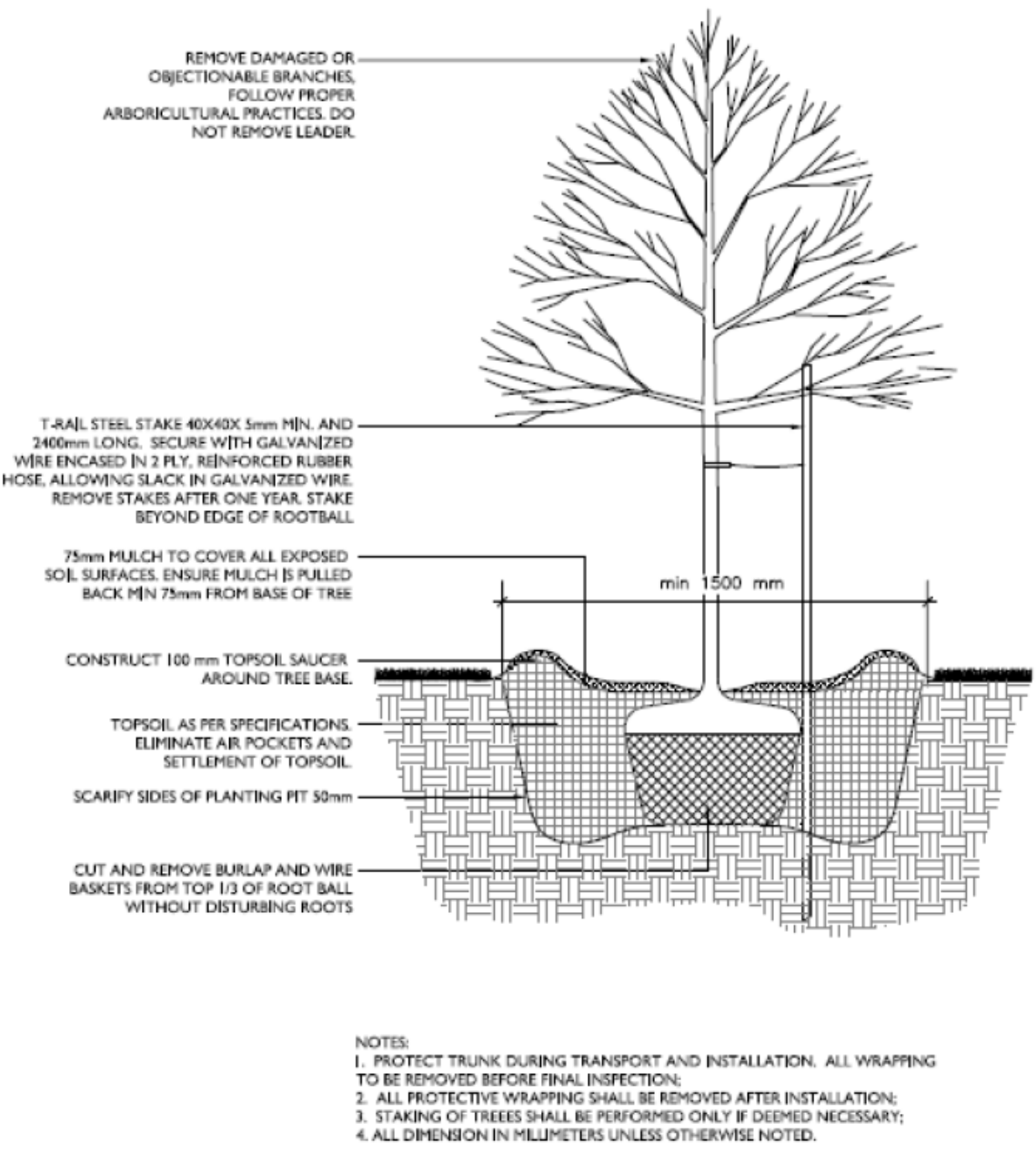




Tree Planting Plan – 117 Winding Way
Prepared by Dendron Forestry Services
Version 1.0, January 30, 2025
For more information, please contact:
info@dendronforestry.ca

Note: the 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 details as quality is lost when importing the plan into the mapping software used to create the tree layer.



