



TREE CONSERVATION REPORT V2.0

109-115 Dalhousie

Tree Conservation Report submitted as Partial
Requirements for a Site Plan Control Application,
February 16, 2022

Dendron Forestry Services



Dendron Forestry Services

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Tree Conservation Report v2.0

Submitted as part of Site Plan Control Application

Address: 109-115 Dalhousie

Date: February 16, 2022

Prepared by: Astrid Nielsen, RPF, ISA Certified Arborist ®

Prepared for: Adam Sarumi, Ethos Development, adam@ethosdevelopments.com

Site Visit: May 1, 2021

Introduction

This Tree Conservation Report has been prepared for Adam Sarumi from Ethos Development, as partial requirements for the Site Plan Control Application submitted to the City of Ottawa. The objectives of this Tree Conservation Report are:

- To describe all trees over 10 cm on the site, recording their species, size, and current health condition. This includes trees on adjacent property whose roots extend onto the subject property
- To evaluate the impact of the trees by the proposed development and what the recommended action is (retain or protect)
- To provide recommendations on how to mitigate damage to retained trees during construction

Current Vegetation

The following is an inventory of all trees that are protected under City of Ottawa Tree Protection (By-law No. 2020-340) on the site. This includes Distinctive Trees (private trees with a diameter at breast height (dbh) of 10 cm or greater) and city-owned trees of all sizes. It also includes Distinctive Trees on adjacent properties whose Critical Root Zone (CRZ) extend into the subject area. The CRZ is an area around the trunk with a radius equivalent to 10 times the diameter of the trunk. This does not take into account infrastructure such as buildings and asphalt and it assumed the tree has no restrictions on root growth.



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Tree ¹	Species	Diameter at breast height (dbh)	Ownership ^{2,3}	Condition	Action
1	Eastern white cedar (<i>Thuja occidentalis</i>)	30, 30 cm	Adjacent property at 105 Dalhousie	Good; 2 codominant stems separated at the base	Retain if excavation can be restricted to no less than 1 m from edge of tree otherwise remove due to instability concerns
2	Eastern white cedar (<i>Thuja occidentalis</i>)	32 cm	Private – possibly jointly owned with 14 Boteler	Fair; 2 codominant stems separating at 4 m, both leaders broken (or cut)	Retain as requested by client. Monitor health during and post construction
3	Eastern white cedar (<i>Thuja occidentalis</i>)	34, 18, 18, 12 cm	Private	Fair; Larger stem (34 cm) with decay in trunk with 60 cm fissure where codominant stem is attached, suppressed by spruce	Retain larger stem as requested by client. Monitor health during and post construction, particularly for signs of failure as excavation will sever some roots. Smaller stems could be retained, if desired.
4	White spruce (<i>Picea glauca</i>)	45 cm	Private	Good, forked top	Retain and protect as per protection measures in report
5	Eastern white cedar (<i>Thuja occidentalis</i>)	42 cm	Adjacent property at 155 Bolton	Good; 2 codominant stems, 20 cm grade higher than subject property	Retain

¹ Please refer to the enclosed Tree Conservation Report map for tree numbers. Note that this map includes a tree layer added to the site plan (in pdf format) provided by the client. This layer includes only information about the trees and the original site plan is not altered in this process.

² Ownership of the tree in this report is based on the information provided and should not be used as a determination of ownership. For ownership disputes, a survey should be relied on. For boundary trees, consent from the adjacent property owner is required for removal as part of the application.

³ Trees on adjacent properties do not include a full assessment. The diameters are estimated, and the health is estimated based on what is visible from the subject property. Trees along the property line may also have limited health assessments if part of the tree is not visible.

Proposed Development and Conserved Vegetation

Tree 1, an eastern white cedar, located on adjacent property is in good health. However, the proposed development will involve severing some of the roots, possibly impacting the structural integrity of the tree. If the excavation in this area cannot be limited to at least 1 m from the edge of the tree, then removal is recommended. The two trunks are situated 25 and 40 cm from the current fence. If the tree is retained, an onsite inspection by an arborist to assess stability during excavation is recommended. Alternatively, the roots can be severed prior to excavation by an arborist using an airspade, at which time, an assessment on potential stability can be made. Pruning of the crown is also required to



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accommodate the scaffolding while the new building is under construction. If excavation cannot be reduced to 1 m from the tree trunk, then removal is the recommended option. Since this tree is entirely on adjacent property, permission from the neighbour would be required for removal.

