

REGION OF PEEL

# ARBORIST REPORT AND TREE PROTECTION PLAN

958-960 EAST AVENUE, MISSISSAUGA,  
ONTARIO

DECEMBER 11, 2019





# ARBORIST REPORT AND TREE PROTECTION PLAN

958-960 EAST AVENUE,  
MISSISSAUGA, ONTARIO

REGION OF PEEL

PROJECT NO.: 181-11306-00  
DATE: DECEMBER 11, 2019

WSP  
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December 11, 2019

Region of Peel  
Real Property Asset Management  
10 Peel Centre Drive, Suite B  
Brampton, ON L6T 4B9  
(905)-791-7800 ext. 7657

**Attention: Yuen Lee, PQS, GSC**

Dear Mr. Lee,

**Subject: Arborist Report and Tree Protection Plan**

WSP Canada Inc. (WSP) is pleased to provide you with this Arborist Report and Tree Protection Plan (TPP) in support of a proposed seven-storey mixed use building and parking lot located at 958-960 East Avenue, Mississauga, Ontario.

WSP has compiled an inventory of all trees within 6 m of the proposed development that are greater than 15 centimetres (cm) in diameter at breast height (DBH). Due to the unavoidable minor encroachment into the designated tree protection zones (TPZs) of trees within the vicinity of the construction area, an arborist report has been completed along with the TPP to address potential impacts to trees.

Thank you for the opportunity to complete this assignment. Please contact the undersigned with any questions or comments.

Yours truly,

A handwritten signature in black ink that reads 'Whitney Black'.

Whitney Black, H.B.Sc  
Ecologist, ISA Certified Arborist ON -2146A

WMB/ham

WSP ref.: 181-11306-00

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# SIGNATURES

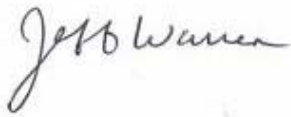
PREPARED BY



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Whitney Black, H.B.Sc.  
Ecologist, ISA Certified Arborist ON-2146A

APPROVED<sup>1</sup> BY



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Jeff Warren, B.Sc.  
Senior Ecologist

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<b>A</b>	TREE INVENTORY
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# 1 INTRODUCTION

WSP Canada Inc. (WSP) was retained to complete an Arborist Report and Tree Protection Plan (TPP) in support of a proposed seven-storey mixed use building and parking lot located at 958-960 East Avenue, Mississauga, Ontario (Figure 1). The Site is bounded by East Avenue to the east, Lakeshore Avenue to the north, lands south are occupied by a Region of Peel paramedic station and Water Treatment Facility and commercial and residential buildings to the west, respectively.

This report is based on the results of an inventory of all trees on the property greater than or equal to 15 centimetres (cm) in diameter at breast height (DBH); which is based on the diameter requirement as defined within the City of Mississauga Private Tree Protection By-law 254-12 (2012). Due to the unavoidable minor encroachment into the designated tree protection zones (TPZs) of trees within the vicinity of the construction area, an arborist report has been completed along with the TPP to address potential impacts to trees.

## 2 STUDY METHODOLOGY

An inventory was completed on September 26, 2019 for all trees 15 cm dbh and above within the property.

The following information was obtained for each tree:

- Tree tag number;
- Tree species (common and scientific names – genus and species);
- DBH either measured directly, or approximated from a distance if trees are situated on private property;
- Tree condition (structure and vigour);
  - GOOD – dead branches less than 10%; signs of good compartmentalization on any wounds, no structural defects.
  - FAIR – 10-30% dead branches, size or occurrence of wounds present some concerns, minor structural defects.
  - POOR – more than 30% dead branches, weak compartmentalization, early leaf drop, presence of insects or disease, major structural defects.
  - DEAD – tree shows no signs of life.
- Evidence of insect or fungal infection;
- Evaluation of the dripline;
- General comments including structural integrity, significant lean, etc.;
- A GPS co-ordinate of each tree or group of trees; and,
- A picture of the tree for reference records.

The results from the tree inventory were used to create a Tree Preservation Plan (TPP) which identifies and details tree protection methodology. As part of this plan, the TPZ for each tree is identified by applying the accepted minimum distances for municipal and privately owned trees. The City of Mississauga does not have standardized TPZ guidelines therefore, zones were calculated using the City of Toronto Tree Protection Policy and Specifications for Construction Near Trees (2016). The TPP includes details on the appropriate use of the TPZ, tree protection fencing, and general notes on best management practices.

### 3 CONTACT INFORMATION

#### APPLICANT:

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#### PROJECT ARBORISTS:

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### 4 LOCATION OF THE TREES

The study area includes the area within 6 m of the proposed building and parking lot. The Site is currently occupied by two (2) buildings and a parking lot. The specific location of each tree is represented on the Tree Inventory and Preservation Plan (Figure 1).

### 5 TREE INVENTORY

A total of 80 trees were inventoried, of which 15 trees were situated on City of Mississauga property just north of the proposed development area. The specific location of each tree is represented on the Tree Preservation Plan (Figure 1). Within the study area, ten (10) tree species were identified, as shown in Table 5-1 below.

**Table 5-1**      **Trees within the Study Area**

COMMON NAME	SCIENTIFIC NAME	NUMBER OF TREES
Austrian Pine	<i>Pinus nigra</i>	27
Blue Spruce	<i>Picea pungens</i>	1
Thornless Honey-locust	<i>Gleditsia triacanthos</i> var. <i>inermis</i>	2
Horsechestnut	<i>Aesculus hippocastanum</i>	1
Little-leaf Linden	<i>Tilia cordata</i>	1
Norway Maple	<i>Acer platanoides</i>	38
Siberian Elm	<i>Ulmus pumila</i>	1
Silver Maple	<i>Acer saccharinum</i>	7
Sugar Maple	<i>Acer saccharum</i>	1
White Ash	<i>Fraxinus americana</i>	1
<b>Total</b>	Individual Trees	<b>80</b>



Of the 80 individual trees inventoried in terms of overall structure and vigor, 38 (48%) were evaluated to be in good condition, 29 (36%) in good-fair condition, 11 (14%) in fair condition, 1 (1%) in fair-poor condition and 1 (1%) in poor condition. Refer to Figure 1 and Appendix A for results of the tree inventory.

## 6 TREE PROTECTION AND REMOVAL PLAN

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### 6.1 TREES TO BE REMOVED

Of the 80 individually assessed trees, 37 trees (Trees #330, 336, 338-340, 342-371 and OS1-OS2) must be removed as they were within or in close proximity to the construction area. For these trees, the recommended TPZs cannot be maintained; and for some, factors including poor health conditions support the decision for removal. Details for trees proposed for removal are provided in Appendix A and shown on Figure 1.

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### 6.2 TREES TO BE RETAINED

The area of disturbance associated with the proposed building and parking lot is outside the minimum TPZs of 42 of the 80 surveyed trees (Figure 1 and Appendix A). Therefore, these trees are not considered to have the potential for impact. These trees (Trees #301-328, 331-335, 337, 341 and 372-378) will not require specific preservation methods, but should receive general protection and preservation methods due to work within their general proximity. To ensure these trees are protected, temporary tree protection fencing has been proposed within the working area to protect their TPZs.

One (1) tree (Tree # 329) will require specific preservation to protect the majority of its TPZ due to the proximity of the adjacent tree (Tree #330) being removed.

General and specific protection measures should not hinder construction movement due to the overall surrounding width of the work area. Trees to be retained with general and specific measures are shown on Figure 1.

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#### 6.2.1 GENERAL PROTECTION AND PRESERVATION METHODS

The following is a list of practical considerations for the construction phase of the project that applies to all trees that may be impacted by the construction:

- The tree protection fencing will be maintained until all construction is completed, soils are stabilized and all of the equipment has been removed from the site.
- Prior to the commencement of tree removals, all limits of the locations of the tree preservation fencing must be clearly staked in the field, installed per approved plans, and approved by the contract administrator. All trees within the TPZ must be left standing. The tree removals must be coordinated in accordance and compliance with the Migratory Bird Convention Act (MBCA).
- All removals must be felled into the work area to ensure that damage does not occur to the trees within the TPZ.
- Upon completion of the tree removals, all felled trees are to be removed from the site, and all should be brush chipped. All brush, roots and wood debris must be shredded into pieces that are smaller than 25 mm in size to ensure that any insect pests that could be present within the wood are destroyed.
- The Canadian Food and Inspection Agency (CFIA) has issued a prohibition of movement of regulated materials where the Emerald Ash Borer (EAB) has been confirmed. EAB has been found within the City of Mississauga and thus the City has been identified as part of the EAB Regulated Area encompassing most of Ontario and a portion of western Quebec. This directive pertains to the movement of regulated materials (including but not

limited to ash wood or bark and ash wood chips or bark chips) from a regulated area. EAB regulated articles moving out of a regulated area must be accompanied by a Movement Certificate issued by the CFIA. Refer to the EAB Regulated Areas of Canada found on the CFIA website.

