347 Pido Road, Unit 29 Peterborough, Ontario K9J 6X7 Canada www.ghd.com



Our ref: 12586015

October 31, 2022

Re: 2411 and 2545 9th Line Part Lot 19, Concession 9 Outside of Town of Metcalfe City of Ottawa

Scoped Environmental Impact Statement and Natural Heritage Constraints Study

1. Introduction

GHD was retained by ASB Greenworld Ltd. (ASB or Client) to conduct several studies on a commercial/agricultural property in Metcalfe, Ontario (hereinafter referred to as the "Site"):

- Vacant/Agricultural property municipally known as 2411 9th Line Road. This parcel is located on the northern portion of the Site, to the east of 9th Line Road. The parcel is approximately 6.7 hectares (ha) in size, rectangular in shape, and is identified with property identification number (PIN) 04313-0174.
- Commercial/Agricultural/Vacant property municipally known as 2545 9th Line Road. This parcel is located
 on the southern portion of the Site, to the east of 9th Line Road. The parcel is approximately 33.4 ha in
 size, irregular in shape, and is identified with property identification numbers (PIN) 04313-0172 and
 04313-0173.

GHD was asked to complete a scoped Environmental Impact Statement (EIS). At this time, as the property is in the due diligence phase, the EIS includes an assessment of the natural features of the Site, the current designations on the property as per the City of Ottawa Natural Heritage System (southern) overlay and provincial policies, the required setbacks from the natural heritage features and any other constraints such as habitat of threatened or endangered species, significant woodlands or watercourses.

When a site plan is developed, an addendum or Final EIS may be required based on pre-consultation with the City of Ottawa.

2. Background

According to most recent NHIC 'make-a-map' data, the property contains several unevaluated wetlands. A headwater tributary flowing across the property has been channelized and is located at the edges of the parking areas and farm fields.

The property has a number of uses including some active agricultural lands planted in soya beans, former/current commercial/agricultural uses, and a large woodland on the eastern property line. The mushroom facilities, outdoor storage areas and accessory buildings are located in the developed part of the site and the gravelled areas. The natural features on the property and within 120 m of the property are all within the South Nation Region Conservation Authority jurisdiction and part of those are within their regulation limit.

The large woodland to the east and the extension of that across the eastern extension of the lot are mapped on the Natural Heritage System overlay (Schedule L2-NHS overlay (south)). Natural Heritage System components identify Provincially Significant Wetland Areas (PSW), Key Natural Heritage Features and key hydrologic features, watercourse, unevaluated wetlands, woodlands and riparian areas.

3. Natural Heritage Inventories

On September 13th, 2022, our terrestrial and wetland biologist visited the site to confirm the current site conditions. The site visit was used to verify the background information obtain within the literature review and confirm the presence/absence of natural features on site. The site visit documented the presence of woodland, wetland, regenerating fields and several small tributaries. Most of the property was comprised of active and abandoned buildings and storage structures with some areas in agricultural fields, which were planted in soya beans.



Photo 1 Agricultural field (left) and woodland in background - Sept. 13th, 2022

Woodland

The woodlot contained a mixture of green ash, eastern hemlock, silver maple, American elm and eastern white cedar. The woodland also encompassed parts that are mapped as unevaluated wetland. The woodland was delineated in the field and displayed on **Figure 1**. In the natural heritage policies, significant woodlands are woodlands of over 0.5 ha in size. The woodland on the property is much greater than 0.5 ha and is contiguous with other woodlands off the property therefore it would be designated as significant. The woodland is shown as a Natural Heritage Feature overlay, and it is not designated as Natural Environment Area, Urban Natural Feature or Rural Natural Feature. A 30-meter buffer has been applied to the dripline of the trees in order to protect the features and functions of the woodland. 30 m is the minimum buffer outlined in the City of Ottawa Official Plan outside the Urban Area.

Wetlands

Southeast corner of Site.

