TREE CONSERVATION REPORT

ADDENDUM 3.0

71 Russell Ave

Tree Conservation Report Addendum submitted as Partial Requirements for a Site Plan Control Application, July 12, 2026

Dendron Forestry Services

Tree Conservation Report Addendum 3.0

Address: 71 Russell Ave

Date of Report: July 12, 2026

Date of Site Visit: April 9, 2026 and July 2, 2026

Prepared by: Astrid Nielsen, RPF, ISA Certified Arborist ®
101- 45 Spencer Ave, K1Y 2P5
Astrid.nielsen@dendronforestry.ca

Client: Colin Miller, Colin@pinehillbuilders.ca

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

Introduction

This Tree Conservation Report Addendum has been prepared to provide additional information regarding the potential for tree retention in the Tree Conservation Report prepared by James B. Lennox & Associates Inc dated Jan 30, 2026. It is supplementary information to the previous Addendums prepared by Dendron Forestry Services dated April 10th (Version 1.0) and May 29th (Version 2.1).

Note: *This report update provides additional information after a site visit on July 2nd that revealed more information regarding the roots of tree#10. The existing wooden wall on the subject property was removed to facilitate the exploration of the rooting system of this elm tree on adjacent property. After the root exploration, the recommendation has been changed from* ***remove*** *to* ***retain.***

Additional information has also been provided regarding slope stability and tree#27.

Methodology

A site visit was conducted on April 9th, May 25th , and July 2, 2026 to assess any changes in tree health since the last site visit completed by Dendron in September 2024. A more thorough assessment on tree impacts was also completed based on the most recent grading plan prepared by TL Mak dated January 22, 2026 and updated May 27, 2026.

Findings

Tree 1: This updated report reflects changes that were made to the grading plan for the walkway to curve around the tree. The new walkway and retaining wall will be approximately 1.5 m from the edge

of the tree trunk which should avoid impacting the structural integrity of the tree. The tree roots are to be pruned in advance of any excavation for the walkway and retaining wall and be completed by a certified arborist and/or city forestry staff. The same applies to the removal of any branches for the clearance of equipment on site – clearance pruning will likely be required for site access.

Note: Historical Google Street View imagery reveals a survey post embedded within the center of this tree's trunk. This hazard should be flagged in the city's internal system to prevent injury during future removal operations.

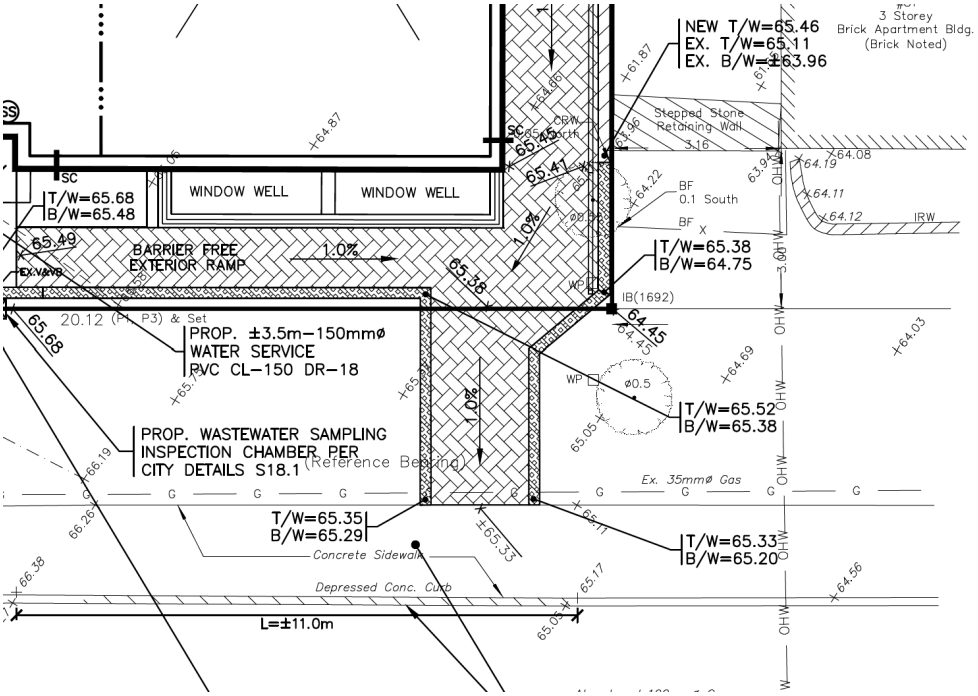

Figure 1: Image clip from updated grading plan prepared by TL Mak dated May 27, 2026 showing the walkway curing around tree 1, city owned Norway maple. The distance from the edge of the tree trunk to the edge of the retaining wall is approximately 1.5 m.