- Ash materials may be removed from the site and disposed of within the 'Regulated Area' (see CFIA website for the 'Regulated Area' limits). Should it be necessary to dispose of Ash products outside of the 'Regulated Area' a 'Movement Certificate' will be required from the CFIA prior to transport.
- Tree protection fencing must be constructed and installed as per the details on the approved Tree Preservation Plan. Upon installation of the fencing, the contractor will contact the contract administrator to review and approve the fencing and its location prior to commencement of any grading work.
- Areas within the TPZ are not to be used for any type of storage (e.g. storage of debris, construction material, surplus soils, and construction equipment). No trenching or tunnelling for underground services shall be located within the TPZ or dripline of trees designated for preservation within or adjacent to the construction zone.
- No grade changes shall occur within TPZ unless approved as part of this report. In the event that any grade changes may occur, either as a cut or fill situation, the consulting arborist must be notified prior to such work occurring to ensure that all precautions to preserve the tree are made.
- Trees shall not have any rigging cables or hardware of any sort attached or wrapped around them, nor shall any contaminants be dumped within the protective areas. Further, no contaminants shall be dumped or flushed where they may come into contact with the feeder roots of the trees.
- In the event that it is necessary to remove additional limbs or portions of trees after construction has commenced, in order to accommodate the construction, the consulting arborist is to be informed and under their direction the removal is to be executed carefully and in full accordance with arboricultural techniques, by a certified arborist.

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### 6.2.2 ROOT PRUNING PRACTICES:

- All approved root pruning is to take place by or under the supervision of an arborist and in accordance with the Tree Protection Specifications.
- Pruned root ends shall be neatly and squarely trimmed and the area shall be backfilled with clean native fill as soon as possible to prevent desiccation and promote root growth.
- The exposed roots shall not be allowed to dry out and an appropriate watering schedule shall be undertaken (e.g. water bi-weekly to field capacity between June 1st and September 15th) so that the roots maintain optimum soil moisture during construction and backfilling operations.
- Backfilling shall occur immediately and shall be with clean uncontaminated topsoil from an approved source. It is recommended that texture of backfill be coarser than existing soils, and that backfill comes into clean contact with existing soils, i.e. remove air pockets, sod, etc.

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### 6.2.3 BRANCH PRUNING PRACTICES:

- All limbs damaged or broken during the course of construction should be pruned cleanly, utilizing by-pass secateurs in accordance with approved horticultural practices. Should there be a potential risk of transfer of disease from infected to non-infected trees, tools must be disinfected after pruning each tree by dipping in methyl hydrate. This practice is particularly important during periods of tree stress and when pruning many members of the same genera, within which a disease could be spread quickly (i.e., Verticillium Wilt on Maples or Fireblight on genera of the Rosaceae family).
- All pruning cuts should be made to a growing point such as a bud, twig or branch, cut just outside the branch collar (the swollen area at the base of the branch that sometimes has a bark ridge), and perpendicular to the branch being pruned rather than as close to the trunk as possible. This minimizes the size of the wound. No stubs should be left. Poor cut location, poor cut angle and torn cuts are not acceptable.

- Extensive pruning is best completed before plants break dormancy. Pruning should be limited to the removal of no more than one third (1/3) of the total bud and leaf bearing branches. Pruning should include the careful removal of:
  - deadwood;
  - branches that are weak, damaged, diseased and those which will interfere with construction activity;
  - secondary leaders of conifers;
  - trunk and root suckers;
  - trunk waterspouts; and,
  - tight V-shaped or weak crotches (included unions).
- Any branches that overhang the work area and require pruning are to be pruned using good arboricultural practices utilizing by-pass secateurs in accordance with approved horticultural practices and/or American National Standard (ANSI) A300 (Part 1) – 2008 Pruning.
- The Contractor must report immediately any damage to trees such as broken limbs, damage to roots, or wounds to the main trunk or stem systems so that the damage can be assessed immediately.

## 6.2.4 SPECIFIC PRESERVATION METHODS

The area of disturbance associated with the removal of Tree #330 will encroach into the TPZ of Tree #329. Encroachment into the TPZ of this tree is considered minor and it is believed that the tree can be retained provided specific preservation methods are implemented. Information for the tree, including recommended actions is provided in Table 6-1. Details of recommended treatment or specific preservation methods are provided in Table 6-2. General protection and preservation methods, as outlined above will also be applied for this tree.

**Table 6-1 Trees to be Retained with Specific Preservation Methods**

TREE #	SPECIES	DBH (CM)	CONDITION	RECOMMENDED ACTION
329	Norway Maple ( <i>Acer platanoides</i> )	19	This tree is in good to fair condition with less than 10% deadwood. Encroachment into its TPZ will occur during the removal of Tree #330. Provided a minimum distance of at least three times the trunk diameter exists between the tree's trunk and the work to remove Tree #330, this tree should be retained and protected.	Retain and Protect with specific preservation methods #1 - #7 (Table 6-2)

**Table 6-2 Specific Preservation Methods**

METHOD	DETAILS
<b>Pre-Construction</b>	
1	Tree protection fencing for these trees must be placed as near the edge of construction as possible. Alternatively, construction along the tree protection fencing that defines these trees should be limited to the extent necessary.
2	Prune low branches near trunk if they can be injured by machinery. If possible, tree protection fence may be used to move these branches away from the construction zone without injury or need for pruning. Pruning should be limited to less than 20% of the tree's crown, and be completed by a qualified arborist or tree care professional in accordance with good arboricultural standards.
3	A qualified arborist should prune existing broken branches to promote overall tree health.
4	Should construction be required within the TPZ area not protected by fencing, an exploratory dig must be made using a low water pressure hydro-vac method in the presence of a qualified arborist and pruned using acceptable arboricultural techniques i.e. pruning saw or by-pass secateurs (hand pruners) to make a clean cut of the roots if digging goes into the root system. If roots in a dense mat, or greater than 5 cm, are to be

	pruned, the City will be contacted for approval. The dig must expose the upper 5 – 75 cm of soil to assess root condition. Immediately after root pruning, put mulch over exposed root and water soil if needed to maintain moisture.
5	Should roots, provided they are not structural roots (>5 cm in diameter) be found within the construction area, the qualified arborist should make a clean cut of those roots using anvil-type pruning shears.
<b>Construction</b>	
6	If there is any lag time between construction and soil replacement, exposed root areas should be covered in 5 to 10 cm of mulch and kept moist. Remove mulch only when restoration occurs.
<b>Post-Construction</b>	
7	Replacement soil should be contaminant and weed-free topsoil. Replacement soil should be watered during summer dry periods to maintain moisture.

## 7 SUMMARY AND CONCLUSIONS

Trees within the study area were inventoried to optimize tree protection in support of a proposed seven-storey mixed use building and parking lot located at 958-960 East Avenue, Mississauga, Ontario. This TPP was created using the best management practices outlined in the City of Mississauga Private Tree Protection By-law 254-12 (2012). Of the 80 trees inventoried, a total of 37 must be removed as they are within or in close proximity to the construction area. Forty-two (42) are to be retained and protected using the general preservation methods outlined, namely protection of the designated TPZ and installation of tree protection fencing. One (1) tree can be preserved using more specific preservation methods, as outlined above. This Arborist Report and TPP minimizes the number of trees that are to be removed and provides.

## 8 CLOSURE

This report has been prepared by WSP Canada Inc. The assessment represents the conditions at the Site only at the time of the assessment, and is based on the information referenced and contained in this report. WSP Canada Inc. attests that to the best of our knowledge, the information presented in this report is accurate. The use of this report for other projects without written permission of the Client and WSP Canada Inc. is solely at the user's own risk. This report must be reviewed and approved by the relevant regulating agencies prior to being relied upon for planning and/or construction purposes.

Thank you for the opportunity to complete this report. We trust that this information is satisfactory for your current requirements. Please contact us if we can be of further assistance.