Tree 2 is in fair health due to the loss of its tops and will be within the area of excavation – removal is recommended. Although tree 3 is slightly further away, there will be some impact to the tree through severing of the roots from the excavation. The main stem of this tree has a large stem attached to the base of the trunk that is at risk of failure. The preferred option by the client is to retain this tree, but it should be monitored through construction for signs of failure. Some of the smaller stems close to this tree may be retained, but they are being suppressed by tree 4, and combined with the stress of the excavation, are not ideal candidates for retention.

Tree 4 is a healthy spruce that should be retainable if the area can be well protected throughout site works as per the tree protected specifications below. Tree 5 is on adjacent property and the roots will likely be impacted by the proposed excavation. This tree is set back far enough that stability should not be severely compromised by the excavation, however, root cutting/pruning by an arborist is recommended.

Prior to any site works, protective fencing should be installed around the trees as indicated in the attached Tree Information Map and maintained until all construction on site has been completed as per the **City of Ottawa Tree Protection Specifications (April 2019)**. Within the fenced area, the following tree protection guidelines should be applied:

- Do not change the grade
- Do not place store construction material of site “furniture” such as outhouses
- Do not operate machinery
- Do not convert to hard surface or change the landscaping
- Do not excavate unless it is a method that has been pre-approved by the City
- Do not place signs, notices or posters to any tree
- Do not damage the root system, trunk, or branches of any tree
- Direct the exhaust away from the tree

The tree protection fencing must be 1.2 m in height and constructed of a rigid or framed material (e.g. modulus – steel, plywood hoarding, or snow fence on a 2”X4” wood frame) with posts 2.4 m apart such that the fence location cannot be altered.

If the fenced tree protection area must be reduced to facilitate construction, *one* of the following mitigation measures should be applied:

- Place a layer of 6-12 inches (15 to 30 cm) of woodchip mulch to the area
- Apply ¾ (2 cm) inch plywood, or road mats over a 4+ inch (10 cm) thick layer of the wood chip mulch
- Apply 4-6 inches (10 to 15 cm) of gravel over a taut, staked, geotextile fabric



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The undersigned personally inspected the property and issues associated with this report on May 1, 2021. On Behalf of Dendron Forestry Services,



Astrid Nielsen, MFC, RPF (Registered Professional Forester)

ISA Certified Arborist®, ON-1976

ISA Tree Risk Assessment Qualified

Principal, Dendron Forestry Services

Astrid.nielsen@dendronforestry.ca



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Figure 1: Tree 1, eastern white cedar on adjacent property to be retained



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Figure 2: Trees 1 (left), 2 (middle), 3 (right), all eastern white cedar



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Figure 3: Tree 4, white spruce to be retained



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Figure 4: Tree 5, eastern white cedar on adjacent property to be retained



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Intended Use of the Report

This Information Report was carried out by Dendron Forestry Services (hereafter Dendron) at the request of the Client. The information, interpretation and analysis contained within this Report is to be used solely for the purposes outlined within this Report. This Report is for the exclusive use of the Client.

Limitations of this Report

This Report is based on the circumstances and observations as they existed at the time of the site inspection of the Client's Property and the trees situated thereon by Dendron and upon information provided by the Client to Dendron. The opinions in this Report are given based on observations made and using generally accepted professional judgment, however, because trees and plants are living organisms and subject to change, damage and disease, the results, observations, recommendations, and analysis as set out in this Report are valid only as at the date any such testing, observations and analysis took place and no guarantee, warranty, representation or opinion is offered or made by Dendron as to the length of the validity of the results, observations, recommendations and analysis contained within this Report. As a result the Client shall not rely upon this Report, save and except for representing the circumstances and observations, analysis and recommendations that were made as at the date of such inspections. It is recommended that the trees discussed in this Report should be re-assessed periodically.

Further Services

Neither Dendron nor any assessor employed or retained by Dendron for the purpose of preparing or assisting in the preparation of this Report shall be required to provide any further consultation or services to the Client, save and except as already carried out in the preparation of this Report and including, without limitation, to act as an expert witness or witness in any court in any jurisdiction unless the Client has first made specific arrangements with respect to such further services, including, without limitation, providing the payment of the Report's regular hourly billing fees.

Dendron accepts no responsibility for the implementation of all or any part of the Report, unless specifically request to examine the implementation of such activities recommended herein. In the event that inspection or supervision of all or part of the implementation is request, that request shall be in writing and the details agreed to in writing by both parties.

