



MEMO

Project No. 1864

To: April Nix, City of Guelph

Cc: Pete Graham (89 Beechwood Inc.)

From: David Stephenson and Ken Burrell

Date: July 20, 2018

Re: 89 Beechwood Avenue, Guelph, EIS Addendum
Additional Information (Cup-Plant, Buffers, and Edge Management)

This memo is in response to comments received from the City of Guelph (A. Nix), dated July 13, 2018, regarding the proposed redevelopment of 89 Beechwood Avenue and provides additional information in conjunction with the Environmental Impact Study (EIS) Addendum, submitted by Natural Resource Solutions Inc. (NRSI) (March 2018).

The client (89 Beechwood Inc.) is proposing to rezone 89 Beechwood Avenue to facilitate the development of a 23 unit 2-storey townhouse complex with associated at-grade parking. As such, this memo provides additional information in relation to the EIS Addendum, specifically in response to City of Guelph (A. Nix) comments regarding Cup Plant (*Silphium perfoliatum*), the City of Guelph's buffer policies, and an overview of an edge management plan.

Cup Plant

Within the EIS Addendum (Section 3.2.2 – Vascular Flora; pg. 16), Cup Plant was observed within the Mineral Meadow Marsh Ecosite (MAM2) (see Map 3). Cup Plant is a provincially and locally significant species that is found primarily in the US prairie region. The species is widely used in gardens and has become a relatively common exotic outside its native range (Voss and Reznicek 2012), including the northeastern USA and southern Ontario (iNaturalist 2018).

As a provincially and locally significant species, Cup Plant is afforded protection from site alteration as per the City of Guelph's Official Plan (2018), specifically Section 4.1.4.4. Given the location of Cup Plant relative to the proposed development (i.e. >15m away), there are no anticipated negative impacts associated with the proposed redevelopment on the species itself or the habitat that it is located within (i.e. the Mineral Meadow Marsh community). As such, habitat for Cup Plant has been mapped as locally significant species habitat is provided on Map 3.

Buffers

Significant Woodland

Within the EIS Addendum, specifically Sections 4.2 (pg. 24) and 5.4.2 (pg. 32-33), the proposed redevelopment is from 5 to over 10m from the surveyed dripline of the Significant Woodland.

The extensive history and existing condition of the subject property (i.e. currently developed) and adjacent lands of Howitt Park (i.e. manicured lawn and City-owned paved trail) precludes the achievement of a minimum buffer (i.e. 10m) as specified in Table 4.1, Sections 4.1.1.11 and 4.1.3.6.5 within the City of Guelph's Official Plan (2018).

Per the City of Guelph's Official Plan (2018), specifically Section 4.1.1.11 states the following:

“Notwithstanding 4.1.1.9, minimum buffers have been applied to lands containing existing development which may preclude achievement of the minimum buffer specified on Table 4.1. For any redevelopment of such lands, an EIS will be completed to the satisfaction of the City that evaluates the need for an established buffer, and determines an appropriate width where a buffer is required.”

Section 4.1.3.6.5 states the following:

“All Significant Woodlands require a minimum buffer of 10m from the drip line of the trees at the woodland edge, except where existing development precludes it. The established buffer is to be determined through an EIS, and may be greater than the 10m minimum buffer.”

Given the existing condition of the subject property and adjacent lands, specifically in regards to their developed nature, City policies allow for the implementation of an established buffer from the Significant Woodland that is 5 to over 10m from the proposed development. Enhancement measures, outlined in the EIS Addendum, such as planting native plants and shrubs and an edge enhancement plan (see below) will enhance the ecological form and function. As such, the proposed development is located 5 to over 10m from the Significant Woodland and is not expected to negatively impact the ecological form and function of the NHS.

Stormwater Management

As noted within the EIS Addendum, specifically Map 3, an infiltration gallery is located within the established buffer to the Significant Woodland and is 5.3m from the dripline at the nearest point. Overflow from the infiltration gallery will be directed overland towards Howitt Creek to maintain current annual infiltration levels throughout the subject property, while overall the infiltration gallery is considered a passive approach to stormwater management, with relatively little expected impact on the land-use of the study area.

As the site is currently developed and precludes the achievement of a minimum buffer (i.e. 10m), stormwater management is permitted within the established buffer under the City of Guelph's Official Plan (2018), specifically under Section 4.1.2.7. Due to the passive nature of infiltration gallery and the fact that overflow water will be directed to maintain current annual infiltration levels from the subject property, the placement of the

infiltration gallery is not expected to negatively impact the form and function of the NHS and will in fact help to maintain it.

Per the City of Guelph's Official Plan (2018), specifically Sections 4.1.2.7 states the following:

"Where essential transportation infrastructure, essential linear infrastructure, stormwater management facilities and structures, and/or trails are permitted within the minimum or established buffers under policies 4.1.3 and 4.1.4, the following shall apply:

- 1. Works are to be located as far away from the feature boundary within the minimum or established buffer as possible;*
- 2. The area of construction disturbance shall be kept to a minimum; and*
- 3. Disturbed areas of the minimum or established buffers shall be re-vegetated or restored with site-appropriate indigenous plants wherever opportunities exist."*

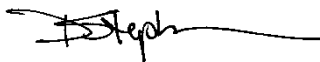
Given the existing condition of the subject property and adjacent lands, specifically in regards to their developed nature, City policies allow for the inclusion of stormwater management within the established buffer.

Edge Management Plan

An edge management plan will be addressed and described in detail as part of the Environmental Implementation Report, which will outline the strategy and steps taken to protect and enhance the Significant Woodland feature. The management plan is anticipated to include a recommendation of native species to be planted, spacing recommendations, as well as timing and maintenance considerations.