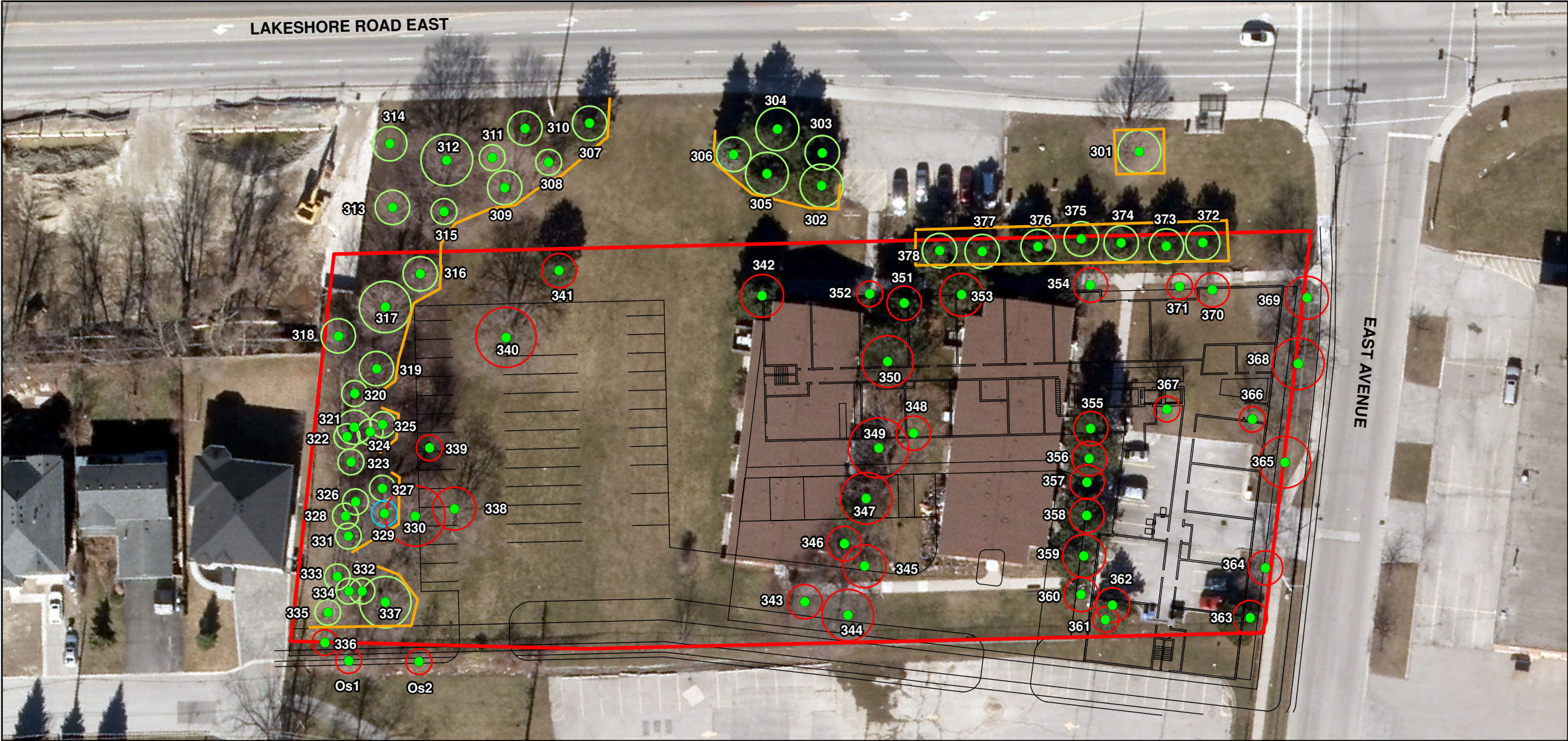
## 9 LITERATURE CITED

- City of Mississauga 2012. Private Tree Protection By-law 254-12. Enacted December 12, 2012. 11 pp.
- City of Toronto. 2016. Tree Protection Policy and Specifications for Construction Near Trees. 18 pp.

# FIGURES







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- LEGEND
- APPROXIMATE SITE BOUNDARY
  - PROPOSED DEVELOPMENT
  - TREE LOCATIONS
  - TREES TO BE REMOVED
  - TREES TO BE RETAINED
  - TREES TO BE RETAINED WITH SPECIFIC METHODS
  - TREE PROTECTION FENCING



0 4 8 Metres

Data Source: Ministry of Natural Resources, Ontario Base Mapping, October 2016.

CLIENT:  
  
REGION OF PEEL

PROJECT:  
  
TREE INVENTORY AND ARBORIST REPORT  
958 - 960 EAST AVENUE  
MISSISSAUGA, ONTARIO

PROJECT NO:  
181-11306-00 233

DATE:  
NOVEMBER 2019

DESIGNED BY:  
-

DRAWN BY:  
T.P.

CHECKED BY:  
-

FIGURE NO:  
1

SCALE:  
1:600

TITLE:  
  
TREE PROTECTION PLAN

DISCIPLINE:  
  
ENVIRONMENT

ISSUE:  
-

REV.:  
-

TREE #	COMMON NAME	SCIENTIFIC NAME	No.	DBH (cm)	CONDITION	CONDITION (G/F/P)			PROTECTION		RECOMMENDATIONS
						STRUCTURE	VIGOUR		ZONE (m)		
301	NORWAY MAPLE	ACER PLATANOIDES	1	42.0	G	G	G		3		RETAIN
302	AUSTRIAN PINE	PINUS NIGRA	1	41.0	G-F	G	F		3		RETAIN
303	AUSTRIAN PINE	PINUS NIGRA	1	37.0	G-F	G	F		2.4		RETAIN
304	AUSTRIAN PINE	PINUS NIGRA	1	46.0	G-F	G	F		3		RETAIN
305	AUSTRIAN PINE	PINUS NIGRA	1	43.0	F	F	F		3		RETAIN
306	BLUE SPRUCE	PICEA PUNGENS	1	37.0	G	G	G		2.4		RETAIN
307	AUSTRIAN PINE	PINUS NIGRA	1	31.0	G	G	G		2.4		RETAIN
308	NORWAY MAPLE	ACER PLATANOIDES	1	21.0	G	G	G		1.8		RETAIN
309	NORWAY MAPLE	ACER PLATANOIDES	1	34.0	G-F	F	G		2.4		RETAIN
310	NORWAY MAPLE	ACER PLATANOIDES	1	37.0	G-F	F	G		2.4		RETAIN
311	NORWAY MAPLE	ACER PLATANOIDES	1	16.0	G-F	F	G		1.8		RETAIN
312	NORWAY MAPLE	ACER PLATANOIDES	1	60.0	G	G	G		3.6		RETAIN
313	NORWAY MAPLE	ACER PLATANOIDES	1	32.0	G-F	F	G		2.4		RETAIN
314	NORWAY MAPLE	ACER PLATANOIDES	1	34.0	G-F	F	G		2.4		RETAIN
315	NORWAY MAPLE	ACER PLATANOIDES	1	24.0	G	G	G		1.8		RETAIN
316	NORWAY MAPLE	ACER PLATANOIDES	1	30.0	G	G	G		2.4		RETAIN
317	SUGAR MAPLE	ACER SACCHARUM	1	52.0	G-F	G	F		3.6		RETAIN
318	NORWAY MAPLE	ACER PLATANOIDES	1	37.0	G-F	F	G-F		2.4		RETAIN
319	NORWAY MAPLE	ACER PLATANOIDES	1	40.0	G	G	G		2.4		RETAIN
320	NORWAY MAPLE	ACER PLATANOIDES	1	22.0	G-F	F	G		1.8		RETAIN
321	NORWAY MAPLE	ACER PLATANOIDES	1	33.0	G	G	G		2.4		RETAIN
322	NORWAY MAPLE	ACER PLATANOIDES	1	29.0	G	G	G		1.8		RETAIN
323	NORWAY MAPLE	ACER PLATANOIDES	1	18.0	F-P	F	P		1.8		RETAIN
324	NORWAY MAPLE	ACER PLATANOIDES	1	16.0	G-F	G	F		1.8		RETAIN
325	NORWAY MAPLE	ACER PLATANOIDES	1	25.0	G	G	G		1.8		RETAIN
326	NORWAY MAPLE	ACER PLATANOIDES	1	22.0	G-F	G	F		1.8		RETAIN
327	NORWAY MAPLE	ACER PLATANOIDES	1	17.0	G-F	G	F		1.8		RETAIN
328	NORWAY MAPLE	ACER PLATANOIDES	1	27.0	G-F	G	F		1.8		RETAIN
329	NORWAY MAPLE	ACER PLATANOIDES	1	19.0	G-F	F	G		1.8		RETAIN WITH SPECIFIC METHODS
330	SILVER MAPLE	ACER SACCHARINUM	1	68.0	F	F	F		4.2		REMOVE
331	NORWAY MAPLE	ACER PLATANOIDES	1	20.0	F	F	F		1.8		RETAIN
332	NORWAY MAPLE	ACER PLATANOIDES	1	28.0	G-F	F	G		1.8		RETAIN
333	NORWAY MAPLE	ACER PLATANOIDES	1	20.0	G	G	G		1.8		RETAIN
334	NORWAY MAPLE	ACER PLATANOIDES	1	22.0	G	G	G		1.8		RETAIN
335	NORWAY MAPLE	ACER PLATANOIDES	1	27.0	G	G	G		1.8		RETAIN
336	NORWAY MAPLE	ACER PLATANOIDES	1	18.0	F	F	F		1.8		REMOVE
Os1	SIBERIAN ELM	ULMUS PUMILA	1	24.0	G-F	F	G		1.8		REMOVE
Os2	NORWAY MAPLE	ACER PLATANOIDES	1	19.0	F	F	F		1.8		REMOVE
337	NORWAY MAPLE	ACER PLATANOIDES	1	51.0	F	F	F		3.6		RETAIN
338	NORWAY MAPLE	ACER PLATANOIDES	1	45.0	G	G	G		3		REMOVE

