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Tree Conservation Report
930 Smith Road
Ottawa, Ontario



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Submitted to:

Heirarchy Development & Design
1836 Maple Grove Road
Ottawa, Ontario
K2S 0M7

Tree Conservation Report
930 Smith Road
Ottawa, Ontario

May 15, 2024

Project: 100812.001 - V02

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1.0 INTRODUCTION

GEMTEC Consulting Engineers and Scientists Ltd. (GEMTEC) was retained by Hierarchy Development & Design, to carry out a Tree Conservation Report (TCR) for the property located at 930 Smith Road, in the City of Ottawa (Navan), 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 to purchase an existing 5.44 ha property for potential future residential development. As part of the purchase due diligence, in preparation for future submission of a proposed plan of subdivision and Site Plan Approval, and in accordance with the City of Ottawa’s Urban Tree Conservation By-Law (No. 2020-340), a Tree Conservation Report (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 current conceptual residential development plan includes the creation of seven residential lots, ranging from 0.46 ha to 2.02 ha. Future development consists of a dwelling, septic, well, and driveway are proposed on each lot. The existing site layout and conceptual development plan is provided on Figure A.2 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 centimetres in diameter and greater.

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

Distinctive Tree, a 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 and rural areas. 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 outside of the urban boundary.

2.0 METHODOLOGY

2.1 Desktop Review

To complete the TCR, digital color air photos of the site available from GeoOttawa were reviewed from 1976 to 2019 to identify natural features, including historical trees, present on-site and in the vicinity of the site.

2.2 Field Investigations

In addition to the completion of a desktop review of historical air photos, one site visit was conducted on July 28, 2021, 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, the trees approximate height, 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 are summarized in Table 2.1 below.

Table 2.1 Summary of Filed Investigations

Date	Time	Weather	Purpose
July 28, 2021	10:00-17:00	18°C, clear (~0% cloud cover), Beaufort wind 1, no precipitation	Tree Inventory

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

3.0 RESULTS

3.1 Existing Conditions

The site is currently occupied by agricultural land, other existing features on the property include a gravel entryway providing access to Smith Road, existing tree cover is mainly present in to small areas of the southwest corner of the property and along the center of the southern property boundary. The rest of the tree cover is present in hedgerows along the north property line. The site does not have any existing development present on-site.

The site is entirely populated by active agricultural fields (ELC code OAG), at the time of the site investigation the field was planted with corn. Two small patches of mixed forest (ELC code FOM) occur in the southcentral portion of the property and along the west property line, along with a small cultural meadow (ELC code CUM) in the southwest portion of the property. However per the Southern Ontario Ecological Land Classification System (Lee et al., 2008) the forest and meadow communities are not large enough to be considered singular communities and are instead considered inclusions within the active agricultural community. Existing vegetation on the property are illustrated on Figure A.2 in Appendix A. Numerous trees are present on the property, a summary of all trees on-site is provided in Section 3.2 below.

The vicinity of the site is characterized by residential properties and agricultural land. The nearest significant feature is the Ottawa Green Belt and the Mer Bleue Bog, a provincially significant wetland, Earth Science Area of Natural and Scientific Interest (ANSI) and Life Science ANSI, both located approximately 2 km west of the property. There are no other natural environmental features in the vicinity (within 120 m) 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	None
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	Adjacent

Based on a review of historical air photos the site, the site has undergone no significant alteration since 1965, when the lot had the same configuration as today. Since 1965, the lot has been vacant, consisting entirely of agricultural fields with trees located sparsely along the northern, eastern, and southern property boundaries.

Per the City of Ottawa's Significant Woodlands Guidelines, woodlands within the rural policy area are considered significant if they meet any of the criteria established in the Natural Heritage Reference Manual, including size, ecological function, uncommon characteristics, or economic and social value. As the site and surround land does not contain any woodland habitat, no significant woodlands have been identified on-site or on the adjacent sites.

Review of online data sources and the site investigation identified butternut, a plant species at risk in the area. One butternut tree was observed on a neighbouring lot, along the west property boundary.

3.2 Tree Inventory Summary

A tree inventory was conducted on July 28, 2021. 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. Critical Root Zones were not calculated for dead trees. For trees with multiple stems greater than 10 cm DBH, the largest DBH was used to calculate the CRZ. All trees with a DBH greater than 10 cm and their CRZ are illustrated on Figure A.3a through A.3h, in Appendix A. In general, the tree community assemblage can be described as containing a diverse range of healthy adult trees; consisting predominantly of deciduous species, with few coniferous species.

Per the City of Ottawa By-law No. 2020-340, the site is outside of the urban boundary area which means distinctive trees are defined as those with a DBH greater than 50 cm. No distinctive trees (DBH > 50 cm) were identified on-site. No wildlife trees were observed on-site.

During the site investigation, one butternut tree was identified adjacent to site. In Ontario, butternut are listed as endangered under the Endangered Species Act.

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 conceptual development plan illustrated on Figure A.2, the following conclusions are provided:

- Four trees (#8, #10, #11, and #109), none of them being City trees, were identified as non-retainable, under the conceptual development plan;
- Eight distinctive trees, meeting the City of Ottawa By-Law No. 2020-340 requirements, were identified on-site;
- Trees on-site are of a typical peri-urban and opportunistic or early successional species;
- 250 trees are in good/healthy condition, 14 trees are in moderate condition, 13 trees are dying or in poor condition, and 13 trees on-site are dead;
- One butternut tree (#207) was identified as Possible Conflict and was located on a neighbouring property adjacent to the site. No Butternut trees were identified on-site; and
- None of the 290 trees present on-site represent exceptional native tree specimens.

4.1 Tree Conservation Recommendations

Opportunities exist along the perimeter of the proposed development, primarily along the southern and eastern property boundaries fronting Smith Road, to retain a majority of the trees present on-site, under the current proposed development concept. In effort to offset the effect of vegetation removal where required, 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.

As discussed above, the trees present on-site do not represent exceptional tree specimens. One butternut tree was observed on the adjacent property addressed as 911 Meteor Avenue. A minimum setback of 25 m around each identified butternut is required to minimize disturbance and protect trees from encroachment. Currently the conceptual development plan occurs outside of the 25 m radius, however, if the 25 m radius cannot be met, than a Butternut Health Assessment shall be completed by a certified Butternut Health Assessor and submitted to the Kemptville district MECP office prior to any construction activity or disturbance on-site.

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. Construction contractors shall apply the following measures below to prevent damages 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;
- Tree protection should follow the tree protection specification provided by the City of Ottawa (2019). The Specification is provided in Appendix D.

- 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;
- Do not place any material or equipment within the CRZ of any tree identified to be retained;
- Do not attach any signs, notices or posters to any tree identified to be retained;
- 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
- Vegetation removal should occur outside of March 15 to November 30 to avoid the key breeding bird period and bat summer active season. The timing windows provides protection of migratory birds, roosting bats and avoids contravention of the Migratory Bird Convention Act and Endangered Species Act. If vegetation clearing activities must take place during the aforementioned timing window than a nest survey and site sweep shall be conducted by a qualified professional to ensure no impacts to birds. If vegetation removal has the potential to impact SAR bats (i.e. vegetation removal within contiguous forested tracts) consultation with the MECP is required to determine whether the project will required an authorization.

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 Heirarchy Development & Design, and is intended for the exclusive use of Heirarchy Development & Design. This report may not be relied upon by any other person or entity without the express written consent of GEMTEC and Heirarchy Development & Design. 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 Pentz, B.Sc.
Junior Biologist

EP/TW/DP



Taylor Warrington, B.Sc.
Biologist

6.0 REFERENCES

Lee, H. T. 2008. Draft Southern Ontario Ecological Land Classification. Ministry of Natural Resources: London, Ontario.

Ottawa, City of (Ottawa). 2003. City of Ottawa Official Plan. May

Ottawa, City of (Ottawa), By-law No. 2020-340, *Tree Protection*.



