

April 27, 2022

File: 101835.001

Byrex Developments Inc.

Via email:ashmontreal@yahoo.com

Attention: Mr. Ash Sharma

**Re: Preliminary Constraints Assessment
Part of Lot 16, Concession 10, Geographic Township of Ramsay, Almonte, Ontario**

Please accept this letter as the GEMTEC Consulting Engineers and Scientists Limited (GEMTEC) Preliminary Environmental Constraints Assessment completed for two parcels of land, comprising 4.1 and 3.1 acres, respectively, located on part of Lot 16, Concession 10 within the Village of Almonte.

INTRODUCTION

The purpose of this Preliminary Constraints Assessment is to identify potential natural heritage features on the subject property, as outlined in Section 3.1.4: *Environmental and Natural Heritage Features* of the Mississippi Mills Official Plan (2019) which may pose a potential environmental constraint for future development at the site.

The subject property is on part of Lot 16, Concession 10, Almonte, Ontario. The site is bound to the north by a vacant parcel also located on part of Lot 16 and to the east by an unnamed tributary to the Mississippi River. To the west the site is bound by the rear-yards of the neighbouring properties fronting to Mcdermott Street and to the south by the same unnamed tributary noted above.

The site location and layout are illustrated on Figure A.1 in Attachment A.

METHODOLOGY

To complete this Preliminary Environmental Constraints Assessment a desktop assessment was completed in combination with a single field investigation. The field investigation was completed on April 25, 2022 from 09:30 to 11:15. The conditions at the time of the field investigation were: clear skies, 12°C, no precipitation and light wind (Beaufort 1).

EXISTING ENVIRONMENT

Currently the site is undeveloped with recreational trails throughout. The topography of the site is relatively flat with elevations ranging between a topographical high of 141 mASL in the southwest portion of the site to a topographical low of 136 mASL in the southeast.

Wetlands, Surface Water and Fish Habitat

Although localized areas of standing water, known as vernal pools, were evident across the central and eastern portion of the site, no wetlands greater than 0.5 ha in size were identified.

The watercourse bordering the east and south portions of the site contributes to downstream fish habitat and may provide direct fish habitat; however, no fish were observed during the site investigation. It is anticipated that a typical watercourse setback of 15 m would need to be adhered to during any future development of the site.

Vegetation Communities

Vegetation communities on the subject property were delineated using publicly available air photos and confirmed in the field on April 12, 2022, following the Ecological Land Classification System for Southern Ontario (Lee et al., 2008). Vegetation communities were confirmed in the field by employing the random meander methodology while documenting dominant vegetation species within the various vegetation community forms.

The site is comprised of two vegetation communities, a lowland green ash hardwood forest and a cultural thicket.

The cultural community, those vegetation communities whose composition and form are reflective of or actively maintained by prolonged human disturbance, includes the area covering the western portion of the site. This vegetation community is predominately characterized by glossy buckthorn, common juniper and bur oak.

The eastern portion of the site contains a lowland green ash hardwood forest which has been significantly deteriorated by the invasive emerald ash borer. The majority of mature ash trees within this forest appear to be dead. The remaining hardwood trees are primarily comprised of silver maple and red maple.

NATURAL HERITAGE FEATURES

Unevaluated Wetlands

No local wetlands or provincially significant wetlands were identified on-site.

Significant Woodlands

The subject property is located within the Municipality of Mississippi Mills within Lanark County, neither County nor the Municipal Official Plans have identified significant woodlands on-site. As the identification and protection of significant woodlands is a municipal planning matter, significant woodlands are not anticipated to present a constraint for future development of the site. Furthermore, the woodlands on-site would not meet the defining criteria outlined in the Natural Heritage Reference Manual (MNR, 2014).

Significant Valleylands

Based on the relatively flat topography of the site, significant valleylands are not present on site or within the immediate vicinity of the site.

Significant Areas of Natural and Scientific Interest

No areas of natural and scientific interest (ANSI) were identified on-site through a search of the Natural Heritage Information Centre database or the County Official Plan. Accordingly, ANSIs are not anticipated to present a development constraint for future development.

Significant Wildlife Habitat

The Significant Wildlife Habitat Ecoregion Criterion Schedules for ecoregion 6E define 40 types of significant wildlife habitat, which are broadly categorized as: habitats of seasonal concentration of animals, rare vegetation communities, specialized habitats for wildlife, habitats of species of conservation concern and animal movement corridors.

Based on a preliminary desktop review and through completion of the field investigation, it is unlikely that significant wildlife habitat will pose an environmental constraint for future development. However, completion of targeted wildlife surveys will be required to formally assess the presence of significant wildlife habitat. Depending on the nature of potential future development, breeding bird surveys and breeding amphibian surveys are likely to be required.

Fish Habitat

As mentioned previously, the unnamed tributary to the Mississippi River which borders the east and south portions of the site may provide direct fish habitat; however, no fish were observed at the time of the site investigation.

Species at Risk

A desktop review of species at risk occurrence records was completed to aid in the assessment of potential environmental constraints. Based on a review of element occurrences listed within the two 1 km² grid squares that encompass the site, the NHIC indicates three SAR occurrences within 1 km of the subject property, Bobolink and Blanding's Turtle.

The cultural and woodland habitat on-site do not provide the necessary habitat for Bobolink. Accordingly Bobolink are not anticipated to occur on-site.

The site may provide suitable transitory and migratory habitat for Blanding's Turtle but is unlikely to provide overwintering or suitable nesting habitat due to a lack of open, sunny, non-vegetated areas with loose soils and the site is unlikely to provide suitable overwintering habitat as the local wetlands do not provide enough water depth or permanency to survive winter conditions.

No butternut, a plant SAR, were observed during the site investigation, as such the project is not anticipated to impact butternut trees.

While there is a moderate potential for Blanding's Turtle to occur on-site, based on professional experience, given appropriate mitigation and consultation with the MECP, SAR are unlikely to constrain future development of the site.

SUMMARY

Based on the desktop analysis and site investigation, the following environmental constraints have been identified on-site:

- Potential (low) significant wildlife habitat for breeding woodland amphibians within on-site vernal pools;
- Potential (moderate) for fish habitat adjacent to site;
- Potential (moderate) for species at risk occurrence (Blanding's turtle)
- Potential (low) for presence of butternut trees on-site.

We trust this report is sufficient for your current needs; however, should you require any clarification of the information presented above, please do not hesitate to contact the undersigned.

Sincerely,



Drew Paulusse, B.Sc.
Senior Biologist



ATTACHMENT A

Figure A.1 – Preliminary Constraints



Legend

- Property Boundary
 - Study Area
 - Watercourse (MVCA/NHIC)
 - Vegetation Community
- FOD7-2 = Green Ash - Hardwood Lowland Forest
 CUT = Cultural Thicket



GEMTEC
 CONSULTING ENGINEERS
 AND SCIENTISTS

32 Steacie Drive,
 Ottawa, ON K2K 2A9
 T: (613) 836-1422
 www.gemtec.ca
 ottawa@gemtec.ca

Client:	Ash Sharma	Project:	101835.001
---------	------------	----------	------------

Location
 Almonte, Ontario

Drwn By:	Chkd By:	Preliminary Constraints
TW	DP	

Date: April 2022	Rev.	Figure: A.1
© Queen's Printer for Ontario	0	

Coordinate System: NAD 1983 UTM Zone 18N
 Service Layer Credits: World Street Map: Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community
 World Imagery: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community