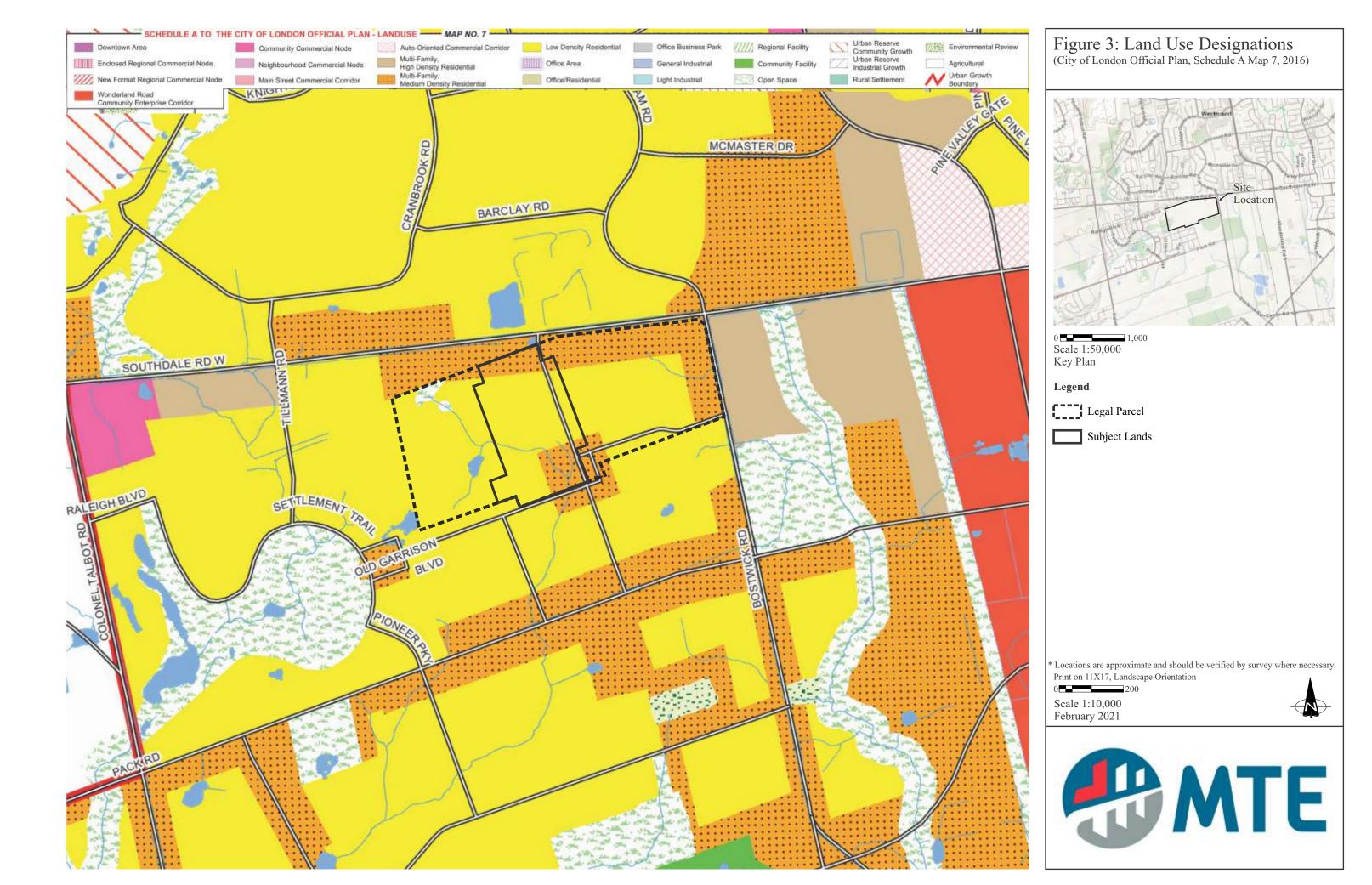
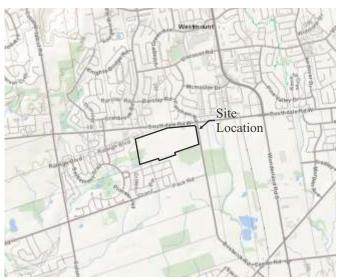




Figure 4: Zoning (City of London Zoning, 2021)



0 ______1 Scale 1:50,000 Key Plan

Legend

Legal Parcel

Subject Lands

Zones

* Locations are approximate and should be verified by survey where necessary.