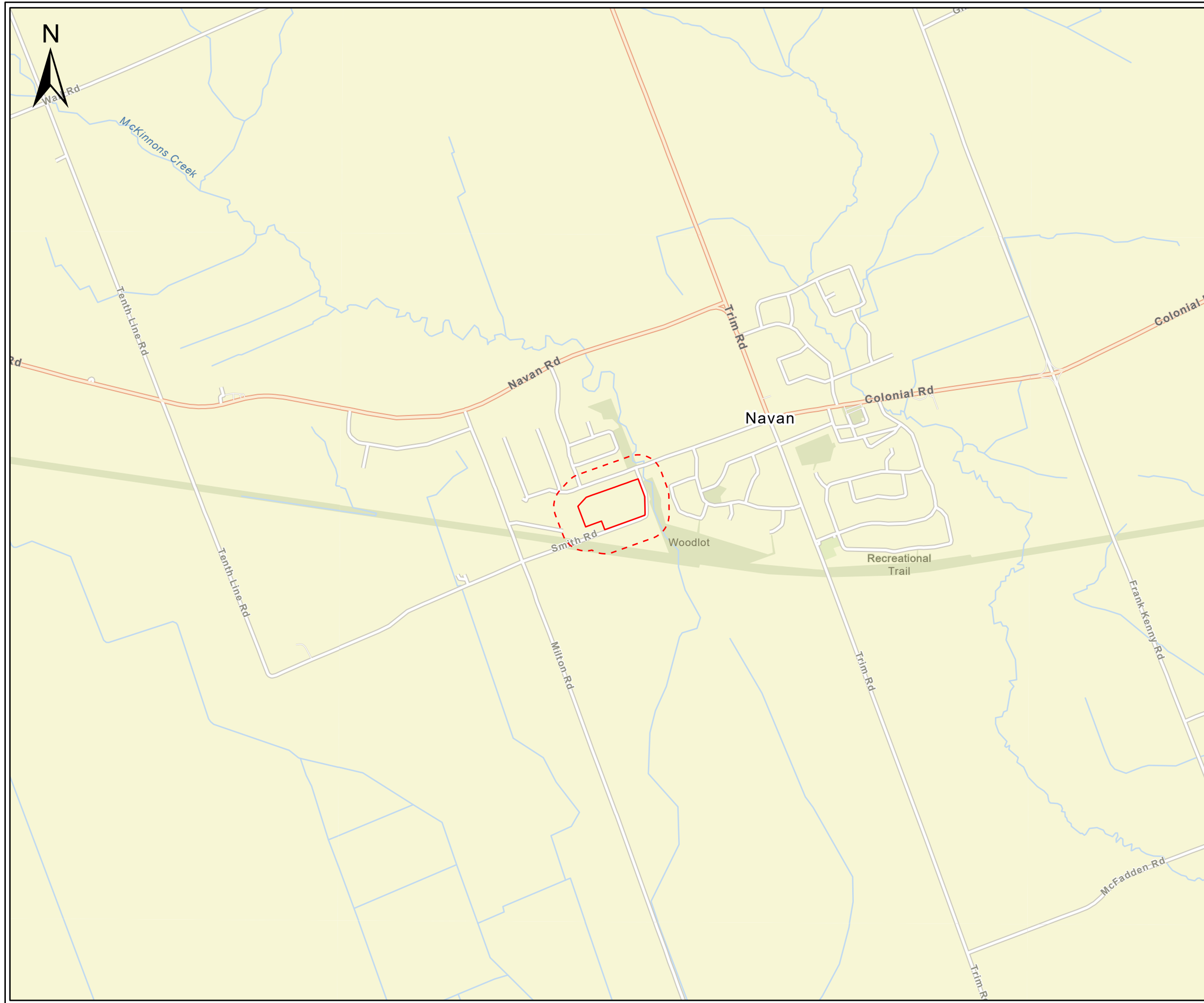
APPENDIX A

Report Figures

Figure A.1 – Site Location

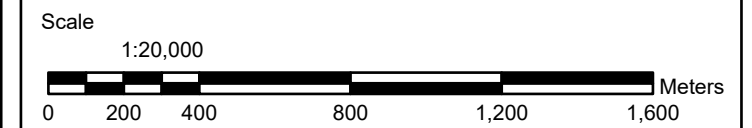
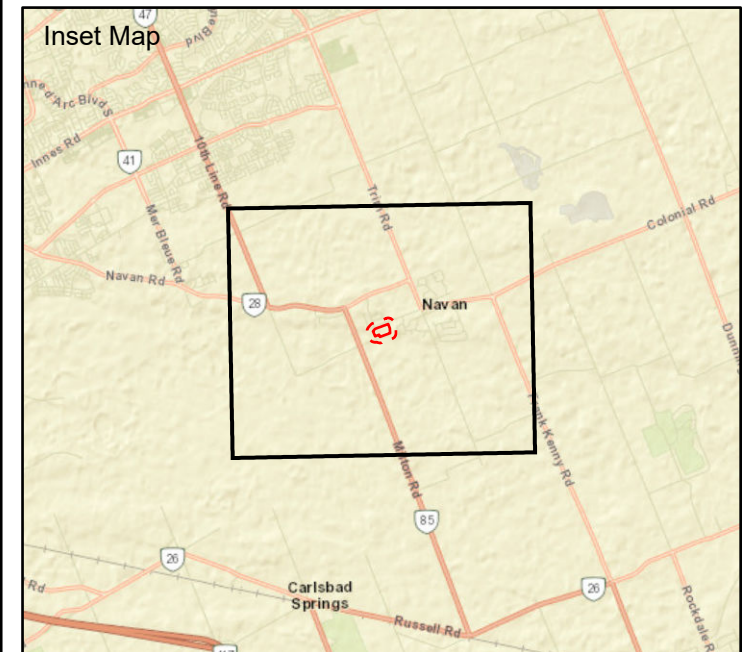
Figure A.2 – Site Layout

Figure A.3 (a to h) – Tree Inventory



Legend

- Property Boundary
- Study Area



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Location 630 Smith Road Ottawa, Ontario

Drwn By: EP	Chkd By: TW	Site Location
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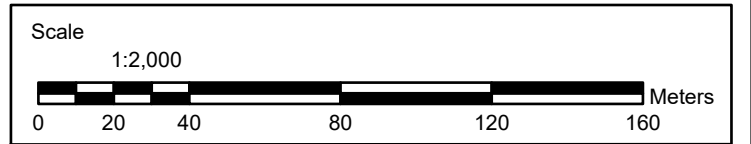
Date: May 2024	Rev. 1	Figure A.1
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Coordinate System: NAD 1983 UTM Zone 18N
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Legend

- Property Boundary
 - Study Area
 - Proposed Lot
 - Vegetation Community
 - OAG = Active Agriculture
 - FOM = Mixed Forest
 - CUM = Cultural Meadow
-
- Development Concept**
- Proposed Dwelling
 - Proposed Driveway
 - Proposed Septic Location
 - Proposed Well Location
- Area of Right Building Footprint**
- 2m Side Yard Setback
 - 7m Front Yard Setback
 - 7.5m Rear Yard Setback



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Location 630 Smith Road Ottawa, Ontario

Drwn By: EP	Chkd By: TW	Site Layout
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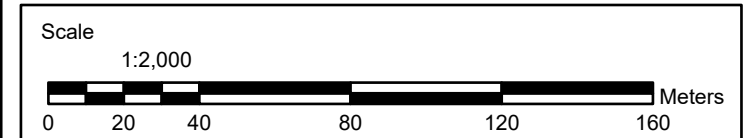
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 World Imagery: SDG Counties, Maxar, Microsoft
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Legend

- Property Boundary
- Study Area
- Proposed Lot
- Proposed Development Concept
- Area of Right Building Footprint
- Butternut (25m Radius)
- Trees Greater than 10 cm DBH
- × Dead Tree



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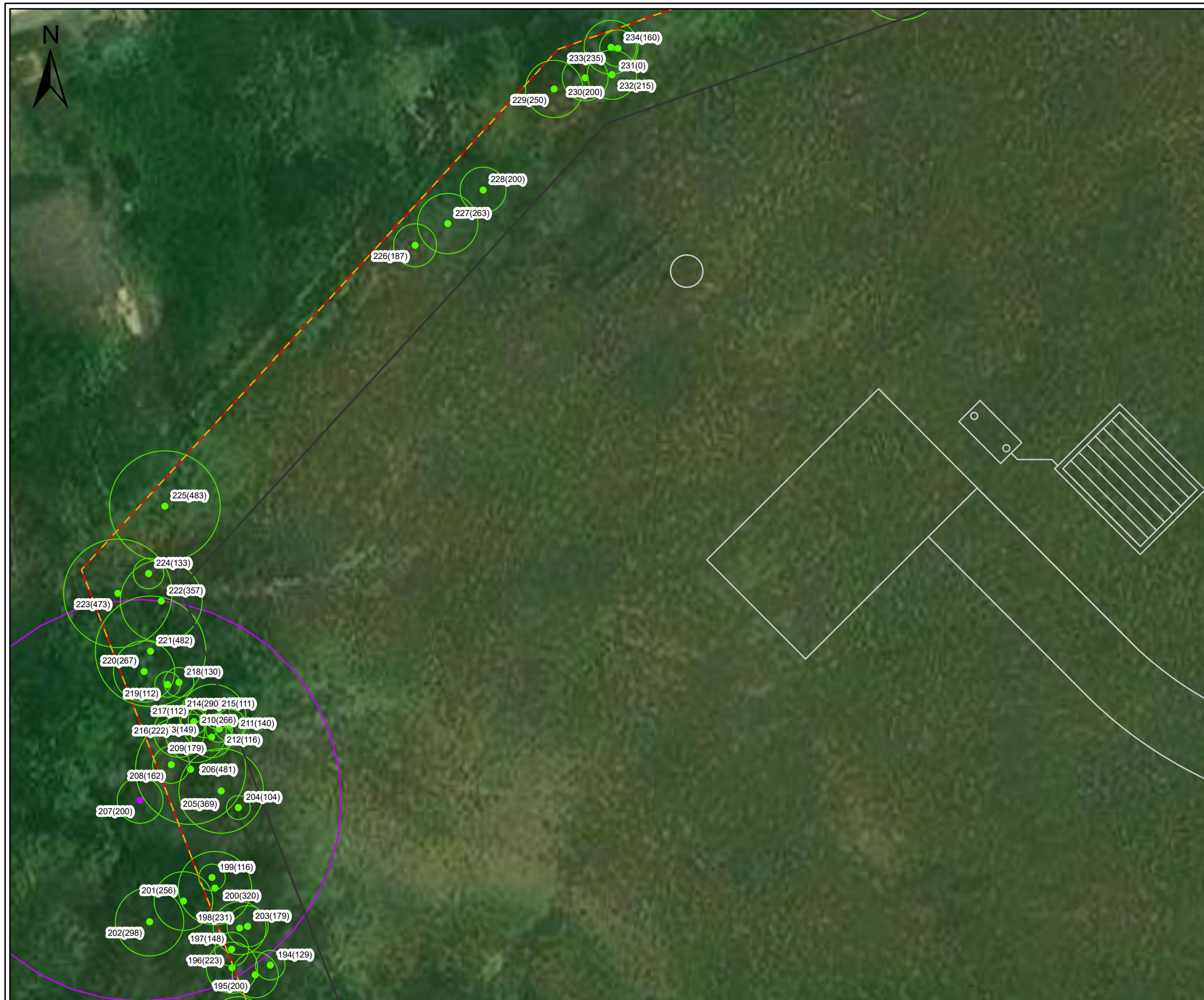
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 World Imagery: SDG Counties, Maxar, Microsoft
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Legend

- Property Boundary
- Study Area
- Proposed Lot
- Proposed Development Concept
- Area of Right Building Footprint

