



**TREE CONSERVATION
REPORT V3.0
1940 Carling Avenue**

Tree Conservation Report submitted as Partial
Requirements for a Site Plan Control Application,
February 15, 2023

Dendron Forestry Services



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www.dendronforestry.ca

613.805.WOOD (9663)

info@dendronforestry.ca

Tree Conservation Report

Submitted as part of Site Plan Control Application

Address: 1940 Carling Ave

Date: February 15, 2023

Prepared by: Astrid Nielsen, MFC, RPF (Registered Professional Forester)
ISA Certified Arborist®, ON-1976
Principal, Dendron Forestry Services
Astrid.nielsen@dendronforestry.ca
(613) 805-9663 (WOOD)

Prepared for: Domenic Santaguida, domenic.santaguida@vittoriatrattoria.com

Site Visit: May 28, and Sept 15, 2021 and May 18, 2022

Introduction

This Tree Conservation Report has been prepared for Domenic Santaguida, 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 with diameters over 10 cm on the site, recording their species, size, and current health condition. This includes trees on adjacent private property 10 cm or greater in diameter, with critical root zones that extend onto the subject property. It also includes city trees of all sizes that will be impacted by the proposed development.
- 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.

Note: this version has been updated to reflect the most recent Removals, Site Servicing, Lot Grading, Drainage and Erosion Control Plan prepared by McIntosh Perry dated January 13, 2023.

Methodology

The following materials were reviewed as part of this report:

- Survey prepared by Farley Smith & Denis Surveying dated April 29, 2021, with line of excavation added by Woodman Architect
- Removals, Site Servicing, Lot Grading, Drainage and Erosion Control Plan prepared by McIntosh Perry dated January 13, 2023

A site visit was conducted to collect the following information from each tree classified as protected under the City of Ottawa's Tree Protection By-law No. 2020-340:



- Diameter at breast height (1.3 m from grade)
- Species
- Tree health
- Relevant measurements such as distance to the existing structures like fences, driveways, etc

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 private trees with a diameter at breast height (dbh) of 10 cm or greater, and city-owned trees of all sizes. It also includes trees with a dbh of 10 cm or greater 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.

Tree ¹	Species	Diameter at breast height (dbh)	Ownership ^{2,3}	Condition	Action
1	Norway maple (<i>Acer platanoides</i>)	77 cm	Private	Fair/poor; multiple spiral frost cracks on trunk, significant deadwood	Remove; within proposed building footprint
2	Norway maple (<i>Acer platanoides</i>)	75 cm (estimate)	Private	Poor; earlier loss of other codominant trunk, 1 m long branch attachment wound, significant crown dieback	Remove based on health and within building footprint
3	Austrian pine (<i>Pinus nigra</i>)	31 cm	Private	Good	Remove; within less than a metre of proposed excavation
4	American elm (<i>Ulmus americana</i>)	34 cm	Private	Good	Remove; within zone of excavation
5	Manitoba maple (<i>Acer negundo</i>)	30 cm	Private (within easement)	Fair; heavy lean due to pruning for hydro access	Remove; on edge of excavation zone
6 ⁴	Manitoba maple (<i>Acer negundo</i>)	25 cm (estimate)	Private (within easement)	Fair; heavy lean due to pruning for hydro access	Remove; on edge of excavation zone
7	Manitoba maple (<i>Acer negundo</i>)	25 cm	Private	Fair; significant sprouting at base of tree	Remove; within excavation zone



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8	Siberian elm (<i>Ulmus pumila</i>)	24, 15 cm	Private	Fair; low vigour and leaf area, crown dieback	Remove; within excavation zone
9	Eastern white cedar hedge (<i>Thuja occidentalis</i>)	10-24 cm, 15-20 stems	Adjacent property at 824 Dunlevie	Fair/good; little foliage on the northern edge, but full foliage along the southern edge	Retain and protect
10	Norway spruce (<i>Picea abies</i>)	20 cm (estimate)	Adjacent property at 824 Dunlevie	Poor; topped through hydro pruning	Retain and protect; grade increase (of approx. 60cm) on subject property may have impact on roots
11	Norway spruce (<i>Picea abies</i>)	40 cm (estimate)	Adjacent property at 824 Dunlevie	Fair; topped through hydro pruning	Retain and protect; grade increase (of approx. 60cm) on subject property may have impact on roots
12	Manitoba maple (<i>Acer negundo</i>)	50 cm (estimate)	Adjacent property at 824 Dunlevie	Fair; significant pruning for hydro clearance	Retain, overhanging branches will need to be pruned back to avoid conflict with new building; grade increase (of approx. 60cm) on subject property may have impact on roots

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

²Ownership 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.

