

TECHNICAL MEMORANDUM

Subject: Proposed Rezoning at Cardinal Creek Village

1.0 INTRODUCTION

Taggart is seeking a Zoning Bylaw Amendment (ZBA) to reclassify a 0.45 ha parcel (the “Subject Lands”) within their Cardinal Creek Village North (CCV-N) community from Environmental Protection (EP1) to Development Reserve (DR). The purpose of this memo is to review the delineation of areas within the current EP zoning limits (potentially) qualifying as “Natural Heritage Feature”, i.e., which would support the current EP zone delineation or changes to it. The memo reviews two general considerations related to:

- 1) How/which relevant Natural Heritage Features are identified under the City of Ottawa’s Official Plan (OP), and with respect to EP zones; and
- 2) How Significant Woodland specifically is, or may be, reviewed and/or modified as a Natural Heritage Feature with respect to development considerations.

2.0 NATURAL HERITAGE FEATURES AND ZONING

Per Part 9 of the City’s Zoning By-law:

The purpose of the EP-Environmental Protection Zone is to:

(1) recognize lands which are designated in the Official Plan as Significant wetlands [PSW], Natural Environment Areas [NEA; i.e. as distinct from Natural Heritage Features] and Urban Natural Features [UNF] that contain important environmental resources which must be protected for ecological, educational and recreational reasons; (By-law 2012-334)

(2) permit only those uses which are compatible with and assist in the protection of the environmental attributes of these lands, or are in keeping with applicable Official Plan policies; and

(3) regulate development to minimize the impact of any buildings or structures within these environmental areas.

Per Paragraph 2 above, the ecological features that EP zones are intended to protect are PSW, UNF, and NEA. The EP1 zone at CCV-N does not include PSW (or any wetland features) and is not designated as a UNF. The zoning, however, may be considered as intended to protect an NEA, though the definition of an NEA is somewhat vague in the City’s OP. Section 7.3 3) of the OP only provides that an NEA protects larger natural areas with multiple, overlapping Natural Heritage Features and functions.

Within the OP, Schedule C11 (Part C for the eastern end of Ottawa) provides a broad estimate of areas potentially qualifying as Natural Heritage Features. The EP1 zone at CCV-N does include some areas flagged within Schedule C11-C, though the mappings do not generally correspond very well (Figure 1).

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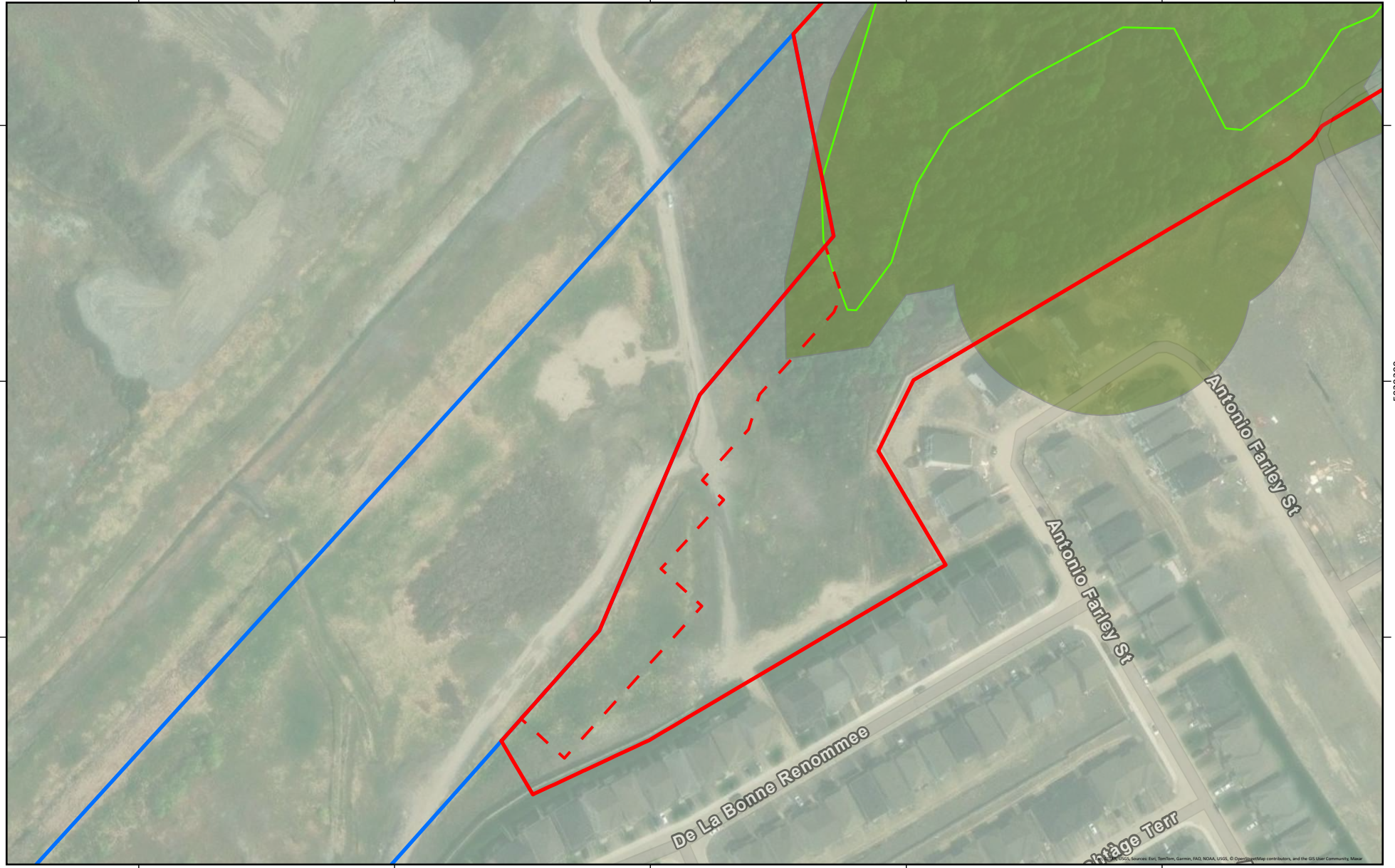
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Legend

