

APPENDIX 1
Applicable Policies and Conformity



Policy	Relevant Sections of the Policy	Policy Constraints Within the Study Area	Project Policy Conformity	Proposed Mitigation
<i>Provincial Planning Statement (2024)</i>	Section 4.1 Natural Heritage	Significant Wildlife Habitat & Suitable Habitat of Threatened and Endangered Species is present within the study area.	Removal of agricultural infrastructure which may contain suitable habitat for Species at Risk Bats is required to accommodate the proposed Draft Plan of Subdivision Compliance with the Species Conservation Act (2025) and Species at Risk Act (2002) is required to demonstrate compliance with the Provincial Planning Statement (2024).	Implementation of all required mitigation measures per requirements under the Species Conservation Act (2025)). No tree or vegetation removal is to occur between March 15- November 30.
<i>Species Conservation Act (2025)</i>	Subsection 2(1) Section 16 O. Reg. 74/26 O. Reg. 75/26 O. Reg. 61/26	Habitat for Species at Risk Bats may occur within the Agricultural Infrastructure.	Approvals through and compliance with Section 16 of the Species Conservation Act and relevant may be required to ensure project conformity.	Additional studies recommended to confirm the need for requirements under the Species Conservation Act (2025).
<i>Fisheries Act (1985)</i>	Section 34.4 (1) Section 35 (1)	Fish and fish bearing water are present within the reach of Municipal Drain No. 1 and its associated tributaries in the study area. In addition, fish and fish bearing waters are present within Municipal Drain No. 7 outside of the Study Area,	Proposed development is occurring > 30 m away from the watercourse, due to the regulated areas of the unevaluated wetland and one-zone floodplain. In-water works in the for of one culvert replacement (C3) is proposed within	Implementation of all mitigation measures identified in Section 7.0 & <i>Appendix 14</i> of the EIS. Implement any additional mitigation measures as requested through consultation with DFO during the

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			Municipal Drain No. 1 which will require a DFO Request for Review and approval.	Request for Review process.
<i>Species at Risk Act (2002)</i>	Subsection 32 (1) and (2) Subsection 33 Subsection 34(1) Subsection 58 (1)	Potential habitat for Chimney Swift was identified within the subject property.	Potential nesting use of Chimney Swift was ruled out during the field surveys. Not approvals under SARA are required.	Implementation of all mitigation measures identified in Section 7.0 & <i>Appendix 14</i> of the EIS.
<i>Grand River Conservation Authority Policies for the Administration of the Prohibited Activities, Exemptions and Permits Regulation, O. Reg. 41/24</i>	Section 7.1 Section 8.1 Section 8.4 Section 8.9	A reach of Municipal Drain No. 1 and its associated tributaries, unevaluated wetland, one-zone floodplain, and their associated regulated areas are present within the study area. In addition, Municipal Drain No. 7 and the associated regulated area is present outside of the Study Area,	Per the Draft Plan of Subdivision (MHBC, January 14, 2026), all natural features and their associated regulated areas are within Block 13 (Open Space). No development is proposed within Block 13.	Implementation of all mitigation measures identified in Section 7.0 & <i>Appendix 14</i> of the EIS.
<i>Woolwich Township Official Plan (2022)</i>	Section 5.7.3 Section 13.2.4 Section 13.7.5 Section 13.8.3 Section 13.8.4 Section 13.9.3 Section 13.14.2 Section 13.14.5	The study area contains Core Greenlands (Habitat for Threatened and Endangered Species), Fish Habitat, and supporting environmental features (unevaluated wetlands & SWH).	Development within Core Greenlands is not permitted. Correspondence with the Township is required to determine conformity based on compliance with the SCA and SARA.	Mitigation measures to be determined through correspondence with the Township.

Policy	Relevant Sections of the Policy	Policy Constraints Within the Study Area	Project Policy Conformity	Proposed Mitigation
<i>Woolwich Township Zoning By-law 26-2024</i>		The subject property is currently zoned as Agricultural (A) and is subject to site specific exemption A93.	A Zoning By-law Amendment will be required for the proposed Draft Plan of Subdivision to comply with the Township Zoning By-law.	No mitigation needed.
<i>Engineer's Report, Elmira Drain #1 (Municipal Drain No. 1)</i>	Section 10	Municipal Drain No. 1 runs adjacent to the site and has a 10 m setback.	Municipal Drain No. 1 occurs on the other side of the railway line, and will be protected by the 30 m railway setback.	No mitigation needed.

APPENDIX 2

Terms of Reference and Agency Consultation





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TRAIL SYSTEMS
GREEN ROOFS
CONTRACT ADMINISTRATION

EXPERT OPINION

OMB TESTIMONY
LEGAL PROCEEDINGS
PEER REVIEW
RESEARCH
EDUCATION

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Our Project No.: AA23-232A

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Re: **1665 Scotch Line Road, Elmira, ON** **Terms of Reference - Scoped Environmental Impact Study**

Dear Mr. Foster-Pengelly, Mr. Dykstra, and **Mr. Hovingh**:

This document outlines the Terms of Reference (ToR) of the scoped Environmental Impact Study (EIS) for a proposed industrial subdivision located at 1665 Scotch Line Road in Elmira, ON. Please review the terms and circulate to Grand River Conservation Authority (GRCA), Township of Woolwich (Township), and Region of Waterloo (Region) staff for discussion and approval.

BACKGROUND

The client requires a scoped EIS, prepared to the satisfaction of the GRCA, Township, and Region to develop the subject property municipally addressed as **1665 Scotch Line Road** in Elmira, ON. The proposed works include an Industrial Subdivision and associated Stormwater Management, streets, and an open space block.

The Region of Waterloo Official Plan does not identify any regionally significant features within the property limits, a significant woodland is present on the adjacent lands, within the 120 m study and identified on *Figure 1*, which is considered a Core Environmental Feature. The Region of Waterloo requires the EIS to meet their standards as a study is required for development proposed adjacent to or within Core Environmental Features. If the wetland present is determined to be provincially significant, it would also be considered a Core environmental feature.

The property is zoned by the Township of Woolwich Zoning By-law 55-85 as Agricultural (A). GRCA mapping identifies a portion of a wetland feature on the subject property per GRCA mapping. Regulatory Floodplain associated with a small portion of a regulatory Watercourse is also present within the property limits. A portion of the property is within the associated GRCA regulated area, **due to the presence of the wetlands and Elmira Drain #1, a tributary of Canagagigue Creek, running adjacent to the property.**

BACKGROUND REVIEW

In preparing the Terms of Reference, the following sources were reviewed for background information:

- Aerial photography of the subject site,
- Draft Concept Plan, **January 2024** by MHBC
- GRCA pre-consultation comments, August 9, 2023
- Official Plan Amendment, Zoning By-law Amendment, and Draft Plan of Subdivision Applications 1665 Scotch Line Road, October 3, 2023, Region of Waterloo
- GRCA mapping (Accessed October 3, 2023) of natural heritage features (e.g., regulation limit, Wetlands, Floodplain, ANSIs),
- Region of Waterloo Official Plan (2015),
- Township of Woolwich Official Plan (2022),
- Township of Woolwich Zoning By-law 55-86 (2022),
- **Township of Woolwich, Engineer's Report, Elmira Drain #1 2020, November 2022, GM BluePlan.**
- **Municipal Aquifer Conceptual Site Model, LANXESS Canada, Elmira, Ontario, undated**
- **Information as it relates to the bypass, to be provided by the Region and MHBC when available,**
- Natural Heritage Information Center, Make-a-map, accessed November 28, 2023,
- Ontario Nature. Ontario Reptile and Amphibian Atlas: a citizen science project to map the distribution of Ontario's reptiles and amphibians. Accessed October 6, 2023,
- Ontario Breeding Bird Atlas. Bird Studies Canada, 2007. Accessed October 6, 2023,

- Federation of Ontario Naturalists, Atlas of the Mammals of Ontario. Accessed October 6, 2023,
- Ontario Nature. Ontario Butterfly Atlas, Accessed November 28, 2023,
- iNaturalist. Accessed November 28, 2023,
- eBird. Cornell Lab of Ornithology. Accessed November 28, 2023,
- Department of Fisheries and Oceans online mapping. Accessed November 28, 2023,
- LIO Aquatic Resource Area Survey Points and Line Segment online mapping. Accessed November 28, 2023.
- LIO Constructed Drain and Tile Drainage Area online mapping. Accessed December 21, 2023.

We have also requested reports from GHD regarding contamination of the groundwater and watercourse relating to the LANXESS Canada Manufacturing facility.

STUDY AREA

The study area includes the subject property and up to 120 m beyond the subject property where permission to access property is granted (*Figure 1*).

As needed, the lands adjacent to the study area may require further access to assist with understanding the features and functions of natural heritage features.

Lands outside of the field study area will be reviewed from existing background information (e.g., Region of Waterloo Official Plan).

PLANNING CONTEXT

Provincial Policy Statement (2020)

The Provincial Policy Statement indicates that natural heritage features shall be protected for the long term. Development may be permitted within or adjacent to Natural Heritage Features where an EIS demonstrates that there will be no negative impacts on the natural heritage resource. Consequently, an EIS is required to demonstrate that the proposed development project will not negatively impact the adjacent natural features.

Endangered Species Act, 2007

The Endangered Species Act (ESA) (Subsection 9(1)) states that:

“No person shall,

- (a) kill, harm, harass, capture or take a living member of a species that is listed on the Species at Risk in Ontario List as an extirpated, endangered or threatened species;*

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

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

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

Clause 16(5) of the ESA states that:

“An agreement entered into under this section may require the authorized party under the agreement to pay a species conservation charge to the Agency in accordance with Section 20.3 if an impacted species under the agreement is also a conservation fund species.”

Clause 17(1) of the ESA states:

“The Minister may issue a permit to a person that, with respect to a species specified in the permit that is listed on the Species at Risk in Ontario List as an extirpated, endangered or threatened species, authorizes the person to engage in an activity specified in the permit that would otherwise be prohibited by Section 9 or 10. 2007, c. 6, s. 17(1).”

Fisheries Act, 1985

The study area contains fish-bearing waters in the form of Canagagigue Creek. This area and the fish within are protected under the Federal Fisheries Act, 1985. The Fisheries Act provides protection for the sustainability and ongoing productivity of Canada’s recreational, commercial, and Aboriginal fisheries.

Section 35 (1) of the Fisheries Act states that:

“No person shall carry on any work, undertaking or activity that results in the harmful alteration, disruption or destruction of fish habitat.”

The Fisheries Act requires that projects and activities avoid causing serious harm to fish and fish habitat unless authorized to do so by the Department of Fisheries and Oceans Canada (DFO). This applies to work conducted in or near waterbodies that support direct or indirect fish habitat. Within the context of the proposed development, any proposed actions that could impact fish or fish habitat would need to be assessed for compliance with the Fisheries Act. If it

is determined that proposed actions will cause serious harm to fish, which cannot be mitigated for, then a Fisheries Act Authorization would be required.

Species at Risk Act (S.C. 2002, c. 29)

The Species at Risk Act (SARA) includes prohibitions to protect listed wildlife species. Prohibitions of SARA within the Province of Ontario generally apply to species present on federal lands and all aquatic Species at Risk (SAR).

SARA subsection 32 (1) and (2) states that:

No person shall kill, harm, harass, capture or take an individual of a wildlife species that is listed as an extirpated species, an endangered species or a threatened species.

And,

No person shall possess, collect, buy, sell or trade an individual of a wildlife species that is listed as an extirpated species, an endangered species or a threatened species, or any part or derivative of such an individual.

SARA subsection 33 also states that:

No person shall damage or destroy the residence of one or more individuals of a wildlife species that is listed as an endangered species or a threatened species, or that is listed as an extirpated species if a recovery strategy has recommended the reintroduction of the species into the wild in Canada.

SARA subsection 34(1), identifies where SARA does not apply in the Province:

With respect to individuals of a listed wildlife species that is not an aquatic species or a species of birds that are migratory birds protected by the Migratory Birds Convention Act, 1994, sections 32 and 33 do not apply in lands in a province that are not federal lands unless an order is made under subsection (2) to provide that they apply.

SARA subsection 58 (1) identified the restrictions to the destruction of critical Habitat, and states that:

Subject to this section, no person shall destroy any part of the critical habitat of any listed endangered species or of any listed threatened species — or of any listed extirpated species if a recovery strategy has recommended the reintroduction of the species into the wild in Canada — if...b) the listed species is an aquatic species; or....

Where impacts may occur or are expected, agreements or permits may be entered into with the appropriate ministry, as outlined in section 73, which states:

(1) The competent minister may enter into an agreement with a person, or issue a permit to a person, authorizing the person to engage in an activity affecting a listed wildlife species, any part of its critical habitat or the residences of its individuals.

(2) The agreement may be entered into, or the permit issued, only if the competent minister is of the opinion that

(a) the activity is scientific research relating to the conservation of the species and conducted by qualified persons;

(b) the activity benefits the species or is required to enhance its chance of survival in the wild; or

(c) affecting the species is incidental to the carrying out of the activity.

3) The agreement may be entered into, or the permit issued, only if the competent minister is of the opinion that

(a) all reasonable alternatives to the activity that would reduce the impact on the species have been considered and the best solution has been adopted;

(b) all feasible measures will be taken to minimize the impact of the activity on the species or its critical habitat or the residences of its individuals; and

(c) the activity will not jeopardize the survival or recovery of the species.

The Species at Risk Act requires that projects and activities avoid causing serious harm to Species at Risk or their habitat unless authorized to do so. This applies to work conducted in or near waterbodies that support species at risk fish, or their critical habitat. Any proposed actions that could impact species at risk or their habitat would need to be assessed for compliance. If it is determined that proposed actions will cause serious harm to species at risk that cannot be mitigated, then a Species at Risk Act Authorization would be required.

Waterloo Regional Official Plan (2015)

Following the Region of Waterloo adopting Regional Official Plan Amendment number 6 (ROPA 6) in April 2023, the subject property is entirely within the Elmira Township Urban Area and Designated Greenfield Area. The subject lands are identified as being within Prime Agricultural Area on the border of the Elmira Built-Up Area. Prime Agricultural Area designation identifies an area where prime agricultural lands predominate. This designation includes areas of prime agricultural lands and associated areas of Canada Land Inventory Class 4 to 7 soils, and additional areas where there is a local concentration of farms that exhibit characteristics of ongoing agriculture. The Greenlands Network is present in the study area (i.e., adjacent to the subject lands) in the form of a Core Environmental Feature (the Significant Woodland in the west of the study area) and Fish Habitat. Other Core Environmental Features (e.g., Significant Habitat of Endangered or Threatened Species) may be identified through field investigations.

Section 7.C.9 states:

“Development or site alteration will not be permitted within Core Environmental Features, except for:

a) forest, fish or wildlife management and conservation;

- b) *flood or erosion control projects demonstrated to be in the public interest and for which no other alternative is feasible;*
- c) *minor alterations to legal non-conforming land uses within Core Environmental Features;*
- d) *infrastructure projects in accordance with Policies 7.C.12 and 7.C.13; or*
- e) *mineral aggregate operations in accordance with the policies in Chapter 9;*

Any application for development or site alteration for the above uses will require the submission of an Environmental Impact Statement, to the satisfaction of the Region, to determine the mitigation measures to be implemented, as appropriate, through the development review process.”

Section 7.C.10 states:

“Development or site alteration will only be permitted on lands contiguous to a Core Environmental Feature where an Environmental Impact Statement, or similar study, submitted in accordance with the policies in Section 7.G has determined to the satisfaction of the Region, Area Municipalities, the Grand River Conservation Authority and/or the Province, as appropriate, that approval of the proposed development or site alteration would not result in adverse environmental impacts on the features and ecological functions of the Core Environmental Feature. The Region may require conditions of approval to implement such recommendations.”

Section 7.C.11 states:

“An Environmental Impact Statement submitted in accordance with Policies 7.C.9 or 7.C.10 will identify appropriate buffers to Core Environmental Features, to the satisfaction of the Region, in consultation with Area Municipalities and the Grand River Conservation Authority. Such buffers will not only serve to protect Core Environmental Features from adverse environmental impacts but will also provide opportunities for net habitat enhancement to enhance or, wherever feasible, restore the ecological functions of the Core Environmental Feature. The location, width, composition and use of buffers will be in accordance with the approved Environmental Impact Statement, with buffers being a minimum of 10 metres as measured from the outside boundary of the Core Environmental Feature and established and maintained as appropriate self-sustaining native vegetation”.

Woolwich Township Official Plan (2022 Consolidation)

The majority of the subject property is within the Township Urban Area and is designated as Industrial within the East Industrial Policy Area, as per Schedule A – Elmira Land Use Plan. The northeastern corner of the subject property is outside of the Township Urban Area and is designated as Prime Agricultural Area. Map 5.4 identifies the majority of the site as occurring within the Settlement Areas boundaries, and as Designated Greenfield Area. Along the western edge of the property, Canagagigue Creek and its associated wetlands and floodplain are designated as Environmental Protection and Natural Hazards respectively in Schedule A. Map 13.1 identifies the presence of the Greenlands Network in the study area in the form of Core Environmental Features (the significant woodland), Potential Fish Habitat (Canagagigue Creek), and Supporting Environmental Features (the wetlands and creek). Map 13.2 identified the presence of Floodplain Area-One Zone in the study area.

Section 5.7.3 states that:

“The Township, in collaboration with the Region, will ensure that development occurring in the designated greenfield areas of the Elmira and St. Jacobs Township Urban Areas will be planned and developed to:

- a) Conform to the general development policies set out in Section 5.5;*
- b) Establish a network of continuous sidewalks, community trails and bicycle pathways that provide direct, safe, comfortable, and convenient linkages within the neighbourhood and externally to other neighbourhoods, including linkages to transit stops, employment areas, school sites, food destinations and community facilities;*
- c) Provide a development pattern and road network that supports the integration of transit services, where planned to be available in the future;*
- d) Provide any required easements, land dedications and pedestrian amenities to support walking, cycling and existing or planned transit services for everyday activities;*
- e) Discourage the use of noise attenuation walls and berms, where appropriate, through the use of passive noise attenuation measures; and*
- f) Support development on municipal water and wastewater services.”*

Section 13.2.4 states:

“Development applications or site alteration will be prohibited on lands where elements of the Greenlands Network have not been adequately identified and evaluated through a watershed/subwatershed study or any other appropriate natural heritage review, until such time as an Environmental Impact Statement has been prepared by an owner/applicant in accordance with the policies of this Plan and/or the Regional Official Plan, to identify and evaluate any such elements located on the subject lands and, wherever appropriate, contiguous lands.”

Section 13.7.5 states:

“Development applications, site alteration or infrastructure projects will only be permitted on lands contiguous to a Core Environmental Feature where an Environmental Impact Statement, or similar study, submitted in accordance with the policies in Section 13.13 has determined to the satisfaction of the Township, the Region, the Grand River Conservation Authority and/or the Province, as appropriate, that approval of the proposed development or site alteration would not result in adverse environmental impacts on the features and ecological functions of the Core Environmental Feature.”

Section 13.8.3 states:

“Watershed/subwatershed studies, Environmental Impact Statements and other appropriate studies will be used to determine appropriate means to implement fishery policy and the specification of protective mitigation measures.”

Section 13.8.4 states:

“Any requirements imposed through watershed/subwatershed studies, Environmental Impact Statements and other appropriate studies must be implemented by the proponent to the satisfaction of the Federal Ministry of Fisheries and Oceans or its delegate.”

Section 13.9.3 states:

“The submission of an Environmental Impact Statement for review by the Township in consultation with the Region and the Grand River Conservation Authority will be required for all development proposed within or adjacent to a Supporting Environmental Feature, not already prohibited through Grand River Conservation Authority Policy. For the purposes of interpretation of this policy, “adjacent” will be defined as lands within 120 metres of the boundary of the Supporting Environmental Feature.”

Section 13.14.5 states:

“Within the Natural Hazards designation, development or site alteration will not be permitted within:

- a) Hazardous lands which are impacted by flooding hazards and/or erosion hazards”*

Section 13.14.14.2 states:

“No new development is permitted within the Flood Plain”

Woolwich Township Zoning By-law 55-85

The subject property is currently zoned as Agricultural (A) and is subject to site specific exemption A93.

Grand River Conservation Authority

A portion of the subject property is within the GRCA Regulation Limit and contains unevaluated wetlands, a watercourse, and a one-zone floodplain.

Section 8.1.1 states:

“Development will not be permitted within the Riverine Flooding Hazard except in accordance with the policies in Sections 7.1.2-7.1.3 – General Policies and Sections 8.1.2-8.1.29 – Policies for One-Zone Policy Areas.”

Section 8.4.4 states:

“Development within a naturally occurring wetland may be permitted where the wetland is less than 0.5 hectares (1.24 acres), and it can be demonstrated that the wetland is not:

- a) part of a Provincially Significant Wetland,*
- b) located within a floodplain or riparian community,*
- c) part of a Provincially or municipally designated natural heritage feature, a significant woodland, or hazard land,*
- d) a bog, fen,*
- e) fish habitat,*
- f) significant wildlife habitat,*
- g) confirmed habitat for a Provincially or regionally significant species as determined by the Ministry of Natural Resources and Forestry or as determined by the municipality,*

- h) *part of an ecologically functional corridor or linkage between larger wetlands or natural areas,*
- i) *part of a groundwater recharge area, or a groundwater discharge area associated with any of the above."*

Section 8.4.9 states:

"Development within an area of interference less than or equal to 30 metres (100 feet) from a wetland may be permitted in accordance with the policies in Sections 7.1.2-7.1.3 – General Policies, and where an Environmental Impact Study demonstrates that:

- a) *there are no negative or adverse hydrological or ecological impacts on the wetland,*
- b) *all development is located outside of the wetland and maintains as much setback as feasible,*
- c) *development is located above the water table, except as specified in Section 8.4.11, and*
- d) *septic systems are located a minimum of 15 metres (50 feet) from the wetland and 0.9 metres (3 feet) above the annual maximum water table."*

Section 8.4.10 states:

"Development within an area of interference between 30 metres (100 feet) and 120 metres (394 feet) from a wetland, which in the opinion of the GRCA may result in hydrologic impact,²³ may be permitted where an Environmental Impact Study demonstrates that policies in Sections 7.1.2-7.1.3 – General Policies are met."

Engineer's Report, Elmira Drain #1

As part of the recommendations for Elmira Drain #1, a 10 m setback from the top of the nearest bank of the drain was established.

Section 10 states:

"The working area for construction purposes shall be a width of 20m centered on the proposed tile drain, and 20m from top of bank for open drains. The working areas for maintenance purpose shall be a width of 10m centered on the proposed tile drain and 10m from top of bank for open drains. Each landowner on whose property the drainage work is to be constructed shall designate access to and from the working area at the time of construction or upon failure to do so, the Engineer or Drainage Superintendent, as the case may be, shall designate access.

