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Arborist Report and Tree Preservation Plan

954 Tennyson Avenue, Mississauga (Lorne Park Estates)

Prepared By

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Prepared On

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Summary

This Arborist Report and Tree Preservation Plan addresses all subject site trees with a diameter at breast height (DBH) of 15cm or greater and all neighbouring and City-owned trees regardless of DBH within 6 metres of the subject site that may be affected by the proposed property development and provides recommendations for their preservation and/or removal. This report also includes hoarding distances for the Tree Protection Zones (TPZ) and provides recommendations for current and future tree health care.

Based upon the Tree Inventory for this property, there are **sixty one (61) trees** that may be affected by the proposed site development plan:

- Twenty four (24) subject site trees
- Two (2) neighbouring trees within 6 metres of the subject site's property lines
- No (0) shared ownership trees along any subject site property lines
- Thirty five (35) trees within 6m of the subject site on lands regulated by the Lorne Park Estates community

Table 1: Tree Preservation and Removal

<u>TREES TO PRESERVE</u>	<u>TREE NUMBER</u>	<u>TOTAL</u>
i) Subject Site Trees	15, 16, 17, 23, 24, 34, 49, 50, 51	18
	52, 53, 54, 55, 56, 57, 58, 60, 61	
ii) Neighbouring Trees	19, 59	2
iii) LP Estates regulated Trees	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 27, 28, 29	
	30, 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44	
	45, 46, 47, 48	<u>35</u>
	#of Trees To Be Preserved:	55
<u>TREES TO BE REMOVED</u>	<u>TREE NUMBER</u>	<u>TOTAL</u>
i) Subject Site Trees	18, 20, 21, 22, 25, 26 (site plan conflict)	6
ii) Neighbouring Trees	0	0
iii) LP Estates regulated Trees	0	<u>0</u>
	#of Trees To Be Removed:	6
	Total trees on or adjacent to subject site:	61

Specific tree-related issues on this site:

Please refer to Pages 7-8 of this report for on-site supervision requirements for a Certified Consulting Arborist during the proposed construction activities at 954 Tennyson Avenue, Mississauga (Lorne Park Estates).



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Introduction

This Arborist Report and Tree Preservation Plan provides the current condition of all subject site trees with a DBH of 15cm or greater and all neighbouring and Lorne Park Estates community-regulated trees regardless of DBH within 6m of the subject site that may be affected by the proposed site development plan as indicated by the attached site plan in Appendix A. The intent of the Tree Preservation Plan is to retain as many trees on the site as is reasonable through the use of Tree Protection Zones (TPZ) and other generally recognized arboricultural practices and to minimize the potential impact of construction injury to the trees.

Assignment

Welwyn Consulting was contacted by **Marthese Rapa** to provide an Arborist Report and Tree Preservation Plan, as required by the City of Mississauga's *Public Tree Protection By-Law 0020-2022*, *Private Tree Protection By-Law 0021-2022*, and *Site Plan Control By-Law 0293-2006* to minimize the impact that the proposed construction may have on the trees on or adjacent to this property. This report shall list specific trees to be preserved or removed, recommend any immediate maintenance required to create a safer environment for contractors and the property owner and provide a long-term tree preservation and management plan for the site.

Limits of Assignment

This report is limited to assessing and documenting the health and structural condition of all subject site trees with a DBH of 15cm or greater and all neighbouring and Lorne Park Estates community-regulated trees regardless of DBH within 6m of the subject site during the site survey on **November 13, 2023**. Evaluations are based upon visual inspection of the trees from the ground, and analysis of photos and any samples taken during that inspection.

Unless specifically stated in the report:

- 1.) Neither aerial inspections nor root excavations were performed on any trees on or within 6 metres of the subject site.
- 2.) A Level II Basic Assessment using the 2011 International Society of Arboriculture (I.S.A.) *Best Management Practices* was used for tree evaluations on the subject site.
- 3.) Where access to off-site trees was restricted, a Level I Limited Visual Assessment was used as required.

Purpose and Use

The purpose of this report is to document the current health and structural condition of all subject site trees with a DBH of 15cm or greater and all neighbouring and Lorne Park Estates community-regulated trees regardless of DBH within 6m of the subject site and to provide an Arborist Report and Tree Preservation Plan that complies with the City of Mississauga's *Public Tree Protection By-Law 0020-2022*, *Private Tree Protection By-Law 0021-2022*, and *Site Plan Control By-Law 0293-2006*. This report is intended for the exclusive use of **Marthese Rapa**. Upon submission by and payment to Welwyn Consulting, this report will become licensed for use by **Marthese Rapa** at her discretion.



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Observations

The proposed development is located in Lorne Park Estates (a private community) near the intersections of Lakeshore Road and Tennyson Avenue within the City of Mississauga. This site presently contains a residential dwelling that will be demolished and replaced with a new home. Welwyn Consulting visited the site on **November 13, 2023** to conduct the tree inventory and take photographs of the trees on site, as well as any neighbouring or City-owned trees that may be affected by the proposed site plan.



Photo #1



Photo #2

Figure #1: These 2 photos show the front and rear yard of the property at 954 Tennyson Avenue as they appeared during the tree inventory conducted on November 13, 2023.

Appendices

Appendix A contains the most current site plan supplied by **Marthese Rapa** and provides the following information:

- The location of the trees on or adjacent to the subject site
- Property lines for the subject site and neighbouring properties
- Property lines for City-owned lands adjacent to the subject site
- All existing buildings and hard surfaces
- An outline of the proposed building

Appendix B contains the Tree Inventory for this site. All trees were assigned numbers, and measured for diameter at breast height (DBH=1.4m), height, and canopy spread. The trees' health, structural condition and physical location/ownership provide the basis for their recommended preservation or removal.

Appendix C contains selected photos of trees on this site.



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Trees to Preserve (55)

NOTES:

- 1.) It is the responsibility of the client to ensure that all architects, engineers, and contractors involved with the project be provided with a copy of the entire Arborist Report and Tree Preservation Plan for review prior to the commencement of construction activities on this site.
- 2.) Permit to Injure is required for the injury, destruction or removal of **any** individual tree 15cm (6 in) in diameter or greater. A permit may be refused based on the health of the tree. Guidelines for Tree Removal/Injury can be found at the following City of Mississauga link:
www.mississauga.ca/services-and-programs/forestry-and-environment/trees/request-to-injure-or-remove-trees/
- 3.) A tree's root system extends 2-3 times beyond the edge of the canopy/dripline. As Tree Protection Zone (TPZ) hoarding protects only that portion of the root system governed by municipal regulations, most trees on urban residential properties may sustain a degree of injury (including but not limited to root severance, soil compaction and disturbance) during proposed construction activities.

■ **Trees #1-14**

Municipal trees (Lorne Park Estates)

These fourteen (14) trees are located the boulevard area of the front yard at 954 Tennyson Avenue (#2-11 and 13-14) and on the neighbouring properties to the east (#1) and west (#12) on lands regulated by the Lorne Park Estates. These 14 trees must be protected for the duration of the proposed construction activities on this site.

These fourteen (14) Lorne Park Estates regulated trees must be preserved. Full implementation of the Tree Care Recommendations, Tree Preservation Plan and Tree Preservation Guidelines starting on Page 13 of this report should result in the trees' continued survival.

■ **Trees #15, 16, 17, 23 and 24**

Front yard trees (subject site)

These five (5) trees are located in the front yard at 954 Tennyson Avenue. These 5 trees shall be protected for the duration of the proposed construction activities on this site.

These five (5) subject site trees shall be preserved. Full implementation of the Tree Care Recommendations, Tree Preservation Plan and Tree Preservation Guidelines starting on Page 13 of this report should result in the trees' continued survival.

NOTES:

- 1.) The existing subject site driveway will be re-configured approx. 5m south of its current location. The existing asphalt surface and sub-grade shall be removed by hand (no heavy equipment) within the minimum 2.4m TPZ for Tree #24 (Flowering Crabapple – 34cm DBH – subject site).
- 2.) The proposed landscaped wall will be installed outside the minimum 2.4m TPZ for Tree #24.