Assumptions

The Client is hereby notified and does hereby acknowledge and agree that where any of the facts and information set out and referenced in this Report are based on assumptions, facts or information provided to Dendron by the Client and/or third parties and unless otherwise set out within this Report, Dendron will in no way be responsible for the veracity or accuracy of any such information. Further, the Client acknowledges and agrees that Dendron has, for the purposes of preparing their Report, assumed that the Property, which is the subject of this Report is in full compliance with all applicable federal, provincial, municipal and local statutes, regulations, by-laws, guidelines and other related laws. Dendron explicitly denies any legal liability for any and all issues with respect to non-compliance with any of the above-referenced statutes, regulations, bylaws, guidelines and laws as it may pertain to or affect the Property to which this Report applies.

Professional Responsibility

In carrying out this Report, Dendron and any Assessor appointed for and on behalf of Dendron to perform and carry out the Report has exercised a reasonable standard of care, skill and diligence as would be customarily and normally provided in carrying out this Report. While reasonable efforts have been made to ensure that the trees recommended for retention are healthy, no guarantees are offered, or implied, that these trees, or all parts of them will remain standing. It is professionally impossible to predict with absolute certainty the behaviour of any single tree or group of trees, or all their component parts, in all given circumstances. Inevitably, a standing tree will always pose some risk. Most trees have the potential to fall, lean, or otherwise pose a danger to property and persons in the event of adverse weather conditions, and this risk can only be eliminated if the tree is removed.

Without limiting the foregoing, no liability is assumed by Dendron for:

- a) any legal description provided with respect to the Property;
- b) issues of title and or ownership respect to the Property;
- c) the accuracy of the Property line locations or boundaries with respect to the Property; and
- d) the accuracy of any other information provided to Dendron by the Client or third parties;
- e) any consequential loss, injury or damages suffered by the Client or any third parties, including but not limited to replacement costs, loss of use, earnings and business interruption; and
- f) the unauthorized distribution of the Report.

Further, under no circumstance may any claims be initiated or commenced by the Client against Dendron or any of its directors, officers, employees, contractors, agents or Assessors, in contract or in tort, more than 12 months after the date of this Report.

General

Any plans and/or illustrations in this Report are included only to help the Client visualize the issues in this Report and shall not be relied upon for any other purpose. This report is best viewed in colour. Any copies printed in black and white may make some details difficult to properly understand. Dendron accepts no liability for misunderstandings due to a black and white copy of the report.

Tree Protection Fencing

Prior to any site works, protective fencing should be installed around the trees as indicated in Map and maintained until all construction on site has been completed as per the **City of Ottawa Tree Protection Specifications (March 2021)**. Within the fenced area, the following tree protection guidelines should be applied:

- Do not change the grade
- Do not store construction material
- Do not operate machinery
- Do not convert to hard surface or change the landscaping
- Do not excavate unless it is a method that has been pre-approved by the City
- Do not place signs, notices or posters to any tree
- Do not damage the root system, trunk, or branches of any tree
- Direct the exhaust away from the tree

The tree protection fencing must be 1.2 m in height and constructed of a rigid or framed material (e.g. modulus-steel, plywood hoarding, or snow fence on a 2"X4" wood frame) with posts 2.4 m apart such that the fence location cannot be altered. All supports must be placed outside of the CRZ and installation must minimize damage to existing roots.

If the fenced tree protection area must be reduced to facilitate construction, *one* of the following mitigation measures should be applied:

- Place a layer of 6-12 inches (15 to 30 cm) of woodchip mulch to the area
- Apply ¾ (2 cm) inch plywood, or road mats over a 4+ inch (10 cm) thick layer of the wood chip mulch
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3	Eastern white cedar (<i>Thuja occidentalis</i>)	34, 18, 18, 12 cm	Fair; Larger stem (34 cm) with decay in trunk with 60 cm fissure where codominant stem is attached, suppressed by spruce	Retain larger stem as requested by client. Monitor health during and post construction, particularly for signs of failure as excavation will sever some roots. Smaller stems could be retained, if desired.
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Critical Root Zone

Recommended Tree Protection Fencing Area

Tree to be removed

Private Tree

City Tree

Tree either fully or partly on adjacent property

Note that the tree layer has been added to the site plan dated February 10, 2022 supplied by the Rosaline J. Hill Architect Inc. in pdf format. This layer refers to the trees only, and the original site plan has not been altered in the process.



Tree Conservation Report – 109-115 Dalhousie
 Tree layer prepared by Dendron Forestry Services
 Version 2.0, February 16, 2022
 For more information, please contact info@dendronforestry.ca