



Tree Inventory, Arborist Report, Tree Protection Plan

2476 & 2482 Confederation Parkway
Mississauga, Ontario
TPB188171 Preeminent Developments Inc.

Prepared for:

Preeminent Developments Inc.

58 Six Point Road, Etobicoke, Ontario M8Z 2X2

April 29, 2020



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Prepared for:

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58 Six Point Road, Etobicoke, Ontario M8Z 2X2

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April 29, 2020

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TABLE OF CONTENTS

	<u>Page</u>
1.0 Introduction	1
2.0 Legislative Requirements.....	1
2.1 Migratory Birds Convention Act, 1994.....	1
2.2 Endangered Species Act, 2007	2
2.3 City of Mississauga Tree Protection By-laws	2
3.0 Methodology.....	3
3.1 Field Work	3
4.0 Existing Conditions (Trees).....	4
4.1 Tree Removal.....	4
4.2 Tree Preservation	5
5.0 Potential Impacts to Trees.....	5
5.1 Soil Compaction and Grade Changes	5
5.2 Physical Injury	6
5.3 Severing Roots.....	6
5.4 Release of Deleterious Substances	6
6.0 Tree Preservation and Protection Specifications.....	6
6.1 Maintenance and Pruning	6
7.0 Replacement.....	7
8.0 Summary Statement	7
9.0 Limitations of the Assessment.....	8
10.0 Closing	8

LIST OF APPENDICES

Appendix A	Tree Inventory Plan Drawing
Appendix B	Tree Inventory Table
Appendix C	Selected Project Photos

LIST OF TABLES

Table 4-1: Tree Inventory Summary – Eight (8) Centimetres DBH or Greater for the Project Site ..	4
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1.0 Introduction

Wood Environment & Infrastructure Solutions, a Division of Wood Canada Limited (Wood), has been retained by Preeminent Developments Inc. to prepare a Tree Inventory, Arborist Report and Tree Protection Plan in support of a Zoning By-law Amendment application for the proposed redevelopment of two (2) existing single detached dwellings into four semi-detached dwellings in the City of Mississauga (City), Ontario (herein after referred to as the Project Site).

Guidance surrounding this assignment follows information outlined in the Project Status Report (PSR) provided by the City of Mississauga to Sajecki Planning dated October 24, 2018, with follow up details supplied through various correspondence in April 2020. Details relative to Landscape Arch-Dev Design requested a tree survey and inventory plan, tree preservation plan and arborist report. The inventory was to include all trees over eight (8) centimetres (80 millimetres) diameter at breast height (DBH) on the Project Site and immediately adjacent to the Project Site (within five (5) metres / 10 metres of the property line).

The purpose of this report is to provide a detailed inventory of trees that could be impacted by the Project, including those identified for preservation or that which may be transplanted. Trees located within the Project Site were inventoried to determine their location, species, size, and condition. Trees adjacent to the proposed design were also inventoried up to a distance of 10 metres. A recommendation of action was then given to each tree, determined by the location of the tree relative to the proposed construction footprint.

This information has been documented in this report and has been applied in an impact or conflict analysis to define the requirement for removal due to direct conflict, and candidates for preservation through protection measures. The extent of the tree inventory area is provided in Attachment A.

2.0 Legislative Requirements

This section of the report summarizes the various federal, provincial, and municipal planning policies and regulations related to tree inventories that may apply to the proposed Project.

2.1 Migratory Birds Convention Act, 1994

The *Migratory Birds Convention Act* (MBCA) was passed in 1917 and updated in 1994. The MBCA protects migratory bird populations by regulating potentially harmful anthropogenic activities. The MBCA (1994) and the *Migratory Bird Regulations* (MBR) are federal legislative requirements that are binding on members of the public and all levels of government, including federal and provincial governments.

Protected species are listed under Article I of the MBCA, and are native or naturally occurring in Canada, and are species that are known to occur regularly in Canada. The legislation protects certain species, controls the harvest of others, and prohibits commercial sale of all species. As described in Section 6 of the associated MBR:

"Subject to subsection 5(9), no person shall:

- Disturb, destroy, or take a nest, egg, nest shelter, Eider Duck shelter or duck box of a migratory bird, or*
- Have in his possession a live migratory bird, or a carcass, skin, nest or egg of a migratory bird except under authority of a permit therefor."*

The “incidental take” of migratory birds and the disturbance, destruction or taking of the nest of a migratory bird is prohibited. No permit can be issued for the incidental take of migratory birds.

Bird species not regulated under the Act include: Rock Dove (*Columba livia*), American Crow (*Corvus brachyrhynchos*), Brown-headed Cowbird (*Molothrus ater*), Common Grackle (*Quiscalus quiscula*), House Sparrow (*Passer domesticus*), Red-winged Blackbird (*Agelaius phoeniceus*), and European Starling (*Sturnus vulgaris*). Furthermore, if the species identified is protected under Ontario’s *Endangered Species Act* (ESA) or *Fish and Wildlife Conservation Act* or the federal *Species at Risk Act*, additional restrictions may apply.

Environment and Climate Change Canada (ECCC) and the Canadian Wildlife Service have compiled nesting calendars that show the variation in nesting intensity by habitat type and nesting zone, within broad geographical areas distributed across Canada. While this does not mean nesting birds will not nest outside of these periods, the calendars can be used to greatly reduce the risk of encountering a bird and its nest.