³Trees 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.

⁴Location was not provided on survey plan and has been estimated

During the site visit on May 18th, the adjacent neighbour at 824 Dunlevie indicated that there was an additional Manitoba maple located on their property close to the area of excavation that had not been identified in the previous version of this report. This tree is in the proximity of tree 6 (to the southeast) and is directly beside the hydro pole. This tree has seeded naturally as is common for Manitoba maples, a naturalized invasive species. They are an opportunistic species that often grow at extreme angles in order to maximize absorption of sunlight. This tree is leaning heavily over 810 Dunlevie. The tree is still relatively small that it may not be significantly impacted by any root loss as a result of the excavation, but consideration should be given for removal at this time as it will likely become problematic in the future. These trees are fast growing, short-lived species and are more prone to failures during windstorms than most other urban trees.



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Proposed Development and Conserved Vegetation

The area of excavation will extend approximately 1.2 m from the property line along the west and south sides. Along the east, the distance to the property line is slightly greater towards the north end as the property is not a perfect rectangle. There is a hydro easement running along the rear of the property.

The *Existing Conditions and Proposed Development* map shows the zone of excavation for the proposed development as provided in the Survey prepared by Farley Smith & Denis Surveying April 29, 2021, with line of excavation added by Woodman Architect & Associates. All the trees on this property are located either within this zone of excavation or so close to it such that severing of the roots will make the tree(s) unstable. The only vegetation that is retainable on the property may be some buckthorn shrubs along the back fence line, although buckthorn is a non-native, highly invasive shrub, and retention of this species is not recommended. Trees 10, 11, and 12, and the cedar hedge (Tree 9) on the adjacent property at 824 Dunlevie may be impacted by the development. The spruces (Trees 10 and 11) and maple (12) are in fair to poor condition as they have undergone significant pruning for clearance of the hydro wires directly above. These are large trees at maturity and not an ideal species for growing under hydro lines where smaller trees are more appropriate. Since the roots of these trees are mostly out of the excavation zone, there should be little impact due to root severing. However, there will be a retaining wall built along the rear property line where there will be a grade increase of approximately 60 cm. This increase in grade is within the critical root zones of the tree 9-12 and may have some long-term impacts on their health. Increases in grade can lead to soil compaction underneath leading to a lack of oxygen. Changes in water and nutrient availability are also common during significant grade increases.

Although this area within the easement will have a grade increase, it is still important to protect the existing soil during site works to avoid additional damage through compaction, and any pruning for clearance should be completed by a Certified Arborist. Prior to any site works, protective fencing should be installed around the cedar hedges 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 (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.



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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

In addition to the above protection measures, the roots will be severed ahead of time for the retained trees 10-12 by an arborist to avoid any tearing during the excavation.

The undersigned personally inspected the property and issues associated with this report on May 21, 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, Norway maple to be removed



Figure 2: Close up of spiral cracking on tree 1



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Figure 3: Tree 2, Norway maple to be removed



Figure 4: Tree 3, Austrian pine to be removed



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Figure 5: Tree 5, Manitoba maple to be removed



Figure 6: Cedar hedges on adjacent property to be retained



Figure 5: Tree 6, Manitoba maple to be removed



Figure 6: Tree 7, Manitoba maple to be removed



Figure 7: Tree 8, Siberian elm to be removed



Figure 8: Photo showing vegetation along back made of up Manitoba maple and buckthorn



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ASSUMPTIONS AND LIMITING CONDITIONS

Intended Use of the Report

This Report was prepared by Dendron Forestry Services (hereafter "Dendron") at the request of the Client. The results, observations, interpretations, analysis, recommendations, and conclusions contained within this Report are to be used solely for the purposes outlined within this Report. All other uses are impermissible and unintended, unless specifically stated in writing in the Report.

Intended User of the Report

This Report was prepared by Dendron for the exclusive use of the Client and may not be used or relied upon by any other party. All other users are unintended and unauthorized, unless specifically stated in writing in the Report.

