Arborist Report

Pre-Construction Assessment

Prepared For:

Brovi Investments Limited
Toronto, ON
Attn: Sanchit Arora

Site Address:

10533 Keele Street
Vaughan, ON
L6A 3Y9

March 11, 2025
Revised: July 13, 2026

Prepared By:
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Summary

The following Arborist Report is with respect to the proposed construction at 10533 Keele Street. Nearby trees are located on the subject property and in the City right-of-way.

Five (5) trees in total were assessed on site.

Three (3) trees are recommended to be preserved.

- Trees #**2, 3 and 5**, all of which are private trees <20cm DBH, and therefore are not regulated trees. **No permits are required.**

Two (2) trees are recommended to be removed.

- Trees #**1 and 4** are unregulated trees and no permit is required for their removal.

Introduction

Davey Resource Group (DRG) was retained by the client, Epic Designs Inc., to develop an Arborist Report and Tree Protection Plan (TPP) for the proposed construction of a single-family dwelling at 119 Gilley Road.

An inventory and assessment of all the trees within the scope of the assignment was conducted. The Arborist was to document the current condition, size, and location of the trees as they relate to the proposed work. To account for the spatial scope of work within the site, the location of the planned construction and all trees within 6 meters of it were surveyed.

Recommendations for tree preservation or removal are to be provided and follow City of Toronto by-laws (Municipal Code Chapter 813, Municipal Code Chapter 608).

This report must be accompanied by the following additional documents:

1. A full printing of the tree inventory performed by Davey Resource Group (DRG), otherwise known as the Tree Protection Action Key (TPAK). (Appendix 1)
2. The construction maps with the Arborist Comments, otherwise known as the Tree Protection Plan (TPP). (Appendix 2)

Limitations of the Assignment

It must be understood that DRG is the assessor of the trees in relation to tree preservation practices. The construction supervisors should incorporate the information and recommendations provided within this report into their construction methodology to complete their project in a reasonable manner.

This Arborist Report is based on the project scope and details for tree preservation as discussed. All proposed construction methods are limited to what was provided in the site plans and in

discussions with the Project Leader. Estimates, measurements and comments regarding tree preservation were based on the proposed construction plans and field observations.

This Arborist Report was compiled from field data collected from the ground. A basic visual assessment of the tree was performed. No level of ISA Tree Risk Assessment was performed. More data on risk may be obtained through a basic or advanced ISA Tree Risk Assessment.

Methods

- Tools used to assess the trees included a metric DBH measuring tape, supplies for field notes, and camera.
- Private, City and neighbour trees within 6 meters of planned construction work were included in the inventory.
- Trees were studied for their proximity to existing and planned structures to determine recommendations or precautions for trees requiring removal or injury.

Observations

- The site was inspected on February, 25, 2025 by ISA Certified Arborist Alex Weegan.
- During the assessment, no evidence of construction was present, and work had not yet started. No injuries to any trees, nor any construction material storage or soil compaction within Tree Protection Zones was noted during the assessment.
- **5** trees were assessed for this report and labeled #1-5 in the inventory and Tree Protection Plan included within Appendices 1-2.
- **3** trees were in good condition, **2** trees were in fair condition, and **0** trees were in poor condition.

For further details and observations, refer to the Tree Protection Action Key (Appendix 1).

Discussion

To preserve and protect these trees, proper recommendations must be followed and abided by the client for the duration of the project.

Regulatory context

Trees in Toronto are protected by City Municipal Code Chapter 813, which establishes permit requirements for work surrounding all trees planted on city-owned property, and all trees over 30 cm in diameter on private property. Park trees in Toronto are protected by Toronto Municipal Code Chapter 608, which establishes approval requirements for work surrounding all trees planted in city-owned parks. Under the by-law, it is prohibited to remove, cut down, destroy or injure a tree or part of a tree located in a park except with the prior written approval of the General Manager. Every person doing any work in a park or accessing a property through a park shall carry out such