TREE #	COMMON NAME	SCIENTIFIC NAME	No.	DBH (cm)	CONDITION (G/F/P)			PROTECTION	
					CONDITION	STRUCTURE	VIGOUR	ZONE (m)	RECOMMENDATIONS
339	WHITE ASH	FRAXINUS AMERICANA	1	18.0	F	F	F	1.8	REMOVE
340	NORWAY MAPLE	ACER PLATANOIDES	1	62.0	G	G	G	4.2	REMOVE
341	AUSTRIAN PINE	PINUS NIGRA	1	34.0	G	G	G	2.4	REMOVE
342	AUSTRIAN PINE	PINUS NIGRA	1	41.0	G	G	G	3	REMOVE
343	LITTLE-LEAF LINDEN	TILIA CORDATA	1	40.0	G	G	G	2.4	REMOVE
344	HONEY-LOCUST	GLEDITSIA TRIACANTHOS	1	52.0	F	F	F	3.6	REMOVE
345	SILVER MAPLE	ACER SACCHARINUM	1	49.0	G	G	G	3	REMOVE
346	AUSTRIAN PINE	PINUS NIGRA	1	38.0	G	G	G	2.4	REMOVE
347	SILVER MAPLE	ACER SACCHARINUM	1	52.0	G-F	F	G	3.6	REMOVE
348	HORSECHESTNUT	AESCULUS HIPPOCASTANUM	1	38.0	G-F	F	G	2.4	REMOVE
349	SILVER MAPLE	ACER SACCHARINUM	1	62.0	G	G	G	4.2	REMOVE
350	AUSTRIAN PINE	PINUS NIGRA	1	51.0	G-F	G	F	3.6	REMOVE
351	AUSTRIAN PINE	PINUS NIGRA	1	36.0	G-F	F	G	2.4	REMOVE
352	NORWAY MAPLE	ACER PLATANOIDES	1	26.0	G	G	G	1.8	REMOVE
353	AUSTRIAN PINE	PINUS NIGRA	1	41.0	G-F	F	G	3	REMOVE
354	NORWAY MAPLE	ACER PLATANOIDES	1	33.0	F	F	F	2.4	REMOVE
355	AUSTRIAN PINE	PINUS NIGRA	1	37.0	G	G	G	2.4	REMOVE
356	AUSTRIAN PINE	PINUS NIGRA	1	33.0	G	G	G	2.4	REMOVE
357	AUSTRIAN PINE	PINUS NIGRA	1	30.0	G-F	F	G	2.4	REMOVE
358	AUSTRIAN PINE	PINUS NIGRA	1	34.0	G	G	G	2.4	REMOVE
359	AUSTRIAN PINE	PINUS NIGRA	1	42.0	G	G	G	3	REMOVE
360	AUSTRIAN PINE	PINUS NIGRA	1	33.0	G	G	G	2.4	REMOVE
361	AUSTRIAN PINE	PINUS NIGRA	1	23.0	F	F	F	1.8	REMOVE
362	AUSTRIAN PINE	PINUS NIGRA	1	32.0	G	G	G	2.4	REMOVE
363	AUSTRIAN PINE	PINUS NIGRA	1	31.0	G	G	G	2.4	REMOVE
364	SILVER MAPLE	ACER SACCHARINUM	1	37.0	F	F	F	2.4	REMOVE
365	SILVER MAPLE	ACER SACCHARINUM	1	55.0	P	P	P	3.6	REMOVE
366	NORWAY MAPLE	ACER PLATANOIDES	1	21.0	G	G	G	1.8	REMOVE
367	NORWAY MAPLE	ACER PLATANOIDES	1	29.0	G	G	G	1.8	REMOVE
368	HONEY-LOCUST	GLEDITSIA TRIACANTHOS	1	54.0	G	G	G	3.6	REMOVE
369	SILVER MAPLE	ACER SACCHARINUM	1	46.0	G-F	G	F	3	REMOVE
370	NORWAY MAPLE	ACER PLATANOIDES	1	31.0	G	G	G	2.4	REMOVE
371	NORWAY MAPLE	ACER PLATANOIDES	1	20.0	G-F	G	F	1.8	REMOVE
372	AUSTRIAN PINE	PINUS NIGRA	1	31.0	G-F	G	G	2.4	RETAIN
373	AUSTRIAN PINE	PINUS NIGRA	1	39.0	G-F	F	G	2.4	RETAIN
374	AUSTRIAN PINE	PINUS NIGRA	1	30.0	G	G	G	2.4	RETAIN
375	AUSTRIAN PINE	PINUS NIGRA	1	35.0	G-F	G	G	2.4	RETAIN
376	AUSTRIAN PINE	PINUS NIGRA	1	39.0	G	G	G	2.4	RETAIN
377	AUSTRIAN PINE	PINUS NIGRA	1	36.0	G	G	G	2.4	RETAIN
378	AUSTRIAN PINE	PINUS NIGRA	1	35.0	G	G	G	2.4	RETAIN



TREE PRESERVATION NOTES AND GUIDELINES

ESTABLISHMENT OF TREE PROTECTION ZONE (TPZ):

- TREE PRESERVATION MEASURES, INCLUDING THE ESTABLISHMENT OF TREE PROTECTION ZONE (TPZ) SHALL APPLY TO THE VEGETATION IDENTIFIED TO BE RETAINED AND PROTECTED. THE TREE PROTECTION ZONE SHALL CONSIST OF TREE PROTECTION FENCING AS PER CITY OF MISSISSAUGA STANDARD, PLACED AT THE DRIPLINE OF VEGETATION TO BE PRESERVED. REFER TO DETAILS ON THIS SHEET.
- NO GRADE CHANGES SHALL OCCUR WITHIN TREE PROTECTION ZONE. IN THE EVENT THAT GRADE CHANGES OCCUR EITHER AS A CUT OR FILL SITUATION, THE CONSULTING ARBORIST MUST BE NOTIFIED SO THAT PRECAUTIONS TO PRESERVE THE TREE CAN BE DETERMINED PRIOR TO THE PLACEMENT OF FILL OR EXCAVATION ACTIVITIES.
- EVERY PRECAUTION MUST BE TAKEN TO PREVENT DAMAGE TO TREES AND ROOT SYSTEMS FROM DAMAGE, COMPACTION AND CONTAMINATION RESULTING FROM THE CONSTRUCTION TO THE SATISFACTION OF THE CONSULTING ARBORIST.
- TREES THAT REQUIRE PRUNING TO PERMIT CONSTRUCTION ACTIVITIES WILL BE DONE SO IN ACCORDANCE WITH GOOD ARBORICULTURAL PRACTICES. IN THE EVENT THAT IT IS NECESSARY TO REMOVE ADDITIONAL LIMBS OR PORTIONS OF TREES, AFTER CONSTRUCTION HAS COMMENCED, TO ACCOMMODATE CONSTRUCTION, THE CONSULTING ARBORIST IS TO BE INFORMED AND UNDER THEIR DIRECTION THE REMOVAL IS TO BE EXECUTED CAREFULLY AND IN FULL ACCORDANCE WITH ARBORICULTURAL TECHNIQUES, BY A CERTIFIED ARBORIST.
- ANY DAMAGE TO TREES SUCH AS BROKEN LIMBS, DAMAGE TO ROOTS, OR WOUNDS TO THE MAIN TRUNK OR STEM SYSTEMS ARE TO BE REPORTED TO THE CONSULTING ARBORIST SO THAT THE DAMAGE CAN BE ASSESSED IMMEDIATELY AND MITIGATION CAN BE PROMPTLY IMPLEMENTED.