Tree Greater than 10 cm DBH

- Alive; Retainable
- Alive; Non-Retainable
- Butternut (25 m Radius)
- × Dead

Inset Map

Scale

1:350

0 7 14 28 Meters

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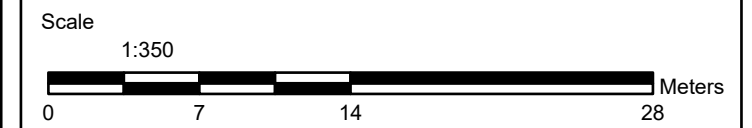
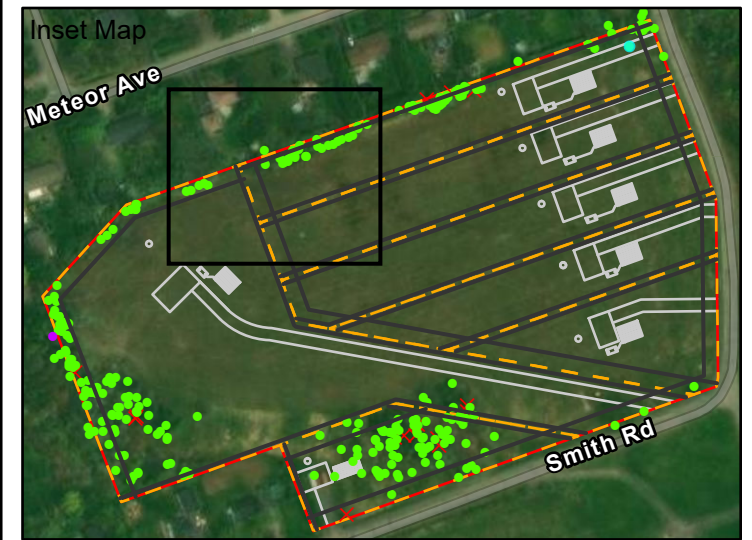
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Location 630 Smith Road Ottawa, Ontario			
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Legend

- Property Boundary
 - Study Area
 - Proposed Lot
 - Proposed Development Concept
 - Area of Right Building Footprint
- Tree Greater than 10 cm DBH**
- Alive; Retainable
 - Alive; Non-Retainable
 - Butternut (25 m Radius)
 - × Dead



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Location 630 Smith Road Ottawa, Ontario

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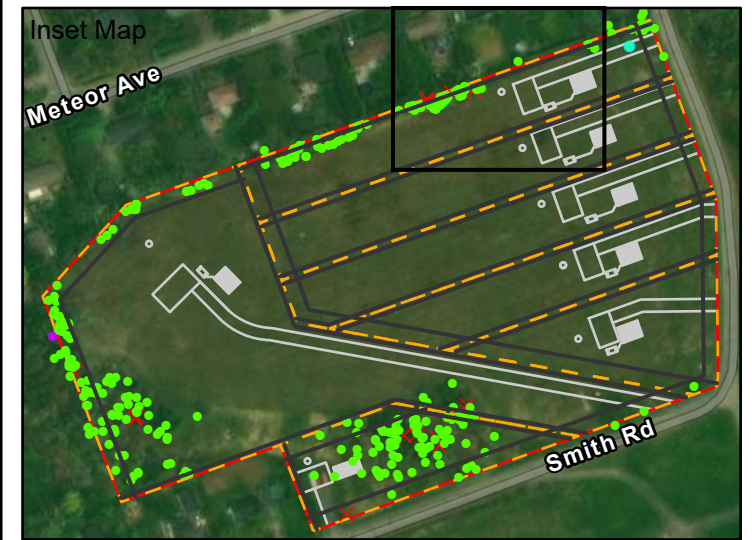


Legend

- Property Boundary
- Study Area
- Proposed Lot
- Proposed Development Concept
- Area of Right Building Footprint

Tree Greater than 10 cm DBH

- Alive; Retainable
- Alive; Non-Retainable
- Butternut (25 m Radius)
- × Dead



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Location 630 Smith Road Ottawa, Ontario

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Date: May 2024	Rev.	Figure A.3c
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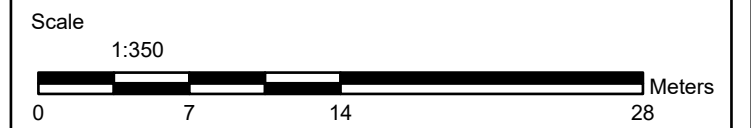
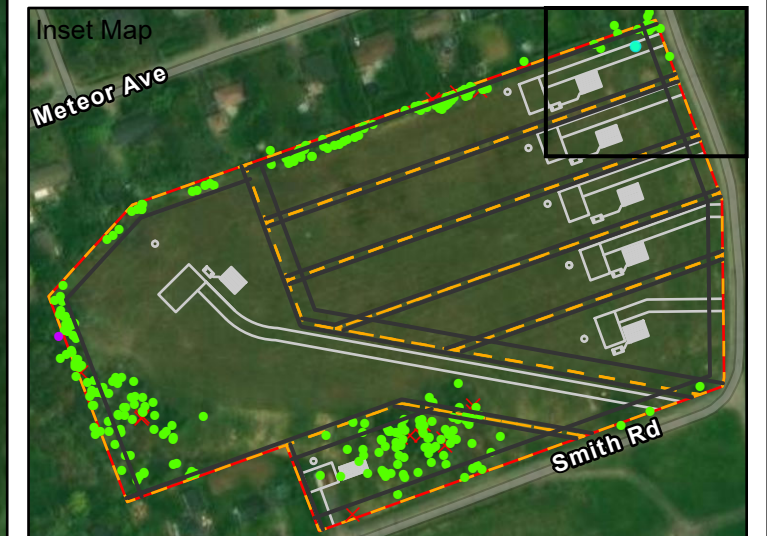


Legend

- Property Boundary
- Study Area
- Proposed Lot
- Proposed Development Concept
- Area of Right Building Footprint

Tree Greater than 10 cm DBH

- Alive; Retainable
- Alive; Non-Retainable
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Drwn By: EP	Chkd By: TW	Tree Inventory
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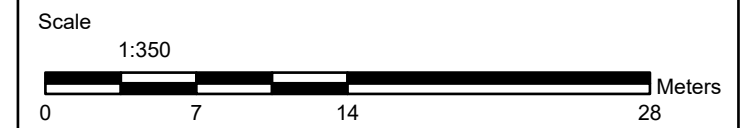
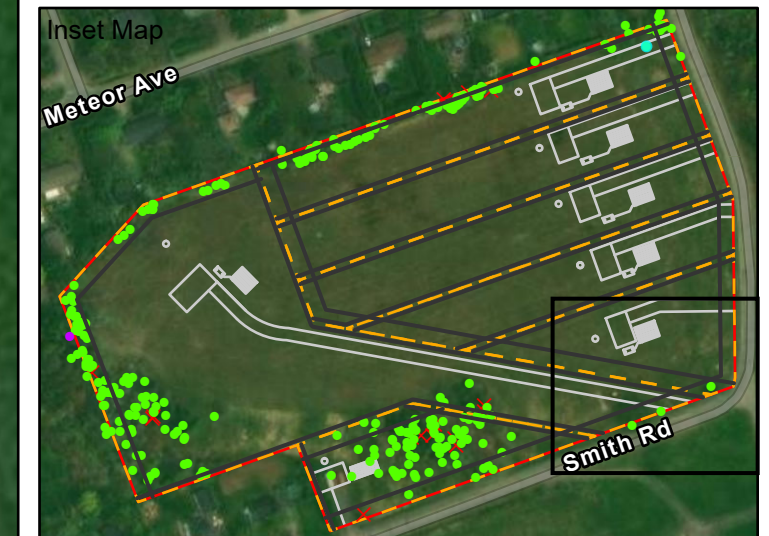


Legend

- Property Boundary
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Tree Greater than 10 cm DBH

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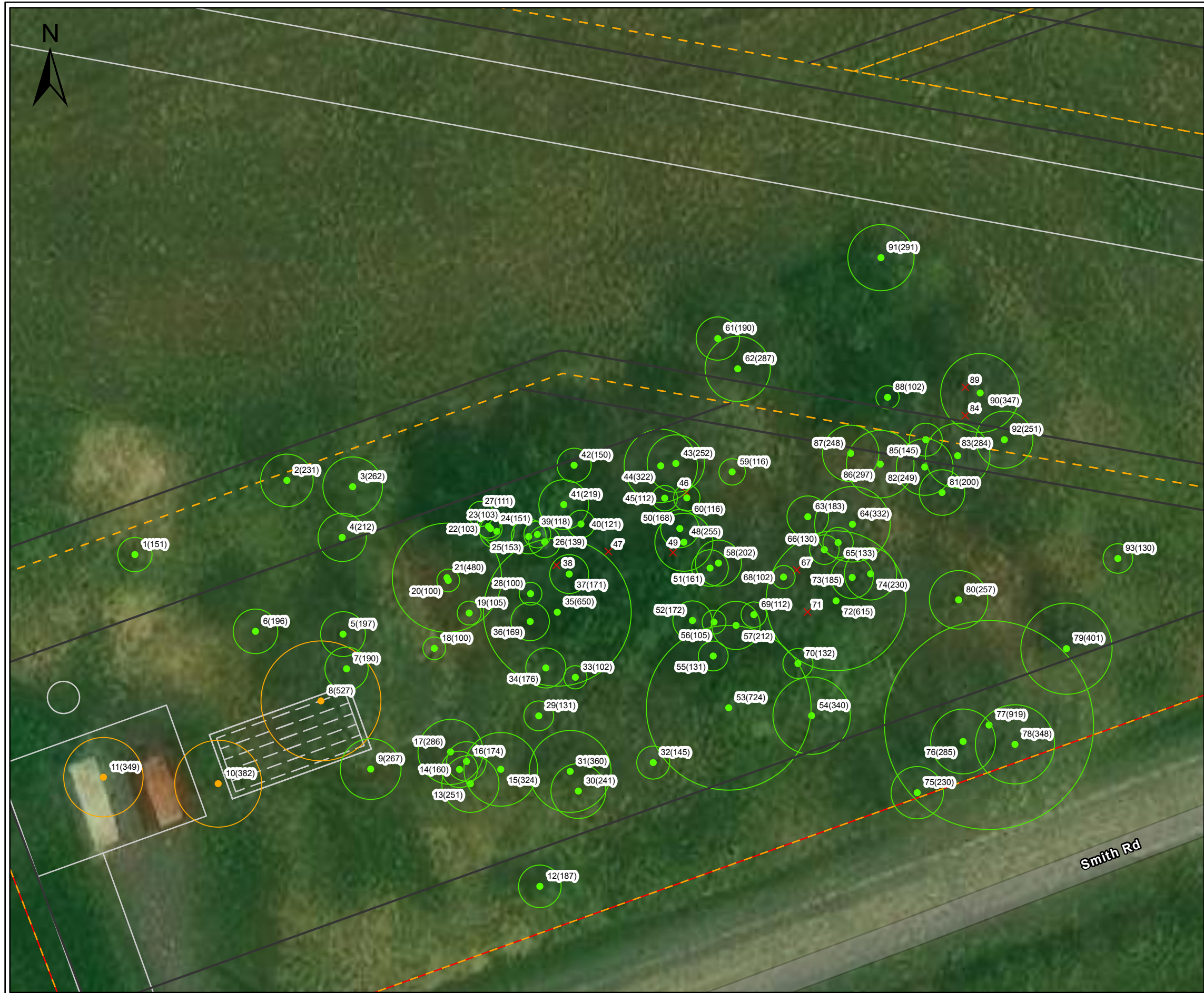
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Location 630 Smith Road Ottawa, Ontario