-  Existing EP Zone
-  Existing DR Zone
-  Subject Lands/Area of Rezoning



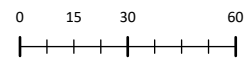
-  Significant Woodland Boundary
-  C11 - Natural Heritage Features Overlay



Figure 1. Taggart is seeking to rezone the area within the red dashed line from EP1 to DR



Spatial Reference:
 PCS: WGS 1984 UTM Zone 18N
 Map Units: Meter

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Importantly, the Natural Heritage Feature data layer within Schedule C11 is intended only to identify areas *suspected* of being Natural Heritage Features. While the data layer extends into the EP1 zone, it is not fully ground-truthed or otherwise confirmed. As such, Schedule C11 should not be considered a definitive delineation of Natural Heritage Features or a firm basis for designating an NEA. The Schedule serves instead to identify areas for which an Environmental Impact Study (EIS) must be completed as part of a development review process to confirm and delineate Natural Heritage Features (i.e. per Section 4.8.1 of the OP).

Natural Heritage Features (i.e. those that might form the basis for an NEA) include:

- a) Significant wetlands;*
- b) Habitat for endangered and threatened species;*
- c) Significant woodlands;*
- d) Significant valleylands;*
- e) Significant wildlife habitat;*
- f) Areas of Natural and Scientific Interest;*
- g) Urban Natural Features; h) Natural Environment Areas;*
- i) Natural linkage features and corridors;*
- j) Groundwater features;*
- k) Surface water features, including fish habitat; and*
- l) Landform features.*

Previous EIS work completed by KAL (2024) delineated the boundaries of Significant Woodland within the western portion of the EP1 zone as a Natural Heritage Feature. While Schedule C11 indicates the Natural Heritage Feature “Overlay” as extending into the Subject Lands, no Significant Woodland (i.e. Natural Heritage Feature potentially supporting an NEA designation) extends into that area (Figure 2). The Subject Lands do not include any PSW, UNA, or NEA (or rather, Natural Heritage Features supporting NEA). The EP-1 zoning is therefore not warranted within the Subject Lands, and a DR zoning would be appropriate considering the existing natural heritage conditions.

3.0 SIGNIFICANT WOODLAND AS A NATURAL HERITAGE FEATURE

The City of Ottawa identifies and manages Significant Woodland as a Natural Heritage Feature per the *Significant Woodlands Guidelines for Identification, Evaluation, and Impact Assessment*. The area of Significant Woodland in CCV-N was delineated by KAL (2024) through their EIS for Phase 7 of CCV-N in accordance with the Significant Woodlands Guidelines.

Within urban areas, such as CCV-N, the identification of Significant Woodland considers the continuous presence of forest-type tree cover within an area for at least 60 years. As such, the delineation of Significant Woodland in urban areas is based on air photo interpretation of how forest edges have shifted since 1965, rather than an on-the-ground review. Areas >0.8 ha having been continuously forested for the requisite time are deemed “significant”.