work or access in accordance with the City's Tree Protection Policy and Specifications for Construction Near Trees and any other standards or conditions imposed or set out by the General Manager. The General Manager is authorized to request funds to secure the protection of a tree in a park by posting a letter of credit in a form and content acceptable to the City, in an amount sufficient to cover the appraised value of the tree, as well as removal and replacement costs. Any person who injures, destroys or removes a tree without the prior written approval of the General Manager may be subject to providing payment to the City in an amount sufficient to cover the appraised value of the tree, as well as removal and replacement costs and the costs of any specific arboricultural procedures to be undertaken to remedy the tree. Approval for tree removal requests may be subject to conditions imposed by the General Manager that include payment of tree value, removal and replacement costs and the replanting of a replacement tree or trees by the applicant. Under City of Toronto by-laws, Tree Protection Zones surrounding each tree are defined by the tree's diameter and must be kept free of all construction activity above and below ground. Were any work to be required within the TPZ of a tree protected by the by-law a permit to injure the tree is required by the City of Toronto. Any tree protected by the by-law that must be removed to accommodate construction also requires permit approval to proceed. If work is proposed within 6 meters of a tree but not within its TPZ, it is in the best interest of the client to protect it using a Tree Protection Fence built to city standards (depicted in Appendix 3). This serves to prevent any incidental contact or harm to a protected tree that would constitute a contravention of the by-law and may result in fines or a stop-work order. Below is a table of TPZ distances as defined by Toronto By-laws.

Trunk Diameter (DBH)	<10cm	11-30cm	31-40cm	41-50cm	51-60cm	61-70cm	71-80cm	81-90cm	91-100+cm
Minimum Protection Distance Required	**1.2m**	**1.8m**	**2.4m**	**3.0m**	**3.6m**	**4.2m**	**4.8m**	**5.4m**	**6.0m+**

Tree Protection Hoarding (Appendix 3)

It is in the best interest of the client to take every precaution possible to minimize damage to trees where work is taking place, and to avoid any unnecessary injury to trees outside of work areas. The distance from trees that hoarding is installed is typically defined by the dripline pursuant to the city by-law. However, it must be understood that sometimes this distance is not achievable due to infrastructure being too close. In most situations, hoarding does not need to be installed beyond the closest extent of impermeable and/or paved surfaces. It must be further understood the hoarding distance sometimes must accommodate a larger TPZ (than the typical MTPZ distance) due to a limited root growing area/volume (this area is typically defined by the project arborist). On most landscapes within a private property, solid plywood hoarding best serves to protect tree trunks from inadvertent damage. However, along city streets and at driveway entrances, it is recommended that high-visibility snow fence be affixed to a wooden beam frame, which allows

for proper tree protection while allowing vehicle and pedestrian traffic to maintain visibility through the tree protection zone. Hoarding locations will be indicated on the Tree Protection Plan (Appendix 2) which has been included in this report but will be printed to-scale for use on-site and in permit applications. Problems will arise for tree preservation efforts when anyone removes the hoarding, even temporarily. It takes one instance of soil compaction from a heavy machine for roots to suffer from air and water deprivation and for the tree to become stressed. It is imperative to install and maintain in good condition the hoarding to prevent this from happening by utilizing horizontal hoarding whenever necessary.

Root Pruning

Similar to pruning the upper canopy of the tree, roots are best removed (if needed) via target pruning practices and not by being torn off. Using mechanical tools or excavation equipment to remove or prune roots often leaves ragged edges, stripped bark, or splintered tissue. These surfaces are difficult for a tree to heal over and provide a high surface area for potential decay pathogens (bacteria, fungus, insects), to enter a tree. Minimizing the cross section of pruned roots allows for the most efficient recovery for the tree. Roots that are larger in diameter than 20% of its parent trunk's DBH are structurally integral to a tree and must be pruned with discretion. Root pruning is recommended to be carried out by a licensed professional, such as an ISA Certified Arborist.