Drwn By: EP	Chkd By: TW	Tree Inventory
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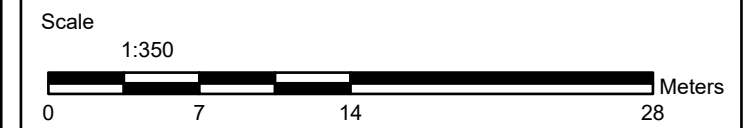
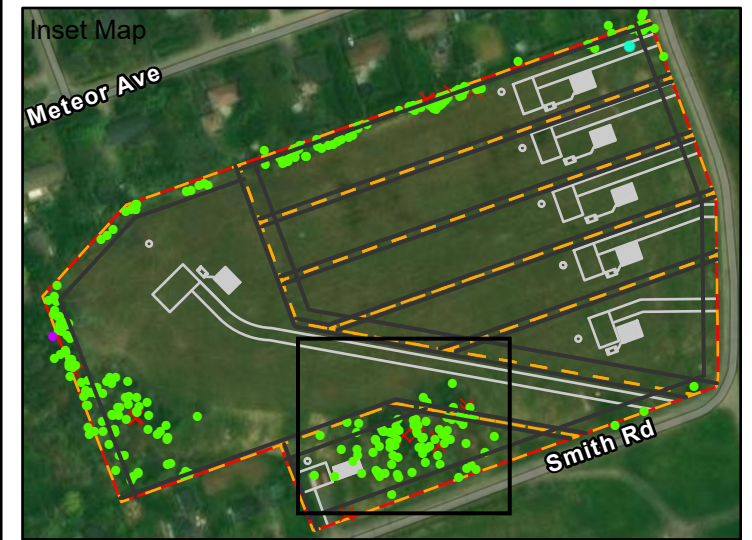


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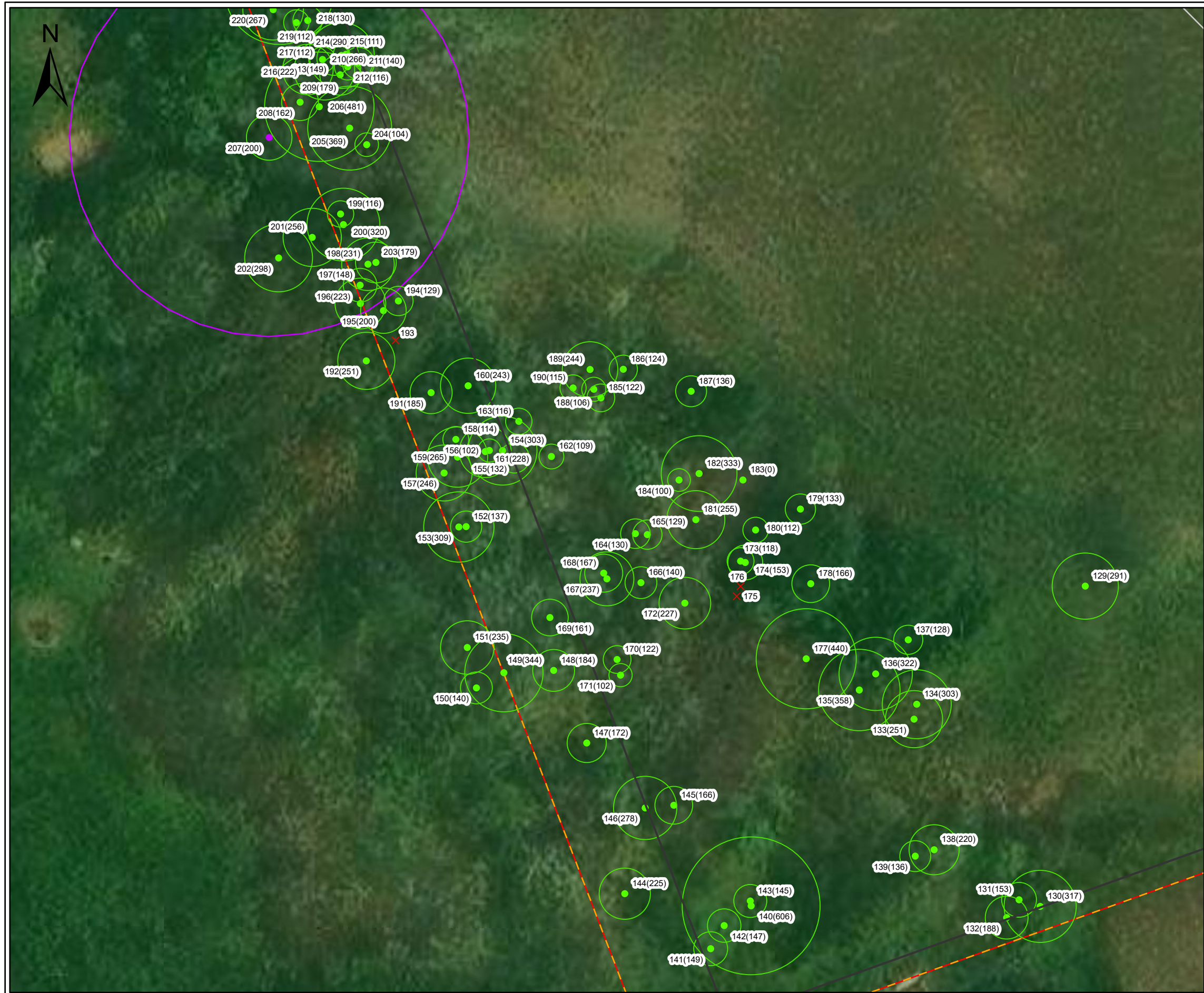
Client: Heirarchy Development & Design	Project: 100812.001
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Location 630 Smith Road Ottawa, Ontario

Drwn By: EP	Chkd By: TW	Tree Inventory
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Date: May 2024	Rev. 1	Figure A.3f
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 World Imagery: SDG Counties, Maxar, Microsoft
 World Imagery: SDG Counties, Maxar, Microsoft

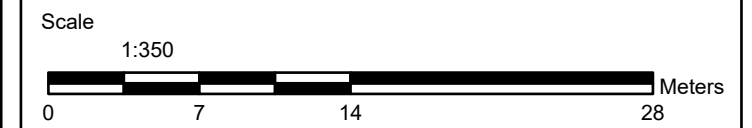
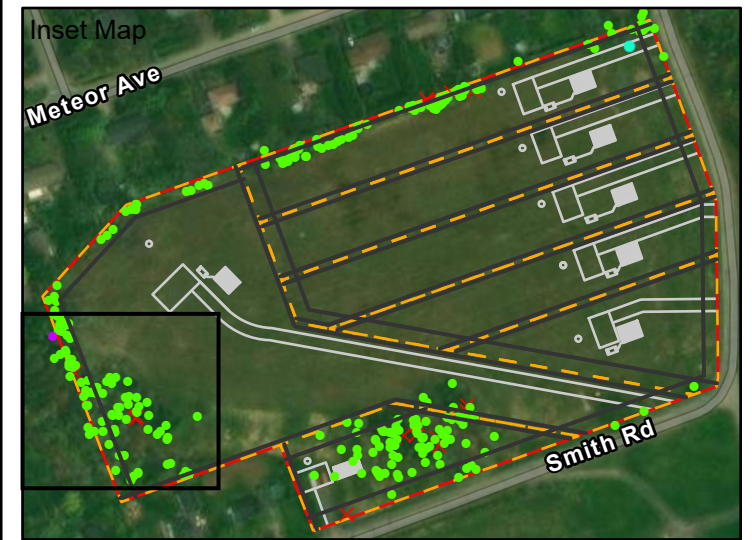


Legend

- Property Boundary
- Study Area
- Proposed Lot
- Proposed Development Concept
- Area of Right Building Footprint

Tree Greater than 10 cm DBH

- Alive; Retainable
- Alive; Non-Retainable
- Butternut (25 m Radius)
- × Dead



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Client: Heirarchy Development & Design	Project: 100812.001
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Location 630 Smith Road Ottawa, Ontario

Drwn By: EP	Chkd By: TW	Tree Inventory
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Date: May 2024	Rev. 1	Figure A.3g
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Coordinate System: NAD 1983 UTM Zone 18N
 Service Layer Credits: Hybrid Reference Layer: Esri Community Maps Contributors, City of Ottawa, Province of Ontario, Ville de Gatineau, Esri Canada, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, NRCAN, Parks Canada
 World Imagery: SDG Counties, Maxar, Microsoft
 World Imagery: SDG Counties, Maxar, Microsoft



APPENDIX B

Site Photographs



Site Photograph 1 – Section of trees along southern property boundary.



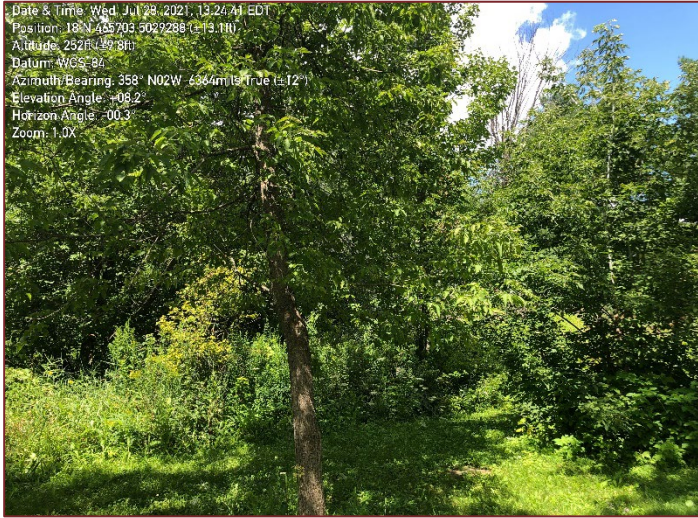
Site Photograph 2 – Section of trees along southern property boundary.