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Scale 1:4000 February 2021



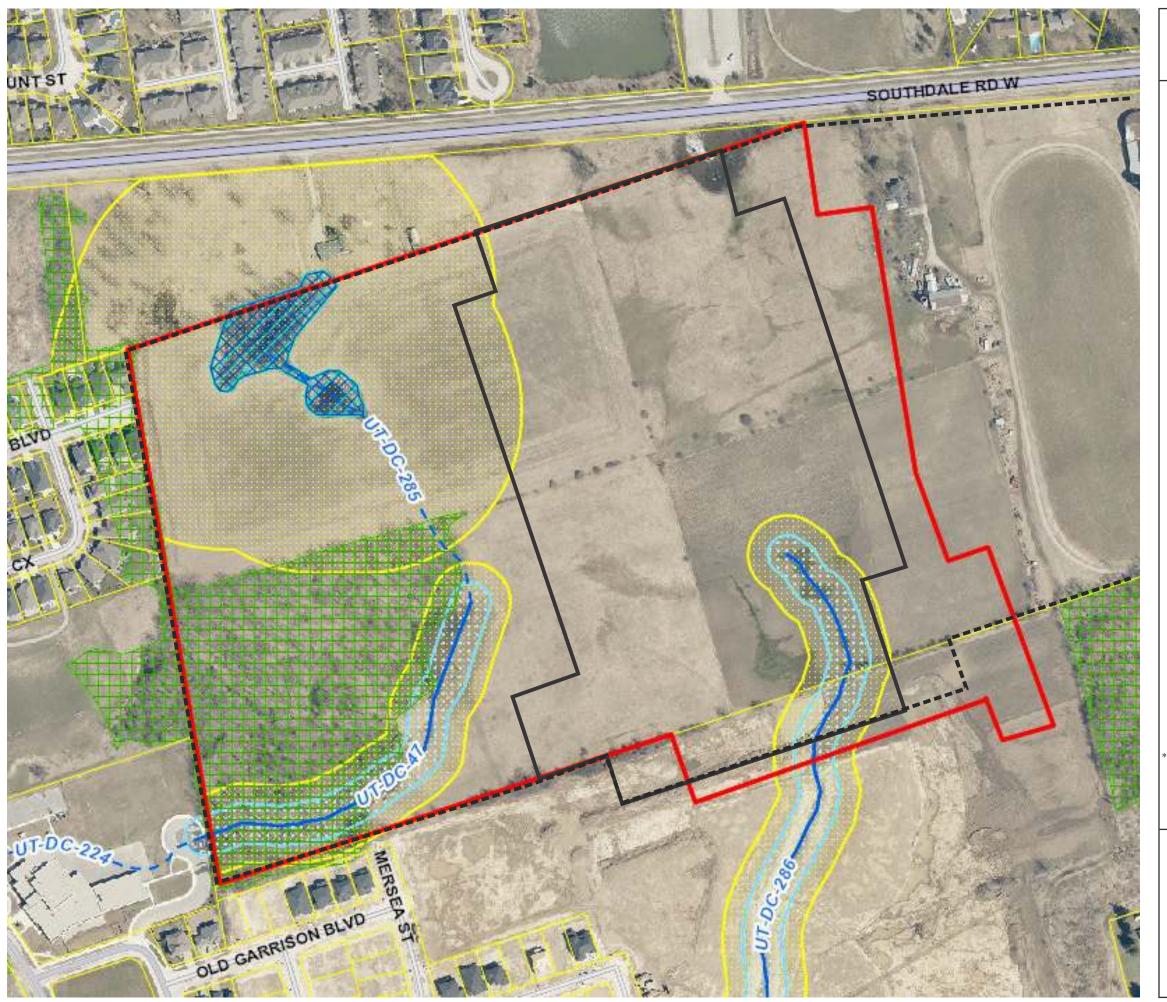


Figure 5: UTRCA Regulation Area (UTRCA 2020)



