

TOWN OF CALEDON
PLANNING
RECEIVED

September 1, 2021

PalmerTM

74 Berkeley Street, Toronto, ON M5A 2W7
Tel: 647-795-8153 | www.pecg.ca

August 20, 2021

Frank Filippo, P.Eng.
Director, Land & Construction
Brookvalley Project Management Inc.
137 Bowes Road,
Concord, ON
L4K 1H3

Dear Mr. Filippo,

Re: Arborist Report and Tree Preservation Plan for Chickadee Lane, Bolton (Palmer #170163)

1. Introduction

Palmer has completed an Arborist Report and Tree Preservation Plan for the property referred to as the Chickadee Lane Rounding Out Area B lands in Bolton, Ontario (the Site). The Site lands are part of the Bolton Residential Expansion Lands (BRES) Regional Official Plan Amendment (ROPA 30). These lands comprise approximately seven hectares (ha) in area, with approximately 2.75 ha of land located outside of the current urban boundary. Lands northwest of the intersection of Chickadee Lane and Glasgow Road, as well as along the eastern property limits are outside of the urban boundary and within the Greenbelt designated lands (**Figure 1**).

This report includes an assessment of applicable policy, methods and results of the tree inventory completed within the Site and the identification of trees to be retained and trees to be removed. The compensation requirements for tree removals, replacement tree species and planting locations are also provided in this report as well as recommended tree protection measures for tree to be retained.

2. Policy Conformity

This Arborist Report and Tree Preservation Plan is guided by The Town of Caledon *Development Standards, Policies & Guidelines* (Town of Caledon, 2009) and the *Terms of Reference for Arborist Reports, Tree Preservation Plans, and Tableland Tree Removal Compensation* (Town of Caledon, 2020). The Town of Caledon documents guide the content of the report and details the standards for tree protection measures. Where additional construction management and monitoring guidance was required, the City of Brampton *Tableland Tree Assessment Guidelines* (2018) were employed, employing standards from the nearest neighbouring municipality.

2.1 Town of Caledon Woodland Conservation By-law

The Woodland Conservation By-law (2000-10) is intended to protect Caledon's woodlands. This by-law applies to all lands defined as "woodlands". The definition of a woodland is different trees, shrubs, ground

vegetation and soil complexes that provide habitat for plants and animals which is a minimum of 0.5 hectares (1.2 acres) in area.

The proposed project is a Plan of Subdivision and this Arborist Report has been prepared as a condition of plan approval. Trees destroyed in accordance with the conditions of an approval granted under the *Planning Act* R.S.O. 1990 are exempt from the bylaw. Regardless, all trees proposed to be removed as part of this project are found within hedgerows or rural residential lots, and would not qualify as trees within Woodlands under the bylaw. The woodlands to the northwest and southeast corners of the Site are to be protected and not removals are proposed in those locations. Therefore, the proposed project conforms to bylaw 2000-10.

3. Methods

A tree inventory was completed for all trees ≥ 10 cm DBH within and adjacent to the area proposed for development on the Site (Town of Caledon, 2020). The tree inventory was conducted by a Certified Arborist on September 12 and September 19, 2018. Information collected during the inventory includes species name, tree tag number, diameter at breast height (DBH), location, a general health assessment, and notes on tree trunk and canopy conditions.

4. Results

4.1 Tree Inventory

Most trees within the Site are found within hedgerows or street side plantings, or within rural residential lots. A small mixed-species orchard was observed on the east side of the Site. Trees that were beyond the influence of the preliminary conceptual Site Plan were not inventoried, such as much of the treeline in the northwest corner. The final Site Plan is detailed on **Figure 2** and confirms that un-inventoried areas will not be affected by the proposed development.

The tree inventory comprised 453 individual trees, including 216 (48%) native and 237 (52%) non-native species (**Table 1**). There were no Species at Risk (SAR) trees observed, such as Butternut (*Juglans cinerea*). There were 68 White Ash (*Fraxinus americana*) trees, which are high risk of infestation by Emerald Ash Borer (EAB), some of which were observed to be already infected or dead. The full tree inventory is provided in **Appendix A**. The locations of inventoried trees are shown on **Figure 2**.

Table 1. Summary of Tree Inventory Results

Scientific Name	Common Name	Total Number
<i>Fraxinus americana</i> *	White Ash	68
<i>Acer x freemanii</i> *	Freeman's Maple	48
<i>Acer negundo</i>	Manitoba Maple	36
<i>Acer platanoides</i>	Norway Maple	33
<i>Malus pumila</i>	Common Apple	32
<i>Thuja occidentalis</i> *	Eastern White Cedar	28

Scientific Name	Common Name	Total Number
<i>Picea pungens</i>	Blue Spruce	26
<i>Picea glauca</i> *	White Spruce	25
<i>Pinus sylvestris</i>	Scots Pine	23
<i>Picea abies</i>	Norway Spruce	22
<i>Malus</i> sp.	Apple species	20
<i>Ulmus americana</i> *	American Elm	16
<i>Pyrus</i> sp.	Pear species	15
<i>Juglans nigra</i> *	Black Walnut	13
<i>Populus alba</i>	European Poplar	12
<i>Prunus</i> sp.	Cherry species	10
<i>Acer saccharum</i> *	Sugar Maple	7
<i>Betula papyrifera</i> *	White Birch	4
<i>Morus alba</i>	White Mulberry	3
<i>Ulmus pumila</i>	Siberian Elm	2
<i>Salix babylonica</i>	Weeping Willow	2
<i>Crataegus</i> sp.*	Hawthorn species	2
<i>Celtis</i> sp.*	Hackberry species	1
<i>Pinus strobus</i> *	Eastern White Pine	1
<i>Sorbus aucuparia</i>	European Mountain-ash	1
<i>Populus tremuloides</i> *	Trembling Aspen	1
<i>Tilia americana</i> *	Basswood	1
<i>Fagus grandifolia</i> *	American Beech	1
Total		453

*Native species

4.2 Trees to be Retained

A total of 209 trees are proposed to be retained (**Table 2**). As many as 73 (35%) of the inventoried trees to be retained are native species, and 136 (65%) are non-native species. Most of the trees proposed to be retained are in good to fair health (92%). The trees to be retained are primarily located within the stand of trees located in the west corner of the Site, adjacent to but outside of the proposed development area in the north, and within the orchard on the east side of the Site (**Figure 3**).

Table 2. Trees Proposed to be Retained

Scientific Name	Common Name	Good to Fair Health	Poor Health	Total Count
<i>Malus pumila</i>	Common Apple	31	1	32
<i>Fraxinus americana</i> *	White Ash	20	6	26
<i>Pinus sylvestris</i>	Scots Pine	16	1	17
<i>Acer negundo</i>	Manitoba Maple	15	0	15
<i>Malus</i> sp.	Apple species	15	1	16

Scientific Name	Common Name	Good to Fair Health	Poor Health	Total Count
<i>Pyrus</i> sp.	Pear species	13	2	15
<i>Acer platanoides</i>	Norway Maple	9	0	9
<i>Picea glauca</i> *	White Spruce	13	0	13
<i>Picea pungens</i>	Blue Spruce	9	0	9
<i>Acer x freemanii</i> *	Freeman's Maple	5	0	5
<i>Juglans nigra</i> *	Black Walnut	10	1	11
<i>Prunus</i> sp.	Cherry species	7	2	9
<i>Ulmus americana</i> *	American Elm	6	0	6
<i>Picea abies</i>	Norway Spruce	3	3	6
<i>Thuja occidentalis</i> *	Eastern White Cedar	5	0	5
<i>Populus alba</i>	European Poplar	3	1	4
<i>Crataegus</i> sp. *	Hawthorn species	2	0	2
<i>Morus alba</i>	White Mulberry	3	0	3
<i>Acer saccharum</i> *	Sugar Maple	2	0	2
<i>Populus tremuloides</i> *	Trembling Aspen	1	0	1
<i>Sorbus aucuparia</i>	European Mountain-ash	1	0	1
<i>Tilia americana</i> *	Basswood	1	0	1
<i>Celtis</i> sp.*	Hackberry species	1	0	1
Total trees to be retained		192	17	209

*Native species

Note that there is currently five (5) White Ash in poor condition and may eventually require pruning or removal. However, these trees are not currently being recommended for removal as they may serve as a wildlife trees.

4.3 Trees to be Removed

A total of 244 inventoried trees are proposed to be removed to accommodate the proposed development (**Table 3**). This includes 143 (59%) native species and 101 (41%) non-native tree species. The trees proposed to be removed are located within the residential areas that are central to the Site (**Figure 3**). The total number of tree to be removed has been increased from the January 2021 version of this report to accommodate the additional Stormwater Management Pond (SWM) area.

Table 3. Trees Proposed to be Removed

Scientific Name	Common Name	Fair to Good Health	Poor Health	Total Count
<i>Fraxinus americana</i> *	White Ash	32	10	42
<i>Acer x freemanii</i> *	Freeman's Maple	43	0	43
<i>Thuja occidentalis</i> *	Eastern White Cedar	19	4	23
<i>Acer negundo</i>	Manitoba Maple	18	3	21
<i>Acer platanoides</i>	Norway Maple	22	2	24
<i>Picea abies</i>	Norway Spruce	15	1	16

Scientific Name	Common Name	Fair to Good Health	Poor Health	Total Count
<i>Picea pungens</i>	Blue Spruce	17	0	17
<i>Picea glauca</i> *	White Spruce	12	0	12
<i>Ulmus americana</i> *	American Elm	9	1	10
<i>Populus alba</i>	European Poplar	6	2	8
<i>Pinus sylvestris</i>	Scots Pine	3	3	6
<i>Acer saccharum</i> *	Sugar Maple	5	0	5
<i>Betula papyrifera</i> *	White Birch	4	0	4
<i>Malus sp.</i>	Apple species	3	0	3
<i>Ulmus pumila</i>	Siberian Elm	0	2	2
<i>Salix babylonica</i>	Weeping Willow	2	0	2
<i>Juglans nigra</i> *	Black Walnut	2	0	2
<i>Prunus sp.</i>	Cherry species	0	0	0
<i>Morus alba</i>	White Mulberry	1	0	1
<i>Pinus strobus</i> *	Eastern White Pine	1	0	1
<i>Fagus grandifolia</i> *	American Beech	1	0	1
<i>Prunus avium</i>	Sweet Cherry	0	1	1
<i>Malus baccata</i>	Siberian Crab Apple	1	0	1
Total trees to be removed		215	29	244

*Native species

5. Tree Preservation Plan

5.1 Tree Protection

The specifications for tree protection are detailed on the Tree Preservation Plan (**Figure 3**), including the locations of required tree protection fencing. The Tree Preservation Plan is intended to act in concert with this Arborist Report; it is expected that the recommendations of both instruments be implemented within construction drawings and/or Site Plans for the project. The trees proposed to be retained will be protected by tree protection fencing, which is to be placed at minimum beyond the dripline as determined as per the Town of Caledon *Development Standards, Policies & Guidelines* (Town of Caledon, 2009; Town of Caledon, 2020).

