



# GEMTEC

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**Tree Conservation Report  
Zoning By-Law Amendment  
910 March Road  
Ottawa, Ontario**



# GEMTEC

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Submitted to:

Canadian Rental Development Services Inc.  
206-555 Legget Drive (Tower A)  
Ottawa, Ontario  
K2K 2X3

**Tree Conservation Report  
Zoning By-Law Amendment  
910 March Road  
Ottawa, Ontario**

May 4, 2023  
Project: 100011.014\_V02

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## 1.0 INTRODUCTION

GEMTEC Consulting Engineers and Scientists Limited (GEMTEC) was retained by Canadian Rental Development Services Inc. to carry out a Tree Conservation Report (TCR) for the property located at 910 March Road, in Ottawa, Ontario, hereafter referred to as the “subject property”. The site location is provided in Figure A.1 in Appendix A.

### 1.1 Purpose

The proponent is seeking a zoning by-law amendment for the property located at 910 March Road, in Ottawa, Ontario for future development. As a component of the zoning amendment application, the City of Ottawa is requesting a TCR for the collective property. In accordance with the City of Ottawa’s Tree Protection (By-law No. 2020-340) a TCR is required to identify trees to be retained and protected under future development scenarios and, where feasible, identify opportunities to offset the loss of trees that cannot be retained or contribute to the City’s forest cover targets.

The property has an approximate size of 2.71-hectares (ha). The proposed site development includes a mixed-use apartment building with road access via March Road. The existing site layout and proposed development is provided in Figure A.2 and Figure A.3, respectively, in Appendix A.

### 1.2 Definitions

Terms and abbreviations used throughout the remainder of this report are summarized below.

*Diameter at Breast Height (DBH)*, is defined as the diameter of the tree trunk measured at a height of 1.2 metres above ground surface for trees of 10 centimeters in diameter and greater.

*Critical Root Zone (CRZ)*, is defined as the ground area within a circumference around the tree trunk calculated as 10 centimeters from the trunk of the tree for every one centimeter of tree trunk diameter at breast height.

*Distinctive Tree*, within the City of Ottawa, is defined as any tree with a DBH of 30 cm or greater within the inner urban area and with a DBH of 50 cm or greater within the suburban area and rural area. For the purposes of this report, a distinctive tree is considered to be a tree with a DBH of 50 cm or greater, as the subject property is located within the suburban boundary.

## **2.0 METHODOLOGY**

### **2.1 Desktop Review**

To complete the TCR, digital colour air photos of the site available from GeoOttawa were reviewed from 1976 to 2021 to identify natural features, including historical trees, present on-site and in the vicinity of the site.

Based on a review of historical air photos, the general surrounding area has seen an increase in residential and commercial development between 1999 – 2011, whereas the site has not undergone any significant change since at least 2007. Development on-site has been present since 1976, with the site at present day configuration since 2021. No alterations to land use were noted during review.

### **2.2 Field Investigations**

In addition to the completion of a desktop review of historical air photos, a site visit was conducted on January 18, 2023, from 08:00 to 12:00, to document and identify all trees on-site with a DBH greater than 10 cm. The site investigation utilized transects bisecting the property to document the health of each tree greater than 10 cm in DBH, the trees location and the tree species.

To determine the presence or absence of species at risk on-site and adjacent to site, butternut were searched for during the transect surveys.

Site conditions during the site investigation were as follows: -2°C, 100% cloud cover, Beaufort 3 and light flurries.

Site photographs taken during the field investigations are provided in Appendix B.

## 3.0 RESULTS

### 3.1 Existing Conditions

Development on-site currently consists of an abandoned log building, storage containers and temporary site buildings. Other existing features on the property include road access to 910 March Road, existing driveways for site access, and gravel areas for parking. Existing development, including the existing structures and associated parking areas, occupies a combined approximate area of 1.05 ha. Impermeable surfaces account for 39% of the total property area.

Outside of the existing development, the subject site consists of the riparian areas of the Shirley's Brook tributaries that flow along the north and east property boundaries. A stormwater outfall and associated watercourse is present off-site, immediately adjacent to the south. Numerous trees are present on the property, primarily along the property lines. A summary of all trees on-site is provided in Section 3.2 below.

The land use in the vicinity of the site is characterized by agriculture, commercial and residential land uses. Natural environmental features in the vicinity of the project, as summarized in Table 3.1 below, include surface water features. Surface water features on-site include the stormwater outfall, associated watercourse and Shirley's Brook tributaries.

Based on NHIC observation data, the following Species at Risk (SAR) have been observed within 1 km of the subject property: barn swallow (avian SAR), eastern small-foot myotis, little brown myotis, tri-colored bat (mammalian SARs), Blanding's turtle (reptilian SAR) and butternut (tree SAR). No SAR species were identified on-site or in the area immediately adjacent to the property during the site investigation. However, based conservatively on the NHIC observation data, the KNUEA EMP (DST, 2015; Novatech, 2016), and observation data from the McKinley EIS (2020), the subject site contains regulated Category 2 and Category 3 habitat for Blanding's turtle. Butternut trees were specifically targeted for presence/absence during the survey, however no butternut were observed on-site or within the study area.

There are no other natural environmental features in the vicinity of the project, as summarized in Table 3.1 below.

**Table 3.1 Summary of Natural Features Present On-site or Adjacent to Site**

| Natural Feature                                     | Present On-site or Adjacent |
|---|-----------------------------|
| Surface water or wetlands present                   | Present                     |
| Steep slopes, valleys or escarpments                | None                        |
| Urban Natural Features or Natural Environment Areas | None                        |
| Significant Woodlands                               | None                        |
| Greenspace Linkages                                 | None                        |

|   |   |
|---|---|
| High Quality Specimen Trees                             | None  |
| Rare plant communities or unique environmental features | None  |
| Presence of Species at Risk                             | Present – suitable Blanding’s turtle habitat within watercourse |
| Significant Wildlife Habitat                            | Present – On-site watercourse may support fish habitat          |

### 3.2 Tree Inventory Summary

A tree inventory was conducted on January 18, 2023. Trees on-site were identified, enumerated and assessed for visual signs of distress and disease. Table C.1 in Appendix C provides a summary of all tree specimens on-site whose DBH was greater than 10 cm. CRZ values for trees with DBH greater than 10 cm are also present in Table C.1 in Appendix C. CRZ were not calculated for dead trees. The square root of the sum of squares method was used to calculate the DBH of trees with multiple stems. All trees with a DBH greater than 10 cm and their CRZ are illustrated on Figure A.4, in Appendix A.