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- 3.) Both the proposed landscaped path and the 2 landscaped walls will encroach into the minimum 4.8m TPZ for Tree #23 (White Pine – 79cm DBH – subject site).
 - 4.) *A Certified Consulting Arborist shall be on-site during hand digging (no heavy equipment) of the proposed landscaped walls and pathway foundation excavations within the minimum 4.8m TPZ for Tree #23 to determine the size and quantity of roots that could be affected. Any roots in the immediate area of the excavation shall be assessed and, if feasible and reasonable, properly pruned by the attending Arborist. This action is anticipated to minimize the extent of root injury due to excavation and provide any pruned roots with the best opportunity to regenerate.*
 - 5.) A Tree Protection Audit documenting the results of the above on-site supervision shall be prepared by the project Consulting Arborist for submission to the City of Mississauga for their records.
- **Trees #19 and 59** **Neighbouring trees**

These two (2) trees are located on the neighbouring property to the east of 954 Tennyson Avenue. These 2 trees must be protected for the duration of the proposed construction activities on this site.

These two (2) neighbouring trees must be preserved. Full implementation of the Tree Care Recommendations, Tree Preservation Plan and Tree Preservation Guidelines starting on Page 13 of this report should result in the trees' continued survival.
 - **Trees #27-33 and 35-48** **Municipal trees (Lorne Park Estates)**

These twenty one (21) trees are located the boulevard area of the rear yard at 954 Tennyson Avenue on lands regulated by the Lorne Park Estates. These 21 trees must be protected for the duration of the proposed construction activities on this site.

These twenty one (21) Lorne Park Estates regulated trees must be preserved. Full implementation of the Tree Care Recommendations, Tree Preservation Plan and Tree Preservation Guidelines starting on Page 13 of this report should result in the trees' continued survival.
 - **Trees #34, 49-58 and 60-61** **Rear yard trees (subject site)**

These thirteen (13) trees are located in the rear yard at 954 Tennyson Avenue. These 13 trees shall be protected for the duration of the proposed construction activities on this site.

These thirteen (13) subject site trees shall be preserved. Full implementation of the Tree Care Recommendations, Tree Preservation Plan and Tree Preservation Guidelines starting on Page 13 of this report should result in the trees' continued survival.



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Trees to Remove (6)

Prior to construction, all trees scheduled for removal should be removed to grade level to increase the safety for both the property owner and any contractors.

NOTES:

- 1.) A Permit to Injure is required for the injury, destruction or removal of **any** individual tree 15cm (6 in) in diameter or greater. A permit may be refused based on the health of the tree.
- 2.) Tree replacement is required for every 15cm (6 in) of diameter of the tree removed – for example, when a tree with a diameter of 45cm (18 in) is removed, three (3) replacement trees are required
- 3.) Replacement trees (no matter the size) cannot be injured or removed without a permit.
- 4.) Guidelines for Tree Removal/Injury can be found at the following City of Mississauga link:
www.mississauga.ca/services-and-programs/forestry-and-environment/trees/request-to-injure-or-remove-trees/

■ **Trees #18, 20, 21, 22, 25 and 26** **Subject site trees**

These six (6) trees are in conflict with the proposed site plan and are proposed to be safely removed to grade level prior to the commencement of on-site construction activities.



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Replacement Tree Planting (18)

Below are the City of Mississauga's Tree Replacement Plan Policy from The City of Mississauga's *Public Tree Protection By-Law 0020-2022*, *Private Tree Protection By-Law 0021-2022* and the 2023 Forestry Fee Schedule:

- (2) Where the planting of a Replacement Tree(s) has been imposed as a condition, the Commissioner may require any one or more of the following:
- (a) the Replacement Tree(s) be located on the same Lot in a location, number, size; and/or species to the satisfaction of the Commissioner;
 - (b) a replanting plan be filed to the satisfaction of the Commissioner;
 - (e) a written undertaking by the Owner to carry out the replacement planting;
 - (f) monies or a letter of credit in a form satisfactory to the Commissioner be delivered to the Commissioner to cover the costs of the Replacement Trees, and the maintenance of the Tree(s) for a period of up to two (2) years; or
 - (g) payment of each Replacement Tree not replanted on the Owner's Lot be made into the City's Replacement Tree Planting Fund. The payment for each such Tree shall be the cost of each street Tree planting as provided in the Fees and Charges By-law.

Schedule "D" Parks, Forestry and Environment Fees and Charges

Effective Date: January 1, 2023

Fee Name	Unit	2023 Fee (Excluding HST)	Applicable Taxes (HST 13% or HST Exempt)
Forestry			
Forestry Inspection	Per Inspection	\$57.18	13%
Road Occupancy Permit Fee	Per Use	\$163.91	13%
Street Tree Planting: 60mm (2.5 in.) Caliper Deciduous Tree or 200cm (6.5 ft. Height) Coniferous Tree	Per Tree	\$644.09	HST Exempt

The City of Mississauga requires eighteen (18) replacement trees to be planted as compensation for trees 15cm DBH and greater being removed due to site re-development. In accordance with the Tree By-Law, replacement trees are to be native in species, a minimum 60mm caliper for deciduous trees and a minimum 1.80m high for coniferous trees. The "cash in lieu of tree replacement planting" fee for 2023 is \$644.09/tree



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Table 1: Tree Replacement Chart (applies to both public and private trees)

PUBLIC TREE REPLACEMENT CHART	
Min. 60mm Diameter Deciduous/1.8m Height Coniferous	
Diameter at Breast Height (DBH) in cm	Number of Replacement Trees
6-15	1
16-30	2
31-45	3
46-60	4
61-75	5
76-90	6
91-105	7
106-120	8
>120	9

Table 2: Tree Protection Zone Table (applies to both public and private trees)

Trunk Diameter (cm)	Minimum Tree Protection Zone (TPZ) Distance from Trunk (m)	Minimum Tree Protection Zone (TPZ) Distance from Trunk (m) for trees in Open Spaces and Woodlands
<10 cm	1.2	2.4
10-20	1.5	2.4
21-30	1.8	3.6
31-40	2.4	4.8
41-50	3.0	6.0
51-60	3.6	7.2
61-70	4.2	8.4
71-80	4.8	9.6
81-90	5.4	10.8
91-100	6.0	12.0
>100	6 cm per 1 cm DBH	12 cm per 1 cm DBH



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Tree Replacement Planting Plan: 954 Tennyson Avenue, Mississauga (LP Estates)

I.D.#	Tree Species	Exposure	Mature Height	Mature Canopy	Soil Type and Zone
R1 (1 tree)	Red Maple <i>Acer rubrum</i>	Full sun	15m	12m	Adaptable to most soil types – Zone 3
R2 (1 tree)	Black Cherry <i>Prunus serotina</i>	Full sun	24m	10m	Adaptable to most soil types – Zone 3
R3 (1 tree)	Ohio Buckeye <i>Aesculus glabra</i>	Full sun to part shade	12m	10m	Prefers well drained soils, but adaptable – Zone 3
R4, R7, R8 (3 trees)	Eastern Hemlock <i>Tsuga canadensis</i>	Part sun to part shade	21m	10m	Prefers well drained soils – Zone3
R5 – R6 (2 trees)	Blue Beech <i>Carpinus caroliniana</i>	Part sun to full shade	10m	10m	Prefers well drained soils – Zone 3
R9 (1 tree)	Basswood <i>Tilia americana</i>	Full sun to part shade	25m	15m	Adaptable to most soil types – Zone 3
R10 (1 tree)	Eastern Redbud <i>Cercis canadensis</i>	Full sun to part shade	10m	8m	Prefers well drained and wind protection – Zone 5
R11 (1 tree)	Paper Birch <i>Betula papyrifera</i>	Full sun	16m	12m	Prefers well drained soils – Zone 2

NOTES:

1.) Replacement tree numbers were derived as follows:

- a. Tree #18 – 59cm DBH 3 replacement trees
 - b. Tree #20 – 21cm DBH 2 replacement trees
 - c. Tree #21 – 16cm DBH 2 replacement trees
 - d. Tree #22 – 15cm DBH 1 replacement tree
 - e. Tree #25 – 95cm DBH 7 replacement trees
 - f. Tree #26 – 55cm DBH 3 replacement trees
- 18 replacement trees

2.) Eleven (11) replacement trees and their approximate proposed locations are marked with the symbol **Rx** on the site plan in Appendix A on Page 23 of this report.