The working area for drain cleanout shall be 20m from top of bank wherever possible but shall take into account the adjacent land use. In sections where there is heavy forest cover, the working area will be reduced to the extent possible."

BACKGROUND REVIEW

Additional background natural heritage information related to the subject lands and adjacent lands identified the following information:

1. Review of the Ontario Reptile and Amphibian Atlas identified 14 species that are known to occur or have historically occurred within the 10 km x 10 km square that contains the study area (17NJ32). This list includes three species which are considered species of conservation concern: Midland Painted Turtle, Snapping Turtle, and Milksnake.
2. The Natural Heritage Information Center identified six SAR within the 1 km x 1 km square that contains the study area and the surrounding squares (17NJ3726, 17NJ3725, 17NJ3724, 17NJ3723, 17NJ3626, 17NJ3526, 17NJ3623, 17NJ3523, 17NJ3624, 17NJ3524, 17NJ3625, 17NJ3525): Bobolink, Eastern Wood-pewee, Red-headed Woodpecker, Wood Thrush, Silver Shiner, and Gypsy Cuckoo Bumble Bee.
3. The Ontario Breeding Bird Atlas identified 82 species that are known to occur or have historically occurred in the 10 km x 10 km square that contains the study area (17NJ32). This list includes seven SAR: Bank Swallow, Barn Swallow, Bobolink, Chimney Swift, Eastern Meadowlark, Eastern Wood-pewee, and Wood Thrush.
4. The Ontario Mammal Atlas indicates 14 mammal species that are known to occur or have historically occurred in the 10 km x 10 km square that contains the study area (17NJ32). No SAR were identified, although it should be noted that SAR bats can be present anywhere in Ontario,
5. Review of the Atlas of the Butterflies of Ontario identified 31 species that are known to occur or have historically occurred in the 10 km x 10 km square that contains the study area (17NJ32), including one SAR: Monarch.
6. iNaturalist observations restricted to research grade within 2 km of the centre of the subject property identified 302 species, eight of which are SAR: Olive-sided Flycatcher, Peregrin Falcon, Rusty Blackbird, Monarch, Wavy-rayed Lampmussel, Snapping Turtle, Dense Blazing Star, and Butternut. It should be noted that some SAR locations are obscured in iNaturalist, and may not actually occur within the vicinity of the study area.
7. eBird records from the nearby Elmira-Lions Ring Trail Hotspot (750 m west from the centre of the site) indicate the recent presence of 123 species, including seven SAR: Bank Swallow, Barn Swallow, Chimney Swift, Eastern Wood-pewee, Olive-sided Flycatcher, Rusty Blackbird, and Wood Thrush.
8. The online Fisheries and Oceans Canada (DFO) mapping system was consulted in the background review. A review for SAR Critical Habitat and species presence was completed in a 1 km radius around the study area. No critical habitat for any species was identified in the search radius, and no SAR were identified as being present or potentially present.
9. The Aquatic Resources Area (ARA) Survey Point and Line Segment mapping indicated the presence of 36 species of fish within 1 km of the study area. None of these species were SAR. Northern Pike spawning was also identified as occurring within the vicinity of the study area.

This information indicates that there is a potential presence of additional natural heritage features and constraints that may require investigation and/or comment.

PROPOSED TERMS OF REFERENCE

Scoped Environmental Impact Study

To fulfill the requirements of this study, we will:

A. Terms of Reference

1. Review background information (e.g., proposed activity, relevant sections of Natural Heritage System components of the Township of Woolwich OP, Region OP, investigation of wildlife atlases and NHIC, **Elmira Drain #1 report, LANXESS Canada groundwater/watercourse contamination reports when available**).
2. Prepare a Terms of Reference and provide to the Township of Woolwich, Region of Waterloo and GRCA for approval.
3. Complete a MECP Request for Information to acquire any available Species at Risk information. **COMPLETE**

B. Field Assessment

To fulfill the requirements of the approved Terms of Reference, AA will:

1. Identify the limits of the designated natural heritage features (e.g., woodlands, wetlands) within the property boundaries.
2. Wetland Limit: Confirm the boundary of the GRCA wetland within the study area, where present within the property boundary, and coordinate with the GRCA to field-verify the staked boundary. **Wetland limit to be identified by an OWES certified ecologist.**
3. Conduct an aquatic assessment and aquatic habitat investigation to characterize the present watercourse and identify any fisheries constraints including a review of substrates and suitability for species at risk, **and an assessment of channel morphology for stability and signs of erosion and flow blockages.**
4. Complete a leaf-off Bat Habitat Assessment, review trees meeting the MNRF criteria (>10cm DBH) within the proposed development and immediately adjacent area and identify trees that meet the criteria for bat maternity habitat and require consideration under the ESA. Any buildings proposed for removal will also be reviewed for candidate bat habitat.
5. Conduct a breeding bird survey of the study area, following the protocol of the Ontario Breeding Bird Atlas (Bird Studies Canada, 2004) and the MNRF Grassland Bird Protocol, and including both point counts and area searches. The breeding bird survey requires three, focused, early morning site visits during the period between late May and early July.
6. Conduct one site visit to characterize vegetation communities using the ELC system (MNRF) of the Study Area.
7. Complete two site visits to carry out a two-season (Spring & Summer) botanical inventory of the site.
8. Investigate the study area for the presence of significant wildlife habitat.

9. Investigate the study area for presence of species at risk and species at risk habitat.
10. Record observations of incidental wildlife during site visits.

C. Scoped Environmental Impact Study (EIS)

1. Analyze findings and prepare a map that shows:
 - a. Identified natural heritage features, and functions and landscape level features (e.g., linkages, wetlands).
 - b. Proposed buffers to natural heritage features
 - c. The proposed site plan (location of building, amenities, drive, **site grading**)
 - d. ELC vegetation communities
 - e. **Existing agricultural field tile maps, if data are available**
 - f. Other noteworthy features as needed
 - g. Locations of other natural heritage features from background literature searches (e.g., mammal atlas, herpetofaunal atlas, Township's OP).
2. Conduct an impact assessment by reviewing the proposed development's direct, indirect, and induced (i.e., residual, ongoing) impacts on the natural features. Provide an **recommendation** about the location of the components of the general concept plan to reduce/avoid impacts to natural heritage features. Show the configuration of the proposed development on the subject property and assess for minimizing impacts to ecological features and functions, including rationale for proposed buffers. This will involve discussions with the proponent and AA.
3. Provide policy rationale for expected impacts to natural heritage features e.g., removal of trees and grading to accommodate the **subdivision**.
4. Edge Management Guidelines and Compensation: Provide **detailed and site-specific** recommendations of where and why naturalization treatments may be needed to protect vegetation features (e.g., woodlands, wetlands) adjacent to the development activity.
5. Prepare a report of the EIS that includes background information, methods, existing conditions, proposed development, discussion and interpretation of other relevant studies such as the Stormwater Management Plan for the site **and site and feature based water balances for pre and post development conditions**, impact assessment and mitigation measures, and appendices of field studies (e.g., ELC, flora list).
6. Submit EIS to client for review followed by distribution to Township, Region and GRCA.

I look forward to your response regarding these proposed terms of reference. If you require clarification, please do not hesitate to email, or call me at 519.781.1581.

Yours truly,

ABOUD & ASSOCIATES INC.



Heather Dixon, PhD
Aquatic Ecologist
heather@aboudtng.com

Figure 1. Study Area

Appendix 1. Candidate Significant Wildlife Habitat
Appendix 2. Candidate Species at Risk Habitat

Cc: Meghan Lippert, MHBC (email)
Cheryl-Anne Ross, Aboud & Associates Inc. (email)



LEGEND

- | | | |
|--|---|---|
|  SUBJECT LANDS |  WETLAND |  ESTIMATED FLOODPLAIN |
|  STUDY AREA |  SIGNIFICANT WOODLAND |  GRCA REGULATION LIMIT |
|  DRAIN #1 |  ENGINEERED FLOODPLAIN | |

Information Sources:
1. Waterloo Region Orthophotography,
Accessed October 2023.
2. Grand River Information Network,
Accessed October 2023.
3. Land Information Ontario,
Accessed October 2023.

Title:

STUDY AREA

Project:

1665 SCOTCH LINE
ELMIRA, ON



Date: OCTOBER 2023

Project: AA23-232A

Scale: 1 : 7000


ABOOD & ASSOCIATES INC.
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Figure No:

1

#	Significant wildlife habitat (SWH)	Candidate SWH type	Candidate SWH criteria	Criteria for SWH confirmation	Candidate SWH present (Field survey type required)
1	Waterfowl stopover and Staging Areas (terrestrial)	Seasonal Concentration Areas	- Fields with Sheet water in spring (incl. agricultural)	- Mixed species aggregations of 100 or more individuals confirms SWH	None, no habitat present.
2	Waterfowl Stopover and Staging (Aquatic)	Seasonal Concentration Areas	- Ponds, marshes, lakes, bays, coastal inlets and watercourses and reservoirs - SWTP & SWMP are not SWH	- Aggregations of 100 or more listed species for 7 days (i.e. >700 waterfowl use days) confirms SWH	None, no habitat present.
3	Shorebird Migratory stopover	Seasonal Concentration Areas	- Shorelines of Lakes, rivers, wetlands, beaches, bars; seasonally flooded, muddy, and un-vegetated shoreline habitat	- 3 or more listed species and >1000 shorebird use days, or >100 whimbrel, confirms SWH	None, no habitat present.
4	Raptor Wintering Area	Seasonal Concentration Areas	- Combination of upland field and woodland habitat >20ha total (includes >15ha upland field) - least disturbed sites, idle, fallow or lightly grazed field/meadow best	- 1 or more Short-eared Owl, or at least 10 individuals and 2 listed species for a minimum of 20 days, and 3 of 5 years, confirms SWH	Candidate habitat present. Need to confirm upland field usage.
5	Bat Hibernacula	Seasonal Concentration Areas	- Caves, mine shafts, underground foundations, karsts. - buildings are not SWH	- All sites with confirmed hibernating bats, confirms SWH	None, no habitat present.
6	Bat Maternity Colony	Seasonal Concentration Areas	- All forested ecosites, FOD, FOC, FOM, SWD, SWM, SWC with >10/ha trees (>25cm DBH) in early stages of decay (class 1-3) - buildings are not SWH	- >10 Big Brown Bats, >20 Little Brown Myotis, >5 adult female Silver-haired Bats confirms SWH	Yes, bat habitat assessment will be completed.
7	Turtle Wintering Area	Seasonal Concentration Areas	- Areas with permanent water deep enough not to freeze, with mud/soft substrates	- 5 over-wintering Midland Painted Turtles, 1 or more Northern Map Turtle or Snapping Turtle confirms SWH	None, no habitat present.
8	Reptile Hibernaculum	Seasonal Concentration Areas	- Sites below the frost line; rock barren, crevice and cave, talus, alvar, rock piles, slopes, stone fences, and crumbling foundations	- Presence of hibernacula with minimum 5 individuals of 1 snake species/ individuals of 2 or more species confirms SWH. - Congregations of a minimum of 5 snakes of 1 species/ individuals of 2 or more snake species, near potential hibernacula on sunny warm days in spring and fall confirms SWH	None, no habitat present.

#	Significant wildlife habitat (SWH)	Candidate SWH type	Candidate SWH criteria	Criteria for SWH confirmation	Candidate SWH present (Field survey type required)
9	Colonially-nesting Bird Habitat (cliff/bank)	Seasonal Concentration Areas	- Eroding banks, sandy hills, borrow pits, steep slopes, sand piles, cliff faces, bridge abutments, silos, barns	- 1 or more nest sites with 8 or more Cliff Swallow or, 50 Bank Swallow and Rough-winged Swallow pairs during the breeding season.	None, no habitat present.
10	Colonially-nesting Bird Habitat (Tree/shrub)	Seasonal Concentration Areas	- Live or dead standing trees in wetlands, lakes, islands and peninsulas, occasionally shrubby and emergent vegetation	- 5 or more active Great-blue Heron or other listed species nests	None, no habitat present.
11	Colonially-nesting Bird Habitat (Ground)	Seasonal Concentration Areas	- Rocky islands or peninsulas within a lake or large river (natural or artificial)	- >25 active nests of Herring Gull, Ring-billed Gull, >5 active nests of Common Tern, or >2 active nests of Caspian Tern. 5 or more pairs of Brewer's Blackbird. Any active nesting colony of Little Gull, Great Black-backed Gull.	None, no habitat present.
12	Migratory Butterfly Stopover Area	Seasonal Concentration Areas	- At least 10ha, with undisturbed field/meadow and forest or woodland edge habitat present, within 5km of Lake Ontario.	- Presence of Monarch use days >5000 or >3000 where there is a mix of Monarch with Painted Ladies or White Admirals	None, no habitat present.
13	Land bird Migratory Stopover Area	Seasonal Concentration Areas	- Woodlots >5ha in size - within 5km of Lake Ontario	- Use by >200 birds/day, with >35species, with at least 10sp recorded on 5 different survey dates.	None, no habitat present.
14	Deer Yarding Areas	Seasonal Concentration Areas	- ELC communities providing Thermal cover (FOM, FOC, SWM, SWC, CUP2, CUP3, FOD3, CUT)	- Deer yards are managed by MNRF, available through district offices and LIO.	None identified in LIO mapping.
15	Deer Winter Congregation Areas	Seasonal Concentration Areas	- All forested ecosites >100ha - Conifer Plantations <50ha may be used	- Deer management is the responsibility of the MNRF. - Contact MNRF or LIO for known deer winter areas.	None, identified in LIO mapping.
16	Cliffs & Talus Slopes	Rare Vegetation Communities	- Cliff: vertical to near vertical bedrock >3m in height - Talus slope: rock rubble at the base of a cliff made up of coarse rocky debris	- Confirm any ELC Vegetation Type for Cliffs or Talus Slopes	None, no habitat present.
17	Sand Barren	Rare Vegetation Communities	- Exposed, sparsely vegetated & caused by lack of moisture, fires, and erosion.	- area >0.5ha in size - Confirm any ELC vegetation Type for Sand Barren - Not dominated by exotic or introduced species	None, no habitat present.

#	Significant wildlife habitat (SWH)	Candidate SWH type	Candidate SWH criteria	Criteria for SWH confirmation	Candidate SWH present (Field survey type required)
18	Alvar	Rare Vegetation Communities	- Level, mostly un-fractured calcareous bedrock feature, overlain by a thin veneer or soil	- area >0.5ha in size - Field Studies that identify four of the five Alvar Indicator Species - Not dominated by exotic or introduced species	None, no habitat present.
19	Old Growth Forest	Rare Vegetation Communities	- >30ha forests with at least 10ha interior habitat and multi-layered canopy	- Dominant Tree Species >140 years old - No recognizable signs forestry practices (old stumps)	None, no habitat present.
20	Savannah	Rare Vegetation Communities	- Tall Grass Prairie Habitat with 25%-60% Tree cover - Remnant sites such as Railway Right of ways are not SWH	- No minimum size and must be restored to a natural state. - Confirm one or more savannah indicator species. - Not dominated by exotic or introduced species	None, no habitat present.
21	Tallgrass Prairie	Rare Vegetation Communities	- Ground cover dominated by prairie grasses with <25% tree cover. - Remnant sites such as Railway Right of ways are not SWH	- No minimum size and must be restored to a natural state. - Confirm one or more prairie indicator species. - Not dominated by exotic or introduced species	None, no habitat present.
22	Other Rare Vegetation Communities	Rare Vegetation Communities	- All Provincially Rare S1, S2, S3 Vegetation Communities (Appendix M of SWHTG)	- Field Studies Confirming ELC vegetation type is a rare vegetation community	None, no habitat present.
23	Waterfowl Nesting Areas	Specialized Habitats for Wildlife	- Upland Habitat, adjacent to Wetland ELC ecosites (except SWC, SWM) - Extends 120m from a wetland (>0.5ha) and any small wetlands (<0.5ha) within a cluster of at least 3. - Upland area at least 120m wide	- Presence of 3 or more nesting pairs of listed species excluding Mallards - Presence of 10 or more nesting pairs including mallards - Any active Black Duck nesting site	None, no habitat present.
24	Bald Eagle or Osprey Nesting, Foraging and Perching Habitat	Specialized Habitats for Wildlife	- Forest communities, adjacent to riparian areas - Osprey nests usually at top of tree - Bald Eagle nest usually in super canopy tree in a notch within canopy	- Studies confirm one or more active Bald Eagle or Osprey nest. - Alternate nests included in SWH. - Nests must be used annually, if found inactive, must be known inactive at least 3 years, or suspected unused for 5 years if unknown	None, no habitat present.

#	Significant wildlife habitat (SWH)	Candidate SWH type	Candidate SWH criteria	Criteria for SWH confirmation	Candidate SWH present (Field survey type required)
25	Woodland Raptor Nesting Habitat	Specialized Habitats for Wildlife	- Forested communities, forested swamp communities and cultural Plantations - Natural Forested/conifer plantations >30ha with >10ha interior habitat (200m buffer)	- One or more active nest of listed species	None, no habitat present.
26	Turtle Nesting Areas	Specialized Habitats for Wildlife	- Exposed Mineral soil (sand or gravel) adjacent (<100m) or within shallow marsh, shallow submerged, shallow floating, bog or fen communities. - Located in open sunny areas, away from roads and less prone to predation - Municipal and provincial road shoulders are not SWH.	- Confirm 5 or more nesting Midland Painted Turtles, 1 or more nesting Northern Map Turtle or Snapping Turtle	None, no habitat present.
27	Seeps and Springs	Specialized Habitats for Wildlife	- Areas where ground water comes to the surface. - Any forested area within the headwaters of a stream or river system	- Confirm site with 2 or more seeps/springs.	Adjacent woodland to be reviewed where access available during ELC/botanical.
28	Amphibian Breeding Habitat (woodland)	Specialized Habitats for Wildlife	- Breeding pools within woodlands - Wetland, pond, or pool >500m² within or adjacent (<120m) to a woodland. - Woodlands with permanent ponds, or those with water until mid-July more likely to be used.	- Confirm Breeding population of 1 or more listed newt/salamander species, 2 or more of the listed frog species with at least 20 individuals (adults or egg masses), 2 or more of the listed frog species with call code levels of 3. - Wetland adjacent to woodlands includes travel corridor connecting features as SWH.	None, no habitat present.
29	Amphibian Breeding Habitat (Wetland)	Specialized Habitats for Wildlife	- Swamp, marsh, fen, bog, open aquatic, and shallow aquatic ELC communities. - Typically isolated from woodlands (>120m) but includes larger wetlands with primarily aquatic species (bull frogs) that are adjacent to woodlands. - Wetlands >500m² - Presence of shrubs & logs - Bullfrogs require permanent water bodies and abundant emergent vegetation.	- Confirm Breeding populations of 1 or more listed newt/salamander species, or 2 or more listed frog/toad species with at least 20 individuals (adults or egg masses), or 2 or more listed frog/toad species with a call code level of 3 - Or any wetland with confirmed breeding Bullfrog.	None, no habitat present.

#	Significant wildlife habitat (SWH)	Candidate SWH type	Candidate SWH criteria	Criteria for SWH confirmation	Candidate SWH present (Field survey type required)
30	Area-sensitive Breeding Bird Habitat	Specialized Habitats for Wildlife	- Habitats where interior breeding birds are breeding. - Large mature (>60 years) forest stands or woodlots >30ha. - Forest and swamp ELC communities - Interior habitat at least 200m from edge	- Presence of nesting or breeding pairs of 3 or more of the listed species - Any site with Cerulean Warbler or Canada Warbler is SWH	None, no habitat present.
31	Marsh Bird Breeding Habitat	Habitats of Species of Conservation Concern	- Some meadow marsh, shallows submerged, shallow floating, mixed shallow floating, fen, and bog communities (see SWH Ecoregion guide for specifics) - Nesting occurs in wetlands; all wetland habitat is considered with presence of shallow water with emergent aquatic vegetation - Green heron at edge of water sheltered by shrubs and trees.	- 5 or more nesting pairs of Sedge Wren or Marsh Wren, 1 pair of Sandhill Crane, or breeding by any combination of 5 or more of the listed species - Any Wetland with 1 or more breeding pair Black Tern, Trumpeter Swan, Green Heron or Yellow Rail	None, no habitat present.
32	Open Country Bird Breeding Habitat	Habitats of Species of Conservation Concern	- Grassland area >30ha (natural & cultural fields and meadows) - Grasslands not class 1 or 2 agriculture (no row crops or intensive hay or livestock pasturing) - Mature hayfields or pasture at least 5 years old	- Nesting or breeding of 2 or more of the listed species. - Field with 1 or more Short-eared Owls	Breeding bird surveys.
33	Shrub/Early Successional Bird Breeding Habitat	Habitats of Species of Conservation Concern	- Cultural thickets, savannah, and woodland habitat - Large field area succeeding to shrub and thicket habitat >10ha in size - Patches of shrub ecosite may be complexed into larger old field ecosites for some species	- Confirm nesting or breeding of 1 of the listed indicator species and at least 2 of the common species - Habitat with Yellow-breasted Chat Or Golden-winged Warbler is SWH	None, no habitat present.

#	Significant wildlife habitat (SWH)	Candidate SWH type	Candidate SWH criteria	Criteria for SWH confirmation	Candidate SWH present (Field survey type required)
34	Terrestrial Crayfish	Habitats of Species of Conservation Concern	- Meadow marsh, shallow marsh, swamp thicket, deciduous swamp, and mixed swamp communities - Cultural meadow with inclusions of meadow marsh may be used - Wet edges of marshes and wet meadows should be surveyed for crayfish	- Presence of 1 or more individuals of listed species or their chimneys in suitable habitat	ELC and botanical inventory.
35	Special Concern & Rare Wildlife Species	Habitats of Species of Conservation Concern	- All Special concern and Provincially Rare plant and animal species - Where an element occurrence is identified within a 1 or 10km grid for a species listed, linking candidate habitat on the site must be completed to ELC ecosites	- Assessment/inventory of site for identified special concern or rare species completed during time of year when species is present or easily identifiable. - Habitat must be easily mapped and cover an important life stage component (specific nesting habitat, foraging)	Suitable habitat for special concern and provincially rare species present. ELC, botanical inventory, breeding bird surveys, and aquatic habitat assessment required.
36	Amphibian Movement Corridor	Wildlife Movement Corridors	- Corridors may occur in all ecosites associated with water. - Presence of significant amphibian breeding indicates the requirement for identifying corridors. - Movement corridors between breeding habitat and summer habitat	- Corridors typically include areas with native vegetation, with several layers of vegetation, unbroken by roads, waterways or waterbodies are most significant - At least 15 of vegetation on both sides of the waterway or up to 200m wide of woodland habitat with gaps of <20m - Shorter corridors are more significant than longer, but amphibians must be able to get to and from their summer breeding habitat	None, no habitat present.
37	Deer Movement Corridor	Wildlife Movement Corridors	- May occur in all forested ecosites. - Determined when deer wintering habitat is confirmed as SWH	- Corridors at least 200m wide with gaps <20m leading to wintering habitat. - Unbroken by roads and residential areas - Shorter corridors are more significant	None, no habitat present.

