



January 18, 2022

MTE File No.: 50372-100

Christine Creighton, Land Use Planner
Environmental Planning and Regulations Unit
Upper Thames River Conservation Authority
1424 Clarke Road, London ON N5V 5B9
Email: creightonc@thamesriver.on.ca

Dear Ms. Creighton:

MTE was retained by Ballymote Developments to complete a Scoped Development Assessment Report (DAR) for a proposed residential development at 21488 Highbury Avenue, at the intersection with Medway Road, in the Municipality of Middlesex Centre, Middlesex County [Figure 1]. The area of proposed development, which includes single family homes fronting both Highbury Ave. and Medway Road, will be referred to as the 'Subject Lands', with the remainder of the property referred to as the 'Legal Parcel'. The DAR is intended to support an application for a Draft Plan of Subdivision.

The Subject Lands consist primarily of agricultural fields bordering Highbury Ave. and Medway Road, but also include one residential lot with a single family home [Figure 2]. The adjacent lands on the Legal Parcel include residential, commercial, and agricultural lands, as well as an approximately 7.0 ha woodland in the northeast of the Legal Parcel. The Subject Lands are primarily zoned Hamlet Residential First Density (H1) with one lot along Highbury Ave zoned Agricultural 1 (A1). The remainder of the Legal Parcel is zoned A1 (Municipality of Middlesex Centre Zoning By-Law, 2005). The designated Land Use in the Official Plan of the Municipality of Middlesex Centre (2018) Schedule A-5 is Hamlet, with one south lot designated Agriculture, consistent with the zoning described above.

A woodland of approximately 7.0 ha on the Legal Parcel is designated a Significant Woodland on Schedule 'B' of the Official Plan of the Municipality of Middlesex Centre (2018), and on Schedule C of the Middlesex County Official Plan (Consolidated 2006). This woodland includes an unevaluated wetland based on regulatory mapping provided by UTRCA [Figure 3]. The north edge of the Subject Lands is regulated by the Upper Thames Region Conservation Authority (UTRCA) in accordance with Ontario Regulation 157/06 due to a flooding hazard associated with Ballymote North Drain along Medway Road [Figure 3]. The regulation limit extends to the east where it is associated with the unevaluated wetland and the surrounding area of interference.

The proposal is to develop 20 residential lots, each with a single family home and associated infrastructure (driveways, servicing) on the Subject Lands [Figure 4]. A scoped DAR was requested by UTRCA during preliminary consultation to address potential impacts to natural features within 120m of the proposed development (Appendix A).

This report is intended to address the requirements of a Terms of Reference and scoped DAR, through identification and assessment of natural heritage features using results obtained from background data sources and field investigations, and to evaluate the potential for negative impacts to identified features. An overview of relevant natural heritage policies is provided in Appendix B. Results of a desktop screening for significant natural features and Species at Risk, as well as results of a preliminary field investigation, are provided in Appendix C. A summary of natural heritage features protected under provincial and municipal policy and which may be

present on or adjacent to the Subject Lands is presented below, along with an assessment of potential impacts and recommended mitigation measures to avoid negative impacts.

Based on the assessment below, it is MTE’s opinion that with the 100m setback distance from the nearest lot to the natural heritage system (woodland and wetland) there will be no negative impacts to the identified natural heritage features or their functions, including habitat for species protected under the Endangered Species Act, 2007 [Figure 5]. The Ballymote North Drain located on the northern boundary of the Legal Parcel is dominated by the non-native, invasive plant *Phragmites (Phragmites australis australis)*, providing limited habitat value, and there was no evidence of surface water drainage from this feature towards the wetland. No further field investigations or studies are recommended to address natural heritage features. Further mitigation measures regarding stormwater management and flow conveyance within the Ballymote North Drain will be provided through a detailed engineering design study.

Assessment of Significant Natural Heritage Features

A summary of significant features and functions identified on the Subject Lands, in accordance with provincial and municipal policy, is provided in Table 1, below.

Table 1: Natural Heritage Features or Functions of the Subject Lands

Policy Category	Natural Heritage Feature	Description of Feature on the Subject Lands
Provincial Policy Statement and Municipality of Middlesex Centre	Significant Wetlands	<ul style="list-style-type: none"> · There are no mapped Significant Wetlands within the Subject Lands or Adjacent Lands. · An unevaluated wetland is present within the woodland of the Adjacent Lands, approximately 100 m from the Subject Lands.
	Significant Woodlands	<ul style="list-style-type: none"> · Woodlands on the Legal Parcel have been mapped as part of the Middlesex Natural Heritage System. Based on size and ecological functions (interior habitat, wetland, species of concern), the woodland meets the Municipality of Middlesex Centre definition of significance. · The proposed development is set to take place >50m from the Significant Woodland, which is outside of the trigger distance outlined for a DAR. Therefore, the woodland will not be carried forward to an assessment of impacts.

	Significant Wildlife Habitat (SWH)	<ul style="list-style-type: none"> · Candidate SWH on the Subject Property is associated with the Significant Woodland (swamp forest) on the Adjacent Lands, and has not been confirmed with targeted surveys. Candidate SWH is present in this woodland for: Bat Maternity Colony, Colonially-nesting Bird Breeding, Waterfowl Nesting, Woodland Raptor Nesting, Amphibian Breeding Habitat, Terrestrial Crayfish Habitat, and Habitat for Special Concern Wildlife (Eastern Wood-pewee, Red-headed Woodpecker, Wood Thrush).
	Habitat of Threatened and Endangered Species	<ul style="list-style-type: none"> · One candidate maternity roost tree was observed within Subject Lands. · Habitat for bat SAR may be present within the Significant Woodland on the Adjacent Lands.
UTRCA Regulations	Regulation Limit	<ul style="list-style-type: none"> · The northeast portion of the Subject Lands is located within an area mapped as regulated by UTRCA.

Impact Assessment and Recommended Mitigation Measures

The Subject Lands include one potential Species at Risk bat maternity roosting tree and are located within 120m of an unevaluated wetland. No other significant natural heritage features and no habitat for Species at Risk are present within the Subject Lands.

Based on the completed site investigations and the policies reviewed, natural heritage features identified within or adjacent to the Subject Lands that need to be considered with respect to the Project are:

- Unevaluated Wetland
- Ballymote East Drainage Feature
- Significant Wildlife Habitat (candidate)
- Habitat of Endangered or Threatened Species (potential)
- UTRCA Regulation Limit

Wetlands

An unevaluated wetland is located within the northeast section of the Adjacent Lands, approximately 100m from the Subject Lands. No direct hydrologic connection from the Subject Lands to this wetland was observed. The 100m setback distance from the wetland is sufficient to ensure there are no negative impacts to the wetland. Standard mitigation measures for erosion and sediment control are recommended during construction.

Recommendation 1:

Sediment and erosion control measures (e.g. fencing or fibre logs) will be installed prior to vegetation clearing and earth disturbance, where appropriate.