3.) Seven (7) replacement trees shall be cash in lieu of planting at \$644.09/tree x 7 trees = **\$4,508.63**



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Tree Care Recommendations

Cabling

Cabling is a practice which provides physical support for trees with structurally weak limbs, co-dominant stems, any branch or trunk unions with included bark, and tree species generally known to be weak-wooded. An aerial inspection of the tree's structural condition should be performed prior to cable installation, and any dead, diseased, or hazardous wood should be removed. Cabled trees should be inspected annually to assess both the cabling hardware and the tree's structural condition. Cabling recommendations by Welwyn Consulting are made as a part of "due diligence" to alert tree owners to the 'potential' for tree failure and to provide hazard mitigation options based upon observed conditions. Cabling reduces but does not eliminate a tree's hazard or failure potential.

- **There are no trees recommended for cabling on this site at this time.**

Fertilization

Current research conducted through the International Society of Arboriculture (I.S.A.) indicates that preserved trees within close proximity of proposed construction activities should not be fertilized during the 1st year following construction injury. Uptake of nutrients and water in compacted soils can be reduced and fertilizer salts may actually remove water from a tree's root zone. If and when supplemental fertilization is deemed necessary, products which stimulate root growth should be employed over those that stimulate shoot and foliage growth and be applied at low application rates.

Supplemental fertilization needs should be assessed by a Certified Consulting Arborist upon completion of all on-site construction activities, and any recommendations should be based on site-specific soil nutrient deficiencies determined primarily through soil testing and secondarily by visual analysis of nutrient deficiencies in foliage, twigs, buds, and roots.

Pruning

Pruning is a practice which removes dead, diseased, broken, rubbing, crossing, and hazardous limbs 2.5 cm and larger from trees to create a safer working environment and improve tree health and vigor. Pruning also provides an excellent opportunity for an aerial inspection of the structural integrity of the tree(s). All pruning should be completed prior to any site demolition or construction.

- **There are no trees recommended for pruning on this site at this time.**



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Root Pruning/Air Spade/Hydro-Vac

Root pruning is performed to minimize a tree's potential loss of structural stability through root removal and/or injury due to excavation within close proximity of its root zone. While not always feasible for all projects, root pruning should occur in late autumn during tree dormancy and ideally one full growing season prior to any on-site construction or demolition to allow for root regeneration. Root pruning should only be performed by a Certified Arborist in accordance with generally recognized standards and principles within the field of Arboriculture. *Air-Spade/dry-vac technologies provide two of the least invasive methods for root zone excavation, and shall be performed under the supervision of a Certified Arborist.*

General Methodology (other than air spade/dry-vac)

Under the direction of a Certified Consulting Arborist and using hand and/or mechanical excavation techniques, the soil shall be carefully removed starting approximately 4-6m (where feasible) from the tree's base perpendicular to the edge of the proposed building foundation area. Digging in a line parallel to the roots rather than across them should minimize cracking of any large roots near the tree's base. The soil shall be removed in shallow layers to minimize the potential for striking any large roots that may have been close to the soil surface.

■ **Tree #24: White Pine (subject sites)**

A Certified Consulting Arborist shall be on-site during hand digging (no heavy equipment) of both the proposed landscaped walls and pathway foundation excavations within the minimum 4.8m TPZ for Tree #23 to determine the size and quantity of roots that could be affected. Please refer to Pages 7-8 of this report for further information.

Irrigation

An irrigation plan for preserved trees should be designed and implemented with the assistance of a Certified Consulting Arborist. The amount and frequency of irrigation will depend on factors such as soil type, local and seasonal precipitation patterns, duration of droughts, and the amount of construction activity near specific trees.

The top 30cm of soil in a tree's root zone should be kept moist without being saturated. Infrequent deep watering produces trees with deeper roots, while frequent shallow watering produces shallow-rooted trees. *When combined with soil aeration improvement techniques such as vertical mulching, drill holes, and radial trenching, an adequate but not excessive supply of moisture to a tree's root zone can be an effective and efficient way to help alleviate construction injury.*

Preserved trees should be monitored at regular intervals by a Certified Consulting Arborist for signs of drought stress or excess irrigation.

- **An irrigation plan will be developed upon determination of tree injury levels after completion of any required root pruning.**



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Root Zone Aeration Improvements

Aeration improvement techniques such as drill holes, vertical mulching, soil fracturing, and radial trenching have the ability to reduce various degrees of soil compaction by increasing the amount of soil macro and micropores. Any form of root zone aeration improvement should be performed post-construction and under the supervision of a Certified Consulting Arborist to help remediate soil compaction caused by construction activity near preserved trees.

- **There are no root zone aeration improvements required on this site at this time.**

Transplanting

Transplanting of larger caliper trees, through either hand digging or tree spade, allows for relocation and retention of desirable trees that might have otherwise been removed due to conflict with the proposed property construction design. Trees should be tree-spaded out by a reputable operator, and are best transplanted during dormancy in late autumn. No construction activity should take place near re-located trees either before or after transplantation.

Any transplanted trees should be fertilized using a complete fertilizer with a preferred nitrogen/phosphorus/potassium ratio of 1-2-2, with the Nitrogen component in slow release form. A 10 cm layer of composted wood mulch should be applied to the root zone, and the tree should receive regular irrigation for a period of at least one year. The tree may also require staking for a period of 1 year to provide stability while it re-establishes its root system.

- **There are no trees recommended for transplanting on this site.**



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Tree Preservation Plan

The following Tree Preservation Plan shall be implemented prior to any on-site construction activity.

Hoarding

Hoarding is used to define the **Tree Protection Zone (TPZ)**, which protects a tree's root zone, trunk, and branches from injury during both construction and landscaping phases of the project. Hoarding shall be installed prior to any construction activity, and remain intact until construction and landscaping is completed. **No** TPZ shall be used for the temporary storage of building materials, storage or washing of equipment, or the dumping of construction debris, excess fill, or topsoil.

As required by the City of Mississauga, hoarding shall be constructed of 4x8 plywood sheets using 2x4 top and bottom rail construction supported by 4x4 wooden posts. A TPZ may be constructed of orange safety fencing using 2x4 top and bottom rail construction and supported by t-bar supports when protecting street trees where site line obstruction is a concern. TPZ signage shall be posted in visible locations on the TPZ hoarding. T-bar supports for solid hoarding will only be allowed through pre-approval from the City of Mississauga's Development and Design Department. The project architect shall update the most current site plan/grading plan to include all existing trees properly plotted and numbered and all TPZ hoarding locations clearly indicated and to scale.

NOTE: A tree's root system extends 2-3 times beyond the edge of the canopy/dripline. As Tree Protection Zone (TPZ) hoarding protects only that portion of the root system governed by municipal regulations, most trees on urban residential properties may sustain a degree of injury (including but not limited to root severance, soil compaction and disturbance) during proposed construction activities.

Hoarding Installation

A diagram of the proposed hoarding plan for this site can be found in Appendix A on Page 23 of this report. The recommended radial distances from the trunk for installation of TPZ hoarding are listed in Appendix B starting on Page 24 of this report, and the hoarding shall be installed using the following guidelines:

- 1) All TPZ hoarding shall be placed at the recommended radial distance from the base of all trees to be protected or up to all existing and/or proposed hard surfaces to allow for construction.
- 2) Any large numbers of trees that can be grouped together in a closed box or continuous line system for protection shall have their TPZ hoarding placed at the recommended radial distance from the base of all of the largest peripheral trees of the system, or up to all existing and/or proposed hard surfaces to allow for construction.
- 3) Encroachment within a tree's TPZ will require a special permit from the City of Mississauga and/or on-site supervision by a Certified Consulting Arborist during any proposed excavation activities for root pruning and assessment.