KEY SPACING GUIDELINES

For Deciduous Trees:

- Minimum 50mm caliper stock
- 1.5m from sidewalks, driveways, walkways, fences, sound walls, and old stumps.
- 2.5m from curbs, hydro transformers, or behind fire hydrants
- 4-7m from any part of an existing tree, depending on canopy width
- 10m from bus shelters and community mailboxes

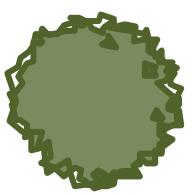
For Coniferous Trees:

- Follow same setbacks as deciduous, but due to the widest branching being at the base of the tree, conifers need greater setbacks for ground-level obstacles.
- Minimum 200cm height stock
- 4.5m setbacks from sidewalks, walkways, driveways, and curbs.
- Do not plant on corners where sight lines will be compromised.

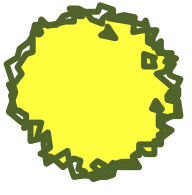
TREES MUST BE WATERED REGULARLY FOLLOWING PLANTING TO ENSURE PROPER ESTABLISHMENT.

On average, a young tree needs 6 gallons (24 liters) of water twice per week. (Do not water using a sprinkler as water on the foliage can lead to fungal infection)
Placing a ring of mulch around the planting hole will help reduce water loss.
Ensure no mulch is touching the base of the tree.

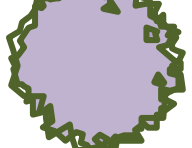
Legend



New Private Tree



New Tree either fully or partly on city property



Existing Tree to be retained

Replacement Tree Specifications

Note: Proposed tree locations are suggestions only and should be finalized only once construction is complete and should adhere to City of Ottawa Tree Planting Guidelines.

Trees 1-6 should be large trees at maturity. Site conditions are expected to be full light exposure and moderate to high moisture availability. Species suggestions include:

Freeman maple - *Acer x freemanii*
Silver maple - *Acer saccharinum**
Colorado spruce - *Picea pungens*
White spruce - *Picea glauca**
Tulip tree - *Liriodendron tulipifera*
Largetooth aspen - *Populus grandidentata**
Trembling aspen - *Populus tremuloides**
Liberty elm - *Ulmus americana* 'Libertas'*
Norway spruce - *Picea abies*
Black walnut - *Juglans nigra**
Swamp white oak - *Quercus bicolor**
Sycamore - *Platanus occidentalis*
Basswood - *Tilia americana**
Hackberry - *Celtis occidentalis**
White pine - *Pinus strobus**
Balsam fir - *Abies balsamea**

Tree 7 should be a small tree at maturity to reduce conflicts with the overhead wires. Site conditions are expected to be full light exposure and moderate to high moisture availability. Species suggestions include:

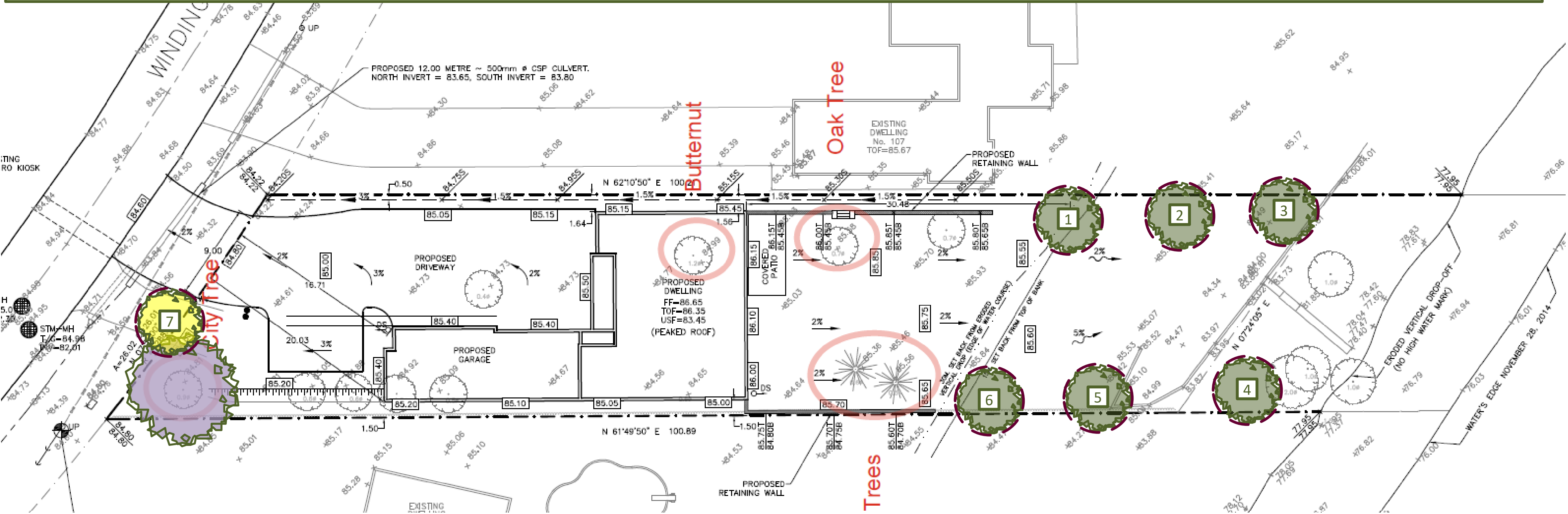
Choke cherry - *Prunus virginiana*
Eastern redbud - *Cercis canadensis**
Flowering dogwood - *Cornus florida*
Magnolia - *Magnolia spp.*
Serviceberry - *Amelanchier spp.**
Ohio buckeye - *Aesculus glabra**
Pagoda dogwood - *Cornus alternifolia**
Witch hazel - *Hamamelis virginiana**
Oakleaf mountain ash (*Sorbus thurungica*)