The recommended fencing locations encompass the Tree Protection Zones (TPZ) of the trees to be retained, providing protection from potential damage during construction activities such as the use of machinery near trees and branches, and stockpiling of materials over the root zone. The TPZ have been defined by radii that follow the Tree Protection Zone criteria outlined in Caledon Standard 606 (**Appendix B**), and the *Terms of Reference for Arborist Reports, Tree Preservation Plans, and Tableland Tree Removal Compensation* (Town of Caledon, 2020). The TPZ has been used as a conservative measure of the dripline requirements, per the Town of Caledon Specifications.

5.1.1 Tree Protection Fencing

Tree protection fencing is to consist of rigid snow fencing complete with iron “T” bars placed at a maximum of 2.4 metres (m) on-centre (maximum spacing) (**Appendix B**). Snow fencing is to be 1.2 m high. Prior to the start of any site work, the Contractor shall supply and install tree protection barriers around each tree or group of trees designated to be protected (**Figure 3**), or as directed by the Consulting Arborist or Landscape Architect, and the Town (Town of Caledon, 2009).

Tree fencing, as a minimum, is to be located at the outer limit of the drip line of the tree (**Figure 3**). The drip line is defined as the outside edge of the tree canopy. The TPZ for each tree has been provided in this report as a conservative and quantifiable measure of the dripline. No fill, machinery, chemicals, fuel or materials are to be placed within the protective barrier. No re-grading, including filling or excavation, is to take place within the protected area. If required, all underbrush that is to be removed from within the protective barriers must be cleared by hand. The method of removal of brush from the protected area is to be approved by the Town (Town of Caledon, 2009).

General construction specifications in relation to trees are also detailed on the Tree Preservation Plan (**Figure 3**). These specifications provide additional details regarding tree protection fencing and their management.

6. Compensation Planting

6.1 Tree Removal and Compensation

A total of 244 trees are to be removed as a result of the project (**Table 3**), of which 215 are “*existing healthy trees*” (i.e., a Vigour rating of Good or Fair). Following the compensation ratios outlined in the *Terms of Reference for Arborist Reports, Tree Preservation Plans, and Tableland Tree Removal Compensation* (Town of Caledon, 2020), it is recommended that 465 trees be planted. Planting and restoration efforts will aim to restore and enhance the natural areas in the northwest and southeast portions of the Site, adjacent to existing natural features. It is recommended that trees be planted in groupings that will provide ecological buffer to existing woodlands or other features or runoff interception functions. Within the orchard to be retained, it is recommended that infill planting with shade tolerant trees be targeted, to increase the wooded density of the area without requiring the removal of the existing native trees.

6.2 Tree Species

To maintain the ratio of conifers and deciduous trees present on the Site and to match the character of the overall woodland to the north and northwest of the Site, the following tree species and composition are proposed to be planted in compensation (**Table 4**). Other criteria include selecting only native trees to increase the quality and character of the adjacent natural heritage system. The planting plan also considers those trees commonly planted in residential areas. Selecting Ash species was avoided due to the advance of EAB in Ontario.

Table 4: Proposed Compensation Tree Species

Scientific Name	Common Name	Quantity	Examples of Appropriate Planting Stock for Restoration*,**			
			Size - St. Williams Nursery	Container – St. Williams Nursery	Size - Humber Nursery	Container – Humber Nursery
<i>Prunus serotina</i>	Black Cherry	65	2 Gallon Pot	60 – 100 cm	2 Gallon Pot	-
<i>Juglans nigra</i>	Black Walnut	65	2 Gallon Pot	60 – 100 cm	-	-
<i>Acer x freemanii</i>	Freeman's Maple	65	2 Gallon Pot	60 – 100 cm	15 Gallon Pot	250 cm
<i>Acer saccharum</i>	Sugar Maple	70	2 Gallon Pot	60 – 100 cm	2 Gallon Pot	60 cm
<i>Quercus alba</i>	White Oak	69	2 Gallon Pot	60 – 100 cm	15 Gallon Pot	250 cm
<i>Tilia americana</i>	Basswood	65	-	-	2 Gallon Pot	60 cm
<i>Ostrya virginiana</i>	Ironwood	66	-	-	15 Gallon Pot	250 cm
Total		465				

*Please note this table provides examples of planting stock and is not meant to recommend any certain nursery.

**Size may be modified during detailed design depending on availability and stock.

The sizes proposed in **Table 5** reflect general findings on establishment performance; the root systems of smaller potted stock are predicted to establish better in the long run than larger stock, being of relatively equal size within approximately five years (Struve, 2009; Watson, 1985; Garcia Chance, et al., 2019). The use of small stock is also practical in the logistics of the establishment of restoration areas.

6.3 Planting Location

The trees are proposed to be planted in the northwest and southeast portions of the Site targeted for restoration purposes, adjacent to existing natural features. Trees are to be planted a minimum of 3.0 m from each other or any structure or feature. Subsequent development and landscaping of the Site may propose additional trees and planting additional native tree species is encouraged.

7. Management and Monitoring

The Town of Caledon Tree Preservation Standard Notes 710 and 711 are provided in **Appendix B** and **Figure 3**. In addition, the following general management and monitoring actions are submitted to help ensure the protection of the trees to be retained on the Site.

7.1 Pre-Construction Phase

The erection of tree protection fencing is to be conducted under the supervision of a Certified Arborist. Any pruning or trimming of trees necessary to accommodate the fencing will be completed by a Certified Arborist using good arboricultural practices.

7.2 Construction Phase

Tree protection fencing will be maintained throughout the project and regularly inspected for damage by construction personnel. Any damage will be reported to the construction supervisor and repaired immediately. Any build up of sediments at tree bases will be removed as part of fencing repairs. All plant material damaged as a result of improper installation or maintenance of protective barriers must be replaced with material of equal value, at the cost of the Developer.

7.3 Post-Construction Phase

The removal of tree protection barriers and additional tree care measures will only be initiated once all construction activities have been completed and landscaping has been initiated.

7.4 Supplemental Notes for the Contractor

In addition to the Notes & Specifications provided on **Figure 3**, the following conditions must be met for implementing the proposed Tree Compensation Plan, Monitoring and Mitigation:

- During construction and prior to final approval by the Town, the consulting Arborist along with appropriate Town staff shall intermittently inspect the entire site. Any noted hazardous trees must be identified and removed prior to Assumption or earlier if deemed hazardous at the sole cost of the Owner/Applicant. Any records of maintenance or removals are to be submitted to the Town.
- Compensation will be required for all tree removals at a rate as determined by the Town's Tableland Tree Removal Compensation. Tree compensation planting will be in addition to the standard required planting. In the event tree compensation cannot be accommodated for in the planting design, financial compensation shall be collected at a rate (per tree) as determined by the Town. Based on the Town of Caledon compensation ratios, 465 replacement trees are required to compensate for the removal of trees on the subject property.
- Removals should occur outside of the breeding bird season (April 1- August 1). If this is not possible, clearance with an ecologist should occur prior to construction to ensure no loss of bird nest, egg or unfledged young.
- Any trees located on the property line or on the adjacent property that are proposed to be removed, pruned or injured, will require written consent from the adjacent landowner. All correspondence is to be forwarded to the Town prior to any removals.
- Minor grading works may be permitted at the edge of the preservation zone as required to correct localized grading issues adjacent to the proposed development at the discretion of the Town. This work

is to be undertaken under the supervision of the consulting Arborist. The consulting Arborist is to verify in writing to the Town, confirming that the work has been completed as per the approved design using best arboricultural practices.

- Areas within the tree protection zone shall remain undisturbed for the duration of site construction and shall not be used for the storage of excavated fill, building/construction material, structures or equipment.
- The limit of tree protection hoarding shall be confirmed in the field by the consulting arborist, Town staff and conservation authority (if applicable). The Owner/Applicant shall be responsible for ongoing maintenance and repairs to tree protection fencing to the satisfaction of the Town, until final approval by the Town and conservation authority (if applicable). The Owner/Applicant shall not remove and not cause or permit any tree preservation fencing to be removed without the approval of the Town and conservation authority (if applicable).

8. Closure

We trust that this letter provides sufficient guidance for the incorporation of tree protection measures into the relevant construction drawings and site plans for the proposed development of the Chickadee Lane Rounding Out Area B lands in Bolton, Ontario. Should you need any further clarification concerning this letter, please contact the undersigned at 647-461-2372 or austin.adams@pecg.ca.

In recognition of the practice of ecology, this report was originally prepared by Carly Van Daele, B.E.S. Ecologist, ISA Certified Arborist ON-2346A. Ms. Van Daele is no longer with Palmer.

Yours truly,

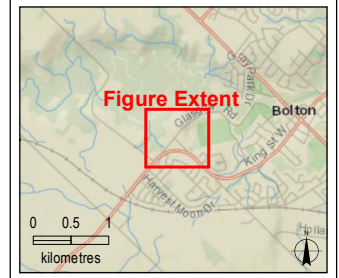
Palmer Environmental Consulting Group Inc.



Austin Adams, M.Sc., EP
Sr. Ecologist, Certified Arborist ON-2000A

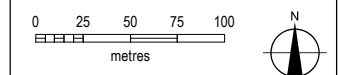
References

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Legend

- Study Area
- Limit of Greenbelt Protected Countryside



DRAWN: B. Elder
 CHECKED: D. Janas
 PROJECT: 1701603
 DATE: Jan 21, 2021

Scale 1:4000
 UTM Zone 17N
 NAD 1983

Data Sources: Imagery ©2017 Google (southern portion). Overview basemap credits at page bottom.

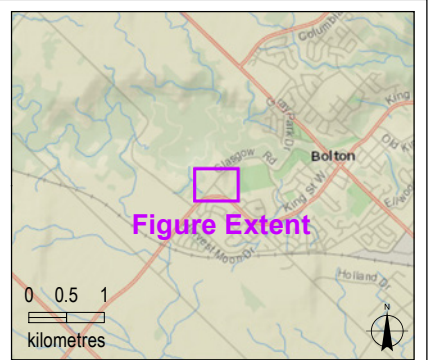
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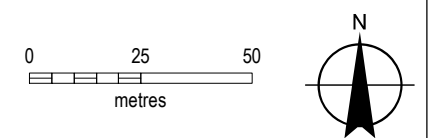
CLIENT: Brook Valley Homes
PROJECT: Chickadee Lane Ecology

Site Location

FIGURE 1



- Legend**
- Inventory Tree
 - Inventory Tree (off property)
 - Tree Protection Zone
 - Study Area



DRAWN: B. Elder
 CHECKED: A. Adams
 PROJECT: 1701603
 DATE: Aug 16, 2021

Scale 1:1700
 UTM Zone 17N
 NAD 1983

Data Sources: Imagery ©2017 Google. Overview basemap credits at page bottom.