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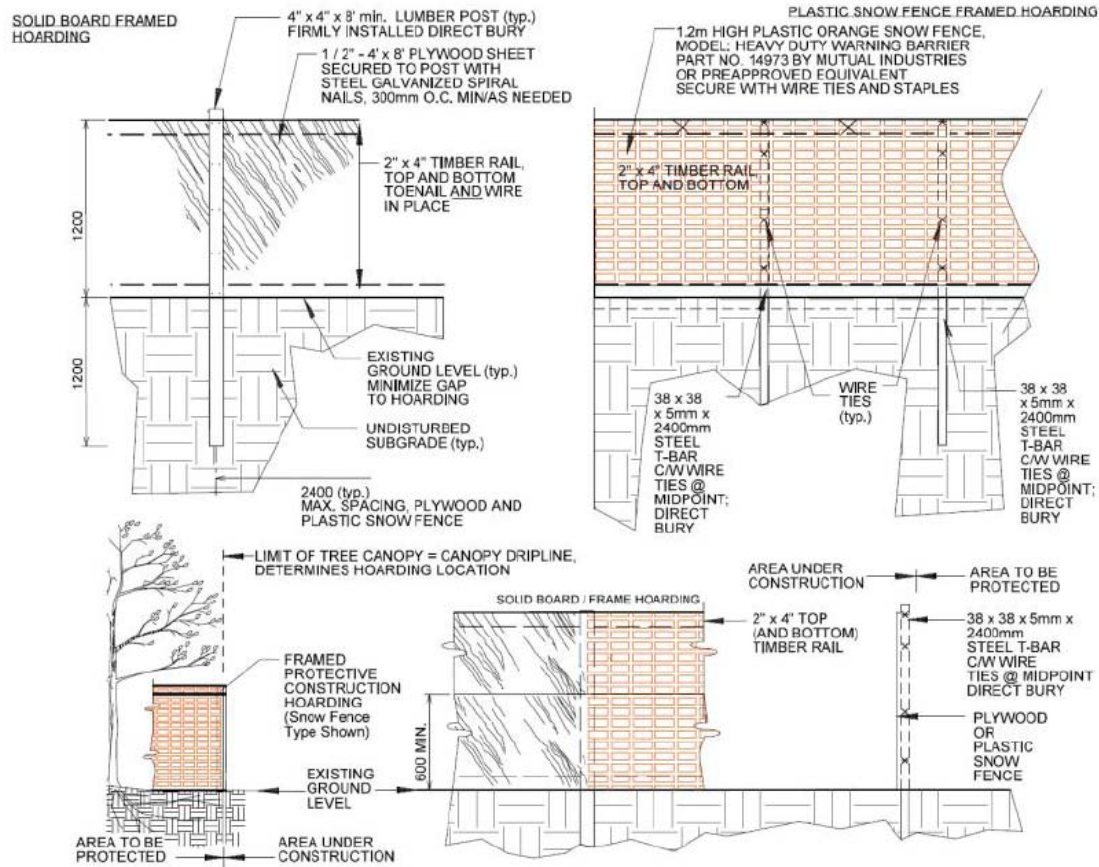
City of Mississauga TPZ Hoarding Specifications

The diagram below provides the City of Mississauga's standards for Tree Protection Zone (T.P.Z) hoarding.

02830-6

Hoarding Framed Protective Construction Hoarding Solid Board- Plastic Snow Fence

NOTE:
TO BE USED AS A GUIDELINE ONLY. NOT TO SCALE. REMOVE CITY TITLE BLOCK AND REDRAW TO REPRESENT SITE SPECIFIC CONDITIONS. ALL SITE SPECIFIC CONDITIONS ARE TO BE CONFIRMED BY THE PROJECT CONSULTANT.



- NOTES**
1. HOARDING LOCATION AS PER DRAWINGS, HOARDING INSTALLATIONS ARE TO INCLUDE WOVEN GEOTEXTILE FABRIC FOR SEDIMENT CONTROL.
 2. NO MOBILIZATION OR CONSTRUCTION WORK TO OCCUR UNTIL HOARDING HAS BEEN INSPECTED AND APPROVED BY COMMUNITY SERVICES PROJECT MANAGER (CSPM). CONTRACTOR TO ARRANGE FOR A HOARDING INSPECTION WITH (CSPM), 48 HOUR NOTICE REQUIRED.
 3. HOARDING TO BE SUPPLIED, INSTALLED AND MAINTAINED BY THE CONTRACTOR THROUGH ALL PHASES OF WORK ON SITE.
 4. THE CONTRACTOR IS TO REMOVE AND DISPOSE THE HOARDING OFF SITE WHEN DIRECTED BY THE (CSPM).
 5. ALL WOOD PRODUCTS TO BE NEW AND LUMBER KILN DRIED SPF.
 6. ALL FASTENERS TO BE NEW GALVANIZED STEEL AND SECURELY INSTALLED. WIRE TIES MIN 3.5mm DIA. GALVANIZED STEEL.
 7. DO NOT ALLOW WATER TO COLLECT AND/OR POND ON EITHER SIDE OF THE HOARDING.
 8. WHEN INSTALLING DIRECT BURY TIMBER POSTS AND T-BARS, TAKE CARE TO AVOID VISIBLE AND ASCERTAINABLE TREE ROOTS.
 9. PLACE HOARDING AT LIMIT OF TREE CANOPY DRIP LINE OR BEYOND (E.G. FURTHER AWAY FROM TRUNK) OF TREE.
 10. HOARDED OFF AREA TO REMAIN UNDISTURBED. NO STOCKPILING, STAGING OR MOVEMENT OF VEHICLES TO OCCUR WITHIN PROTECTED AREA.
 11. FOR PROTECTION OF TREE'S AND ROOT SYSTEM, CONTRACTOR MAY BE REQUIRED TO PROVIDE WATERING, MULCHING, FERTILIZING, PRUNING OR OTHER ACTIVITIES TO ENSURE THE HEALTH OF THE TREE(S).
 12. ALL MEASUREMENTS IN MILLIMETRES UNLESS NOTED OTHERWISE (E.G. DIMENSIONAL LUMBER).
 13. CONTRACTOR RESPONSIBLE FOR LOCATES

N.T.S.

Detail: 02830-6

ORIGINAL DATE: Mar 08/18
REVISION DATE: Mar 08/18





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Activity Allowed Within Tree Protection Zones (TPZ):

It is to be understood that any type of activity within a Tree Protection Zone has an inherent risk of causing damage to the subject tree. Mississauga Forestry advises that any form of activity be avoided at all costs but fully understands that there may be a need to do so. Any activity within the Tree Protection Zone must be pre-approved by Mississauga Forestry. Below are some of the activities that Mississauga Forestry recognizes as acceptable practices of working within Tree Protection Zones if done appropriately. All other activities are to be avoided unless pre-approved by Mississauga Forestry.

Approved Types of Activities within a TPZ: (permit required prior to any works)

- Excavation
 - ◆ Root Exploration/Root Pruning
 - ◆ Foundation/Basement Construction
 - ◆ Utility Relocation/Repair
 - ◆ Directional Boring – minimum 1.2m Depth
- Hand Digging
 - ◆ No Mechanical advantage such as excavator, backhoe, or skid steers
- Air Assist Machinery
 - ◆ Air Spade/Air Knife using 185 cfm portable air compressor
 - ◆ Air vacuum unit
- Site Accessibility
 - ◆ Temporary Road/Entrance
 - ◆ Construction Worker Access
 - ◆ Material Delivery
- Hydro Vac
 - ◆ Maximum water psi of 500 or less
 - ◆ Oscillating nozzle
- Root Pruning
 - ◆ Any exposed roots which are frayed or damaged shall be pruned in accordance with good arboriculture practices
 - ◆ Prolonged exposed roots shall be kept moist and covered with mulch or moistened burlap
- Directional Boring / Micro Tunnelling
 - ◆ All efforts should be made to route all underground utilities around the TPZ; if this cannot be achieved, utilities should be bored or tunnelled with a minimum depth of 1.2m under the TPZ. Boring/tunnels should not go directly beneath the trunk; instead the boring/tunnels should be offset based on the tree diameter

Excavation within a TPZ: (permit required prior to any works)

When excavation is necessary within Tree Protection Zone proper care must be taken when performing such activities. Excavation methods must be pre-approved and documented with the City of Mississauga Forestry. The following methods are acceptable and must be either conducted or supervised by a Certified Arborist during the activity.