Recommendation 2: Store hazardous materials away from sensitive natural features. Equipment refueling should occur a minimum of 30m away from the wetland.

Recommendation 3: Areas of exposed soil following construction should be stabilized with vegetation or other suitable ground cover, avoiding plant species with the potential to invade nearby natural features. For information on invasive, non-native plant species in the Upper Thames watershed refer to: <http://thamesriver.on.ca/wp-content/uploads/InvasiveSpecies/Invasiveplants.pdf>

Ballymote East Drainage Feature

The Ballymote North Drain flows north to south until it reaches Medway Road and then flows eastward along the northern edge of the Subject Lands. This drain does not provide fish habitat and has limited ecological function due to the abundance of non-native Phragmites. The function of this drain for flood control and flow conveyance should be addressed through a separate engineering study, with mitigation measures provided therein.

Recommendation 4: The engineering study prepared at detailed design should address flood control and flow conveyance within the Ballymote North Drain.

Significant Wildlife Habitat

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

The Subject Lands do not contain SWH. The Adjacent Lands contain candidate SWH associated with the Significant Woodland and wetland communities as follows:

- Candidate Bat Maternity Roost Colony (SWD3)
- Candidate Colonially-Nesting Bird Breeding (SWD3)
- Candidate Waterfowl Nesting (SWD3)
- Candidate Amphibian Breeding Habitat (SWD3)
- Candidate Terrestrial Crayfish Habitat (SWD3)
- Candidate Habitat for Species Concern Wildlife (Eastern Wood-pewee, Red-headed Woodpecker & Wood Thrush) (SWD3)

Direct impacts to these features are not anticipated as they are located outside the Subject Lands (> 100m distance) and will be retained. Standard mitigation measures to avoid impacts to wildlife and wildlife habitat during construction are recommended as follows:

Recommendation 5: Avoid vegetation clearing and site disturbance during the migratory bird breeding season (April to August 31) to ensure that no active nests will be removed or disturbed, in accordance with the Migratory Birds Convention Act and/or Regulations under that Act. If works are proposed within the breeding season, prior to any vegetation removal or ground disturbance, the area should be checked for nesting birds by a qualified professional. If there are any nesting birds, works within the nesting area should not proceed until after August 31 or the nest is confirmed inactive.

Recommendation 6: If an animal enters the work site, work at that location will stop and the animal should be permitted to leave un-harassed. If there are repeat observations of wildlife in the work area, barrier fencing (e.g. silt fence) may be used to direct wildlife away from active construction and toward natural areas.

Habitat of Endangered or Threatened Species

Based on review of background data sources (Table 1) and results of field investigations, suitable habitat for species protected under the *Endangered Species Act* (2007) within the Subject Lands are limited to a single suitable bat maternity roosting tree that was identified during field investigations. Potential habitat for bat SAR is also present within the Significant Woodland on the Adjacent Lands. No other habitat suitable for SAR was identified within the Subject Lands. Based on this, it is our opinion that the Project will avoid impacts to species protected under the ESA (2007). Mitigation measures for wildlife and wildlife habitat are recommended, as noted above, with the following addition:

Recommendation 6: Removal of trees > 10cm DBH should occur outside the bat maternity roost period, which is approximately May 1 to September 31. This avoidance measure includes dead standing trees.

Recommendation 7: Any observation of a Protected Species should be reported to MECP. Protected Species should not be handled, harassed or moved unless they are in immediate danger.

UTRCA Regulation Limit

A portion of the Subject Lands are regulated by UTRCA [Attachment 1]. As noted by UTRCA in their correspondence dated October 1st, 2021, written approval is required from the Authority prior to undertaking any site alteration within the regulated area, including filling or grading.

Summary

The Subject Lands are located within 120m of an unevaluated wetland and include one potential Species at Risk bat maternity roosting tree. No other significant natural heritage features and no habitat for Species at Risk are present within the Subject Lands.

The proposed development will take place more than 100 m from the unevaluated wetland and is not connected through surface drainage, which is sufficient to protect this natural feature from negative impacts. Therefore, it is MTE's opinion that given the large setback distance and continued intervening land use (agricultural) no further field investigations or studies are required to address natural heritage features. Further mitigation measures regarding stormwater management and flow conveyance within the Ballymote North Drain will be provided through a detailed engineering design study.

We welcome UTRCA's comments and look forward to confirming the conclusions of this natural heritage study.

Yours Truly,

MTE Consultants Inc.

