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

March 31, 2023

Mike Liburdi
12148 Albion Vaughn Inc.
27 Fenton Way
Brampton ON
L6P 0P4

Dear Mike Liburdi:

Re: 2023 Update – Arborist Report and Tree Preservation Plan for 12148 Albion Vaughan Road, Bolton (Palmer #160461)

1. Introduction

Palmer has completed an Arborist Report for the proposed development of 12148 Albion Vaughan Road, in the community of Bolton, Town of Caledon, Region of Peel (the Subject Property). This 2023 updated version of the report reflects agency comments on the first submission of the proposed development application (File # – POPA 2021-0001, RZ 2021-0003 & SPA 2021-0004).

Currently, residential buildings, including one house, a barn and manicured lawns with scattered trees occupy the Subject Property (**Figure 1**). Robinson Creek, a headwater tributary of Humber River, enters the property at the northwest corner and runs southward along the western edge, lying within the Toronto and Region Conservation Authority (TRCA) Regulatory Floodplain.

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

2. Guidance Documents

This Arborist Report and TPP is guided by The Town of Caledon *Development Standards Manual* (Town of Caledon, 2019), and the *Terms of Reference for Arborist Reports, Tree Preservation Plans, and Tableland Tree Removal Compensation* (Town of Caledon, 2020). The Town of Caledon document guides the content of the report and details the standards for tree protection measures. For additional guidance on Tree Protection Zones (TPZ), the standards outlined in the *Arborists' Certification Study Guide, Third Edition* were employed (Lilly, 2010).

2.1 Woodland Conservation By-law (2000-10)

The Woodland Conservation By-law (2000-10) is intended to protect Caledon's woodlands (Town of Caledon, 2000). 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.

There are no woodlands on-site, and this by-law would not apply to the proposed development.

2.2 Endangered Species Act

Species designated as *Threatened* or *Endangered* by the Committee on the Status of Species at Risk in Ontario (COSSARO), otherwise known as Species at Risk in Ontario (SARO), and their habitats (e.g., areas essential for breeding, rearing, feeding, hibernation and migration) are afforded legal protection under the *Endangered Species Act* (ESA) (Government of Ontario, 2007). The ESA is currently administered by the Ministry of Environment, Conservation and Park (MECP). Species at Risk (SAR) protected by the ESA include tree species, such as Butternut (*Juglans cinerea*), native Kentucky Coffeetree (*Gymnocladus dioicus*) (not cultivars), and American Chestnut (*Castanea dentata*).

2.3 Migratory Bird Convention Act

The *Migratory Birds Convention Act* (MBCA) (1994), and *Migratory Birds Regulations* (MBR) 2014, together with the provincial *Fish and Wildlife Conservation Act* (1997), protect most species of migratory birds and their nests and eggs anywhere they are found in Canada (Government of Canada, 1994). General prohibitions under the MBCA and MBR protect migratory birds, their nests, and eggs, and prohibit the deposition of harmful substances in waters/areas frequented by them. The MBR includes an additional prohibition against incidental take, which is the inadvertent harming or destruction of birds, nests, or eggs.

3. Methods

The TPP was completed by an International Society of Arboriculture (ISA) Certified Arborist and was completed on November 7, 2016. The Town of Caledon *Terms of Reference for Arborist Reports,* requires that a tree inventory be completed for all trees ≥10 cm in Diameter at Breast Height (DBH) within the tree assessment area (being the Development Area of the Subject Property and 6 m beyond). Information collected during the inventory for individual trees includes species name, tree tag number, tree size (DBH), crown diameter, geo-location, a condition rating, ownership, and notes on tree trunk and canopy conditions. DBH was measured at 1.4 m above the ground level.

Tree groupings were used in areas where species made individual counts cumbersome (e.g., groups of Eastern White Cedar), or where hazardous ground conditions were present; in most cases individual trees were inventoried. For tree groups, information collected during the inventory includes tree group number, species composition, tree/stem count, DBH range, and general condition notes.

A proposed action was determined for all individual trees and tree groups.