*Native to Ottawa region: Planting species native to a region can help maintain and enhance biodiversity.

Note: Norway maple (*Acer platanoides*) is *not* recommended as it is highly invasive and not a suitable tree for urban planting.

The species recommended herein are the most suitable species based on the existing plans. For best success, tree species should be matched to site conditions.

All deciduous trees must be a minimum of 50 mm in diameter measured no less than 15 cm above ground level. Coniferous trees must be no less than 200 cm in height.



Tree Information Report

Submitted as part of Building Permit Application to the City of Ottawa

Committee of Adjustment
Received | Reçu le

2025-06-02

City of Ottawa | Ville d'Ottawa
Comité de dérogation

Date of Report: January 30, 2025
Property Address: 117 Winding Way
Prepared for: Enigma Property Group; purchasing@enigmaproperty.com
Prepared by: Kevin Myers, ISA Certified Arborist®; kevin.myers@dendronforestry.ca
Date of Site Visit: January 29, 2025

This Report must be read in its entirety, including the Assumptions and Limiting Conditions.

Purpose of the Report

The purpose of this report is to provide the client with a detailed description of all protected trees on site as per the City of Ottawa's Tree Protection By-law No. 2020-340. This report is part of a building permit application to the City of Ottawa and considers the impact that the proposed development will have on the trees. Technical and design documents provided by the client are reviewed as part of this report, and conclusions are made on the suitability for retaining the protected trees on the site. For those trees that are recommended for retention, mitigation measures are provided to reduce the impact during construction.

While a rationale for removing trees may be provided based on document review and the site visit, **this report does not grant permission to remove trees: a permit from the city must be received before removal of distinctive trees can occur.**

Methodology

The following materials were reviewed as part of this report:

- Grading Plan by Kollaard Associates, dated October 8, 2024
- GeoOttawa tree inventory layer and aerial photography
- Google© Street View imagery – various years

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
- Pertinent measurements to structures such as fences, driveways, or buildings



Existing site conditions

The site is currently vacant. There is a large hedge running along the south side of the property. It was not determined during the site visit the ownership of this hedge, but none of the stems appeared to be over 30cm DBH. Several trees are identified on the grading plan, but many were not present during the site visit; only the trees indicated were found.

Appendix A is an inventory of all trees that are protected under City of Ottawa Tree Protection (By-law No. 2020-340) on the site and adjacent City property. This includes Distinctive Trees (private trees with a diameter at breast height (dbh) of 30 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 assumes the tree has no restrictions on root growth.

Proposed development and Tree protection

The client has indicated a pool will be installed in the rear yard. This, combined with the grade changes and the excavation for retaining walls, will necessitate the removal of **Trees 4-6**.

Trees 1 and 2 are far enough from construction that they could be effectively protected. While terracing is shown within the CRZ of Tree 2, it is expected this will be a minor grade raise, and will not have severe adverse impacts on the tree.