Per the City of Ottawa’s Tree Protection (By-law No. 2020-340), 16 trees on the subject site, were identified as a distinctive tree (DBH > 50 cm). Table 3.2 below details the results. For the purpose of this report, dead standing trees were not included in the distinctive tree list, even if the DBH was greater than 50 cm.

**Table 3.2 Summary of Distinctive Trees Present On-Site or Adjacent**

| Tree # | Species        | DBH (cm) | Condition |
|--------|----------------|----------|-----------|
| 2      | Manitoba Maple | 50       | Healthy   |
| 7      | Willow sp.     | 58       | Healthy   |
| 12     | Manitoba Maple | 64       | Healthy   |
| 20     | Willow sp.     | 151      | Healthy   |
| 28     | Willow sp.     | 55       | Healthy   |
| 81     | Willow sp.     | 54       | Healthy   |
| 98     | Crabapple      | 59       | Good      |
| 113    | Black Cherry   | 54       | Healthy   |
| 114    | Black Cherry   | 57       | Healthy   |
| 132    | Black Cherry   | 57       | Healthy   |
| 133    | Manitoba maple | 74       | Healthy   |

None of the trees identified on-site are listed under the provincial Endangered Species Act.

In general, the tree community assemblage can be described as containing a few mature and semi-mature trees. Dominant tree species on-site were represented by Manitoba maple (*Acer negundo*) in areas of disturbance and willow species (*Salix* sp.) along the watercourses. Most of

the observed ash species identified on-site were of poor health or dead, likely due to the presence of emerald ash borer. Many of the ash species were observed to have epicormic shoots (young shoots growing from near the base of the tree) indicative of stress and poor health conditions. The majority of other tree species were observed to be in good or healthy conditions.



## 4.0 CONCLUSIONS AND RECOMMENDATIONS

Based on a review of the information summarized in Section 3.2, Table C.1 in Appendix C and the proposed development concept illustrated on Figure A.3, the following conclusions are provided:

- Out of 143 trees identified on-site with a DBH greater or equal to 10 cm, 132 were identified as retainable and 11 trees as non-retainable;
- 16 distinctive trees, meeting the City of Ottawa's Tree Protection (By-law No. 2020-340), requirements of DBH > 50 cm, were identified on-site, 1 of which was identified as not retainable under the current development plan;
- Trees on-site are of a typical upland or early successional species;
- 107 trees are in good/healthy condition and 36 trees are in poor or dead condition;
- 27 of the trees present on-site were observed to provide potential wildlife habitat (snag, active nest), 1 of which is identified as not retainable under the current development plan;
- No Butternut trees were identified on-site or in the area immediately adjacent to site;
- None of the 143 trees present on-site are protected under the Endangered Species Act, Ontario 2007;
- None of the trees on-site were identified to represent High Quality Specimen Tree; and
- All trees identified to be retained or with a Critical Root Zone Conflict will have their existing elevations around the critical root zone maintained;

### 4.1 Tree Conservation Recommendations

As discussed above, none of the trees on-site represent exceptional tree specimens, rare communities, nor do they provide any conservation value or great ecological benefit. Based on the proposed development plan it is assumed that 143 of the identified trees on the subject property are retainable. Future development plans should give consideration to maintaining the distinctive trees identified in this report, in addition to other healthier more mature trees.

Future development that requires vegetation clearing should be offset through landscape planting. Consideration should be given to landscape planting with native tree species indicative of the Great Lakes – St. Lawrence Forest Region, such as white cedar, white spruce, red maple and red oak.

### 4.2 Recommended Mitigation Measures

The following mitigation measures and best practice recommendations are provided by GEMTEC in order to minimize and eliminate negative impacts to trees identified in Appendix C as retainable during potential future construction. Construction contractors shall apply the following measures outlined below to prevent damage to trees identified to be retained in the redevelopment plan for the site;

- All trees identified to be retained should be clearly marked and the CRZ delineated with fencing to prevent encroachment and damage during construction. General prohibitions of activities within the fencing include:
  - No placement of construction material (including fill and equipment);
  - No construction activities (i.e. grading, machine operation, etc.) to avoid soil compaction and direct injury to the tree or its root system; and
  - No refueling or disposal of liquids.
  - Do not attach any signs, notices or posters to any tree identified to be retained;
- Tree protection should follow the tree protection specification provided by the City of Ottawa (2019). The Specification is provided in Appendix D;
- As per the City of Ottawa's Tree Protection (By-law No. 2020-340), a tree compensation plan may be brought forth by the City of Ottawa, by means of offsetting overall tree and vegetation removal;
- If existing pavement surface around trees to be retained is going to be removed than temporary fencing should be installed to delineate the CRZ of each tree;
- If trees to be removed overlap with the CRZ of trees to be retained, cut roots at the edge of the retained CRZ and grind down stumps after tree removal, do not pull out stumps. If roots must be cut, roots 20 cm or larger should be cut at right angles with clean, sharp, horticultural tools, without tearing, crushing, or pulling;
- All tree service activities (i.e. removal, branch / root pruning, etc.) will be completed by or under the direction of an ISA certified arborist;
- Do not damage the root system, trunk, or branches or any tree identified to be retained;
- Ensure that exhaust fumes from all equipment are directed away from tree canopy; and
- For the protection of migratory birds and SAR bat species, tree removal shall occur outside of March 15 – November 30 of any given year, to avoid the key breeding bird period as identified by Environment Canada and the bat active season as identified by the Ministry of Environment, Conservation and Parks (MECP). Adhering to the timing window will also avoid contravention of the Migratory Bird Convention Act and the Endangered Species Act. If vegetation clearing activities must take place outside of the aforementioned timing window than a nest and roost survey shall be conducted by a qualified professional.

## 5.0 CLOSURE

This letter and the work referred to within it have been undertaken by GEMTEC Consulting Engineers and Scientists Ltd. (GEMTEC), and was prepared for Canadian Rental Development Services Inc. and is intended for the exclusive use of Canadian Rental Development Services Inc. This report may not be relied upon by any other person or entity without the express written consent of GEMTEC and Canadian Rental Development Services Inc. Nothing in this report is intended to provide a legal opinion.

The investigation undertaken by GEMTEC with respect to this report and any conclusions or recommendations made in this report reflect the best judgements of GEMTEC based on the site conditions observed during the investigations undertaken at the date(s) identified in the report and on the information available at the time the report was prepared.

This letter has been prepared for the application notes and it is based in part, on visual observations made at the site, all as described in the report. Unless otherwise states, the findings contained in this report cannot be extrapolates or extended to previous or future site conditions or for portions of the site that were unavailable for direct investigation.