1,000 Scale 1:50,000 Key Plan

Legend

Legal Parcel

Subject Lands

Wetland Hazard

Flooding Hazard

Erosion Hazard

Regulation Limit 2018

Wetlands (MNRF)

Evaluated-Provincial

Evaluated-Other

Not Evaluated

* Locations are approximate and should be verified by survey where necessary.

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Scale 1:2900 February 2021





Figure 6: Vegetation Communities (OMAFRA Ag Mapping, 2020)



O Scale 1:50,000 Key Plan

Legend

Legal Parcel

Subject Lands

- 1 FOD7 Fresh-Moist Deciduous Lowland Ecosite (4.0ha)
- a MAM Meadow Marsh (filled pond) (0.2ha)
- b MAS2 Mineral Shallow Marsh Ecosite (0.1ha)
- c SWD3 Maple Mineral Deciduous Swamp Ecosite (0.3ha)
- d SAS1 Submerged Shallow Aquatic Type (0.25ha)
- A Agricultural

* Locations are approximate and should be verified by survey where necessary.

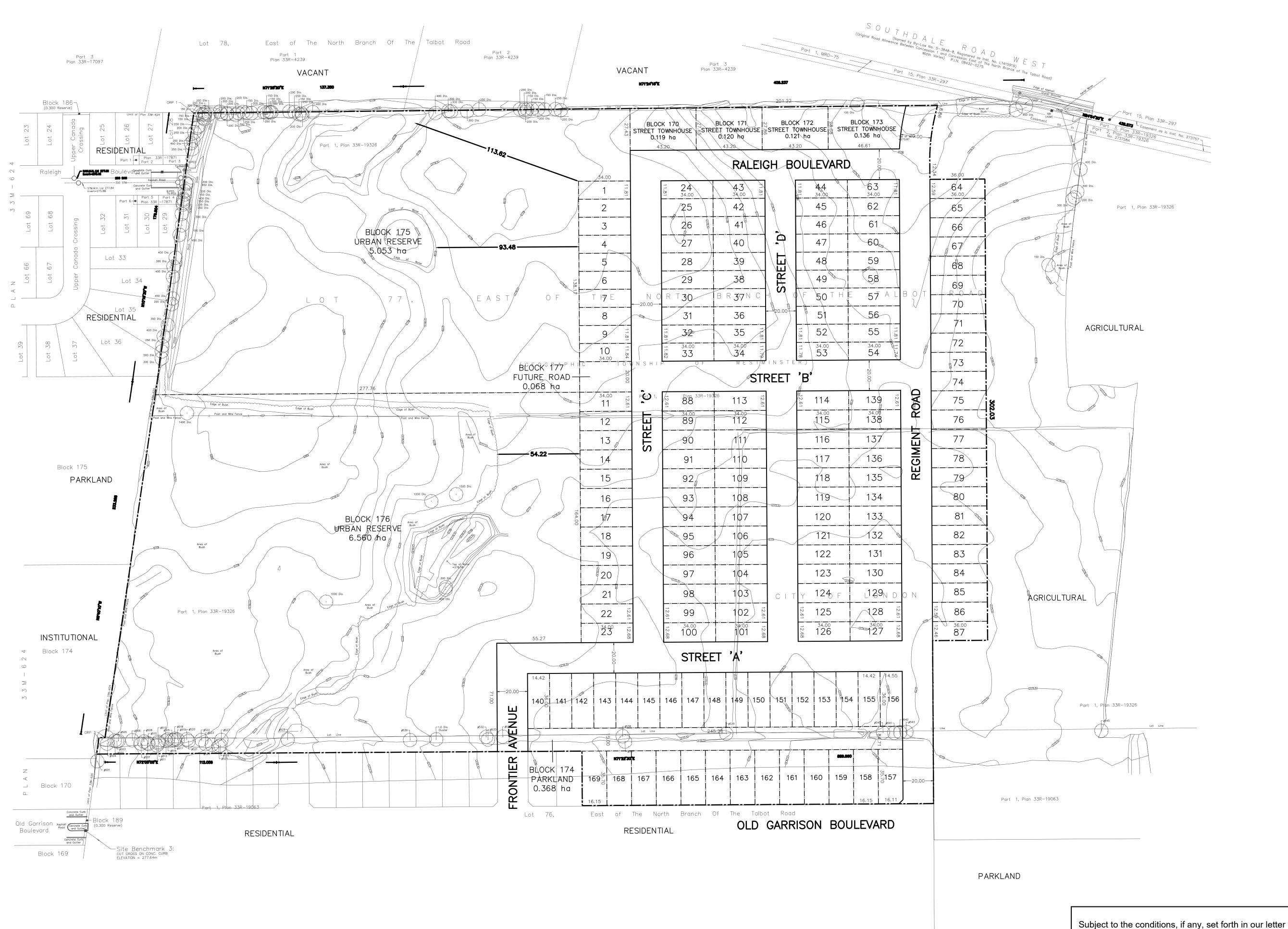
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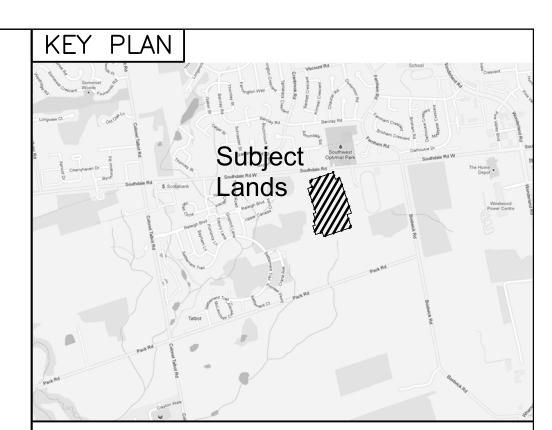
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Scale 1:5000 February 2021