Tree Protection Signage

It is recommended for the client to create Tree Protection Signs to affix to tree protection hoarding. A sign should be displayed on the tree protection fencing. The Toronto standard sign format is displayed in Appendix 4 within this report.

Staging Areas

All staging areas are understood to be outside the TPZ. At no time are materials, vehicles, traffic or debris to be stacked, staged, or piled inside the hoarding (Tree Protection Fencing).

Conclusion and Recommendations

To account for the proposed additions to 10533 Keele Street, we assessed **5** trees for protection, injury, or removal:

The following Arborist Report is with respect to the proposed construction at 10533 Keele Street. Nearby trees are located on the subject property and in the City right-of-way.

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- Trees #**2, 3 and 5**, all of which are private trees <20cm DBH, and therefore are not regulated trees.

No permits are required.

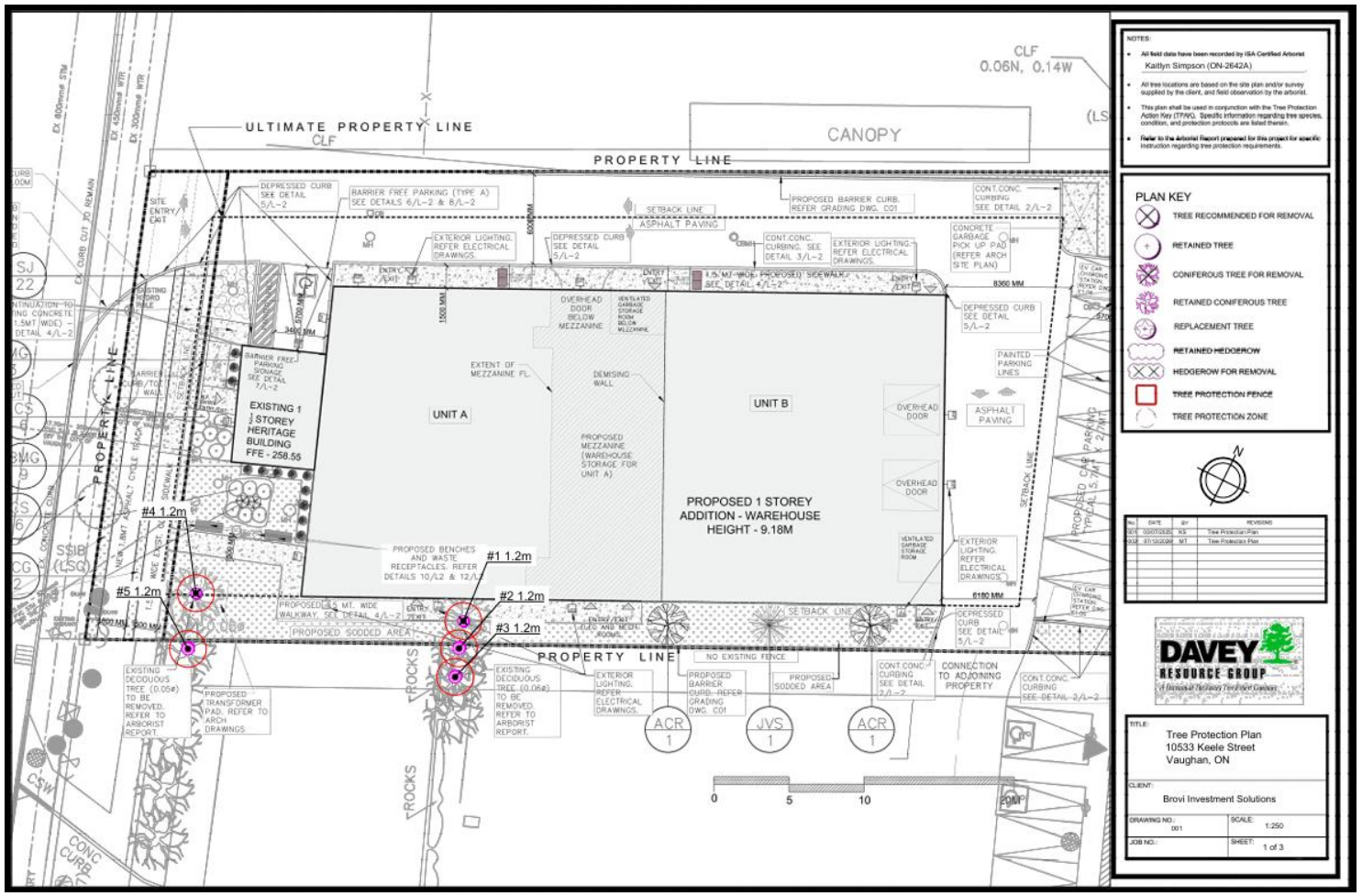
Two (2) trees are recommended to be removed.