Photo 1: Existing wall by Tree 10, American elm on adjacent property. The new retaining wall will be over 4 m in depth and flush against the property line which is close to the existing fence

Tree 10: Previous versions of this TCR Addendum identified this tree for removal and recommended exploratory root investigation. On July 2nd, Nicole Nolan, an ISA Certified Arborist with Dendron Forestry Services, visited the site to observe the tree's rooting system after the wall shown in the photo above was removed. The purpose of the visit was to better understand the rooting structure and complete a more detailed assessment of the tree's health and structure.

Observations:

Measurements:

- Species: American elm
- Diameter at breast height: 45 cm (approximation as measured from subject property)
- Tree located 25 cm from fence (to edge of trunk)
- 40 cm from L Bend of wall to edge of root collar, 90 cm to centre of tree

Tree health:

- There was no evidence of canopy breakage despite a severe storm the previous day with high winds causing failure of trees at the nearby Sandy Hill Community Centre
- Good to fair canopy vigour: No evidence of dieback of wilting that would be expected with Dutch elm disease, a very common affliction with mature elms in the region
- Fair to declining canopy structure: canopy is slightly unbalanced, weighted mostly over the adjacent property
    - One major branch which extends over the adjacent property's roof has a large injury near its union with the trunk. Injury has limited wound wood growth.
- Good trunk structure and health: no major defects to trunk
    - Inspected for evidence of Dutch elm disease and bark beetle exit holes. No major infestation of beetles evident. No obvious exit holes, a few markings on bark could be older exit holes. (note that this is based only on inspection from subject property)
- Declining root collar health: Evidence of dark brown staining along root collar, suggests possible decay below soil surface.

The existing wall is estimated to be 20 years old based on the condition of the wood. The team onsite noted that the wall was not functioning as a retaining wall and would likely have failed if it were supporting the soil. It was also noted that there was a French drain installed on the adjacent property which extends below the existing fence and onto the subject property.

Roots

- Roots present in section of wall excavated:
    - 6 roots measuring 1.5 cm - 5 cm
        - 1 @ 5 cm
        - 1 @ 4.5 cm
        - 1 @ 3.5 cm
        - 1 @ 2 cm
        - 2 @ 1.5 cm
    - 9 roots measuring <1cm, >0.3cm
    - Fine roots
- There were two areas where some decayed wood was present that may have been roots at one point
- Roots extended the full depth of the wall, and are expected to continue deeper into the substrate on the subject property

Conclusion and Recommendations

While we recommend proceeding with the retention of the Elm tree to accommodate the adjacent property owner's request, it is critical that all parties have a clear understanding of the risks associated with this retention. We advise formally communicating the findings of this assessment to the neighbour in writing, explicitly highlighting that pre-existing factors—such as the major branch injury and potential root collar decay—may contribute to the tree's decline over time, **regardless of the construction**

activities. It is recommended that the neighbour be required to sign a formal liability waiver acknowledging these conditions.

The existing wall will be replaced with shoring set approximately 20 cm closer to the tree. Soil in this area will be removed, and pruned back by a certified Arborist, concurrent with the shoring installation. The required 20 cm of root pruning to accommodate the shoring system must be executed with clean cuts using sharp, sanitized arborist tools to minimize further stress and pathogen entry. Note that there is additional soil past the L bend of the wall that was not included in this assessment that will be excavated. It is anticipated this area will be beyond the area where structural roots will be located.

Finally, we advise the neighbour to secure an independent Level 3 Advanced (aerial) Assessment from a TRAQ-certified arborist to fully evaluate the structural integrity of the potentially decayed root collar and the injured branch overhanging their roof structure.

Photo 2: Wound on the branch overhanging the adjacent property at 69 Russell. An aerial assessment is recommended.

Photo 3: Soil and roots visible after the removal of the wall

Tree 11: This tree is located on the adjacent property and exhibits a severe structural defect, growing at a nearly horizontal lean. Given its poor condition, the tree may be susceptible to failure triggered by construction-related vibrations. While its removal is not mandatory for the project, it is recommended that the applicant consult with the neighbor to explore this option. At a minimum, any large branches encroaching over the subject property that pose a risk of failure should be pruned.