TREE PROTECTION ZONE:

APPLIES TO TREES LOCATED THE LIMIT OF GRADING OR NOTED OTHERWISE. THESE TREES ARE TO BE PRESERVED AND WILL HAVE SILT / TREE PROTECTION FENCING INSTALLED AT ALONG THE LIMIT OF GRADING / LIMIT OF WORK TO ESTABLISH THE TREE PROTECTION ZONE. ANY DAMAGE TO TREES SUCH AS BROKEN LIMBS, DAMAGE TO ROOTS, OR WOUNDS TO THE MAIN TRUNK OR STEM SYSTEMS ARE TO BE REPORTED TO THE CONSULTING ARBORIST SO THAT THE DAMAGE CAN BE ASSESSED IMMEDIATELY AND MITIGATION CAN BE PROMPTLY IMPLEMENTED. WITHIN A TREE PROTECTION ZONE THERE IS TO BE:

- NO CONSTRUCTION
- NO ALTERING OF GRADE BY ADDING FILL, EXCAVATING, TRENCHING, SCRAPING, DUMPING OR DISTURBANCE OF ANY KIND.
- NO STORAGE OF CONSTRUCTION MATERIALS, EQUIPMENT, SOIL, CONSTRUCTION WASTE OR DEBRIS WITHIN THE DRIP LINE
- NO MOVEMENT OF VEHICLES, EQUIPMENT
- NO PARKING OF VEHICLES OR MACHINERY
- NO DIGGING, BORING
- NO RIGGING CABLES SHALL BE WRAPPED AROUND OR INSTALLED IN TREES
- NO CONTAMINANTS WILL BE PLACED OVER ROOT SYSTEM
- NO CONTAMINANTS WILL BE DUMPED OR FLUSHED WHERE FEEDER ROOTS OF TREES EXIST

WORK WITHIN TREE PROTECTION ZONE:

IF WORK MUST BE CONDUCTED WITHIN A TREE PROTECTION ZONE THE CONTRACTOR SHOULD MINIMIZE SOIL COMPACTION AND MECHANICAL ROOT DAMAGE BY UTILIZING ONE OF THE FOLLOWING FOUR METHODS:

1. APPLYING 150-300mm OF MULCH TO AREA. UPON COMPLETION REMOVE EXCESS MULCH LEAVING A 100mm DEPTH LAYER OF MULCH.
2. LAYING 20mm THICK PLYWOOD OR 100X100mm WOOD BEAMS OVER A 100+MM THICK LAYER OF WOOD CHIP MULCH. UPON COMPLETION REMOVE PLYWOOD AND LEAVE MULCH LAYER IN PLACE.
3. APPLYING 100-150mm DEPTH OF GRAVEL OVER A TAUT, STAKED GEOTEXTILE FABRIC. UPON COMPLETION REMOVE GRAVEL AND GEOTEXTILE.
4. PLACING COMMERCIAL LOGGING OR ROAD MATS ON TOP OF A MULCH LAYER. UPON COMPLETION REMOVE MATS. STONE, GEOTEXTILE, AND MULCH EXCEEDING 100mm THICK WILL BE REMOVED FROM THE TREE PRESERVATION AREA ONCE THE THREAT OF SOIL OR ROOT DAMAGE HAS PASSED.

TREE PRESERVATION AND PROTECTION RECOMMENDATIONS:

THE SURVIVAL RATES FOR TREES, WHICH ARE IN PROXIMITY TO CONSTRUCTION SITES ARE DEPENDENT ON THE RESULTANT CHANGES TO A VARIETY OF ENVIRONMENTAL AND ANTHROPOGENIC FACTORS. THESE CONSTRUCTION ACTIVITIES BRING ABOUT CHANGES TO A VARIETY OF ENVIRONMENTAL FEATURES INCLUDING THE EXISTING MICROCLIMATE INCLUDING WINDS, TEMPERATURE, SOIL MOISTURE, AMOUNT OF AVAILABLE SUNLIGHT, SOIL QUALITY, AND THE LEVEL OF THE WATER TABLE. INCREASED HUMAN ACTIVITIES MAY ALSO DAMAGE THE STRUCTURE AND / OR PHYSIOLOGICAL ACTIVITIES OF THE TREES. THE FULL EFFECTS OF THE DAMAGE MAY NOT APPEAR UNTIL SEVERAL YEARS AFTER ITS OCCURRENCE. THUS, IT IS ESSENTIAL THAT BOTH VEGETATIVE CLEARING AND PRESERVATION METHODS FOLLOW THE GUIDELINES BELOW AND THOSE GENERALLY ACCEPTED AS KEEPING WITH GOOD HORTICULTURAL AND CONSTRUCTION PRACTICES. THE GUIDELINES ARE SUBJECT TO ADJUSTMENTS DEEMED REASONABLE AND APPROPRIATE CONSIDERING THE PROXIMITY AND NUMBER OF TREES INVOLVED AND THE SITE-SPECIFIC SERVICING REQUIREMENT.

GENERAL RECOMMENDATIONS:

- ALL TREES WITHIN THE TREE PRESERVATION ZONE MUST BE LEFT STANDING. THE TREE REMOVALS MUST BE COORDINATED TO BE COMPLETED OUTSIDE OF THE BIRD NESTING SEASON, APRIL 1 TO AUGUST 31.
- ALL REMOVALS MUST BE FELLED INTO THE WORK AREA TO ENSURE THAT DAMAGE DOES NOT OCCUR TO THE TREES WITHIN THE TREE PRESERVATION ZONE.
- UPON COMPLETING OF THE TREE REMOVALS, ALL FELLED TREES ARE TO BE CHIPPED. THIS WORK MUST BE COMPLETED OUTSIDE OF THE BIRD NESTING SEASON, APRIL 1 TO AUGUST 31.
- TREE PROTECTION FENCING / SILT FENCE MUST BE INSTALLED AS PER THE CITY OF MISSISSAUGA STANDARD SILT FENCE DETAIL AND AS SHOWN ON THE APPROVED MUNICIPAL ENGINEERING PLAN. UPON INSTALLATION OF THE FENCING, THE CONTRACTOR WILL CONTACT THE CONSULTING ARBORIST TO REVIEW AN APPROVE THE FENCING AND ITS LOCATION PRIOR TO COMMENCEMENT OF ANY GRADING WORK.
- AREAS WITHIN THE TREE PRESERVATION ZONE ARE NOT TO BE USED FOR ANY TYPE OF STORAGE (E.G. STORAGE OF DEBRIS, CONSTRUCTION MATERIAL, SURPLUS SOILS, AND CONSTRUCTION EQUIPMENT). NO TRENCHING OR TUNNELLING FOR UNDERGROUND SERVICES SHALL BE LOCATED WITHIN THE TREE PROTECTION ZONE OR DRIPLINE OF TREES DESIGNATED FOR PRESERVATION WITHIN OR ADJACENT TO THE CONSTRUCTION ZONE.

ROOT PRUNING:

- AT THE COMMENCEMENT OF CONSTRUCTION PRUNE ROOTS CLEANLY USING ACCEPTABLE ARBORICULTURAL PRACTICES AND IMMEDIATELY BACKFILL WITH APPROPRIATE MATERIAL. ROOTS OVER 2.5cm DIAMETER THAT ARE TO BE CUT SHOULD BE PRUNED RATHER THAN LEFT TORN OR CRUSHED. THE FOLLOWING ARE GENERAL METHODS OF ROOT PRUNING:
1. SOIL EXCAVATION USING SUPERSONIC AIR TOOLS, PRESSURIZED WATER OR HAND TOOLS, FOLLOWED BY SELECTIVE ROOT CUTTING
  2. CUTTING THROUGH THE SOIL ALONG A PREDETERMINED LINE ON THE SURFACE USING TOOL SPECIFICALLY DESIGNED TO CUT ROOTS
  3. MECHANICALLY EXCAVATING (e.g. BACKHOE) THE SOIL AND PRUNING WHAT IS LEFT OF THE EXPOSED ROOTS.
  4. CUTS TO BE MADE WITH HAND PRUNING SHEARS, BY-PASS BLADE, PRUNING SAW. DO NOT USE ANVIL TYPE PRUNERS.