Whenever work is required within the Tree Protection Zone an arborist must be present and either performing or supervising the work at hand. Below are the qualifications required to be recognized as a competent arborist by Mississauga Forestry.

- Have a current certification in good standing from the International Society of Arboriculture, Certified Arborist or Board Certified Master Arborist; or,
- Have completed an apprenticeship in Arboriculture and completed the required hours/written exam to be a Qualified Arborist in the eyes of the Ontario Provincial Government; or,
- Have completed the qualifications and are a Registered Professional Forester (RPF); or,
- Have the verifiable skills and experience to perform or supervise said work within the Tree Protection Zone.

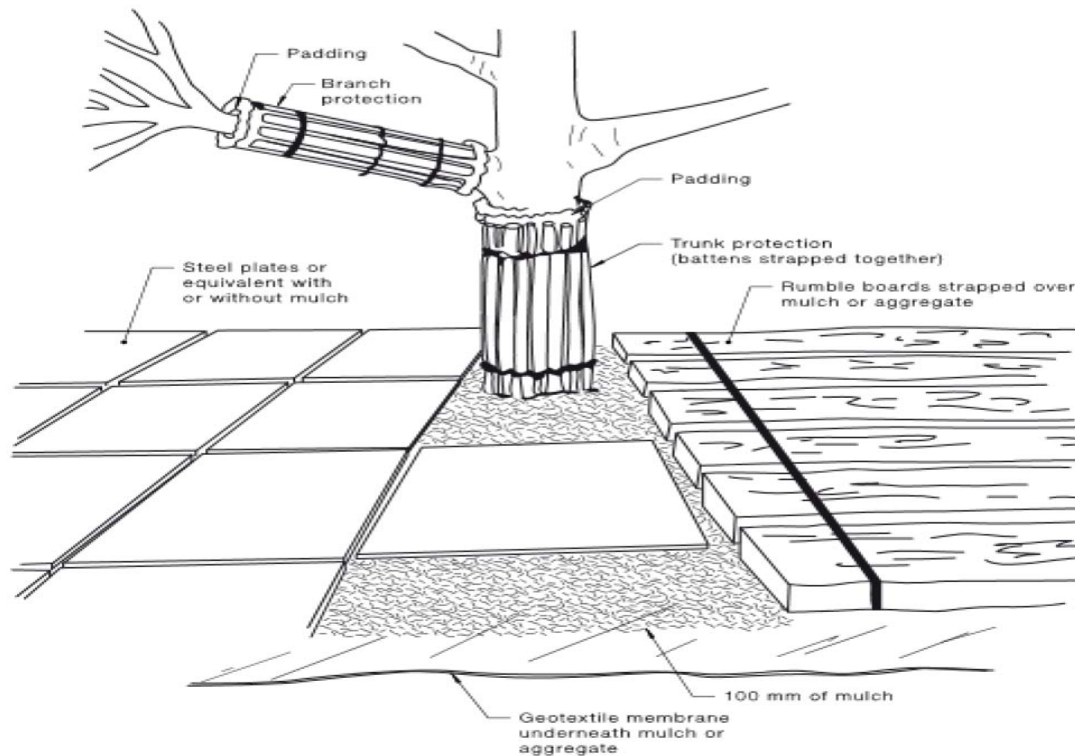


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Horizontal Hoarding / Soil Compaction Alleviation:

When site accessibility is necessary within or through Tree Protection Zone proper care must be taken when performing such activities. Site accessibility methods must be pre-approved and documented with Mississauga Forestry. The following methods are acceptable but must be recommended by a Certified Arborist and documented within the Tree Preservation Report and Plan. Mitigating measures such as horizontal hoarding/compaction alleviation measures must be under taken when such activities occur within the Tree Protection Zone. Below are some approved mitigating options for working within Tree Protection Zone.

- Multiple Layered Approach
 - ◆ Bottom Layer must consist of a pre-approved synthetic geotextile material
 - ◆ Middle Layer must consist of 8 – 12 inches of coarse wood chips
 - ◆ Top Layer must consist of ¾ inch hard wood plywood
- Two Layer Approach
 - ◆ Bottom Layer must consist of ¾ inch hard wood plywood laid in one direction of orientation
 - ◆ Top Layer must consist of ¾ inch hard wood plywood laid in opposite direction of orientation
 - ◆ Both layers must then be screwed together at 12 inch spacing
- Steel Plate
 - ◆ ¾ inch steel plate smooth finish on ground side no checker plate on ground side





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Tree Preservation Plan Summary

I.) Pre-Construction Phase

- It is recommended that an on-site meeting take place with the project Certified Consulting Arborist, a representative from the City of Mississauga's Urban Forestry Department, the property owner(s), and any Architects, Engineers, and contractors involved with the project to discuss the Tree Preservation Plan.
- Complete all Tree Care Recommendations, including pruning and any required tree removals.
- Install Tree Protection Zone (TPZ) hoarding as required.
- Where required, apply composted wood mulch to tree root zones within the TPZ hoarding, and apply fresh wood mulch over steel plates and/or plywood to any high-traffic areas immediately adjacent to the TPZ hoarding to help reduce soil compaction.
- If permitted by the City of Mississauga, root-prune any preserved trees adjacent to excavation areas prior to construction under the supervision of a Certified Consulting Arborist.
- Establish an irrigation plan with the assistance of a Certified Consulting Arborist.

II.) Construction Phase

- Maintain and respect TPZ hoarding throughout the construction phase. Do not store or dump materials in this area.
- Continue irrigation plan as directed by a Certified Consulting Arborist.
- If permitted by the City of Mississauga, prune any roots exposed during excavation under the supervision of a Certified Consulting Arborist.
- On-going monitoring by a Certified Consulting Arborist to evaluate construction injury/stress and make recommendations.

III.) Post-Construction Phase

- Remove hoarding only after permission from the City of Mississauga.
- Continue irrigation program as directed by a Certified Consulting Arborist.
- Supplemental fertilizer needs assessment by a Certified Consulting Arborist.
- Post-construction monitoring of all trees by a Certified Consulting Arborist.

NOTE:

Post-Construction Monitoring

Construction injury may take several years to become apparent. All preserved trees should be inspected by a Certified Consulting Arborist on a semi-annual basis for a period of up to 2 years to pro-actively address any tree health related issues as they occur.



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ASSUMPTIONS AND LIMITING CONDITIONS

Any legal description provided to the consultant/appraiser is assumed to be correct. Any titles and ownerships to any property are assumed to be good and marketable. No responsibility is assumed for matters legal in character. Any and all property is appraised or evaluated as though free and clear, under responsible ownership and competent management. It is assumed that any property is not in violation of any applicable codes, ordinances, statutes, by-laws, or other governmental regulations.

Care has been taken to obtain all information from reliable sources, and all data has been verified insofar as possible. The consultant/appraiser can neither guarantee nor be responsible for the accuracy of information provided by others.

The consultant/appraiser shall not be required to give testimony or to attend court by reason of this report unless subsequent contractual arrangements are made, including payment of an additional fee for such services as described in the fee schedule and contract of engagement.

Loss or alteration of any part of this report invalidates the entire report.

Possession of this report or a copy thereof does not imply right of publication or use for any purpose by anyone other than the person to whom it is addressed without the prior expressed written or verbal consent of the consultant/appraiser.