Common name	Scientific name	Group	SARO	Cosewic	S-rank	Background sources	Habitat requirements	Candidate habitat in study area	Field studies recommended
Jefferson Salamander	<i>Ambystoma jeffersonianum</i>	Amphibians	END	END	S2	MNRF Species Occurrence Mapping	Adults are found within upland deciduous or mixed forest habitat with suitable breeding ponds, such as kettle ponds, natural basins and limestone sink holes, which can be permanent or ephemeral, and include appropriate egg attachment sites and lack of predatory fish (COSEWIC 2010).	No habitat present in study area.	None needed.
Unisexual Ambystoma, Jefferson dependent population	<i>Ambystoma laterale</i> - (2) <i>jeffersonianum</i>	Amphibians	END	END	S2	MNRF Species Occurrence Mapping	Unisexual ambystoma share the same habitat requirements as Jefferson salamander, as they rely on Jefferson salamander for sperm donation to breed (COSEWIC 2016).	No habitat present in study area.	None needed.
Western Chorus Frog – Great Lakes / St. Lawrence - Canadian Shield Population	<i>Pseudacris triseriata</i> pop. 2	Amphibians	NAR	THR	S4	MNRF Species Occurrence Mapping	Generally found in lowland communities, such as swamps, inhabiting lowland shrubs and grasses in the community, near breeding habitat. Breeding occurs in lowland, ephemeral ponds, devoid of predatory fish species (COSEWIC 2008a).	No habitat present in study area.	None needed.
Gypsy Cuckoo Bumble Bee	<i>Bombus bohemicus</i>	Butterflies, bees, damselflies, dragonflies & insects	END	END	S1S2	NHIC	Occurs in diverse habitats, including open meadows, mixed farmlands, urban areas, boreal forest, and montane meadows. Feed on pollen and nectar from a variety of plant genera (COSEWIC 2014).	Habitat potentially present in study area.	ELC and botanical inventory.
Monarch	<i>Danaus plexippus</i>	Butterflies, bees, damselflies, dragonflies & insects	SC	SC	S2N, S4B	MNRF Species Occurrence Mapping, OBA (2022), iNat (2023)	Requires milkweed for larval feeding, other wildflower species are also important for adult feeding when milkweed is not in flower; often found in abandoned farmland, along roadsides, and other open spaces (COSEWIC 2010b).	Habitat potentially present in study area.	ELC and botanical inventory.
West Virginia White	<i>Pieris virginenis</i>	Butterflies, bees, damselflies, dragonflies & insects	SC	NAR	S3	MNRF Species Occurrence Mapping	Found in rich deciduous and mixed forests and swamps with a poorly vegetated shrub layer. The larvae feed only on the leaves of a few host plants, including the Two-leaved Toothwort (<i>Cardamine diphylla</i>) and cut-leaved toothwort (Burke 2013).	No habitat present in study area.	None needed.
Yellow-banded Bumble Bee	<i>Bombus terricola</i>	Butterflies, bees, damselflies, dragonflies & insects	SC	SC	S3S5	MNRF Species Occurrence Mapping	Occur in a diverse range of habitat, including mixed woodlands, farmlands, urban areas, montane meadows, prairie grasslands and boreal habitats. Queens overwinter underground and in decomposing organic material such as rotting lots (COSEWIC 2015).	Habitat potentially present in study area.	ELC and botanical inventory.
Acadian Flycatcher	<i>Empidonax Virens</i>	Birds	END	END	S2S3B	MNRF Species Occurrence Mapping	Breeds in mature deciduous and mixed forests, using tableland forests and ravine habitats. Nests are often located over vernal pools, trails or bare ground in tablelands or over streams in ravines (COSEWIC 2010d).	No habitat present in study area.	None needed.
Bank Swallow	<i>Riparia riparia</i>	Birds	THR	THR	S4B	MNRF Species Occurrence Mapping, OBBA, eBird (2023)	Breeds in a variety of natural and artificial bank type habitat, such as bluffs, stream and river banks, sand and gravel pits, piles of sand, topsoil and other material. Nests are typically in vertical or near-vertical surfaces (COSEWIC 2013b).	No habitat present in study area.	None needed.
Barn Swallow	<i>Hirundo rustica</i>	Birds	SC	THR	S5B	MNRF Species Occurrence Mapping, OBBA, eBird (2023)	Occurs in farmland, along lake/river shorelines, in wooded clearings and in urban populated areas. Nesting may occur inside or outside buildings; under bridges and in road culverts (COSEWIC 2011a).	Habitat potentially present in study area.	Breeding bird survey.

Common name	Scientific name	Group	SARO	Cosewic	S-rank	Background sources	Habitat requirements	Candidate habitat in study area	Field studies recommended
Barn Owl	<i>Tyto alba</i>	Birds	END	END	S1	MNRF Species Occurrence Mapping	Requires open habitat for foraging, such as old fields and pastures, that provide habitat for rodents, and uses a variety of natural and man-made structures for nesting (COSEWIC 2010e)	No habitat present in study area.	None needed.
Bobolink	<i>Dolichonyx oryzivorus</i>	Birds	THR	THR	S4B	MNRF Species Occurrence Mapping, NHIC, OBBA	Nest in grassland habitats, including hayfields and meadows with a mixture of grasses and broad-leaved forbs with a high litter cover. Area Sensitive, with increased density in grasslands greater than 10ha (Renfrew et. al. 2015)	Habitat potentially present in study area.	Breeding bird surveys.
Canada Warbler	<i>Wilsonia canadensis</i>	Birds	SC	THR	S4B	MNRF Species Occurrence Mapping	Prefers wet coniferous, deciduous and mixed forest types, with a dense shrub layer (COSEWIC 2008b).	No habitat present in study area.	None needed.
Cerulean Warbler	<i>Setophaga cerulea</i>	Birds	THR	END	S3B	MNRF Species Occurrence Mapping	Occur in older, mature, deciduous forests, preferentially oak-maple composition, with a full, to partially open canopy, and little to no understory cover. Often in bottomland forests, or adjacent to treed swamplands (COSEWIC 2010f).	No habitat present in study area.	None needed.
Chimney Swift	<i>Chaetura pelagica</i>	Birds	THR	THR	S4B, S4N	MNRF Species Occurrence Mapping, OBBA, eBird (2023)	Typically nests in traditional chimneys of older buildings, which also provide roosting sites for many individuals during spring and fall migration (MNRF 2013).	No habitat present in study area.	None needed.
Common Nighthawk	<i>Chordeiles minor</i>	Birds	SC	THR	S4B	MNRF Species Occurrence Mapping	Breeds in open habitat, on the ground, in areas with no vegetation, including sand dunes, burned areas, open forests, railways, and gravel rooftops. Eggs are laid directly on the ground (COSEWIC 2007b).	No habitat present in study area.	None needed.
Eastern Meadowlark	<i>Sturnella magna</i>	Birds	THR	THR	S4B	MNRF Species Occurrence Mapping, OBBA	Nest in grassland habitats, including hayfields, pasture, savannahs, and other open areas. Preferential habitat includes areas with good grass and thatch (litter) cover (Jaster et. al. 2012).	Habitat potentially present in study area.	Breeding bird surveys.
Eastern Wood-Pewee	<i>Contopus virens</i>	Birds	SC	SC	S4B	MNRF Species Occurrence Mapping, NHIC, OBBA, eBird (2023)	Associated with mid-age mixed and deciduous forest stands, often dominated by Maple (Acer), Elm (Ulmus) or Oak (Quercus), and include areas with clear-cuts, openings or forest edges. Also prefers forest stands with little to no understory vegetation (COSEWIC 2012a).	Habitat potentially present in study area.	Breeding bird surveys.
Evening Grosbeak	<i>Coccothraustes vespertinus</i>	Birds	SC	SC	S4B	MNRF Species Occurrence Mapping	Breeding habitat includes open, mature mixed wood forests, where fir species and/or White Spruce are dominant, and Spruce Budworm is abundant (COSEWIC 2016)	No habitat present in study area.	None needed.
Golden-winged Warbler	<i>Vermivora chrysoptera</i>	Birds	SC	THR	S4B	MNRF Species Occurrence Mapping	Nests in early successional shrub habitat, with adjacent forest edges for singing perches, often in hydro cut-overs, recently logged areas and beaver marshes (COSEWIC 2006a).	No habitat present in study area.	None needed.
Grasshopper Sparrow	<i>Ammodramus savannarum</i>	Birds	SC	SC	S4B	MNRF Species Occurrence Mapping	Prefers moderately open grasslands and prairies with patchy bare ground; avoids grasslands with extensive shrub cover (Vickery 1996).	Habitat potentially present in study area.	Breeding bird surveys.
Least Bittern	<i>Ixobrychus exilis</i>	Birds	THR	THR	S4B	MNRF Species Occurrence Mapping	Breeds in large marshes (>5ha) with emergent vegetation, typically cattails, with at least 50% open water, and relatively stable water levels (COSEWIC 2009b).	No habitat present in study area.	None needed.
Louisiana Waterthrush	<i>Seiurus motacilla</i>	Birds	SC	THR	S3B	MNRF Species Occurrence Mapping	Nests along headwater streams and associated wetlands which occur within large tracts of mature forest especially mixed wood forests with a component of hemlock. Nests are in stream bank niches, under mossy logs, and within the roots of fallen trees (COSEWIC 2006b)	No habitat present in study area.	None needed.

Common name	Scientific name	Group	SARO	Cosewic	S-rank	Background sources	Habitat requirements	Candidate habitat in study area	Field studies recommended
Olive-sided Flycatcher	<i>Contopus cooperi</i>	Birds	SC	THR	S4B	MNRF Species Occurrence Mapping, eBird (2023), iNat (2023)	Associated with natural forest openings (usually conifer or mixed), and edges of forests adjacent wetlands or watercourses, will also use open and semi-open forests and clear-cuts. Presence of tall snags and residual live trees required for nesting and foraging (COSEWIC 2007c).	Habitat potentially present in study area.	Breeding bird surveys.
Peregrine Falcon	<i>Falco peregrinus</i>	Birds	SC	SC	S3B	MNRF Species Occurrence Mapping, iNat (2022)	Nests on cliff-ledges (50-200m preferred) near foraging areas. Also nests on anthropomorphic structures, such as tall building ledges, bridges, quarries, mines and cuts for road beds (COSEWIC, 2007a).	No habitat present in study area.	None needed.
Red-headed Woodpecker	<i>Melanerpes erythrocephalus</i>	Birds	END	THR	S4B	MNRF Species Occurrence Mapping, NHIC	Found in a variety of open areas, with a high density of dead or dying trees, particularly forests dominated by oak or beech (COSEWIC 2007d).	No habitat present in study area.	None needed.
Rusty Blackbird	<i>Euphagus carolinus</i>	Birds	SC	SC	S4B	eBird (2023), iNat (2023)	Breeding habitat is characterized by coniferous-dominated forests adjacent to wetlands, such as slow-moving streams, peat bogs, sedge meadows, marshes, swamps and beaver ponds. On migration, the Rusty Blackbird is primarily associated with wooded wetlands (COSSARO 2017).	No habitat present in study area.	None needed.
Short-eared Owl	<i>Asio flammeus</i>	Birds	THR	SC	S2N, S4B	MNRF Species Occurrence Mapping	Breeds in open habitats, including grasslands, old pasture marshes, bogs, and sand-sage. Nests are scrapes, located on the ground (COSEWIC 2008c).	Habitat potentially present in study area.	Breeding bird surveys.
Wood Thrush	<i>Hylocichla mustelina</i>	Birds	SC	THR	S4B	MNRF Species Occurrence Mapping, NHIC, OBBA, eBird (2023)	Prefers second growth moist deciduous forests, with tall trees, and a dense understory of low saplings and an open forest floor with decaying leaf litter. Often nests in saplings, shrubs or occasionally dead stumps (COSEWIC 2012b).	Habitat potentially present in study area.	Breeding bird surveys.
Yellow-breasted Chat	<i>Icteria virens</i>	Birds	END	END	S1B	MNRF Species Occurrence Mapping	Shrub specialist, nesting in early successional, dense, low-shrub habitat, including old fields, hydro-cutovers and forest edges experiencing regeneration (COSEWIC 2011c).	Habitat potentially present in study area.	Aquatic habitat assessment.
Black Redhorse	<i>Moxostoma duquesnei</i>	Fish	THR	THR	S2	MNRF Species Occurrence Mapping	Associated with cool, clear streams of moderate size with substrates of rocky, cobble, sand, or silt. Found in the Lake Erie and Grand River Watersheds (COSEWIC, 2005a).	Habitat potentially present in study area.	Aquatic habitat assessment.
Northern Sunfish (Great Lakes-Upper St. Lawrence Population)	<i>Lepomis peltastes</i>	Fish	SC	SC	S3	MNRF Species Occurrence Mapping	Prefers shallow, vegetated areas of warm lakes, ponds, and slowly flowing watercourses. Usually occurs in clear waters and is considered intolerant of siltation. Substrate usually consists of sand and gravel, as in the Thames River (COSEWIC 2016)	Habitat potentially present in study area.	Aquatic habitat assessment.
Silver Shiner	<i>Notropis photogenis</i>	Fish	THR	THR	S2S3	MNRF Species Occurrence Mapping, NHIC	Associated with large, wide streams (usually >20m) in deep riffles and pools, with substrates of gravel, boulder, rubble, and sand (COSEWIC, 2011d).	Habitat potentially present in study area.	Aquatic habitat assessment.
Rainbow	<i>Villosa iris</i>	Molluscs	SC	SC	S2S3	MNRF Species Occurrence Mapping	Most abundant in small to medium-sized rivers but can also be found in inland lakes. Usually found in or near riffles and along the edges of emergent vegetation in moderate to strong current. Occupies substrate mixtures of cobble, gravel, sandy and occasionally mud or boulder (COSEWIC 2015).	Habitat potentially present in study area.	Aquatic habitat assessment.
Wavy-rayed Lampmussel	<i>Lamslilis fasciola</i>	Molluscs	THR	SC	S1	MNRF Species Occurrence Mapping, iNat (2022)	Inhabits clear rivers and streams of various sizes with steady flows and stable substrates and is typically found in gravel or sand substrates in and around riffle areas. Most abundant in small to medium-sized stream and occurs at sites that support a great diversity of other mussel species (COSEWIC 2010).	Habitat potentially present in study area.	Aquatic habitat assessment.

Common name	Scientific name	Group	SARO	Cosewic	S-rank	Background sources	Habitat requirements	Candidate habitat in study area	Field studies recommended
Eastern Small-footed Myotis	<i>Myotis leibii</i>	Mammals	END	NA	S2S3	MNRF Species Occurrence Mapping	Associated with hilly or mountainous terrain, in or near coniferous or deciduous forest habitat. Maternity roosts located in cracks and crevices of talus slopes and rocky outcrops, or, occasionally in bridges, old buildings, hollow trees (or loose bark) and caves and mines during the maternity season. Hibernate singly or in small clusters in mines and caves (NatureServe, 2015).	Habitat potentially present in study area.	Bat habitat assessment.
Little Brown Myotis	<i>Myotis lucifugus</i>	Mammals	END	END	S3	MNRF Species Occurrence Mapping	Hibernate in Caves; maternity colonies located in warm sites, often associated with human habitation; including attics, old buildings, under bridges, rock crevices and cavities in canopy trees in wooded areas (COSEWIC, 2013c).	Habitat potentially present in study area.	Bat habitat assessment.
Northern Myotis	<i>Myotis septentrionalis</i>	Mammals	END	END	S3	MNRF Species Occurrence Mapping	Hibernate in Caves; maternity colonies usually located in trees, and are closely associated with specific tree characteristics and density of suitable trees. Characterized by tall, large diameter trees in early stages of decay, located in openings in mature forest canopies (COSEWIC, 2013c).	Habitat potentially present in study area.	Bat habitat assessment.
Tri-colored Bat	<i>Perimyotis subflavus</i>	Mammals	END	END	S3?	MNRF Species Occurrence Mapping	Hibernate in caves, abandoned mines, wells, and tunnels. Summer roosts include clumps of dead foliage and lichens, typically found in forested habitat close to water sources. May also use anthropogenic structures such as barns for maternity roosts. Foraging habitat includes forested riparian areas over water in relatively open areas (Environment Canada.2015).	Habitat potentially present in study area.	Bat habitat assessment.
Blanding’s Turtle	<i>Emydoidea blandingii</i>	Reptiles	THR	THR	S3	MNRF Species Occurrence Mapping	Use a variety of eutrophic wetland habitat types, including lakes, ponds, watercourses, marshes, man-made channels, farm fields, coastal areas and bays. Seasonal overland terrestrial movements up to 2.5 km occur to reach nesting and overwintering areas, generally through wooded coniferous or mixed forest habitat. Nests are usually laid in loose sand or organic soil (COSEWIC 2005b).	No habitat present in study area.	None needed.
Midland Painted Turtle	<i>Chrysemys picta marginata</i>	Reptiles	NL	SC	S4	MNRF Species Occurrence Mapping, ORAA (1981)	Occupy slow moving, relatively shallow and well-vegetated wetlands and water bodies with abundant basking sites and organic substrate. Found in association with submergent aquatic plants, which are used for cover and feeding. Semi -tolerant of human-altered landscapes, occasionally found occupying urban ponds and lands subject to anthropogenic disturbance. Suitable nesting habitat includes open, often south-facing, and sloped areas with sandy-loamy and/or gravel substrate usually within 1200 m of aquatic active season habitats. Overwinter in shallow water with deep sediment (COSEWIC 2018).	Habitat potentially present in study area.	Aquatic habitat assessment.
Northern Map Turtle	<i>Graptemys geographica</i>	Reptiles	SC	SC	S3	MNRF Species Occurrence Mapping	Highly aquatic species, found in deep, large waterbodies, including lakes and large rivers, with abundant basking sites. Emerge onto land only during nesting, which occurs in soft sand or soil. Waterbodies with slow currents, soft mud bottoms and abundant aquatic vegetation are preferred (COSEWIC, 2002b).	No habitat present in study area.	None needed.
Snapping Turtle	<i>Chelydra serpentina</i>	Reptiles	SC	SC	S4	MNRF Species Occurrence Mapping, ORAA (2019), iNat (2023)	Inhabit slow-moving waters with soft, muck bottom and dense aquatic vegetation. Ponds, sloughs and shallow bays are all often used as summering and overwintering habitat (COSEWIC 2008d).	Habitat potentially present in study area.	Aquatic habitat assessment.
Wood Turtle	<i>Glyptemys insculpta</i>	Reptiles	END	THR	S2	MNRF Species Occurrence Mapping	Generally found in forested landscapes, associated with clear freshwater streams and associated floodplains. Preferential to streams with year-round current, with sandy or gravelly-sandy bottoms. Streams used are typically meandering with frequent oxbows. Overwintering associated with stable, high concentration dissolved oxygen in pools, under mud or under overhanging banks. Nesting occurs in open areas with high sun exposure, typically within 10 to 50m of aquatic habitat. Home ranges are typically linear, following streams (Environment Canada, 2016).	No habitat present in study area.	None needed.
Eastern Ribbonsnake	<i>Thamnophis sauritus</i>	Reptiles	SC	SC	S4	MNRF Species Occurrence Mapping	A semi-aquatic species that inhabits dense, low- vegetation, edges of ponds, streams, marshes, fens and bogs, with open sunlit areas for basking (COSEWIC 2002c).	Habitat potentially present in study area.	Aquatic habitat assessment, ELC, and botanical inventory.
Milksnake	<i>Lampropeltis triangulum</i>	Reptiles	SC	SC	S4	MNRF Species Occurrence Mapping, ORAA (1971)	Habitat generalists, often associated with edge habitat, meadows, prairies, pastures, rocky outcrops and human disturbances such as hydro corridors and railway embankments. Habitat is usually close to a water source. Hibernation occurs in a variety of natural and man-made features, including rotting logs, old foundations, basements, and burrows (COSEWIC 2014).	Habitat potentially present in study area.	ELC and botanical inventory.

Common name	Scientific name	Group	SARO	Cosewic	S-rank	Background sources	Habitat requirements	Candidate habitat in study area	Field studies recommended
Queensnake	<i>Regina septemvittata</i>	Reptiles	END	END	S2	MNRF Species Occurrence Mapping	Associated with rocky streams and rivers, but occasionally found in marsh, pond and lake shore habitats. Usually found within 3m of the shoreline and only at sites where there is an abundance of crayfish (COSEWIC 2010).	No habitat present in study area.	None needed.
American Chestnut	<i>Castanea dentata</i>	Vascular plants	END	END	S1S2	MNRF Species Occurrence Mapping	Typically occur in upland deciduous forests in Southern Ontario with dry, sandy, acid-neutral soils, Typical associates include Red Oak, Black Cherry, Sugar Maple, American Beech, White Ash, White Oak, Red Maple and Sassafras (COSEWIC 2004).	No habitat present in study area.	None needed.
American Columbo	<i>Frasera carolinensis</i>	Vascular plants	END	END	S2	MNRF Species Occurrence Mapping	Associated with open forested slopes and forest edges. May also occur in thickets and clearings (COSEWIC 2006a).	No habitat present in study area.	None needed.
American Ginseng	<i>Panax quinquefolius</i>	Vascular plants	END	END	S2	MNRF Species Occurrence Mapping	Occur in moist, rich, undisturbed, mature Sugar Maple dominated deciduous woodlands. Often, colonies are located at the bottom of south facing slopes (COSEWIC, 2000).	No habitat present in study area.	None needed.
Butternut	<i>Juglans cinerea</i>	Vascular plants	END	END	S2?	MNRF Species Occurrence Mapping, iNat (2019)	Occur in rich moist sites, that are well-drained, often found along stream banks or gravelly sites. Butternut is shade intolerant (COSEWIC, 2003b).	Habitat potentially present in study area.	ELC and botanical inventory.
Dense Blazing Star	<i>Liatris spicata</i>	Vascular plants	THR	THR	S2	MNRF Species Occurrence Mapping, iNat (2022)	Occurs in open tallgrass prairies. It can grow in a range of moisture regimes from dry to very moist (COSEWIC 2010).	Habitat potentially present in study area.	ELC and botanical inventory.
False Hop Sedge	<i>Carex lupuliformis</i>	Vascular plants	END	END	S1	MNRF Species Occurrence Mapping	Associated with a variety of relatively open wetland habitats subject to periodic flooding. Known habitats consist mostly of small temporary forest ponds or marshes isolated in swamps (COSEWIC 2011).	Habitat potentially present in study area.	ELC and botanical inventory.
Green Dragon	<i>Arisaema dracontium</i>	Vascular plants	SC	SC	S3	MNRF Species Occurrence Mapping	Occurs along creek, river, and clay floodplains in moist to wet deciduous woodlands and thickets. Grows in shaded to partly shaded, seasonally wet areas (Donley et. al. 2013).	No habitat present in study area.	None needed.
Pygmy Pocket Moss	<i>Fissidens exilis</i>	Vascular plants	NAR	NAR	S1	MNRF Species Occurrence Mapping	Found largely on bare, moist, at least partly shaded, clay-based soil or loam. Collected on the forested banks of streams and ravines, floodplains, bluffs, beaches, roadsides, trails, and other environments where bare soil is exposed (COSEWIC 2016).	No habitat present in study area.	None needed.
Swamp Rose-mallow	<i>Hibiscus moscheutos</i>	Vascular plants	SC	SC	S3	MNRF Species Occurrence Mapping	Restricted to the Carolinian or Deciduous Forest region. All populations are confined to early successional wetlands that are associated with Lakes Erie, Ontario, or St. Clair. Most common in deep-water Typha marshes, along the interface with the open water in the cattail mat; and in meadow marshes (COSEWIC 2004).	No habitat present in study area.	None needed.