Figure 7: Development Plan





DRAFT PLAN OF SUBDIVISION

LOT 76, CONCESSION EAST OF THE NORTH BRANCH OF THE TALBOT ROAD

TALBOT ROAD
(GEOGRAPHIC TOWNSHIP OF WESTMINISTER)
AND ALL OF

BLOCK 172, PLAN 33M-562

CITY OF LONDON COUNTY OF MIDDLESEX

INFORMATION REQUIRED UNDER SECTION 51 (17) OF THE PLANNING

A) As shown G) As shown

B) As shownC) As shownD) As listed above

H) Municipal water supply available
I) Mix of Silty Sand & Silty Clay

E) As shown

K) All municipal services to be available

F) As shown L) As shown

PROPOSED LAND USES AND AREAS
RESIDENTIAL, SINGLE DETACHED (LOTS 1-169)
RESIDENTIAL, STREET TOWNHOUSE (BLOCKS 170-173)
7.515 ha
0.496 ha

 RESIDENTIAL, STREET TOWNHOUSE (BLOCKS 170-173)
 0.49

 PARKLAND (BLOCK 174)
 0.36

 URBAN RESERVE (BLOCKS 175-176)
 11.61

 FUTURE ROAD (BLOCK 177)
 0.06

 PROPOSED ROADS
 3.38

OWNER'S CERTIFICATE

TOPPING FAMILY FARM INC.
HEREBY CONSENTS TO THE FILING OF THIS PLAN IN DRAFT

Topping Family Farm Inc., Owner DATED

OWNER'S CERTIFICATE SPEYSIDE EAST CORPORATION

HEREBY CONSENTS TO THE FILING OF THIS PLAN IN DRAFT

Speyside East Corporation, Owner DATED

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THE BOUNDARIES OF THE LAND TO BE SUBDIVIDED AND THEIR RELATIONSHIP TO THE ADJACENT LANDS ARE ACCURATELY SHOWN ON THIS PLAN.