Neither all nor any part of the contents of this report, nor any copy thereof, shall be conveyed by anyone, including the client, to the public through advertising, public relations, news, sales or other media without the prior expressed written or verbal consent of the consultant/appraiser particularly as to value conclusions, identity of the consultant/appraiser, or any reference to any professional society, institute, or any initialed designation conferred upon the consultant/appraiser as stated in his/her qualification.

This report and the values expressed herein represent the opinion of the consultant/appraiser, and the consultant/appraiser's fee is in no way contingent upon the reporting of a specified value, a stipulated result, the occurrence of a subsequent event, nor upon any finding to be reported.

Sketches, diagrams, graphs, and photographs in this report, being intended as visual aids, are not necessarily to scale and should not be construed as either engineering or architectural reports or surveys.

Unless expressed otherwise: 1) Information contained in this report covers only those items that were examined and reflections the condition of those items at the time of inspection, and 2) the inspection is limited to visual examination of accessible items without dissection, excavation, probing, or coring. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the plants or property in question may not arise in the future.




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CERTIFICATE OF PERFORMANCE

I, Tom Bradley, certify that:

- I have personally inspected the tree(s) and/or the property referred to in this report, and have stated my findings accurately. The extent of any evaluation or appraisal is stated in the attached report and the Limits of Assignment.
- I have no current or prospective interest in the vegetation of the property that is the subject of this report, and have no personal interest or bias with respect to the parties involved.
- The analysis, opinions and conclusions stated herein are my own, and are based on current scientific procedures and facts.
- My compensation is not contingent upon the reporting of a pre-determined conclusion that favours the cause of the client or any other party, or upon the results of the assessment, the attainment of stipulated results, or the occurrence of any subsequent events.
- My analysis, opinions and conclusions were developed and this report has been prepared according to commonly accepted arboricultural practices.
- No one provided significant professional assistance to the consultant, except as indicated within the report.

I further certify that I am a Registered Consulting Arborist through the *American Society of Consulting Arborists (A.S.C.A)*, and both a Certified Arborist and Certified Tree Risk Assessor with the *International Society of Arboriculture (I.S.A)*. I have been involved in the fields of Arboriculture and Horticulture in a full-time capacity for a period of more than 20 years.

Signed: 

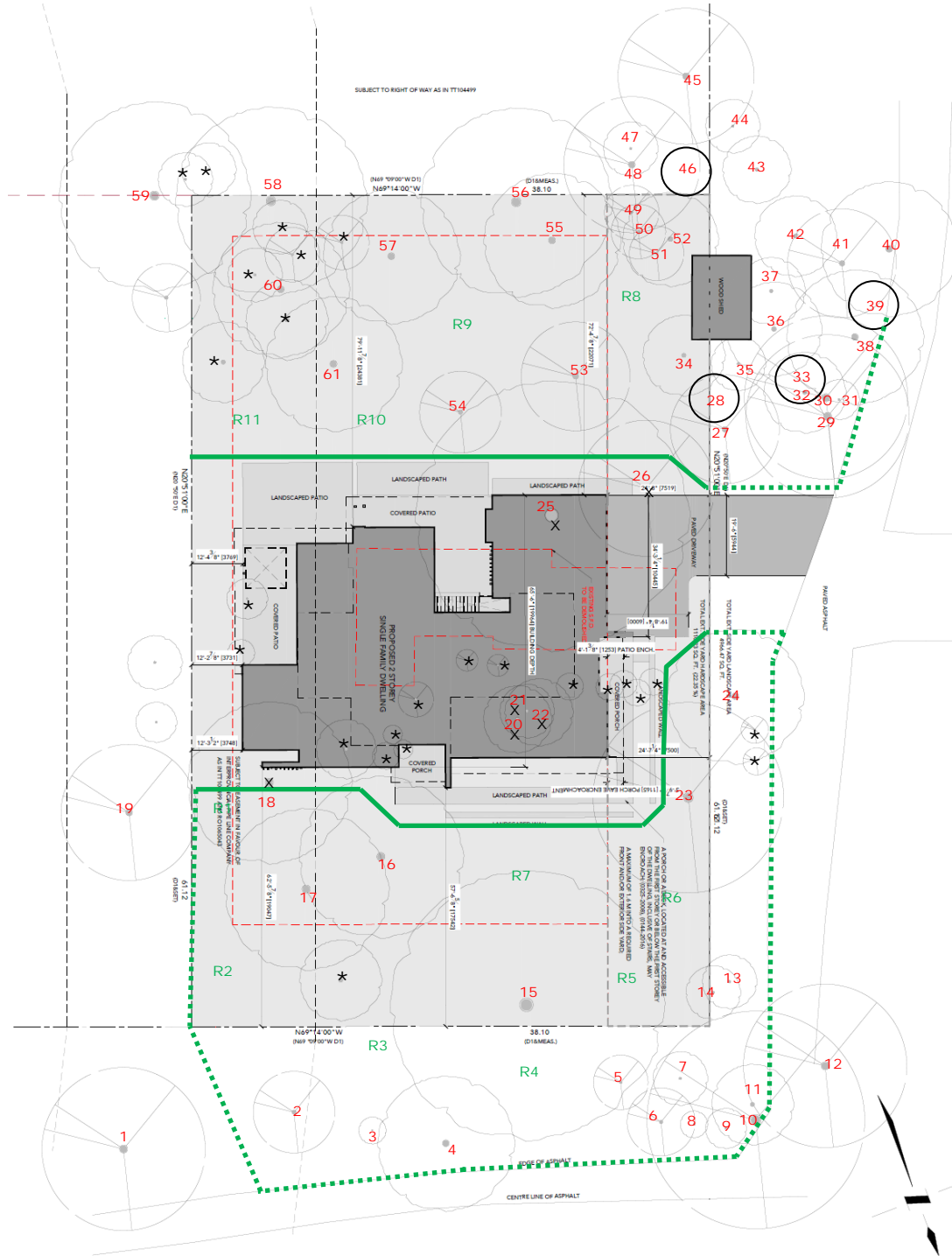
Date: December 11, 2023



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Appendix A: Proposed Site Plan – 954 Tennyson Ave., Mississauga (Lorne Park Estates)

Note: The locations of Trees #28, 33, 39 and 46 are approximations. The proposed Tree Protection Zone (TPZ) hoarding is shown as green lines and shall be drawn to scale on the site/grading plan by the project architect. Rx denotes eleven (11) replacement trees and their approximate proposed locations. The symbol * denotes shrub form and/or tree below 15cm DBH.



Legend:

Solid Hoarding
(Water and sanitary services to be determined)



Framed Hoarding





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Appendix B: Tree Survey – 954 Tennyson Ave., Mississauga (Lorne Park Estates)