- Trees #**1 and 4** are unregulated trees and no permit is required for their removal.

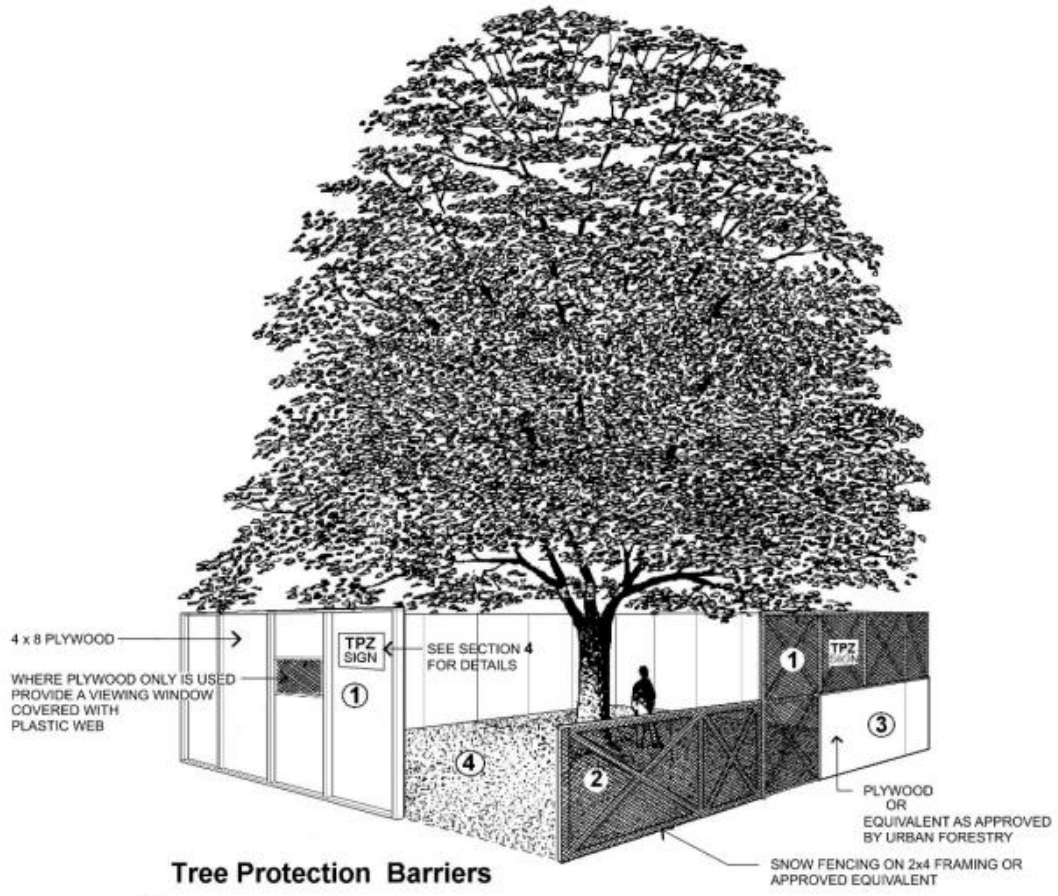
Appendix 1 – Tree Protection Action Key (TPAK)