Melissa Cameron

Senior Biologist

519-204-6510 ext. 2263

mcameron@mte85.com



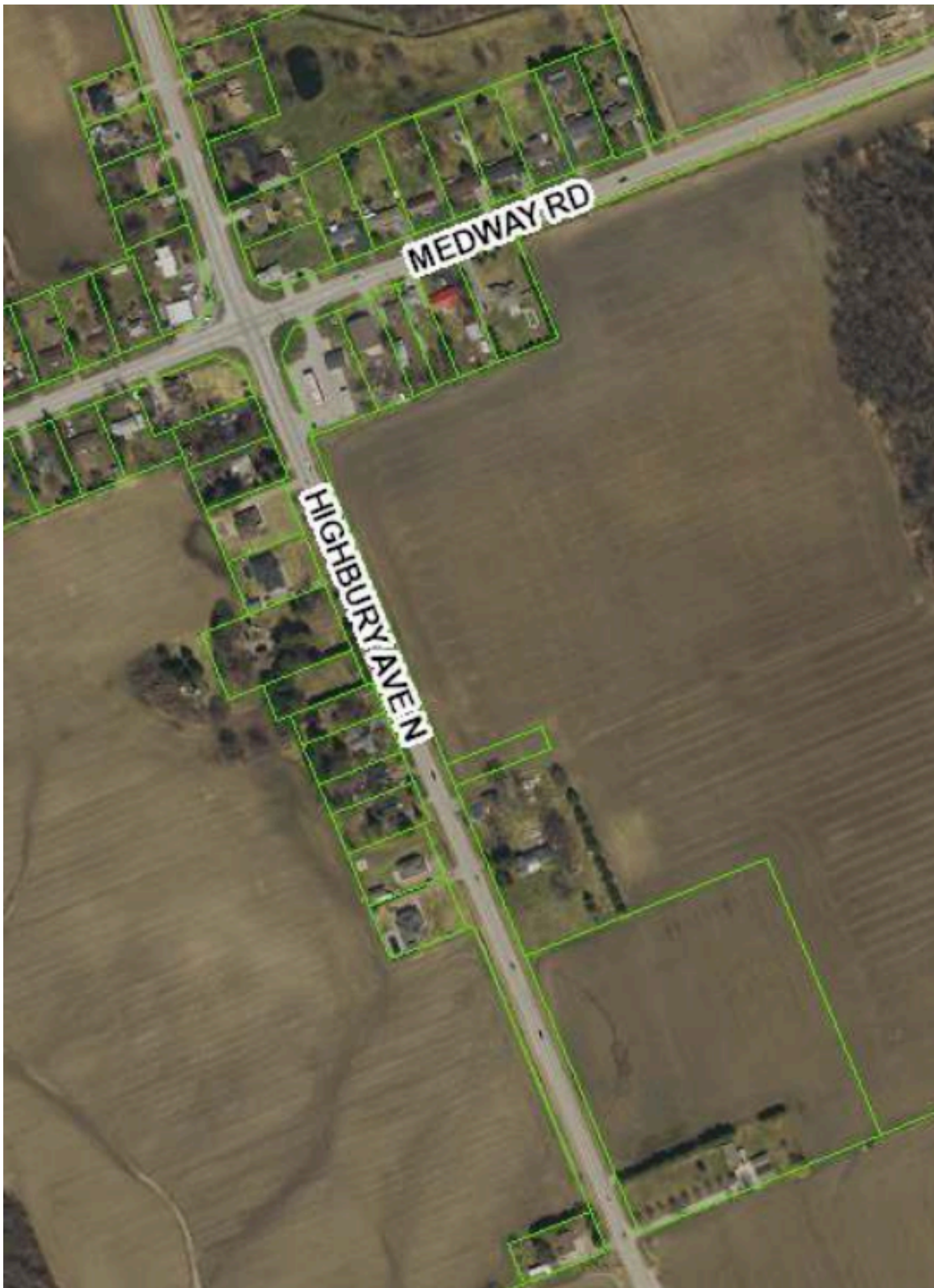


Figure 1: Site Location

(Middlesex Centre 2015 Air Photo)

Site
Location

0 1,000
Scale 1:50,000
Key Plan

Legend:

* Locations are approximate and should be verified by survey where necessary. Print on 11X17, Landscape Orientation

Legal

0

Scale 1:3500

70

Parcel

December 2021

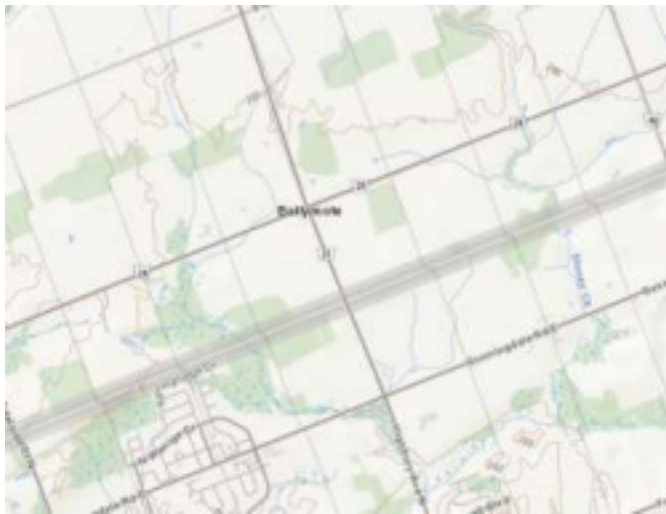
MTE Project#: 50372100

WAY RD





Figure 2:
Vegetation Communities (Middlesex Centre 2015 Air Photo)



Scale 1:50,000
Key Plan

0 1,000

Legend:

Site
Location



A Agricultural Lands & Boundary Treelines 1 SWD3 Maple Mineral Deciduous Swamp (7.1ha)
Significant Woodland
Ballymote North Tributary



Print on 11X17, Landscape Orientation

70
0

Scale 1:3500
January 2022

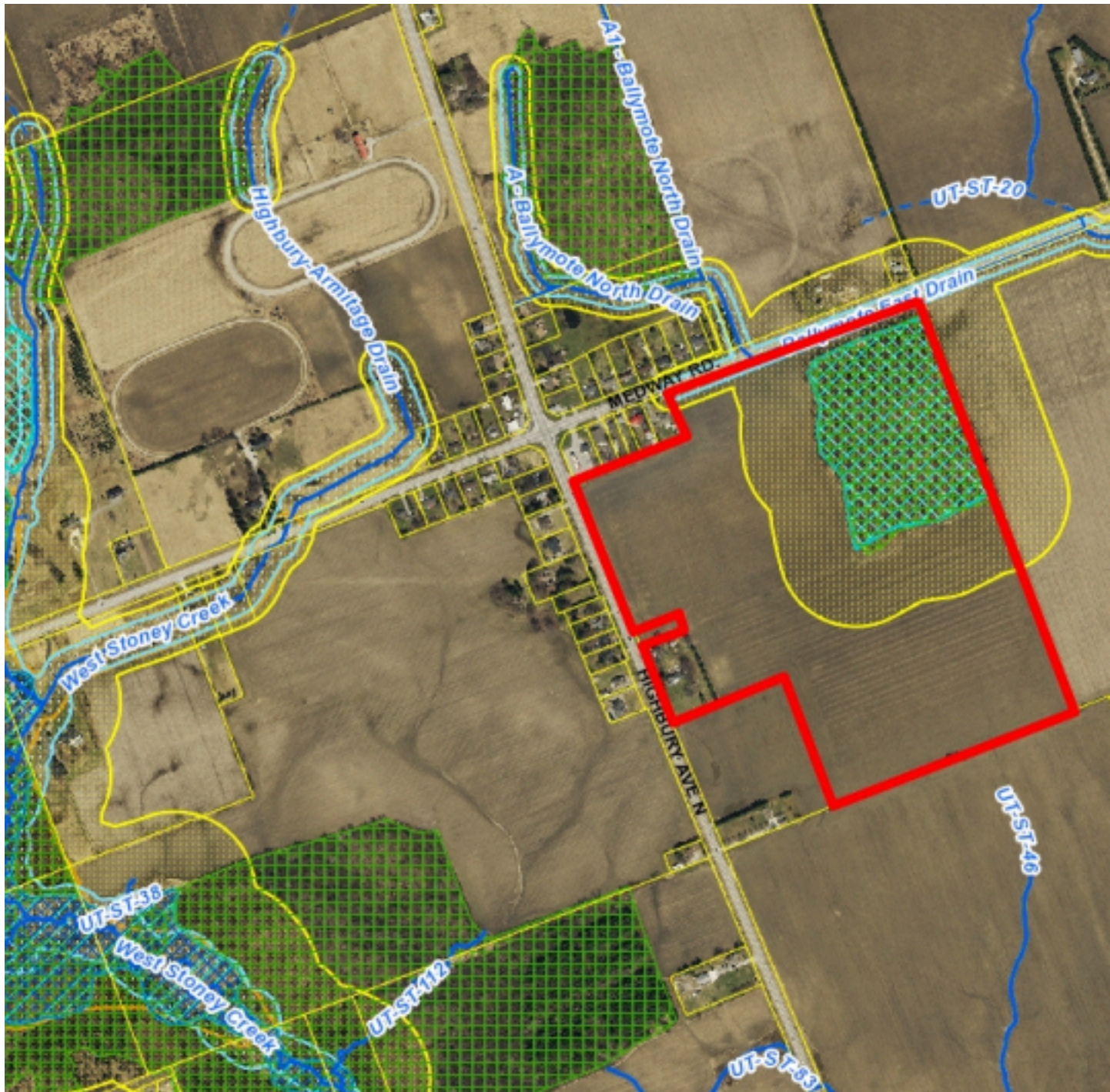
Legal Parcel



MTE Project#: 50372100



Notes:
21488 Highbury Avenue North, Middlesex Centre



0 180 360 720

metres



Legend

- UTRCA Watershed (1:10K)
- Assessment Parcel (MPAC) Watercourse (UTRCA)
- Open
- Tiled
- Middlesex NHSS Woodland (2014) Candidate for Ecologically Important
- Ecologically Important
- Significant Ecologically Important
- Wetlands (MNRF)
- Evaluated-Provincial
- Evaluated-Other
- Not Evaluated

- Wetland Hazard
- Flooding Hazard
- Erosion Hazard
- Regulation Limit 2018

The Regulation Limit depicted on this map schedule is a representation of O.Reg 157/06 under O.Reg 97/04.