PRUNING PRACTICES:

- ALL LIMBS DAMAGED OR BROKEN DURING THE COURSE OF CONSTRUCTION SHOULD BE PRUNED CLEANLY, UTILIZING BY-PASS SECATEURS IN ACCORDANCE WITH APPROVED HORTICULTURAL PRACTICES. SHOULD THERE BE A POTENTIAL RISK OF TRANSFER OF DISEASE FROM INFECTED TO NON-INFECTED TREES; TOOLS MUST BE DISINFECTED AFTER PRUNING EACH TREE BY DIPPING IN METHYL HYDRATE. THIS PRACTICE IS PARTICULARLY IMPORTANT DURING PERIODS OF TREE STRESS AND WHEN PRUNING MANY MEMBERS OF THE SAME GENERA, WITHIN WHICH A DISEASE COULD BE SPREAD QUICKLY (I.E., VERTICILLIUM WILT ON MAPLES OR FIRE BLIGHT ON GENERA OF THE ROSACEA FAMILY).

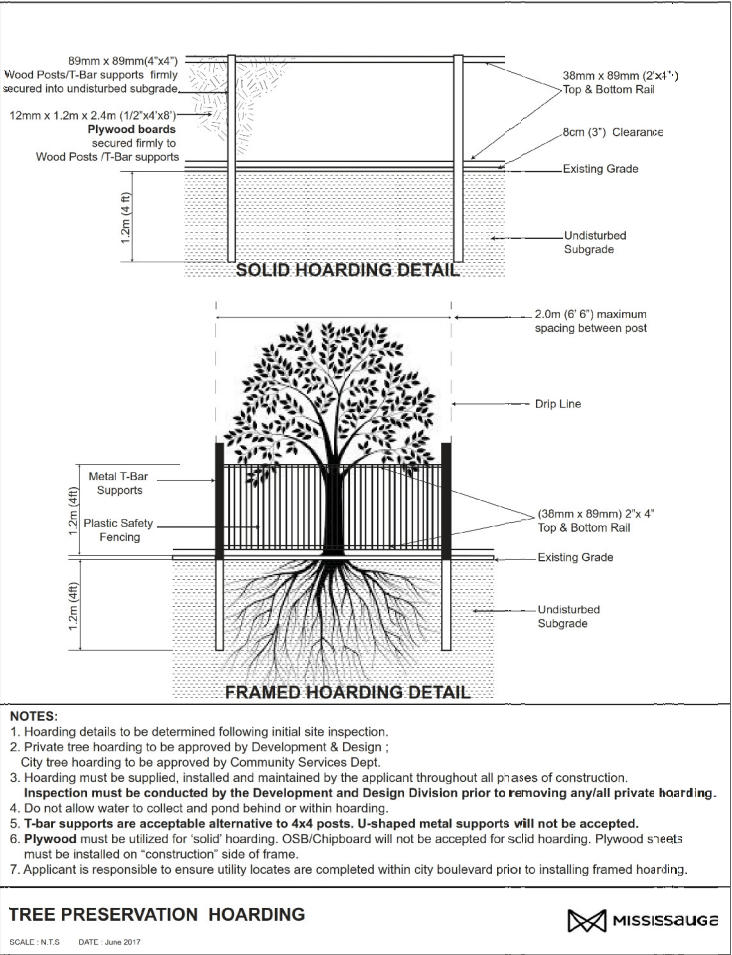
- DURING EXCAVATION OPERATIONS IN WHICH THE ROOT AREA IS AFFECTED, THE CONTRACTOR IS TO PRUNE ALL EXPOSED ROOTS CLEANLY. PRUNED ROOT ENDS ARE TO BE NEATLY AND SQUARELY TRIMMED AND THE AREA IS TO BE BACKFILLED WITH CLEAN NATIVE FILL AS SOON AS POSSIBLE TO PREVENT DESICCATION AND PROMOTE ROOT GROWTH. THE EXPOSED ROOTS SHOULD NOT BE ALLOWED TO DRY OUT, AND THE CONTRACTOR SHALL DISCUSS WATERING OF THE ROOTS WITH THE CONSULTING ARBORIST SO THAT THE ROOTS SHALL MAINTAIN OPTIMUM SOIL MOISTURE DURING CONSTRUCTION AND BACKFILLING OPERATIONS, YET SO NOT TO INTERFERE WITH CONSTRUCTION OPERATIONS. BACKFILLING MUST BE WITH CLEAN UNCONTAMINATED TOPSOIL FROM AN APPROVED SOURCE. TEXTURE MUST BE COARSER THAN EXISTING SOILS, AND TO COME INTO CLEAN CONTACT WITH EXISTING SOILS (REMOVE AIR POCKETS, SOD, ETC.)
- ALL PRUNING CUTS SHOULD BE MADE TO A GROWING POINT SUCH AS A BUD, TWIG OR BRANCH, CUT JUST OUTSIDE THE BRANCH COLLAR (THE SWOLLEN AREA AT THE BASE OF THE BRANCH THAT SOMETIMES HAS A BARK RIDGE), AND PERPENDICULAR TO THE BRANCH BEING PRUNED RATHER THAN AS CLOSE TO THE TRUNK AS POSSIBLE. THIS MINIMIZES THE SITE OF THE WOUND. NO STUBS SHOULD BE LEFT. POOR CUT LOCATION, POOR CUT ANGLE AND TORN CUTS ARE NOT ACCEPTABLE.
- TREE ROOTS SHOULD NOT BE EXCAVATED WITHIN THE CRITICAL STRUCTURAL ROOTING AREA. THIS IS THE MINIMUM AREA OF THE ROOT SYSTEM NECESSARY TO MAINTAIN VITALITY OR STABILITY OF THE TREE. TYPICALLY THIS AREA EXTENDS TO THE DRIPLINE OF THE TREE. THE SEVERING OF ONE ROOT CAN CAUSE APPROXIMATELY 5-20% LOSS OF THE ROOT SYSTEM. A REDUCTION OF THIS AREA BY GREATER THAN 30% CAN POSE STABILITY CONCERNS FOR THE TREE.
- A SLOW RELEASE FERTILIZER EG: BONE MEAL OR APPROVED EQUAL TO BE APPLIED TO TREES WHERE ROOT PRUNING OR ROOT DAMAGE HAS OCCURRED. APPLY PER MANUFACTURER'S RECOMMENDATIONS.
- EXTENSIVE PRUNING IS BEST COMPLETED BEFORE PLANTS BREAK DORMANCY. PRUNING SHOULD BE LIMITED TO THE REMOVAL OF NO MORE THAN ONE THIRD (1/3) OF THE TOTAL BUD AND LEAF BEARING BRANCHES. PRUNING SHOULD INCLUDE THE CAREFUL REMOVAL OF:
  - DEADWOOD,
  - BRANCHES THAT ARE WEAK, DAMAGED, DISEASED AND THOSE WHICH WILL INTERFERE WITH CONSTRUCTION ACTIVITY,
  - SECONDARY LEADERS OF CONIFERS,
  - TRUNK AND ROOT SUCKERS,
  - TRUNK WATERSPOUTS, AND
  - TIGHT V-SHAPED OR WEAK CROTCHES (INCLUDED UNIONS).

THE CONTRACTOR MUST IMMEDIATELY REPORT ANY DAMAGE TO TREES SUCH AS BROKEN LIMBS, DAMAGE TO ROOTS, OR WOUNDS TO THE MAIN TRUNK OR STEM SYSTEMS SO THAT THE DAMAGE CAN BE ASSESSED IMMEDIATELY. THE TREE PROTECTION FENCING WILL BE MAINTAINED UNTIL ALL CONSTRUCTION IS COMPLETED, SOILS ARE STABILIZED AND ALL OF THE EQUIPMENT HAS BEEN REMOVED FROM THE SITE.