Tree Map Number	Species	Botanical	DBH (cm) @ 1.4 m	Tree Ownership	Minimum Tree Protection Distance (m)	Health	Structure	Overall Condition	Crown Width (m)	Construction inside Min TPZ? (Y/N)	Construction Impact (None, Low, Medium, High)	Action	Permit Required? (Y/N)	Recommendations	Notes and Observations
1	American Beech	*Fagus grandifolia*	7	Private	1.2	Good	Good	Good	3	Y	None	Remove	N		
2	American Beech	*Fagus grandifolia*	7	Neighbour	1.2	Good	Good	Good	3	N	None	Preserve	N		
3	American Beech	*Fagus grandifolia*	7	Neighbour	1.2	Good	Good	Good	3	N	None	Preserve	N		
4	Sugar Maple	*Acer saccharum*	6	Private	1.2	Fair	Fair	Fair	3	Y	None	Remove	N		Witches broom. Girdling by wire
5	Sugar Maple	*Acer saccharum*	6	Neighbour	1.2	Fair	Good	Fair	3	N	None	Preserve	N		Witches broom.

Appendix 2 – Tree Protection Plan (Preview)



Appendix 3 – Hoarding (TPF) Detail



Tree Protection Barriers

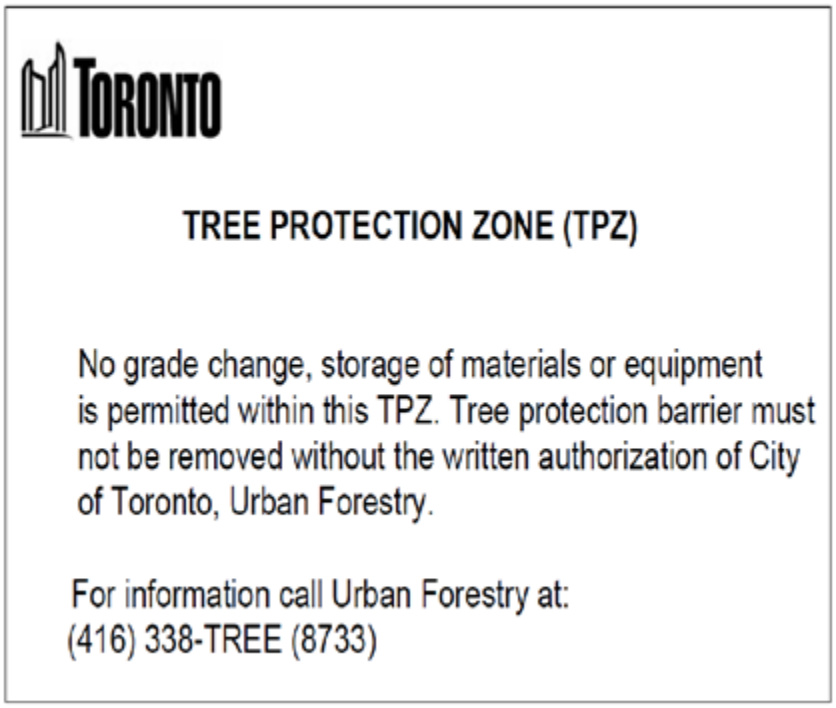
1. Tree protection barriers must be constructed with a solid wood frame clad with plywood or approved equivalent. Height of hoarding may be less than 8 ft. to accomodate any branches that may be lower.
2. Tree protection barriers for trees situated on the City road allowance where visibility must be maintained can be 1.2m (4ft.) high and consist of orange plastic web snow fencing on a wood frame made of 2 x 4s.
3. Where some excavate or fill has to be temporarily located near a tree protection barrier, plywood must be used to ensure no material enters the Tree Protection Zone.
4. No construction activity, grade changes, surface treatment or excavations of any kind is permitted within the Tree Protection Zone.