Site Photograph 3 – Along the southeastern property boundary.



Site Photograph 4 – Along northern property boundary.



Site Photograph 5 – Large section of trees in the southwestern corner of the property.



Site Photograph 6 – Current shrubs and trees along western property boundary.



Site Photograph 7 – Butternut tree found in study area.



Site Photograph 8 – Butternut tree found in study area.



APPENDIX C

Tree Inventory Summary Table

**Table C.1
Summary of Tree Inventory Results**

Tree Number	Common Name	Scientific Name	Diameter at Breast Height (cm)	Critical Root Zone (cm)	Condition	Retainable or Conflict	Significant Tree (> 50 cm)	Wildlife Tree
1	Bur Oak	<i>Quercus macrocarpa</i>	15.1	151	Good	Retainable	No	No
2	American Elm	<i>Ulmus americana</i>	23.1	231	Good	Retainable	No	No
3	American Elm	<i>Ulmus americana</i>	26.2	262	Good	Retainable	No	No
4	American Elm	<i>Ulmus americana</i>	21.2	212	Good	Retainable	No	No
5	Sugar Maple	<i>Acer saccharum</i>	19.7	197	Good	Retainable	No	No
6	Black Cherry	<i>Prunus serotina</i>	19.6	196	Good	Retainable	No	No
7	Sugar Maple	<i>Acer saccharum</i>	19.0	190	Good	Retainable	No	No
8	Bur Oak	<i>Quercus macrocarpa</i>	52.7	527	Good	Non-Retainable	Yes	No
9	Slippery Elm	<i>Ulmus rubra</i>	26.7	267	Good	Retainable	No	No
10	Slippery Elm	<i>Ulmus rubra</i>	38.2	382	Good	Non-Retainable	No	No
11	Slippery Elm	<i>Ulmus rubra</i>	34.9	349	Good	Non-Retainable	No	No
12	Slippery Elm	<i>Ulmus rubra</i>	18.7	187	Good	Retainable	No	No
13	Bur Oak	<i>Quercus macrocarpa</i>	25.1	251	Good	Retainable	No	No
14	Bur Oak	<i>Quercus macrocarpa</i>	16	160	Good	Retainable	No	No
15	Bur Oak	<i>Quercus macrocarpa</i>	32.4	324	Good	Retainable	No	No
16	Bur Oak	<i>Quercus macrocarpa</i>	17.4	174	Good	Retainable	No	No
17	Bur Oak	<i>Quercus macrocarpa</i>	28.6	286	Good	Retainable	No	No
18	Sugar Maple	<i>Acer saccharum</i>	10	100	Good	Retainable	No	No
19	Bur Oak	<i>Quercus macrocarpa</i>	10.5	105	Moderate	Retainable	No	No
20	American Elm	<i>Ulmus americana</i>	10	100	Good	Retainable	No	No
21	White Pine	<i>Pinus strobus</i>	48.0	480	Good	Retainable	No	No
22	Black Cherry	<i>Prunus serotina</i>	10.3	103	Good	Retainable	No	No
23	Slippery Elm	<i>Ulmus rubra</i>	10.3	103	Good	Retainable	No	No
24	Slippery Elm	<i>Ulmus rubra</i>	15.1	151	Good	Retainable	No	No
25	Black Cherry	<i>Prunus serotina</i>	15.3	153	Good	Retainable	No	No
26	Slippery Elm	<i>Ulmus rubra</i>	13.9	139	Good	Retainable	No	No
27	American Elm	<i>Ulmus americana</i>	11.1	111	Good	Retainable	No	No
28	Sugar Maple	<i>Acer saccharum</i>	10	100	Good	Retainable	No	No
29	Sugar Maple	<i>Acer saccharum</i>	13.1	131	Good	Retainable	No	No
30	Bur Oak	<i>Quercus macrocarpa</i>	24.1	241	Moderate	Retainable	No	No
31	Slippery Elm	<i>Ulmus rubra</i>	36	360	Good	Retainable	No	No
32	Bur Oak	<i>Quercus macrocarpa</i>	14.5	145	Good	Retainable	No	No
33	Sugar Maple	<i>Acer saccharum</i>	10.2	102	Good	Retainable	No	No
34	Slippery Elm	<i>Ulmus rubra</i>	17.6	176	Poor	Retainable	No	No
35	White Pine	<i>Pinus strobus</i>	65	650	Good	Retainable	Yes	No
36	White Pine	<i>Pinus strobus</i>	16.9	169	Good	Retainable	No	No
37	Sugar Maple	<i>Acer saccharum</i>	17.7, 17.1	177	Good	Retainable	No	No
38	Elm spp.	<i>Ulmus spp.</i>	11.1	--	Dead	Retainable	No	No
39	Slippery Elm	<i>Ulmus rubra</i>	11.8	118	Moderate	Retainable	No	No
40	Sugar Maple	<i>Acer saccharum</i>	12.1	121	Good	Retainable	No	No
41	Slippery Elm	<i>Ulmus rubra</i>	21.9	219	Good	Retainable	No	No
42	Wild Crab Apple	<i>Malus coronaria</i>	14, 14.6, 15, 12, 14	150	Moderate	Retainable	No	No
43	Bur Oak	<i>Quercus macrocarpa</i>	25.2	252	Good	Retainable	No	No
44	Bur Oak	<i>Quercus macrocarpa</i>	32.2	322	Good	Retainable	No	No
45	Slippery Elm	<i>Ulmus rubra</i>	11.2	112	Moderate	Retainable	No	No
46	Elm spp.	<i>Ulmus spp.</i>	12.8, 14.6	--	Dead	Retainable	No	No
47	Elm spp.	<i>Ulmus spp.</i>	12.6	--	Dead	Retainable	No	No

**Table C.1
Summary of Tree Inventory Results**

Tree Number	Common Name	Scientific Name	Diameter at Breast Height (cm)	Critical Root Zone (cm)	Condition	Retainable or Conflict	Significant Tree (> 50 cm)	Wildlife Tree
48	White Pine	<i>Pinus strobus</i>	25.5	255	Good	Retainable	No	No
49	White Pine	<i>Pinus strobus</i>	33.8	--	Dead	Retainable	No	No
50	Bur Oak	<i>Quercus macrocarpa</i>	16.8	168	Good	Retainable	No	No
51	Bur Oak	<i>Quercus macrocarpa</i>	16.1	161	Good	Retainable	No	No
52	Bur Oak	<i>Quercus macrocarpa</i>	17.2	172	Good	Retainable	No	No
53	Sugar Maple	<i>Acer saccharum</i>	72.4	724	Moderate	Retainable	Yes	Yes
54	Bur Oak	<i>Quercus macrocarpa</i>	34	340	Good	Retainable	No	No
55	Bur Oak	<i>Quercus macrocarpa</i>	13.1	131	Good	Retainable	No	No
56	Bur Oak	<i>Quercus macrocarpa</i>	10.5	105	Good	Retainable	No	No
57	Bur Oak	<i>Quercus macrocarpa</i>	21.2	212	Good	Retainable	No	No
58	Manitoba Maple	<i>Acer negundo</i>	17.5, 20.2	202	Good	Retainable	No	No
59	Sugar Maple	<i>Acer saccharum</i>	11.6	116	Good	Retainable	No	No
60	Sugar Maple	<i>Acer saccharum</i>	11.6	116	Good	Retainable	No	No
61	Manitoba Maple	<i>Acer negundo</i>	19	190	Good	Retainable	No	No
62	Bur Oak	<i>Quercus macrocarpa</i>	22.8, 28.7	287	Good	Retainable	No	No
63	Basswood	<i>Tilia americana</i>	18.3	183	Good	Retainable	No	No
64	Bur Oak	<i>Quercus macrocarpa</i>	33.2	332	Good	Retainable	No	No
65	Sugar Maple	<i>Acer saccharum</i>	13.3	133	Good	Retainable	No	No
66	Sugar Maple	<i>Acer saccharum</i>	13	130	Good	Retainable	No	No
67	Elm spp.	<i>Ulmus spp.</i>	14.3	--	Dead	Retainable	No	No
68	Sugar Maple	<i>Acer saccharum</i>	10.2	102	Good	Retainable	No	No
69	Sugar Maple	<i>Acer saccharum</i>	11.2	112	Good	Retainable	No	No
70	American Elm	<i>Ulmus americana</i>	13.2	132	Good	Retainable	No	No
71	Elm spp.	<i>Ulmus spp.</i>	23.6	--	Dead	Retainable	No	No
72	Sugar Maple	<i>Acer saccharum</i>	61.5	615	Good	Retainable	Yes	No
73	Black Cherry	<i>Prunus serotina</i>	18.5, 17.3	185	Good	Retainable	No	No
74	Black Cherry	<i>Prunus serotina</i>	23	230	Good	Retainable	No	No
75	Bur Oak	<i>Quercus macrocarpa</i>	23, 20.9, 20.5, 18.5	230	Good	Retainable	No	No
76	Bur Oak	<i>Quercus macrocarpa</i>	23, 24.5, 28.5	285	Good	Retainable	No	No
77	Bur Oak	<i>Quercus macrocarpa</i>	91.9	919	Good	Retainable	Yes	No
78	Bur Oak	<i>Quercus macrocarpa</i>	32.4, 34.8, 23.9	348	Good	Retainable	No	No
79	Bur Oak	<i>Quercus macrocarpa</i>	40.1	401	Good	Retainable	No	No
80	Bur Oak	<i>Quercus macrocarpa</i>	25.7	257	Good	Retainable	No	No
81	Black Cherry	<i>Prunus serotina</i>	20	200	Good	Retainable	No	No
82	Bur Oak	<i>Quercus macrocarpa</i>	24.9	249	Good	Retainable	No	No
83	Bur Oak	<i>Quercus macrocarpa</i>	28.4	284	Good	Retainable	No	No
84	Elm spp.	<i>Ulmus spp.</i>	13.3	--	Dead	Retainable	No	No
85	Green Ash	<i>Fraxinus pennsylvanica</i>	14.5	145	Very poor	Retainable	No	No
86	Elm spp.	<i>Ulmus spp.</i>	29.7	297	Very poor	Retainable	No	No
87	White Pine	<i>Pinus strobus</i>	24.8	248	Good	Retainable	No	No
88	Sugar Maple	<i>Acer saccharum</i>	10.2	102	Good	Retainable	No	No
89	Elm spp.	<i>Ulmus spp.</i>	15.5	--	Dead	Retainable	No	No
90	Manitoba Maple	<i>Acer negundo</i>	27.8, 13.6, 22.6, 34.7	347	Good	Retainable	No	Yes
91	Manitoba Maple	<i>Acer negundo</i>	20, 18.3, 29.1	291	Moderate	Retainable	No	No
92	Bur Oak	<i>Quercus macrocarpa</i>	25.1	251	Good	Retainable	No	No