* denotes estimated DBH due to restricted site access/private property

I.D #	Owner	Tree Species Common Name	Tree Species Botanical Name	DBH (cm)	Height (m)	Canopy (m)	Tree Health	Structural Condition	Comments	Minimum TPZ and action
1	Lorne Park Estates	White Pine	<i>Pinus strobus</i>	70*	30	16	Good	Good	Small-caliper deadwood in canopy; branch canopy above 6m; neighbour's driveway on west side of stem	Preserve: TPZ = 4.2m
2	Lorne Park Estates	White Pine	<i>Pinus strobus</i>	26	13	8	Good	Fair	Small-caliper deadwood in canopy; large aspect ratio co-dominant stems with included bark union 5m from tree base; branch canopy above 2m	Preserve: TPZ = 1.8m
3	Lorne Park Estates	White Oak	<i>Quercus alba</i>	62	23	16	Good	Good	Small-caliper deadwood in canopy; branch canopy above 3m on south side and 10m on north side	Preserve: TPZ = 4.2m
4	Lorne Park Estates	White Oak	<i>Quercus alba</i>	61	23	11	Good	Fair	Small-caliper deadwood in canopy; large aspect ratio co-dominant stems with included bark union 15m from tree base; branch canopy above union	Preserve: TPZ = 4.2m
5	Lorne Park Estates	White Pine	<i>Pinus strobus</i>	22	11	8	Good	Fair	Small-caliper deadwood in canopy; large aspect ratio co-dominant stems with wide included bark union 4m from tree base	Preserve: TPZ = 1.8m
6	Lorne Park Estates	White Pine	<i>Pinus strobus</i>	22	14	7	Good	Good	Small-caliper deadwood in canopy; branch canopy above 1.5m	Preserve: TPZ = 1.8m
7	Lorne Park Estates	Mountain Ash	<i>Sorbus aucuparia</i>	11	9	4	Good	Good	Small-caliper deadwood in canopy; branch canopy above 2m and shaded and reduced on west and east sides	Preserve: TPZ = 1.5m
8	Lorne Park Estates	Black Cherry	<i>Prunus serotina</i>	13	13	4	Good	Good	Small-caliper deadwood in canopy; branch canopy above 2m and shaded and reduced on west and east sides	Preserve: TPZ = 1.5m
9	Lorne Park Estates	Slippery Elm	<i>Ulmus rubra</i>	19	14	4	Good	Fair	Small-caliper deadwood in canopy; branch canopy above 2.5m and shaded and reduced on east side	Preserve: TPZ = 1.5m
10	Lorne Park Estates	White Pine	<i>Pinus strobus</i>	78	30	14	Good	Good	Small-caliper deadwood in canopy; branch canopy above 14m with road at west base	Preserve: TPZ = 4.8m



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I.D #	Owner	Tree Species Common Name	Tree Species Botanical Name	DBH (cm)	Height (m)	Canopy (m)	Tree Health	Structural Condition	Comments	Minimum TPZ and action
11	Lorne Park Estates	Mulberry	<i>Morus alba</i>	13	9	8	Good	Fair	Small-caliper deadwood in canopy; large aspect ratio co-dominant stems with included bark union 5m from tree base; branch canopy above 4m; road at west base	Preserve: TPZ = 1.5m
12	Lorne Park Estates	White Pine	<i>Pinus strobus</i>	66	28	10	Good	Good	Small-caliper deadwood in canopy; branch canopy above 5m; stem wounds on east side at 1-3m; road at east base	Preserve: TPZ = 4.2m
13	Lorne Park Estates	Paper Birch	<i>Betula papyrifera</i>	27	18	7	Good	Good	Small-caliper deadwood in canopy; branch canopy above 4m and shaded and reduced on east side	Preserve: TPZ = 1.8m
14	Lorne Park Estates	Black Cherry	<i>Prunus serotina</i>	19	14	6	Good	Fair	Small-caliper deadwood in canopy; large aspect ratio co-dominant stems with narrow included bark union 6m from tree base; branch canopy above 12m and shaded/reduced on west side	Preserve: TPZ = 1.8m
15	Subject Site	White Oak	<i>Quercus alba</i>	101	30	18	Good	Fair	Large-caliper deadwood in canopy; large aspect ratio co-dominant stems with included bark union 18m from tree base; branch canopy above 8m	Preserve: TPZ = 6.0m
16	Subject Site	Red Maple	<i>Acer rubrum</i>	47	20	14	Good	Fair	Small-caliper deadwood in canopy; large aspect ratio co-dominant stems with narrow included bark union 10m from tree base; branch canopy above 5m and shaded/reduced on east side; approx. 10 degree stem curve west above included bark union	Preserve: TPZ = 3.0m
17	Subject Site	White Oak	<i>Quercus alba</i>	61	28	11	Good	Good	Small-caliper deadwood in canopy; branch canopy above 8m	Preserve: TPZ = 4.2m
18	Subject Site	White Oak	<i>Quercus alba</i>	59	24	10	Good	Good	Small-caliper deadwood in canopy; branch canopy above 8m	Remove: Proposed site plan in conflict with the tree
19	Neighbour	White Pine	<i>Pinus strobus</i>	65*	30	12	Good	Good	Small-caliper deadwood in canopy; branch canopy above 14m	Preserve: TPZ = 4.2m
20	Subject Site	Tree Hydrangea	<i>Hydrangea arborescens</i>	7, 8, 8, 9, 9, 9 (21)	4	8	Good	Good	Small-caliper deadwood in canopy; multi-stem form with branch canopy clearance pruned 1.8m from tree base	Remove: Proposed site plan in conflict with the tree



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I.D #	Owner	Tree Species Common Name	Tree Species Botanical Name	DBH (cm)	Height (m)	Canopy (m)	Tree Health	Structural Condition	Comments	Minimum TPZ and action
21	Subject Site	Tree Hydrangea	<i>Hydrangea arborescens</i>	7, 7, 12 (16)	4	7	Good	Good	Small-caliper deadwood in canopy; multi-stem form with branch canopy clearance pruned 1.8m from tree base	Remove: Proposed site plan in conflict with the tree
22	Subject Site	Tree Hydrangea	<i>Hydrangea arborescens</i>	9, 12 (15)	4	6	Good	Good	Small-caliper deadwood in canopy; multi-stem form with branch canopy clearance pruned 1.8m from tree base	Remove: Proposed site plan in conflict with the tree
23	Subject Site	White Pine	<i>Pinus strobus</i>	79	25	9	Good	Good	Small-caliper deadwood in canopy; branch canopy above 8m with roadway 2m from west tree base	Preserve: TPZ = 4.8m
24	Subject Site	Flowering Crabapple	<i>Malus spp.</i>	34	6	9	Good	Fair	Small-caliper deadwood in canopy; large aspect ratio co-dominant stems with narrow included bark union 1.5m from tree base; branch canopy above union at 2m	Preserve: TPZ = 2.4m
25	Subject Site	Red Oak	<i>Quercus rubra</i>	95	30	20	Good	Fair	Small-caliper deadwood in canopy; large aspect ratio co-dominant stems with included bark union 14m from tree base; branch canopy above union	Remove: Proposed site plan in conflict with the tree
26	Subject Site	White Pine	<i>Pinus strobus</i>	55	28	8	Good	Good	Small-caliper deadwood in canopy; branch canopy above 10m	Remove: Proposed site plan in conflict with the tree
27	Lorne Park Estates	Red Oak	<i>Quercus rubra</i>	29	19	7	Good	Good	Small-caliper deadwood in canopy; branch canopy shaded/reduced on south side	Preserve: TPZ = 1.8m
28	Lorne Park Estates	Yew	<i>Taxus spp.</i>	17	6	8	Good	Good	Small-caliper deadwood in canopy	Preserve: TPZ = 1.5m
29	Lorne Park Estates	White Pine	<i>Pinus strobus</i>	67	30	12	Good	Good	Small-caliper deadwood in canopy; branch canopy above 16m and roadway at west stem base	Preserve: TPZ = 4.2m
30	Lorne Park Estates	White Pine	<i>Pinus strobus</i>	68	30	10	Good	Fair	Small-caliper deadwood in canopy; branch canopy above 16; approx. 10 degree stem lean south	Preserve: TPZ = 4.2m
31	Lorne Park Estates	Norway Maple	<i>Acer platanoides</i>	15	8	5	Good	Good	Small-caliper deadwood in canopy; branch canopy above 2m and roadway at west tree base	Preserve: TPZ = 1.5m