Applicability to the Project

The MBCA applies to all of Canada. As such, the MBCA is applicable to the entire Project. Therefore, if a protected species or their nest is encountered during future Project works, the Project must comply with the Act. As vegetation removal is part of future Project works, it is recommended that it occur outside of the core breeding time-period identified by the ECCC, which takes place from April 1 to August 31 in any given year.

2.2 Endangered Species Act, 2007

The Ontario ESA, 2007 was passed into law in 2007. Under the ESA, species in Ontario are identified as extirpated, endangered, threatened, or of special concern. Section 9 of the ESA generally prohibits the killing or harming of a threatened or endangered species. Section 10 of the ESA prohibits the damage or destruction of the habitat of all endangered and threatened species. Habitat is broadly characterized within the ESA (2007) as the area prescribed by a regulation as the habitat of the species or an area on which the species depends directly or indirectly, to carry on its life processes, including reproduction, rearing of young, hibernation, migration or feeding.

Applicability to the Project

If threatened and/or endangered species or their habitat are encountered, the Project may be subject to a permit under the ESA and/or regulatory exemptions under the Act. No SAR were documented during the field investigations.

2.3 City of Mississauga Tree Protection By-laws

The City has a Private Tree Protection By-law (0254-2012) which protects and enhances the City’s existing tree cover. In order to remove trees on private property you require a permit from the City’s Parks and Forestry Department if one plans to remove three (3) or more trees that are 15 centimetres or greater in DBH, which includes those considered dead and/or dying in each calendar year. The PSR for this Project required that the tree survey and inventory plan locate all trees over eight (8) centimetres DBH.

Applicability to the Project

The Project Site contains a number of trees measured 15 centimetres DBH or greater. Based on the current construction footprint, it is understood that more than three (3) trees will require removal to facilitate future development requirements. As such, a permit from the City of Mississauga pursuant to By-law 0254-2012 will be required.

3.0 Methodology

3.1 Field Work

Field data was collected on February 5, 2019 under overcast conditions with temperatures around two (2) degrees Celsius. Field data was collected by an International Society of Arboriculture (ISA) Certified Arborist. Trees were inventoried following guidance provided by the City of Mississauga PSR, whereby those trees eight (8) centimetres DBH or greater were inventoried.

All trees documented that meet the above noted criteria are illustrated within Appendix A and tabulated within Appendix B. All trees surveyed were tagged with a pre-numbered aluminum tag, affixed with an aluminum nail, with the exception of one (1) tree on an adjacent property (Tree No. 200). Adjacent access and permissions to 2470 Confederation Parkway were not provided at the time of the field investigation. Those tagged trees inclusive of Tree No. 200 were surveyed using a total station.

All trees included as part of this assessment were inspected visually from the ground. This included a non-invasive inspection of each tree documenting site conditions, buttress roots, trunk, and branches. This is considered a standard assessment that is performed by arborists to identify tree conditions from the ground level. The results from this basic assessment should not be relied on for internal, below-ground and/or upper crown conditions or defects, as these areas may not be possible to visually inspect from the ground level. In addition, as the assessment was completed during leaf-off conditions due to timing, a complete assessment of canopy health and dripline is not provided herein. An estimation of canopy health has been provided based on a live stem assessment and number of buds.

Tree Number: this refers to the id number noted on the aluminum tag for those trees measured at eight (8) centimetres or greater DBH. Please refer to Appendix A which provides the drawing that illustrates the locations of trees, Appendix B which provides the tabulated tree inventory data, and Appendix C for selected photographs.

DBH: This refers to diameter (in centimetres) at breast height and is measured at 1.37 metres above the ground for each tree.

Codominant Stem: Stems equal in size and relative importance, usually associated with either the trunks and stems or scaffold limbs and branches in the crown. DBH measurement for co-dominant stems was tabulated using the square root of the sum of squares for each stem (i.e. $\sqrt{X^2+X^2}$).

Multi-Stem: Stems equal to or varying in size, usually associated with either the trunks and stems or scaffold limbs and branches in the crown. DBH measurement for multi-stems was tabulated using the square root of the sum of squares for each stem (i.e. $\sqrt{X^2+X^2}$).

Species: Identified the individual tree by botanical name and common name.

Condition Rating: Condition of the tree is based on several factors including: size, species, condition, location, root system, trunk, branching, twigs and foliage, disease evidence, and the overall health and vigour of the tree. Each tree was provided a condition as outlined in the following categories.

E - Excellent: The tree is nearly perfect in condition, vigor, and form. This rarely used category is applicable to small diameter trees recently transplanted that are well established.

G - Good: Overall, the tree is healthy and satisfactory in condition, vigor, and form. The tree has no major structural problems, no mechanical damage, and may only have insignificant aesthetic, insect, disease, or structure problems. Small amounts of dead wood may be present in the secondary branches, but account for less than 25 percent of the canopy.

F - Fair: The tree has no major structural problems, no significant mechanical damage, may have only minor aesthetic insect, disease, or structure problems, and is in good health. Trees in fair condition show moderate symptoms of decline (25% to 50%) in the lower canopy or scaffold branches.