**Table C.1
Summary of Tree Inventory Results**

Tree Number	Common Name	Scientific Name	Diameter at Breast Height (cm)	Critical Root Zone (cm)	Condition	Retainable or Conflict	Significant Tree (> 50 cm)	Wildlife Tree
93	Sugar Maple	<i>Acer saccharum</i>	13	130	Good	Retainable	No	No
94	American Elm	<i>Ulmus americana</i>	94.8	948	Good	Retainable	Yes	No
95	Bur Oak	<i>Quercus macrocarpa</i>	31.3	313	Good	Retainable	No	No
96	American Elm	<i>Ulmus americana</i>	62.8	628	Good	Retainable	Yes	No
97	Slippery Elm	<i>Ulmus rubra</i>	15.5, 19.8	198	Good	Retainable	No	No
98	Trembling Aspen	<i>Populus tremuloides</i>	12.7	127	Good	Retainable	No	No
99	Trembling Aspen	<i>Populus tremuloides</i>	12.3	123	Good	Retainable	No	No
100	Slippery Elm	<i>Ulmus rubra</i>	10.8	108	Good	Retainable	No	No
101	Slippery Elm	<i>Ulmus rubra</i>	16.5	165	Good	Retainable	No	No
102	Trembling Aspen	<i>Populus tremuloides</i>	16.3	163	Good	Retainable	No	No
103	Wild Crab Apple	<i>Malus coronaria</i>	12.3, 14	140	Good	Retainable	No	No
104	White Spruce	<i>Picea glauca</i>	34.4	344	Good	Retainable	No	No
105	Basswood	<i>Tilia americana</i>	10.1	101	Good	Retainable	No	No
106	Trembling Aspen	<i>Populus tremuloides</i>	19.3	193	Good	Retainable	No	No
107	Trembling Aspen	<i>Populus tremuloides</i>	19	190	Good	Retainable	No	No
108	Trembling Aspen	<i>Populus tremuloides</i>	18.3, 14.7	183	Good	Retainable	No	No
109	Trembling Aspen	<i>Populus tremuloides</i>	13.3	133	Good	Non-Retainable	No	No
110	Trembling Aspen	<i>Populus tremuloides</i>	10.4	104	Good	Retainable	No	No
111	Manitoba Maple	<i>Acer negundo</i>	14.2	142	Good	Retainable	No	No
112	Manitoba Maple	<i>Acer negundo</i>	15.5	155	Good	Retainable	No	No
113	Bur Oak	<i>Quercus macrocarpa</i>	35.7	357	Good	Retainable	No	No
114	Manitoba Maple	<i>Acer negundo</i>	25.8	258	Good	Retainable	No	No
115	White Spruce	<i>Picea glauca</i>	10.2	102	Good	Retainable	No	No
116	Elm spp.	<i>Ulmus spp.</i>	12.1	--	Dead	Retainable	No	No
117	Trembling Aspen	<i>Populus tremuloides</i>	10	100	Good	Retainable	No	No
118	Trembling Aspen	<i>Populus tremuloides</i>	10.8	108	Good	Retainable	No	No
119	Manitoba Maple	<i>Acer negundo</i>	32.9	329	Good	Retainable	No	No
120	Manitoba Maple	<i>Acer negundo</i>	11.7	117	Good	Retainable	No	No
121	Trembling aspen	<i>Populus tremuloides</i>	16.4	164	Good	Retainable	No	
122	Eastern White Cedar	<i>Thuja occidentalis</i>	11.8	118	Good	Retainable	No	No
123	Trembling Aspen	<i>Populus tremuloides</i>	21.7	217	Good	Retainable	No	No
124	White Spruce	<i>Picea glauca</i>	48.1	481	Poor	Retainable	No	No
125	White Spruce	<i>Picea glauca</i>	39.4	394	Poor	Retainable	No	No
126	Trembling Aspen	<i>Populus tremuloides</i>	21.5	215	Good	Retainable	No	No
127	Trembling Aspen	<i>Populus tremuloides</i>	28.3	283	Good	Retainable	No	No
128	Jack Pine	<i>Pinus banksiana</i>	25	250	Good	Retainable	No	No
129	Bur Oak	<i>Quercus macrocarpa</i>	29.1	291	Good	Retainable	No	No

**Table C.1
Summary of Tree Inventory Results**

Tree Number	Common Name	Scientific Name	Diameter at Breast Height (cm)	Critical Root Zone (cm)	Condition	Retainable or Conflict	Significant Tree (> 50 cm)	Wildlife Tree
130	Cottonwood	<i>Populus deltoides</i>	31.7	317	Good	Retainable	No	No
131	Manitoba Maple	<i>Acer negundo</i>	15.3	153	Good	Retainable	No	No
132	Manitoba Maple	<i>Acer negundo</i>	18.8	188	Good	Retainable	No	No
133	White Pine	<i>Pinus strobus</i>	25.1	251	Good	Retainable	No	No
134	White Pine	<i>Pinus strobus</i>	30.3, 22.2	303	Good	Retainable	No	No
135	White Pine	<i>Pinus strobus</i>	35.8	358	Good	Retainable	No	No
136	White Pine	<i>Pinus strobus</i>	32.2	322	Good	Retainable	No	No
137	White Pine	<i>Pinus strobus</i>	12.8	128	Good	Retainable	No	No
138	Manitoba Maple	<i>Acer negundo</i>	22	220	Good	Retainable	No	No
139	Red Maple	<i>Acer rubrum</i>	13.6	136	Good	Retainable	No	No
140	Manitoba Maple	<i>Acer negundo</i>	60.6, 56.2	606	Good	Retainable	Yes	No
141	Manitoba Maple	<i>Acer negundo</i>	14.9	149	Good	Retainable	No	No
142	Manitoba Maple	<i>Acer negundo</i>	14.7	147	Good	Retainable	No	No
143	Manitoba Maple	<i>Acer negundo</i>	14.5	145	Good	Retainable	No	No
144	River Birch	<i>Betula nigra</i>	22.5	225	Moderate	Retainable	No	No
145	River Birch	<i>Betula nigra</i>	16.6	166	Good	Retainable	No	No
146	Red Maple	<i>Acer rubrum</i>	12.8, 11.4, 14.6, 27.8, 11.9	278	Good	Retainable	No	No
147	Green Ash	<i>Fraxinus pennsylvanica</i>	17.2, 11	172	Moderate	Retainable	No	No
148	Manitoba Maple	<i>Acer negundo</i>	18.4, 16.3, 14.1	184	Good	Retainable	No	No
149	River Birch	<i>Betula nigra</i>	34.4	344	Good	Retainable	No	No
150	Green Ash	<i>Fraxinus pennsylvanica</i>	12.5, 14	140	Good	Retainable	No	No
151	River Birch	<i>Betula nigra</i>	23.5	235	Good	Retainable	No	No
152	Red Maple	<i>Acer rubrum</i>	10.8, 13.7	137	Good	Retainable	No	No
153	River Birch	<i>Betula nigra</i>	30.9	309	Good	Retainable	No	No
154	River Birch	<i>Betula nigra</i>	30.3, 24.8	303	Good	Retainable	No	No
155	Sugar Maple	<i>Acer saccharum</i>	13.2	132	Good	Retainable	No	No
156	Red Maple	<i>Acer rubrum</i>	10.2	102	Good	Retainable	No	No
157	River Birch	<i>Betula nigra</i>	24.6	246	Good	Retainable	No	No
158	American Elm	<i>Ulmus americana</i>	11.4	114	Moderate	Retainable	No	No
159	River Birch	<i>Betula nigra</i>	26.5	265	Good	Retainable	No	No
160	White Pine	<i>Pinus strobus</i>	24.3	243	Good	Retainable	No	No
161	White Pine	<i>Pinus strobus</i>	22.8	228	Good	Retainable	No	No
162	Slippery Elm	<i>Ulmus rubra</i>	10.9	109	Good	Retainable	No	No
163	Red Maple	<i>Acer rubrum</i>	11.6	116	Good	Retainable	No	No
164	Manitoba Maple	<i>Acer negundo</i>	13	130	Good	Retainable	No	No
165	Red Maple	<i>Acer rubrum</i>	12.9	129	Good	Retainable	No	No
166	Red Maple	<i>Acer rubrum</i>	14	140	Good	Retainable	No	No
167	River Birch	<i>Betula nigra</i>	23.7	237	Good	Retainable	No	No
168	River Birch	<i>Betula nigra</i>	16.7	167	Good	Retainable	No	No
169	River Birch	<i>Betula nigra</i>	16.1	161	Good	Retainable	No	No
170	Green Ash	<i>Fraxinus pennsylvanica</i>	12.2	122	Good	Retainable	No	No
171	Manitoba Maple	<i>Acer negundo</i>	10.2	102	Good	Retainable	No	No
172	Red Maple	<i>Acer rubrum</i>	13.2, 22.7	227	Good	Retainable	No	No
173	Red Maple	<i>Acer rubrum</i>	11.8	118	Good	Retainable	No	No
174	Jack Pine	<i>Pinus banksiana</i>	15.3	153	Poor	Retainable	No	No