Note:
Sediment control fencing shall be installed in locations indicated in an Urban Forestry approved Tree Protection Plan. The sediment control fencing must be installed to Ontario Provicial Standards (OPSD-219.130) heavy duty silt fence barrier and to the satisfaction of Urban Forestry. See Detail TP- 2

TORONTO
Parks, Forestry and Recreation
Urban Forestry
February 2016
Detail TP-1

Appendix 4 – Tree Protection Zone Sign Detail

A sign that is similar to the illustration below may be required to be mounted on all sides of a Tree Protection Barrier for trees protected by the Trees on City Streets By-law and the Private Tree By-law. The sign should be a minimum of 40cm x 60cm and made of white gator board or equivalent material.



Appendix 5 – References

1. ISA, 2001-2011. Best Management Practices, Books 1-9, Companion publications to ANSI A300 Standards for Tree Care
2. Dujesiefken, Dr. Dirk, 2012. Director of the Institute for Tree Care in Germany, The CODIT Principle, research presented on cambial regrowth on trees after injury at the Annual ISA Conference in Kingston Ontario
3. Sinclair and Lyon, 2005. Diseases of Trees and Shrubs, Second Edition
4. ISA, 2010. Glossary of Arboricultural Terms
5. Neely and Watson, ISA, 1994 and 1998. The Landscape Below Ground 1 and 2
6. Matheny and Clark, ISA, 1994. A Photographic Guide to the Evaluation of Hazard Trees in Urban Areas, 2nd Edition
7. Matheny and Clark, ISA 1998. Trees and Development, A Technical Guide to Preservation of Tree During Land Development
8. PNW-ISA, 2011. Tree Risk Assessment in Rural Areas and Urban/Rural Interface, Version 1-5
9. City of Toronto, 2015. Application to Injure or Destroy Trees
10. Todd Hurt & Bob Westerfield, 2005.Tree Protection During Construction and Landscaping Activities
11. City of Toronto, 2015. Toronto Municipal Code Chapter 813: Trees.
12. City of Toronto, 2016. Tree Protection Policy and Specifications for Construction Near Trees

Appendix 6 – Glossary of Common Arboricultural Terms

Arborist	A professional who possesses the technical competence gained through experience and related training to provide for or supervise the management of trees and other woody plants in residential, commercial, and public landscapes.
ANSI A300	Acronym for American National Standards Institute. In the United States, industry-developed, national consensus standards of practice for tree care.
Bark Tracing	Cutting away torn or injured bark to leave a smooth edge.
Branch Bark Ridge	Raised strip of bark at the top of a branch union, where the growth and expansion of the trunk or parent stem and adjoining branch push the bark into a ridge.
Callus wood	Undifferentiated tissue formed by the cambium, usually as the result of wounding.
Clinometer	A device used to calculate the height of trees.
Consulting Arborist	An Arboricultural consultant is one of the following: ● American Society of Consulting Arborists, Registered Consulting Arborist (ASCA RCA#___) ● International Society of Arboriculture, Board Certified Master Arborist (ISA BCMA #_____B) ● ISA Certified Arborist/Municipal Specialist in good standing for a minimum of 6 years with 6 years of proven experience in a management role related to arboriculture, and has attested and signed to a code of ethics related to arboriculture (ISA#_____)
Compartmentalization	Natural defense process in trees by which chemical and physical boundaries are created that act to limit the spread of disease and decay organisms
Critical Root Zone – (CRZ)	Area of soil around a tree where the minimum amounts of roots considered critical to the structural stability or health of the tree are located. CRZ determination is sometimes based on the drip line or a multiple of dbh (12:1, 12cm of ground distance from the trunk for every cm of dbh) but because root growth is often asymmetric due to site conditions, on-site investigation is preferred.
Daylighting	Also known as Hydro-vac, this is the process by which soil is vacuumed up. In the context of tree care this allows workers to access the soil below the roots without mortal damage to significant roots.
DBH	Acronym for tree diameter at breast height. Measured at 1.4m above ground.