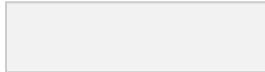
The Regulation Limit is a conservative estimation of the hazard lands within the UTRCA watershed. In the case of discrepancies between the mapping and the actual features on a property, the text of Ontario Regulation 157/06 prevails and the jurisdiction of the UTRCA may extend beyond areas shown on the maps.

The UTRCA disclaims explicitly any warranty, representation or guarantee as to the content, sequence, accuracy, timeliness, fitness for a particular purpose, merchantability or completeness of any of the data depicted and provided herein. The UTRCA assumes no liability for any errors, omissions or inaccuracies in the information provided herein and further assumes no liability for any decisions made or actions taken or not taken by any person in reliance upon the information and data furnished hereunder.

This map is not a substitute for professional advice. Please contact UTRCA staff for any changes, updates and amendments to the information provided.

This document is not a Plan of Survey.

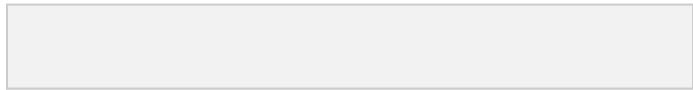
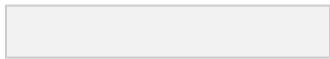
Sources: Base data, 2015 Aerial Photography used under licence with the Ontario Ministry of Natural Resources Copyright © Queen's Printer for Ontario; City of London.

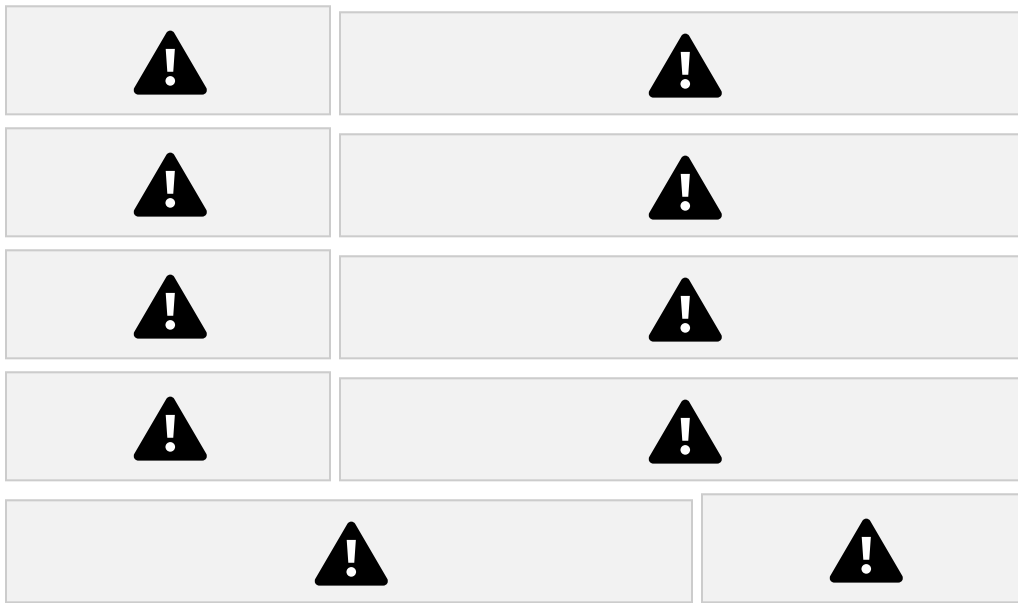


Created By: 1:9,000
CC

May 12, 2021

*Please note: Any reference to scale on this map is only appropriate when it is printed landscape on legal-sized (8.5" x 14") paper.
Copyright © UTRCA, 2021





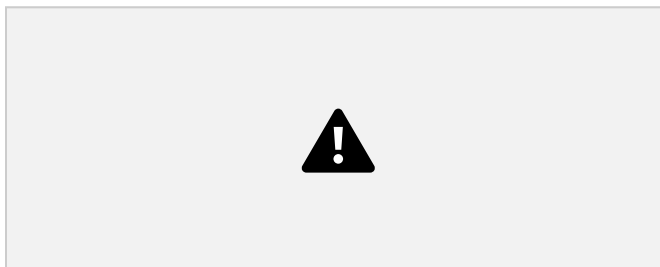
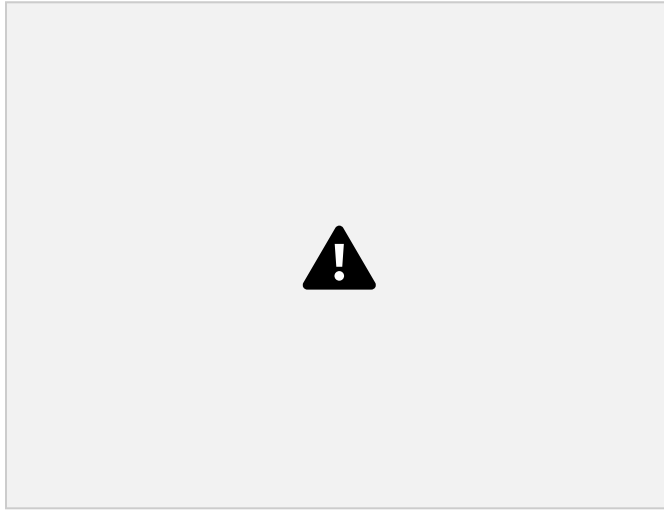




Figure 5: Development Overlay
(Middlesex Centre 2015 Air Photo)



.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....


.....

.....

.....