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Heather Dixon

From: Heather Dixon
Sent: Tuesday, March 12, 2024 9:30 AM
To: 'Stephen Dykstra'
Cc: Cheryl-Anne Ross; Bryan Bishop
Subject: RE: Draft Terms of Reference for a Scoped EIS 1665 Scotch Line Road

Hi,

Many thanks for the confirmation.

Best,

Heather Dixon, PhD (she/her) . Aquatic Ecologist
ABOUD & ASSOCIATES INC. 3-5 Edinburgh Road South . Guelph . Ontario . N1H 5N8
519.781.1581 www.aboudtng.com . heather@aboudtng.com

Aboud & Associates Inc. is located within the Between the Lakes Purchase (Treaty 3); the treaty lands and territory of the Mississaugas of the Credit.

From: Stephen Dykstra <sdykstra@woolwich.ca>
Sent: Monday, March 11, 2024 3:47 PM
To: Heather Dixon <Heather@aboudtng.com>
Cc: Cheryl-Anne Ross <Cheryl@aboudtng.com>; Bryan Bishop <BBishop@woolwich.ca>
Subject: Draft Terms of Reference for a Scoped EIS 1665 Scotch Line Road

Caution. Outside Sender

Heather,

The Township is satisfied.

Regards,

Stephen Dykstra MCIP, RPP
Senior Planner
Township of Woolwich

From: Heather Dixon <Heather@aboudtng.com>
Sent: Monday, March 11, 2024 9:33 AM
To: Stephen Dykstra <sdykstra@woolwich.ca>
Cc: Cheryl-Anne Ross <Cheryl@aboudtng.com>
Subject: [EXT] Draft Terms of Reference for a Scoped EIS for the proposed development of an industrial subdivision at 1665 Scotch Line Road, Elmira, Region of Waterloo, ON (AA23-232A)

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Good morning Stephen,

Can you please confirm whether the updated ToR for the proposed development of an industrial subdivision at 1665 Scotch Line Road, Elmira is acceptable to the Township?

Many thanks,

Heather Dixon, PhD (she/her) . Aquatic Ecologist
ABOUD & ASSOCIATES INC. 3-5 Edinburgh Road South . Guelph . Ontario . N1H 5N8
519.781.1581 www.aboudtng.com . heather@aboudtng.com

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From: Heather Dixon

Sent: Wednesday, February 28, 2024 11:26 AM

To: 'cfosterpengelly@grandriver.ca' <cfosterpengelly@grandriver.ca>; 'sdykstra@woolwich.ca' <sdykstra@woolwich.ca>; 'AHovingh@RegionofWaterloo.ca' <AHovingh@RegionofWaterloo.ca>

Cc: Cheryl-Anne Ross <Cheryl@aboudtng.com>; 'mlippert@mhbcplan.com' <mlippert@mhbcplan.com>

Subject: RE: Draft Terms of Reference for a Scoped EIS for the proposed development of an industrial subdivision at 1665 Scotch Line Road, Elmira, Region of Waterloo, ON (AA23-232A)

Good morning,

Following comments from the Region, GRCA, and Township, we have produced a revised draft Terms of Reference for a Scoped Environmental Impact Study (EIS) for the proposed development of an industrial subdivision at 1665 Scotch Line Road, Elmira, Region of Waterloo, ON. Please note the correction of the address from 1655 to 1665 Scotch Line Road. We would appreciate your review and comments on the revised Terms of Reference in order to finalize the proposed scope of work required for the Scoped EIS.

Many thanks,

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From: Heather Dixon

Sent: Monday, December 4, 2023 12:21 PM

To: cfosterpengelly@grandriver.ca; sdykstra@woolwich.ca; environmentalplanning@regionofwaterloo.ca

Cc: Cheryl-Anne Ross <Cheryl@aboudtng.com>; mlippert@mhbcplan.com

Subject: Draft Terms of Reference for a Scoped EIS for the proposed development of an industrial subdivision at 1655 Scotch Line Road, Elmira, Region of Waterloo, ON (AA23-232A)

Dear Mr. Foster-Pengelly, Mr. Dykstra, and the Region of Waterloo Planning Department,

Please see the attached draft Terms of Reference for a Scoped Environmental Impact Study (EIS) for the proposed development of an industrial subdivision at 1655 Scotch Line Road, Elmira, Region of Waterloo, ON. The draft Terms of Reference have been developed based on information received from the proponent, and a review of the applicable municipal, provincial, and federal guidelines that apply to this project. We would appreciate your review and comments on the Terms of Reference in order to finalize the proposed scope of work required for the Scoped EIS.

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Heather Dixon

From: Albert Hovingh <AHovingh@regionofwaterloo.ca>
Sent: Wednesday, February 28, 2024 1:37 PM
To: Heather Dixon; Chris Foster-Pengelly; sdykstra@woolwich.ca
Cc: Cheryl-Anne Ross; mlippert@mhbcplan.com
Subject: RE: Draft Terms of Reference for a Scoped EIS for the proposed development of an industrial subdivision at 1665 Scotch Line Road, Elmira, Region of Waterloo, ON (AA23-232A)

Caution. Outside Sender

Hi Heather,
The revised Terms of Reference is acceptable to the Region.
Albert

Albert Hovingh R.P.F.
Senior Planner, Stewardship Planning
Planning, Development and Legislative Services
Region of Waterloo
150 Frederick St. 8th Floor
Kitchener, ON N2G 4J3

Phone: 519-575-4813
Cell : 519-510-9505
e-mail: AHovingh@RegionofWaterloo.ca

From: Heather Dixon <Heather@aboudtng.com>
Sent: February 28, 2024 12:46 PM
To: Chris Foster-Pengelly <cfosterpengelly@grandriver.ca>; sdykstra@woolwich.ca; Albert Hovingh <AHovingh@regionofwaterloo.ca>
Cc: Cheryl-Anne Ross <Cheryl@aboudtng.com>; mlippert@mhbcplan.com
Subject: RE: Draft Terms of Reference for a Scoped EIS for the proposed development of an industrial subdivision at 1665 Scotch Line Road, Elmira, Region of Waterloo, ON (AA23-232A)

****EXTERNAL ALERT** This email originated from outside the Region of Waterloo.**

Hi Chris,

Thanks for the reply. We used the LIO watercourse layer for our mapping, which does not have that watercourse. Moving forward we will use the GRCA mapping.

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From: Chris Foster-Pengelly <cfosterpengelly@grandriver.ca>
Sent: Wednesday, February 28, 2024 12:39 PM
To: Heather Dixon <Heather@aboudtng.com>; sdykstra@woolwich.ca; AHovingh@RegionofWaterloo.ca
Cc: Cheryl-Anne Ross <Cheryl@aboudtng.com>; mlippert@mhbcplan.com
Subject: RE: Draft Terms of Reference for a Scoped EIS for the proposed development of an industrial subdivision at 1665 Scotch Line Road, Elmira, Region of Waterloo, ON (AA23-232A)

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Hi Heather,

The revised Terms of Reference is acceptable. One editorial comment, Figure No 1 does not appear to include the watercourse that runs along a portion of the west boundary of the property.

Thanks,
Chris

Chris Foster-Pengelly, M.Sc.
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www.grandriver.ca | [Connect with us on social media](#)

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Subject: RE: Draft Terms of Reference for a Scoped EIS for the proposed development of an industrial subdivision at 1665 Scotch Line Road, Elmira, Region of Waterloo, ON (AA23-232A)

Good morning,

Following comments from the Region, GRCA, and Township, we have produced a revised draft Terms of Reference for a Scoped Environmental Impact Study (EIS) for the proposed development of an industrial subdivision at 1665 Scotch Line Road, Elmira, Region of Waterloo, ON. Please note the correction of the address from 1655 to 1665 Scotch Line Road. We would appreciate your review and comments on the revised Terms of Reference in order to finalize the proposed scope of work required for the Scoped EIS.

Many thanks,

Heather Dixon, PhD (she/her) . Aquatic Ecologist
ABOUD & ASSOCIATES INC. 3-5 Edinburgh Road South . Guelph . Ontario . N1H 5N8
519.781.1581 www.aboudtng.com . heather@aboudtng.com

Aboud & Associates Inc. is located within the Between the Lakes Purchase (Treaty 3); the treaty lands and territory of the Mississaugas of the Credit.

From: Heather Dixon

Sent: Monday, December 4, 2023 12:21 PM

To: cfosterpengelly@grandriver.ca; sdykstra@woolwich.ca; environmentalplanning@regionofwaterloo.ca

Cc: Cheryl-Anne Ross <Cheryl@aboudtng.com>; mlippert@mhbcplan.com

Subject: Draft Terms of Reference for a Scoped EIS for the proposed development of an industrial subdivision at 1655 Scotch Line Road, Elmira, Region of Waterloo, ON (AA23-232A)

Dear Mr. Foster-Pengelly, Mr. Dykstra, and the Region of Waterloo Planning Department,

Please see the attached draft Terms of Reference for a Scoped Environmental Impact Study (EIS) for the proposed development of an industrial subdivision at 1655 Scotch Line Road, Elmira, Region of Waterloo, ON. The draft Terms of Reference have been developed based on information received from the proponent, and a review of the applicable municipal, provincial, and federal guidelines that apply to this project. We would appreciate your review and comments on the Terms of Reference in order to finalize the proposed scope of work required for the Scoped EIS.

Many thanks,

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PARKS AND OPEN SPACES
TRAIL SYSTEMS
GREEN ROOFS
CONTRACT ADMINISTRATION

EXPERT OPINION

OMB TESTIMONY
LEGAL PROCEEDINGS
PEER REVIEW
RESEARCH
EDUCATION

December 4, 2023

Our Project No.: AA23-232A

Sent By Email: cfosterpengelly@grandriver.ca

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&

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&

Planning Department
Region of Waterloo
150 Frederick Street
Kitchener, ON N2G 4J3

Re: 1655 Scotch Line Road, Elmira, ON Terms of Reference - Scoped Environmental Impact Study

Dear Mr. Foster-Pengelly, Mr. Dykstra, and the Region of Waterloo Planning Department:

This document outlines the Terms of Reference (ToR) of the scoped Environmental Impact Study (EIS) for a proposed industrial subdivision located at 1655 Scotch Line Road in Elmira, ON. Please review the terms and circulate to Grand River Conservation Authority (GRCA), Township of Woolwich (Township), and Region of Waterloo (Region) staff for discussion and approval.

BACKGROUND

The client requires a scoped EIS, prepared to the satisfaction of the GRCA, Township, and Region to develop the subject property municipally addressed as 1655 Scotch Line Road in Elmira, ON. The proposed works include an Industrial Subdivision and associated Stormwater Management, streets, and an open space block.

The Region of Waterloo Official Plan does not identify any regionally significant features within the property limits, a significant woodland is present on the adjacent lands, within the 120 m study and identified on *Figure 1*, which is considered a Core Environmental Feature. The Region of Waterloo requires the EIS to meet their standards as a study is required for development proposed adjacent to or within Core Environmental Features. If the wetland present is determined to be provincially significant, it would also be considered a Core environmental feature.

The property is zoned by the Township of Woolwich Zoning By-law 55-85 as Agricultural (A). GRCA mapping identifies a portion of a wetland feature on the subject property per GRCA mapping. Regulatory Floodplain associated with a small portion of a regulatory Watercourse is also present within the property limits. A portion of the property is within the associated GRCA regulated area.

BACKGROUND REVIEW

In preparing the Terms of Reference, the following sources were reviewed for background information:

- Aerial photography of the subject site,
- Draft Concept Plan, July 2023 by MHBC
- GRCA pre-consultation comments, August 9, 2023
- Official Plan Amendment, Zoning By-law Amendment, and Draft Plan of Subdivision Applications 1665 Scotch Line Road, October 3, 2023, Region of Waterloo
- GRCA mapping (Accessed October 3, 2023) of natural heritage features (e.g., regulation limit, Wetlands, Floodplain, ANSIs),
- Region of Waterloo Official Plan (2015),
- Township of Woolwich Official Plan (2022),
- Township of Woolwich Zoning By-law 55-86 (2022),
- Natural Heritage Information Center, Make-a-map, accessed November 28, 2023,
- Ontario Nature. Ontario Reptile and Amphibian Atlas: a citizen science project to map the distribution of Ontario's reptiles and amphibians. Accessed October 6, 2023,
- Ontario Breeding Bird Atlas. Bird Studies Canada, 2007. Accessed October 6, 2023,
- Federation of Ontario Naturalists, Atlas of the Mammals of Ontario. Accessed October 6, 2023,
- Ontario Nature. Ontario Butterfly Atlas, Accessed November 28, 2023,
- iNaturalist. Accessed November 28, 2023,
- eBird. Cornell Lab of Ornithology. Accessed November 28, 2023,
- Department of Fisheries and Oceans online mapping. Accessed November 28, 2023,

- Aquatic Resource Area Survey Points online mapping. Accessed November 28, 2023.

STUDY AREA

The study area includes the subject property and up to 120 m beyond the subject property where permission to access property is granted (*Figure 1*).

As needed, the lands adjacent to the study area may require further access to assist with understanding the features and functions of natural heritage features.

Lands outside of the field study area will be reviewed from existing background information (e.g., Region of Waterloo Official Plan).

PLANNING CONTEXT

Provincial Policy Statement (2020)

The Provincial Policy Statement indicates that natural heritage features shall be protected for the long term. Development may be permitted within or adjacent to Natural Heritage Features where an EIS demonstrates that there will be no negative impacts on the natural heritage resource. Consequently, an EIS is required to demonstrate that the proposed development project will not negatively impact the adjacent natural features.

Endangered Species Act, 2007

The Endangered Species Act (ESA) (Subsection 9(1)) states that:

“No person shall,

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

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

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

Clause 16(5) of the ESA states that:

“An agreement entered into under this section may require the authorized party under the agreement to pay a species conservation charge to the Agency in accordance with Section 20.3 if an impacted species under the agreement is also a conservation fund species.”

Clause 17(1) of the ESA states:

“The Minister may issue a permit to a person that, with respect to a species specified in the permit that is listed on the Species at Risk in Ontario List as an extirpated, endangered or threatened species, authorizes the person to engage in an activity specified in the permit that would otherwise be prohibited by Section 9 or 10. 2007, c. 6, s. 17(1).”

Fisheries Act, 1985

The study area contains fish-bearing waters in the form of Canagagigue Creek. This area and the fish within are protected under the Federal Fisheries Act, 1985. The Fisheries Act provides protection for the sustainability and ongoing productivity of Canada’s recreational, commercial, and Aboriginal fisheries.

Section 35 (1) of the Fisheries Act states that:

“No person shall carry on any work, undertaking or activity that results in the harmful alteration, disruption or destruction of fish habitat.”

The Fisheries Act requires that projects and activities avoid causing serious harm to fish and fish habitat unless authorized to do so by the Department of Fisheries and Oceans Canada (DFO). This applies to work conducted in or near waterbodies that support direct or indirect fish habitat. Within the context of the proposed development, any proposed actions that could impact fish or fish habitat would need to be assessed for compliance with the Fisheries Act. If it is determined that proposed actions will cause serious harm to fish, which cannot be mitigated for, then a Fisheries Act Authorization would be required.

Species at Risk Act (S.C. 2002, c. 29)

The Species at Risk Act (SARA) includes prohibitions to protect listed wildlife species. Prohibitions of SARA within the Province of Ontario generally apply to species present on federal lands and all aquatic Species at Risk (SAR).

SARA subsection 32 (1) and (2) states that:

No person shall kill, harm, harass, capture or take an individual of a wildlife species that is listed as an extirpated species, an endangered species or a threatened species.

And,

No person shall possess, collect, buy, sell or trade an individual of a wildlife species that is listed as an extirpated species, an endangered species or a threatened species, or any part or derivative of such an individual.

SARA subsection 33 also states that:

No person shall damage or destroy the residence of one or more individuals of a wildlife species that is listed as an endangered species or a threatened species, or that is listed as an extirpated species if a recovery strategy has recommended the reintroduction of the species into the wild in Canada.

SARA subsection 34(1), identifies where SARA does not apply in the Province:

With respect to individuals of a listed wildlife species that is not an aquatic species or a species of birds that are migratory birds protected by the Migratory Birds Convention Act, 1994, sections 32 and 33 do not apply in lands in a province that are not federal lands unless an order is made under subsection (2) to provide that they apply.

SARA subsection 58 (1) identified the restrictions to the destruction of critical Habitat, and states that:

Subject to this section, no person shall destroy any part of the critical habitat of any listed endangered species or of any listed threatened species — or of any listed extirpated species if a recovery strategy has recommended the reintroduction of the species into the wild in Canada — if...b) the listed species is an aquatic species; or....

Where impacts may occur or are expected, agreements or permits may be entered into with the appropriate ministry, as outlined in section 73, which states:

(1) The competent minister may enter into an agreement with a person, or issue a permit to a person, authorizing the person to engage in an activity affecting a listed wildlife species, any part of its critical habitat or the residences of its individuals.

(2) The agreement may be entered into, or the permit issued, only if the competent minister is of the opinion that

(a) the activity is scientific research relating to the conservation of the species and conducted by qualified persons;

(b) the activity benefits the species or is required to enhance its chance of survival in the wild; or

(c) affecting the species is incidental to the carrying out of the activity.

3) The agreement may be entered into, or the permit issued, only if the competent minister is of the opinion that

(a) all reasonable alternatives to the activity that would reduce the impact on the species have been considered and the best solution has been adopted;

(b) all feasible measures will be taken to minimize the impact of the activity on the species or its critical habitat or the residences of its individuals; and

(c) the activity will not jeopardize the survival or recovery of the species.

The Species at Risk Act requires that projects and activities avoid causing serious harm to Species at Risk or their habitat unless authorized to do so. This applies to work conducted in or near waterbodies that support species at risk fish, or their critical habitat. Any proposed actions that could impact species at risk or their habitat would need to be assessed for compliance. If it is determined that proposed actions will cause serious harm to species at risk that cannot be mitigated, then a Species at Risk Act Authorization would be required.

Waterloo Regional Official Plan (2015)

Following the Region of Waterloo adopting Regional Official Plan Amendment number 6 (ROPA 6) in April 2023, the subject property is entirely within the Elmira Township Urban Area and Designated Greenfield Area. The subject lands are identified as being within Prime Agricultural Area on the border of the Elmira Built-Up Area. Prime Agricultural Area designation identifies an area where prime agricultural lands predominate. This designation includes areas of prime agricultural lands and associated areas of Canada Land Inventory Class 4 to 7 soils, and additional areas where there is a local concentration of farms that exhibit characteristics of ongoing agriculture. The Greenlands Network is present in the study area (i.e., adjacent to the subject lands) in the form of a Core Environmental Feature (the Significant Woodland in the west of the study area) and Fish Habitat. Other Core Environmental Features (e.g., Significant Habitat of Endangered or Threatened Species) may be identified through field investigations.

Section 7.C.9 states:

“Development or site alteration will not be permitted within Core Environmental Features, except for:

- a) forest, fish or wildlife management and conservation;*
- b) flood or erosion control projects demonstrated to be in the public interest and for which no other alternative is feasible;*
- c) minor alterations to legal non-conforming land uses within Core Environmental Features;*
- d) infrastructure projects in accordance with Policies 7.C.12 and 7.C.13; or*
- e) mineral aggregate operations in accordance with the policies in Chapter 9;*

Any application for development or site alteration for the above uses will require the submission of an Environmental Impact Statement, to the satisfaction of the Region, to determine the mitigation measures to be implemented, as appropriate, through the development review process.”

Section 7.C.10 states:

“Development or site alteration will only be permitted on lands contiguous to a Core Environmental Feature where an Environmental Impact Statement, or similar study, submitted in accordance with the policies in Section 7.G has determined to the satisfaction of the Region, Area Municipalities, the Grand River Conservation Authority and/or the Province, as appropriate, that approval of the proposed development or site alteration would not result in adverse environmental impacts on the features and ecological functions of the Core Environmental Feature. The Region may require conditions of approval to implement such recommendations.”

Section 7.C.11 states:

“An Environmental Impact Statement submitted in accordance with Policies 7.C.9 or 7.C.10 will identify appropriate buffers to Core Environmental Features, to the satisfaction of the Region, in consultation with Area Municipalities and the Grand River Conservation Authority. Such buffers will not only serve to protect Core Environmental Features from adverse environmental impacts but will also provide opportunities for net habitat enhancement to enhance or, wherever feasible, restore the ecological functions of the Core Environmental Feature. The location, width, composition and use of buffers will be in accordance with the approved Environmental Impact Statement, with buffers being a minimum of 10 metres as measured from the outside boundary of the Core Environmental Feature and established and maintained as appropriate self-sustaining native vegetation”.

Woolwich Township Official Plan (2022 Consolidation)

The majority of the subject property is within the Township Urban Area and is designated as Industrial within the East Industrial Policy Area, as per Schedule A – Elmira Land Use Plan. The northeastern corner of the subject property is outside of the Township Urban Area and is designated as Prime Agricultural Area. Map 5.4 identifies the majority of the site as occurring within the Settlement Areas boundaries, and as Designated Greenfield Area. Along the western edge of the property, Canagagigue Creek and its associated wetlands and floodplain are designated as Environmental Protection and Natural Hazards respectively in Schedule A. Map 13.1 identifies the presence of the Greenlands Network in the study area in the form of Core Environmental Features (the significant woodland), Potential Fish Habitat (Canagagigue Creek), and Supporting Environmental Features (the wetlands and creek). Map 13.2 identified the presence of Floodplain Area-One Zone in the study area.