Decurrent	Rounded or spreading growth habit of the tree crown.
Directional Pruning	Providing clearance by pruning branches that could significantly affect the integrity of utility facilities or other structures, and leaving in place branches that could have little or no effect.
Dripline	Imaginary line defined by the branch spread of a single parent or group of plants
Excurrent	Tree growth habit characterized by a central leader and a pyramidal crown.
Included bark	Bark that becomes embedded in a crotch (union) between branch and trunk or between codominant stems. Causes a weak structure.
Lion's Tailing	Poor pruning practice in which an excessive number of branches are thinned from the inside and lower part of specific limbs or a tree crown, leaving mostly terminal foliage. Results in poor branch taper, poor wind load distribution, and higher risk of branch failure.
MTPZ	Acronym for Minimum Tree Protection Zone, also known as the Structural Root Zone (SRZ), which is the distance from the tree equal to 6 times the dbh, within which the likelihood of encountering roots that are structural supports for the tree.
Moment	Rotational force that is created by any line force on a body. The magnitude of a moment is defined as the product of the force magnitude and perpendicular distance from the line of action of the force to the axis of which the moment is being calculated.
Mortality Spiral	A sequence of stressful events or conditions causing the decline and eventual death of a tree.
Mulch	Material that is spread of sometimes sprayed on the soil surface to reduce weed growth, to retain soil moisture and moderate temperature extremes, to reduce compaction from pedestrian traffic or to prevent damage from lawn-maintenance equipment, to reduce erosion or soil spattering onto adjacent surfaces, to improve soil quality through its eventual decomposition, and/or to improve aesthetic appearance of the landscape. Mulch can be composed of chipped, ground, or shredded organic material such as bark, wood, or recycled paper; unmodified organic material such as seed hulls; organic fiber blankets or mats; or inorganic material such as plastic sheeting.
Organic Matter	Material derived from the growth (and death) of living organisms. The organic components of the soil.
CRZ	Acronym for Critical Root Zone, also known as the Critical Root Zone (see definition above), within which there is a high likelihood of encountering roots that are necessary for the survival for the tree.
Project Arborist	The consulting arborist retained to provide all tree preservation recommendations to the project manager or contractors on a given construction project.

Qualified Arborist	An arborist who has documented related training (i.e. ISA, MTCU, or equivalent) and on-the-job experience (minimum of 5 years)
Radial trenching	Technique for aerating the soil or alleviating compaction around a tree by removing and replacing soil (which may be amended) in trenches (typically 300mm deep and 150mm wide) made in a spoke like pattern (radially from the trunk) in the root zone to improve conditions for root growth.
Reaction Wood	Wood formed in leaning or crooked stems or on lower or upper sides of branches as a means of counteracting the effects of gravity.
Removal Cut	A cut that removes a branch at its point of origin. Collar cut.
Reduction Cut	A pruning cut that reduces the length of a branch or stem back to a lateral branch large enough to assume apical dominance.
Resistograph®	A brand name of a device consisting of a specialized micro-drill bit that drills into trees and graphs density differences that are used to detect decay.
Soft-Scaped	Landscaping practices that do not involved solid or deeply-dug foundations. Patios consisting of slab rocks laid on-top of the soil with minimal excavation and base (less than 10cm) and causing minimal damage to existing tree roots.
Static Support System	Cabling system that utilizes rigid materials such as rods and steel cables to limit movement and provide constant support of limbs.
Structural cells	Modular system consisting of units of soil and integrated support structures that serve both as a foundation for paved surfaces and a hospitable environment for tree root growth,
Structural pruning	Pruning to establish a strong arrangement or system of scaffold branches.
Structural Soil™	Pavement substrate that can be compacted to meet engineering specifications yet remains penetrable be tree roots in the urban environment. Composed of angular crushed stone, clay loam, and hydrogel mixed in a weight ratio of 100:20:0.03. Developed at the Urban Horticulture Institute, Cornell University, Ithaca, NY.
Supersonic Air Excavation Techniques (SSAT)	A methodology using a device that directs a jet of highly compressed air to excavate soil. Used within the root zone of trees to avoid or minimizing damage to the roots, or near underground structures such as pipes and wires to avoid or minimize damage to them.
Tree Protection Zone (TPZ)	Defined area within which certain activities are prohibited or restricted to prevent or minimize potential injury to designated trees, especially during construction. TPZ is sometimes based on a minimum multiple of dbh (e.g. 6:1, 6cm of ground distance from the trunk for 1cm of dbh)
Walls	Trees have 4 walls in a process known as compartmentalization.