Photo 4: Tree 11, Manitoba maple with very heavy lean on adjacent property

Tree 27: This tree is situated on an adjacent property on a steep slope experiencing active soil creep. Evidence of this movement is visible in the accumulation of soil and organic debris against the boundary fence, which has mostly collapsed under the pressure near the base of the slope.

The tree currently exhibits a significant lean toward the subject property, presenting an existing safety hazard. While a full assessment was limited by property access, visual inspection from the property line suggests potential girdling roots on the upslope side of the root flare. Furthermore, the proposed building presents a direct conflict with the tree's crown.

It is critical to note that the risk of whole-tree failure will increase once the trees on the subject site are removed, as Tree 27 will suddenly be subjected to increased wind exposure. Concurrently, the subject site will become an active construction zone, increasing the number of targets (workers, equipment, and structures) within the fall zone.

Manitoba maples are fast-growing, opportunistic trees characterized by weak wood and shallow, fibrous root systems that grow irregularly toward light, making them prone to storm failure. Furthermore, they tend to uproot more frequently than other maple species on similar sites (Ontario, 2024). From a failure potential perspective, the downhill lean increases the overturning moment on the shallow root plate. Should this tree fail, it is most likely to involve a full tree failure that includes the entire rooting mass. This root plate failure would remove a large volume of soil, exacerbating current erosion issues on the slope.

Because of the degree of lean, there are no effective or practical mitigation measures available to reduce this risk to an acceptable level. Given the lack of viable alternatives, removing (most of) the tree is the only recommended option to ensure site safety. Furthermore, the massive above-ground weight of the tree is likely contributing to the downward soil creep. Removing the tree while leaving the stump and entire root network intact may actually reduce ongoing erosion and improve the overall stability of the slope.

To optimize slope stability while mitigating the overhead hazard, it is recommended that the crown and stem be removed, but the trunk and root system be left intact. Because Manitoba maple is a prolific stump sprouter, leaving the stump untreated will trigger the immediate production of epicormic shoots, ensuring the root system remains alive and continues functioning as it did prior to removal. To establish permanent structural anchoring, a succession planting strategy combining native trees, shrubs, and herbs is recommended. Shrubs will provide for immediate, shallow soil cohesion, whereas structural trees, such as oak, will establish deep taproots.

Some planting recommendations for this slope stabilization include Buttonbush, Gray dogwood, New Jersey tea, Northern bush honeysuckle, Eastern white cedar, and Bur oak, with Creeping juniper positioned in full sun at the top of the slope. While the maple's epicormic shoots are necessary to sustain the existing root network, their aggressive growth will require cutting back after a couple of years to avoid shading out and competing with the newly planted vegetation.

If the adjacent property owner does not support removal of this tree, an option would be to remove the portion of the tree extending over the subject property line to reduce the weight and reassess. Although this may not be an accepted arboricultural practice, it may reduce the risk to an acceptable level which is a higher priority. It is recommended that a risk assessment be completed after the pruning has been completed.

Photo 1: Tree 27, Manitoba maple on adjacent property that should be removed due to the potential for failure on subject property

Additional two small Manitoba maple along the fence line: There are two small Manitoba maple along the fence line, intertwined with the existing metal fence, that will also require removal. These trees measure 11 cm in diameter and are in poor health due to their weak bases.

Photo 2: Small Manitoba maples along the fence long, intertwined with the fence

Trees in the rear yard:

Due to the significant grading requirements in the rear year, tree retention is not feasible. There is already a steep slope, and grading will be required along with a retaining wall along the northern, and mostly eastern side.

Tree Retention possibilities with 11.27m rear yard setback vs proposed 7.52m setback:

It is unlikely that an increase in setbacks would result in an increase of tree retention as the reason for removal is based on grading requirements and not excavation for the new building. The rear yard is very steep making any tree retention very challenging.

Tree Protection

Prior to any site works, protective fencing should be installed around the Tree Protection Area for tree 1 as indicated in the Tree Conservation Report 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 April 9, and May 29th, 2026. 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

References

- Ontario Invasive Plant Council. (2024). *Best Management Practices for Manitoba Maple*.
- Rideau Valley Conservation Authority (RVCA). *A Landowner's Guide to Native Plants for Eastern Ontario*.

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 April 5, 2026, 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.