Limitations of this Report

This Report is based on the circumstances and on-site conditions as they existed at the time of the site inspection and the information provided by the Client and/or third parties to Dendron. On-site conditions may limit the extent of the on-site inspection(s) conducted by Dendron, including weather events such as rain, flooding, storms, winds, tornados, snowfall, snow cover, hail; obstructions including fencing, dwellings, buildings, sheds, plants, and animals; lack of access to the entire perimeter of the tree due to adjacent properties; the shape of the tree; and accessibility of the tree crown, branches, trunk, or roots for examination.

In the event that information provided by the Client or any third parties, including but not limited to documents, records, site and grading plans, permits, or representations or any site conditions are updated or change following the completion of this Report, this Report is no longer current and valid and cannot be relied upon for the purpose for which it was prepared. Dendron and its agents, assessors, and/or employees are not liable for any damages, injuries, or losses arising from amendments, revisions, or changes to the documents, records, site and grading plans, permits, representations, or other information upon which Dendron relied in preparing this Report.

No assessment of any other trees or plants has been undertaken by Dendron. Dendron and its agents, assessors, and/or employees are not liable for any other trees or plants on or around the subject Property except those expressly identified herein. The results, observations, interpretations, analysis, recommendations, and conclusions contained within this Report apply only to the trees identified herein.

Trees and plants are living organisms and subject to change, damage, and disease, and the results, observations, interpretations, analysis, recommendations, and conclusions as set out in this Report are valid only as at the date any inspections, observations, tests, and analysis took place. No guarantee, warranty, representation, or opinion is offered or made by Dendron as to the length of the validity of the results, observations, interpretations, analysis, recommendations, and conclusions contained within this Report. As a result the Client shall only rely upon this Report as representing the results, observations, interpretations, analysis, recommendations, and conclusions that were made as at the date of such inspections, observations, tests, and analysis. The trees discussed in this Report should be re-assessed periodically and at least within one year of the date of this Report.

No Opinion regarding ownership of the Tree

This Report was not prepared to make a determination as to ownership of the subject tree(s). Where ownership of the subject tree(s) is identified within this Report, said identification is based on the information provided by the Client and third parties, including surveys, permits, and site and grading plans and may not be relied upon as a guarantee, warranty, or representation of ownership.

Assumptions

This Report is based on the circumstances and conditions as they existed at the time of the site inspection and the information provided by the Client and/or third parties to Dendron. Where documents, records, site and grading plans, permits, representations, and any other information was provided to Dendron for the purpose of preparing this Report, Dendron assumed that said information was correct and up-to-date and prepared this Report in reliance on that information. Dendron and its agents, assessors, and/or employees, are not responsible for the veracity or accuracy of such information. Dendron and its agents, assessors, or employees are not liable for any damages, injuries, or losses arising from inaccuracies, errors, and/or omissions in the documents, records, site and grading plans, permits, representations, or other information upon which Dendron relied in preparing this Report.

For the purpose of preparing this Report, Dendron and its agents, assessors, and/or employees 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 and its agents, assessors, and/or employees are not liable for any 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.

For the purpose of preparing this Report, Dendron and its agents, assessors, and/or employee assumed that there are no hidden or unapparent conditions affecting the results, observations, interpretations, analysis, recommendations, and conclusions contained within this Report.

No Publication

The Client acknowledges and agrees that all intellectual property rights and title, including without limitation, all copyright in this Report shall remain solely with Dendron Forestry. Possession of this Report, or a copy thereof, does not entitle the Client or any third party to the right of publication or reproduction of the Report for any purpose save and except where Dendron has given its prior written consent.



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Neither all nor any part of the contents of this Report shall be disseminated to the public through advertising, public relations, news, sales, the internet or other media (including, without limitation, television, radio, print or electronic media) without the prior written consent of Dendron Forestry.

Implementing the Report Recommendations

Dendron and its agents, assessors, and/or employees accept no responsibility for the implementation of any part of this Report unless specifically requested to provide oversight on the implementation of the recommendations. In the event that inspection or supervision of all or part of the implementation of the within recommendations is requested, that request shall be in writing and the details agreed to in writing by both parties.

Dendron and its agents, assessors, and/or employees are not liable for any damages or injuries arising from the manner in which the recommendations in this Report are implemented, including failure to, incorrect, or negligent implementation of the recommendations.

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.

Limits of Liability

In carrying out this Report, Dendron and its agents, assessors, and/or employees have 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.

The total monetary amount of all claims or causes of action the Client may have as against Dendron Forestry, including but not limited to claims for negligence, negligent misrepresentation, and breach of contract, shall be strictly limited solely to the total amount of fees paid by the Client to Dendron Forestry pursuant to the Contract for Services dated _____ for which this Assessment was carried out.