	• Wall 1 prevents decay moving up and down in a tree • Wall 2 prevents decay moving inward in a tree • Wall 3 prevents decay moving laterally in a tree • Wall 4 is the new growth formed on the outside of the tree, callus growth.
Woundwood	Lignified, differentiated tissues produced on woody plants after wounding.

Appendix 7 – Arborist Qualifications

Kaitlyn Simpson is an ISA Certified Arborist Consultant with Davey Resources Group. Her formal education includes a bachelor's degree in environmental management, Arboriculture Graduate from Humber College, and IPM Short Course Graduate from the University of Maryland. Kaitlyn has varied work experience in the past 7 years in arboriculture, urban forestry, and education fields.

Certifications

International Society of Arboriculture Certified Arborist (ON-2642A)
Certified Chainsaw Operator
ISA Tree Risk Assessment Qualified (TRAQ)
444a Qualified Arborist
Tree Appraisal Qualified

Appendix 8 – Photographs



Figure 1. Trees #1-3



Figure 2. Trees #4-5

Conditions of Assessment Agreement

This Conditions of Assessment Agreement is made pursuant to and as a provision of Davey Resource Group, a division of The Davey Tree Expert Co. of Canada, Limited ("Davey"), providing tree assessment services as agreed to between the parties, the terms and substance of which are incorporated in and made a part of this Agreement (collectively the "Services").

Trees are living organisms that are subject to stress and conditions and which inherently impose some degree or level of risk. Unless a tree is removed, the risk cannot be eliminated entirely. Tree conditions may also change over time even if there is no external evidence or manifestation. In that Davey provides the Services at a point in time utilizing applicable standard industry practices, any conclusions and recommendations provided are relevant only to the facts and conditions at the time the Services are performed. Given that Davey cannot predict or otherwise determine subsequent developments, Davey will not be liable for any such developments, acts, or conditions that occur including, but not limited to, decay, deterioration, or damage from any cause, insect infestation, acts of god or nature or otherwise.

Unless otherwise stated in writing, assessments are performed visually from the ground on the above-ground portions of the tree(s). However, the outward appearance of trees may conceal defects. **Therefore, to the extent permitted by law, Davey does not make and expressly disclaims any warranties or representations of any kind, express or implied, with respect to completeness or accuracy of the information contained in the reports or findings resulting from the Services beyond that expressly contracted for by Davey in writing, including, but not limited to, performing diagnosis or identifying hazards or conditions not within the scope of the Services or not readily discoverable using the methods applied pursuant to applicable standard industry practices.** Further, Davey's liability for any claim, damage or loss caused by or related to the Services shall be limited to the work expressly contracted for.

In performing the Services, Davey may have reviewed publicly available or other third- party records or conducted interviews, and has assumed the genuineness of such documents and statements. Davey disclaims any liability for errors, omissions, or inaccuracies resulting from or contained in any information obtained from any third- party or publicly available source.

Except as agreed to between the parties prior to the Services being performed, the reports and recommendations resulting from the Services may not be used by any other party or for any other purpose. The undersigned also agrees, to the extent permitted by law, to protect, indemnify, defend and hold Davey harmless from and against any and all claims, demands, actions, rights and causes of action of every kind and nature, including actions for contribution or indemnity, that may hereafter at any time be asserted against Davey or another party, including, but not limited to, bodily injury or death or property damage arising in any manner from or in any way related to any disclaimers or limitations in this Agreement.

By accepting or using the Services, the customer will be deemed to have agreed to the terms of this Agreement, even if it is not signed.

Acknowledged by:

Name of Customer: _____

Authorized Signature: _____

Date: _____