Tree Protection

Prior to any site works, protective fencing should be installed around the Tree Protection Area 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).

Failure to install and maintain fencing as shown on the attached map may result in fines from the city.

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
- Apply 4-6 inches (10 to 15 cm) of gravel over a taut, staked, geotextile fabric

The undersigned personally inspected the property and issues associated with this report on January 29, 2025. On Behalf of Dendron Forestry Services,

Kevin Myers, MFC, RPF
ISA Certified Arborist®, ON-2907A
kevin.myers@dendronforestry.ca
(514) 726-8531



APPENDIX A

TREE INFORMATION TABLE

Tree ¹	Species	DBH (cm)	Ownership ²	Tree Condition	Approximate distance to excavation (m)	Action	Forester recommendation
1 ⁴	Manitoba maple (<i>Acer negundo</i>)	21	City	Fair: heavy lean towards road – growing away from hedge; growing towards wires	Driveway: 10	Retain	Retain and protect as per the City of Ottawa Tree Protection Specifications (March 2021).
2	Austrian pine (<i>Pinus nigra</i>)	42, 48	Subject property	Poor: very few green needles on tree – unclear whether this is seasonal or tree is dying; branch fusing with stem	Driveway: 9	Retain	Retain and protect as per the City of Ottawa Tree Protection Specifications (March 2021).
3	Butternut (<i>Juglans cinerea</i>)	51, 68	Subject property	Poor: tree has only a few living twigs	0	Remove	Remove due to health – tree is dead; no city permit required. Provincial regulations to be followed.
4	Bur oak (<i>Quercus macrocarpa</i>)	56	Subject property	Good: two very shallow spiral seams extending to ground	Retaining wall: 2 House: 6.5	Remove	Remove due to grade change, proximity of excavation and future pool. Tree permit required for removal.
5	Colorado spruce (<i>Picea pungens</i>)	48	Subject property	Fair: stem-girdling root possible; codominant leaders @6m	3	Remove	Remove due to grade changes and future pool. Tree permit required for removal.
6	Colorado spruce (<i>Picea pungens</i>)	42	Subject property	Fair: crook in stem at base; codominant leaders @8m	2	Remove	Remove due to grade changes and future pool. Tree permit required for removal.

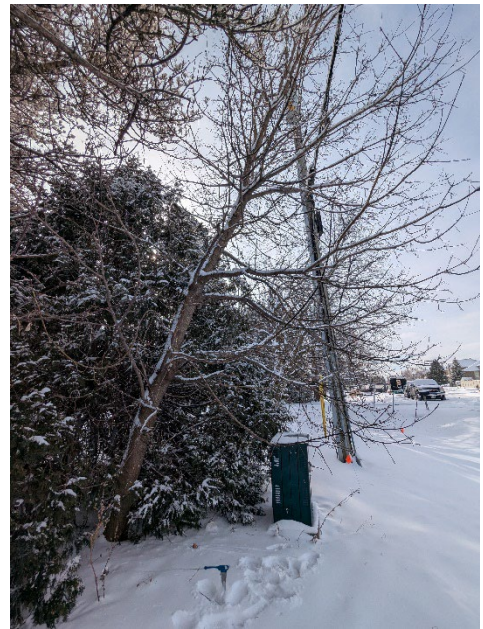
¹ Please refer to the attached Tree Information map for tree numbers. Note that this includes a tree layer added to the grading plan (in pdf format) provided by the client. This layer includes only information about the trees and the original grading plan is not altered in this process.

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.

⁴ The location of these trees was not provided and has been estimated

APPENDIX B

PHOTOGRAPHS



Clockwise from upper left:

Tree 2 - private pine to be retained.

Tree 1 - city maple to be retained.

Tree 3 - private butternut to be removed.



Above: Trees 5 and 6 - private spruces to be removed.

Right: Tree 4 - private oak to be removed





APPENDIX C

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.

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 January 21, 2025, 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.

No Third Party Liability

This Report was prepared by Dendron exclusively for the Client for the purpose set out in the Report. Any use which a third party makes of this Report, or any reliance on or decisions a third party may make based upon this Report, are made at the sole risk of any such third parties. Dendron Forestry accepts no responsibility for any damages or loss suffered by any third party or by the Client as a result of decisions made or actions based upon the unauthorized use or reliance of this Report by any such party.

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.