Section 5.7.3 states that:

“The Township, in collaboration with the Region, will ensure that development occurring in the designated greenfield areas of the Elmira and St. Jacobs Township Urban Areas will be planned and developed to:

- a) Conform to the general development policies set out in Section 5.5;*
- b) Establish a network of continuous sidewalks, community trails and bicycle pathways that provide direct, safe, comfortable, and convenient linkages within the neighbourhood and externally to other neighbourhoods, including linkages to transit stops, employment areas, school sites, food destinations and community facilities;*
- c) Provide a development pattern and road network that supports the integration of transit services, where planned to be available in the future;*
- d) Provide any required easements, land dedications and pedestrian amenities to support walking, cycling and existing or planned transit services for everyday activities;*
- e) Discourage the use of noise attenuation walls and berms, where appropriate, through the use of passive noise attenuation measures; and*
- f) Support development on municipal water and wastewater services.”*

Section 13.2.4 states:

“Development applications or site alteration will be prohibited on lands where elements of the Greenlands Network have not been adequately identified and evaluated through a watershed/subwatershed study or any other appropriate natural heritage review, until such time as an Environmental Impact Statement has been prepared by an owner/applicant in accordance with the policies of this Plan and/or the Regional Official Plan, to identify and evaluate any such elements located on the subject lands and, wherever appropriate, contiguous lands.”

Section 13.7.5 states:

“Development applications, site alteration or infrastructure projects will only be permitted on lands contiguous to a Core Environmental Feature where an Environmental Impact Statement, or similar study, submitted in accordance with the policies in Section 13.13 has determined to the satisfaction of the Township, the Region, the Grand River Conservation Authority and/or the Province, as appropriate, that approval of the proposed development or site alteration would not result in adverse environmental impacts on the features and ecological functions of the Core Environmental Feature.”

Section 13.8.3 states:

“Watershed/subwatershed studies, Environmental Impact Statements and other appropriate studies will be used to determine appropriate means to implement fishery policy and the specification of protective mitigation measures.”

Section 13.8.4 states:

“Any requirements imposed through watershed/subwatershed studies, Environmental Impact Statements and other appropriate studies must be implemented by the proponent to the satisfaction of the Federal Ministry of Fisheries and Oceans or its delegate.”

Section 13.9.3 states:

“The submission of an Environmental Impact Statement for review by the Township in consultation with the Region and the Grand River Conservation Authority will be required for all development proposed within or adjacent to a Supporting Environmental Feature, not already prohibited through Grand River Conservation Authority Policy. For the purposes of interpretation of this policy, “adjacent” will be defined as lands within 120 metres of the boundary of the Supporting Environmental Feature.”

Section 13.14.5 states:

“Within the Natural Hazards designation, development or site alteration will not be permitted within:

- a) Hazardous lands which are impacted by flooding hazards and/or erosion hazards”*

Section 13.14.14.2 states:

“No new development is permitted within the Flood Plain”

Woolwich Township Zoning By-law 55-85

The subject property is currently zoned as Agricultural (A) and is subject to site specific exemption A93.

Grand River Conservation Authority

A portion of the subject property is within the GRCA Regulation Limit and contains unevaluated wetlands, a watercourse, and a one-zone floodplain.

Section 8.1.1 states:

“Development will not be permitted within the Riverine Flooding Hazard except in accordance with the policies in Sections 7.1.2-7.1.3 – General Policies and Sections 8.1.2-8.1.29 – Policies for One-Zone Policy Areas.”

Section 8.4.4 states:

“Development within a naturally occurring wetland may be permitted where the wetland is less than 0.5 hectares (1.24 acres), and it can be demonstrated that the wetland is not:

- a) part of a Provincially Significant Wetland,*
- b) located within a floodplain or riparian community,*
- c) part of a Provincially or municipally designated natural heritage feature, a significant woodland, or hazard land,*
- d) a bog, fen,*
- e) fish habitat,*
- f) significant wildlife habitat,*
- g) confirmed habitat for a Provincially or regionally significant species as determined by the Ministry of Natural Resources and Forestry or as determined by the municipality,*
- h) part of an ecologically functional corridor or linkage between larger wetlands or natural areas,*
- i) part of a groundwater recharge area, or a groundwater discharge area associated with any of the above.”*

Section 8.4.9 states:

“Development within an area of interference less than or equal to 30 metres (100 feet) from a wetland may be permitted in accordance with the policies in Sections 7.1.2-7.1.3 – General Policies, and where an Environmental Impact Study demonstrates that:

- a) there are no negative or adverse hydrological or ecological impacts on the wetland,*
- b) all development is located outside of the wetland and maintains as much setback as feasible,*
- c) development is located above the water table, except as specified in Section 8.4.11, and*
- d) septic systems are located a minimum of 15 metres (50 feet) from the wetland and 0.9 metres (3 feet) above the annual maximum water table.”*

Section 8.4.10 states:

“Development within an area of interference between 30 metres (100 feet) and 120 metres (394 feet) from a wetland, which in the opinion of the GRCA may result in hydrologic impact, may be permitted where an Environmental Impact Study demonstrates that policies in Sections 7.1.2-7.1.3 – General Policies are met.”

BACKGROUND REVIEW

Additional background natural heritage information related to the subject lands and adjacent lands identified the following information:

1. Review of the Ontario Reptile and Amphibian Atlas identified 14 species that are known to occur or have historically occurred within the 10 km x 10 km square that contains the study area (17NJ32). This list includes three species which are considered species of conservation concern: Midland Painted Turtle, Snapping Turtle, and Milksnake.
2. The Natural Heritage Information Center identified six SAR within the 1 km x 1 km square that contains the study area and the surrounding squares (17NJ3726, 17NJ3725, 17NJ3724, 17NJ3723, 17NJ3626, 17NJ3526, 17NJ3623, 17NJ3523, 17NJ3624, 17NJ3524, 17NJ3625, 17NJ3525): Bobolink, Eastern Wood-pewee, Red-headed Woodpecker, Wood Thrush, Silver Shiner, and Gypsy Cuckoo Bumble Bee.
3. The Ontario Breeding Bird Atlas identified 82 species that are known to occur or have historically occurred in the 10 km x 10 km square that contains the study area (17NJ32). This list includes seven SAR: Bank Swallow, Barn Swallow, Bobolink, Chimney Swift, Eastern Meadowlark, Eastern Wood-pewee, and Wood Thrush.
4. The Ontario Mammal Atlas indicates 14 mammal species that are known to occur or have historically occurred in the 10 km x 10 km square that contains the study area (17NJ32). No SAR were identified, although it should be noted that SAR bats can be present anywhere in Ontario,
5. Review of the Atlas of the Butterflies of Ontario identified 31 species that are known to occur or have historically occurred in the 10 km x 10 km square that contains the study area (17NJ32), including one SAR: Monarch.
6. iNaturalist observations restricted to research grade within 2 km of the centre of the subject property identified 302 species, eight of which are SAR: Olive-sided Flycatcher, Peregrin Falcon, Rusty Blackbird, Monarch, Wavy-rayed Lampmussel, Snapping Turtle, Dense Blazing Star, and Butternut. It should be noted that some SAR locations are obscured in iNaturalist, and may not actually occur within the vicinity of the study area.
7. eBird records from the nearby Elmira-Lions Ring Trail Hotspot (750 m west from the centre of the site) indicate the recent presence of 123 species, including seven SAR: Bank Swallow, Barn Swallow, Chimney Swift, Eastern Wood-pewee, Olive-sided Flycatcher, Rusty Blackbird, and Wood Thrush.

8. The online Fisheries and Oceans Canada (DFO) mapping system was consulted in the background review. A review for SAR Critical Habitat and species presence was completed in a 1 km radius around the study area. No critical habitat for any species was identified in the search radius, and no SAR were identified as being present or potentially present.
9. The Aquatic Resources Area (ARA) Survey Point and Line Segment mapping indicated the presence of 36 species of fish within 1 km of the study area. None of these species were SAR. Northern Pike spawning was also identified as occurring within the vicinity of the study area.

This information indicates that there is a potential presence of additional natural heritage features and constraints that may require investigation and/or comment.

PROPOSED TERMS OF REFERENCE

Scoped Environmental Impact Study

To fulfill the requirements of this study, we will:

A. Terms of Reference

1. Review background information (e.g., proposed activity, relevant sections of Natural Heritage System components of the Township of Woolwich OP, Region OP, investigation of wildlife atlases and NHIC).
2. Prepare a Terms of Reference and provide to the Township of Woolwich, Region of Waterloo and GRCA for approval.
3. Complete a MECP Request for Information to acquire any available Species at Risk information.

B. Field Assessment

To fulfill the requirements of the approved Terms of Reference, AA will:

1. Identify the limits of the designated natural heritage features (e.g., woodlands, wetlands) within the property boundaries.
2. Wetland Limit: Confirm the boundary of the GRCA wetland within the study area, where present within the property boundary, and coordinate with the GRCA to field-verify the staked boundary.
3. Conduct an aquatic assessment and aquatic habitat investigation to characterize the present watercourse and identify any fisheries constraints including a review of substrates and suitability for species at risk.
4. Complete a leaf-off Bat Habitat Assessment, review trees meeting the MNRF criteria (>10cm DBH) within the proposed development and immediately adjacent area and identify trees that meet the criteria for bat maternity habitat and require consideration under the ESA. Any buildings proposed for removal will also be reviewed for candidate bat habitat.
5. Conduct a breeding bird survey of the study area, following the protocol of the Ontario Breeding Bird Atlas (Bird Studies Canada, 2004) and the MNRF Grassland Bird Protocol, and including both point counts and area searches. The breeding bird survey requires three, focused, early morning site visits during the period between late May and early July.
6. Conduct one site visit to characterize vegetation communities using the ELC system (MNRF) of the Study Area.
7. Complete two site visits to carry out a two-season (Spring & Summer) botanical inventory of the site.
8. Investigate the study area for the presence of significant wildlife habitat.
9. Investigate the study area for presence of species at risk and species at risk habitat.
10. Record observations of incidental wildlife during site visits.

C. Scoped Environmental Impact Study (EIS)

11. Analyze findings and prepare a map that shows:
 - a. Identified natural heritage features, and functions and landscape level features (e.g., linkages, wetlands).
 - b. Proposed buffers to natural heritage features
 - c. The proposed site plan (location of building, amenities, drive)
 - d. ELC vegetation communities
 - e. Other noteworthy features as needed
 - f. Locations of other natural heritage features from background literature searches (e.g., mammal atlas, herpetofaunal atlas, Township's OP).
12. Conduct an impact assessment by reviewing the proposed development's direct, indirect, and induced (i.e., residual, ongoing) impacts on the natural features. Provide an opinion about the location of the components of the general concept plan to reduce/avoid impacts to natural heritage features. Show the configuration of the proposed development on the subject property and assess for minimizing impacts to ecological features and functions, including rationale for proposed buffers. This will involve discussions with the proponent and AA.
13. Provide policy rationale for expected impacts to natural heritage features e.g., removal of trees and grading to accommodate the site plan.
14. Edge Management Guidelines and Compensation: Provide general recommendations of where and why naturalization treatments may be needed to protect vegetation features (e.g., woodlands, wetlands) adjacent to the development activity.
15. Prepare a report of the EIS that includes background information, methods, existing conditions, proposed development, discussion and interpretation of other relevant studies such as the Stormwater Management Plan for the site, impact assessment and mitigation measures, and appendices of field studies (e.g., ELC, flora list).
16. Submit EIS to client for review followed by distribution to Township, Region and GRCA.

I look forward to your response regarding these proposed terms of reference. If you require clarification, please do not hesitate to email, or call me at 519.781.1581.

Yours truly,

ABOUD & ASSOCIATES INC.



Heather Dixon, PhD

Aquatic Ecologist
heather@aboudtng.com

Figure 1. Study Area

Appendix 1. Candidate Significant Wildlife Habitat

Appendix 2. Candidate Species at Risk Habitat

Cc: Meghan Lippert, MHBC (email)
Cheryl-Anne Ross, Aboud & Associates Inc. (email)



LEGEND

- | | | |
|--|---|---|
|  SUBJECT LANDS |  WETLAND |  ESTIMATED FLOODPLAIN |
|  STUDY AREA |  SIGNIFICANT WOODLAND |  GRCA REGULATION LIMIT |
|  CANAGAGIGUE CREEK |  ENGINEERED FLOODPLAIN | |

Information Sources:
1. Waterloo Region Orthophotography,
Accessed October 2023.
2. Grand River Information Network,
Accessed October 2023.
3. Land Information Ontario,
Accessed October 2023.

Title:

STUDY AREA

Project:

1655 SCOTCH LINE
ELMIRA, ON



Date: OCTOBER 2023

Project: AA23-232A

Scale: 1 : 7000


ABOOD & ASSOCIATES INC.
Consulting Arborists • Ecologists • Landscape Architects
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Figure No:

1

#	Significant wildlife habitat (SWH)	Candidate SWH type	Candidate SWH criteria	Criteria for SWH confirmation	Candidate SWH present (Field survey type required)
1	Waterfowl stopover and Staging Areas (terrestrial)	Seasonal Concentration Areas	- Fields with Sheet water in spring (incl. agricultural)	- Mixed species aggregations of 100 or more individuals confirms SWH	None, no habitat present.
2	Waterfowl Stopover and Staging (Aquatic)	Seasonal Concentration Areas	- Ponds, marshes, lakes, bays, coastal inlets and watercourses and reservoirs - SWTP & SWMP are not SWH	- Aggregations of 100 or more listed species for 7 days (i.e. >700 waterfowl use days) confirms SWH	None, no habitat present.
3	Shorebird Migratory stopover	Seasonal Concentration Areas	- Shorelines of Lakes, rivers, wetlands, beaches, bars; seasonally flooded, muddy, and un-vegetated shoreline habitat	- 3 or more listed species and >1000 shorebird use days, or >100 whimbrel, confirms SWH	None, no habitat present.
4	Raptor Wintering Area	Seasonal Concentration Areas	- Combination of upland field and woodland habitat >20ha total (includes >15ha upland field) - least disturbed sites, idle, fallow or lightly grazed field/meadow best	- 1 or more Short-eared Owl, or at least 10 individuals and 2 listed species for a minimum of 20 days, and 3 of 5 years, confirms SWH	Candidate habitat present. Need to confirm upland field usage.
5	Bat Hibernacula	Seasonal Concentration Areas	- Caves, mine shafts, underground foundations, karsts. - buildings are not SWH	- All sites with confirmed hibernating bats, confirms SWH	None, no habitat present.
6	Bat Maternity Colony	Seasonal Concentration Areas	- All forested ecosites, FOD, FOC, FOM, SWD, SWM, SWC with >10/ha trees (>25cm DBH) in early stages of decay (class 1-3) - buildings are not SWH	- >10 Big Brown Bats, >20 Little Brown Myotis, >5 adult female Silver-haired Bats confirms SWH	Yes, bat habitat assessment will be completed.
7	Turtle Wintering Area	Seasonal Concentration Areas	- Areas with permanent water deep enough not to freeze, with mud/soft substrates	- 5 over-wintering Midland Painted Turtles, 1 or more Northern Map Turtle or Snapping Turtle confirms SWH	None, no habitat present.
8	Reptile Hibernaculum	Seasonal Concentration Areas	- Sites below the frost line; rock barren, crevice and cave, talus, alvar, rock piles, slopes, stone fences, and crumbling foundations	- Presence of hibernacula with minimum 5 individuals of 1 snake species/ individuals of 2 or more species confirms SWH. - Congregations of a minimum of 5 snakes of 1 species/ individuals of 2 or more snake species, near potential hibernacula on sunny warm days in spring and fall confirms SWH	None, no habitat present.

#	Significant wildlife habitat (SWH)	Candidate SWH type	Candidate SWH criteria	Criteria for SWH confirmation	Candidate SWH present (Field survey type required)
9	Colonially-nesting Bird Habitat (cliff/bank)	Seasonal Concentration Areas	- Eroding banks, sandy hills, borrow pits, steep slopes, sand piles, cliff faces, bridge abutments, silos, barns	- 1 or more nest sites with 8 or more Cliff Swallow or, 50 Bank Swallow and Rough-winged Swallow pairs during the breeding season.	None, no habitat present.
10	Colonially-nesting Bird Habitat (Tree/shrub)	Seasonal Concentration Areas	- Live or dead standing trees in wetlands, lakes, islands and peninsulas, occasionally shrubby and emergent vegetation	- 5 or more active Great-blue Heron or other listed species nests	None, no habitat present.
11	Colonially-nesting Bird Habitat (Ground)	Seasonal Concentration Areas	- Rocky islands or peninsulas within a lake or large river (natural or artificial)	- >25 active nests of Herring Gull, Ring-billed Gull, >5 active nests of Common Tern, or >2 active nests of Caspian Tern. 5 or more pairs of Brewer's Blackbird. Any active nesting colony of Little Gull, Great Black-backed Gull.	None, no habitat present.
12	Migratory Butterfly Stopover Area	Seasonal Concentration Areas	- At least 10ha, with undisturbed field/meadow and forest or woodland edge habitat present, within 5km of Lake Ontario.	- Presence of Monarch use days >5000 or >3000 where there is a mix of Monarch with Painted Ladies or White Admirals	None, no habitat present.
13	Land bird Migratory Stopover Area	Seasonal Concentration Areas	- Woodlots >5ha in size - within 5km of Lake Ontario	- Use by >200 birds/day, with >35species, with at least 10sp recorded on 5 different survey dates.	None, no habitat present.
14	Deer Yarding Areas	Seasonal Concentration Areas	- ELC communities providing Thermal cover (FOM, FOC, SWM, SWC, CUP2, CUP3, FOD3, CUT)	- Deer yards are managed by MNRF, available through district offices and LIO.	None identified in LIO mapping.
15	Deer Winter Congregation Areas	Seasonal Concentration Areas	- All forested ecosites >100ha - Conifer Plantations <50ha may be used	- Deer management is the responsibility of the MNRF. - Contact MNRF or LIO for known deer winter areas.	None, identified in LIO mapping.
16	Cliffs & Talus Slopes	Rare Vegetation Communities	- Cliff: vertical to near vertical bedrock >3m in height - Talus slope: rock rubble at the base of a cliff made up of coarse rocky debris	- Confirm any ELC Vegetation Type for Cliffs or Talus Slopes	None, no habitat present.
17	Sand Barren	Rare Vegetation Communities	- Exposed, sparsely vegetated & caused by lack of moisture, fires, and erosion.	- area >0.5ha in size - Confirm any ELC vegetation Type for Sand Barren - Not dominated by exotic or introduced species	None, no habitat present.

#	Significant wildlife habitat (SWH)	Candidate SWH type	Candidate SWH criteria	Criteria for SWH confirmation	Candidate SWH present (Field survey type required)
18	Alvar	Rare Vegetation Communities	- Level, mostly un-fractured calcareous bedrock feature, overlain by a thin veneer or soil	- area >0.5ha in size - Field Studies that identify four of the five Alvar Indicator Species - Not dominated by exotic or introduced species	None, no habitat present.
19	Old Growth Forest	Rare Vegetation Communities	- >30ha forests with at least 10ha interior habitat and multi-layered canopy	- Dominant Tree Species >140 years old - No recognizable signs forestry practices (old stumps)	None, no habitat present.
20	Savannah	Rare Vegetation Communities	- Tall Grass Prairie Habitat with 25%-60% Tree cover - Remnant sites such as Railway Right of ways are not SWH	- No minimum size and must be restored to a natural state. - Confirm one or more savannah indicator species. - Not dominated by exotic or introduced species	None, no habitat present.
21	Tallgrass Prairie	Rare Vegetation Communities	- Ground cover dominated by prairie grasses with <25% tree cover. - Remnant sites such as Railway Right of ways are not SWH	- No minimum size and must be restored to a natural state. - Confirm one or more prairie indicator species. - Not dominated by exotic or introduced species	None, no habitat present.
22	Other Rare Vegetation Communities	Rare Vegetation Communities	- All Provincially Rare S1, S2, S3 Vegetation Communities (Appendix M of SWHTG)	- Field Studies Confirming ELC vegetation type is a rare vegetation community	None, no habitat present.
23	Waterfowl Nesting Areas	Specialized Habitats for Wildlife	- Upland Habitat, adjacent to Wetland ELC ecosites (except SWC, SWM) - Extends 120m from a wetland (>0.5ha) and any small wetlands (<0.5ha) within a cluster of at least 3. - Upland area at least 120m wide	- Presence of 3 or more nesting pairs of listed species excluding Mallards - Presence of 10 or more nesting pairs including mallards - Any active Black Duck nesting site	None, no habitat present.
24	Bald Eagle or Osprey Nesting, Foraging and Perching Habitat	Specialized Habitats for Wildlife	- Forest communities, adjacent to riparian areas - Osprey nests usually at top of tree - Bald Eagle nest usually in super canopy tree in a notch within canopy	- Studies confirm one or more active Bald Eagle or Osprey nest. - Alternate nests included in SWH. - Nests must be used annually, if found inactive, must be known inactive at least 3 years, or suspected unused for 5 years if unknown	None, no habitat present.

#	Significant wildlife habitat (SWH)	Candidate SWH type	Candidate SWH criteria	Criteria for SWH confirmation	Candidate SWH present (Field survey type required)
25	Woodland Raptor Nesting Habitat	Specialized Habitats for Wildlife	- Forested communities, forested swamp communities and cultural Plantations - Natural Forested/conifer plantations >30ha with >10ha interior habitat (200m buffer)	- One or more active nest of listed species	None, no habitat present.
26	Turtle Nesting Areas	Specialized Habitats for Wildlife	- Exposed Mineral soil (sand or gravel) adjacent (<100m) or within shallow marsh, shallow submerged, shallow floating, bog or fen communities. - Located in open sunny areas, away from roads and less prone to predation - Municipal and provincial road shoulders are not SWH.	- Confirm 5 or more nesting Midland Painted Turtles, 1 or more nesting Northern Map Turtle or Snapping Turtle	None, no habitat present.
27	Seeps and Springs	Specialized Habitats for Wildlife	- Areas where ground water comes to the surface. - Any forested area within the headwaters of a stream or river system	- Confirm site with 2 or more seeps/springs.	Adjacent woodland to be reviewed where access available during ELC/botanical.
28	Amphibian Breeding Habitat (woodland)	Specialized Habitats for Wildlife	- Breeding pools within woodlands - Wetland, pond, or pool >500m² within or adjacent (<120m) to a woodland. - Woodlands with permanent ponds, or those with water until mid-July more likely to be used.	- Confirm Breeding population of 1 or more listed newt/salamander species, 2 or more of the listed frog species with at least 20 individuals (adults or egg masses), 2 or more of the listed frog species with call code levels of 3. - Wetland adjacent to woodlands includes travel corridor connecting features as SWH.	None, no habitat present.
29	Amphibian Breeding Habitat (Wetland)	Specialized Habitats for Wildlife	- Swamp, marsh, fen, bog, open aquatic, and shallow aquatic ELC communities. - Typically isolated from woodlands (>120m) but includes larger wetlands with primarily aquatic species (bull frogs) that are adjacent to woodlands. - Wetlands >500m² - Presence of shrubs & logs - Bullfrogs require permanent water bodies and abundant emergent vegetation.	- Confirm Breeding populations of 1 or more listed newt/salamander species, or 2 or more listed frog/toad species with at least 20 individuals (adults or egg masses), or 2 or more listed frog/toad species with a call code level of 3 - Or any wetland with confirmed breeding Bullfrog.	None, no habitat present.