Should new information become available during future work, or other studies, GEMTEC should be requested to review the information and, if necessary, re-assess the conclusions present herein.

We trust this report provides sufficient information for your present purposes. If you have any questions concerning this report, please do not hesitate to contact our office.

Sincerely,



Emily Young, B.Sc.  
Junior Biologist



Drew Paulusse, B.Sc.  
Senior Biologist

## 6.0 REFERENCES

Ontario Ministry of Natural Resources and Forestry (OMNRF). 2019. Natural Heritage Information Centre. Make a Map: Natural Heritage Areas.

Ottawa, City of (Ottawa). 2022, City of Ottawa Official Plan.

Ottawa, City of (Ottawa), By-law No. 2020-340, Tree Protection (Updated: January, 2021).



## **APPENDIX A**

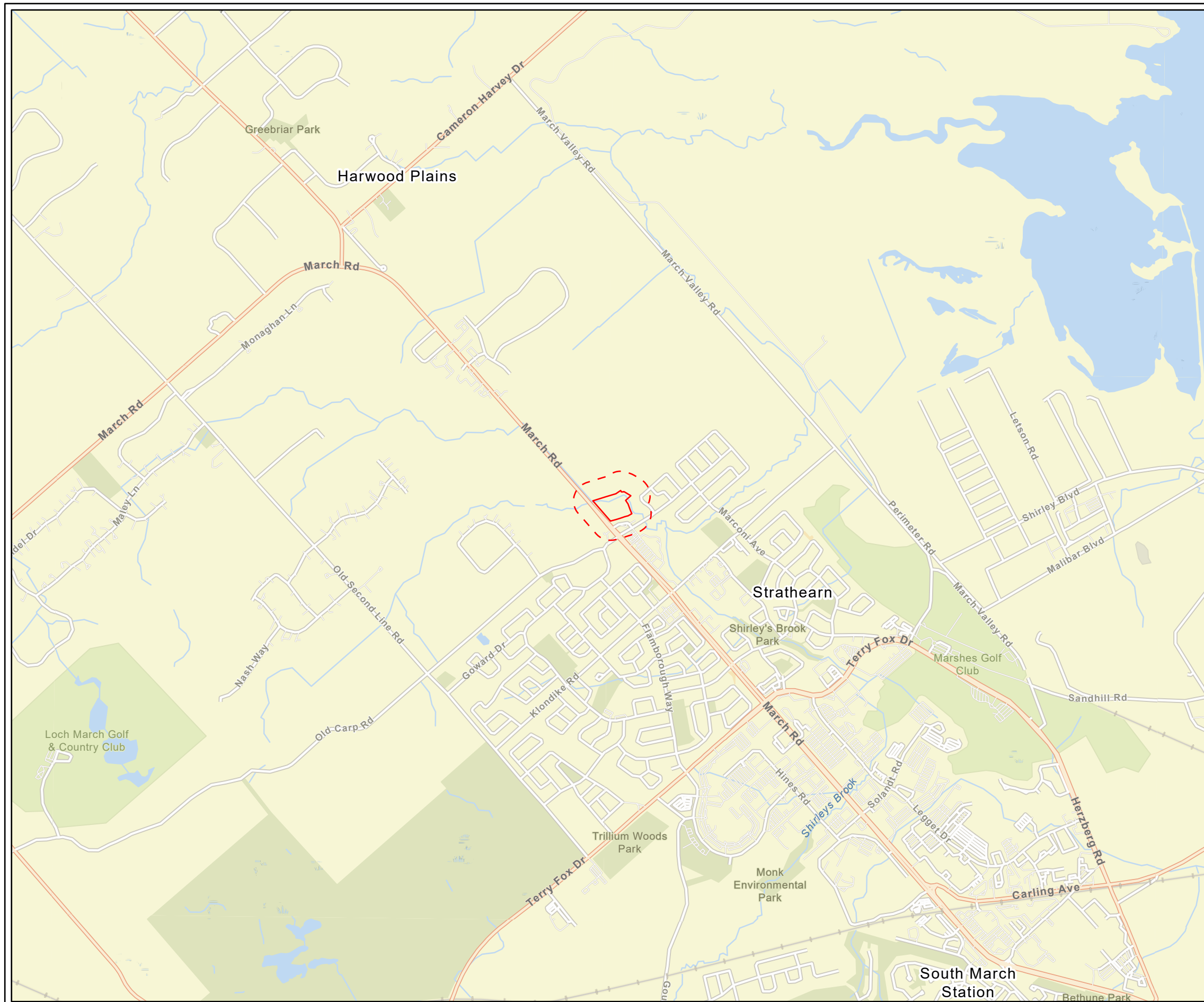
### Report Figures

Figure A.1 – Site Location

Figure A.2 – Site Layout

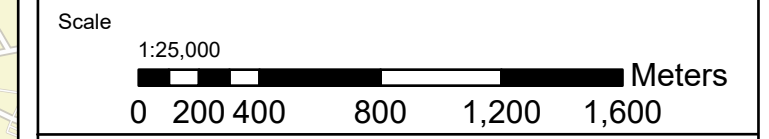
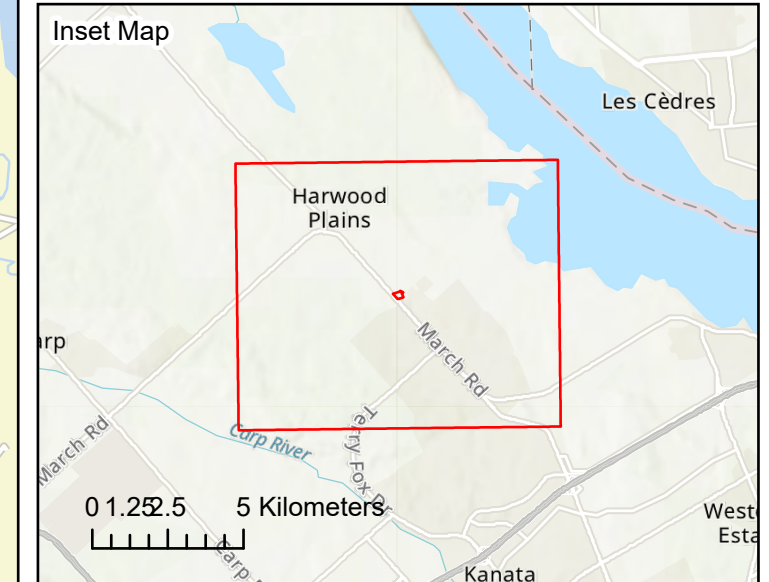
Figure A.3 – Development Plan