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, assessors, or Assessors, in contract or in tort, more than 12 months after the date of this Report.

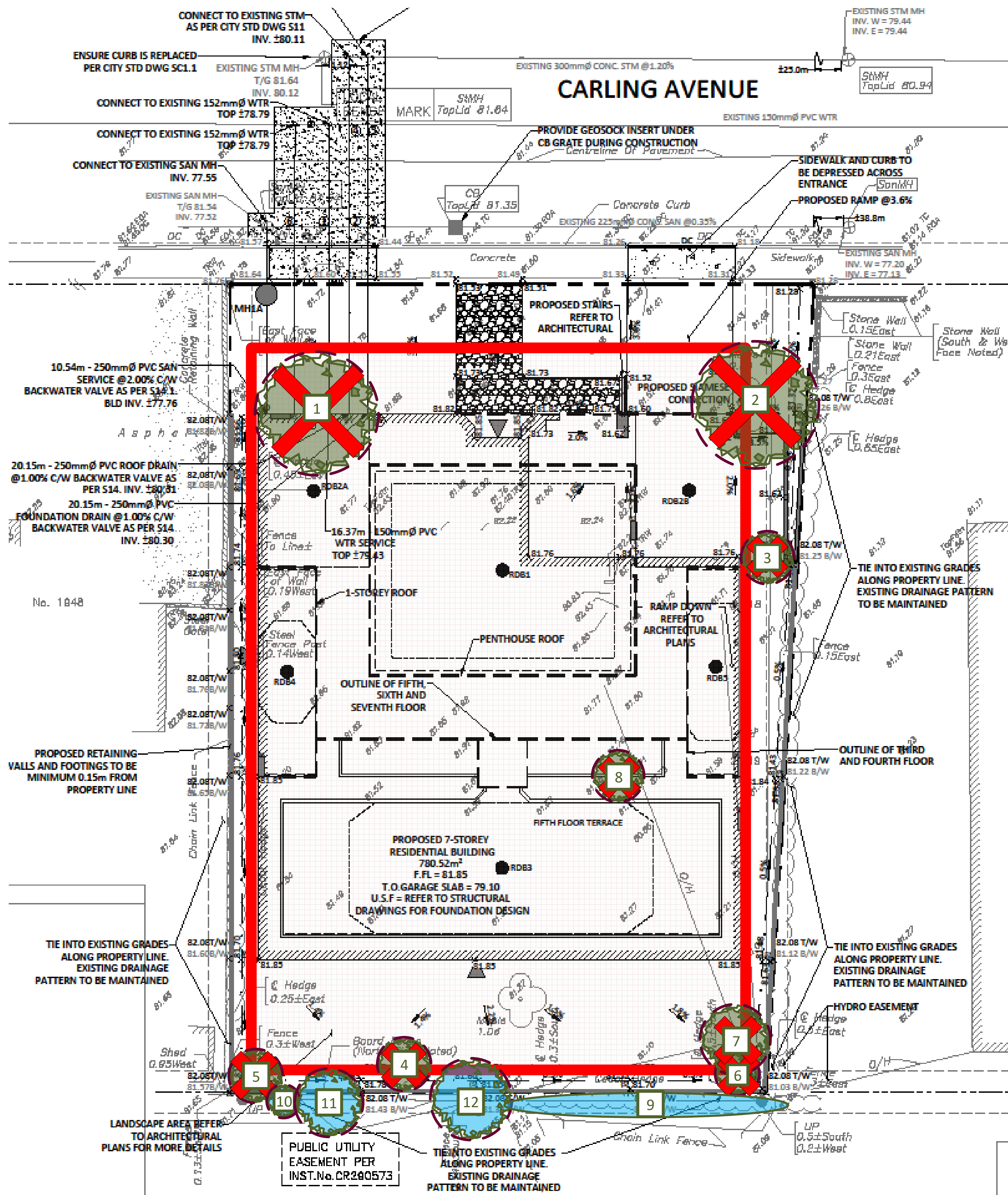
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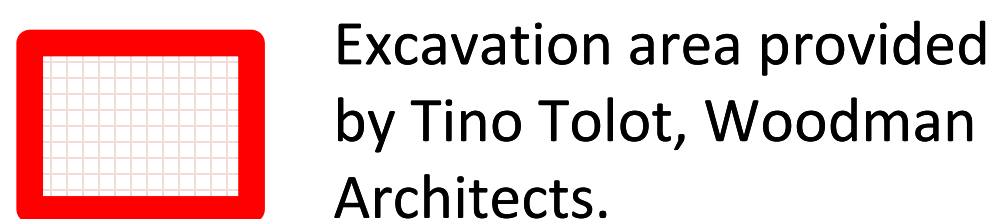
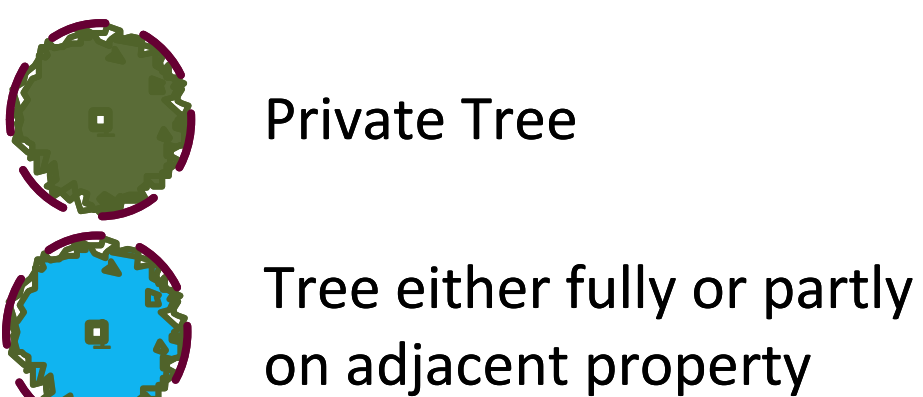
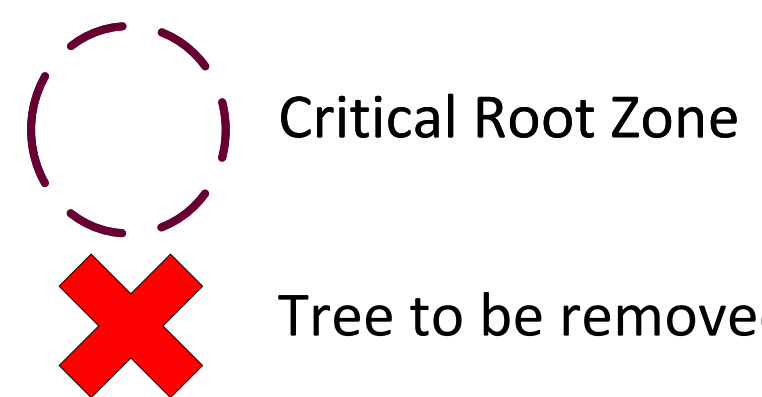
General