P - Poor: The tree may exhibit the following characteristics: minor structural problems, mechanical damage, significant damage from diseases, thin crown, or stunted growth compared to adjacent trees. This condition also includes trees that have been topped, but show reasonable vitality with no obvious signs of decay. Poor condition rating can be applied to trees where the trunk shows evidence of advanced rot, deadwood or is hollow and/or there is twig development on the main branches (i.e., greater than 50%).

Dead: The tree is considered dead. There is no live crown or branches, and has begun stages of decay.

4.0 Existing Conditions (Trees)

The tree inventory documented a total of 22 trees of eight (8) centimetres DBH or greater within the Project Site. A summary of those trees documented is provided in Table 4-1. No SAR trees, shrubs or herbaceous material were identified within the Project Site.

To note, there was one (1) small Tree of Heaven (2482 Confederation Parkway) and one (1) shrub (2476 Confederation Parkway) noted within the Project Site (both less than eight (8) centimetres DBH). A small cedar hedgerow that contained four (4) trees ranging in DBH sizes from five (5) to seven (7) centimetres DBH was also noted at the rear side of 2476 Confederation Parkway. As these were smaller than those required as part of this inventory (per the PSR), they have not been included in the overall count of trees documented within this report. Full tree data and notes are shown in Table B-1 in Appendix B and tree photographs are provided in Appendix C.

Table 4-1: Tree Inventory Summary – Eight (8) Centimetres DBH or Greater for the Project Site

Botanical Name	Common Name	Total # in Project Site	# to be removed	# to be preserved
<i>Pyrus communis</i>	Common Pear	2	2	0
<i>Salix matsudana</i>	Corkscrew Willow	1	1	0
<i>Prunus cultivar</i>	Japanese Cherry	1	1	0
<i>Acer negundo</i>	Manitoba Maple	5	5	0
<i>Acer platanoides</i>	Norway Maple	1	1	0
<i>Prunus sp.</i>	Ornamental Cherry	1	1	0
<i>Ulmus glabra</i>	Scotch Elm	1	1	0
<i>Acer saccharinum</i>	Silver Maple	2	1	1
<i>Ailanthus altissima</i>	Tree of Heaven	2	2	0
<i>Morus alba</i>	White Mulberry	6	6	0
Total		22	21	1

4.1 Tree Removal

For the 22 trees of eight (8) centimetres DBH or greater inventoried, a recommendation with respect to tree removal was made based on where the tree was located relative to the design footprint, those areas proposed for construction activities (e.g., grading, laydown, access etc.), and where the estimated root

zones/crown areas that overlap the work limits by greater than or equal to 30 percent. Root zones/crowns were estimated using the tree driplines. Again, as this assessment was not completed during leaf-on conditions, the dripline associated with each tree was estimated.

Based on the existing design plans for redevelopment and construction of new structures, it is believed that this Project will require the removal of 21 trees measured at eight (8) centimetres DBH or greater. Further details regarding the tree removals are available in Table B-1 (Appendix B). As noted in Section 4.0, one (1) small tree, one (1) small shrub, and a cedar hedge will also require removal based on the existing design plans. As these trees were smaller than eight (8) centimetres DBH, they have been excluded from the count contained within this report.

Relative to the City's Private Tree Protection By-law, a total of 16 of the 21 trees identified for removal are measured 15 centimetres DBH or greater. Therefore, the proposed Project meets the minimum requirement for obtaining a tree removal permit pursuant to By-law 0254-2012. Furthermore, each of the two (2) parcels (2476 & 2482) meet this requirement respectively. Relative to Forestry Fees effective January 1, 2020, Wood estimates the following fees would be applicable for future tree removal permits/permissions, based on the assumption each property will have a separate application:

- 2476 Confederation Parkway: seven (7) trees each with diameter greater than 15 centimetres DBH identified for removal: \$421.75 (base fee for three (3) trees) + (\$95.23 X 4) = \$802.67.
- 2482 Confederation Parkway: nine (9) trees each with diameter greater than 15 centimetres DBH identified for removal: \$421.75 (base fee for three (3) trees) + (\$95.23 X 6) = \$993.13

As noted, the above is an estimation of applicable fees. Consultation with Parks and Forestry will be required as part of the future permit application submission(s) to determine and finalize applicable fee requirements. The City's 2020 fee schedule is available at:

<<http://www.mississauga.ca/portal/residents/parks-fees-charges>>.

4.2 Tree Preservation

For the 22 trees inventoried, a total of one (1) tree will be preserved. Tree No. 200 is situated on the adjacent property at 2470 Confederation Parkway. This tree is within five (5) to 10 metres of proposed construction and has been included in this inventory as per the PSR. Based on the understanding of future construction requirements at this time, it is recommended this tree be avoided and protected as prescribed and illustrated in Appendix A.

5.0 Potential Impacts to Trees

There are several common impacts to trees that can occur during construction, especially in urban settings due to the already limited growth space for root systems. The following construction activities have the potential to damage trees and may be encountered for this Project.

5.1 Soil Compaction and Grade Changes

Soil compaction around areas where tree roots grow is one of the leading causes of tree decline. Soil compaction may include: vehicle traffic; pedestrian/foot traffic; and, stockpiling. Soil compaction reduces the pore space in the soil, thereby limiting oxygen and water transport. If the soil becomes heavily compacted, the tree will suffocate and begin declining making it more susceptible to pests and disease. Impacts such as these may not be immediately visible, and the decline could take up to five (5) years to become evident, well after construction and/or activities conclude.