The Significant Woodlands Guidelines include two important considerations for the review of development plans that intersect Significant Woodlands. First, the Guidelines note that when they approved the new woodland policies in 2016, City Council exempted features in urban areas previously excluded from listing in the Natural Heritage System through secondary plans, community design plans, approved plans of subdivision, or existing conditions reports submitted and accepted by the City in support of on-going development applications. Plans for CCV-N had



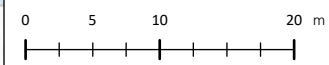


Legend

- Existing EP Zone
- Existing DR Zone
- - - Subject Lands/Area of Rezoning
- Significant Woodland Boundary
- Non-Significant Woodland Area



Figure 2. The orange area is excluded from designation as Significant Woodland as it was approved for development prior to 2016



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established the DR zone to the north of the Subject Lands by 2014. As such, historically wooded areas extending into that DR zone will not be treated as “Significant” in a development review context, despite otherwise qualifying as such (Figure 2).

Second, even where forested areas do fully qualify as Significant Woodland, they are still not considered “no touch” features. Site alteration and/or development within Significant Woodlands is permissible where there are “no negative impacts on the natural features or their ecological functions”. In practice, however, the total set of possible ecological functions that may qualify a feature as significant must be considered. Consequently, development or alterations that do not negatively affect the sum total of qualifying functions may occur, i.e., small developmental changes to existing forest areas or functions may be offset by improvements in other areas or functions. The net lack of negative effects on the adjacent Significant Woodland associated with future development under a rezoning (i.e. any minor rebalancing of forest area and/or functionality) would be established through an EIS process directly supporting a ZBA application for areas within the Significant Woodland.

3.1 Existing Natural Heritage Conditions

KAL characterized the area within the EP-1 zone and the broader area of Significant Woodland through the 2024 EIS. Forests north of Phase 7 were further subject to targeted investigation by KAL on May 7, 2025. This broader area within the EP1 zone was characterized as a Fresh-Moist Sugar Maple – Lowland Ash Deciduous Forest (FOD6-1) vegetation community in the KAL (2024) EIS.

For the purposes of this memo, the forested areas within/near the Subject Lands were more finely characterized to capture micro ecological communities within the EP1 zone there, some of which do not otherwise meet the standard size threshold for an ELC survey (<0.5 ha; Lee et al., 1998). Three distinctive micro ELC vegetation community units were identified within this zone:

1. a Dry-Fresh White Cedar Coniferous Woodland Type (WOCM1-2) in the southwest area of the EP1 zone, adjacent to the community retaining wall;
2. a Fresh-Moist Green Ash – Hardwood Lowland Deciduous Forest Type (FODM7-2) below in the northern portion of the EP1 zone, immediately east of the construction access road, and
3. a Dry-Fresh Ironwood Deciduous Forest Type (FODM4-4) near the edge of the Significant Woodland where the FODM7-2 transitions eastward into FODM4-4. The FODM4-4 shortly transitions into the FOD6-1 vegetation community that comprises much of the Significant Woodland (KAL, 2024).

The FODM7-2 community is characterized by standing dead Green Ash trees ranging from 8-12 DBH, with a thick European Buckthorn understory and associations of Red Osier Dogwood, scattered Eastern White Cedar trees, and Sugar Maple saplings. The FODM4-4 community is dominated by Ironwood trees, ranging from 15-20 DBH in size, with smaller amounts of Sugar Maple and Eastern White Cedar, both ranging from 10 – 15 DBH. One large Basswood measuring 95 DBH and in declining health was observed within this community (T4, broader site; Appendix A in KAL TCR, dated March 11, 2025), and one large Sugar Maple measuring 72 DBH and in very poor health was observed (T5, broader site; Appendix A in KAL TCR, dated March 11, 2025). The fate of both trees, as noted in that TCR (KAL, 2025) was “Planned for Removal”. The WOCM1-2 is



dominated by sparse Eastern White Cedar trees, ranging from 10-15 DBH in size. Some shrub and Eastern White Cedar saplings were observed. The photo below shows the transitional zone between the FODM4-4 towards the FODM7-2 community.



Figure 3

The forest community (FODM4-4) within the Significant Woodland area in the EP1 zone did not exhibit notable species composition, age, or tree size. The large trees on the edge of the Significant Woodland did not exhibit characteristics of specimen trees (i.e., unique species, good health condition relative to size, etc.) and were observed to be in poor health.



4.0 CLOSURE

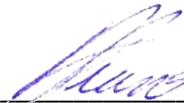
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Respectfully submitted,

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