Figure A.4 – Tree Inventory



**Legend**

- Property Boundary
- Study Area



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|---|---------------------|
| Client: Canadian Rental Development Services Inc. | Project: 100011.014 |
|---|---------------------|

Location  
**910 March Road  
Ottawa, Ontario**

|                |                |                      |
|----------------|----------------|----------------------|
| Drwn By:<br>EP | Chkd By:<br>TW | <b>Site Location</b> |
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| Date: January 2023            | Rev. 0 | <b>Figure: A.1</b> |
| © Queen's Printer for Ontario |        |                    |

Coordinate System: NAD 1983 UTM Zone 18N  
 Service Layer Credits: World Topographic Map: City of Ottawa, Province of Ontario, Esri Canada, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA, NRCAN, Parks Canada  
 World Street Map: City of Ottawa, Province of Ontario, Esri Canada, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, NRCAN, Parks Canada



**Legend**

- Property Boundary
- Study Area
- Watercourse

Scale  
1:1,900

Meters

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|---|---------------------|
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|          |                                   |
|----------|-----------------------------------|
| Location | 910 March Road<br>Ottawa, Ontario |
|----------|-----------------------------------|

|                |                |             |
|----------------|----------------|-------------|
| Drwn By:<br>EP | Chkd By:<br>TW | Site Layout |
|----------------|----------------|-------------|

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| Date: January 2023            | Rev.<br>0 | Figure: A.2 |
| © Queen's Printer for Ontario |           |             |

Coordinate System: NAD 1983 UTM Zone 18N  
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 City of Ottawa 2021 Imagery:

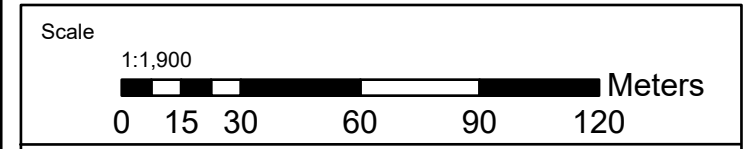


**Legend**

- Property Boundary
- Study Area
- Watercourse

**Development Concept**

- Building
- Private Road / Parking
- Sidewalk



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Location  
**910 March Road  
Ottawa, Ontario**

|                |                |                            |
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| Drwn By:<br>EP | Chkd By:<br>TW | <b>Development Concept</b> |
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 City of Ottawa 2021 Imagery:



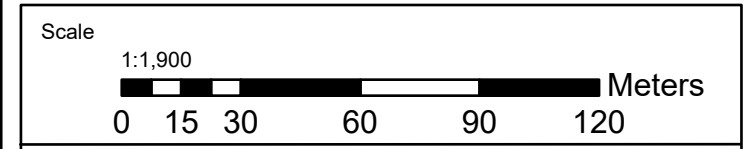


**Legend**

- Property Boundary
- Study Area
- Watercourse
- Development Concept

**Tree with DBH Greater than 10 cm**

- × Dead
- Alive



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|          |                                   |
|----------|-----------------------------------|
| Location | 910 March Road<br>Ottawa, Ontario |
|----------|-----------------------------------|

|                |                |                       |
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| Drwn By:<br>EP | Chkd By:<br>TW | <b>Tree Inventory</b> |
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| Date: January 2023 | Rev.<br>0 | <b>Figure: A.4</b> |
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 City of Ottawa 2021 Imagery:

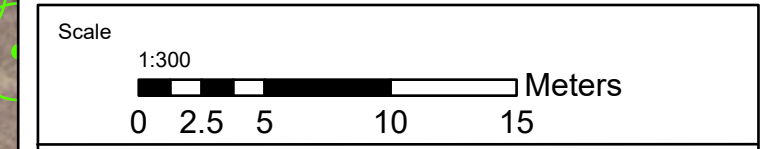
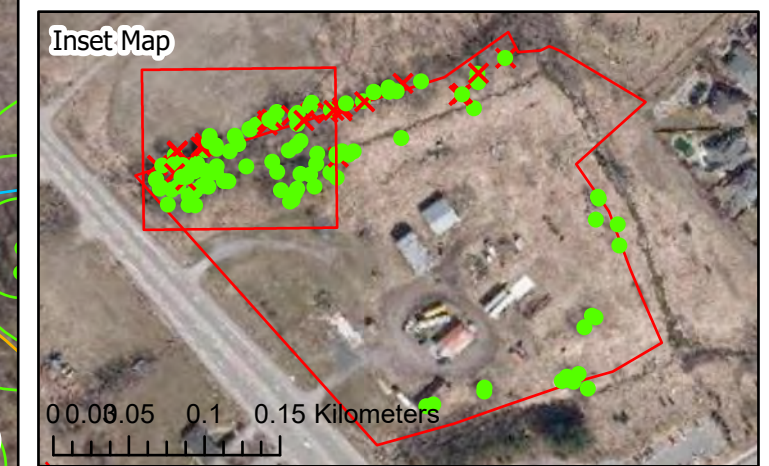


**Legend**

- Property Boundary
- Study Area
- Watercourse
- Development Concept

**Tree Number (Critical Root Zone [cm])**

- Retainable
- Conflict
- ✕ Dead



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| Location<br><b>910 March Road<br/>Ottawa, Ontario</b> |
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| Drwn By:<br>EP | Chkd By:<br>TW | <b>Tree Inventory</b> |
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| Date: January 2023 | Rev.<br>0 | <b>Figure: A.4a</b> |
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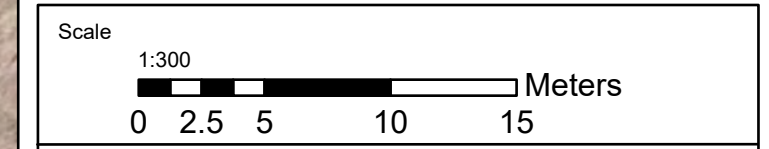
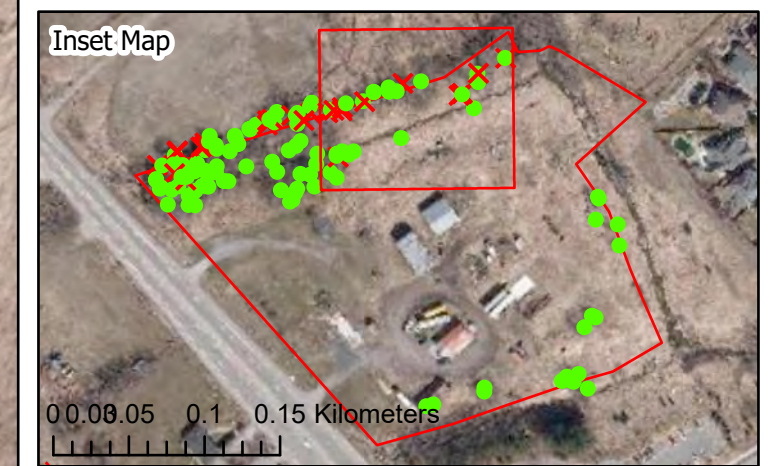