5.2 Physical Injury

Accidental contact between construction equipment and trees can result in damage to the roots, trunks, and crown.

5.3 Severing Roots

Root cutting is a type of injury to a tree that can significantly affect its health. Excavation for the installation of new infrastructure may cut tree roots if the excavation is too close to the tree. It is important to note that the majority of tree roots are found in the upper 30 to 60 centimetres of the soil. Trees can become destabilized (i.e., a hazard) and may fall if structural roots that support the tree are severed and/or removed completely.

5.4 Release of Deleterious Substances

The accidental release of deleterious substances such as oil, hydraulic fluid etc., into soil within close proximity to trees can inhibit tree growth and function.

6.0 Tree Preservation and Protection Specifications

Tree protection measures have been identified for one (1) tree (Tree No. 200). Tree protection measures shall follow the City's Tree Preservation Hoarding detail as illustrated in Appendix A. According to the City's tree protection measures, tree preservation hoarding is to encompass the dripline in order to help avoid injury to the canopy and potentially to the root system. The Tree Protection Zone (TPZ) is considered a "no touch zone" where by there will be:

- No construction;
- No altering of grade by adding fill;
- No excavating, trenching, scraping, dumping or disturbance of any kind;
- No storage of construction materials, equipment, soil, construction waste or debris;
- No disposal of any liquids e.g., concrete, gas, oil, paint;
- No movement of vehicles, equipment, or pedestrians; and
- No parking of vehicles or machinery.

It is the responsibility of the site supervisor/contractor to inspect the condition of the tree protection measures on a regular basis to identify damage and/or maintenance requirements. If damage or the need for maintenance is observed, repair work to the tree protection barriers should be completed immediately.

6.1 Maintenance and Pruning

If at the time of construction, work within the TPZ will be required as not previously identified it should be carried out by a tree care specialist that is also an ISA Certified Arborist or under the supervision of a ISA Certified Arborist.

If determined that trees require pruning as part of this Project, trees shall be pruned in a manner that minimizes physical damage and promotes quick wound closure and regeneration. If earthworks are required immediately adjacent to a TPZ, and there is a potential to encounter roots, it is recommended that an exploratory exercise with an air spade be conducted. If it is determined that root pruning must

occur to facilitate a grade change or other earthworks, the roots shall be pruned in accordance with acceptable arboricultural standards which may include:

- Maintenance and pruning shall be avoided during hot and dry weather;
- Exposed roots should be neatly cut with a sharp saw;
- If tree maintenance is to occur during hot weather, exposed roots should be wrapped with dampened burlap, especially if there is a delay in pruning or filling with soil; and
- Trees to be pruned should be watered after digging, along with an application of soil and mulch.

Again, all tree maintenance and pruning should be carried out by a tree care specialist that is also an ISA Certified Arborist or under the supervision of an ISA Certified Arborist.

7.0 Replacement

In accordance with City By-law 0254-2012, in the event three (3) or more healthy trees are removed on the property, the City requires a replacement tree for each tree removed. The City allows private landowners to plant replacement trees on their own property if the owner is able to follow the recommended criteria below:

- Trees must be 1.8 metres tall if it is a coniferous tree;
- Trees must be a minimum of six (6) centimetres DBH if it is a deciduous tree;
- For those healthy trees that are 49 centimetres DBH or less, the City requires a 1:1 replacement ratio; and
- For those health trees 50 centimetres DBH or greater the City requires a 2:1 replacement ratio.

If the owner wishes to plant replacement trees themselves, a deposit valued at the cost of the replacement tree is required for one (1) year after the tree is planted. If the replacement tree is healthy one (1) year after being planted, the City will refund the deposit. If the owner does not have space for replanting, or does not wish to replant replacement trees, they may pay a predetermined fee for a tree to be planted on City property by City staff.

All trees identified for removal are less than 49 centimetres, therefore a 1:1 replacement ratio would apply to this Project. Additional discussions will be required with the City staff about replacement requirements and fees relative to this Project.

8.0 Summary Statement

Preeminent Developments Inc. retained Wood to provide a Tree Inventory, Arborist Report and Tree Protection Plan as part of the Zoning By-law Amendment in order to facilitate the redevelopment of two (2) existing single detached residential dwellings. To meet the requirements for construction space, the following has been identified based on the current Project design plans and current construction footprint:

- Based on current Project design plans, a total of 21 trees will require removal. As noted in Section 4.0 and 4.1, one (1) small tree, one (1) small shrub and a cedar hedge (four (4) trees) will also require removal based on existing design plans;
- One (1) tree (Tree No. 200) has been identified for preservation. Tree protection hoarding is required to be installed prior to construction activities and maintained throughout.

- If following the City of Mississauga Private Tree By-law, a total of 16 trees; seven (7) at 2476 and nine (9) at 2482 Confederation Parkway will require a permit/permission for removal. Following the City's replacement requirements, a total of 16 trees will need to be replaced. Further discussions with the City will be required to address replacement requirements, and is beyond the scope of this assignment.