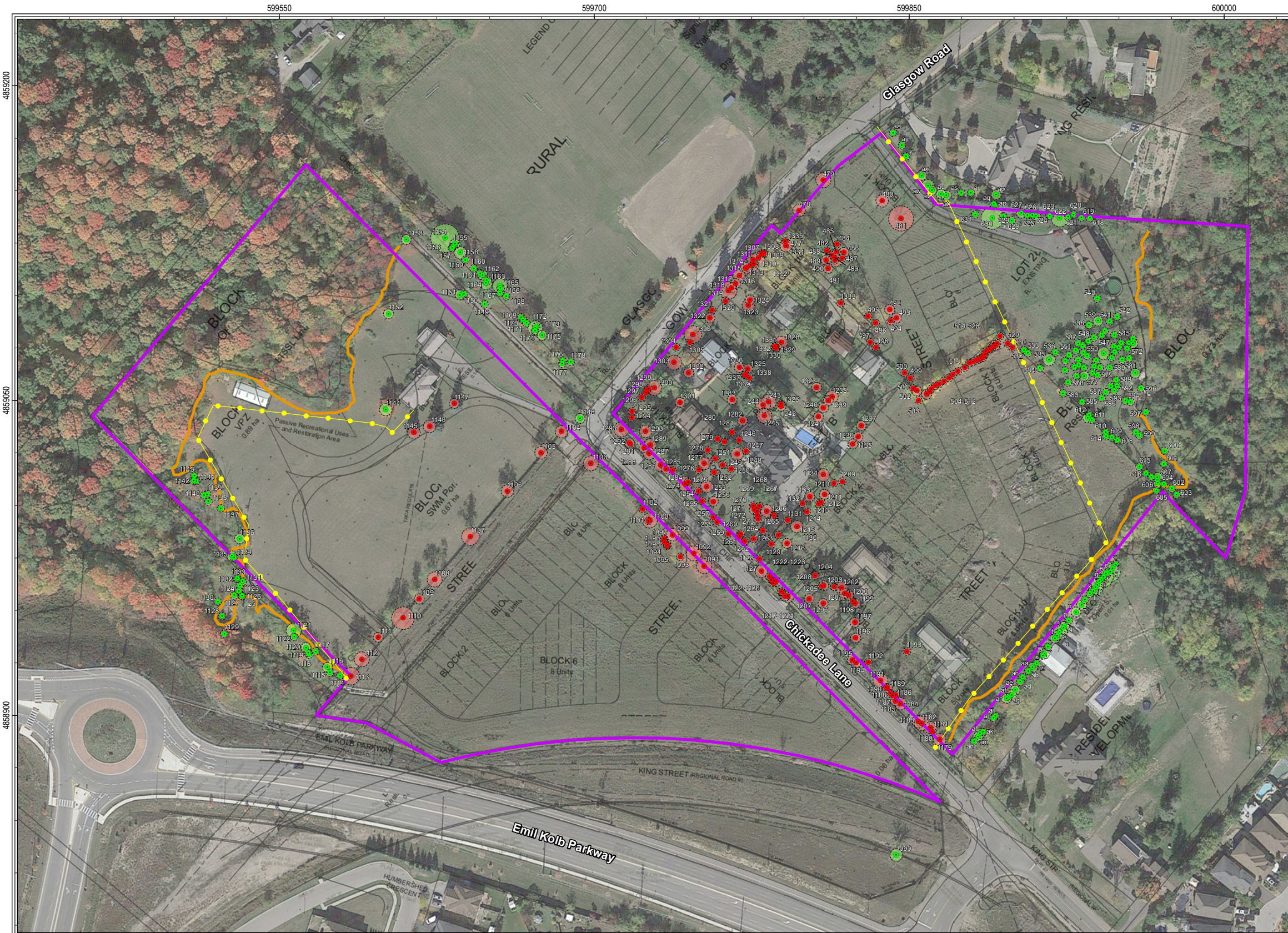
Prepared by:

Palmer™

CLIENT: Brook Valley Homes
 PROJECT: Chickadee Lane Ecology and Hydrogeology

Tree Inventory

FIGURE 2



Town of Caledon Tree Preservation Standard Notes – Standard No. 710/711

A. General
 The following Tree Preservation and Protection Measures will be undertaken to help eliminate and/or significantly reduce construction injury to all trees recommended for preservation. All temporary tree protection measures cited for retained trees must comply with the Town of Caledon Tree Protection Specifications and Details. Any variation from the standard tree protection measures must be approved by the Town of Caledon.

- B. Pre-Construction Phase**
1. Prior to construction, the trees to be preserved shall be protected with a Tree Protection Barrier. The barrier shall consist of 1.2 m (4 ft) high orange plastic snow fence wired to T-bars (see Town of Caledon Tree Preservation Fencing, STD 606).
 2. If applicable, attach a filter cloth 600 mm high to the construction side of the hoarding to act as sediment control. Sediment control fencing shall meet or exceed OPSD-2119.10, and be installed to the satisfaction of the Town of Caledon.
 3. All supports and bracing used to safely secure the barrier should be located outside the Tree Protection Zone (TPZ). All supports ad bracing should minimize damage to roots.
 4. The TPZ fence is to be installed along the edge of the tree protection zones. This hoarding is to remain in place and remain in good condition throughout the entire duration of the project. Dismantling the tree protection barrier prior to approval by the Town of Caledon staff may result in a contravention.
 5. The applicant shall notify the Town of Caledon and the consulting certified arborist or landscape architect to confirm that the tree protection barriers are in place.
 6. Where fill or excavated material must be temporarily located near a TPZ, a wooden barrier must be used to ensure no material enters the TPZ.
 7. Remove any garbage and foreign debris from the tree protections zones, daily.
 8. For the trees that were recommended for removal and/or crown pruning that are within the PTZ limits, these activities are to be performed by a qualified ISA certified arborist prior to the installation of the Tree Protection Zone barriers and prior to the commencement of any construction activities. Install the Tree Protection Zone as per Tree Preservation Fencing, STD 606 at the limits shown on the tree inventory and protection plan after the tree removal, whichever is greater, and crown pruning activities are completed.
 9. A Tree Protection Zone sign must be mounted to all sides of the tree protection barrier for the duration of site construction. The sign should be a minimum of 40 cm x 60 cm and made of white gator board or equivalent material.
 10. The sign must be similar to the illustration shown below, or as directed by the Town of Caledon.

Tree Protection Zone
 No work is permitted in the Tree Protection Zone.
 This includes construction works, grading, storage of trash or materials.
 The tree protection barrier must not be removed without written authorization of the Town of Caledon.

11. All contractors and site visitors should be informed of the tree protection and preservation measures at a pre-construction meeting.

- A. During Construction Phase**
1. All areas within the TPZ shall remain undisturbed for the duration of construction. There will be no grade changes, dumping, and storage of any materials, structures or equipment within these areas. The Tree Protection Barrier must not be removed without the written authorization of the Town of Caledon.
 2. Minor grading works will be permitted at the edge of the preservation zone as required to correct localized depressions, and blend to the existing grades. This work is to be undertaken under the direct supervision of an ISA certified arborist.
 3. A certified ISA arborist will undertake proper root pruning in accordance with acceptable arboriculture practices when and if the roots of retained trees are to be exposed, damaged or severed due to construction work. The exposed roots will be backfilled with appropriate material as soon as possible to prevent unnecessary damage to tree roots. The use of low pressure hydrovac to expose roots is recommended, at no additional cost.
 4. The Town of Caledon must be notified for all work that impacts the TPZs for temporary removal of a section of hoarding to gain access for fine grading or other works. All works are to be supervised by the Town of Caledon.
 5. No cables, wire or ropes of any kind shall be wrapped around or installed in trees to be preserved.
 6. No contaminants will be dumped or flushed in the TPZ area or where feeder roots of trees exist (generally beyond the TPZ areas).
 7. Irrigate tree protection zones during drought conditions, June to September to reduce drought stress.
 8. Inspect the site daily to ensure hoarding is in place and in good condition. Inspect trees to monitor condition.

- A. Post Construction Phase**
1. Following the completion of all site works including landscaping, and after review and approval of the Town of Caledon staff, the protective hoarding may be removed.
 2. After removal of the protective hoarding, the Tree Preservation Zones shall be inspected by Town of Caledon staff. Any remaining dead, diseased, or hazardous limbs or trees are to be removed by an ISA certified arborist as directed by the consulting arborist or Town of Caledon staff.

Prepared by:

 CLIENT: Brook Valley Homes
 PROJECT: Chickadee Lane Ecology and Hydrogeology

0 25 50
 metres
 DRAWN: SF/BE
 CHECKED: A. Adams
 PROJECT: 1701603
 DATE: Aug 19, 2021
 Data Sources: Imagery ©2017 Google.

Scale 1:2000
 UTM Zone 17N
 NAD 1983

Legend

- Trees to be Retained
- Trees to be Removed
- Study Area
- Critical Root Protection Zone
- Critical Root Protection Zone
- Dripline
- Tree Protection Fencing