4. Results

4.1 Tree Inventory

The tree inventory comprised 34 individual trees, with an additional grouping of untagged Eastern White Cedar trees. The inventory included 14 trees and one (1) grouping which were native species (43%), nine

(26%) trees that were non-native, and 11 (31%) trees were identified to the genus only. There were 32 trees identified as live, two (2) individual dead trees and a grouping of dead trees on the Subject Property (**Table 1**). The inventory included 11 (31%) trees which were deciduous species and 24 (69%) trees that were coniferous species. The trees identified as dead were not tagged during this inventory. All are trees commonly found and/or planted in southern Ontario landscapes. There were no Species at Risk (SAR) trees observed, such as Butternut (*Juglans cinerea*) (Government of Ontario, 2007). There were several trees at high risk of disease or infestation, including Ash species (*Fraxinus* sp.). Complete tree inventory details are 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
Acer x *freemanii**	Freeman's Maple	1
Fraxinus sp.	Ash Species	7
Juglans sp.	Walnut Species	2
Malus sp.	Apple Species	1
Picea sp.	Spruce Species	1
Picea abies	Norway Spruce	8
*Picea glauca**	White Spruce	7
Picea pungens	Blue Spruce	1
*Pinus strobus**	Eastern White Pine	6
*Thuja occidentalis**	Eastern White Cedar	1 Grouping
Total		**35**

*Native species

4.2 Trees to be Retained

A total of five (5) trees are proposed to be retained (**Table 2**). All six are Eastern White Pine, a native species. These trees are considered to be in good to fair health and are located along the northwestern property boundary of the Subject Property (**Figure 2**).

Table 2. Trees Proposed to be Retained

Scientific Name	Common Name	Good to Fair Health	Poor Health	Total Count
*Pinus strobus**	Eastern White Pine	5	0	5
Total trees to be retained		**5**	**0**	**5**

4.3 Trees to be Removed

A total of 24 inventoried trees and a tree grouping are proposed to be removed to accommodate the proposed development (**Table 3**). This includes ten (42%) trees of which are native, nine (38%) trees are non-native and six (20%) trees were identified to the genus only. The trees proposed to be removed are scattered throughout the Subject Property (**Figure 2**). Most of these trees were observed to be in good to fair health; however, there were several ash trees that were affected by Emerald Ash Borer (EAB – *Agrilus*

planipennis) and in poor health. There was also a grouping of dead Eastern White Cedar in the northern portion of the Subject Property; while there are ~50 stems in this grouping, it is counted as one unit in this report are most stems are <10 cm DBH and the grouping is dead.

Palmer understands that the five (5) Ash trees located along the hedgerow at the southeastern property boundary were removed subsequent to the inventory (between 2016 and 2018), likely due to adjacent development or the effects of EAB (**Figure 2, Table 3**). It is assumed that removal conditions have been previously obtained from the municipality for these trees; therefore, these trees will not be proposed for compensation.

Table 3. Trees Proposed to be Removed

Scientific Name	Common Name	Fair to Good Health	Poor Health	Dead**	Total Count
Trees to be Removed					
Acer x *freemanii**	Freeman's Maple	1	0	0	1
Fraxinus sp.	Ash	1	0	1	2
Juglans sp.	Walnut	2	0	0	2
Malus sp.	Apple	1	0	0	1
Picea sp.	Spruce	0	0	1	1
Picea abies	Norway Spruce	8	0	0	8
*Picea glauca**	White Spruce	6	1	0	7
Picea pungens	Blue Spruce	1	0	0	1
*Pinus strobus**	Eastern White Pine	1	0	0	1
*Thuja occidentalis**	Eastern White Cedar	0	0	1 Grouping	1
	Subtotal	*21*	*1*	*3*	*25*
Trees Removed Subsequent to Inventory (2016 – 2018)					
Fraxinus sp.	Ash	4	1	0	5
	Subtotal	*4*	*1*	*0*	*5*
Total		**24**	**2**	**3**	**29**

*Native species
**Dead trees in various stages of decay.

5. Tree Preservation Plan

The specifications for tree protection are detailed on the Tree Preservation Plan (**Figure 2**), 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 for the Project. Caledon Tree Preservation Standard Notes 710 and 711 have been attached to **Figure 2**, as applicable to this project.

5.1 Standard Tree Protection Measures

5.1.1 Tree Protection Zone

The trees proposed to be retained will be primarily protected by tree protection barriers/fencing, which is to be placed at minimum beyond their dripline and/or Tree Protection Zone (TPZ). As a proxy to driplines, TPZ have been defined by radii that follow standard calculations developed by the ISA (Lilly, 2010) (**Table 4**). The TPZ has been used as a conservative measure of the dripline requirements, per the Town of Caledon Specifications.