9.0 Limitations of the Assessment

This Assessment is based on the circumstances and observations as they existed at the time the inventory was completed, and those trees documented within the Project Site. The opinions in this Assessment are based on observations made and using generally accepted professional judgment. It is understood that trees and other vegetation are living organisms and subject to change, damage, and disease. Therefore, the results provided within this Report reflect those conditions on the date the Assessment was completed, and no guarantee, warranty, representation, or opinion is offered or made as to the length of the validity of the results, observations, recommendations, and analysis contained within this Assessment. As noted herein, the results from this basic Assessment should not be relied on for internal, below-ground and/or upper crown conditions or defects, as these areas were not visually inspected. Although observations on structural integrity may have been provided, it is beyond the scope of this Report to provide hazard ratings and/or prescribed measures to mitigate risk. Similarly, the assessment was completed during leaf-off conditions due to timing, therefore a complete assessment of canopy health and dripline is not provided herein. An estimation of canopy health has been provided based on a live stem assessment and number of buds.

The Assessment carried out at the Project Site is based on the Project design plans as provided to Wood. No Assessment of any other trees or plants, not identified herein has been undertaken by Wood. Wood is not legally liable for any other trees or plants on the Project Site except those expressly discussed herein. The conclusions of this Assessment do not apply to any areas, trees, plants, or any other property not covered or referenced in this Report.

In carrying out this Assessment, Wood has exercised a reasonable standard of care, skill and diligence as would be customarily and normally provided in carrying out this type of Assessment. The Assessment has been made using accepted arboricultural techniques. As such, all trees included as part of this Assessment were inspected visually from the ground. This included a non-invasive inspection of each tree documenting site conditions, buttress roots, trunk, and branches. This is considered a standard Assessment that is performed by arborists to identify tree conditions from the ground level. 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 both professionally and practically 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, or to the degree in which it can be properly pruned to mitigate risk.

10.0 Closing

The findings, interpretations and recommendations as outlined herein are based on the expertise of Wood and based on the observations and information available at the time of the Report preparation. This Report has been prepared by Wood for the sole benefit of Preeminent Developments Inc. for the purposes of this Project as identified herein. It should not be relied upon by any other party or used for any other purposes. Any use by which a third party makes of this Report, or any reliance on or decisions

made based on it, are the responsibilities of such third parties. We trust this Report provides the required information necessary to support the Project Site Plan Approval Application. Should you have any questions or you would like to discuss the above information, please do not hesitate to contact the undersigned.

Yours sincerely,

**Wood Environment & Infrastructure Solutions
a Division of Wood Canada Limited**

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APPENDIX A

TREE INVENTORY PLAN DRAWING



TREE PROTECTION ZONE, BARRIER & FENCING/HOARDING:

1. THE TREE PROTECTION ZONE SHALL BE ESTABLISHED BY THE INSTALLATION OF TREE PROTECTION FENCING AS ILLUSTRATED ON THE PLAN DRAWINGS.
2. TREE PROTECTION FENCING IS TO BE ERECTED PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION, GRADING OR CLEARING ACTIVITIES, AND IS TO REMAIN IN PLACE THROUGHOUT THE ENTIRE DURATION OF CONSTRUCTION AND RESTORATION EFFORTS.
3. ALL SUPPORTS AND BRACING USED TO SAFETY SECURE THE FENCING SHALL BE LOCATED OUTSIDE OF THE TREE PROTECTION FENCE. ALL SUPPORTS AND/OR BRACING SHALL BE INSTALLED IN A MANNER SO AS TO MINIMIZE DAMAGE TO THE ROOT SYSTEM.

TREE PROTECTION NOTES:

1. THIS TREE PROTECTION PLAN SHALL BE READ IN CONJUNCTION WITH THE TREE INVENTORY/ARBORIST REPORT/TREE PROTECTION PLAN PREPARED BY WOOD, 2020.
2. ALL CLEARING SHALL COMPLY WITH THE MIGRATORY BIRD CONVENTION ACT, SUCH THAT ALL CLEARING ACTIVITIES ARE OUTSIDE OF THE SEASONAL BREEDING WINDOW FROM APRIL 1 TO AUGUST 31. IF CLEARING OF VEGETATION IS REQUIRED DURING THIS TIMEFRAME THE CONTRACTOR SHALL OBTAIN A QUALIFIED AVIAN BIOLOGIST TO CLEAR THE AREA OF NESTS IN CONNECTION WITH CLEARING AND GRUBBING ACTIVITIES. IF NESTING ACTIVITY IS OBSERVED, THE CONTRACTOR MUST CEASE WORK IN THIS AREA AND IMMEDIATELY NOTIFY THE CONTRACT ADMINISTRATOR.
3. ALL TREES LOCATED WITHIN THE PROJECT AREA DESIGNATED FOR PRESERVATION/PROTECTION AND ALL TREES ON ADJACENT PROPERTIES SHALL BE PRESERVED. IN THE EVENT THAT A TREE DESIGNATED FOR PRESERVATION/PROTECTION IS DAMAGED OR KILLED BY THE ACTIONS OF THE CONTRACTOR OR THEIR AGENT/SUBCONTRACTORS, THE CONTRACTOR WILL BE RESPONSIBLE FOR THE REPLACEMENT OF THE DESTROYED PLANT MATERIAL WITH MATERIAL OF EQUAL VALUE AND COMPARABLE SPECIES TO THE SATISFACTION OF THE OWNER.
4. TREES SHALL NOT HAVE ANY RIGGING CABLES OR HARDWARE OF ANY SORT ATTACHED OR WRAPPED AROUND THEM.
5. AREAS WITHIN THE TREE PROTECTION BARRIERS ARE NOT TO BE USED FOR ANY TYPE OF STORAGE (I.E., STOCKPILING, CONSTRUCTION MATERIAL AND EQUIPMENT ETC.)
6. NO GRADE CHANGES SHALL OCCUR WITHIN THE TREE PROTECTION ZONES.
7. THE CONTRACTOR WILL TAKE EVERY PRECAUTION TO PREVENT DAMAGE TO TREES OR SHRUBS, INCLUDING PROTECTING THE STEM AND ROOT SYSTEM FROM DAMAGE, COMPACTION OR CONTAMINATION RESULTING FROM THE CONSTRUCTION TO THE SATISFACTION OF THE CONTRACT ADMINISTRATOR.
8. THE CONTRACTOR MUST REPORT IMMEDIATELY ANY DAMAGE TO TREES SUCH AS BROKEN LIMBS, DAMAGE TO ROOTS, OR WOUNDS TO THE MAIN TRUNK OR STEMS SO THAT THE DAMAGED CAN BE ADDRESSED IMMEDIATELY.
9. ANY ROOTS OR BRANCHES WHICH EXTEND BEYOND THE TREE PROTECTION ZONE(S) INDICATED ON THE PLAN(S) WHICH REQUIRES PRUNING MUST BE APPROVED BY THE CONTRACT ADMINISTRATOR. ALL PRUNING MUST BE COMPLETED BY A CERTIFIED ARBORIST OR OTHER TREE CARE PROFESSIONAL AS APPROVED BY THE CONTRACT ADMINISTRATOR. ALL PRUNING OF TREE ROOTS AND BRANCHES MUST BE IN ACCORDANCE WITH BEST ARBORICULTURE STANDARDS.