Tree Preservation Plan

FIGURE 3

Appendix A

Tree Inventory

Tag #	Common Name	Scientific Name	DBH (cm)	Effective DBH* (cm)	% dead branches	Condition (G/F/P/D)		Dripline (m)		Recommendation
						Structure	Vigour	Reading 1	Reading 2	
1090	American Elm	<i>Ulmus americana</i>	42	42	30	F	F	9	10	retain
1091	Sugar Maple	<i>Acer saccharum</i>	58	58	30	G	F	9	5	remove
1092	Sugar Maple	<i>Acer saccharum</i>	55	55	30	G	F	8	4	remove
1093	American Elm	<i>Ulmus americana</i>	28	28	40	F	P	4	4	remove
1094	American Elm	<i>Ulmus americana</i>	12	12	10	G	G	2	3	remove
1095	American Elm	<i>Ulmus americana</i>	11	11	10	F	G	3	2	remove
1096	American Elm	<i>Ulmus americana</i>	15	15	10	G	G	3	3	remove
1097	American Elm	<i>Ulmus americana</i>	10	10	5	F	G	5	1	remove
1098	American Elm	<i>Ulmus americana</i>	16	16	30	G	F	4	5	remove
1099	Sugar Maple	<i>Acer saccharum</i>	46	46	15	G	G	6	8	remove
1100	Sugar Maple	<i>Acer saccharum</i>	51	51	40	P	F	6	7	remove
1101	American Elm	<i>Ulmus americana</i>	16	16	10	G	G	2	2	remove
1102	White Ash	<i>Fraxinus americana</i>	14	14	10	F	F	3	2	remove
1103	White Ash	<i>Fraxinus americana</i>	52	52	90	F	P	7	4	remove
1104	Freeman's Maple	<i>Acer x freemanii</i>	43	43	15	G	F	6	6	remove
1105	Freeman's Maple	<i>Acer x freemanii</i>	47	47	10	F	G	5	6	remove
1106	Freeman's Maple	<i>Acer x freemanii</i>	47	47	10	F	F	6	7	remove
1107	Freeman's Maple	<i>Acer x freemanii</i>	59+35	69	15	F	F	5	7	remove
1108	Freeman's Maple	<i>Acer x freemanii</i>	52	52	20	F	F	5	6	remove
1109	Freeman's Maple	<i>Acer x freemanii</i>	40	40	15	F	F	6	4	remove
1110	Freeman's Maple	<i>Acer x freemanii</i>	34+68+29	81	25	F	F	5	9	remove
1111	Freeman's Maple	<i>Acer x freemanii</i>	30	30	20	G	F	5	5	remove
1112	Freeman's Maple	<i>Acer x freemanii</i>	60	60	15	F	G	7	9	remove
1113	Freeman's Maple	<i>Acer x freemanii</i>	63+27	69	15	F	F	6	4	remove
1114	Freeman's Maple	<i>Acer x freemanii</i>	24	24	10	G	G	4	6	retain
1115	American Elm	<i>Ulmus americana</i>	16	16	5	G	G	3	2	retain
1116	White Ash	<i>Fraxinus americana</i>	31	31	95	F	P	4	5	retain
1117	Norway Maple	<i>Acer platanoides</i>	10	10	0	G	G	2	2	retain
1118	Norway Maple	<i>Acer platanoides</i>	16	16	10	F	G	5	4	retain
1119	Freeman's Maple	<i>Acer x freemanii</i>	12+18	22	20	F	F	6	4	retain
1120	Hawthorn sp.	<i>Crataegus sp.</i>	15+12+9+14+18	31	20	F	F	2	3	retain
1121	Freeman's Maple	<i>Acer x freemanii</i>	19+21+22+19+40+10	58	10	F	G	6	5	retain
1122	Apple sp.	<i>Malus pumila</i>	13+10+16+12+17	26	40	F	F	3	3	retain
1123	American Elm	<i>Ulmus americana</i>	11	11	5	G	G	1	2	retain
1124	Apple sp.	<i>Malus pumila</i>	11+14	18	10	F	F	3	2	retain
1125	Apple sp.	<i>Malus pumila</i>	13	13	25	F	F	1	2	retain
1126	Apple sp.	<i>Malus pumila</i>	15	15	10	F	F	1	2	retain
1127	Apple sp.	<i>Malus pumila</i>	19	19	20	G	F	3	3	retain
1128	White Ash	<i>Fraxinus americana</i>	12	12	20	F	F	2	2	retain
1129	Eastern White Cedar	<i>Thuja occidentalis</i>	11+9+13	19	5	G	G	2	2	retain
1130	Eastern White Cedar	<i>Thuja occidentalis</i>	12	12	0	G	G	2	1	retain
1131	Apple sp.	<i>Malus pumila</i>	13+13	18	10	F	F	3	2	retain
1132	Apple sp.	<i>Malus pumila</i>	17	17	15	G	F	2	1	retain
1133	Apple sp.	<i>Malus pumila</i>	19	19	70	F	P	2	1	retain
1134	White Ash	<i>Fraxinus americana</i>	17	17	40	F	F	3	2	retain
1135	Apple sp.	<i>Malus pumila</i>	12+15+16+16+19	35	15	F	F	4	4	retain
1136	Apple sp.	<i>Malus pumila</i>	18+15+16+15+15	35	15	F	F	4	4	retain
1137	White Ash	<i>Fraxinus americana</i>	17	17	5	G	G	2	4	retain
1138	Apple sp.	<i>Malus pumila</i>	11+10+8+8+6	20	5	F	G	3	3	retain
1139	White Ash	<i>Fraxinus americana</i>	13	13	5	G	G	4	4	retain
1140	White Ash	<i>Fraxinus americana</i>	11	11	10	G	G	3	3	retain
1141	Sugar Maple	<i>Acer saccharum</i>	10	10	5	G	G	4	3	retain
1142	White Ash	<i>Fraxinus americana</i>	11	11	5	G	G	3	3	retain
1143	Apple sp.	<i>Malus pumila</i>	10+10	14	15	F	F	4	1	retain
1144	Sugar Maple	<i>Acer saccharum</i>	48	48	5	F	G	6	6	retain
1145	Blue Spruce	<i>Picea pungens</i>	47	47	5	G	G	3	3	remove
1146	Blue Spruce	<i>Picea pungens</i>	45	45	10	G	F	4	4	remove
1147	Blue Spruce	<i>Picea pungens</i>	35	35	10	G	F	4	3	remove
1148	American Elm	<i>Ulmus americana</i>	34	34	15	F	F	6	3	remove
1149	American Elm	<i>Ulmus americana</i>	12	12	5	G	G	2	2	retain
1150	White Ash	<i>Fraxinus americana</i>	12	12	5	F	G	3	1	retain
1151	American Elm	<i>Ulmus americana</i>	16+15+26+18	38	5	G	G	4	4	retain
1152	Mountain Ash	<i>Sorbus aucuparia</i>	18+13+15+16+17	36	25	G	F	7	5	retain
1153	White Ash	<i>Fraxinus americana</i>	39	39	30	G	F	4	6	retain
1154	Manitoba Maple	<i>Acer negundo</i>	114	114	15	P	F	6	8	retain
1155	Black Walnut	<i>Juglans nigra</i>	35	35	10	G	G	6	6	retain
1156	White Ash	<i>Fraxinus americana</i>	11	11	25	G	F	1	3	retain

Tag #	Common Name	Scientific Name	DBH (cm)	Effective DBH* (cm)	% dead branches	Condition (G/F/P/D)		Dripline (m)		Recommendation
						Structure	Vigour	Reading 1	Reading 2	
1157	White Ash	<i>Fraxinus americana</i>	11+7	13	5	G	G	4	3	retain
1158	White Ash	<i>Fraxinus americana</i>	43	43	25	F	F	8	4	retain
1159	Basswood	<i>Tilia americana</i>	24	24	5	G	G	4	4	retain
1160	White Ash	<i>Fraxinus americana</i>	14+16	21	30	F	F	3	3	retain
1161	White Ash	<i>Fraxinus americana</i>	22	22	50	F	P	4	3	retain
1162	Manitoba Maple	<i>Acer negundo</i>	26+26	37	10	G	G	6	5	retain
1163	White Ash	<i>Fraxinus americana</i>	34	34	90	F	P	4	3	retain
1164	Black Walnut	<i>Juglans nigra</i>	49	49	5	G	G	6	6	retain
1165	Manitoba Maple	<i>Acer negundo</i>	13+20+16+43	52	10	F	G	7	5	retain
1166	White Ash	<i>Fraxinus americana</i>	13	13	10	G	F	3	2	retain
1167	White Ash	<i>Fraxinus americana</i>	13	13	10	G	F	3	2	retain
1168	White Ash	<i>Fraxinus americana</i>	13	13	10	G	F	3	2	retain
1169	White Ash	<i>Fraxinus americana</i>	24	24	25	F	F	8	5	retain
1170	Hawthorn sp.	<i>Crataegus sp.</i>	19	19	25	F	F	2	2	retain
1171	White Ash	<i>Fraxinus americana</i>	25	25	5	G	G	5	4	retain
1172	Manitoba Maple	<i>Acer negundo</i>	10	10	10	F	F	5	2	retain
1173	Manitoba Maple	<i>Acer negundo</i>	60	60	5	F	G	4	5	retain
1174	White Ash	<i>Fraxinus americana</i>	10	10	10	G	F	4	3	retain
1175	Manitoba Maple	<i>Acer negundo</i>	34	34	5	G	G	5	2	retain
1176	Manitoba Maple	<i>Acer negundo</i>	21+10+10+9	27	5	G	G	4	5	retain
1177	Black Walnut	<i>Juglans nigra</i>	24	24	5	G	G	6	6	retain
1178	European Poplar	<i>Populus alba</i>	28	28	60	F	P	4	3	retain
1179	European Poplar	<i>Populus alba</i>	44	44	90	F	P	1	2	remove
1180	Apple sp.	<i>Malus pumila</i>	15+10+10+10+10	25	10	G	G	5	4	remove
1181	European Poplar	<i>Populus alba</i>	46	46	20	G	F	5	4	remove
1182	European Poplar	<i>Populus alba</i>	52	52	40	F	F	4	4	remove
1183	European Poplar	<i>Populus alba</i>	43	43	30	F	F	5	4	remove
1184	European Poplar	<i>Populus alba</i>	41	41	20	G	F	5	4	remove
1185	American Elm	<i>Ulmus americana</i>	37	37	5	G	F	2	2	remove
1186	Scots Pine	<i>Pinus sylvestris</i>	20	20	10	G	G	4	3	remove
1187	American Elm	<i>Ulmus americana</i>	23	23	5	G	G	4	2	remove
1188	Eastern White Cedar	<i>Thuja occidentalis</i>	15	15	10	G	F	1	2	remove
1189	European Poplar	<i>Populus alba</i>	38	38	50	F	P	4	4	remove
1190	Scots Pine	<i>Pinus sylvestris</i>	17	17	10	F	F	2	1	remove
1191	European Poplar	<i>Populus alba</i>	39+36	53	30	F	F	8	6	remove
1192	Scots Pine	<i>Pinus sylvestris</i>	18	18	5	G	G	3	3	remove
1193	Norway Maple	<i>Acer platanoides</i>	11	11	0	G	G	2	3	remove
1194	Freeman's Maple	<i>Acer x freemanii</i>	39	39	10	G	F	9	6	remove
1195	White Ash	<i>Fraxinus americana</i>	30	30	80	F	P	3	2	remove
1196	Blue Spruce	<i>Picea pungens</i>	31	31	5	G	G	3	4	remove
1197	Blue Spruce	<i>Picea pungens</i>	33	33	10	G	F	3	3	remove
1198	White Spruce	<i>Picea glauca</i>	35	35	5	G	G	4	5	remove
1199	White Spruce	<i>Picea glauca</i>	24	24	10	G	G	4	5	remove
1200	White Spruce	<i>Picea glauca</i>	38	38	5	G	G	6	5	remove
1201	White Spruce	<i>Picea glauca</i>	31	31	10	G	G	4	5	remove
1202	White Spruce	<i>Picea glauca</i>	41	41	5	G	G	6	5	remove
1203	White Spruce	<i>Picea glauca</i>	26	26	5	G	G	5	4	remove
1204	White Spruce	<i>Picea glauca</i>	31	31	5	G	G	5	4	remove
1205	Black Walnut	<i>Juglans nigra</i>	12	12	5	G	G	5	4	remove
1206	European Poplar	<i>Populus alba</i>	30	30	30	G	F	7	6	remove
1207	White Spruce	<i>Picea glauca</i>	40	40	0	G	G	6	5	remove
1208	Eastern White Cedar	<i>Thuja occidentalis</i>	20	20	5	G	G	3	2	remove
1209	Manitoba Maple	<i>Acer negundo</i>	15	15	5	F	G	4	3	remove
1210	Manitoba Maple	<i>Acer negundo</i>	11+15	19	5	F	G	4	3	remove
1211	Manitoba Maple	<i>Acer negundo</i>	14+17+17+11	30	5	F	G	6	4	remove
1212	Manitoba Maple	<i>Acer negundo</i>	12+9	15	5	F	G	5	6	remove
1213	Manitoba Maple	<i>Acer negundo</i>	13	13	5	F	F	3	4	remove
1214	Manitoba Maple	<i>Acer negundo</i>	18	18	20	G	G	5	4	remove
1215	Weeping Willow	<i>Salix babylonica</i>	41	41	5	G	G	8	6	remove
1216	Manitoba Maple	<i>Acer negundo</i>	19+16+21	33	5	F	G	7	9	remove
1217	Freeman's Maple	<i>Acer x freemanii</i>	43	43	5	G	G	7	8	remove
1218	Freeman's Maple	<i>Acer x freemanii</i>	20+22+23	38	5	F	G	8	10	remove
1219	Freeman's Maple	<i>Acer x freemanii</i>	19+30	36	5	F	F	8	8	remove
1220	Freeman's Maple	<i>Acer x freemanii</i>	25	25	40	G	F	3	4	remove
1221	Freeman's Maple	<i>Acer x freemanii</i>	25	25	10	G	G	4	6	remove
1222	Freeman's Maple	<i>Acer x freemanii</i>	32	32	5	G	G	5		remove
1223	Freeman's Maple	<i>Acer x freemanii</i>	15	15	0	F	G	3	4	remove