The eastern part of the site is located in a lower lying area with a watercourse flowing through a wetland community. The wetland was characterized by a mixture of wetland types. This included some meadow marsh and thicket swamp closer to the channel with patches of speckled alder, red-osier dogwood, narrow-leaved spiraea, green ash, slender willow and nannyberry. The western portion was dominated by a green ash swamp.

Some standing water was present and portions of the woodland with organic soils over clay. The source of water was from surface water sources, including spring snow melt and intermittent runoff received from the watercourse

The protection of the feature and a 30 m buffer is recommended. Currently the buffer area is partially farmland or woodland. Areas that may be adjacent to a future building envelope should be revegetated with native tree and shrub species.



Photo 2. View of Wetland in back centre of photo and to right of photo.

Central wetland

Existing mapping shows an unevaluated wetland in the north central portion of the property, along the creek. The site visit by GHD found that there was some riparian vegetation along much of the creek. This was impacted by the active farming on those farm fields beside the watercourse, narrowing the wetland to a 10-30 m wide area (Figure 1). Feature is associated with creek and a narrower feature. A 30m buffer from the creek or the wetland, greatest constraint, would protect this feature.

3. Wetland to west of 9th Line.

There is wetland on the west side of 9th Line across from the site. The wetland was comprised of a green ash swamp with a willow thicket swamp along the headwaters of the creek. The pocket of wetland extends well to the west. The wetland has not been evaluated by MNRF and is not designated as provincially significant. The wetland is contiguous with the significant woodland on the lands to the north.



Photo 3. Off-site wetland. Facing southwest (Sept. 13th, 2022)

As the wetland is located on the opposite side of the road from the subject property, no buffer or constraint is needed on the Site. As the watercourse originates in this wetland, maintenance of the flow under the road and across the site is required

Tributary

The tributaries on site are part of the watershed of the North Castor River. The watercourse on site, originates on the west side of 9th Line and flows across the northern part of the property before turning south and then back north. The thermal regime is warmwater with the reaches in the site listed as intermittent and downstream as permanent. The City of Ottawa Official Plan and SNRCA require a 30 m setback from a watercourse (**Figure 1**).

The redevelopment of the site will require that the catchment area and flow downstream continues post-construction. Any realignment of the watercourse would require a permit from the conservation authority. Stormwater for the Site would require consideration of maintaining flows, water quality and impacts on the receiving watercourse and downstream fish habitat.



Photo 4. View of watercourse, just east of mushroom farm buildings

Species at Risk

No Species at Risk were identified during field surveys. As it was late in the year, evidence of barn swallow nests and bat cavity trees was conducted when on site. A list of potential species in the area that may find suitable habitat on the site is found below.

Breeding Bird Surveys and targeted Species At Risk surveys would need to be completed to confirm the presence/ absence of Species at Risk on the property as part of the final submissions and final Environmental Impact Statement report.

Barn swallow prefer to nest in open structures, barns, storage buildings, outbuildings, bridges and culverts. On this site large mushroom facility has multiple openings and doors that may allow barn swallows to enter the building. Barns swallows are listed as a threatened species. Further surveys and assessment of habitat needed in the summer breeding season.



Photo 5. View of mushroom facility buildings and openings in eves.

Eastern meadowlark prefer grasslands, hayfields, pasturelands and fallow farm fields for nesting. There are some abandoned fields on this Site that may contain suitable habitat for this species. Further surveys and assessment of habitat needed in the summer breeding season.

There are 3 species of bats that have been listed as federally and provincially endangered. Those species may find suitable roosting habitat in the mushroom farm building and the mature trees on site. Further surveys and assessment of habitat needed in the summer breeding season and in the leaf on season for the treed sites.

Eastern chorus frog is listed as threatened federally. There may be habitat in the southeast wetland for this species. Surveys for detection are conducted in the early spring (April) to show presence or absence.