0 1,000 Scale 1:50,000
Key Plan

Legend:

Site
Location




..... A Agricultural Lands & Boundary Treelines
1 SWD3 Maple Mineral Deciduous Swamp (7.1ha) Significant Woodland
50m Woodland Adjacent Lands



(Middlesex Centre, Middlesex County)

120m Wetland Area of Interference (Middlesex Centre, UTRCA)

* Locations are approximate and should be verified by survey where necessary. Print on 11X17, Landscape Orientation

Legal Parcel

0

Scale 1:3500 January 2022

70

MTE Project#: 50372100



"Inspiring a Healthy Environment"

October 1, 2021

County of Middlesex
399 Ridout Street North
London, Ontario N6A 2P1

Attention: Marion-Frances Cabral (sent via email)

Dear Ms. Cabral:

Re: File No. 39T-MC2101, OPA 54 & ZBA -08-2-021
Owner – Ballymote Developments Inc.

21488 Highbury Avenue North, Middlesex Centre

The Upper Thames River Conservation Authority (UTRCA) has reviewed this application as per our delegated responsibility from the Province to represent provincial interests regarding natural hazards identified in Section 3.1 of the Provincial Policy Statement (PPS, 2020) and as a regulatory authority under Ontario Regulation 157/06. This application has also been reviewed through our role as a public body under the *Planning Act* as per our Conservation Authority Board approved policies contained in *Environmental Planning Policy Manual for the Upper Thames River Conservation Authority (June 2006)*.

The Drinking Water Source Protection information is being disclosed to the Municipality to assist them in fulfilling their decision making responsibilities under the Planning Act.

PROPOSAL

The applicant is proposing a residential plan of subdivision comprised of 20 lots located on private on-site services.

DELEGATED RESPONSIBILITY & STATUTORY ROLE

Provincial Policy Statement 2020

The UTRCA has the provincially delegated responsibility for natural hazards and we ensure that development applications are consistent with the PPS. Our role in the planning process is comprehensive and also considers the requirements of the *Conservation Authorities Act* and the policies of the UTRCA's *Environmental Planning Policy Manual (2006)*. This approach makes sure that the principle of development is established through the *Planning Act* approval process and that a permit application can be issued under Section 28 of the *Conservation Authorities Act* once all of the planning matters have been addressed.

Conservation Authorities Act - Section 28 Regulations - Ontario Regulation 157/06 As shown on the enclosed mapping, the subject lands are regulated by the UTRCA in accordance with Ontario Regulation 157/06, made pursuant to Section 28 of the *Conservation Authorities Act*. The regulation limit is comprised of a riverine flooding hazard as well as a wetland and the surrounding area of interference. The UTRCA has jurisdiction over lands within the regulated area and requires that landowners obtain written approval from the Authority prior to undertaking any site alteration or

1424 Clarke Road, London, Ont. N5V 5B9 · Phone: 519.451.2800 · Email: infoline@thamesriver.on.ca www.thamesriver.on.ca

UTRCA Comments

File Nos. 39T-MC2101, OPA 54 & ZBA -08-2-021

development within this area including filling, grading, construction, alteration to a watercourse and/or interference with a wetland.

In cases where a discrepancy in the mapping occurs, the text of the regulation prevails and a feature determined to be present on the landscape may be regulated by the UTRCA.

UTRCA ENVIRONMENTAL PLANNING POLICY MANUAL (2006)

The UTRCA's Environmental Planning Policy Manual is available online at:

<http://thamesriver.on.ca/wp-content/uploads/PlanningRegulations/EnvPlanningPolicyManual-update2017.pdf>

NATURAL HAZARDS

In Ontario, prevention is the preferred approach for managing hazards in order to reduce or minimize the risk to life and property. The UTRCA's natural hazard policies are consistent with the PPS and the applicable policies include:

3.2.2 General Natural Hazard Policies

These policies direct new development and site alteration away from hazard lands. No new hazards are to be created and existing hazards should not be aggravated. The Authority also does not

support the fragmentation of hazard lands through lot creation.

3.2.3 Riverine Flooding Hazard Policies

These policies address matters such as the provision of detailed flood plain mapping, floodplain planning approach, and uses that may be allowed in the flood plain subject to satisfying UTRCA permit requirements.

3.2.6 & 3.3.2 Wetland Policies – Natural Hazards & Natural Heritage

New development and site alteration is not permitted in wetlands. Furthermore, new development and site alteration may only be permitted in the area of interference surrounding a wetland if it can be demonstrated through the preparation of an Environmental Impact Study (EIS) that there will be no impact on the hydrological and ecological function of the wetland feature and no potential hazard impact on the development.

NATURAL HERITAGE

The UTRCA provides technical advice on natural heritage to ensure an integrated approach for protecting the natural environment consistent with the PPS. The linkages and functions of water resource systems consisting of groundwater and surface water features, hydrologic functions and the natural heritage system are necessary to maintain the ecological and hydrological integrity of the watershed. The PPS also recognizes the watershed as the ecologically meaningful scale for integrated and long-term planning which provides the foundation for considering the cumulative impacts of development.

The UTRCA's natural heritage policies that are applicable to the subject lands include:

3.3.3.1 Significant Woodland

The woodland that is located on the subject lands has been identified as Significant in the Middlesex Natural Heritage Systems Study (2014). New development and site alteration is not permitted in woodlands considered to be significant. Furthermore, new development and site alteration is not permitted on adjacent lands (please see *Note) to significant woodlands unless an EIS has been completed to the satisfaction of the UTRCA which demonstrates that there will be no negative impact on the feature or its ecological function.

2

UTRCA Comments
File Nos. 39T-MC2101, OPA 54 & ZBA -08-2-021

***NOTE:** Table 4-2 of the *Natural Heritage Reference Manual Second Edition* (OMNR, 2010) identifies adjacent lands from significant natural heritage features as being 120m from the feature for considering potential negative impacts. The *Natural Heritage Reference Manual* provides technical guidance for implementing the natural heritage policies of the *PPS*.

On page 11 of the Planning Justification Report [Brock, March 23, 2021], it is noted that the proposed residential lots are not located within 50m of the significant woodland as per the County Official Plan [2006]. As per the *Natural Heritage Reference Manual Second Edition* (OMNR, 2010), the adjacent lands from significant natural heritage features is 120m.

The Planning Justification Report does not speak to the wetland that is located within the significant woodland. The County OP requires that a DAR be prepared if development is proposed within 120 metres of a wetland. It appears that the proposed development is encroaching into the 120m adjacent lands and also the area of interference of the wetland.

The UTRCA requires that a scoped EIS/DAR be prepared to address the proposed encroachment. This submission should include the following –

- confirmation of the feature boundary

- classification of the feature [type of vegetation]
- explanation of how the drainage to the feature will be maintained – both quantity and quality
- justification that there will be no negative impact on the wetland and the significant woodland

We recommend that a Terms of Reference for the scoped EIS/DAR be prepared and submitted to the Conservation Authority for our review and acceptance.

3.5.2 Policies for Stormwater Management and Erosion & Sediment Control Measures

Generally discusses the requirements for SWM and the requirements for report submissions, while advocating for catchment area planning of SWM facilities.

The UTRCA has reviewed the stormwater management section of the site servicing memo - **Brock Development Group Proposed 19 Residential Lots Development Medway Road, Ballymote, Ontario prepared** by Strik, Baldinelli, Moniz Ltd (SBM) dated March 18, 2021. We offer the following comments.