Tag #	Common Name	Scientific Name	DBH (cm)	Effective DBH* (cm)	% dead branches	Condition (G/F/P/D)		Dripline (m)		Recommendation
						Structure	Vigour	Reading 1	Reading 2	
1124	Freeman's Maple	<i>Acer x freemanii</i>	23	23	0	G	F	3	2	remove
1125	Freeman's Maple	<i>Acer x freemanii</i>	25	25	5	G	G	6	4	remove
1126	Freeman's Maple	<i>Acer x freemanii</i>	22	22	0	G	G	4	5	remove
1127	Freeman's Maple	<i>Acer x freemanii</i>	44	44	0	G	G	5	5	remove
1128	Norway Maple	<i>Acer platanoides</i>	16	16	0	G	G	4	3	remove
1129	Norway Maple	<i>Acer platanoides</i>	16	16	5	G	G	4	3	remove
1130	Norway Maple	<i>Acer platanoides</i>	16	16	5	G	G	5	4	remove
1131	Norway Maple	<i>Acer platanoides</i>	17	17	10	G	G	4	3	remove
1132	Norway Maple	<i>Acer platanoides</i>	13	13	0	G	F	2	1	remove
1133	Freeman's Maple	<i>Acer x freemanii</i>	34	34	10	G	G	8	9	remove
1134	Freeman's Maple	<i>Acer x freemanii</i>	43	43	10	G	G	7	8	remove
1135	Freeman's Maple	<i>Acer x freemanii</i>	33	33	5	G	G	7	6	remove
1236	Freeman's Maple	<i>Acer x freemanii</i>	30	30	0	G	G	6	5	remove
1237	Freeman's Maple	<i>Acer x freemanii</i>	39	39	0	G	G	7	6	remove
1238	Freeman's Maple	<i>Acer x freemanii</i>	46	46	5	G	G	10	9	remove
1239	Freeman's Maple	<i>Acer x freemanii</i>	35	35	5	G	G	10	8	remove
1240	Freeman's Maple	<i>Acer x freemanii</i>	37	37	0	G	G	8	9	remove
1241	Freeman's Maple	<i>Acer x freemanii</i>	34	34	0	G	G	6	7	remove
1242	Freeman's Maple	<i>Acer x freemanii</i>	40	40	10	G	G	6	9	remove
1243	Weeping Willow	<i>Salix babylonica</i>	55	55	10	G	G	4	7	remove
1244	Freeman's Maple	<i>Acer x freemanii</i>	27+42+17	53	5	G	G	4	5	remove
1245	Freeman's Maple	<i>Acer x freemanii</i>	54	54	0	G	G	8	6	remove
1246	Scots Pine	<i>Pinus sylvestris</i>	22	22	60	G	P	3	3	remove
1247	White Birch	<i>Betula papyrifera</i>	15+13+11+11	25	5	G	G	5	4	remove
1248	Freeman's Maple	<i>Acer x freemanii</i>	43	43	5	G	G	4	7	remove
1249	Blue Spruce	<i>Picea pungens</i>	24	24	0	P	G	3	2	remove
1250	Scots Pine	<i>Pinus sylvestris</i>	12+12	17	20	G	P	3	2	remove
1251	Blue Spruce	<i>Picea pungens</i>	22	22	0	G	G	2	2	remove
1252	Freeman's Maple	<i>Acer x freemanii</i>	26	26	5	G	G	6	5	remove
1253	Freeman's Maple	<i>Acer x freemanii</i>	42	42	5	G	G	6	8	remove
1254	Norway Maple	<i>Acer platanoides</i>	21	21	0	G	G	4	4	remove
1255	Norway Maple	<i>Acer platanoides</i>	20	20	0	G	G	3	4	remove
1256	Blue Spruce	<i>Picea pungens</i>	32	32	5	G	G	3	3	remove
1257	Norway Maple	<i>Acer platanoides</i>	15	15	0	G	G	3	2	remove
1258	Norway Maple	<i>Acer platanoides</i>	16	16	0	G	F	3	3	remove
1259	Norway Maple	<i>Acer platanoides</i>	17	17	10	F	F	3	2	remove
1260	White Birch	<i>Betula papyrifera</i>	14+9+5+5+3	18	10	G	F	4	5	remove
1261	Norway Maple	<i>Acer platanoides</i>	12	12	0	G	G	2	2	remove
1262	Norway Maple	<i>Acer platanoides</i>	16	16	0	G	G	3	3	remove
1263	Norway Maple	<i>Acer platanoides</i>	13	13	0	G	G	4	3	remove
1264	Norway Maple	<i>Acer platanoides</i>	13	13	0	G	G	3	4	remove
1265	Norway Maple	<i>Acer platanoides</i>	13	13	5	G	G	3	2	remove
1266	Blue Spruce	<i>Picea pungens</i>	25	25	5	G	G	3	3	remove
1267	Freeman's Maple	<i>Acer x freemanii</i>	47	47	5	G	G	6	9	remove
1268	White Birch	<i>Betula papyrifera</i>	14+11	18	5	G	G	3	2	remove
1269	Blue Spruce	<i>Picea pungens</i>	22	22	30	G	F	3	2	remove
1270	Blue Spruce	<i>Picea pungens</i>	20+22	30	10	F	G	3	3	remove
1271	Blue Spruce	<i>Picea pungens</i>	25	25	5	G	G	3	3	remove
1272	Blue Spruce	<i>Picea pungens</i>	21+20	29	5	G	G	3	3	remove
1273	Blue Spruce	<i>Picea pungens</i>	22	22	10	G	G	2	3	remove
1274	Freeman's Maple	<i>Acer x freemanii</i>	25+43+31	59	0	G	G	10	7	remove
1275	Norway Maple	<i>Acer platanoides</i>	20+16	26	5	G	G	7	6	remove
1276	White Spruce	<i>Picea glauca</i>	29	29	0	G	G	4	5	remove
1277	Sweet Cherry	<i>Prunus avium</i>	19+12+12+24+26	44	80	F	P	5		remove
1278	White Spruce	<i>Picea glauca</i>	28	28	5	G	G	4	2	remove
1279	Siberian Crab Apple	<i>Malus baccata</i>	21	21	10	G	F	4	3	remove
1280	White Spruce	<i>Picea glauca</i>	18+18	25	0	G	G	3	3	remove
1281	White Spruce	<i>Picea glauca</i>	28	28	10	G	G	3	4	remove
1282	Apple sp.	<i>Malus pumila</i>	22+19+19	35	5	G	G	6	5	remove
1283	Norway spruce	<i>Picea abies</i>	35	35	0	G	G	3	4	remove
1284	Norway Maple	<i>Acer platanoides</i>	29	29	5	G	G	5	4	remove
1285	Freeman's Maple	<i>Acer x freemanii</i>	38	38	20	G	F	6	7	remove
1286	Freeman's Maple	<i>Acer x freemanii</i>	50	50	5	F	G	9	7	remove
1287	Norway Maple	<i>Acer platanoides</i>	44	44	10	F	G	9	6	remove
1288	Norway Maple	<i>Acer platanoides</i>	40	40	5	F	G	8	6	remove
1289	Norway Maple	<i>Acer platanoides</i>	46	46	5	F	G	9	7	remove
1290	White Birch	<i>Betula papyrifera</i>	27+15+26+17	44	5	G	G	5	4	remove