Bruce S. Baker, ONTARIO LAND SURVEYOR
for Archibald, Gray & McKay Ltd.

NO.

REVISION

DATE

DATE

DATE

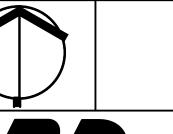
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DATE

DATE

DATE

INITIA





318 Wellington Road, London, Ontario N6C 4P4
Tel: (519) 474-7137 Fax: (519) 474-2284 e-mail: zp@zpplan.com

DRAWN BY PROJECT NO.

SPE/LON/12-02

DATE

NOVEMBER 2020

dated ___day of _____, 201__, this draft

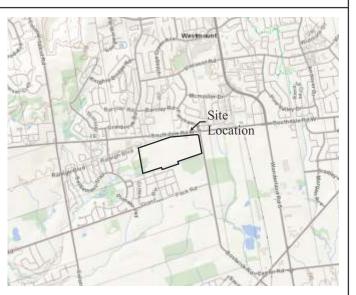
plan is approved under Section 51 of the Planning

Act this ___day of _____, 201__.

1:1,250



Figure 8: Development Overlay (OMAFRA Ag Mapping, 2020)



Scale 1:50,000 Key Plan

Legend

Legal Parcel

Subject Lands

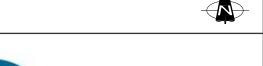
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- a MAM Meadow Marsh (filled pond) (0.2ha)
- b MAS2 Mineral Shallow Marsh Ecosite (0.1ha)
- c SWD3 Maple Mineral Deciduous Swamp Ecosite (0.3ha)
- d SAS1 Submerged Shallow Aquatic Type (0.25ha)
- A Agricultural

* Locations are approximate and should be verified by survey where necessary.

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15

Scale 1:7500 February 2021





Appendix A

Significant Wildlife Habitat



Seasonal Concentration of Animals

Wildlife Habitat	ELC Codes Triggers	Additional Habitat Criteria	Candidate SWH
Waterfowl Stopover and Staging Areas (Terrestrial)	Fields with Seasonal Flooding	-ELC Ecosites not present; crop fields with seasonal flooding are present, but not within the Long Point, Rondeau, Lake St. Clair, Grand Bend, or Point Pelee regions.	No
Waterfowl Stopover and Staging Areas (Aquatic)	-	- The SAS1 within the Subject Lands will be removed as a result of the Southdale Road widening and approved Southdale Road connection and is not considered for SWH for this EIS.	No
Shorebird Migratory Stopover Area	-	- ELC triggers not present.	No
Raptor Wintering Area	-	- ELC triggers not present.	No
Bat Hibernacula	-	- ELC triggers not present.	No
Bat Maternity Colonies	-	- ELC triggers not present.	No
Turtle Wintering Areas	-	- ELC triggers not present.	No
Reptile Hibernaculum	all other than really wet	-No features indicative of hibernation sites (bedrock fissures, rock piles, burrows) present within the Subject Lands.	No
Colonially-Nesting Bird Breeding Habitat (Bank / Cliff)	-	- ELC triggers not present.	No
Colonially-Nesting Bird Breeding Habitat (Trees/Shrubs)	-	- ELC triggers not present.	No
Colonially-Nesting Bird Breeding Habitat (Ground)	-	- ELC triggers not present.	No
Migratory Butterfly Stopover Areas	Combination of ELC communities including field and forest	- ELC triggers not present.	No
Land Bird Migratory Stopover Areas	-	- ELC triggers not present.	No
Deer Winter Congregation Areas	-	- ELC triggers not present.	No

Rare Vegetation Communities

Wildlife Habitat	ELC Codes Triggers	Additional Habitat Criteria	Candidate SWH
Cliffs and Talus Slopes	-	-ELC Triggers not present	No
Sand Barren	-	-ELC Triggers not present	No
Alvar	-	-ELC Triggers not present	No
Old Growth Forest	-	-ELC Triggers not present	No
Savannah	-	-ELC Triggers not present	No
Tallgrass Prairie	-	-ELC Triggers not present	No
Other Rare Vegetation	-	-ELC Triggers not present	No