Table 2. Minimum Tree Protection Zone Based on DBH

DBH*	Minimum TPZ Distance**
<10 cm	1.2 m
10-29 cm	1.8 m
30-40 cm	2.4 m
41-50 cm	3.0 m
51-60 cm	3.6 m
61-70 cm	4.2 m
71-80 cm	4.8 m
81-90 cm	5.4 m
91-100 cm	6.0 m
>100 cm	6 cm protection for each 1 cm diameter

*DBH measurement of tree is taken at 1.4 metres above the ground
**TPZ distances are to be measured from the outside edge of the tree base

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 (**Figure 2**). 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, 2019).

TPZ barriers shall extend a minimum of the TPZ distances for individual trees as detailed in **Appendix A,** and shown on **Figure 2**. Where possible and beyond the TPZ, the driplines themselves should also be respected. For tree groups, TPZ barriers shall enclose the minimum required TPZ of each tree as well as the area between the trees, even if this area extends beyond the minimum required TPZ.

5.1.2 Tree Protection Fencing

Fencing provides protection from potential damage during construction activities. Tree protection fencing is to be per Caledon Standard #606 (**Appendix B**). Specifically, it 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). 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, 2019). See **Figure 2** for additional standards and placement of tree fencing.

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).

5.1.3 Tree Removal

All trees to be removed should be felled into the Subject Property so as to avoid damage to adjacent trees and property. While most trees to be removed can be root-pulled as necessary to accommodate development, **Tree 390** (**Figure 2**) should be cut and the stump ground to below surface in order to protect the roots of adjacent trees. Tree removals shall not be undertaken without prior written approval of the Town. When tree removal is necessary, the following recommendations shall be implemented:

- Trees to be removed will be felled using good arboricultural practices to limit potential damage to the trees being retained.
- Trees for removal must be clearly marked with the letter “R” using orange or red high-visibility spray paint at breast height (1.4 m) and at base of the stem (stump height).
- TPZ barriers shall be installed for trees to be retained prior to tree removal unless barriers would directly interfere with undertaking of approved tree removal.
- Approved tree removals shall be carried out prior to other site disturbance and in such a manner as to prevent site disturbance and damage to trees to be retained.

5.2 Additional Tree Protection Measure for Trees Potentially Injured

For this project, trees to be protected are well separated from needed project disturbances; therefore, it is felt that measures outlined above for fencing and TPZ avoidance are sufficient in this specific circumstance. No additional tree protection measures (e.g., canopy clearance, root pruning) are recommended. Should the construction consulting arborist or construction supervisor determine that additional protections are warranted based on-site conditions during construction, these should be implemented using best arboricultural practices.

6. Compensation Plantings

Compensation will be required for tree removals at a rate as determined by the Town’s *Tableland Tree Removal Compensation Ratio (Town of Caledon, 2020)*. 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.

Of the 29 trees to be removed, 22 have are live trees to be considered for compensation (**Table 5**). The five ash trees previously removed (Section 4.3) are assumed to have removal conditions previously obtained from the municipality; therefore, these trees will not be proposed for compensation. Additionally,

dead trees were not considered in the compensation ratio, including one dead Spruce, a dead ash and the dead Eastern White Cedar group.

Based on the *Tableland Tree Removal Compensation Ratio*, 29 trees are required to compensate for the removal of trees on the subject property (**Table 5**).

Table 3: Town of Caledon Tree Compensation Ratio

Diameter at Breast Height (m)	Compensation Ratio	Trees To Remove	Compensation Trees
<10	Not Applicable	1	0
10 – 20	1:1	13	13
21 – 35	2:1	5	10
36 – 50	3:1	3	6
51 – 65	4:1	0	0
>65	5:1	0	0
Totals		**22**	**29**

To be considered compensation, the proposed new trees shall exceed the existing planting standards as currently outlined in the Section 2.3 of the *Development Standards Manual* (Town of Caledon, 2019). Compensation trees shall be identified on the landscape drawings and shall also be listed on a separate plant list accordingly, unless otherwise directed by Town staff.

In instances where development applications are unable to meet the Town's tree compensation numbers within the subject property, a cash-in-lieu option for the removal of table land trees may be considered at a rate as determined by the Town of Caledon.

6.1 Tree Species

To match with the restoration activities on the Subject Property as outlined in the Environmental Impact Study (EIS) for the proposed development (Palmer, 2023), the following tree species and composition are proposed to be planted in compensation (**Table 5**). While other species can be considered, another planting criterion should be selecting only native trees to increase the quality and character of the overall natural heritage system. Selecting Ash species should be avoided (at present) due to the advance of Emerald Ash Borer (EAB) in Ontario.