Tag #	Common Name	Scientific Name	DBH (cm)	Effective DBH* (cm)	% dead branches	Condition (G/F/P/D)		Dripline (m)		Recommendation
						Structure	Vigour	Reading 1	Reading 2	
1291	Blue Spruce	<i>Picea pungens</i>	30	30	5	G	F	2	3	remove
1292	Blue Spruce	<i>Picea pungens</i>	39	39	5	G	F	3	3	remove
1293	Blue Spruce	<i>Picea pungens</i>	51	51	5	G	F	4	3	remove
1294	Norway spruce	<i>Picea abies</i>	23	23	0	G	G	4	4	remove
1295	Scots Pine	<i>Pinus sylvestris</i>	25	25	50	G	P	3	3	remove
1296	Eastern White Cedar	<i>Thuja occidentalis</i>	12+10+8+4+4	18	0	G	F	3	2	remove
1297	Eastern White Cedar	<i>Thuja occidentalis</i>	11+11+6+3	17	5	G	F	3	2	remove
1298	Eastern White Cedar	<i>Thuja occidentalis</i>	12+6	13	5	G	F	3	2	remove
1299	Eastern White Cedar	<i>Thuja occidentalis</i>	10+10+9	17	5	G	F	3	2	remove
1300	Freeman's Maple	<i>Acer x freemanii</i>	55	55	0	G	G	7		remove
1301	Freeman's Maple	<i>Acer x freemanii</i>	29+26	39	5	G	G	6	4	remove
1302	Norway Maple	<i>Acer platanoides</i>	40	40	20	F	F	5	5	remove
1303	Manitoba Maple	<i>Acer negundo</i>	31+31+27+22	56	10	F	F	4	7	remove
1304	Eastern White Cedar	<i>Thuja occidentalis</i>	12+5	13	0	G	G	1	1	remove
1305	Eastern White Cedar	<i>Thuja occidentalis</i>	12+10	16	0	G	G	1	1	remove
1306	Manitoba Maple	<i>Acer negundo</i>	61+22+16	67	15	P	F	12	6	remove
1307	Eastern White Cedar	<i>Thuja occidentalis</i>	11	11	25	P	F	1	1	remove
1308	Eastern White Cedar	<i>Thuja occidentalis</i>	13+16	21	25	F	F	1	2	remove
1309	Eastern White Cedar	<i>Thuja occidentalis</i>	16+7+7	19	15	F	F	3	1	remove
1310	norway spruce	<i>Picea abies</i>	47	47	15	G	F	6	4	remove
1311	Norway spruce	<i>Picea abies</i>	41	41	50	G	P	6	4	remove
1312	Eastern White Cedar	<i>Thuja occidentalis</i>	24	24	5	F	G	4	2	remove
1313	Norway spruce	<i>Picea abies</i>	52	52	15	G	F	6	4	remove
1314	Norway spruce	<i>Picea abies</i>	45	45	15	G	F	6	4	remove
1315	Eastern White Cedar	<i>Thuja occidentalis</i>	20+10+29+12+18	43	15	F	F	3	2	remove
1316	Eastern White Cedar	<i>Thuja occidentalis</i>	18+21+24+21	42	10	F	F	5	3	remove
1317	Eastern White Cedar	<i>Thuja occidentalis</i>	16+12+21+18+18	39	10	F	F	5	3	remove
1318	Eastern White Cedar	<i>Thuja occidentalis</i>	8+8+15+15+18	30	25	F	F	5	3	remove
1319	Norway spruce	<i>Picea abies</i>	68	68	15	F	F	6	4	remove
1320	Eastern White Cedar	<i>Thuja occidentalis</i>	26	26	15	F	F	4	2	remove
1321	Norway spruce	<i>Picea abies</i>	28	28	5	G	G	6	6	remove
1322	Norway spruce	<i>Picea abies</i>	30	30	0	G	G	6	6	remove
1323	Norway Maple	<i>Acer platanoides</i>	30+30	42	40	F	P	6	2	remove
1324	Norway Maple	<i>Acer platanoides</i>	33	33	50	F	P	6	2	remove
1325	Norway spruce	<i>Picea abies</i>	31	31	5	G	G	6	6	remove
1326	Norway spruce	<i>Picea abies</i>	18	18	5	F	G	3	2	remove
1327	Manitoba Maple	<i>Acer negundo</i>	13+23+20+8	34	15	F	F	4	2	remove
1328	Eastern White Cedar	<i>Thuja occidentalis</i>	17+43	46	50	F	P	2	1	remove
1329	Eastern White Cedar	<i>Thuja occidentalis</i>	20+25	32	10	F	F	2	1	remove
1330	Eastern White Cedar	<i>Thuja occidentalis</i>	15+20	25	25	F	P	2	1	remove
1331	Eastern White Cedar	<i>Thuja occidentalis</i>	22	22	25	F	P	2	1	remove
1332	Eastern White Cedar	<i>Thuja occidentalis</i>	22	22	25	F	P	2	1	remove
1333	Siberian Elm	<i>Ulmus pumila</i>	20+20	28	75	P	P	2	2	remove
1334	Siberian Elm	<i>Ulmus pumila</i>	43	43	25	F	P	8	2	remove
1335	Black Walnut	<i>Juglans nigra</i>	16	16	5	G	G	4	2	remove
1336	Norway spruce	<i>Picea abies</i>	32	32	0	G	G	3	3	remove
1337	Norway spruce	<i>Picea abies</i>	28	28	0	G	G	3	2	remove
1338	Norway spruce	<i>Picea abies</i>	25	25	5	G	G	3	2	remove
1339	Norway spruce	<i>Picea abies</i>	11	11	0	G	G	3	2	remove
1340	Norway spruce	<i>Picea abies</i>	30	30	0	G	G	4	4	remove
477	Sugar Maple	<i>Acer saccharum</i>	46	46	20	F	F	2	5	remove
478	White Ash	<i>Fraxinus americana</i>	50	50	40	F	F	4	5	remove
479	Eastern White Cedar	<i>Thuja occidentalis</i>	21+15+51	57	20	F	F	3	5	remove
480	Manitoba Maple	<i>Acer negundo</i>	17+18+18+20+30	47	80	F	P	3	4	remove
481	Manitoba Maple	<i>Acer negundo</i>	8+100	100	95	P	P	2	1	remove
482	Manitoba Maple	<i>Acer negundo</i>	13+16+12+12	27	20	P	F	7	8	remove
483	White Ash	<i>Fraxinus americana</i>	66	66	20	F	F	8	9	remove
484	Manitoba Maple	<i>Acer negundo</i>	21+12	24	30	F	F	8	6	remove
485	Manitoba Maple	<i>Acer negundo</i>	13+18	22	10	F	F	6	8	remove
486	White Ash	<i>Fraxinus americana</i>	21+30	37	20	F	F	2	6	remove
487	Manitoba Maple	<i>Acer negundo</i>	15+12	19	10	F	F	3	5	remove
488	Manitoba Maple	<i>Acer negundo</i>	21	21	5	F	F	4	5	remove
489	Manitoba Maple	<i>Acer negundo</i>	24+22	33	5	F	F	5	5	remove
490	Manitoba Maple	<i>Acer negundo</i>	17+16+19+10	32	5	F	F	4	5	remove
491	White Ash	<i>Fraxinus americana</i>	11	11	20	G	F	4	3	remove
492	White Ash	<i>Fraxinus americana</i>	30	30	5	F	G	5	6	remove
493	White Ash	<i>Fraxinus americana</i>	31	31	10	G	G	7	7	remove

Tag #	Common Name	Scientific Name	DBH (cm)	Effective DBH* (cm)	% dead branches	Condition (G/F/P/D)		Dripline (m)		Recommendation
						Structure	Vigour	Reading 1	Reading 2	
494	White Ash	<i>Fraxinus americana</i>	14	14	5	G	G	4	5	remove
495	White Ash	<i>Fraxinus americana</i>	16	16	10	G	F	4	3	remove
496	Manitoba Maple	<i>Acer negundo</i>	17+10	20	90	P	P	3	3	remove
497	Manitoba Maple	<i>Acer negundo</i>	26	26	40	P	F	7	6	remove
498	White Ash	<i>Fraxinus americana</i>	18+12+10+10+8	27	10	F	F	4	3	remove
499	White Ash	<i>Fraxinus americana</i>	20+10+10	25	80	F	P	2	1	remove
500	White Ash	<i>Fraxinus americana</i>	18+15+14	27	5	F	G	4	5	remove
501	White Ash	<i>Fraxinus americana</i>	21	21	5	G	G	4	5	remove
502	White Ash	<i>Fraxinus americana</i>	36	36	10	F	F	6	7	remove
503	White Ash	<i>Fraxinus americana</i>	16	16	30	F	F	5	4	remove
504	White Ash	<i>Fraxinus americana</i>	19+20+22	35	40	F	F	6	5	remove
505	White Ash	<i>Fraxinus americana</i>	16+14+3	21	80	F	P	3	2	remove
506	White Ash	<i>Fraxinus americana</i>	14+22	26	20	F	F	7	6	remove
507	White Ash	<i>Fraxinus americana</i>	16+17+14	27	10	F	F	7	6	remove
508	White Ash	<i>Fraxinus americana</i>	26	26	80	F	P	7	5	remove
509	White Ash	<i>Fraxinus americana</i>	21	21	70	P	P	5	4	remove
510	White Ash	<i>Fraxinus americana</i>	11+12+3	17	40	P	F	4	3	remove
511	White Ash	<i>Fraxinus americana</i>	14	14	50	G	F	5	4	remove
512	White Ash	<i>Fraxinus americana</i>	22+19	29	5	F	G	7	6	remove
513	White Ash	<i>Fraxinus americana</i>	20	20	20	G	F	5	4	remove
514	White Ash	<i>Fraxinus americana</i>	14	14	10	G	G	4	3	remove
515	White Ash	<i>Fraxinus americana</i>	10+11	15	5	F	G	6	5	remove
516	White Ash	<i>Fraxinus americana</i>	11+9	14	10	F	F	4	3	remove
517	White Ash	<i>Fraxinus americana</i>	14+15	21	50	F	P	3	2	remove
518	White Ash	<i>Fraxinus americana</i>	16+13	21	5	F	F	7	6	remove
519	White Ash	<i>Fraxinus americana</i>	16	16	70	F	P	4	5	remove
520	White Ash	<i>Fraxinus americana</i>	15	15	70	F	P	4	5	remove
521	White Ash	<i>Fraxinus americana</i>	13	13	20	F	F	5	6	remove
522	White Ash	<i>Fraxinus americana</i>	22	22	10	F	F	7	6	remove
523	White Ash	<i>Fraxinus americana</i>	15	15	40	F	P	4	3	remove
524	White Ash	<i>Fraxinus americana</i>	24	24	20	F	F	7	6	remove
525	White Ash	<i>Fraxinus americana</i>	13+13	18	30	F	F	6	5	remove
526	White Ash	<i>Fraxinus americana</i>	16+16+16	28	10	F	G	7	6	remove
527	American Beech	<i>Fagus grandifolia</i>	19+24+5	31	5	F	G	6	5	remove
528	Eastern White Pine	<i>Pinus strobus</i>	20	20	5	G	G	4	6	remove
529	White Ash	<i>Fraxinus americana</i>	13+15	20	10	F	F	4	5	remove
530	White Ash	<i>Fraxinus americana</i>	16+16	23	10	F	G	4	5	remove
532	Apple sp.	<i>Malus sp.</i>	15+12+6	20	10	G	G	5	4	remove
533	Apple sp.	<i>Malus sp.</i>	17+15	23	10	G	G	5	4	retain
534	Hackberry sp	<i>Celtis sp.</i>	17	17	0	G	G	3	2	retain
535	Pear sp.	<i>Pyrus sp.</i>	15	15	10	G	G	3	3	retain
536	White Mulberry	<i>Morus alba</i>	26+25+28+12	47	10	F	G	6	7	retain
537	Apple sp.	<i>Malus sp.</i>	15+14	21	10	G	G	5	6	retain
538	Apple sp.	<i>Malus sp.</i>	15+15+12	24	5	G	G	5	4	retain
539	Apple sp.	<i>Malus sp.</i>	15+17	23	5	G	G	5	6	retain
540	White Mulberry	<i>Morus alba</i>	15+18+20+10	32	5	G	G	5	6	retain
541	Cherry sp.	<i>Prunus sp.</i>	12+4	12	5	F	F	3	2	retain
542	Pear sp.	<i>Pyrus sp.</i>	20+12	23	5	F	G	4	5	retain
543	Cherry sp.	<i>Prunus sp.</i>	21	21	40	G	F	5	6	retain
544	Common Apple	<i>Malus pumila</i>	16	16	20	F	F	5	6	retain
545	Common Apple	<i>Malus pumila</i>	16	16	20	F	F	5	6	retain
546	Common Apple	<i>Malus pumila</i>	14+12	18	30	F	F	6	7	retain
547	Common Apple	<i>Malus pumila</i>	16+14	21	20	F	F	5	6	retain
548	Common Apple	<i>Malus pumila</i>	16	16	20	F	G	5	5	retain
549	Common Apple	<i>Malus pumila</i>	14+13	19	50	F	F	6	5	retain
550	Common Apple	<i>Malus pumila</i>	13	13	20	F	F	4	5	retain
551	Pear sp.	<i>Pyrus sp.</i>	18+10+10	23	10	F	F	5	4	retain
552	Common Apple	<i>Malus pumila</i>	14+18	23	10	G	F	5	4	retain
553	Common Apple	<i>Malus pumila</i>	20	20	5	G	G	5	6	retain
554	Pear sp.	<i>Pyrus sp.</i>	20+16	26	10	G	G	5	6	retain
555	Common Apple	<i>Malus pumila</i>	17+12	21	10	G	G	5	6	retain
558	Common Apple	<i>Malus pumila</i>	14+12	18	10	G	G	5	6	retain
560	White Mulberry	<i>Morus alba</i>	17+10	20	20	F	G	4	5	retain
561	Common Apple	<i>Malus pumila</i>	15+10	18	5	G	G	4	5	retain
562	Common Apple	<i>Malus pumila</i>	20+20+15+15	35	5	G	G	4	5	retain
563	Common Apple	<i>Malus pumila</i>	15	15	10	G	G	4	5	retain
564	Common Apple	<i>Malus pumila</i>	12	12	5	G	G	4	5	retain