TREE INJURY:

- TYPICALLY TREE ROOTS EXTEND 1.5 TO 3 TIMES BEYOND THE DRIPLINE OF THE TREE AND ARE WITHIN THE TOP 150mm OF THE SOIL. TYPES OF DAMAGE FROM CONSTRUCTION INCLUDE:
- PHYSICAL INJURY
  - SOIL COMPACTION
  - SEVERING OF ROOTS
  - SMOTHERING OF ROOTS
  - SPLIT OR BROKEN BRANCHES
  - EXCESSIVE PRUNING

SOIL COMPACTION REDUCES PORE SPACE, OXYGEN AVAILABLE TO ROOTS INCREASES CARBON DIOXIDE ACCUMULATION, RESTRICTS ROOT GROWTH AND THE ABILITY TO ABSORB WATER AND NUTRIENTS, AS WELL AS IMPAIRS DRAINAGE. SMOTHERING OF ROOTS: 90% OF FINE ABSORBING ROOTS ARE WITHIN THE UPPER 150-300mm OF THE SOIL. SMOTHERING WITH THE ADDITION OF SOIL CAN KILL THE ROOTS AND STRESS THE TREE. PHYSICAL INJURY, SPLIT OR BROKEN BRANCHES HINDER THE TREES ABILITY TO COMPARTMENTALIZE (CLOSE) WOUNDS PROPERLY.



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LEGEND

CLIENT:

REGION OF PEEL

PROJECT:

TREE INVENTORY AND ARBORIST REPORT  
958 - 960 EAST AVENUE  
MISSISSAUGA, ONTARIO

PROJECT NO:  
181-11306-00 233

DATE:  
DECEMBER 2019

DESIGNED BY:

-

DRAWN BY:

T.P.

CHECKED BY:

-

FIGURE NO:  
2

SCALE:

TITLE:

TREE PROTECTION PLAN -  
NOTES

DISCIPLINE:

ENVIRONMENT

ISSUE:

-

REV.:

-



# APPENDIX

## A TREE INVENTORY



## TREE INVENTORY

Project: 181-11306-00							Field Work Completed By: W.Black			Date of Fieldwork: September 26, 2019			
Tree ID	Common Name	Scientific Name	No.	DBH (cm)	Effective DBH <sup>1</sup>	% Dead Branches	Condition (G/F/P) <sup>2</sup>			Comments (Wounds, Insects, Disease, other)	City of Mississauga Tree	TPZ	Recommendation
							Overall Condition	Condition/Structure	Health/Vigour				
301	Norway Maple	<i>Acer platanoides</i>	1	42.00	42.00	<10	G - Good	G - Good	G - Good	Tar spots on leaves	X	3	Retain
302	Austrian Pine	<i>Pinus nigra</i>	1	41.00	41.00	<10	G-F - Good to Fair	G - Good	F - Fair	Some dieback	X	3	Retain
303	Austrian Pine	<i>Pinus nigra</i>	1	37.00	37.00	<10	G-F - Good to Fair	G - Good	F - Fair	Some dieback	X	2.4	Retain
304	Austrian Pine	<i>Pinus nigra</i>	1	46.00	46.00	<10	G-F - Good to Fair	G - Good	F - Fair	Slight lean, dieback	X	3	Retain
305	Austrian Pine	<i>Pinus nigra</i>	1	43.00	43.00	<10	F - Fair	F - Fair	F - Fair	Slight lean, dieback, firebug	X	3	Retain
306	Blue Spruce	<i>Picea pungens</i>	1	37.00	37.00	<10	G - Good	G - Good	G - Good		X	2.4	Retain
307	Austrian Pine	<i>Pinus nigra</i>	1	31.00	31.00	<10	G - Good	G - Good	G - Good		X	2.4	Retain
308	Norway Maple	<i>Acer platanoides</i>	1	21.00	21.00	<10	G - Good	G - Good	G - Good	Slight lean, tar spots	X	1.8	Retain
309	Norway Maple	<i>Acer platanoides</i>	1	34.00	34.00	<10	G-F - Good to Fair	F - Fair	G - Good	Slight lean, y at 2.5 m included bark, tar spots	X	2.4	Retain
310	Norway Maple	<i>Acer platanoides</i>	1	37.00	37.00	<10	G-F - Good to Fair	F - Fair	G - Good	Curved trunk	X	2.4	Retain
311	Norway Maple	<i>Acer platanoides</i>	1	16.00	16.00	<10	G-F - Good to Fair	F - Fair	G - Good	Curved trunk, tar spots	X	1.8	Retain
312	Norway Maple	<i>Acer platanoides</i>	1	60.00	60.00	<10	G - Good	G - Good	G - Good	Tar spots on leaves	X	3.6	Retain
313	Norway Maple	<i>Acer platanoides</i>	1	32.00	32.00	<10	G-F - Good to Fair	F - Fair	G - Good	Competition from large maple, on growing from one side, tar spots	X	2.4	Retain
314	Norway Maple	<i>Acer platanoides</i>	1	34.00	34.00	<10	G-F - Good to Fair	F - Fair	G - Good	Slight lean, favouring one side growth, tar spots	X	2.4	Retain
315	Norway Maple	<i>Acer platanoides</i>	1	24.00	24.00	<10	G - Good	G - Good	G - Good	Tar spots on leaves	X	1.8	Retain
316	Norway Maple	<i>Acer platanoides</i>	1	30.00	30.00	<10	G - Good	G - Good	G - Good	Tar spots on leaves		2.4	Retain
317	Sugar Maple	<i>Acer saccharum</i>	1	52.00	52.00	<10	G-F - Good to Fair	G - Good	F - Fair	Dieback, lower dead branches		3.6	Retain
318	Norway Maple	<i>Acer platanoides</i>	1	34.14	37.0	<10	G-F - Good to Fair	F - Fair	G-F - Good to Fair	Curved trunk, multi at base, Manitoba maple growing right beside		2.4	Retain
319	Norway Maple	<i>Acer platanoides</i>	1	40.00	40.00	<10	G - Good	G - Good	G - Good	Tar spots on leaves		2.4	Retain
320	Norway Maple	<i>Acer platanoides</i>	1	22.00	22.00	<10	G-F - Good to Fair	F - Fair	G - Good	Curved top, tar spots		1.8	Retain
321	Norway Maple	<i>Acer platanoides</i>	1	33.00	33.00	<10	G - Good	G - Good	G - Good	Squirrels nest, tar spots		2.4	Retain
322	Norway Maple	<i>Acer platanoides</i>	1	29.00	29.00	<10	G - Good	G - Good	G - Good	Leaning		1.8	Retain
323	Norway Maple	<i>Acer platanoides</i>	1	18.00	18.00	80	F-P - Fair to Poor	F - Fair	P - Poor	A lot of dieback		1.8	Retain
324	Norway Maple	<i>Acer platanoides</i>	1	16.00	16.00	<10	G-F - Good to Fair	G - Good	F - Fair	Epicormic shooting, tar spots		1.8	Retain
325	Norway Maple	<i>Acer platanoides</i>	1	25.00	25.00	<10	G - Good	G - Good	G - Good	Tar spots on leaves		1.8	Retain
326	Norway Maple	<i>Acer platanoides</i>	1	22.00	22.00	<10	G-F - Good to Fair	G - Good	F - Fair			1.8	Retain
327	Norway Maple	<i>Acer platanoides</i>	1	17.00	17.00	<10	G-F - Good to Fair	G - Good	F - Fair	Epicormic shooting, tar spots		1.8	Retain
328	Norway Maple	<i>Acer platanoides</i>	1	27.00	27.00	<10	G-F - Good to Fair	G - Good	F - Fair	Epicormic shooting, tar spots		1.8	Retain
329	Norway Maple	<i>Acer platanoides</i>	1	19.00	19.00	<10	G-F - Good to Fair	F - Fair	G - Good	Curved trunk, tar spots		1.8	Retain with specific methods
330	Silver Maple	<i>Acer saccharinum</i>	1	68.00	68.00	<10	F - Fair	F - Fair	F - Fair	Significant lean, some dieback, y at 4 m		4.2	Remove
331	Norway Maple	<i>Acer platanoides</i>	1	20.00	20.00	25	F - Fair	F - Fair	F - Fair	Leaning, dieback tar spots		1.8	Retain
332	Norway Maple	<i>Acer platanoides</i>	1	28.00	28.00	<10	G-F - Good to Fair	F - Fair	G - Good	Curved trunk, tar spots		1.8	Retain
333	Norway Maple	<i>Acer platanoides</i>	1	20.00	20.00	<10	G - Good	G - Good	G - Good	Some epicormic shoots.		1.8	Retain
334	Norway Maple	<i>Acer platanoides</i>	1	22.00	22.00	<10	G - Good	G - Good	G - Good			1.8	Retain
335	Norway Maple	<i>Acer platanoides</i>	1	27.00	27.00	<10	G - Good	G - Good	G - Good			1.8	Retain
336	Norway Maple	<i>Acer platanoides</i>	1	18.00	18.00	<10	F - Fair	F - Fair	F - Fair	Growing up against fence, wounds on trunk, tar spots		1.8	Remove
Os1	Siberian Elm	<i>Ulmus pumila</i>	1	24.00	24.00	<10	G-F - Good to Fair	F - Fair	G - Good	Up against fence, y at 4m, leaning		1.8	Remove
Os2	Norway Maple	<i>Acer platanoides</i>	1	15.11	19.0	<10	F - Fair	F - Fair	F - Fair	Y at base, up against fence wild grape		1.8	Remove
337	Norway Maple	<i>Acer platanoides</i>	1	51.00	51.00	25	F - Fair	F - Fair	F - Fair	Some dead stems, multi at 2.5 m,		3.6	Retain
338	Norway Maple	<i>Acer platanoides</i>	1	45.00	45.00	<10	G - Good	G - Good	G - Good			3	Remove
339	White Ash	<i>Fraxinus americana</i>	1	18.00	18.00	<10	F - Fair	F - Fair	F - Fair	Leaning, some dieback, EAB		1.8	Remove
340	Norway Maple	<i>Acer platanoides</i>	1	62.00	62.00	<10	G - Good	G - Good	G - Good	Exposed roots, tar spots		4.2	Remove
341	Austrian Pine	<i>Pinus nigra</i>	1	34.00	34.00	<10	G - Good	G - Good	G - Good			2.4	Retain
342	Austrian Pine	<i>Pinus nigra</i>	1	41.00	41.00	<10	G - Good	G - Good	G - Good			3	Remove
343	Little-leaf Linden	<i>Tilia cordata</i>	1	40.00	40.00	<10	G - Good	G - Good	G - Good			2.4	Remove
344	Honey-locust	<i>Gleditsia triacanthos</i>	1	52.00	52.00	<10	F - Fair	F - Fair	F - Fair	Dieback, at 4 m		3.6	Remove
345	Silver Maple	<i>Acer saccharinum</i>	1	49.00	49.00	<10	G - Good	G - Good	G - Good	Multi at 2.5m		3	Remove
346	Austrian Pine	<i>Pinus nigra</i>	1	38.00	38.00	<10	G - Good	G - Good	G - Good			2.4	Remove
347	Silver Maple	<i>Acer saccharinum</i>	1	37.37	52.0	<10	G-F - Good to Fair	F - Fair	G - Good	Multi at 1m		3.6	Remove
348	Horsechestnut	<i>Aesculus hippocastanum</i>	1	38.00	38.00	<10	G-F - Good to Fair	F - Fair	G - Good	Multi at 2.5m		2.4	Remove
349	Silver Maple	<i>Acer saccharinum</i>	1	62.00	62.00	<10	G - Good	G - Good	G - Good			4.2	Remove
350	Austrian Pine	<i>Pinus nigra</i>	1	51.00	51.00	<10	G-F - Good to Fair	G - Good	F - Fair	Some dieback		3.6	Remove
351	Austrian Pine	<i>Pinus nigra</i>	1	36.00	36.00	<10	G-F - Good to Fair	F - Fair	G - Good	Curved branches		2.4	Remove
352	Norway Maple	<i>Acer platanoides</i>	1	26.00	26.00	<10	G - Good	G - Good	G - Good	Tar spots on leaves		1.8	Remove
353	Austrian Pine	<i>Pinus nigra</i>	1	41.00	41.00	<10	G-F - Good to Fair	F - Fair	G - Good	Leaning		3	Remove
354	Norway Maple	<i>Acer platanoides</i>	1	33.00	33.00	<10	F - Fair	F - Fair	F - Fair	Leader as been topped, tar spots		2.4	Remove
355	Austrian Pine	<i>Pinus nigra</i>	1	37.00	37.00	<10	G - Good	G - Good	G - Good			2.4	Remove
356	Austrian Pine	<i>Pinus nigra</i>	1	33.00	33.00	<10	G - Good	G - Good	G - Good			2.4	Remove
357	Austrian Pine	<i>Pinus nigra</i>	1	30.00	30.00	<10	G-F - Good to Fair	F - Fair	G - Good	Multi at 4m		2.4	Remove
358	Austrian Pine	<i>Pinus nigra</i>	1	34.00	34.00	<10	G - Good	G - Good	G - Good			2.4	Remove
359	Austrian Pine	<i>Pinus nigra</i>	1	42.00	42.00	<10	G - Good	G - Good	G - Good	Slight lean		3	Remove
360	Austrian Pine	<i>Pinus nigra</i>	1	33.00	33.00	<10	G - Good	G - Good	G - Good	Some curve branches		2.4	Remove
361	Austrian Pine	<i>Pinus nigra</i>	1	23.00	23.00	<10	F - Fair	F - Fair	F - Fair	Dieback, curved trunk		1.8	Remove
362	Austrian Pine	<i>Pinus nigra</i>	1	32.00	32.00	<10	G - Good	G - Good	G - Good			2.4	Remove
363	Austrian Pine	<i>Pinus nigra</i>	1	31.00	31.00	<10	G - Good	G - Good	G - Good			2.4	Remove
364	Silver Maple	<i>Acer saccharinum</i>	1	37.00	37.00	<10	F - Fair	F - Fair	F - Fair	Dieback, grilling roots, yellowing of leaves		2.4	Remove
365	Silver Maple	<i>Acer saccharinum</i>	1	55.00	55.00	75	P - Poor	Poor	Poor	Man leader been pruned back, dieback		3.6	Remove
366	Norway Maple	<i>Acer platanoides</i>	1	21.00	21.00	<10	G - Good	G - Good	G - Good	Tar spots on leaves		1.8	Remove
367	Norway Maple	<i>Acer platanoides</i>	1	29.00	29.00	<10	G - Good	G - Good	G - Good	Tar spots on leaves		1.8	Remove
368	Honey-locust	<i>Gleditsia triacanthos</i>	1	54.00	54.00	<10	G - Good	G - Good	G - Good	Squirrels nest		3.6	Remove
369	Silver Maple	<i>Acer saccharinum</i>	1	46.00	46.00	40	G-F - Good to Fair	G - Good	F - Fair	Dieback		3	Remove
370	Norway Maple	<i>Acer platanoides</i>	1	31.00	31.00	<10	G - Good	G - Good	G - Good	Tar spots on leaves		2.4	Remove