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.

Notwithstanding any of the above, nothing in this Report is taken to absolve the Client of the responsibility of obtaining a new Report in the event that the circumstances of the tree change.



Tree ¹	Species	DBH	Condition	Action
1	Norway maple (<i>Acer platanoides</i>)	77 cm	Fair/poor; multiple spiral frost cracks on trunk, significant deadwood	Remove; within proposed building footprint
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9	Eastern white cedar hedge (<i>Thuja occidentalis</i>)	10-24 cm, 15-20 stems	Fair/good, little foliage on the northern edge, but full foliage along the southern edge	Retain and protect
10	Norway spruce (<i>Picea abies</i>)	20 cm (estimate)	Poor; topped through hydro pruning	Retain and protect; may have impact on roots due to increase of approximately 60 cm in grade on subject property
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12	Manitoba maple (<i>Acer negundo</i>)	50 cm (estimate)	Fair; significant pruning for hydro clearance	Retain, overhanging branches will need to be pruned back to avoid conflict with new building; may have impact on roots due to increase of approximately 60 cm in grade on subject property



Note: This tree layer has been added to the original grading plan supplied by the client in pdf format. This layer refers to the trees only, and the original grading plan has not been altered in the process. Refer to the original plan for grading details as some detail is lost when importing into the software used for the tree layer.

Note: The trees and excavation area have been transposed onto this map from surveys supplied by the client in pdf format. For complete accuracy, the original survey should be relied upon.



Tree Conservation Report – 1940 Carling Avenue
 Proposed Development and Conserved Vegetation
 Tree layer prepared by Dendron Forestry Services
 Version 3.0, February 15, 2023
 For more information, please contact info@dendronforestry.ca