Tag #	Common Name	Scientific Name	DBH (cm)	Effective DBH* (cm)	% dead branches	Condition (G/F/P/D)		Dripline (m)		Recommendation
						Structure	Vigour	Reading 1	Reading 2	
565	Common Apple	<i>Malus pumila</i>	17	17	10	G	G	4	5	retain
566	Common Apple	<i>Malus pumila</i>	20	20	5	G	G	4	5	retain
567	Common Apple	<i>Malus pumila</i>	15	15	5	G	G	4	5	retain
568	Common Apple	<i>Malus pumila</i>	13	13	5	G	G	4	5	retain
569	Cherry sp.	<i>Prunus sp.</i>	17	17	10	F	F	4	5	retain
570	Cherry sp.	<i>Prunus sp.</i>	25	25	5	G	G	5	6	retain
571	Cherry sp.	<i>Prunus sp.</i>	18+20+32	42	20	G	G	5	6	retain
572	Cherry sp.	<i>Prunus sp.</i>	16	16	20	G	G	4	3	retain
573	Common Apple	<i>Malus pumila</i>	15+12	19	20	G	G	4	3	retain
574	Common Apple	<i>Malus pumila</i>	16	16	10	G	G	4	3	retain
575	Common Apple	<i>Malus pumila</i>	14	14	90	G	P	4	3	retain
576	Pear sp.	<i>Pyrus sp.</i>	21	21	5	G	G	4	5	retain
577	Common Apple	<i>Malus pumila</i>	20+20+10	30	5	G	G	4	6	retain
578	Common Apple	<i>Malus pumila</i>	11	11	5	G	G	4	3	retain
579	Pear sp.	<i>Pyrus sp.</i>	12	12	60	G	P	4	3	retain
580	Common Apple	<i>Malus pumila</i>	21+12	24	5	G	G	4	5	retain
581	Common Apple	<i>Malus pumila</i>	14	14	5	G	G	4	3	retain
582	Cherry sp.	<i>Prunus sp.</i>	14+13+10	22	90	G	P	4	3	retain
583	Norway Maple	<i>Acer platanoides</i>	14	14	5	G	G	4	5	retain
584	Pear sp.	<i>Pyrus sp.</i>	16	16	90	F	P	4	3	retain
585	Pear sp.	<i>Pyrus sp.</i>	16	16	20	G	F	4	3	retain
586	Common Apple	<i>Malus pumila</i>	12	12	20	P	F	4	3	retain
587	Pear sp.	<i>Pyrus sp.</i>	14	14	10	G	G	4	3	retain
588	Pear sp.	<i>Pyrus sp.</i>	12	12	5	G	G	4	3	retain
589	Pear sp.	<i>Pyrus sp.</i>	15	15	0	G	G	4	3	retain
591	Cherry sp.	<i>Prunus sp.</i>	24+11+14	30	80	G	P	5	6	retain
592	Common Apple	<i>Malus pumila</i>	14	14	10	G	G	4	3	retain
593	Common Apple	<i>Malus pumila</i>	18	18	10	G	G	4	3	retain
594	Pear sp.	<i>Pyrus sp.</i>	11	11	5	G	G	4	3	retain
595	Common Apple	<i>Malus pumila</i>	19	19	20	G	G	4	4	retain
596	Common Apple	<i>Malus pumila</i>	15+10+10+8	22	10	G	G	4	3	retain
597	Pear sp.	<i>Pyrus sp.</i>	9+15	17	10	G	F	4	3	retain
598	Pear sp.	<i>Pyrus sp.</i>	14	14	0	G	G	4	3	retain
599	Pear sp.	<i>Pyrus sp.</i>	15	15	20	G	G	4	3	retain
600	Cherry sp.	<i>Prunus sp.</i>	21	21	20	G	G	4	5	retain
601	Common Apple	<i>Malus pumila</i>	13	13	10	G	G	4	3	retain
602	European Poplar	<i>Populus alba</i>	19	19	20	G	G	4	3	retain
603	European Poplar	<i>Populus alba</i>	16	16	10	F	G	4	3	retain
604	European Poplar	<i>Populus alba</i>	10	10	40	F	G	4	3	retain
605	Eastern White Cedar	<i>Thuja occidentalis</i>	15+18	23	10	G	G	5	4	retain
606	Eastern White Cedar	<i>Thuja occidentalis</i>	20+25	32	10	G	G	5	4	retain
607	Eastern White Cedar	<i>Thuja occidentalis</i>	25+30	39	10	G	G	5	4	retain
608	White Spruce	<i>Picea glauca</i>	14	14	0	G	G	4	4	retain
609	White Spruce	<i>Picea glauca</i>	14	14	5	G	G	4	4	retain
610	White Spruce	<i>Picea glauca</i>	12	12	5	G	G	4	4	retain
611	White Spruce	<i>Picea glauca</i>	15	15	5	G	G	5	6	retain
612	White Spruce	<i>Picea glauca</i>	12	12	5	G	G	5	6	retain
613	Manitoba Maple	<i>Acer negundo</i>	20+15+17	30	30	G	F	5	6	retain
614	Manitoba Maple	<i>Acer negundo</i>	15	15	10	G	G	4	5	retain
615	Manitoba Maple	<i>Acer negundo</i>	15	15	5	G	G	4	5	retain
616	Manitoba Maple	<i>Acer negundo</i>	12	12	5	G	G	4	5	retain
617	Manitoba Maple	<i>Acer negundo</i>	16	16	10	G	G	6	6	retain
a	Norway Spruce	<i>Picea abies</i>	25	25	40	G	P	4	4	retain
b	Norway Spruce	<i>Picea abies</i>	20	20	20	G	P	4	5	retain
c	Black Walnut	<i>Juglans nigra</i>	30	30	10	G	G	6	5	retain
d	Black Walnut	<i>Juglans nigra</i>	20	20	20	G	G	6	5	retain
e	Black Walnut	<i>Juglans nigra</i>	80	80	100	G	D	8	7	retain
f	Norway Spruce	<i>Picea abies</i>	15	15	90	G	P	4	5	retain
g	Norway Spruce	<i>Picea abies</i>	15+18	23	30	G	F	5	6	retain
h	Norway Spruce	<i>Picea abies</i>	30	30	5	G	G	5	6	retain
i	Norway Spruce	<i>Picea abies</i>	25	25	60	G	F	5	6	retain
j	Trembling Aspen	<i>Populus tremuloides</i>	80	80	40	G	F	7	6	retain
k	Black Walnut	<i>Juglans nigra</i>	65	65	10	G	G	7	6	retain
l	Black Walnut	<i>Juglans nigra</i>	35	35	20	G	G	5	6	retain
m	Black Walnut	<i>Juglans nigra</i>	20	20	5	G	G	4	5	retain
n	Black Walnut	<i>Juglans nigra</i>	30	30	10	G	G	5	4	retain
o	Black Walnut	<i>Juglans nigra</i>	40	40	10	G	G	5	4	retain

Tag #	Common Name	Scientific Name	DBH (cm)	Effective DBH* (cm)	% dead branches	Condition (G/F/P/D)		Dripline (m)		Recommendation
						Structure	Vigour	Reading 1	Reading 2	
p	White Ash	<i>Fraxinus americana</i>	50	50	30	G	F	6	5	retain
q	White Ash	<i>Fraxinus americana</i>	25	25	30	G	F	4	5	retain
r	White Ash	<i>Fraxinus americana</i>	60	60	100	G	D	6	7	retain
s	White Spruce	<i>Picea glauca</i>	20	20	20	G	F	4	3	retain
t	White Spruce	<i>Picea glauca</i>	30	30	5	G	G	4	3	retain
u	Norway Maple	<i>Acer platanoides</i>	40	40	0	G	G	7	8	retain
v	Manitoba Maple	<i>Acer negundo</i>	15	15	10	G	G	6	4	retain
w	Norway Maple	<i>Acer platanoides</i>	15	15	0	G	G	5	4	retain
x	Norway Maple	<i>Acer platanoides</i>	15+12+12	23	5	G	G	6	5	retain
y	Norway Maple	<i>Acer platanoides</i>	20	20	0	G	G	7	6	retain
z	American elm	<i>Ulmus americana</i>	30+12	32	5	G	G	6	5	retain
aa	Norway Maple	<i>Acer platanoides</i>	90	90	20	G	F	10	8	retain
ab	Freeman's Maple	<i>Acer x freemanii</i>	30	30	5	G	G	8	7	retain
ac	White Ash	<i>Fraxinus americana</i>	30	30	60	F	P	7	8	retain
ad	White Spruce	<i>Picea glauca</i>	16	16	20	G	G	4	5	retain
ae	White Spruce	<i>Picea glauca</i>	15	15	5	G	G	4	5	retain
af	White Spruce	<i>Picea glauca</i>	15	15	5	G	G	4	5	retain
ag	White Spruce	<i>Picea glauca</i>	20	20	5	G	G	4	5	retain
ah	White Ash	<i>Fraxinus americana</i>	40	40	30	G	G	6	7	retain
ai	Manitoba Maple	<i>Acer negundo</i>	15+25	29	20	G	G	6	5	retain
aj	Manitoba Maple	<i>Acer negundo</i>	40+30	50	10	G	G	8	9	retain
ak	White Spruce	<i>Picea glauca</i>	20	20	20	G	G	4	3	retain
al	Norway Maple	<i>Acer platanoides</i>	40+35	53	5	G	F	6	7	retain
am	Freeman's Maple	<i>Acer x freemanii</i>	40	40	0	G	G	7	6	retain
618	Scots Pine	<i>Pinus sylvestris</i>	24+26	35	5	G	G	4	3	retain
619	Scots Pine	<i>Pinus sylvestris</i>	33	33	10	G	G	4	3	retain
620	Scots Pine	<i>Pinus sylvestris</i>	38	38	5	G	G	4	3	retain
621	Scots Pine	<i>Pinus sylvestris</i>	34	34	20	G	G	4	3	retain
622	Scots Pine	<i>Pinus sylvestris</i>	26	26	20	G	G	4	3	retain
623	Scots Pine	<i>Pinus sylvestris</i>	43	43	30	G	G	4	3	retain
624	Scots Pine	<i>Pinus sylvestris</i>	34	34	40	F	F	4	3	retain
625	Scots Pine	<i>Pinus sylvestris</i>	32	32	40	F	F	4	3	retain
626	Scots Pine	<i>Pinus sylvestris</i>	17	17	40	F	F	4	3	retain
627	Scots Pine	<i>Pinus sylvestris</i>	26	26	60	F	P	4	3	retain
628	White Spruce	<i>Picea glauca</i>	22	22	20	G	G	4	3	retain
629	Scots Pine	<i>Pinus sylvestris</i>	24	24	20	G	F	4	3	retain
an	Blue Spruce	<i>Picea pungens</i>	30	30	0	G	G	4	3	retain
ao	Blue Spruce	<i>Picea pungens</i>	25	25	5	G	G	4	3	retain
ap	Blue Spruce	<i>Picea pungens</i>	28	28	5	G	G	4	3	retain
630	Scots Pine	<i>Pinus sylvestris</i>	12	12	5	G	G	4	3	retain
631	Scots Pine	<i>Pinus sylvestris</i>	10	10	0	G	G	4	3	retain
aq	Blue Spruce	<i>Picea pungens</i>	30	30	0	G	G	4	3	retain
ar	Scots Pine	<i>Pinus sylvestris</i>	35	35	0	G	G	4	3	retain
as	Blue Spruce	<i>Picea pungens</i>	25	25	0	G	G	4	3	retain
at	Scots Pine	<i>Pinus sylvestris</i>	30	30	0	G	G	4	3	retain
au	Scots Pine	<i>Pinus sylvestris</i>	25	25	0	G	G	4	3	retain
av	Blue Spruce	<i>Picea pungens</i>	20	20	10	G	G	4	3	retain
aw	Blue Spruce	<i>Picea pungens</i>	25	25	5	G	G	4	3	retain
ax	Scots Pine	<i>Pinus sylvestris</i>	30	30	0	G	G	4	3	retain
at	Blue Spruce	<i>Picea pungens</i>	30	30	0	G	G	4	3	retain
az	Blue Spruce	<i>Picea pungens</i>	25	25	0	G	G	4	3	retain