#	Significant wildlife habitat (SWH)	Candidate SWH type	Candidate SWH criteria	Criteria for SWH confirmation	Candidate SWH present (Field survey type required)
30	Area-sensitive Breeding Bird Habitat	Specialized Habitats for Wildlife	- Habitats where interior breeding birds are breeding. - Large mature (>60 years) forest stands or woodlots >30ha. - Forest and swamp ELC communities - Interior habitat at least 200m from edge	- Presence of nesting or breeding pairs of 3 or more of the listed species - Any site with Cerulean Warbler or Canada Warbler is SWH	None, no habitat present.
31	Marsh Bird Breeding Habitat	Habitats of Species of Conservation Concern	- Some meadow marsh, shallows submerged, shallow floating, mixed shallow floating, fen, and bog communities (see SWH Ecoregion guide for specifics) - Nesting occurs in wetlands; all wetland habitat is considered with presence of shallow water with emergent aquatic vegetation - Green heron at edge of water sheltered by shrubs and trees.	- 5 or more nesting pairs of Sedge Wren or Marsh Wren, 1 pair of Sandhill Crane, or breeding by any combination of 5 or more of the listed species - Any Wetland with 1 or more breeding pair Black Tern, Trumpeter Swan, Green Heron or Yellow Rail	None, no habitat present.
32	Open Country Bird Breeding Habitat	Habitats of Species of Conservation Concern	- Grassland area >30ha (natural & cultural fields and meadows) - Grasslands not class 1 or 2 agriculture (no row crops or intensive hay or livestock pasturing) - Mature hayfields or pasture at least 5 years old	- Nesting or breeding of 2 or more of the listed species. - Field with 1 or more Short-eared Owls	Breeding bird surveys.
33	Shrub/Early Successional Bird Breeding Habitat	Habitats of Species of Conservation Concern	- Cultural thickets, savannah, and woodland habitat - Large field area succeeding to shrub and thicket habitat >10ha in size - Patches of shrub ecosite may be complexed into larger old field ecosites for some species	- Confirm nesting or breeding of 1 of the listed indicator species and at least 2 of the common species - Habitat with Yellow-breasted Chat Or Golden-winged Warbler is SWH	None, no habitat present.

#	Significant wildlife habitat (SWH)	Candidate SWH type	Candidate SWH criteria	Criteria for SWH confirmation	Candidate SWH present (Field survey type required)
34	Terrestrial Crayfish	Habitats of Species of Conservation Concern	- Meadow marsh, shallow marsh, swamp thicket, deciduous swamp, and mixed swamp communities - Cultural meadow with inclusions of meadow marsh may be used - Wet edges of marshes and wet meadows should be surveyed for crayfish	- Presence of 1 or more individuals of listed species or their chimneys in suitable habitat	ELC and botanical inventory.
35	Special Concern & Rare Wildlife Species	Habitats of Species of Conservation Concern	- All Special concern and Provincially Rare plant and animal species - Where an element occurrence is identified within a 1 or 10km grid for a species listed, linking candidate habitat on the site must be completed to ELC ecosites	- Assessment/inventory of site for identified special concern or rare species completed during time of year when species is present or easily identifiable. - Habitat must be easily mapped and cover an important life stage component (specific nesting habitat, foraging)	Suitable habitat for special concern and provincially rare species present. ELC, botanical inventory, breeding bird surveys, and aquatic habitat assessment required.
36	Amphibian Movement Corridor	Wildlife Movement Corridors	- Corridors may occur in all ecosites associated with water. - Presence of significant amphibian breeding indicates the requirement for identifying corridors. - Movement corridors between breeding habitat and summer habitat	- Corridors typically include areas with native vegetation, with several layers of vegetation, unbroken by roads, waterways or waterbodies are most significant - At least 15 of vegetation on both sides of the waterway or up to 200m wide of woodland habitat with gaps of <20m - Shorter corridors are more significant than longer, but amphibians must be able to get to and from their summer breeding habitat	None, no habitat present.
37	Deer Movement Corridor	Wildlife Movement Corridors	- May occur in all forested ecosites. - Determined when deer wintering habitat is confirmed as SWH	- Corridors at least 200m wide with gaps <20m leading to wintering habitat. - Unbroken by roads and residential areas - Shorter corridors are more significant	None, no habitat present.

Common name	Scientific name	Group	SARO	Cosewic	S-rank	Background sources	Habitat requirements	Candidate habitat in study area	Field studies recommended
Jefferson Salamander	<i>Ambystoma jeffersonianum</i>	Amphibians	END	END	S2	MNRF Species Occurrence Mapping	Adults are found within upland deciduous or mixed forest habitat with suitable breeding ponds, such as kettle ponds, natural basins and limestone sink holes, which can be permanent or ephemeral, and include appropriate egg attachment sites and lack of predatory fish (COSEWIC 2010).	No habitat present in study area.	None needed.
Unisexual Ambystoma, Jefferson dependent population	<i>Ambystoma laterale</i> - (2) <i>jeffersonianum</i>	Amphibians	END	END	S2	MNRF Species Occurrence Mapping	Unisexual ambystoma share the same habitat requirements as Jefferson salamander, as they rely on Jefferson salamander for sperm donation to breed (COSEWIC 2016).	No habitat present in study area.	None needed.
Western Chorus Frog – Great Lakes / St. Lawrence - Canadian Shield Population	<i>Pseudacris triseriata</i> pop. 2	Amphibians	NAR	THR	S4	MNRF Species Occurrence Mapping	Generally found in lowland communities, such as swamps, inhabiting lowland shrubs and grasses in the community, near breeding habitat. Breeding occurs in lowland, ephemeral ponds, devoid of predatory fish species (COSEWIC 2008a).	No habitat present in study area.	None needed.
Gypsy Cuckoo Bumble Bee	<i>Bombus bohemicus</i>	Butterflies, bees, damselflies, dragonflies & insects	END	END	S1S2	NHIC	Occurs in diverse habitats, including open meadows, mixed farmlands, urban areas, boreal forest, and montane meadows. Feed on pollen and nectar from a variety of plant genera (COSEWIC 2014).	Habitat potentially present in study area.	ELC and botanical inventory.
Monarch	<i>Danaus plexippus</i>	Butterflies, bees, damselflies, dragonflies & insects	SC	SC	S2N, S4B	MNRF Species Occurrence Mapping, OBA (2022), iNat (2023)	Requires milkweed for larval feeding, other wildflower species are also important for adult feeding when milkweed is not in flower; often found in abandoned farmland, along roadsides, and other open spaces (COSEWIC 2010b).	Habitat potentially present in study area.	ELC and botanical inventory.
West Virginia White	<i>Pieris virginenis</i>	Butterflies, bees, damselflies, dragonflies & insects	SC	NAR	S3	MNRF Species Occurrence Mapping	Found in rich deciduous and mixed forests and swamps with a poorly vegetated shrub layer. The larvae feed only on the leaves of a few host plants, including the Two-leaved Toothwort (<i>Cardamine diphylla</i>) and cut-leaved toothwort (Burke 2013).	No habitat present in study area.	None needed.
Yellow-banded Bumble Bee	<i>Bombus terricola</i>	Butterflies, bees, damselflies, dragonflies & insects	SC	SC	S3S5	MNRF Species Occurrence Mapping	Occur in a diverse range of habitat, including mixed woodlands, farmlands, urban areas, montane meadows, prairie grasslands and boreal habitats. Queens overwinter underground and in decomposing organic material such as rotting lots (COSEWIC 2015).	Habitat potentially present in study area.	ELC and botanical inventory.
Acadian Flycatcher	<i>Empidonax Virens</i>	Birds	END	END	S2S3B	MNRF Species Occurrence Mapping	Breeds in mature deciduous and mixed forests, using tableland forests and ravine habitats. Nests are often located over vernal pools, trails or bare ground in tablelands or over streams in ravines (COSEWIC 2010d).	No habitat present in study area.	None needed.
Bank Swallow	<i>Riparia riparia</i>	Birds	THR	THR	S4B	MNRF Species Occurrence Mapping, OBBA, eBird (2023)	Breeds in a variety of natural and artificial bank type habitat, such as bluffs, stream and river banks, sand and gravel pits, piles of sand, topsoil and other material. Nests are typically in vertical or near-vertical surfaces (COSEWIC 2013b).	No habitat present in study area.	None needed.
Barn Swallow	<i>Hirundo rustica</i>	Birds	SC	THR	S5B	MNRF Species Occurrence Mapping, OBBA, eBird (2023)	Occurs in farmland, along lake/river shorelines, in wooded clearings and in urban populated areas. Nesting may occur inside or outside buildings; under bridges and in road culverts (COSEWIC 2011a).	Habitat potentially present in study area.	Breeding bird survey.

Common name	Scientific name	Group	SARO	Cosewic	S-rank	Background sources	Habitat requirements	Candidate habitat in study area	Field studies recommended
Barn Owl	<i>Tyto alba</i>	Birds	END	END	S1	MNRF Species Occurrence Mapping	Requires open habitat for foraging, such as old fields and pastures, that provide habitat for rodents, and uses a variety of natural and man-made structures for nesting (COSEWIC 2010e)	No habitat present in study area.	None needed.
Bobolink	<i>Dolichonyx oryzivorus</i>	Birds	THR	THR	S4B	MNRF Species Occurrence Mapping, NHIC, OBBA	Nest in grassland habitats, including hayfields and meadows with a mixture of grasses and broad-leaved forbs with a high litter cover. Area Sensitive, with increased density in grasslands greater than 10ha (Renfrew et. al. 2015)	Habitat potentially present in study area.	Breeding bird surveys.
Canada Warbler	<i>Wilsonia canadensis</i>	Birds	SC	THR	S4B	MNRF Species Occurrence Mapping	Prefers wet coniferous, deciduous and mixed forest types, with a dense shrub layer (COSEWIC 2008b).	No habitat present in study area.	None needed.
Cerulean Warbler	<i>Setophaga cerulea</i>	Birds	THR	END	S3B	MNRF Species Occurrence Mapping	Occur in older, mature, deciduous forests, preferentially oak-maple composition, with a full, to partially open canopy, and little to no understory cover. Often in bottomland forests, or adjacent to treed swamplands (COSEWIC 2010f).	No habitat present in study area.	None needed.
Chimney Swift	<i>Chaetura pelagica</i>	Birds	THR	THR	S4B, S4N	MNRF Species Occurrence Mapping, OBBA, eBird (2023)	Typically nests in traditional chimneys of older buildings, which also provide roosting sites for many individuals during spring and fall migration (MNRF 2013).	No habitat present in study area.	None needed.
Common Nighthawk	<i>Chordeiles minor</i>	Birds	SC	THR	S4B	MNRF Species Occurrence Mapping	Breeds in open habitat, on the ground, in areas with no vegetation, including sand dunes, burned areas, open forests, railways, and gravel rooftops. Eggs are laid directly on the ground (COSEWIC 2007b).	No habitat present in study area.	None needed.
Eastern Meadowlark	<i>Sturnella magna</i>	Birds	THR	THR	S4B	MNRF Species Occurrence Mapping, OBBA	Nest in grassland habitats, including hayfields, pasture, savannahs, and other open areas. Preferential habitat includes areas with good grass and thatch (litter) cover (Jaster et. al. 2012).	Habitat potentially present in study area.	Breeding bird surveys.
Eastern Wood-Pewee	<i>Contopus virens</i>	Birds	SC	SC	S4B	MNRF Species Occurrence Mapping, NHIC, OBBA, eBird (2023)	Associated with mid-age mixed and deciduous forest stands, often dominated by Maple (Acer), Elm (Ulmus) or Oak (Quercus), and include areas with clear-cuts, openings or forest edges. Also prefers forest stands with little to no understory vegetation (COSEWIC 2012a).	Habitat potentially present in study area.	Breeding bird surveys.
Evening Grosbeak	<i>Coccothraustes vespertinus</i>	Birds	SC	SC	S4B	MNRF Species Occurrence Mapping	Breeding habitat includes open, mature mixed wood forests, where fir species and/or White Spruce are dominant, and Spruce Budworm is abundant (COSEWIC 2016)	No habitat present in study area.	None needed.
Golden-winged Warbler	<i>Vermivora chrysoptera</i>	Birds	SC	THR	S4B	MNRF Species Occurrence Mapping	Nests in early successional shrub habitat, with adjacent forest edges for singing perches, often in hydro cut-overs, recently logged areas and beaver marshes (COSEWIC 2006a).	No habitat present in study area.	None needed.
Grasshopper Sparrow	<i>Ammodramus savannarum</i>	Birds	SC	SC	S4B	MNRF Species Occurrence Mapping	Prefers moderately open grasslands and prairies with patchy bare ground; avoids grasslands with extensive shrub cover (Vickery 1996).	Habitat potentially present in study area.	Breeding bird surveys.
Least Bittern	<i>Ixobrychus exilis</i>	Birds	THR	THR	S4B	MNRF Species Occurrence Mapping	Breeds in large marshes (>5ha) with emergent vegetation, typically cattails, with at least 50% open water, and relatively stable water levels (COSEWIC 2009b).	No habitat present in study area.	None needed.
Louisiana Waterthrush	<i>Seiurus motacilla</i>	Birds	SC	THR	S3B	MNRF Species Occurrence Mapping	Nests along headwater streams and associated wetlands which occur within large tracts of mature forest especially mixed wood forests with a component of hemlock. Nests are in stream bank niches, under mossy logs, and within the roots of fallen trees (COSEWIC 2006b)	No habitat present in study area.	None needed.

Common name	Scientific name	Group	SARO	Cosewic	S-rank	Background sources	Habitat requirements	Candidate habitat in study area	Field studies recommended
Olive-sided Flycatcher	<i>Contopus cooperi</i>	Birds	SC	THR	S4B	MNRF Species Occurrence Mapping, eBird (2023), iNat (2023)	Associated with natural forest openings (usually conifer or mixed), and edges of forests adjacent wetlands or watercourses, will also use open and semi-open forests and clear-cuts. Presence of tall snags and residual live trees required for nesting and foraging (COSEWIC 2007c).	Habitat potentially present in study area.	Breeding bird surveys.
Peregrine Falcon	<i>Falco peregrinus</i>	Birds	SC	SC	S3B	MNRF Species Occurrence Mapping, iNat (2022)	Nests on cliff-ledges (50-200m preferred) near foraging areas. Also nests on anthropomorphic structures, such as tall building ledges, bridges, quarries, mines and cuts for road beds (COSEWIC, 2007a).	No habitat present in study area.	None needed.
Red-headed Woodpecker	<i>Melanerpes erythrocephalus</i>	Birds	END	THR	S4B	MNRF Species Occurrence Mapping, NHIC	Found in a variety of open areas, with a high density of dead or dying trees, particularly forests dominated by oak or beech (COSEWIC 2007d).	No habitat present in study area.	None needed.
Rusty Blackbird	<i>Euphagus carolinus</i>	Birds	SC	SC	S4B	eBird (2023), iNat (2023)	Breeding habitat is characterized by coniferous-dominated forests adjacent to wetlands, such as slow-moving streams, peat bogs, sedge meadows, marshes, swamps and beaver ponds. On migration, the Rusty Blackbird is primarily associated with wooded wetlands (COSSARO 2017).	No habitat present in study area.	None needed.
Short-eared Owl	<i>Asio flammeus</i>	Birds	THR	SC	S2N, S4B	MNRF Species Occurrence Mapping	Breeds in open habitats, including grasslands, old pasture marshes, bogs, and sand-sage. Nests are scrapes, located on the ground (COSEWIC 2008c).	Habitat potentially present in study area.	Breeding bird surveys.
Wood Thrush	<i>Hylocichla mustelina</i>	Birds	SC	THR	S4B	MNRF Species Occurrence Mapping, NHIC, OBBA, eBird (2023)	Prefers second growth moist deciduous forests, with tall trees, and a dense understory of low saplings and an open forest floor with decaying leaf litter. Often nests in saplings, shrubs or occasionally dead stumps (COSEWIC 2012b).	Habitat potentially present in study area.	Breeding bird surveys.
Yellow-breasted Chat	<i>Icteria virens</i>	Birds	END	END	S1B	MNRF Species Occurrence Mapping	Shrub specialist, nesting in early successional, dense, low-shrub habitat, including old fields, hydro-cutovers and forest edges experiencing regeneration (COSEWIC 2011c).	Habitat potentially present in study area.	Aquatic habitat assessment.
Black Redhorse	<i>Moxostoma duquesnei</i>	Fish	THR	THR	S2	MNRF Species Occurrence Mapping	Associated with cool, clear streams of moderate size with substrates of rocky, cobble, sand, or silt. Found in the Lake Erie and Grand River Watersheds (COSEWIC, 2005a).	Habitat potentially present in study area.	Aquatic habitat assessment.
Northern Sunfish (Great Lakes-Upper St. Lawrence Population)	<i>Lepomis peltastes</i>	Fish	SC	SC	S3	MNRF Species Occurrence Mapping	Prefers shallow, vegetated areas of warm lakes, ponds, and slowly flowing watercourses. Usually occurs in clear waters and is considered intolerant of siltation. Substrate usually consists of sand and gravel, as in the Thames River (COSEWIC 2016)	Habitat potentially present in study area.	Aquatic habitat assessment.
Silver Shiner	<i>Notropis photogenis</i>	Fish	THR	THR	S2S3	MNRF Species Occurrence Mapping, NHIC	Associated with large, wide streams (usually >20m) in deep riffles and pools, with substrates of gravel, boulder, rubble, and sand (COSEWIC, 2011d).	Habitat potentially present in study area.	Aquatic habitat assessment.
Rainbow	<i>Villosa iris</i>	Molluscs	SC	SC	S2S3	MNRF Species Occurrence Mapping	Most abundant in small to medium-sized rivers but can also be found in inland lakes. Usually found in or near riffles and along the edges of emergent vegetation in moderate to strong current. Occupies substrate mixtures of cobble, gravel, sandy and occasionally mud or boulder (COSEWIC 2015).	Habitat potentially present in study area.	Aquatic habitat assessment.
Wavy-rayed Lampmussel	<i>Lamslilis fasciola</i>	Molluscs	THR	SC	S1	MNRF Species Occurrence Mapping, iNat (2022)	Inhabits clear rivers and streams of various sizes with steady flows and stable substrates and is typically found in gravel or sand substrates in and around riffle areas. Most abundant in small to medium-sized stream and occurs at sites that support a great diversity of other mussel species (COSEWIC 2010).	Habitat potentially present in study area.	Aquatic habitat assessment.

Common name	Scientific name	Group	SARO	Cosewic	S-rank	Background sources	Habitat requirements	Candidate habitat in study area	Field studies recommended
Eastern Small-footed Myotis	<i>Myotis leibii</i>	Mammals	END	NA	S2S3	MNRF Species Occurrence Mapping	Associated with hilly or mountainous terrain, in or near coniferous or deciduous forest habitat. Maternity roosts located in cracks and crevices of talus slopes and rocky outcrops, or, occasionally in bridges, old buildings, hollow trees (or loose bark) and caves and mines during the maternity season. Hibernate singly or in small clusters in mines and caves (NatureServe, 2015).	Habitat potentially present in study area.	Bat habitat assessment.
Little Brown Myotis	<i>Myotis lucifugus</i>	Mammals	END	END	S3	MNRF Species Occurrence Mapping	Hibernate in Caves; maternity colonies located in warm sites, often associated with human habitation; including attics, old buildings, under bridges, rock crevices and cavities in canopy trees in wooded areas (COSEWIC, 2013c).	Habitat potentially present in study area.	Bat habitat assessment.
Northern Myotis	<i>Myotis septentrionalis</i>	Mammals	END	END	S3	MNRF Species Occurrence Mapping	Hibernate in Caves; maternity colonies usually located in trees, and are closely associated with specific tree characteristics and density of suitable trees. Characterized by tall, large diameter trees in early stages of decay, located in openings in mature forest canopies (COSEWIC, 2013c).	Habitat potentially present in study area.	Bat habitat assessment.
Tri-colored Bat	<i>Perimyotis subflavus</i>	Mammals	END	END	S3?	MNRF Species Occurrence Mapping	Hibernate in caves, abandoned mines, wells, and tunnels. Summer roosts include clumps of dead foliage and lichens, typically found in forested habitat close to water sources. May also use anthropogenic structures such as barns for maternity roosts. Foraging habitat includes forested riparian areas over water in relatively open areas (Environment Canada.2015).	Habitat potentially present in study area.	Bat habitat assessment.
Blanding’s Turtle	<i>Emydoidea blandingii</i>	Reptiles	THR	THR	S3	MNRF Species Occurrence Mapping	Use a variety of eutrophic wetland habitat types, including lakes, ponds, watercourses, marshes, man-made channels, farm fields, coastal areas and bays. Seasonal overland terrestrial movements up to 2.5 km occur to reach nesting and overwintering areas, generally through wooded coniferous or mixed forest habitat. Nests are usually laid in loose sand or organic soil (COSEWIC 2005b).	No habitat present in study area.	None needed.
Midland Painted Turtle	<i>Chrysemys picta marginata</i>	Reptiles	NL	SC	S4	MNRF Species Occurrence Mapping, ORAA (1981)	Occupy slow moving, relatively shallow and well-vegetated wetlands and water bodies with abundant basking sites and organic substrate. Found in association with submergent aquatic plants, which are used for cover and feeding. Semi -tolerant of human-altered landscapes, occasionally found occupying urban ponds and lands subject to anthropogenic disturbance. Suitable nesting habitat includes open, often south-facing, and sloped areas with sandy-loamy and/or gravel substrate usually within 1200 m of aquatic active season habitats. Overwinter in shallow water with deep sediment (COSEWIC 2018).	Habitat potentially present in study area.	Aquatic habitat assessment.
Northern Map Turtle	<i>Graptemys geographica</i>	Reptiles	SC	SC	S3	MNRF Species Occurrence Mapping	Highly aquatic species, found in deep, large waterbodies, including lakes and large rivers, with abundant basking sites. Emerge onto land only during nesting, which occurs in soft sand or soil. Waterbodies with slow currents, soft mud bottoms and abundant aquatic vegetation are preferred (COSEWIC, 2002b).	No habitat present in study area.	None needed.
Snapping Turtle	<i>Chelydra serpentina</i>	Reptiles	SC	SC	S4	MNRF Species Occurrence Mapping, ORAA (2019), iNat (2023)	Inhabit slow-moving waters with soft, muck bottom and dense aquatic vegetation. Ponds, sloughs and shallow bays are all often used as summering and overwintering habitat (COSEWIC 2008d).	Habitat potentially present in study area.	Aquatic habitat assessment.
Wood Turtle	<i>Glyptemys insculpta</i>	Reptiles	END	THR	S2	MNRF Species Occurrence Mapping	Generally found in forested landscapes, associated with clear freshwater streams and associated floodplains. Preferential to streams with year-round current, with sandy or gravelly-sandy bottoms. Streams used are typically meandering with frequent oxbows. Overwintering associated with stable, high concentration dissolved oxygen in pools, under mud or under overhanging banks. Nesting occurs in open areas with high sun exposure, typically within 10 to 50m of aquatic habitat. Home ranges are typically linear, following streams (Environment Canada, 2016).	No habitat present in study area.	None needed.
Eastern Ribbonsnake	<i>Thamnophis sauritus</i>	Reptiles	SC	SC	S4	MNRF Species Occurrence Mapping	A semi-aquatic species that inhabits dense, low- vegetation, edges of ponds, streams, marshes, fens and bogs, with open sunlit areas for basking (COSEWIC 2002c).	Habitat potentially present in study area.	Aquatic habitat assessment, ELC, and botanical inventory.
Milksnake	<i>Lampropeltis triangulum</i>	Reptiles	SC	SC	S4	MNRF Species Occurrence Mapping, ORAA (1971)	Habitat generalists, often associated with edge habitat, meadows, prairies, pastures, rocky outcrops and human disturbances such as hydro corridors and railway embankments. Habitat is usually close to a water source. Hibernation occurs in a variety of natural and man-made features, including rotting logs, old foundations, basements, and burrows (COSEWIC 2014).	Habitat potentially present in study area.	ELC and botanical inventory.