89mm x 89mm (4"x4")
Wood Posts/T-Bar supports firmly
secured into undisturbed subgrade

12mm x 1.2m x 2.4m (1/2"x4"x8")
Plywood boards
secured firmly to
Wood Posts /T-Bar supports

1.2m (4 ft)

38mm x 89mm (2"x4")
Top & Bottom Rail

8cm (3") Clearance

Existing Grade

Undisturbed Subgrade

SOLID HOARDING DETAIL

2.0m (6' 6") maximum
spacing between post

Drip Line

1.2m (4ft)
Metal T-Bar
Supports

1.2m (4ft)
Plastic Safety
Fencing

Existing Grade

Undisturbed Subgrade

FRAMED HOARDING DETAIL

NOTES:

1. Hoarding details to be determined following initial site inspection.

2. Private tree hoarding to be approved by Development & Design ;
City tree hoarding to be approved by Community Services Dept.

3. Hoarding must be supplied, installed and maintained by the applicant throughout all phases of construction.
Inspection must be conducted by the Development and Design Division prior to removing any/all private hoarding.

4. Do not allow water to collect and pond behind or within hoarding.

5. T-bar supports are acceptable alternative to 4x4 posts. U-shaped metal supports will not be accepted.

6. Plywood must be utilized for 'solid' hoarding. OSB/Chipboard will not be accepted for solid hoarding. Plywood sheets must be installed on "construction" side of frame.

7. Applicant is responsible to ensure utility locates are completed within city boulevard prior to installing framed hoarding.