**Legend**

- Property Boundary
- Study Area
- Watercourse
- Development Concept

**Tree Number (Critical Root Zone [cm])**

- Retainable
- Conflict
- ✕ Dead



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|---|---------------------|

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|                |                |                       |
|----------------|----------------|-----------------------|
| Drwn By:<br>EP | Chkd By:<br>TW | <b>Tree Inventory</b> |
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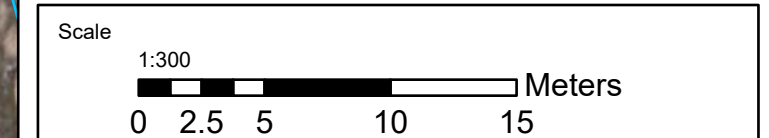
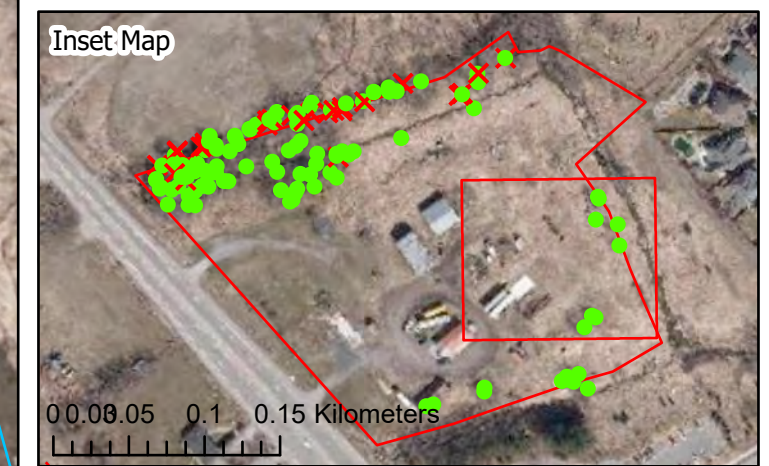
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 World Imagery: Maxar, Microsoft



**Legend**

- Property Boundary
  - Study Area
  - Watercourse
  - Development Concept
- Tree Number (Critical Root Zone [cm])**
- Retainable
  - Conflict
  - × Dead



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|---|---------------------|

Location  
**910 March Road  
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|             |             |                       |
|-------------|-------------|-----------------------|
| Drwn By: EP | Chkd By: TW | <b>Tree Inventory</b> |
|-------------|-------------|-----------------------|

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| Date: January 2023            | Rev. 0 | <b>Figure: A.4c</b> |
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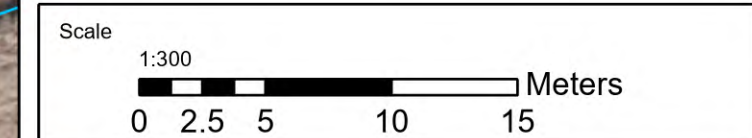
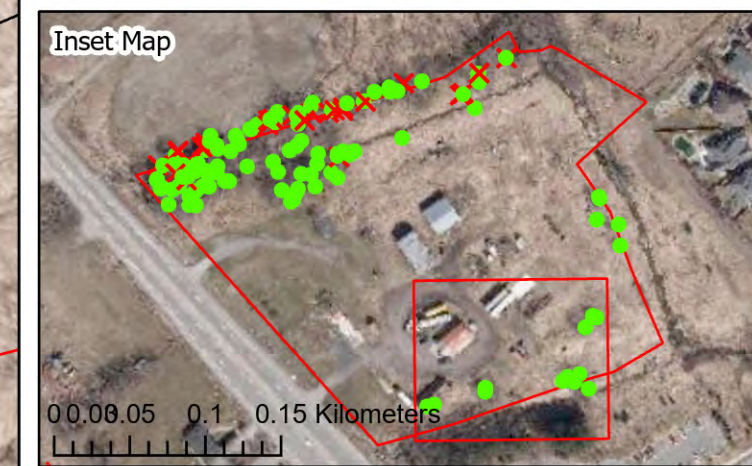


### Legend

- Property Boundary
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### Tree Number (Critical Root Zone [cm])

- Retainable
- Conflict
- × Dead



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|   |                     |
|---|---------------------|
| Client: Canadian Rental Development Services Inc. | Project: 100011.014 |
|---|---------------------|

Location  
**910 March Road  
Ottawa, Ontario**

|             |             |                       |
|-------------|-------------|-----------------------|
| Drwn By: EP | Chkd By: TW | <b>Tree Inventory</b> |
|-------------|-------------|-----------------------|

|                               |        |                     |
|-------------------------------|--------|---------------------|
| Date: May 2023                | Rev. 1 | <b>Figure: A.4d</b> |
| © Queen's Printer for Ontario |        |                     |

Coordinate System: NAD 1983 UTM Zone 18N  
 Service Layer Credits: World Topographic Map: Esri Community Maps Contributors, City of Ottawa, Province of Ontario, Esri Canada, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, NRCAN, Parks Canada  
 World Imagery: Maxar, Microsoft