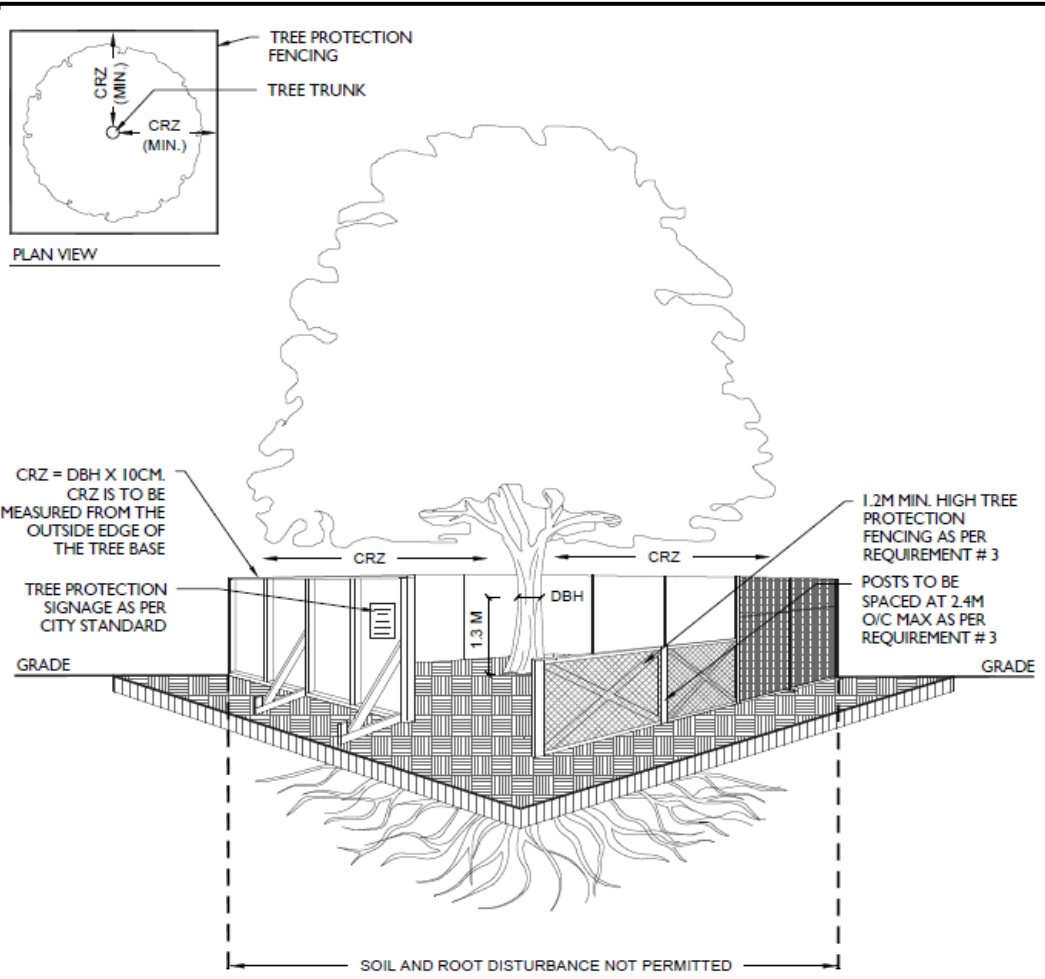
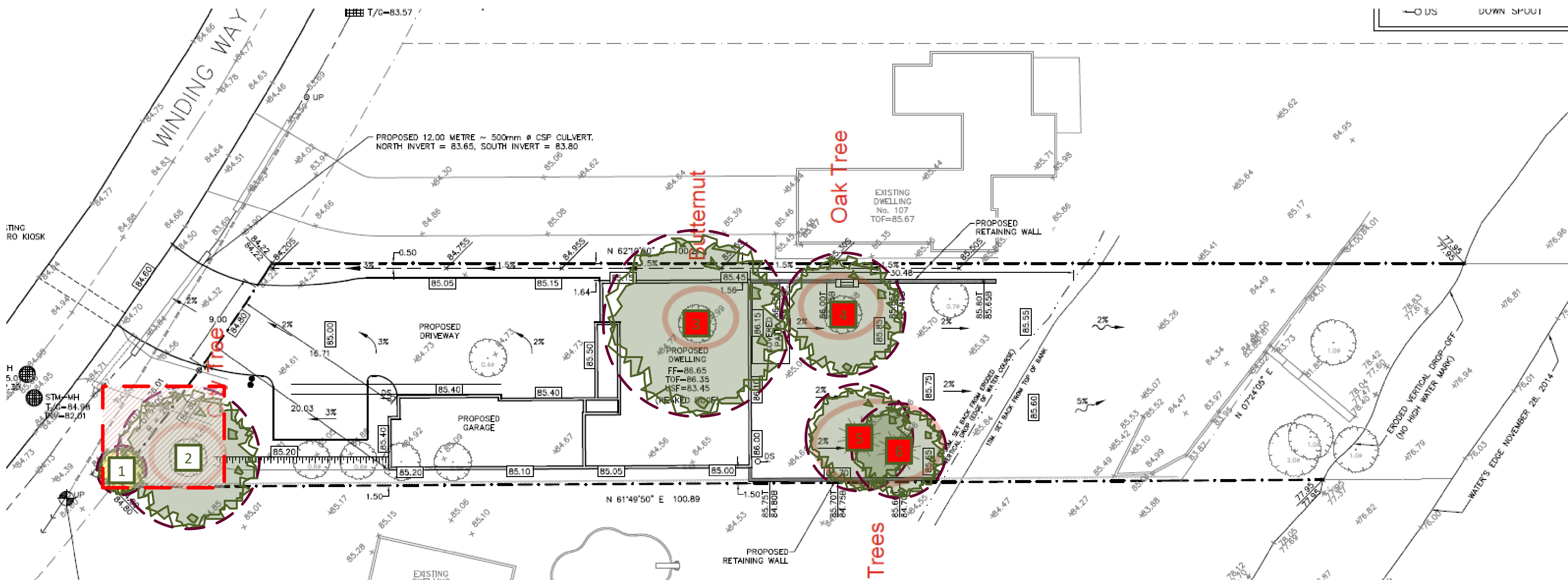
Notwithstanding any of the above, nothing in this Report is taken to absolve the Client of the responsibility of obtaining a new Report in the event that the circumstances of the tree change.