Common name	Scientific name	Group	SARO	Cosewic	S-rank	Background sources	Habitat requirements	Candidate habitat in study area	Field studies recommended
Queensnake	<i>Regina septemvittata</i>	Reptiles	END	END	S2	MNRF Species Occurrence Mapping	Associated with rocky streams and rivers, but occasionally found in marsh, pond and lake shore habitats. Usually found within 3m of the shoreline and only at sites where there is an abundance of crayfish (COSEWIC 2010).	No habitat present in study area.	None needed.
American Chestnut	<i>Castanea dentata</i>	Vascular plants	END	END	S1S2	MNRF Species Occurrence Mapping	Typically occur in upland deciduous forests in Southern Ontario with dry, sandy, acid-neutral soils, Typical associates include Red Oak, Black Cherry, Sugar Maple, American Beech, White Ash, White Oak, Red Maple and Sassafras (COSEWIC 2004).	No habitat present in study area.	None needed.
American Columbo	<i>Frasera carolinensis</i>	Vascular plants	END	END	S2	MNRF Species Occurrence Mapping	Associated with open forested slopes and forest edges. May also occur in thickets and clearings (COSEWIC 2006a).	No habitat present in study area.	None needed.
American Ginseng	<i>Panax quinquefolius</i>	Vascular plants	END	END	S2	MNRF Species Occurrence Mapping	Occur in moist, rich, undisturbed, mature Sugar Maple dominated deciduous woodlands. Often, colonies are located at the bottom of south facing slopes (COSEWIC, 2000).	No habitat present in study area.	None needed.
Butternut	<i>Juglans cinerea</i>	Vascular plants	END	END	S2?	MNRF Species Occurrence Mapping, iNat (2019)	Occur in rich moist sites, that are well-drained, often found along stream banks or gravelly sites. Butternut is shade intolerant (COSEWIC, 2003b).	Habitat potentially present in study area.	ELC and botanical inventory.
Dense Blazing Star	<i>Liatris spicata</i>	Vascular plants	THR	THR	S2	MNRF Species Occurrence Mapping, iNat (2022)	Occurs in open tallgrass prairies. It can grow in a range of moisture regimes from dry to very moist (COSEWIC 2010).	Habitat potentially present in study area.	ELC and botanical inventory.
False Hop Sedge	<i>Carex lupuliformis</i>	Vascular plants	END	END	S1	MNRF Species Occurrence Mapping	Associated with a variety of relatively open wetland habitats subject to periodic flooding. Known habitats consist mostly of small temporary forest ponds or marshes isolated in swamps (COSEWIC 2011).	Habitat potentially present in study area.	ELC and botanical inventory.
Green Dragon	<i>Arisaema dracontium</i>	Vascular plants	SC	SC	S3	MNRF Species Occurrence Mapping	Occurs along creek, river, and clay floodplains in moist to wet deciduous woodlands and thickets. Grows in shaded to partly shaded, seasonally wet areas (Donley et. al. 2013).	No habitat present in study area.	None needed.
Pygmy Pocket Moss	<i>Fissidens exilis</i>	Vascular plants	NAR	NAR	S1	MNRF Species Occurrence Mapping	Found largely on bare, moist, at least partly shaded, clay-based soil or loam. Collected on the forested banks of streams and ravines, floodplains, bluffs, beaches, roadsides, trails, and other environments where bare soil is exposed (COSEWIC 2016).	No habitat present in study area.	None needed.
Swamp Rose-mallow	<i>Hibiscus moscheutos</i>	Vascular plants	SC	SC	S3	MNRF Species Occurrence Mapping	Restricted to the Carolinian or Deciduous Forest region. All populations are confined to early successional wetlands that are associated with Lakes Erie, Ontario, or St. Clair. Most common in deep-water Typha marshes, along the interface with the open water in the cattail mat; and in meadow marshes (COSEWIC 2004).	No habitat present in study area.	None needed.

References:

Cadman, M.D.,D.A. Sutherland, G.G. Beck, D. Lepage, and A.R. Couturier. 2007. The Atlas of the Breeding Birds Ontario 2001-2005. Bird Studies Canada, Environment Canada, Ontario Field Ornithologists, Ontario Ministry of Natural Resources, and Ontario Nature, Toronto,xxii + 706pp. (Available online here: <http://www.birdsontario.org/atlas/datasummaries.jsp>)

Colin Jones, Ross Layberry, and Alan Macnaughton. Ontario Butterfly Atlas Online. (Available online here: Toronto Entomologists’ Association: http://www.ontarioinsects.org/atlas_online.htm)

Dobbyn, J. 1994. Atlas of the Mammals of Ontario. Federation of Ontario Naturalists, Altona Manitoba, Canada. (Available online here: <http://www.ontarionature.org/discover/resources/publications.php>)

MNRF, 2015. Wellington County Upper Tier Species at Risk. Ministry of Natural Resources and Forestry. Provided February 10, 2015.

NatureServe. 2015. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, Virginia. Available <http://explorer.natureserve.org>.

NHIC, 2015. MNRF Make a map: Natural Heritage Areas. (Available online: <http://www.ontario.ca/environment-and-energy/make-natural-heritage-area-map>)

Ontario Nature. 2015. Ontario Reptile and Amphibian Atlas: a citizen science project to map the distribution of Ontario’s reptiles and amphibians. Ontario Nature, Ontario. (Available online here: <http://www.ontarionature.org/atlas>)

Heather Dixon

From: Stephen Dykstra <sdykstra@woolwich.ca>
Sent: Wednesday, February 14, 2024 1:56 PM
To: Heather Dixon
Cc: Cheryl-Anne Ross; Alex Pasley; Bryan Bishop
Subject: RE: [EXT] RE: Draft Terms of Reference for a Scoped EIS for the proposed development of an industrial subdivision at 1665 Scotch Line Road, Elmira, Region of Waterloo, ON (AA23-232A)

Follow Up Flag: Follow up
Flag Status: Flagged

Caution. Outside Sender

Heather,

We would like to see the revised ToR, just to verify it has been updated.

With regards to the Lanxess documents it would be best to reach out to GHD. Below is the PM contact

Luis Almeida Luis.Almeida@ghd.com

Stephen Dykstra MCIP, RPP
Senior Planner
Township of Woolwich

From: Heather Dixon <Heather@aboudtng.com>
Sent: Wednesday, February 14, 2024 10:29 AM
To: Stephen Dykstra <sdykstra@woolwich.ca>
Cc: Cheryl-Anne Ross <Cheryl@aboudtng.com>; Alex Pasley <apasley@ksmart.ca>; Bryan Bishop <BBishop@woolwich.ca>
Subject: RE: [EXT] RE: Draft Terms of Reference for a Scoped EIS for the proposed development of an industrial subdivision at 1665 Scotch Line Road, Elmira, Region of Waterloo, ON (AA23-232A)

Hi Stephen,

Thank you for the comments. Would the township like to see a revised ToR with these comments included, or are you happy to work on the understanding that they will be included in the drafting of the EIS? I was able to track down the Elmira Drain Report no problem, but I am not sure I found the correct document regarding the ground water/watercourse contaminants. I have attached what I was able to find. If these are not the right documents, would you please be able to provide us with the correct ones?

Many thanks,

Heather Dixon, PhD (she/her) . Aquatic Ecologist
ABOUD & ASSOCIATES INC. 3-5 Edinburgh Road South . Guelph . Ontario . N1H 5N8
519.781.1581 www.aboudtng.com . heather@aboudtng.com

About & Associates Inc. is located within the Between the Lakes Purchase (Treaty 3); the treaty lands and territory of the Mississaugas of the Credit.

From: Stephen Dykstra <sdykstra@woolwich.ca>

Sent: Wednesday, February 14, 2024 9:45 AM

To: Heather Dixon <Heather@aboudtng.com>

Cc: Cheryl-Anne Ross <Cheryl@aboudtng.com>; Alex Pasley <apasley@ksmart.ca>; Bryan Bishop <BBishop@woolwich.ca>

Subject: RE: [EXT] RE: Draft Terms of Reference for a Scoped EIS for the proposed development of an industrial subdivision at 1665 Scotch Line Road, Elmira, Region of Waterloo, ON (AA23-232A)

Caution. Outside Sender

Heather,

Please see the attached PDF which includes comments from our engineering group, and also the comments below.

We may want to mention the following section from the Elmira Drain report, which establishes a 10m setback from the top of the nearest bank of the drain:

10. WORKING AREA

The working area for construction purposes shall be a width of 20m centered on the proposed tile drain, and 20m from top of bank for open drains. The working areas for maintenance purpose shall be a width of 10m centered on the proposed tile drain and 10m from top of bank for open drains. Each landowner on whose property the drainage work is to be constructed shall designate access to and from the working area at the time of construction or upon failure to do so, the Engineer or Drainage Superintendent, as the case may be, shall designate access.

The working area for drain cleanout shall be 20m from top of bank wherever possible but shall take into account the adjacent land use. In sections where there is heavy forest cover, the working area will be reduced to the extent possible.

Regards,

Stephen Dykstra MCIP, RPP
Senior Planner
Township of Woolwich

From: Heather Dixon <Heather@aboudtng.com>

Sent: Friday, February 9, 2024 12:30 PM

To: Stephen Dykstra <sdykstra@woolwich.ca>

Cc: Cheryl-Anne Ross <Cheryl@aboudtng.com>

Subject: [EXT] RE: Draft Terms of Reference for a Scoped EIS for the proposed development of an industrial subdivision at 1665 Scotch Line Road, Elmira, Region of Waterloo, ON (AA23-232A)

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Good morning,

I submitted the attached draft Terms of Reference (ToR) for the proposed development of an industrial subdivision at 1665 Scotch Line Road, Elmira (erroneously listed as 1655 Scotch Line Road in the original email) for comments at the beginning of December, and sent a follow-up email at the beginning of January. We have received comments from the

GRCA and the Region, but have yet to hear from the Township. Could you please let me know if Township staff have any comments on the attached ToR?

Many thanks,

Heather Dixon, PhD (she/her) . Aquatic Ecologist
ABOUD & ASSOCIATES INC. 3-5 Edinburgh Road South . Guelph . Ontario . N1H 5N8
519.781.1581 www.aboudtng.com . heather@aboudtng.com

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From: Heather Dixon
Sent: Wednesday, January 3, 2024 11:49 AM
To: sdykstra@woolwich.ca
Cc: Cheryl-Anne Ross <Cheryl@aboudtng.com>
Subject: RE: Draft Terms of Reference for a Scoped EIS for the proposed development of an industrial subdivision at 1665 Scotch Line Road, Elmira, Region of Waterloo, ON (AA23-232A)

Good morning,

I submitted the attached draft Terms of Reference (ToR) for the proposed development of an industrial subdivision at 1665 Scotch Line Road, Elmira (erroneously listed as 1655 Scotch Line Road in the previous email) for comments at the beginning of December. We have received comments from the GRCA and the Region, but have yet to hear from the Township. Could you please let me know if Township staff have any comments on the attached ToR?

Many thanks,

Heather Dixon, PhD (she/her) . Aquatic Ecologist
ABOUD & ASSOCIATES INC. 3-5 Edinburgh Road South . Guelph . Ontario . N1H 5N8
519.781.1581 www.aboudtng.com . heather@aboudtng.com

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From: Heather Dixon
Sent: Monday, December 4, 2023 12:21 PM
To: 'cfosterpengelly@grandriver.ca' <cfosterpengelly@grandriver.ca>; 'sdykstra@woolwich.ca' <sdykstra@woolwich.ca>; 'environmentalplanning@regionofwaterloo.ca' <environmentalplanning@regionofwaterloo.ca>
Cc: Cheryl-Anne Ross <Cheryl@aboudtng.com>; 'mlippert@mhbcplan.com' <mlippert@mhbcplan.com>
Subject: Draft Terms of Reference for a Scoped EIS for the proposed development of an industrial subdivision at 1655 Scotch Line Road, Elmira, Region of Waterloo, ON (AA23-232A)

Dear Mr. Foster-Pengelly, Mr. Dykstra, and the Region of Waterloo Planning Department,

Please see the attached draft Terms of Reference for a Scoped Environmental Impact Study (EIS) for the proposed development of an industrial subdivision at 1655 Scotch Line Road, Elmira, Region of Waterloo, ON. The draft Terms of Reference have been developed based on information received from the proponent, and a review of the applicable municipal, provincial, and federal guidelines that apply to this project. We would appreciate your review and comments on the Terms of Reference in order to finalize the proposed scope of work required for the Scoped EIS.

Many thanks,

Heather Dixon, PhD (she/her) . Aquatic Ecologist
ABOUD & ASSOCIATES INC. 3-5 Edinburgh Road South . Guelph . Ontario . N1H 5N8
519.781.1581 www.aboudtng.com . heather@aboudtng.com

Aboud & Associates Inc. is located within the Between the Lakes Purchase (Treaty 3); the treaty lands and territory of the Mississaugas of the Credit.

Heather Dixon

From: Chris Foster-Pengelly <cfosterpengelly@grandriver.ca>
Sent: Thursday, December 21, 2023 2:55 PM
To: Heather Dixon; sdykstra@woolwich.ca; environmentalplanning@regionofwaterloo.ca
Cc: Cheryl-Anne Ross; mlippert@mhbcplan.com
Subject: RE: Draft Terms of Reference for a Scoped EIS for the proposed development of an industrial subdivision at 1655 Scotch Line Road, Elmira, Region of Waterloo, ON (AA23-232A)

Caution. Outside Sender

Hi Heather,

Thank you for reaching out for clarification. We agree that the water balance does not need to be shown on the maps, but the site and feature based water balances (for pre to post development) should be included and specifically mentioned in the discussion of the impacts and mitigations.

With regards to the tile drain data, I would recommend the OMAFRA website: [Tile Drainage Area | Tile Drainage Area | Ontario GeoHub \(gov.on.ca\)](#)

You could also reach out to the Drainage Superintendent who might be able to provide you with maps. I would recommend reaching out to the Township for their contact information, if needed.

Thank you,
Chris

Chris Foster-Pengelly, M.Sc.

Office: 519-621-2763 ext. 2319

Toll-free: 1-866-900-4722

www.grandriver.ca | [Connect with us on social media](#)

From: Heather Dixon <Heather@aboudtng.com>
Sent: Thursday, December 7, 2023 10:00 AM
To: Chris Foster-Pengelly <cfosterpengelly@grandriver.ca>; sdykstra@woolwich.ca; environmentalplanning@regionofwaterloo.ca
Cc: Cheryl-Anne Ross <Cheryl@aboudtng.com>; mlippert@mhbcplan.com
Subject: RE: Draft Terms of Reference for a Scoped EIS for the proposed development of an industrial subdivision at 1655 Scotch Line Road, Elmira, Region of Waterloo, ON (AA23-232A)

Hi Chris,

Thank you for the comments. I was hoping for clarification for comment 2. Scoped EIS #11 refers to the preparation of maps showing noteworthy and natural heritage features. Are these all features that the GRCA wants included on these maps? We normally include site grading, but water balance is normally included in the discussion of the impacts and mitigations and not on the map. Additionally, do you know where we can find tile drain data, and is that something GRCA also wants to see included in the mapping?

Many thanks,

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From: Chris Foster-Pengelly <cfosterpengelly@grandriver.ca>
Sent: Thursday, December 7, 2023 9:06 AM
To: Heather Dixon <Heather@aboudtng.com>; sdykstra@woolwich.ca; environmentalplanning@regionofwaterloo.ca
Cc: Cheryl-Anne Ross <Cheryl@aboudtng.com>; mlippert@mhbcplan.com
Subject: RE: Draft Terms of Reference for a Scoped EIS for the proposed development of an industrial subdivision at 1655 Scotch Line Road, Elmira, Region of Waterloo, ON (AA23-232A)

Caution. Outside Sender

Hi Heather,

The GRCA has reviewed the draft terms of reference. We offer the following comments:

1. B. Field Assessment #3, the proposed aquatic assessment should also review the channel morphology for stability and signs of erosion and flow blockages.
2. C. Scoped EIS #11, should include a site grading plan, existing agricultural field tile, and complete a site water balance for pre and post development conditions that will match contributions to the watercourse and wetland.

Thank you,
Chris

Chris Foster-Pengelly, M.Sc.
Office: 519-621-2763 ext. 2319
Toll-free: 1-866-900-4722
www.grandriver.ca | [Connect with us on social media](#)

From: Heather Dixon <Heather@aboudtng.com>
Sent: Monday, December 4, 2023 12:21 PM
To: Chris Foster-Pengelly <cfosterpengelly@grandriver.ca>; sdykstra@woolwich.ca; environmentalplanning@regionofwaterloo.ca
Cc: Cheryl-Anne Ross <Cheryl@aboudtng.com>; mlippert@mhbcplan.com
Subject: Draft Terms of Reference for a Scoped EIS for the proposed development of an industrial subdivision at 1655 Scotch Line Road, Elmira, Region of Waterloo, ON (AA23-232A)

Dear Mr. Foster-Pengelly, Mr. Dykstra, and the Region of Waterloo Planning Department,

Please see the attached draft Terms of Reference for a Scoped Environmental Impact Study (EIS) for the proposed development of an industrial subdivision at 1655 Scotch Line Road, Elmira, Region of Waterloo, ON. The draft Terms of Reference have been developed based on information received from the proponent, and a review of the applicable municipal, provincial, and federal guidelines that apply to this project. We would appreciate your review and comments on the Terms of Reference in order to finalize the proposed scope of work required for the Scoped EIS.

Many thanks,

519.781.1581 www.aboudtng.com . heather@aboudtng.com

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Heather Dixon

From: Heather Dixon
Sent: Wednesday, December 13, 2023 1:55 PM
To: 'Environmental Planning'
Cc: Cheryl-Anne Ross
Subject: RE: Draft Terms of Reference for a Scoped EIS for the proposed development of an industrial subdivision at 1655 Scotch Line Road, Elmira, Region of Waterloo, ON (AA23-232A)

Hi Albert,

Thanks for getting back to us, we greatly appreciate your comments.

For the terms of reference we include everything we will be doing as part of the scoped environmental impact study, which includes the steps taken to produce the terms of reference, what field work we will be doing, and the content of the scoped EIS itself. That way municipalities and conservation authorities can provide input on anything we may undertake as part of the process.

The numbering continuing for section C was a mistake I did not catch when formatting that section. It is its own section and should have its own numbering.

Many thanks,

Heather Dixon, PhD (she/her) . Aquatic Ecologist
ABOUD & ASSOCIATES INC. 3-5 Edinburgh Road South . Guelph . Ontario . N1H 5N8
519.781.1581 www.aboudtng.com . heather@aboudtng.com

Aboud & Associates Inc. is located within the Between the Lakes Purchase (Treaty 3); the treaty lands and territory of the Mississaugas of the Credit.

From: Environmental Planning <EnvironmentalPlanning@regionofwaterloo.ca>
Sent: Tuesday, December 12, 2023 12:21 PM
To: Environmental Planning <EnvironmentalPlanning@regionofwaterloo.ca>; Heather Dixon <Heather@aboudtng.com>
Cc: Cheryl-Anne Ross <Cheryl@aboudtng.com>
Subject: RE: Draft Terms of Reference for a Scoped EIS for the proposed development of an industrial subdivision at 1655 Scotch Line Road, Elmira, Region of Waterloo, ON (AA23-232A)

Caution. Outside Sender

Hi Heather,

I found the structure of the material on pages 12&13 a bit confusing. I'm not sure that the line "To fulfill the requirements of this study, we will..." at the top of page 12 should be there at all seeing as how you are giving proposed terms of reference and then you also make reference to preparing a Terms of Reference in A.2.

I'm also not clear how "C. Scoped Environmental Impact Study (EIS)" at the bottom of page 12 fits in given that the numbering continues on through the heading (from 10 – 11).

Overall, I think I see that you've included the relevant bits of a scoped EIS, but it's not organized very clearly. If you could provide clarification on the material on these 2 pages would be helpful.

Thanks,
Albert

Albert Hovingh R.P.F.