Specialized Habitats of Wildlife considered SWH

Wildlife Habitat	ELC Codes Triggers	Additional Habitat Criteria	Candidate SWH
Waterfowl Nesting Area	-includes adjacency to PSWs	-PSW units are within 120m of the Subject Lands, however the units do not meet the criteria for SWH (greater than 0.5ha in size, or 3+ small wetland units). - Breeding bird studies did not identify the presence of 3 or more nesting pairs for listed species excluding Mallards.	No
Bald Eagle and Osprey Nesting, Foraging, Perching	-	-ELC Triggers not present	No
Woodland Raptor Nesting Habitat	-	-ELC Triggers not present	No
Turtle Nesting Areas	Exposed mineral soil within 100m of wetlands	- Exposed mineral soil is present within the Southdale Road right-of-way, however this does not meet the criteria for SWH.	No
Springs and Seeps	-	- ELC triggers not present.	No
Amphibian Breeding Habitat (Woodland)	-	-ELC Triggers not present	No
Amphibian Breeding Habitat (Wetlands)	-	-ELC Triggers not present	No
Woodland Area-Sensitive Bird Breeding Habitat	-	-ELC Triggers not present	No

Habitats of Species of Conservation Concern considered SWH

Wildlife Habitat	ELC Codes Triggers	Additional Habitat Criteria	Candidate SWH
Marsh Breeding Bird Habitat	-	- ELC Triggers not present.	No
Open Country Bird Breeding Habitat	-	- Natural and cultural fields >30ha are not present.	No
Shrub/Early Successional Bird Breeding Habitat	-	- No large fields succeeding to shrub and thicket habitats > 10ha in size.	No
Terrestrial Crayfish	-	- ELC Triggers not present.	No
Special Concern and Rare Wildlife Species (NHIC and MNRF pre- consultation)	None	- No Special Concern or Provincially Rare plant species observed within the Subject Lands.	No

Animal Movement Corridors

Wildlife Habitat	ELC Codes Triggers*	Additional Habitat Criteria	Candidate SWH
Amphibian Movement Corridors	-	- Movement corridors are determined when there is confirmed amphibian breeding habitat	No

SWH exceptions

Wildlife Habitat	Ecosites	Habitat Criteria and Information	Candidate SWH
Bat Migratory Stopover Area	None	- The site is not near Long Point.	No

Appendix B

Farm History



Mr. Dave Hayman,

My name is Gary Topping, I am the son of Ronald William Topping, formerly of 3095 Bostwick Road in London, Ontario. At the request of Southside Construction Management Limited, our partner in developing our properties at 3095 & 3105 Bostwick Road, I am providing a timeline of the events that have taken place on the North farm 3095 Bostwick Road.

In 1954 my father Ron and his brother Glen purchased the property now known as 3095 Bostwick drive. Sometime between 1954 and 1962 they dug a pond near the wooded area in the southwest corner of the property for the cattle they had at the time. The farm was pastured by cattle until 1973. At that time, my father was heavily involved in horse racing and so horses were pastured on the farm using that dug pond for water.

Over the years of 1985 to 1987, the property along our Northern boundary, known as 735 Southdale Road West, raised the grades of their property 5 to 7 feet in some areas. The water that had flowed North naturally was now trapped South of the common property line without being able to drain properly. This elevation changed has now turned into a regulated wetland preventing any farming or future uses on that part of the property.

In late 2017, my father's health was worsening and we were reducing the number of horses we had and transitioning to farming crops on the property. As such, our family filled in the pond we dug to yield crops on that land.

On April 23, 2019 my father passed away, the horses were gone and we prepared the land for crops. Archaeological mitigation work was required prior to making a Draft Plan application on this farm. We completed the ploughing and disking to prepare the land for crops in the summer of 2019 and completed the archaeological mitigation on the field at that time. We had held off on moving these lands towards development due to my father's health, but the plan was to farm the land at that time and it will continue to be farmed until the property is developed.

Sincerely,

Gary Topping