**Table C.1
Summary of Tree Inventory Results**

Tree Number	Common Name	Scientific Name	Diameter at Breast Height (cm)	Critical Root Zone (cm)	Condition	Retainable or Conflict	Significant Tree (> 50 cm)	Wildlife Tree
175	Elm spp.	<i>Ulmus spp.</i>	19.9	--	Dead	Retainable	No	No
176	Elm spp.	<i>Ulmus spp.</i>	37.8	--	Dead	Retainable	No	No
177	White Pine	<i>Pinus strobus</i>	44	440	Good	Retainable	No	No
178	Red Maple	<i>Acer rubrum</i>	16.6	166	Good	Retainable	No	No
179	Manitoba Maple	<i>Acer negundo</i>	13.3	133	Good	Retainable	No	No
180	Red Maple	<i>Acer rubrum</i>	11.2	112	Good	Retainable	No	No
181	Slippery Elm	<i>Ulmus rubra</i>	25.5	255	Good	Retainable	No	No
182	White Pine	<i>Pinus strobus</i>	33.3	333	Good	Retainable	No	No
183	Green Ash	<i>Fraxinus pennsylvanica</i>	10	100	Good	Retainable	No	No
184	Jack Pine	<i>Pinus banksiana</i>	12.2	122	Poor	Retainable	No	No
185	Red Maple	<i>Acer rubrum</i>	11	110	Good	Retainable	No	No
186	Manitoba Maple	<i>Acer negundo</i>	12.4	124	Good	Retainable	No	No
187	Red Maple	<i>Acer rubrum</i>	13.6	136	Good	Retainable	No	No
188	Manitoba Maple	<i>Acer negundo</i>	10.5, 10.6	106	Good	Retainable	No	No
189	Manitoba Maple	<i>Acer negundo</i>	24.4	244	Good	Retainable	No	No
190	Red Maple	<i>Acer rubrum</i>	11.5	115	Good	Retainable	No	No
191	Manitoba Maple	<i>Acer negundo</i>	18.5	185	Good	Retainable	No	No
192	Jack Pine	<i>Pinus banksiana</i>	25.1	251	Moderate	Retainable	No	No
193	Unknown spp.	--	10.7	--	Dead	Retainable	No	No
194	River Birch	<i>Betula nigra</i>	12.9	129	Good	Retainable	No	No
195	River Birch	<i>Betula nigra</i>	20	200	Good	Retainable	No	No
196	Jack Pine	<i>Pinus banksiana</i>	22.3	223	Good	Retainable	No	No
197	Black Cherry	<i>Prunus serotina</i>	14.8	148	Good	Retainable	No	No
198	Jack Pine	<i>Pinus banksiana</i>	23.1	231	Poor	Retainable	No	No
199	Jack Pine	<i>Pinus banksiana</i>	11.6	116	Good	Retainable	No	No
200	Jack Pine	<i>Pinus banksiana</i>	32	320	Good	Retainable	No	No
201	Jack Pine	<i>Pinus banksiana</i>	25.6	256	Good	Retainable	No	No
202	Jack Pine	<i>Pinus banksiana</i>	29.8	298	Good	Retainable	No	No
203	River Birch	<i>Betula nigra</i>	15.6, 17.9	179	Good	Retainable	No	No
204	Red Maple	<i>Acer rubrum</i>	10.4	104	Good	Retainable	No	No
205	Trembling Aspen	<i>Populus tremuloides</i>	36.9	369	Good	Retainable	No	No
206	Trembling Aspen	<i>Populus tremuloides</i>	48.1	481	Good	Retainable	No	No
207	Butternut	<i>Juglans cinerea</i>	--	--	Moderate	Possible Conflict	No	--
208	White Pine	<i>Pinus strobus</i>	16.2	162	Good	Retainable	No	No
209	White Pine	<i>Pinus strobus</i>	17.9	179	Good	Retainable	No	No
210	White Pine	<i>Pinus strobus</i>	26.6	266	Good	Retainable	No	No
211	White Pine	<i>Pinus strobus</i>	14	140	Good	Retainable	No	No
212	Red Maple	<i>Acer rubrum</i>	11.6	116	Good	Retainable	No	No
213	White Pine	<i>Pinus strobus</i>	14.9	149	Good	Retainable	No	No
214	Trembling Aspen	<i>Populus tremuloides</i>	29	290	Good	Retainable	No	No
215	White Pine	<i>Pinus strobus</i>	11.1	111	Good	Retainable	No	No
216	White Pine	<i>Pinus strobus</i>	22.2	222	Good	Retainable	No	No
217	White Pine	<i>Pinus strobus</i>	11.2	112	Good	Retainable	No	No
218	Red Maple	<i>Acer rubrum</i>	13	130	Good	Retainable	No	No
219	Red Maple	<i>Acer rubrum</i>	11.2	112	Good	Retainable	No	No
220	Red Maple	<i>Acer rubrum</i>	22.4, 26.7	267	Good	Retainable	No	No

**Table C.1
Summary of Tree Inventory Results**

Tree Number	Common Name	Scientific Name	Diameter at Breast Height (cm)	Critical Root Zone (cm)	Condition	Retainable or Conflict	Significant Tree (> 50 cm)	Wildlife Tree
221	Trembling Aspen	<i>Populus tremuloides</i>	48.2	482	Good	Retainable	No	No
222	Trembling Aspen	<i>Populus tremuloides</i>	35.7	357	Good	Retainable	No	No
223	Trembling Aspen	<i>Populus tremuloides</i>	47.3	473	Good	Retainable	No	No
224	Bur Oak	<i>Quercus macrocarpa</i>	13.3	133	Good	Retainable	No	No
225	Manitoba Maple	<i>Acer negundo</i>	48.3, 29.4	483	Good	Retainable	No	No
226	Bur Oak	<i>Quercus macrocarpa</i>	18.7	187	Good	Retainable	No	No
227	Basswood	<i>Tilia americana</i>	25.3, 19.6, 26.3	263	Good	Retainable	No	No
228	Manitoba Maple	<i>Acer negundo</i>	20, 16.5, 17.5	200	Good	Retainable	No	No
229	Red Maple	<i>Acer rubrum</i>	25	250	Good	Retainable	No	No
230	Red Maple	<i>Acer rubrum</i>	20	200	Good	Retainable	No	No
231	White Pine	<i>Pinus strobus</i>	17, 21.5	215	Good	Retainable	No	No
232	Red Maple	<i>Acer rubrum</i>	23.5, 16.5	235	Good	Retainable	No	No
233	Red Maple	<i>Acer rubrum</i>	16, 11.5	160	Good	Retainable	No	No
234	Red Maple	<i>Acer rubrum</i>	39, 33.2	390	Good	Retainable	No	No
235	Red Maple	<i>Acer rubrum</i>	19.1, 24.1, 25.1	251	Good	Retainable	No	No
236	Red Maple	<i>Acer rubrum</i>	26.5, 12	265	Good	Retainable	No	No
237	Red Maple	<i>Acer rubrum</i>	21	210	Good	Retainable	No	No
238	Red Maple	<i>Acer rubrum</i>	14.2, 16.7	167	Moderate	Retainable	No	No
239	Trembling Aspen	<i>Populus tremuloides</i>	10.6	106	Good	Retainable	No	No
240	Silver Maple	<i>Acer saccharinum</i>	50	500	Good	Retainable	No	No
241	Trembling Aspen	<i>Populus tremuloides</i>	13.2	132	Good	Retainable	No	No
242	Trembling Aspen	<i>Populus tremuloides</i>	11.3	113	Good	Retainable	No	No
243	Trembling Aspen	<i>Populus tremuloides</i>	10.3	103	Good	Retainable	No	No
244	Silver Maple	<i>Acer saccharinum</i>	18.1	181	Good	Retainable	No	No
245	Trembling Aspen	<i>Populus tremuloides</i>	14.6	146	Good	Retainable	No	No
246	Trembling Aspen	<i>Populus tremuloides</i>	16.4	164	Good	Retainable	No	No
247	Red Maple	<i>Acer rubrum</i>	14.2	142	Good	Retainable	No	No
248	Red Maple	<i>Acer rubrum</i>	13.5	135	Good	Retainable	No	No
249	White Pine	<i>Pinus strobus</i>	10.8	108	Good	Retainable	No	No
250	Trembling Aspen	<i>Populus tremuloides</i>	23.1	231	Good	Retainable	No	No
251	Red Maple	<i>Acer rubrum</i>	10.8	108	Good	Retainable	No	No
252	Trembling Aspen	<i>Populus tremuloides</i>	17.2	172	Good	Retainable	No	No
253	Bur Oak	<i>Quercus macrocarpa</i>	11.4	114	Good	Retainable	No	No
254	Trembling Aspen	<i>Populus tremuloides</i>	11.5	115	Good	Retainable	No	No
255	Red Maple	<i>Acer rubrum</i>	10	100	Good	Retainable	No	No
256	Red Maple	<i>Acer rubrum</i>	11.1	111	Good	Retainable	No	No
257	Jack Pine	<i>Pinus banksiana</i>	13	130	Good	Retainable	No	No
258	Manitoba Maple	<i>Acer negundo</i>	11.9	119	Good	Retainable	No	No

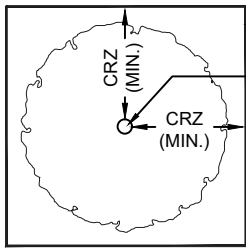
**Table C.1
Summary of Tree Inventory Results**