Senior Planner, Stewardship Planning
Planning, Development and Legislative Services
Region of Waterloo
150 Frederick St. 8th Floor
Kitchener, ON N2G 4J3

Phone: 519-575-4813
Cell : 519-510-9505
e-mail: AHovingh@RegionofWaterloo.ca

From: Environmental Planning <EnvironmentalPlanning@regionofwaterloo.ca>
Sent: December 7, 2023 11:27 AM
To: 'Heather Dixon' <Heather@aboudtng.com>; Environmental Planning <EnvironmentalPlanning@regionofwaterloo.ca>
Cc: Cheryl-Anne Ross <Cheryl@aboudtng.com>
Subject: RE: Draft Terms of Reference for a Scoped EIS for the proposed development of an industrial subdivision at 1655 Scotch Line Road, Elmira, Region of Waterloo, ON (AA23-232A)

Thanks Heather. I will finish reviewing the scoped EIS and send comments in the next day or so
Albert

From: Heather Dixon <Heather@aboudtng.com>
Sent: December 6, 2023 11:04 AM
To: Environmental Planning <EnvironmentalPlanning@regionofwaterloo.ca>
Cc: Cheryl-Anne Ross <Cheryl@aboudtng.com>
Subject: RE: Draft Terms of Reference for a Scoped EIS for the proposed development of an industrial subdivision at 1655 Scotch Line Road, Elmira, Region of Waterloo, ON (AA23-232A)

****EXTERNAL ALERT** This email originated from outside the Region of Waterloo.**

Hi Albert,

Apologies, there was a mix up in discussions with the planner. It should indeed be 1665 Scotch Line Road.

Many thanks,

Heather Dixon, PhD (she/her) . Aquatic Ecologist
ABOUD & ASSOCIATES INC. 3-5 Edinburgh Road South . Guelph . Ontario . N1H 5N8
519.781.1581 www.aboudtng.com . heather@aboudtng.com

Aboud & Associates Inc. is located within the Between the Lakes Purchase (Treaty 3); the treaty lands and territory of the Mississaugas of the Credit.

From: Environmental Planning <EnvironmentalPlanning@regionofwaterloo.ca>
Sent: Wednesday, December 6, 2023 11:02 AM
To: Heather Dixon <Heather@aboudtng.com>
Subject: RE: Draft Terms of Reference for a Scoped EIS for the proposed development of an industrial subdivision at 1655 Scotch Line Road, Elmira, Region of Waterloo, ON (AA23-232A)

Caution. Outside Sender

Hi Heather,

Can you confirm the address - according to the GIS parcel layer, it looks like it should be 1665 Scotch Line Road.

Thanks,

Albert

Albert Hovingh R.P.F.
Senior Planner, Stewardship Planning
Planning, Development and Legislative Services
Region of Waterloo
150 Frederick St. 8th Floor
Kitchener, ON N2G 4J3

Phone: 519-575-4813

Cell : 519-510-9505

e-mail: AHovingh@RegionofWaterloo.ca

From: Heather Dixon <Heather@aboudtng.com>

Sent: December 4, 2023 12:21 PM

To: cfosterpengelly@grandriver.ca; sdykstra@woolwich.ca; Environmental Planning
<EnvironmentalPlanning@regionofwaterloo.ca>

Cc: Cheryl-Anne Ross <Cheryl@aboudtng.com>; mlippert@mhbcplan.com

Subject: Draft Terms of Reference for a Scoped EIS for the proposed development of an industrial subdivision at 1655 Scotch Line Road, Elmira, Region of Waterloo, ON (AA23-232A)

****EXTERNAL ALERT** This email originated from outside the Region of Waterloo.**

Dear Mr. Foster-Pengelly, Mr. Dykstra, and the Region of Waterloo Planning Department,

Please see the attached draft Terms of Reference for a Scoped Environmental Impact Study (EIS) for the proposed development of an industrial subdivision at 1655 Scotch Line Road, Elmira, Region of Waterloo, ON. The draft Terms of Reference have been developed based on information received from the proponent, and a review of the applicable municipal, provincial, and federal guidelines that apply to this project. We would appreciate your review and comments on the Terms of Reference in order to finalize the proposed scope of work required for the Scoped EIS.

Many thanks,

Heather Dixon, PhD (she/her) . Aquatic Ecologist
ABOUD & ASSOCIATES INC. 3-5 Edinburgh Road South . Guelph . Ontario . N1H 5N8
519.781.1581 www.aboudtng.com . heather@aboudtng.com

Aboud & Associates Inc. is located within the Between the Lakes Purchase (Treaty 3); the treaty lands and territory of the Mississaugas of the Credit.

Heather Dixon

From: Heather Dixon
Sent: Friday, February 23, 2024 11:38 AM
To: Alex Pasley; Stephen Dykstra
Cc: Cheryl-Anne Ross; Bryan Bishop
Subject: RE: [EXT] RE: Draft Terms of Reference for a Scoped EIS for the proposed development of an industrial subdivision at 1665 Scotch Line Road, Elmira, Region of Waterloo, ON (AA23-232A)

Hi Alex,

Thank you for the information. I do have a copy of the report for Elmira Drain 1, as well as the mapping for that drain from the LIO constructed drainage mapping.

Many thanks,

Heather Dixon, PhD (she/her) . Aquatic Ecologist
ABOUD & ASSOCIATES INC. 3-5 Edinburgh Road South . Guelph . Ontario . N1H 5N8
519.781.1581 www.aboudtng.com . heather@aboudtng.com

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From: Alex Pasley <apasley@ksmart.ca>
Sent: Friday, February 23, 2024 11:35 AM
To: Heather Dixon <Heather@aboudtng.com>; Stephen Dykstra <sdykstra@woolwich.ca>
Cc: Cheryl-Anne Ross <Cheryl@aboudtng.com>; Bryan Bishop <BBishop@woolwich.ca>
Subject: RE: [EXT] RE: Draft Terms of Reference for a Scoped EIS for the proposed development of an industrial subdivision at 1665 Scotch Line Road, Elmira, Region of Waterloo, ON (AA23-232A)

Caution. Outside Sender

Hi Heather,

I am the current Township Drainage Superintendent.

I only have information relating to the Municipal Drain (Elmira Drain 1), do you have a copy of this report and drawings showing the drain location?

If you are looking for systematic tiling maps, I do not have access to this kind of information, systematic tiling is done privately. Your best bet to get your hands on systematic tiling maps would be to reach out to the landowner to see if they have a copy, or to see if they remember the contractor they hired to complete the tiling. Most tile contractors will keep records of tile maps.

If you have any further questions feel free to contact me at the information below.

Thank you,



Alex Pasley, C.E.T.

K. Smart Associates Limited

85 McIntyre Dr. Kitchener ON N2R 1H6 | <http://www.ksmart.ca>

T: 519.748.1199 x257 | F: 519.748.6100 | apasley@ksmart.ca

From: Heather Dixon <Heather@aboudtng.com>

Sent: Friday, February 23, 2024 11:15 AM

To: Stephen Dykstra <sdykstra@woolwich.ca>

Cc: Cheryl-Anne Ross <Cheryl@aboudtng.com>; Alex Pasley <apasley@ksmart.ca>; Bryan Bishop <BBishop@woolwich.ca>

Subject: RE: [EXT] RE: Draft Terms of Reference for a Scoped EIS for the proposed development of an industrial subdivision at 1665 Scotch Line Road, Elmira, Region of Waterloo, ON (AA23-232A)

Hi Stephen,

Thanks you for the contact details. I was hoping you would be able to provide me with contact details for the Township's Drainage Superintendent, to see if they can provide is with maps of the tile drainage for the site.

Many thanks,

Heather Dixon, PhD (she/her) . Aquatic Ecologist
ABOUD & ASSOCIATES INC. 3-5 Edinburgh Road South . Guelph . Ontario . N1H 5N8
519.781.1581 www.aboudtng.com . heather@aboudtng.com

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From: Stephen Dykstra <sdykstra@woolwich.ca>

Sent: Wednesday, February 14, 2024 1:56 PM

To: Heather Dixon <Heather@aboudtng.com>

Cc: Cheryl-Anne Ross <Cheryl@aboudtng.com>; Alex Pasley <apasley@ksmart.ca>; Bryan Bishop <BBishop@woolwich.ca>

Subject: RE: [EXT] RE: Draft Terms of Reference for a Scoped EIS for the proposed development of an industrial subdivision at 1665 Scotch Line Road, Elmira, Region of Waterloo, ON (AA23-232A)

Caution. Outside Sender

Heather,

We would like to see the revised ToR, just to verify it has been updated.

With regards to the Lanxess documents it would be best to reach out to GHD. Below is the PM contact

Luis Almeida Luis.Almeida@ghd.com

Stephen Dykstra MCIP, RPP
Senior Planner
Township of Woolwich

From: Heather Dixon <Heather@aboudtng.com>

Sent: Wednesday, February 14, 2024 10:29 AM

To: Stephen Dykstra <sdykstra@woolwich.ca>

Cc: Cheryl-Anne Ross <Cheryl@aboudtng.com>; Alex Pasley <apasley@ksmart.ca>; Bryan Bishop

<BBishop@woolwich.ca>

Subject: RE: [EXT] RE: Draft Terms of Reference for a Scoped EIS for the proposed development of an industrial subdivision at 1665 Scotch Line Road, Elmira, Region of Waterloo, ON (AA23-232A)

Hi Stephen,

Thank you for the comments. Would the township like to see a revised ToR with these comments included, or are you happy to work on the understanding that they will be included in the drafting of the EIS? I was able to track down the Elmira Drain Report no problem, but I am not sure I found the correct document regarding the ground water/watercourse contaminants. I have attached what I was able to find. If these are not the right documents, would you please be able to provide us with the correct ones?

Many thanks,

Heather Dixon, PhD (she/her) . Aquatic Ecologist
ABOUD & ASSOCIATES INC. 3-5 Edinburgh Road South . Guelph . Ontario . N1H 5N8
519.781.1581 www.aboudtng.com . heather@aboudtng.com

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From: Stephen Dykstra <sdykstra@woolwich.ca>

Sent: Wednesday, February 14, 2024 9:45 AM

To: Heather Dixon <Heather@aboudtng.com>

Cc: Cheryl-Anne Ross <Cheryl@aboudtng.com>; Alex Pasley <apasley@ksmart.ca>; Bryan Bishop

<BBishop@woolwich.ca>

Subject: RE: [EXT] RE: Draft Terms of Reference for a Scoped EIS for the proposed development of an industrial subdivision at 1665 Scotch Line Road, Elmira, Region of Waterloo, ON (AA23-232A)

Caution. Outside Sender

Heather,

Please see the attached PDF which includes comments from our engineering group, and also the comments below.

We may want to mention the following section from the Elmira Drain report, which establishes a 10m setback from the top of the nearest bank of the drain:

10. WORKING AREA

The working area for construction purposes shall be a width of 20m centered on the proposed tile drain, and 20m from top of bank for open drains. The working areas for maintenance purpose shall be a width of 10m centered on the proposed tile drain and 10m from top of bank for open drains. Each landowner on whose property the drainage work is to be constructed shall designate access to and from the working area at the time of construction or upon failure to do so, the Engineer or Drainage Superintendent, as the case may be, shall designate access.

The working area for drain cleanout shall be 20m from top of bank wherever possible but shall take into account the adjacent land use. In sections where there is heavy forest cover, the working area will be reduced to the extent possible.

Regards,

Stephen Dykstra MCIP, RPP
Senior Planner
Township of Woolwich

From: Heather Dixon <Heather@aboudtng.com>

Sent: Friday, February 9, 2024 12:30 PM

To: Stephen Dykstra <sdykstra@woolwich.ca>

Cc: Cheryl-Anne Ross <Cheryl@aboudtng.com>

Subject: [EXT] RE: Draft Terms of Reference for a Scoped EIS for the proposed development of an industrial subdivision at 1665 Scotch Line Road, Elmira, Region of Waterloo, ON (AA23-232A)

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Good morning,

I submitted the attached draft Terms of Reference (ToR) for the proposed development of an industrial subdivision at 1665 Scotch Line Road, Elmira (erroneously listed as 1655 Scotch Line Road in the original email) for comments at the beginning of December, and sent a follow-up email at the beginning of January. We have received comments from the GRCA and the Region, but have yet to hear from the Township. Could you please let me know if Township staff have any comments on the attached ToR?

Many thanks,

Heather Dixon, PhD (she/her) . Aquatic Ecologist
ABOUD & ASSOCIATES INC. 3-5 Edinburgh Road South . Guelph . Ontario . N1H 5N8
519.781.1581 www.aboudtng.com . heather@aboudtng.com

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From: Heather Dixon

Sent: Wednesday, January 3, 2024 11:49 AM

To: sdykstra@woolwich.ca

Cc: Cheryl-Anne Ross <Cheryl@aboudtng.com>

Subject: RE: Draft Terms of Reference for a Scoped EIS for the proposed development of an industrial subdivision at 1665 Scotch Line Road, Elmira, Region of Waterloo, ON (AA23-232A)

Good morning,

I submitted the attached draft Terms of Reference (ToR) for the proposed development of an industrial subdivision at 1665 Scotch Line Road, Elmira (erroneously listed as 1655 Scotch Line Road in the previous email) for comments at the beginning of December. We have received comments from the GRCA and the Region, but have yet to hear from the Township. Could you please let me know if Township staff have any comments on the attached ToR?

Many thanks,

Heather Dixon, PhD (she/her) . Aquatic Ecologist
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519.781.1581 www.aboudtng.com . heather@aboudtng.com

Aboud & Associates Inc. is located within the Between the Lakes Purchase (Treaty 3); the treaty lands and territory of the Mississaugas of the Credit.

From: Heather Dixon

Sent: Monday, December 4, 2023 12:21 PM

To: 'cfosterpengelly@grandriver.ca' <cfosterpengelly@grandriver.ca>; 'sdykstra@woolwich.ca' <sdykstra@woolwich.ca>; 'environmentalplanning@regionofwaterloo.ca'

<environmentalplanning@regionofwaterloo.ca>

Cc: Cheryl-Anne Ross <Cheryl@aboudtng.com>; 'mlippert@mhbcplan.com' <mlippert@mhbcplan.com>

Subject: Draft Terms of Reference for a Scoped EIS for the proposed development of an industrial subdivision at 1655 Scotch Line Road, Elmira, Region of Waterloo, ON (AA23-232A)

Dear Mr. Foster-Pengelly, Mr. Dykstra, and the Region of Waterloo Planning Department,

Please see the attached draft Terms of Reference for a Scoped Environmental Impact Study (EIS) for the proposed development of an industrial subdivision at 1655 Scotch Line Road, Elmira, Region of Waterloo, ON. The draft Terms of Reference have been developed based on information received from the proponent, and a review of the applicable municipal, provincial, and federal guidelines that apply to this project. We would appreciate your review and comments on the Terms of Reference in order to finalize the proposed scope of work required for the Scoped EIS.

Many thanks,

Heather Dixon, PhD (she/her) . Aquatic Ecologist
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Heather Dixon

From: Heather Dixon
Sent: Friday, March 15, 2024 9:42 AM
To: 'Luis Almeida'
Subject: RE: GHD/Lanxess reports regarding groundwater/watercourse contamination on the eastern edge of Elmira

Hi Luis,

Thank you for passing the request on. I have been in contact with the Township regarding the repository information and FOI.

Many thanks,

Heather Dixon, PhD (she/her) . Aquatic Ecologist
ABOUD & ASSOCIATES INC. 3-5 Edinburgh Road South . Guelph . Ontario . N1H 5N8
519.781.1581 www.aboudtng.com . heather@aboudtng.com

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From: Luis Almeida <Luis.Almeida@ghd.com>
Sent: Monday, March 11, 2024 9:49 AM
To: Heather Dixon <Heather@aboudtng.com>
Cc: Cheryl-Anne Ross <Cheryl@aboudtng.com>
Subject: RE: GHD/Lanxess reports regarding groundwater/watercourse contamination on the eastern edge of Elmira

Caution. Outside Sender

Heather

The Township of Woolwich has a repository of all the environmental reports that have been prepared by various consultants and submitted on behalf LANXESS to the MECP and the public. I will pass on your request to LANXESS but in the past we have provided the repository information and recommended that a FOI be submitted for the specific area of interest. Stantec is also in the process of preparing a risk assessment for a specific area of the Canagagigue Creek. Also there will be an Annual Monitoring report completed as part of the groundwater remedy that will be submitted to the MECP and Township at the end of this month.

Thanks

Lou Almeida B.Sc. (he/him)

GHD

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455 Phillip Street Unit #100 Waterloo Ontario N2L 3X2 Canada

D +1 519 340 3778 **M** +1 519 897 9745 **E** luis.almeida@ghd.com

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Please consider the environment before printing this email

From: Heather Dixon <Heather@aboudtng.com>

Sent: Monday, March 11, 2024 9:39 AM

To: Luis Almeida <Luis.Almeida@ghd.com>

Cc: Cheryl-Anne Ross <Cheryl@aboudtng.com>

Subject: RE: GHD/Lanxess reports regarding groundwater/watercourse contamination on the eastern edge of Elmira

You don't often get email from heather@aboudtng.com. [Learn why this is important](#)

Good morning,

I emailed you previously to request the GHD/Lanxess reports regarding the groundwater/watercourse contamination in Elmira, as part of the approval process for a Terms of Reference with the Township of Woolwich (see email below). Please can you provide me with these reports?

Many thanks,

Heather Dixon, PhD (she/her) . Aquatic Ecologist
ABOUD & ASSOCIATES INC. 3-5 Edinburgh Road South . Guelph . Ontario . N1H 5N8
519.781.1581 www.aboudtng.com . heather@aboudtng.com

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From: Heather Dixon

Sent: Friday, February 23, 2024 9:57 AM

To: 'Luis.Almeida@ghd.com' <Luis.Almeida@ghd.com>

Cc: Cheryl-Anne Ross <Cheryl@aboudtng.com>

Subject: GHD/Lanxess reports regarding groundwater/watercourse contamination on the eastern edge of Elmira

Good morning,

I am in the process of getting a Terms of Reference approved with the Township of Woolwich for a proposed development on the eastern edge of Elmira. One of the comments provided was to review the GHD/Lanxess reports regarding the groundwater/watercourse contamination in the area. Stephen Dykstra from the Township recommended that I reach out to you to obtain these documents. Would you please be able to provide them to me?

Many thanks,

Heather Dixon, PhD (she/her) . Aquatic Ecologist
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Heather Dixon

From: Stephen Dykstra <sdykstra@woolwich.ca>
Sent: Wednesday, October 30, 2024 3:21 PM
To: Heather Dixon
Cc: Cheryl-Anne Ross
Subject: RE: [EXT] FW: GHD/Lanxess reports regarding groundwater/watercourse contamination on the eastern edge of Elmira

Caution. Outside Sender

Heather,

I have not heard back from staff – I just sent out another email to see if I can get a response.

Regards,

Stephen Dykstra MCIP, RPP
Senior Planner
Township of Woolwich

From: Heather Dixon <Heather@aboudtng.com>
Sent: October 30, 2024 1:14 PM
To: Stephen Dykstra <sdykstra@woolwich.ca>
Cc: Cheryl-Anne Ross <Cheryl@aboudtng.com>
Subject: RE: [EXT] FW: GHD/Lanxess reports regarding groundwater/watercourse contamination on the eastern edge of Elmira

Hi Stephen,

Do you have any more information about this?

Many thanks,

Heather Dixon, PhD (she/her) . Aquatic Ecologist
ABOUD & ASSOCIATES INC. 3-5 Edinburgh Road South . Guelph . Ontario . N1H 5N8
519.781.1581 www.aboudtng.com . heather@aboudtng.com

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From: Stephen Dykstra <sdykstra@woolwich.ca>
Sent: Monday, March 18, 2024 11:41 AM
To: Heather Dixon <Heather@aboudtng.com>
Cc: Cheryl-Anne Ross <Cheryl@aboudtng.com>
Subject: RE: [EXT] FW: GHD/Lanxess reports regarding groundwater/watercourse contamination on the eastern edge of Elmira

Caution. Outside Sender

Heather,

I have reached out to some other staff to see if they have any additional information about this.

I will let you know when I get a response.

Regards,

Stephen Dykstra MCIP, RPP
Senior Planner
Township of Woolwich

From: Heather Dixon <Heather@aboudtng.com>

Sent: Tuesday, March 12, 2024 9:30 AM

To: Stephen Dykstra <sdykstra@woolwich.ca>

Cc: Cheryl-Anne Ross <Cheryl@aboudtng.com>

Subject: [EXT] FW: GHD/Lanxess reports regarding groundwater/watercourse contamination on the eastern edge of Elmira

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Hi Stephen,

I have been in communication with GHD regarding their LANXESS reports, and received the below reply from Lou Almeida yesterday. Would you be able to provide the repository information for the reports requested? Also we are unsure of the process for a FOI. What that be something we would go about doing, and, if so, how?

Many thanks,

Heather Dixon, PhD (she/her) . Aquatic Ecologist
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519.781.1581 www.aboudtng.com . heather@aboudtng.com

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From: Luis Almeida <Luis.Almeida@ghd.com>

Sent: Monday, March 11, 2024 9:49 AM

To: Heather Dixon <Heather@aboudtng.com>

Cc: Cheryl-Anne Ross <Cheryl@aboudtng.com>

Subject: RE: GHD/Lanxess reports regarding groundwater/watercourse contamination on the eastern edge of Elmira

Caution. Outside Sender

Heather

The Township of Woolwich has a repository of all the environmental reports that have been prepared by various consultants and submitted on behalf LANXESS to the MECP and the public. I will pass on your request to LANXESS but in the past we have provided the repository information and recommended that a FOI be submitted for the specific area of interest. Stantec is also in the process of preparing a risk assessment for a specific area of the Canagagigue Creek. Also there will be an Annual Monitoring report completed as part of the groundwater remedy that will be submitted to the MECP and Township at the end of this month.

Thanks

Lou Almeida B.Sc. (he/him)

GHD

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D +1 519 340 3778 **M** +1 519 897 9745 **E** luis.almeida@ghd.com

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From: Heather Dixon <Heather@aboudtng.com>

Sent: Monday, March 11, 2024 9:39 AM

To: Luis Almeida <Luis.Almeida@ghd.com>

Cc: Cheryl-Anne Ross <Cheryl@aboudtng.com>

Subject: RE: GHD/Lanxess reports regarding groundwater/watercourse contamination on the eastern edge of Elmira

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Good morning,

I emailed you previously to request the GHD/Lanxess reports regarding the groundwater/watercourse contamination in Elmira, as part of the approval process for a Terms of Reference with the Township of Woolwich (see email below). Please can you provide me with these reports?

Many thanks,

Heather Dixon, PhD (she/her) . Aquatic Ecologist
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From: Heather Dixon

Sent: Friday, February 23, 2024 9:57 AM

To: 'Luis.Almeida@ghd.com' <Luis.Almeida@ghd.com>

Cc: Cheryl-Anne Ross <Cheryl@aboudtng.com>

Subject: GHD/Lanxess reports regarding groundwater/watercourse contamination on the eastern edge of Elmira

Good morning,

I am in the process of getting a Terms of Reference approved with the Township of Woolwich for a proposed development on the eastern edge of Elmira. One of the comments provided was to review the GHD/Lanxess reports regarding the groundwater/watercourse contamination in the area. Stephen Dykstra from the Township recommended that I reach out to you to obtain these documents. Would you please be able to provide them to me?

Many thanks,

Heather Dixon, PhD (she/her) . Aquatic Ecologist
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