TREE PRESERVATION HOARDING

SCALE : N.T.S. DATE : June 2017

MISSISSAUGA

LEGEND

TREES TO BE REMOVED

TREE TO BE PROTECTED

TREE PROTECTION FENCE

EXISTING LIGHT STANDARD

SCALE VALID ONLY
FOR 24"x36" VERSION

Scale
1:150

Consultant File No.
TPB188171

Drawing No.
1

APPENDIX B

TREE INVENTORY TABLE



Appendix B – Tree Inventory Project 2476 & 2482 Confederation Parkway

Project: 2476 & 2482 Confederation Parkway, Mississauga, ON								Field Work Completed By: Melissa Torchia							
Dates of Field Work: February 5, 2019								Weather: 2°C; overcast							
Tree Condition Assessment								G = Good: tree displays less than 25% deficiency/defect within the tree condition criteria							
Structure: assessment of scaffold branches, unions and canopy, overall trunk.								F = Fair: tree displays 25-50% deficiency/defect within the given tree condition criteria							
Health: assessment of the health of the tree, based on the % of deadwood & live crown.								P = Poor: tree displays greater than 50% deficiency/defect within the given tree condition criteria							
Tree ID Number (Aluminum Tag)	Botanical Name	Common Name	DBH (cm)	Dripline Radius (m)*	Tree Condition			Remove, Preserve, Injure	City of Mississauga Tree Permit Required (Tree Meets 15cm DBH Criteria)	Comments	Address				
					Structure	Health*	Hazard				Owner	Street No.	Street Name	City	Postal Code
179	<i>Morus alba</i>	White Mulberry	24.2	1	Good	Good	No	Remove	Yes	Tree will interfere with construction footprint and space necessary to facilitate construction work (i.e., grading, laydown, and equipment use/access.	Private	2476	Confederation Parkway	Mississauga	L5B
180	<i>Morus alba</i>	White Mulberry	17	1	Good	Good	No	Remove	Yes	Tree will interfere with construction footprint and space necessary to facilitate construction work (i.e., grading, laydown, and equipment use/access.	Private	2476	Confederation Parkway	Mississauga	L5B
181	<i>Morus alba</i>	White Mulberry	20.1	1	Good	Good	No	Remove	Yes	Tree will interfere with construction footprint and space necessary to facilitate construction work (i.e., grading, laydown, and equipment use/access.	Private	2476	Confederation Parkway	Mississauga	L5B
182	<i>Pyrus communis</i>	Common Pear	44.6	2.5	Good	Good	No	Remove	Yes	Previously pruned; tree will interfere with construction footprint and space necessary to facilitate construction work (i.e., grading, laydown, and equipment use/access.	Private	2476	Confederation Parkway	Mississauga	L5B
183	<i>Morus alba</i>	White Mulberry	14.6	1.5	Fair	Good	No	Remove	Yes	Stem wrapped in vines; tree will interfere with construction footprint and space necessary to facilitate construction work (i.e., grading, laydown, and equipment use/access.	Private	2476	Confederation Parkway	Mississauga	L5B
184	<i>Pyrus communis</i>	Common Pear	14.0	1.5	Fair	Good	No	Remove	No	Co-dominant stem; stem wrapped in vines; tree will interfere with construction footprint and space necessary to facilitate construction work (i.e., grading, laydown, and equipment use/access.	Private	2476	Confederation Parkway	Mississauga	L5B
185	<i>Prunus cultivar</i>	Japanese Cherry	15.0	1	Fair	Good	No	Remove	Yes	Multi-stem; tree will interfere with construction footprint and space necessary to facilitate construction work (i.e., grading, laydown, and equipment use/access.	Private	2476	Confederation Parkway	Mississauga	L5B



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Tree ID Number (Aluminum Tag)	Botanical Name	Common Name	DBH (cm)	Dripline Radius (m)*	Tree Condition			Remove, Preserve, Injure	City of Mississauga Tree Permit Required (Tree Meets 15cm DBH Criteria)	Comments	Address				
					Structure	Health*	Hazard				Owner	Street No.	Street Name	City	Postal Code
186	<i>Acer saccharinum</i>	Silver Maple	26.5	2	Fair	Good	No	Remove	Yes	Tree will interfere with construction footprint and space necessary to facilitate construction work (i.e., grading, laydown, and equipment use/access.	Private	2476	Confederation Parkway	Mississauga	L5B
187	<i>Morus alba</i>	White Mulberry	22.8	2	Fair	Good	No	Remove	Yes	Co-dominant stem; tree will interfere with construction footprint and space necessary to facilitate construction work (i.e., grading, laydown, and equipment use/access.	Private	2476	Confederation Parkway	Mississauga	L5B
188	<i>Morus alba</i>	White Mulberry	11.7	2	Good	Good	No	Remove	No	Tree will interfere with construction footprint and space necessary to facilitate construction work (i.e., grading, laydown, and equipment use/access.	Private	2476	Confederation Parkway	Mississauga	L5B
189	<i>Acer platanoides</i>	Norway Maple	36.2	3.5	Good	Good	No	Remove	Yes	Tree will interfere with construction footprint and space necessary to facilitate construction work (i.e., grading, laydown, and equipment use/access.	Private	2482	Confederation Parkway	Mississauga	L5B
190	<i>Ailanthus altissima</i>	Tree of Heaven	20.2	2.5	Good	Good	No	Remove	Yes	Co-dominant stem; along fence-row; tree will interfere with construction footprint and space necessary to facilitate construction work (i.e., grading, laydown, and equipment use/access.	Private	2482	Confederation Parkway	Mississauga	L5B
191	<i>Salix matsudana</i>	Corkscrew Willow	24.8	2	Fair	Good	No	Remove	Yes	Multi-stem; along fence-row; tree will interfere with construction footprint and space necessary to facilitate construction work (i.e., grading, laydown, and equipment use/access.	Private	2482	Confederation Parkway	Mississauga	L5B
192	<i>Prunus sp.</i>	Ornamental Cherry	21	2	Fair	Good	No	Remove	Yes	Along fence-row; peeling bark; trunk rot; tree will interfere with construction footprint and space necessary to facilitate construction work (i.e., grading, laydown, and equipment use/access.	Private	2482	Confederation Parkway	Mississauga	L5B