## **APPENDIX B**

### Site Photographs



Site Photograph 1 – Tributary 2



Site Photograph 2 – Tributary 2



Site Photograph 3 – Tributary 2 Riparian



Site Photograph 4 – Tributary 2 Riparian



Site Photograph 5 – Tributary 3



Site Photograph 6 – Tributary 3



Site Photograph 7 – Tributary 3 Riparian



Site Photograph 8 – Riparian Confluence for Tributary 2 and 3





Site Photograph 9 – Inlet for Tributary 4



Site Photograph 10 – Barn Swallow Habitat Compensation



Site Photograph 11 – Previous Development On-site



Site Photograph 12 – Previous Development On-site



## **APPENDIX C**

### Tree Inventory Summary Table

**TABLE C.1  
TREE INVENTORY**

| Tree Number | Common Name        | Scientific Name               | Diameter (cm DBH) | Critical Root Zone (cm) | Condition | Retainable or Conflict | Significant Tree (> 50 cm) | Wildlife Tree |
|-------------|--------------------|-------------------------------|-------------------|-------------------------|-----------|------------------------|----------------------------|---------------|
| 1           | Manitoba maple     | <i>Acer negundo</i>           | 36                | 358                     | Healthy   | Retainable             | No                         | No            |
| 2           | Manitoba maple     | <i>Acer negundo</i>           | 50                | 501                     | Healthy   | Retainable             | Yes                        | Yes           |
| 3           | Black Ash          | <i>Fraxinus nigra</i>         | 19                | 185                     | Poor      | Retainable             | No                         | No            |
| 4           | Black Ash          | <i>Fraxinus nigra</i>         | 19                | 185                     | Poor      | Retainable             | No                         | No            |
| 5           | Willow             | <i>Salix sp.</i>              | 19                | 185                     | Good      | Retainable             | No                         | No            |
| 6           | Willow             | <i>Salix sp.</i>              | 25                | 250                     | Healthy   | Retainable             | No                         | No            |
| 7           | Willow             | <i>Salix sp.</i>              | 58                | 580                     | Healthy   | Retainable             | Yes                        | No            |
| 8           | Black Ash          | <i>Fraxinus nigra</i>         | 22                | 217                     | Poor      | Retainable             | No                         | No            |
| 9           | Willow             | <i>Salix sp.</i>              | 36                | 355                     | Healthy   | Retainable             | No                         | No            |
| 10          | Willow             | <i>Salix sp.</i>              | 20                | 200                     | Healthy   | Retainable             | No                         | No            |
| 11          | Green Ash          | <i>Fraxinus pennsylvanica</i> | 33                | 328                     | Poor      | Retainable             | No                         | No            |
| 12          | Manitoba maple     | <i>Acer negundo</i>           | 64                | 636                     | Healthy   | Retainable             | Yes                        | No            |
| 13          | Manitoba maple     | <i>Acer negundo</i>           | 40                | 398                     | Healthy   | Conflict               | No                         | No            |
| 14          | Manitoba maple     | <i>Acer negundo</i>           | 27                | 270                     | Healthy   | Conflict               | No                         | No            |
| 15          | Manitoba maple     | <i>Acer negundo</i>           | 25                | 245                     | Healthy   | Conflict               | No                         | No            |
| 16          | Manitoba maple     | <i>Acer negundo</i>           | 34                | 335                     | Healthy   | Retainable             | No                         | No            |
| 17          | Manitoba maple     | <i>Acer negundo</i>           | 23                | 228                     | Healthy   | Retainable             | No                         | No            |
| 18          | Manitoba maple     | <i>Acer negundo</i>           | 43                | 432                     | Healthy   | Retainable             | No                         | No            |
| 19          | Manitoba maple     | <i>Acer negundo</i>           | 25                | 250                     | Healthy   | Retainable             | No                         | No            |
| 20          | Willow             | <i>Salix sp.</i>              | 151               | 1510                    | Healthy   | Conflict               | Yes                        | Yes           |
| 21          | Manitoba maple     | <i>Acer negundo</i>           | 29                | 290                     | Healthy   | Retainable             | No                         | No            |
| 22          | Manitoba maple     | <i>Acer negundo</i>           | 17                | 165                     | Healthy   | Retainable             | No                         | No            |
| 23          | Manitoba maple     | <i>Acer negundo</i>           | 24                | 235                     | Healthy   | Retainable             | No                         | No            |
| 24          | Manitoba maple     | <i>Acer negundo</i>           | 19                | 192                     | Healthy   | Retainable             | No                         | No            |
| 25          | Willow             | <i>Salix sp.</i>              | 37                |                         | Dead      | Retainable             | No                         | Yes           |
| 26          | Manitoba maple     | <i>Acer negundo</i>           | 20                | 198                     | Healthy   | Retainable             | No                         | No            |
| 27          | Willow             | <i>Salix sp.</i>              | 47                | 466                     | Good      | Retainable             | No                         | Yes           |
| 28          | Willow             | <i>Salix sp.</i>              | 55                | 550                     | Good      | Retainable             | Yes                        | Yes           |
| 29          | Green Ash          | <i>Fraxinus pennsylvanica</i> | 14                | 135                     | Poor      | Retainable             | No                         | No            |
| 30          | Green Ash          | <i>Fraxinus pennsylvanica</i> | 14                | 135                     | Poor      | Retainable             | No                         | No            |
| 31          | Willow             | <i>Salix sp.</i>              | 20                | 200                     | Healthy   | Retainable             | No                         | No            |
| 32          | Willow             | <i>Salix sp.</i>              | 29                | 287                     | Healthy   | Retainable             | No                         | No            |
| 33          | Manitoba maple     | <i>Acer negundo</i>           | 43                | 435                     | Healthy   | Retainable             | No                         | No            |
| 34          | Manitoba maple     | <i>Acer negundo</i>           | 34                | 340                     | Healthy   | Retainable             | No                         | No            |
| 35          | Eastern cottonwood | <i>Populus deltoides</i>      | 15                | 150                     | Healthy   | Retainable             | No                         | No            |
| 36          | Manitoba maple     | <i>Acer negundo</i>           | 26                | 260                     | Healthy   | Retainable             | No                         | No            |
| 37          | Manitoba maple     | <i>Acer negundo</i>           | 21                | 214                     | Healthy   | Retainable             | No                         | Yes           |
| 38          | Manitoba maple     | <i>Acer negundo</i>           | 35                | 353                     | Healthy   | Conflict               | No                         | No            |
| 39          | Manitoba maple     | <i>Acer negundo</i>           | 25                | 246                     | Healthy   | Conflict               | No                         | No            |
| 40          | Manitoba maple     | <i>Acer negundo</i>           | 33                | 329                     | Healthy   | Conflict               | No                         | No            |
| 41          | Manitoba maple     | <i>Acer negundo</i>           | 20                | 200                     | Healthy   | Retainable             | No                         | No            |
| 42          | Manitoba maple     | <i>Acer negundo</i>           | 15                | 150                     | Healthy   | Retainable             | No                         | No            |
| 43          | Manitoba maple     | <i>Acer negundo</i>           | 21                | 212                     | Healthy   | Retainable             | No                         | No            |
| 44          | Manitoba maple     | <i>Acer negundo</i>           | 15                | 150                     | Healthy   | Retainable             | No                         | No            |
| 45          | Manitoba maple     | <i>Acer negundo</i>           | 31                | 311                     | Healthy   | Retainable             | No                         | No            |
| 46          | Manitoba maple     | <i>Acer negundo</i>           | 30                | 303                     | Healthy   | Retainable             | No                         | No            |
| 47          | Manitoba maple     | <i>Acer negundo</i>           | 42                | 418                     | Healthy   | Conflict               | No                         | No            |
| 48          | Manitoba maple     | <i>Acer negundo</i>           | 37                | 369                     | Healthy   | Conflict               | No                         | No            |
| 49          | Manitoba maple     | <i>Acer negundo</i>           | 32                | 324                     | Healthy   | Conflict               | No                         | No            |
| 50          | Manitoba maple     | <i>Acer negundo</i>           | 23                | 230                     | Healthy   | Conflict               | No                         | No            |
| 51          | American Elm       | <i>Ulmus americana</i>        | 52                |                         | Dead      | Retainable             | Yes                        | Yes           |