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I.D #	Owner	Tree Species Common Name	Tree Species Botanical Name	DBH (cm)	Height (m)	Canopy (m)	Tree Health	Structural Condition	Comments	Minimum TPZ and action
32	Lorne Park Estates	Red Maple	<i>Acer rubrum</i>	9, 11, 14, 31 (36)	17	10	Good	Fair	Small-caliper deadwood in canopy; small aspect ratio co-dominant stems (3 on north side of stem) with included bark unions at tree base; branch canopy shaded/reduced on south side	Preserve: TPZ = 2.4m
33	Lorne Park Estates	Black Cherry	<i>Prunus serotina</i>	26	18	3	Good	Good	Small-caliper deadwood in canopy; branch canopy 4m from tree apex and shaded/reduced on all sides	Preserve: TPZ = 1.8m
34	Subject Site	Red Oak	<i>Quercus rubra</i>	37	24	12	Good	Good	Small-caliper deadwood in canopy; large aspect ratio co-dominant stems with included bark union 8m from tree base; branch canopy shaded and reduced on west side; shed at south tree base	Preserve: TPZ = 2.4m
35	Lorne Park Estates	Black Cherry	<i>Prunus serotina</i>	44	24	10	Good	Fair	Small-caliper deadwood in canopy; large aspect ratio co-dominant stems with included bark union 14m from tree base; branch canopy above union; shed at south tree base	Preserve: TPZ = 3.0m
36	Lorne Park Estates	Red Oak	<i>Quercus rubra</i>	41	28	12	Good	Fair	Small-caliper deadwood in canopy; large aspect ratio co-dominant stems with included bark union 16m from tree base; branch canopy above union; shed at east tree base	Preserve: TPZ = 3.0m
37	Lorne Park Estates	Sugar Maple	<i>Acer saccharum</i>	32	20	10	Good	Good	Small-caliper deadwood in canopy; branch canopy above 4m; shed at west tree base	Preserve: TPZ = 2.4m
38	Lorne Park Estates	Red Oak	<i>Quercus rubra</i>	60	26	10	Good	Fair	Small-caliper deadwood in canopy; approx. 20 degree stem lean to the northwest above 4m	Preserve: TPZ = 3.6m
39	Lorne Park Estates	Red Pine	<i>Pinus resinosa</i>	42	26	5	Good	Good	Small-caliper deadwood in canopy; branch canopy above 20m	Preserve: TPZ = 3.0m



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I.D #	Owner	Tree Species Common Name	Tree Species Botanical Name	DBH (cm)	Height (m)	Canopy (m)	Tree Health	Structural Condition	Comments	Minimum TPZ and action
40	Lorne Park Estates	Red Maple	<i>Acer rubrum</i>	49	21	8	Good	Poor	Small-caliper deadwood in canopy; stem cavity at 6-10m on southeast side of stem with response growth on west, east and south sides; roadway at east tree base	Preserve: TPZ = 3.0m Level III Inspection to determine structural stability
41	Lorne Park Estates	White Pine	<i>Pinus strobus</i>	54	26	7	Good	Fair	Small-caliper deadwood in canopy; branch canopy above 20m; windswept canopy north to southeast	Preserve: TPZ = 3.6m
42	Lorne Park Estates	Blue Beech	<i>Carpinus caroliniana</i>	34	14	7	Fair	Fair	Small-caliper deadwood in canopy; branch canopy above 3m; dead top	Preserve: TPZ = 2.4m
43	Lorne Park Estates	Yellow Birch	<i>Betula lenta</i>	32	20	9	Good	Good	Small-caliper deadwood in canopy; branch canopy above 6m	Preserve: TPZ = 2.4m
44	Lorne Park Estates	Black Cherry	<i>Prunus serotina</i>	14	10	6	Good	Fair	Small-caliper deadwood in canopy; large aspect ratio co-dominant stems with included bark union 5m from tree base; branch canopy above 4m	Preserve: TPZ = 1.5m
45	Lorne Park Estates	White Pine	<i>Pinus strobus</i>	67	30	11	Good	Good	Small-caliper deadwood in canopy; branch canopy above 15m	Preserve: TPZ = 4.2m
46	Lorne Park Estates	Eastern Hemlock	<i>Tsuga canadensis</i>	35	14	10	Good	Good	Small-caliper deadwood in canopy; branch canopy above 3m	Preserve: TPZ = 2.4m
47	Lorne Park Estates	Black Cherry	<i>Prunus serotina</i>	21	14	6	Good	Good	Small-caliper deadwood in canopy; branch canopy above 3m and shaded and reduced on north side	Preserve: TPZ = 1.8m
48	Lorne Park Estates	White Pine	<i>Pinus strobus</i>	55	26	10	Good	Good	Small-caliper deadwood in canopy; branch canopy above 16m	Preserve: TPZ = 3.6m
49	Subject Site	White Pine	<i>Pinus strobus</i>	11	8	5	Good	Good	Small-caliper deadwood in canopy; branch canopy shaded/reduced on southwest side	Preserve: TPZ = 1.5m
50	Subject Site	White Pine	<i>Pinus strobus</i>	16	12	5	Good	Good	Small-caliper deadwood in canopy; branch canopy shaded/reduced on west side; <u>below 15cm DBH</u>	Preserve: TPZ = 1.5m
51	Subject Site	Yew	<i>Taxus spp.</i>	11	6	5	Good	Good	Small-caliper deadwood in canopy; branch canopy shaded/reduced on south side; <u>below 15cm DBH</u>	Preserve: TPZ = 1.5m



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I.D #	Owner	Tree Species Common Name	Tree Species Botanical Name	DBH (cm)	Height (m)	Canopy (m)	Tree Health	Structural Condition	Comments	Minimum TPZ and action
52	Subject Site	Red Maple	<i>Acer rubrum</i>	43	24	9	Good	Fair	Small-caliper deadwood in canopy; large aspect ratio co-dominant stems with included bark union 14m from tree base; branch canopy above 10m	Preserve: TPZ = 3.0m
53	Subject Site	White Pine	<i>Pinus strobus</i>	39	21	6	Good	Good	Small-caliper deadwood in canopy; branch canopy above 10m	Preserve: TPZ = 2.4m
54	Subject Site	White Pine	<i>Pinus strobus</i>	29	16	8	Good	Good	Small-caliper deadwood in canopy; branch canopy shaded/reduced on south, east and west sides; canopy to tree base	Preserve: TPZ = 1.8m
55	Subject Site	Black Cherry	<i>Prunus serotina</i>	51	28	12	Good	Fair	Small-caliper deadwood in canopy; large aspect ratio co-dominant stems with included bark union 16m from tree base	Preserve: TPZ = 3.6m
56	Subject Site	Red Oak	<i>Quercus rubra</i>	72	28	15	Good	Fair	Small-caliper deadwood in canopy; large aspect ratio co-dominant stems with included bark union 16m from tree base; branch canopy above union	Preserve: TPZ = 4.8m
57	Subject Site	Red Oak	<i>Quercus rubra</i>	58	23	9	Good	Good	Small-caliper deadwood in canopy; branch canopy above 10m	Preserve: TPZ = 3.6m
58	Subject Site	Red Oak	<i>Quercus rubra</i>	70	27	14	Good	Good	Small-caliper deadwood in canopy; branch canopy above 8m	Preserve: TPZ = 4.8m
59	Neighbour	Red Oak	<i>Quercus rubra</i>	80*	28	14	Good	Good	Small-caliper deadwood in canopy; branch canopy above 14m	Preserve: TPZ = 4.8m
60	Subject Site	Black Cherry	<i>Prunus serotina</i>	58	25	9	Good	Fair	Small-caliper deadwood in canopy; large aspect ratio co-dominant stems with included bark union 18m from tree base; branch canopy above 8m and shaded/reduced on south and west sides	Preserve: TPZ = 3.6m
61	Subject Site	Red Oak	<i>Quercus rubra</i>	59	21	9	Good	Good	Small-caliper deadwood in canopy; large aspect ratio co-dominant stems with included bark union 13m from tree base; branch canopy above 5m from tree base and shaded/reduced on south side	Preserve: TPZ = 3.6m



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Appendix C: Site Photos – 954 Tennyson Avenue, Mississauga (LP Estates)



Photo #3 (Tree #18 – White Oak – 59cm DBH – proposed for removal)



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Appendix C: Site Photos – 954 Tennyson Avenue, Mississauga (LP Estates) (cont.)



Photo #3 (Trees #20, 21 and 22 – 21, 16 and 15cm DBH respectively – proposed for removal)



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Appendix C: Site Photos – 954 Tennyson Avenue, Mississauga (LP Estates) (cont.)



Photo #5 (Tree #25 – White Oak – 59cm DBH) and Tree #26 (White Pine – 55cm DBH)
▪ **proposed for removal**