* For trees with multiple stems, the effective DBH is calculated as the square root of the sum of squares.

Appendix B

Town of Caledon Standards

#606 Tree Preservation

#710 Tree Preservation Std. Notes - Part 1

#711 Tree Preservation Std. Notes - Part 2

DRIPLINE

1200

FINISHED GRADE

UNDISTURBED SOIL

SPECIFICATIONS FOR THE PROTECTION AND PRESERVATION OF EXISTING VEGETATION:

1. PRIOR TO ISSUANCE OF THE GRADING AND SERVICING OR BUILDING PERMIT, ALL EXISTING TREES THAT ARE TO BE PRESERVED SHALL BE FULLY PROTECTED WITH HOARDING (IE SNOW FENCING) OUTSIDE THEIR 'DRIPLINES', OR AS DIRECTED THROUGH ADDITIONAL GOVERNING DOCUMENTS, TO THE SATISFACTION OF THE TOWN.
2. GROUPS OF TREES AND OTHER EXISTING PLANTINGS TO BE PROTECTED SHALL BE TREATED IN A LIKE MANNER WITH HOARDING AROUND THE ENTIRE CLUMP(S).
3. TREE PRESERVATION FENCE IS TO BE INSPECTED BY THE CONSULTING ARBORIST OR LANDSCAPE ARCHITECT AND APPROVED BY THE TOWN PRIOR TO CONSTRUCTION COMMENCING.
4. SILTATION CONTROL FENCING MAY BE USED AS A TREE PRESERVATION FENCING SUBSTITUTE IF REQUIRED BY ENGINEERING AT THE DISCRETION OF THE TOWN.
5. AREAS WITHIN PROTECTIVE FENCING SHALL REMAIN UNDISTURBED AND SHALL NOT BE USED FOR THE STORAGE OF BUILDING MATERIALS OR EQUIPMENT. NO CONTAMINANTS SHALL BE DUMPED OR FLUSHED WHERE FEEDER ROOTS OF TREES EXIST. NO GARBAGE OR BUILDING MATERIALS ARE TO BE PLACED ON OR AGAINST THE TREE PRESERVATION FENCE.
6. PRUNE BRANCHES TO REMOVE DAMAGED LIMBS ONLY. DO NOT DAMAGE LEADERS. ALL CUTS OVER 25mm SHALL BE TREATED IN ACCORDANCE WITH APPROPRIATE HORTICULTURAL PRACTICES AS APPROVED BY THE TOWN. NO MORE THAN 20% OF THE TREE SHALL BE PRUNED UNLESS DIRECTED BY THE TOWN.
7. CUTTING OF ROOTS OR CHANGING OF GRADES AROUND EXISTING TREES TO BE PRESERVED WILL NOT BE PERMITTED WITHOUT THE APPROVAL OF THE PUBLIC WORKS AND ENGINEERING DEPARTMENT.
8. IF TREES ARE BEING ADVERSELY AFFECTED BY CONSTRUCTION, A WATERING AND FERTILIZING PROGRAM IS TO BE SET UP TO THE SATISFACTION OF THE TOWN.
9. PRIOR TO FINAL APPROVAL, TREES THAT HAVE DIED OR HAVE BEEN DAMAGED BEYOND REPAIR PRIOR DURING OR POST CONSTRUCTION SHALL BE REMOVED AND REPLACED WITH TREES OF A SIZE AND SPECIES APPROVED BY THE TOWN, AT THE SOLE COST OF THE DEVELOPER.

TOWN OF CALEDON

TREE PRESERVATION

NO.	REVISION	APRD	DATE
3	STANDARD 707 NOW 606		JAN 18
2	STANDARD No. 1136 NOW 707, NOTES EDIT		JUNE 08
1	NOTE NO. 9 ADDED		MARCH 08

APRD:	C. C.	DATE: JUNE 08
DRAWN:	abal	SCALE: NTS

STANDARD No. 606

SPECIFICATIONS

A. General

The following Tree Preservation and Protection Measures will be undertaken to help eliminate and/or significantly reduce construction injury to all trees recommended for preservation. All temporary tree protection measures cited for retained trees must comply with the Town of Caledon Tree Protection Specifications and Details. Any variation from the standard tree protection measures must be approved in writing by the Town of Caledon.

B. Pre-Construction Phase

1. Prior to construction, the trees to be preserved shall be protected with a Tree Protection Barrier. The barrier shall consist of 1.2m (4ft) high orange plastic snow fence wired to T-bars (see Town of Caledon Tree Preservation Fencing, STD 606).
2. If applicable, attach a filter cloth 600mm high to the construction side of the hoarding to act as sediment control. Sediment control fencing shall meet or exceed OPSD-219.110, and be installed to the satisfaction of the Town of Caledon.
3. All supports and bracing used to safely secure the barrier should be located outside the Tree Protection Zone (TPZ). All supports and bracing should minimize damage to roots.
4. The TPZ fence is to be installed along the edge of the tree protection zones. This hoarding is to remain in place and remain in good condition throughout the entire duration of the project. Dismantling the tree protection barrier prior to approval by the Town of Caledon staff may constitute a contravention.
5. The applicant shall notify the Town of Caledon and the consulting certified arborist or landscape architect to confirm that the tree protection barriers are in place.

6. Where fill or excavated material must be temporarily located near a TPZ, a wooden barrier must be used to ensure no material enters the TPZ.
7. Remove any garbage and foreign debris from the tree protection zones, daily.
8. For the trees that were recommended for removal and/or crown pruning that are within the TPZ limits, these activities are to be performed by a qualified ISA certified arborist prior to the installation of the Tree Protection Zone barriers and prior to the commencement of any construction activities. Install the Tree Protection Zone barrier as per Tree Preservation Fencing, STD 606 at the limits shown on the tree inventory and protection plan after the tree removal, whichever is greater, and crown pruning activities are completed.
9. A **Tree Protection Zone** sign must be mounted on all sides of the tree protection barrier for the duration of site construction. The sign should be a minimum of 40cm x 60cm and made of white gator board or equivalent material.
10. The sign must be similar to the illustration shown below, or as directed by the Town of Caledon.



11. All contractors and site visitors should be informed of the tree preservation and protection measures at a pre-construction meeting.

specifications continued on next panel...

TOWN OF CALEDON		APRD:	B.B.	DATE:	AUGUST 17
		DRAWN:	B.M.	SCALE:	NTS
NO.	REVISION	APRD	DATE	STANDARD No. 710	

SPECIFICATIONS

continued from previous panel

C. During Construction Phase

1. All areas within the TPZ shall remain undisturbed for the duration of construction. There will be no grade changes, dumping, and storage of any materials, structures or equipment within these areas. The Tree Protection Barrier must not be removed without the written authorization of the Town of Caledon.
2. Minor grading works will be permitted at the edge of the preservation zone as required to correct localized depressions and blend to existing grades. This work to be undertaken under the direct supervision of an ISA certified arborist.
3. A certified ISA arborist will undertake proper root pruning in accordance with acceptable arboriculture practices when and if roots of retained trees are to be exposed, damaged, or severed by construction work. The exposed roots will be backfilled with appropriate material as soon as possible to prevent desiccation. Root pruning prior to excavation will help prevent necessary damage to tree roots. The use of low pressure hydrovac to expose roots is recommended, at no additional cost.
4. The Town of Caledon must be notified for all work that impacts the TPZ for temporary removal of a section of hoarding to gain access for fine grading or other works. All works are to be supervised by the Town of Caledon.
5. No cables, wire or ropes of any kind shall be wrapped around or installed in trees to be preserved.
6. No contaminants will be dumped or flushed in the TPZ areas or where feeder roots of trees exist (generally beyond the TPZ areas).
7. Irrigate tree protection zones during drought conditions, June to September to reduce drought stress.
8. Inspect the site daily to ensure hoarding is in place and in good condition. Inspect trees to monitor condition.

D. Post Construction Phase

1. Following the completion of all site works including landscaping, and after review and approval by the Town of Caledon staff, the protective hoarding may be removed.
2. After removal of the protective hoarding, the Tree Preservation Zones shall be inspected by the Town of Caledon staff. Any remaining dead, diseased, or hazardous limbs or trees are to be removed by an ISA certified arborist as directed by the consulting arborist or Town of Caledon staff.

end of specifications

TOWN OF CALEDON

TREE PRESERVATION STANDARD NOTES - PART 2

			APRD:	B.B.	DATE: AUGUST 17
			DRAWN:	B.M.	SCALE: NTS
NO.	REVISION	APRD	DATE	STANDARD No. 711	