**TABLE C.1  
TREE INVENTORY**

|     |              |                               |    |     |         |            |     |     |
|-----|--------------|-------------------------------|----|-----|---------|------------|-----|-----|
| 52  | Green Ash    | <i>Fraxinus pennsylvanica</i> | 22 | 220 | Poor    | Retainable | No  | No  |
| 53  | Sugar maple  | <i>Acer saccharum</i>         | 32 | 320 | Healthy | Retainable | No  | No  |
| 54  | Black Cherry | <i>Prunus serotina</i>        | 49 | 490 | Good    | Retainable | No  | No  |
| 55  | White Ash    | <i>Fraxinus americana</i>     | 16 |     | Dead    | Retainable | No  | No  |
| 56  | White Ash    | <i>Fraxinus americana</i>     | 16 |     | Dead    | Retainable | No  | No  |
| 57  | Red Pine     | <i>Pinus resinosa</i>         | 27 | 270 | Healthy | Retainable | No  | No  |
| 58  | Red Pine     | <i>Pinus resinosa</i>         | 25 | 250 | Healthy | Retainable | No  | No  |
| 59  | Red Pine     | <i>Pinus resinosa</i>         | 27 | 270 | Healthy | Retainable | No  | No  |
| 60  | Crabapple    | <i>Malus sp.</i>              | 15 | 150 | Healthy | Retainable | No  | No  |
| 61  | Rock Elm     | <i>Ulmus thomasi</i>          | 14 | 140 | Healthy | Retainable | No  | No  |
| 62  | White Ash    | <i>Fraxinus americana</i>     | 22 |     | Dead    | Retainable | No  | Yes |
| 63  | Red Pine     | <i>Pinus resinosa</i>         | 27 | 270 | Healthy | Retainable | No  | No  |
| 64  | Red Pine     | <i>Pinus resinosa</i>         | 33 | 330 | Healthy | Retainable | No  | No  |
| 65  | Red Pine     | <i>Pinus resinosa</i>         | 29 | 285 | Healthy | Retainable | No  | No  |
| 66  | Tamarack     | <i>Larix laricina</i>         | 32 | 315 | Healthy | Retainable | No  | No  |
| 67  | Tamarack     | <i>Larix laricina</i>         | 29 | 290 | Healthy | Retainable | No  | No  |
| 68  | White Ash    | <i>Fraxinus americana</i>     | 44 | 435 | Poor    | Retainable | No  | Yes |
| 69  | Green Ash    | <i>Fraxinus pennsylvanica</i> | 17 |     | Dead    | Retainable | No  | No  |
| 70  | Red Pine     | <i>Pinus resinosa</i>         | 26 | 260 | Healthy | Retainable | No  | No  |
| 71  | Red Pine     | <i>Pinus resinosa</i>         | 21 | 210 | Healthy | Retainable | No  | No  |
| 72  | Rock Elm     | <i>Ulmus thomasi</i>          | 12 | 120 | Healthy | Retainable | No  | No  |
| 73  | Red Pine     | <i>Pinus resinosa</i>         | 24 | 240 | Healthy | Retainable | No  | No  |
| 74  | Red Pine     | <i>Pinus resinosa</i>         | 25 | 250 | Healthy | Retainable | No  | No  |
| 75  | Red Pine     | <i>Pinus resinosa</i>         | 26 | 260 | Healthy | Retainable | No  | No  |
| 76  | Red Pine     | <i>Pinus resinosa</i>         | 21 | 210 | Healthy | Retainable | No  | No  |
| 77  | Red Pine     | <i>Pinus resinosa</i>         | 23 | 225 | Healthy | Retainable | No  | No  |
| 78  | Red Pine     | <i>Pinus resinosa</i>         | 20 | 200 | Healthy | Retainable | No  | No  |
| 79  | Red Pine     | <i>Pinus resinosa</i>         | 23 | 230 | Healthy | Retainable | No  | No  |
| 80  | Red Pine     | <i>Pinus resinosa</i>         | 27 | 270 | Healthy | Retainable | No  | No  |
| 81  | Willow       | <i>Salix sp.</i>              | 54 | 544 | Healthy | Retainable | Yes | No  |
| 82  | Red Pine     | <i>Pinus resinosa</i>         | 29 | 290 | Healthy | Retainable | No  | No  |
| 83  | Black Cherry | <i>Prunus serotina</i>        | 21 | 205 | Healthy | Retainable | No  | No  |
| 84  | White Ash    | <i>Fraxinus americana</i>     | 21 |     | Dead    | Retainable | No  | Yes |
| 85  | White Ash    | <i>Fraxinus americana</i>     | 16 | 160 | Dead    | Retainable | No  | No  |
| 86  | White Ash    | <i>Fraxinus americana</i>     | 23 |     | Dead    | Retainable | No  | Yes |
| 87  | Sugar Maple  | <i>Acer saccharum</i>         | 40 | 400 | Healthy | Retainable | No  | No  |
| 88  | Rock Elm     | <i>Ulmus thomasi</i>          | 14 | 140 | Healthy | Retainable | No  | No  |
| 89  | Hawthorns    | <i>Crataegus sp.</i>          | 27 | 270 | Healthy | Retainable | No  | No  |
| 90  | Red Pine     | <i>Pinus resinosa</i>         | 27 | 270 | Healthy | Retainable | No  | No  |
| 91  | Red Pine     | <i>Pinus resinosa</i>         | 26 | 260 | Healthy | Retainable | No  | No  |
| 92  | Red Pine     | <i>Pinus resinosa</i>         | 20 | 200 | Healthy | Retainable | No  | No  |
| 93  | Red Pine     | <i>Pinus resinosa</i>         | 18 | 180 | Healthy | Retainable | No  | No  |
| 94  | Sugar Maple  | <i>Acer saccharum</i>         | 16 | 160 | Good    | Retainable | No  | No  |
| 95  | Black Cherry | <i>Prunus serotina</i>        | 22 | 216 | Healthy | Retainable | No  | No  |
| 96  | Sugar Maple  | <i>Acer saccharum</i>         | 18 | 180 | Healthy | Retainable | No  | No  |
| 97  | Sugar Maple  | <i>Acer saccharum</i>         | 20 | 200 | Healthy | Retainable | No  | No  |
| 98  | Crabapple    | <i>Malus sp.</i>              | 59 | 588 | Good    | Retainable | Yes | Yes |
| 99  | White Ash    | <i>Fraxinus americana</i>     | 33 |     | Dead    | Retainable | No  | Yes |
| 100 | White Ash    | <i>Fraxinus americana</i>     | 29 |     | Dead    | Retainable | No  | Yes |
| 101 | Sugar Maple  | <i>Acer saccharum</i>         | 22 | 220 | Healthy | Retainable | No  | No  |
| 102 | Bur Oak      | <i>Quercus macrocarpa</i>     | 34 | 340 | Healthy | Retainable | No  | No  |
| 103 | White Ash    | <i>Fraxinus americana</i>     | 30 |     | Dead    | Retainable | No  | Yes |
| 104 | Black Cherry | <i>Prunus serotina</i>        | 18 | 180 | Healthy | Retainable | No  | No  |