## TREE INVENTORY

Tree ID	Common Name	Scientific Name	No.	DBH (cm)	Effective DBH <sup>1</sup>	% Dead Branches	Condition (G/F/P) <sup>2</sup>			Comments (Wounds, Insects, Disease, other)	City of Mississauga Tree	TPZ	Recommendation
							Overall Condition	Condition/Structure	Health/Vigour				
371	Norway Maple	<i>Acer platanoides</i>	1	20.00	20.00	20	G-F - Good to Fair	G - Good	F - Fair	Dieback		1.8	Remove
372	Austrian Pine	<i>Pinus nigra</i>	1	31.00	31.00	<10	G-F - Good to Fair	G - Good	G - Good	Squirrels nest		2.4	Retain
373	Austrian Pine	<i>Pinus nigra</i>	1	29.26	39.0	<10	G-F - Good to Fair	F - Fair	G - Good	Y at 1m		2.4	Retain
374	Austrian Pine	<i>Pinus nigra</i>	1	30.00	30.00	<10	G - Good	G - Good	G - Good			2.4	Retain
375	Austrian Pine	<i>Pinus nigra</i>	1	35.00	35.00	<10	G-F - Good to Fair	G - Good	G - Good			2.4	Retain
376	Austrian Pine	<i>Pinus nigra</i>	1	39.00	39.00	<10	G - Good	G - Good	G - Good			2.4	Retain
377	Austrian Pine	<i>Pinus nigra</i>	1	36.00	36.00	<10	G - Good	G - Good	G - Good			2.4	Retain
378	Austrian Pine	<i>Pinus nigra</i>	1	35.00	35.00	<10	G - Good	G - Good	G - Good			2.4	Retain

<sup>1</sup>Effective Diameter at Breast Height (DBH) calculated as the square root of the sum of squares.

<sup>2</sup>Condition codes: G - Good, F - Fair, P - Poor, D - Dead