Project: 2476 & 2482 Confederation Parkway, Mississauga, ON								Field Work Completed By: Melissa Torchia							
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					Structure	Health*	Hazard				Owner	Street No.	Street Name	City	Postal Code
193	<i>Acer negundo</i>	Manitoba Maple	22.2	1.5	Good	Good	No	Remove	Yes	Along fence-row; tree will interfere with construction footprint and space necessary to facilitate construction work (i.e., grading, laydown, and equipment use/access.	Private	2482	Confederation Parkway	Mississauga	L5B
194	<i>Acer negundo</i>	Manitoba Maple	33.3	2.5	Fair	Good	No	Remove	Yes	Multi-stem; along fence-row; part of trunk wrapped with wire; epicormic shoots; tree will interfere with construction footprint.	Private	2482	Confederation Parkway	Mississauga	L5B
195	<i>Ailanthus altissima</i>	Tree of Heaven	22.3	2	Good	Good	No	Remove	Yes	Tree will interfere with construction footprint and space necessary to facilitate construction work (i.e., grading, laydown, and equipment use/access.	Private	2482	Confederation Parkway	Mississauga	L5B
196	<i>Acer negundo</i>	Manitoba Maple	20.5	2	Good	Good	No	Remove	Yes	Tree will interfere with construction footprint and space necessary to facilitate construction work (i.e., grading, laydown, and equipment use/access.	Private	2482	Confederation Parkway	Mississauga	L5B
197	<i>Acer negundo</i>	Manitoba Maple	15.8	2	Good	Good	No	Remove	Yes	Tree will interfere with construction footprint and space necessary to facilitate construction work (i.e., grading, laydown, and equipment use/access.	Private	2482	Confederation Parkway	Mississauga	L5B
198	<i>Acer negundo</i>	Manitoba Maple	9.3	1.5	Good	Good	No	Remove	No	Co-dominant stem; tree will interfere with construction footprint and space necessary to facilitate construction work (i.e., grading, laydown, and equipment use/access.	Private	2482	Confederation Parkway	Mississauga	L5B
199	<i>Ulmus glabra</i>	Scotch Elm	8.4	1.5	Fair	Fair	No	Remove	No	Co-dominant stem; tree will interfere with construction footprint and space necessary to facilitate construction work (i.e., grading, laydown, and equipment use/access.	Private	2482	Confederation Parkway	Mississauga	L5B
200	<i>Acer saccharinum</i>	Silver Maple	57.5	3	Good	Good	No	Preserve/Protect	No	Tree on adjacent property. This tree can be preserved and protected during construction.	Private	2470	Confederation Parkway	Mississauga	L5B

*As the tree inventory and assessment was completed during leaf-off conditions due to timing, a complete assessment of canopy health and dripline is not provided herein. An estimation of canopy health has been provided based on a live stem assessment and number of buds.



APPENDIX C

SELECTIVE PROJECT PHOTOS





Photograph 1. Three (3) White Mulberry at the front of 2476 Confederation Parkway. (Tree Tag No. 179 to 181).



Photograph 2. Common Pear located in the rear yard of 2476 Confederation Parkway. (Tree Tag No. 182).



Photograph 3. White Mulberry located in rear yard of 2476 Confederation Parkway. (Tree Tag No. 183).



Photograph 4. Common Pear located in rear yard of 2476 Confederation Parkway (Tree Tag No. 184)



Photograph 5. Japanese cultivar located in the rear yard of 2476 Confederation Parkway (Tree Tag No. 185).



Photograph 6. Silver Maple located along fence line in the rear yard of 2476 Confederation Parkway. (Tree Tag No.186).



Photograph 7. Two White Mulberries along fence line in the rear yard of 2476 Confederation Parkway. (Tree Tag No.187 and 188).



Photograph 8. Norway Maple in rear yard of 2482 Confederation Parkway. (Tree Tag no. 189).



Photograph 9. Tree of Heaven located in the rear yard of 2482 Confederation Parkway. (Tree Tag No. 190).



Photograph 10. Corkscrew Willow located in the rear yard of 2482 Confederation Parkway. (Tree Tag no. 191).



Photograph 11. Ornamental Cherry located in the rear yard of 2482 Confederation Parkway. (Tree Tag no. 192).



Photograph 12. Manitoba Maple located in the rear yard of 2482 Confederation Parkway. (Tree Tag no. 193).



Photograph 13. Manitoba Maple located in the side yard of 2482 Confederation Parkway. (Tree Tag no. 194).



Photograph 14. Tree of Heaven located in the rear yard of 2482 Confederation Parkway. (Tree Tag no. 195).



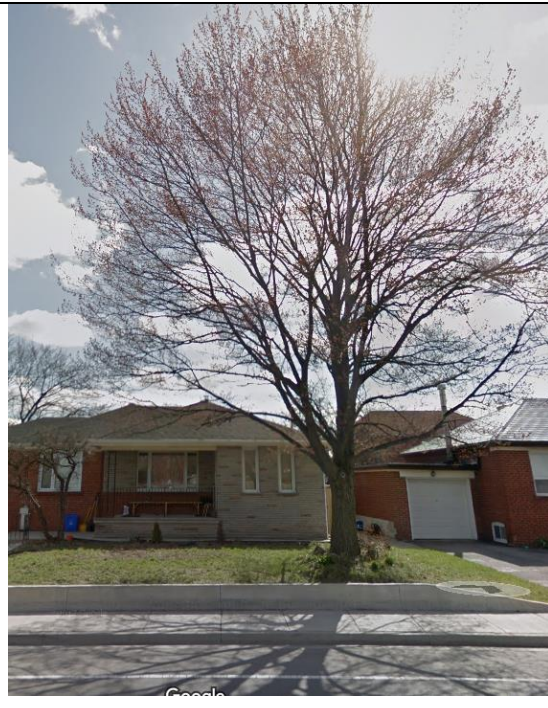
Photograph 15. Manitoba Maple located in the front yard of 2482 Confederation Parkway. (Tree Tag no. 196).



Photograph 16. Manitoba Maples located in the front yard of 2482 Confederation Parkway. (Tree Tag no. 197 and 198).



Photograph 17. Scotch Elm located in the front yard of 2482 Confederation Parkway. (Tree Tag no. 199).



Photograph 18. Silver Maple image taken from google imagery. Tree located in front yard of 2470 Confederation Parkway. No tag. Identified as Tree No. 200.