4. Impact Assessment

The existing facility was constructed close to the road and separated from any of the natural heritage features.

The demolition of some or all of the building on site may result in a loss of habitat for Species at Risk including bats and barn swallows. Further assessments and discussions with the Ministry of Environment, Conservation and Parks would be necessary to ensure compliance with the Ontario Endangered Species Act regulations.

Several natural features were found on the site or within 120 metres. This includes several unevaluated wetlands, tributaries and significant woodlands. The woodlands and wetland on the east side of the property are part of the City of Ottawa's Natural Heritage Features overlay.

The NHF overlay provides some protection for those features and retention is recommended. The policies and implementation of the protection is dependent on the development proposed. Impacts on the ecological functions that may be impacted from a future development application would need to be made at the submission stage through an addendum to this scoped EIS.

The wetlands and tributary are part of the hydrological features under the conservation authority regulations. Protection of those features is recommended and required. In addition a buffer of 30 metres from the watercourse banks and from the wetland boundary is also recommended. That area should be left in its natural state, if forested, or be restored to forest and shrubs through a landscape plan.

The main constraints are the wetlands and the watercourse where retention of the feature in its current location is recommended. As the wetland and woodland is on the far east end, that will likely not impact on the building envelope. The watercourse has been straightened and altered historically. The retention of that watercourse, the flows it provides to downstream fish habitat and the riparian corridor is recommended. A buffer from that feature and possible enhancements is also recommended. Determining if direct fish habitat is present would need to be conducted in the spring.

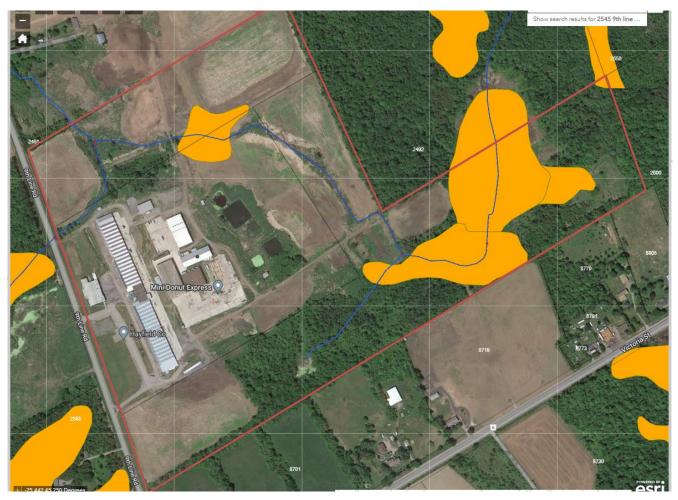


Figure 1: Natural Heritage Features: orange polygons are unevaluated wetland, blue lines are watercourses.

5. Summary

- A 30-meter buffer be applied to all natural features (Wetland, Significant Woodland and watercourses).
- No Species at Risk was noted on site during Sept 13th, 2022 natural heritage constraint surveys.
- Habitat may be present in the open field areas for eastern meadowlark, for bats in the barns and large diameter trees and potential habitat for barn swallows in the existing structures including the mushroom factory, open storage buildings and accessory buildings.
- An Environmental Impact Statement or addendum will be required as part of any planning applications.
 City typically requires a 3-season survey of site and woodland/wetland.

6. Conclusion

This scoped EIS has been conducted on the subject property to understand the natural environment constraints and opportunities for future development. An Environmental Impact Study will need to be completed as part of the Planning Application for any future development. Likewise, additional field investigations and reporting will be a requirement to support the development application and to show compliance with applicable federal and provincial legislation and policies, conservation authority regulations and City of Ottawa Official Plan policies.

Regards

Chris Ellingwood

Senior Terrestrial and Wetland Biologist

+1 249 749-3317

chris.ellingwood@ghd.com

Katherine Ryan

Terrestrial and Wetland Biologist

Kattodyn

1-289-795-5422

katherine.ryan@ghd.com