Tree Number	Common Name	Scientific Name	Diameter at Breast Height (cm)	Critical Root Zone (cm)	Condition	Retainable or Conflict	Significant Tree (> 50 cm)	Wildlife Tree
259	Trembling Aspen	<i>Populus tremuloides</i>	12.8	128	Good	Retainable	No	No
260	Slippery Elm	<i>Ulmus rubra</i>	15.6	156	Good	Retainable	No	No
261	Trembling Aspen	<i>Populus tremuloides</i>	22.6, 24.9	249	Good	Retainable	No	No
262	Trembling Aspen	<i>Populus tremuloides</i>	11.7	117	Good	Retainable	No	No
263	Jack Pine	<i>Pinus banksiana</i>	13.1	131	Good	Retainable	No	No
264	Slippery Elm	<i>Ulmus rubra</i>	12.2	122	Good	Retainable	No	No
265	Trembling Aspen	<i>Populus tremuloides</i>	13.1	131	Good	Retainable	No	No
266	Red Maple	<i>Acer rubrum</i>	19.3	193	Good	Retainable	No	No
267	Green Ash	<i>Fraxinus pennsylvanica</i>	12.5	125	Poor	Retainable	No	No
268	Trembling Aspen	<i>Populus tremuloides</i>	12	120	Good	Retainable	No	No
269	Manitoba Maple	<i>Acer negundo</i>	30	300	Good	Retainable	No	No
270	Green Ash	<i>Fraxinus pennsylvanica</i>	13	130	Poor	Retainable	No	No
271	Manitoba Maple	<i>Acer negundo</i>	25	250	Good	Retainable	No	No
272	Trembling Aspen	<i>Populus tremuloides</i>	12	120	Good	Retainable	No	No
273	Trembling Aspen	<i>Populus tremuloides</i>	13.2	132	Good	Retainable	No	No
274	Trembling Aspen	<i>Populus tremuloides</i>	14.2	142	Good	Retainable	No	No
275	Green Ash	<i>Fraxinus pennsylvanica</i>	12.3	123	Poor	Retainable	No	No
276	Trembling Aspen	<i>Populus tremuloides</i>	14.8	148	Good	Retainable	No	No
277	Trembling Aspen	<i>Populus tremuloides</i>	25.7	257	Good	Retainable	No	No
278	White Spruce	<i>Picea glauca</i>	--	--	Dead	Retainable	No	No
279	Trembling Aspen	<i>Populus tremuloides</i>	11.1	111	Good	Retainable	No	No
280	Trembling Aspen	<i>Populus tremuloides</i>	17.8	178	Good	Retainable	No	No
281	Trembling Aspen	<i>Populus tremuloides</i>	10	100	Good	Retainable	No	No
282	Trembling Aspen	<i>Populus tremuloides</i>	22	220	Good	Retainable	No	No
283	Trembling Aspen	<i>Populus tremuloides</i>	18.2	182	Good	Retainable	No	No
284	White Spruce	<i>Picea glauca</i>	45	450	Moderate	Retainable	No	No
285	Trembling Aspen	<i>Populus tremuloides</i>	14.4	144	Good	Retainable	No	No
286	Trembling Aspen	<i>Populus tremuloides</i>	17.1	171	Good	Retainable	No	No
287	Trembling Aspen	<i>Populus tremuloides</i>	10.4	104	Good	Retainable	No	No
288	Trembling Aspen	<i>Populus tremuloides</i>	26	260	Good	Retainable	No	No
289	White Spruce	<i>Picea glauca</i>	~45	450	Poor	Retainable	No	No
290	White Spruce	<i>Picea glauca</i>	25	250	Poor	Retainable	No	No



APPENDIX D

City of Ottawa Tree Protection Specification



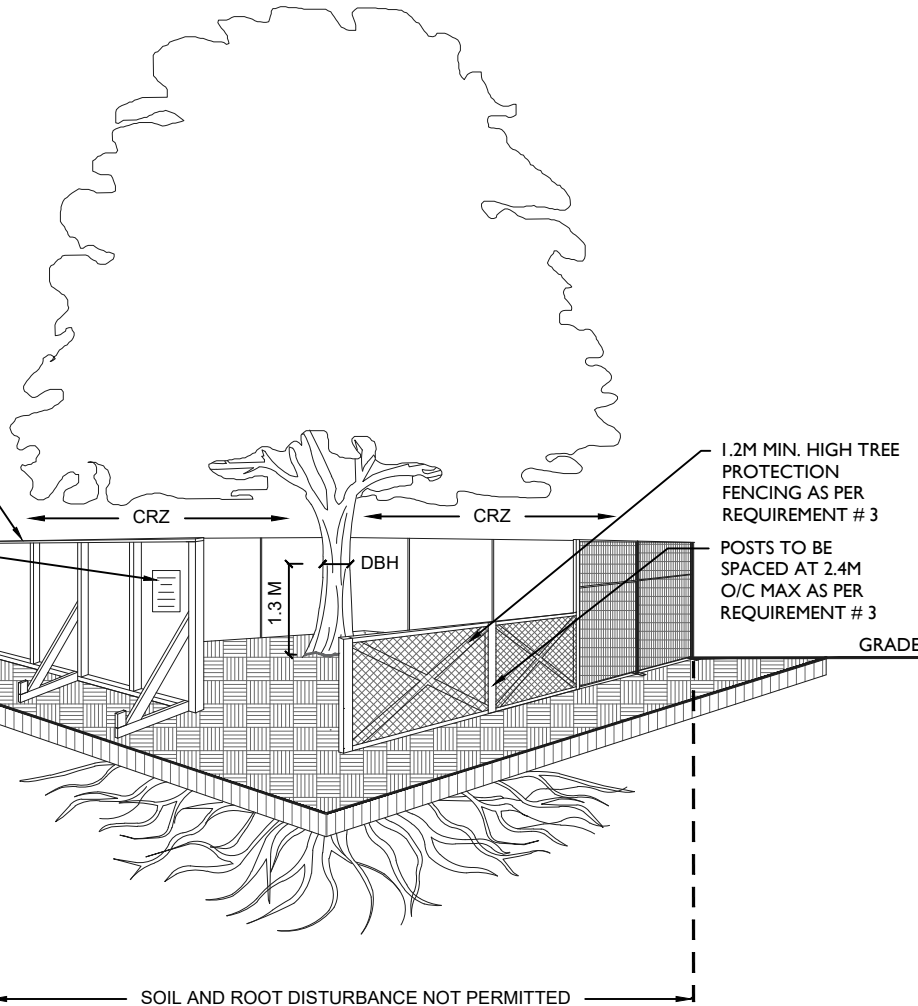
PLAN VIEW

TREE PROTECTION FENCING
TREE TRUNK

CRZ = DBH X 10CM.
CRZ IS TO BE MEASURED FROM THE OUTSIDE EDGE OF THE TREE BASE

TREE PROTECTION SIGNAGE AS PER CITY STANDARD

GRADE



1.2M MIN. HIGH TREE PROTECTION FENCING AS PER REQUIREMENT # 3

POSTS TO BE SPACED AT 2.4M O/C MAX AS PER REQUIREMENT # 3

SOIL AND ROOT DISTURBANCE NOT PERMITTED

TREE PROTECTION REQUIREMENTS:

1. PRIOR TO ANY WORK ACTIVITY WITHIN THE CRITICAL ROOT ZONE (CRZ = 10 X DIAMETER) OF A TREE, TREE PROTECTION FENCING MUST BE INSTALLED SURROUNDING THE CRITICAL ROOT ZONE, AND REMAIN IN PLACE UNTIL THE WORK IS COMPLETE.
2. UNLESS PLANS ARE APPROVED BY CITY FORESTRY STAFF, FOR WORK WITHIN THE CRZ:
 - DO NOT PLACE ANY MATERIAL OR EQUIPMENT - INCLUDING OUTHOUSES;
 - DO NOT ATTACH ANY SIGNS, NOTICES OR POSTERS TO ANY TREE;
 - DO NOT RAISE OR LOWER THE EXISTING GRADE;
 - TUNNEL OR BORE WHEN DIGGING;
 - DO NOT DAMAGE THE ROOT SYSTEM, TRUNK, OR BRANCHES OR ANY TREE;
 - ENSURE THAT EXHAUST FUMES FROM ALL EQUIPMENT ARE NOT DIRECTED TOWARD ANY TREE CANOPY.
 - DO NOT EXTEND HARD SURFACE OR SIGNIFICANTLY CHANGE LANDSCAPING
3. TREE PROTECTION FENCING MUST BE AT LEAST 1.2M IN HEIGHT, AND CONSTRUCTED OF RIGID OR FRAMED MATERIALS (E.G. MODULOC - STEEL, PLYWOOD HOARDING, OR SNOW FENCE ON A 2"X4" WOOD FRAME) WITH POSTS 2.4M APART, SUCH THAT THE FENCE LOCATION CANNOT BE ALTERED. ALL SUPPORTS AND BRACING MUST BE PLACED OUTSIDE OF THE CRZ, AND INSTALLATION MUST MINIMISE DAMAGE TO EXISTING ROOTS. (SEE DETAIL)
4. THE LOCATION OF THE TREE PROTECTION FENCING MUST BE DETERMINED BY AN ARBORIST AND DETAILED ON ANY ASSOCIATED PLANS FOR THE SITE (E.G. TREE CONSERVATION REPORT, TREE INFORMATION REPORT, ETC). THE PLAN AND CONSTRUCTED FENCING MUST BE APPROVED BY CITY FORESTRY STAFF PRIOR TO THE COMMENCEMENT OF WORK.
5. IF THE FENCED TREE PROTECTION AREA MUST BE REDUCED TO FACILITATE CONSTRUCTION, MITIGATION MEASURES MUST BE PRESCRIBED BY AN ARBORIST AND APPROVED BY CITY FORESTRY STAFF. THESE MAY INCLUDE THE PLACEMENT OF PLYWOOD, WOOD CHIPS, OR STEEL PLATING OVER THE ROOTS FOR PROTECTION OR THE PROPER PRUNING AND CARE OF ROOTS WHERE ENCOUNTERED.

THE CITY'S TREE PROTECTION BY-LAW, 2020-340 PROTECTS BOTH CITY-OWNED TREES, CITY-WIDE, AND PRIVATELY-OWNED TREES WITHIN THE URBAN AREA. PLEASE REFER TO WWW.OTTAWA.CA/TREEBYLAW FOR MORE INFORMATION ON HOW THE TREE BY-LAW APPLIES.

ACCESSIBLE FORMATS AND COMMUNICATION SUPPORTS ARE AVAILABLE, UPON REQUEST



TREE PROTECTION SPECIFICATION

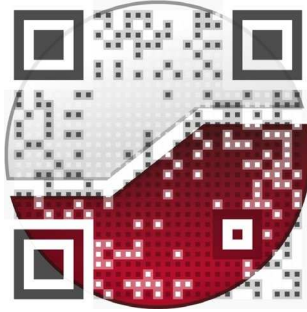
TO BE IMPLEMENTED FOR RETAINED TREES, BOTH ON SITE AND ON ADJACENT SITES, PRIOR TO ANY TREE REMOVAL OR SITE WORKS AND MAINTAINED FOR THE DURATION OF WORK ACTIVITIES ON SITE.

SCALE: NTS

DATE: MARCH 2021

DRAWING NO.: 1 of 1

experience • knowledge • integrity



civil
geotechnical
environmental
field services
materials testing

civil
géotechnique
environnementale
surveillance de chantier
service de laboratoire des matériaux

expérience • connaissance • intégrité