1. The Ballymote North Drain flows north to south and continues flowing to the east at the northern edge of the property. The UTRCA requires an estimation of the floodplain width and elevation and that a setback is provided from the flooding hazard as per the MNR guidelines.
2. There is a wetland in the northeast section of the property. The UTRCA recommends undertaking a study and that a suitable setback be provided for the wetland.

Also, the UTRCA will require a water balance analysis which demonstrates that the base flow to the wetland will be maintained including surface runoff and infiltration. The UTRCA will only permit clean runoff to flow into the wetland. Please address.

3. In Section 3, it is mentioned that a soakaway pit is proposed for each lot. The proposed soakaway pit should be considered using the local soil and site conditions. The UTRCA will allow only clean runoff to be infiltrated.

3

UTRCA Comments
File Nos. 39T-MC2101, OPA 54 & ZBA -08-2-021

4. The UTRCA will require quantity control under the proposed conditions up to the 250-year storm which is the UTRCA's regulatory storm event. Please revise Table 1 by providing storage up to the 250-year storm.
5. The performance of the proposed soakaway pits depends on the operation and maintenance (O&M) and public education. The performance of the soakaway pit decreases with passage of time due to sediment accumulation. The UTRCA strongly recommends that the operation and maintenance should be in place including public education material for the home owner to understand the function of the proposed soakaway pits located on their properties.
6. The required ponding in the proposed soakaway pit during a major storm event should be approved by the local municipality. Usually, the Municipality does not allow surface ponding greater than 30 mm.
7. The proposed driveway culverts should be designed to convey the major flows under the 250-year storm safely and without causing ponding.
8. The proposed swale between the lots and the field to direct all stormwater flow to the existing municipal ditch to the Medway Road ROW should be designed to convey the major flows under the 250-year storm. The UTRCA requires a cross section of the proposed swale showing the 100- year and the 250-year storm elevation.

9. Please include the 2-year and the 250-year storms SWM calculation in the Appendix.
10. A detailed Erosion and Sediment Control (ESC) drawing is required supported by standards, notes, monitoring, inspection and reporting.
11. Please submit pre- and post-development catchments areas supported by grading and contours.

In addition, the proposed development must be consistent with the UTRCA's comments on the Middlesex Centre Stormwater Master Plan [Appendix A4] –

(UTRCA Comments – February 2020) Specific to the Ballymote Settlement Area ▪

Realignment of the High bury-Armitage Drain would require site-specific approval from the UTRCA.

- Lots do not appear large enough for private septic.
- UTRCA must be consulted on any watercourse realignment.
- UTRCA notes that the currently proposed 'Development Areas' (in purple on the drawings – Figure B4-2 – Ballymote Preferred Alternative On-Site SWM Controls, Stantec, 2020-07-10) may not be in keeping with Natural Hazard and/or Natural Heritage regulations, policies and setbacks and may still be subject to further studies (i.e. flood modeling, geotech, EIS/DAR, etc.) to determine the actual extent of development.

PLAN OF SUBDIVISION/DRAWINGS

Please revise the plan and figures to identify the wetland and the significant woodland feature as well as the UTRCA's regulated area.

4

UTRCA Comments
File Nos. 39T-MC2101, OPA 54 & ZBA -08-2-021

DRINKING WATER SOURCE PROTECTION

The subject lands are located within a vulnerable area (Wellhead Protection Area, Highly Vulnerable Aquifer, and Significant Groundwater Recharge Areas). For more information pertaining to drinking water source protection, please refer to the approved Source Protection Plan at:

<https://www.sourcewaterprotection.on.ca/approved-source-protection-plan/>

RECOMMENDATION

Given the outstanding technical matters, the UTRCA recommends that the application be deferred to provide the applicant with the opportunity to respond to the comments.

A Section 28 Permit will be required for the proposed development.

UTRCA REVIEW FEES

Consistent with UTRCA Board of Directors approved policy, Authority Staff are authorized to collect fees for the review of Planning Act applications and the peer review of technical reports. Our fee to review this submission is \$4,825.00 as follows and will be invoiced under separate cover –

Subdivision Application - \$3000.00 (\$150.00 x 20 lots)
OPA - \$375.00 (50% reduction of the \$750.00 fee)
ZBA - \$375.00 (50% reduction of the \$750.00 fee)
Technical Peer Review – \$1075.00 (SWM Report)

We remind the applicant that the Conservation Authority's peer review fee includes *one comprehensive review and one revised report review* and that additional fees will be collected for subsequent reviews.

Thank you for the opportunity to comment. If you have any questions, please contact the undersigned.

Yours truly,
UPPER THAMES RIVER CONSERVATION AUTHORITY

Christine Creighton
Land Use Planner
IS/TT/KW/CC/cc

Enclosure – Regulations Mapping (please print on legal size paper to ensure that the scales are accurate)

c.c. Sent via e-mail -
Middlesex Centre – Planning Division
Owner – Ballymote Developments Inc.
UTRCA – Karen Winfield, Land Use Regulations Officer & Deb Kirk

Appendix B

Relevant Natural Heritage Policy Overview



Planning Act

The Provincial Policy Statement (PPS; MMAH, 2020) was issued under the *Planning Act, 1990* to provide direction to regional and local municipalities regarding planning policy, ensuring that decisions made by planning authorities were consistent with provincial policy. With respect to natural heritage features and resources, the PPS defines seven natural heritage features:

- Significant wetlands
- Significant coastal wetlands
- Significant woodlands
- Significant valleylands
- Significant wildlife habitat (SWH)
- Significant areas of natural and scientific interest (ANSI's)
- Fish habitat, and,
- Habitat of endangered and threatened species

These features are described in the Natural Heritage Reference Manual (MNR, 2010), a technical document intended to support the PPS which also provides guidance to help assess these natural heritage features. Section 2.1.4 of the PPS states that development and site alteration are not permitted in significant wetlands or significant coastal wetlands. The subject lands are located within Ecoregion 6E. Section 2.1.5 states that development and site alteration shall not be

permitted in significant woodlands, significant valleylands, SWH or ANSI's unless it has been demonstrated through a DAR/EIS that there will be no negative impacts on the features or their ecological functions. Development and site alteration are not permitted in fish habitat or habitat of endangered or threatened species, except in accordance with provincial and federal legislation.

Endangered Species Act

The *Endangered Species Act, 2007* protects species listed as threatened, endangered or extirpated in Ontario from killing, harm, harassment or possession, and also protects their habitats from damage or destruction. All species are provided with general habitat protection for areas the species depend on to carry out their life processes, such as reproduction, rearing, hibernation, migration or feeding. Activities that may impact a protected species or its habitat require prior authorization from the Ministry of Environment, Conservation and Parks (MECP), unless the activities are exempt under Ontario Regulation 242/08. The provincial status of species in Ontario is determined by the Committee on the Status of Species at Risk in Ontario (COSSARO) and documented in the Species at Risk in Ontario List (SARO List).