Note: the tree layer has been added to the original base layer supplied by the client in pdf format. This layer refers to the trees only, and the original base has not been altered in the process, although it may be cropped. Refer to the original plan for details as quality is lost when importing the plan into the software used to create the tree layer.

Base Layer: Grading plan by Kollaard Associates, dated October 8, 2024

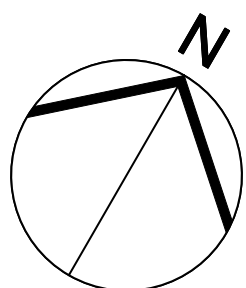
Tree ¹	Species	DBH (cm)	Tree Condition	Forester recommendation
1 ⁴	Manitoba maple (<i>Acer negundo</i>)	21	Fair: heavy lean towards road – growing away from hedge; growing towards wires	Retain and protect as per the City of Ottawa Tree Protection Specifications (March 2021).
2	Austrian pine (<i>Pinus nigra</i>)	42, 48	Poor: very few green needles on tree – unclear whether this is seasonal or tree is dying; branch fusing with stem	Retain and protect as per the City of Ottawa Tree Protection Specifications (March 2021).
3	Butternut (<i>Juglans cinerea</i>)	51, 68	Poor: tree has only a few living twigs	Remove due to health – tree is dead; no city permit required. Provincial regulations to be followed.
4	Bur oak (<i>Quercus macrocarpa</i>)	56	Good: two very shallow spiral seams extending to ground	Remove due to grade change, proximity of excavation and future pool. Tree permit required for removal.
5	Colorado spruce (<i>Picea pungens</i>)	48	Fair: stem-girdling root possible; codominant leaders @6m	Remove due to grade changes and future pool. Tree permit required for removal.
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TIR Map – 117 Winding Way		
Date	Version	Prepared By
30/01/2025	1	KM



Failure to install and maintain fencing as described in this report may result in fines from the city.

- TREE PROTECTION REQUIREMENTS:**
- 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.
 - 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
 - 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)
 - 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.
 - 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.



- Legend**
- Critical Root Zone (as defined in By-Law 2020-340)
 - Private Tree
 - Tree either fully or partly on city property
 - Tree Protection Area
 - Tree to be removed