**TABLE C.1  
TREE INVENTORY**

|     |                |                           |    |     |         |            |     |     |
|-----|----------------|---------------------------|----|-----|---------|------------|-----|-----|
| 105 | Sugar Maple    | <i>Acer saccharum</i>     | 20 | 200 | Healthy | Retainable | No  | No  |
| 106 | White Ash      | <i>Fraxinus americana</i> | 70 |     | Dead    | Retainable | Yes | Yes |
| 107 | Manitoba maple | <i>Acer negundo</i>       | 18 | 180 | Healthy | Retainable | No  | No  |
| 108 | Manitoba maple | <i>Acer negundo</i>       | 15 | 150 | Healthy | Retainable | No  | No  |
| 109 | Willow         | <i>Salix sp.</i>          | 20 | 200 | Healthy | Retainable | No  | Yes |
| 110 | Sugar maple    | <i>Acer saccharum</i>     | 20 | 200 | Healthy | Retainable | No  | No  |
| 111 | Sugar maple    | <i>Acer saccharum</i>     | 15 | 150 | Healthy | Retainable | No  | No  |
| 112 | Manitoba maple | <i>Acer negundo</i>       | 15 | 150 | Healthy | Retainable | No  | No  |
| 113 | Black Cherry   | <i>Prunus serotina</i>    | 54 | 535 | Healthy | Retainable | Yes | No  |
| 114 | Black Cherry   | <i>Prunus serotina</i>    | 57 | 570 | Healthy | Retainable | Yes | No  |
| 115 | White Ash      | <i>Fraxinus americana</i> | 58 |     | Dead    | Retainable | Yes | No  |
| 116 | Sugar Maple    | <i>Acer saccharum</i>     | 20 | 200 | Healthy | Retainable | No  | No  |
| 117 | Sugar Maple    | <i>Acer saccharum</i>     | 15 | 150 | Healthy | Retainable | No  | No  |
| 118 | White Ash      | <i>Fraxinus americana</i> | 51 |     | Dead    | Retainable | Yes | No  |
| 119 | American Elm   | <i>Ulmus thomasii</i>     | 47 |     | Dead    | Retainable | No  | Yes |
| 120 | Black Cherry   | <i>Prunus serotina</i>    | 45 | 445 | Healthy | Retainable | No  | No  |
| 121 | American Elm   | <i>Ulmus americana</i>    | 25 |     | Dead    | Retainable | No  | Yes |
| 122 | White Ash      | <i>Fraxinus americana</i> | 33 |     | Dead    | Retainable | No  | Yes |
| 123 | White Ash      | <i>Fraxinus americana</i> | 41 |     | Dead    | Retainable | No  | Yes |
| 124 | Crabapple      | <i>Malus sp.</i>          | 29 | 290 | Healthy | Retainable | No  | No  |
| 125 | Black Cherry   | <i>Prunus serotina</i>    | 25 | 250 | Healthy | Retainable | No  | No  |
| 126 | White Ash      | <i>Fraxinus americana</i> | 88 |     | Dead    | Retainable | Yes | Yes |
| 127 | Black Cherry   | <i>Prunus serotina</i>    | 26 | 260 | Healthy | Retainable | No  | No  |
| 128 | Black Cherry   | <i>Prunus serotina</i>    | 15 | 150 | Healthy | Retainable | No  | No  |
| 129 | White Ash      | <i>Fraxinus americana</i> | 20 | 200 | Poor    | Retainable | No  | No  |
| 130 | White Ash      | <i>Fraxinus americana</i> | 20 | 200 | Poor    | Retainable | No  | No  |
| 131 | White Ash      | <i>Fraxinus americana</i> | 25 |     | Dead    | Retainable | No  | Yes |
| 132 | Black Cherry   | <i>Prunus serotina</i>    | 57 | 570 | Healthy | Retainable | Yes | No  |
| 133 | Manitoba maple | <i>Acer negundo</i>       | 74 | 737 | Healthy | Retainable | Yes | No  |
| 134 | White Ash      | <i>Fraxinus americana</i> | 25 |     | Dead    | Retainable | No  | Yes |
| 135 | White Ash      | <i>Fraxinus americana</i> | 30 |     | Dead    | Retainable | No  | Yes |
| 136 | White Ash      | <i>Fraxinus americana</i> | 25 |     | Dead    | Retainable | No  | Yes |
| 137 | Willow         | <i>Salix sp.</i>          | 34 | 335 | Healthy | Retainable | No  | No  |
| 138 | Willow         | <i>Salix sp.</i>          | 30 | 300 | Healthy | Retainable | No  | No  |
| 139 | Willow         | <i>Salix sp.</i>          | 25 | 250 | Healthy | Retainable | No  | No  |
| 140 | Willow         | <i>Salix sp.</i>          | 26 | 256 | Healthy | Retainable | No  | No  |
| 141 | White Ash      | <i>Fraxinus americana</i> | 30 |     | Dead    | Retainable | No  | No  |
| 142 | White Ash      | <i>Fraxinus americana</i> | 35 |     | Dead    | Retainable | No  | No  |
| 143 | Manitoba maple | <i>Acer negundo</i>       | 47 | 472 | Good    | Retainable | No  | Yes |



## **APPENDIX D**

City of Ottawa Tree Protection

experience • knowledge • integrity



civil  
geotechnical  
environmental  
field services  
materials testing

civil  
géotechnique  
environnementale  
surveillance de chantier  
service de laboratoire des matériaux

expérience • connaissance • intégrité