Municipality of Middlesex Centre & County of Middlesex Official Plan

The Official Plan of Middlesex Centre and Middlesex County include policies for the established primarily to manage and direct physical change and the effects of the social, economic and natural environment of the municipality or part of it. The plans separate natural features into those where development is prohibited within their boundaries and those where development and site alteration may be permitted within their boundaries subject to the finding of a Development Assessment Report (DAR). The purpose of the DAR is to demonstrate that there will be no negative impacts to the features or their ecological functions. Both the Municipality and the County require a DAR to be prepared in instance of a development proposal that is within 50m of a Significant Woodland and within 120m of a wetland.

Upper Thames Conservation Authority

The Upper Thames River Conservation Authority (UTRCA) regulates lands within its watershed under Ontario Regulation 157/06, pursuant to Section 28 of the *Conservation Authorities Act*. The UTRCA has jurisdiction over riverine flooding and erosion hazards, wetlands and the surrounding area, and requires that landowners obtain written approval from the Authority prior to undertaking any site alteration or development within the regulation limit.

Appendix C

Characterization of the Natural Environment



Protected Species Records

Protected Species are those species listed as Threatened or Endangered on the Species at Risk in Ontario (SARO) List, and protected by the *Endangered Species Act, 2007*. A background data review was completed to identify Protected Species with the potential to be present in the vicinity of the Subject Lands [Table C1, below]. Data sources used for this review included the SARO

List, Natural Heritage Information Centre (NHIC, 2020a), Ontario Reptile and Amphibian Atlas, and citizen science online database eBird. Species which are under-represented in these databases, but may be present in the vicinity of the Subject Lands, have also been included.

Table C1: Protected Species (Threatened or Endangered) Potentially Present in the Vicinity of the Subject Lands

Common Name	Scientific Name	SARO Status	S-rank (NHIC)	Source
Bank Swallow	<i>Riparia riparia</i>	THR	S4B	OBBA

Barn Swallow	<i>Hirundo rustica</i>	THR	S5B	OBBA
Bobolink	<i>Dolichonyx oryzivorus</i>	THR	S4B	OBBA
Chimney Swift	<i>Chaetura pelagica</i>	THR	S4B	OBBA
Eastern Hog-nosed Snake	<i>Heterodon platirhinos</i>	THR	S3	ORAA
Eastern Meadowlark	<i>Sturnella magna</i>	THR	S4B	NHIC
Butternut	<i>Juglans cinerea</i>	END	S2?	NHIC
Queensnake	<i>Regina septemvittata</i>	END	S2	ORAA

ORAA – Ontario Reptile and Amphibian Atlas

OBBA – Ontario Breeding Bird Atlas

SARO – Species at Risk in Ontario List

Field Investigations

In order to assist in scoping the DAR, field investigations were undertaken on December 17th, 2021, by MTE ecologist Will Huys, certified to complete Ecological Land Classification in southern Ontario. Field investigations included:

- Vegetation community classification using protocols outlined in the Ecological Land Classification (ELC) System for Southern Ontario (Lee et al., 1998)
- Confirmation of the Significant Woodland boundary
- General Habitat Assessment and identification of potential habitat for Protected Species (provincially endangered or threatened species), including bat maternity roost trees and Protected tree species
- Documentation of incidental wildlife observations and their habitats in relation to the site
- Investigation of the drainage features within and adjacent to the Subject Lands

One natural vegetation community was identified during field investigations within the Legal Parcel, outside the Subject Lands [Figure 1]:

- A Maple Mineral Deciduous Swamp (SWD3) of approximately 7.1ha with a canopy dominated by Silver Maple and Eastern Cottonwood. Other plant species found within this community include Green Ash and Black Walnut. The dripline of this feature was studied during field investigations and it was confirmed that the woodland is located >50m from the proposed development.

The remainder of the Legal Parcel, including the Subject Lands, consists of agricultural lands and boundary trees (species include Hedge Maple, Manitoba Maple, Shagbark Hickory, etc.). There is also a drain feature located on the northern boundary of the Legal Parcel that is dominated by the non-native, invasive plant *Phragmites (Phragmites australis australis)*. There was no evidence of surface water drainage from this feature towards the wetland.

A habitat assessment was conducted to identify candidate Significant Wildlife Habitat (SWH; Table D1, Appendix D) and assist in the determination of habitat suitability for Protected Species listed in Table C1. A single candidate bat maternity roosting tree was observed within the Subject Lands. Additional potential habitat for three Endangered bat species (Little Brown Myotis, Northern Myotis and Tri-coloured Bat) may be present in the trees within the woodland on the Adjacent Lands. No further candidate or confirmed SWH was identified on or adjacent to

the Subject Lands.

Michelle Doornbosch (MTE #: 50372-100) – 21488 Highbury Avenue Medway Road Lot Severance NHS

Support **Appendix D – Significant Wildlife Habitat Assessment Table**

Subject Lands ELCs: Agricultural

Adjacent Lands ELCs: SWD3

Seasonal Concentration of Animals

Wildlife Habitat	ELC Codes Triggers	Additional Habitat Criteria	Candidate SWH in Subject Lands	Candidate SWH on Adjacent Lands
Waterfowl Stopover and Staging Areas (Terrestrial)	None Present	- Based on satellite photo interpretation, fields with spring sheet water are absent from the Subject Lands and Adjacent Lands.	No	No
Waterfowl Stopover and Staging Areas (Aquatic)	SWD3	- Marsh wetlands large enough to support significant concentration of waterfowl are absent from the Subject Lands and Adjacent Lands.	No	No
Shorebird Migratory Stopover Area	None Present	- Beach areas, bars, seasonally flooded, muddy and un-vegetated shoreline habitat are absent from the Subject Lands and Adjacent Lands.	No	No
Raptor Wintering Area	None Present	- Habitat >20ha with a combination of forest and fallow fields or meadows is absent from the Subject Lands and Adjacent Lands.	No	No
Bat Hibernacula	None Present	- No caves, mine shafts, underground foundations present.	No	No
Bat Maternity Colonies	SWD3	- Woodlands on the and Adjacent Lands are assumed to provide suitable roosting habitat for bats.	No	Candidate
Turtle Wintering Areas	None Present	- Deep (>2m) permanent waterbodies greater than 120m are absent from the Subject Lands and the Adjacent Lands.	No	No
Reptile Hibernaculum	None Present	- No burrows, rock piles, rock crevices, or mammal burrows were observed within the Subject Lands.	No	Candidate
Colonially-Nesting Bird Breeding Habitat (Bank / Cliff)	None Present	- No exposed cliffs or banks are present on the Subject Lands or Adjacent Lands.	No	No
Colonially-Nesting Bird Breeding Habitat (Trees/Shrubs)	SWD3	- Mixed and deciduous treed wetland is absent from the Subject Lands but present within the Adjacent Lands. No nesting colonies were observed during field investigations.	No	Candidate