I trust that this information is satisfactory, however, if you have any questions please do not hesitate to contact me.

Sincerely,
Natural Resource Solutions Inc.



David Stephenson
Senior Biologist/Certified Arborist



Ken Burrell
Terrestrial and Wetlands Biologist

Works Cited

City of Guelph. 2018. The City of Guelph Official Plan: March 2018 Consolidation. (<https://guelph.ca/plans-and-strategies/official-plan/>).

iNaturalist. 2018. iNaturalist: An online database of flora and fauna [web application]. California Academy of Sciences. (<https://www.inaturalist.org/>).











Voss, Edward G. and Anton A. Reznicek. 2012. Field Manual of Michigan Flora. The University of Michigan Press, Ann Arbor. 990 pp.

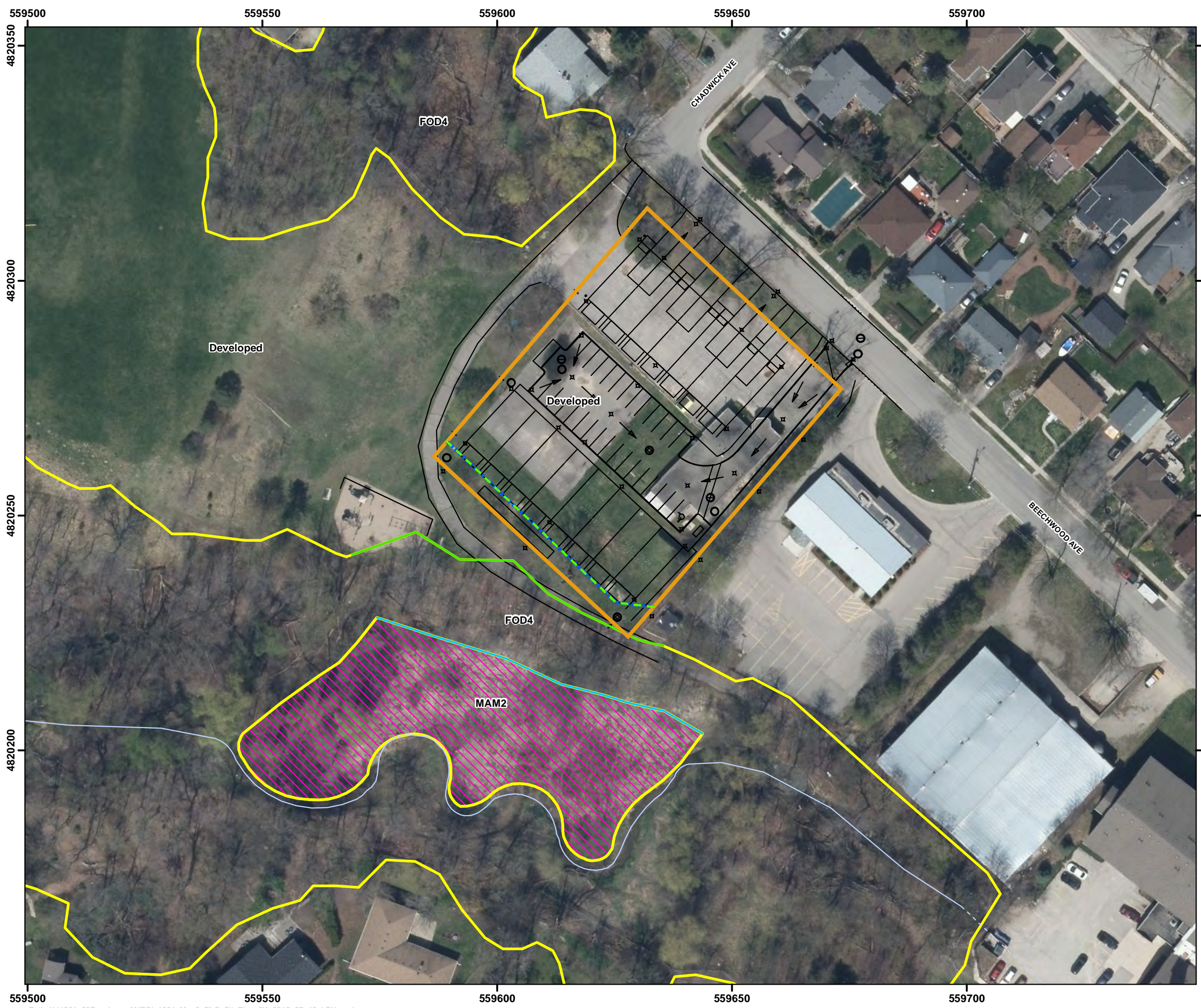
Map

89 Beechwood Avenue, Guelph Environmental Impact Study

Vegetation Communities and Site Plan Overlay

Legend

-  Subject Property
 -  Site Plan
 -  Woodland Dripline - confirmed by City of Guelph (June 26, 2017)
 -  Wetland Boundary - confirmed by GRCA (June 26, 2017)
 -  Woodland Buffer (Ranges from 5 -10+ metres)
 -  Wetland Buffer (Ranges from 18.7-37.5 metres)
 -  Permanent Watercourse
 -  Enclosed Watercourse
 -  Locally Significant Species Habitat (Cup Plant)
 -  Ecological Land Classification (ELC)
- (FOD4) Dry - Fresh Deciduous Forest Ecosite
(MAM2) Mineral Meadow Marsh Ecosite



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Project: 1864 Date: July 19, 2018	NAD83 - UTM Zone 17 Size: 11x17" 1:800
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