Colonially-Nesting Bird Breeding Habitat (Ground)	None Present	- Islands or peninsulas associated with open water are absent from the Subject Lands and Adjacent Lands.	No	No
Migratory Butterfly Stopover Areas	None Present	- The Subject Lands and Adjacent Lands are not located within 5km of Lake Erie.	No	No
Land Bird Migratory Stopover Areas	SWD3	- The Subject Lands or Adjacent Lands are not located within 5km of Lake Erie.	No	No
Deer Yarding Areas	None Present	- Wooded areas primarily composed of coniferous trees are absent from the Subject Lands and Adjacent Lands	No	No
Deer Winter Congregation Areas	None present	- Deer winter congregation areas are typically mapped by MNRF. No deer winter congregation areas have been mapped on the Subject Lands or Adjacent Lands.	No	No

Rare Vegetation Communities

Wildlife Habitat	ELC Codes Triggers	Additional Habitat Criteria	Candidate SWH on Subject Lands	Candidate SWH on Adjacent Lands
Cliffs and Talus Slopes	None present	- No vertical cliffs with bedrock >3m in height	No	No
Sand Barren	None Present	- No sand barren areas >0.5ha	No	No
Alvar	None Present	- No alvars >0.5ha	No	No
Old Growth Forest	SWD3	- Woodland area not >0.5ha, dominant tree species not >140 years old	No	No
Savannah	None Present	- No savannah habitat with 25-60% tree cover	No	No
Tallgrass Prairie	None Present	- No ground cover dominated by prairie grasses	No	No
Other Rare Vegetation	None Present	- No Provincially Rare vegetation communities	No	No

Specialized Habitats of Wildlife considered SWH

Wildlife Habitat	ELC Codes Triggers	Additional Habitat Criteria	Candidate SWH on Subject Lands	Candidate SWH on Adjacent Lands
Waterfowl Nesting Area	SWD3	- Wetlands >0.5ha or cluster of smaller wetlands are present on the Adjacent Lands but absent within the Subject Lands	No	Candidate

Bald Eagle and Osprey Nesting, Foraging, Perching

SWD3
 - Nests of Bald Eagle or Osprey were not observed within the Subject Lands. No super-canopy trees providing ideal perches are present on the Subject Lands or Adjacent Lands. No No

Wildlife Habitat	ELC Codes Triggers	Additional Habitat Criteria	Candidate SWH on Subject Lands	Candidate SWH on Adjacent Lands
Woodland Raptor Nesting Habitat	SWD3	- Interior forest habitat > 200m from a woodland edge is absent from the Subject Lands and Adjacent Lands.	No	No
Turtle Nesting Areas	None Present	- No exposed mineral soil adjacent to a wetland within the Subject Lands and Adjacent Lands.	No	No
Springs and Seeps	None Present	- Seepage from the base of the woodland slope was not observed during field investigation and are absent from the Subject Lands and the Adjacent Lands.	No	No
Amphibian Breeding Habitat (Woodland or Wetland)	SWD3	- Wetlands >500m ² present within the Adjacent Lands based on field investigations and satellite photo interpretation. Absent within the Subject Lands	No	Candidate
Woodland Area-Sensitive Bird Breeding Habitat	SWD3	- Large mature (>60 years old) forest stand or woodlots >30ha with interior habitat are absent from the Subject Lands and Adjacent Lands.	No	No

Habitats of Species of Conservation Concern considered SWH

Wildlife Habitat	ELC Codes Triggers	Additional Habitat Criteria	Candidate SWH on Subject Lands	Candidate SWH on Adjacent Lands
-------------------------	---------------------------	------------------------------------	---------------------------------------	--

Marsh Breeding Bird Habitat	None Present	- There is no marsh habitat present within the Subject Lands and Adjacent Lands to support nesting by marsh birds.	No	No
Open Country Bird Breeding Habitat	None Present	- Natural and cultural fields >30ha are absent from the Subject Lands and Adjacent Lands.	No	No
Shrub/Early Successional Bird Breeding Habitat	None Present	- Large fields succeeding to shrub and thicket habitats >10ha in size are absent from the Subject Lands and Adjacent Lands.	No	No
Terrestrial Crayfish	SWD3	- Wetland habitat is present within the Adjacent Lands but absent from the Subject Lands. There were no crayfish chimneys observed.	No	Candidate
Special Concern and Rare Wildlife Species (Based on Background Data Review)	Bald Eagle (SC)	- This species prefers woodland habitats near open water (lakes, large rivers), which are absent from the Subject Lands and the Adjacent Lands.	No	No
	Common Nighthawk (SC)	- This species nests in open areas with little to no ground vegetation. Agricultural fields are not considered suitable habitat for this species, and natural clearing are absent from the Subject Lands and Adjacent Lands.	No	No
	Eastern Wood-Pee wee (SC)	- Potential habitat (deciduous forest) for this species is present within the woodland on the Adjacent Lands.	No	Candidate
	Grasshopper Sparrow (SC)	- This species prefers open grassland area with well-drained, sandy soil which are absent within the Subject Lands and Adjacent Lands.	No	No

	Northern Map Turtle (SC)	- This species prefers rivers and lakeshores with emergent rocks and fallen trees which are absent within the Subject Lands and Adjacent Lands.	No	No
	Northern Sunfish (SC)	- This species inhabits warm lakes and ponds which are absent within the Subject Lands and the Adjacent Lands.	No	No
	Red-headed Woodpecker (SC)	- This species prefers dry, open woodland and woodland edges which are absent from the Subject Lands and Adjacent Lands.	No	No
	Snapping Turtle (SC)	- This species inhabits shallow waters which are absent from the Subject Lands and the Adjacent Lands.	No	No
	Wood Thrush	- Potential habitat (deciduous forest) for this species is present within the	No	Candidate

	(SC)	woodland on the Adjacent Lands.		
--	------	---------------------------------	--	--

Animal Movement Corridors

Wildlife Habitat	ELC Codes Triggers*	Additional Habitat Criteria	Candidate SWH	Candidate SWH on Adjacent Lands
Amphibian Movement Corridors	SWD3	- Amphibian movement corridors are identified once breeding habitat is confirmed. There are suitable movement corridors present for amphibians within the Adjacent Lands but not within the Subject Lands.	No	Candidate
Deer Movement Corridors	None Present	- Deer movement corridors are identified when Deer Wintering Habitat is confirmed as SWH. No wintering habitat has been identified by the MNRF.	No	No

SWH exceptions for Ecoregion 6E

Wildlife Habitat	Candidate Ecosites	Habitat Criteria and Information	Candidate SWH	Candidate SWH on Adjacent Lands
Mast Producing Areas	Not Present	- The Subject Lands are not >30ha and do not contain mast-producing tree species (cherry, oak or beech)	No	No
Lek	None Present	- Grassland greater than > 15 ha and adjacent to shrubland or > 30 ha and adjacent to woodland, are absent from the Subject Lands and Adjacent Lands. - The Subject Lands are not located near Manitoulin Island	No	No