Table 5: Proposed Compensation Tree Species

Tree/Shrub Species	Quantity	Recommended Size
Silver Maple (Acer saccharinum)	7	2 – 4 gallon pot
Tamarack (*Larix laricina*)	7	100 - 150 cm wire basket
Paper Birch (*Betula papyrifera*)	7	2 – 4 gallon pot
Hackberry (*Celtis occidentalis*)	8	2 – 4 gallon pot

Typically, compensation trees shall be sized as per minimum planting size chart as currently outlined in Section 2.3 of the *Development Standards Manual* and Town of Caledon *Site Plan Control Manual Submission Package* (August 2019), unless otherwise directed by the Town. However, as the trees are to be planted in a restoration area, the sizes proposed in **Table 5** are reflective of the sizes recommended for ecosystem naturalization, as outlined in the *Guideline for Determining Ecosystem Compensation* (Toronto and Region Conservation Authority, 2018).

6.2 Planting Location

The replacement trees are proposed to be planted on the Subject Property. As outlined in the EIS for the proposed development, the restoration Planting Area surrounding Robinson Creek is planned to accommodate approximately 330 trees, far in excess of the proposed tree compensation (Palmer, 2023). It is noted that this restoration planting is in addition to the general landscaping that surrounds the proposed development, and thus exceeds the existing planting standards as per the *Development Standards Manual* (Town of Caledon, 2019). The restoration/compensation trees are identified on the restoration landscape drawings (ESC-3), separately from general landscaping.

The proposed Planting Area includes areas between Robinson Creek and the proposed development along the western boundary of the Subject Property (**Figure 2**). Trees planted adjacent to the stream should be able to tolerate some sun and moist soils along the stream riparian zone.

This tree compensation plan should be incorporated into the landscaping plan for the Project. Trees should be planted a minimum of 2.45 m x 2.45 m from each other and any proposed development structure or feature.

7. Management and Monitoring Phase

The following general management and monitoring actions are submitted to help ensure the protection of the trees to be retained on the Subject Property.

7.1 Pre-Construction Phase

To avoid a MBCA offence by the inadvertent injury or destruction of active nests and/or eggs during bird nesting periods/breeding bird season (April 1- August 1), it is recommended that all vegetation (including tree) removal works are conducted between August 2 and May 31 of any given year. Should tree removal during the bird nesting season be unavoidable, a qualified biologist should conduct a nesting survey immediately before any vegetation removal is conducted to ensure no loss of bird nest, egg or unfledged young. Cutting, brush, and chipping cleanup are to be completed outside of the migratory bird nesting season.

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. Note, for this project, no shared trees have been identified.

All trees to be removed be felled into the proposed construction area as to avoid damage to the adjacent treed areas. The tree protection fencing/barriers should be installed before the commencement of any earth

works or construction. Appropriate tree pruning would also be completed at this point. Any pruning of tree roots and branches of tree necessary to accommodate construction work should be completed by a certified arborist using best arboricultural practices.

7.2 Construction Phase

Contractors are responsible for all protection measures, to the satisfaction of the consulting arborist. Tree protection fencing should remain in place throughout the duration of construction and works should not allow traffic, vehicles, foot traffic or equipment to compact soil within the tree protection fencing area. Any pruning of tree roots and branches of trees necessary to accommodate the fencing or nearby construction work should be completed by a qualified arborist using best arboricultural practices.

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.

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.

7.3 Post-Construction Phase

The removal of tree protection fencing, and additional tree care measures should only be completed when all construction activities have been completed and landscaping has been initiated. 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).

It is recommended that planting as part of landscaping be completed by nursery professionals or a Certified Arborist. To promote successful establishment, plantings will occur solely during the spring or fall planting seasons; being April 15 – July 1, and September 15 – November 15, respectively. Tree plantings should be monitoring for a minimum of one growing season post-planting. Monitoring efforts should assess the growth and establishment of the planted trees, ensuring that the conditions of any nursery guarantees are met.

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 12148 Albion Vaughan Road. Should you need any further clarification concerning this letter, please contact the undersigned at 647-461-2372 or austin.adams@pecg.ca.

Yours truly,

Palmer

Palmer

Prepared By:

Austin Adams

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

References

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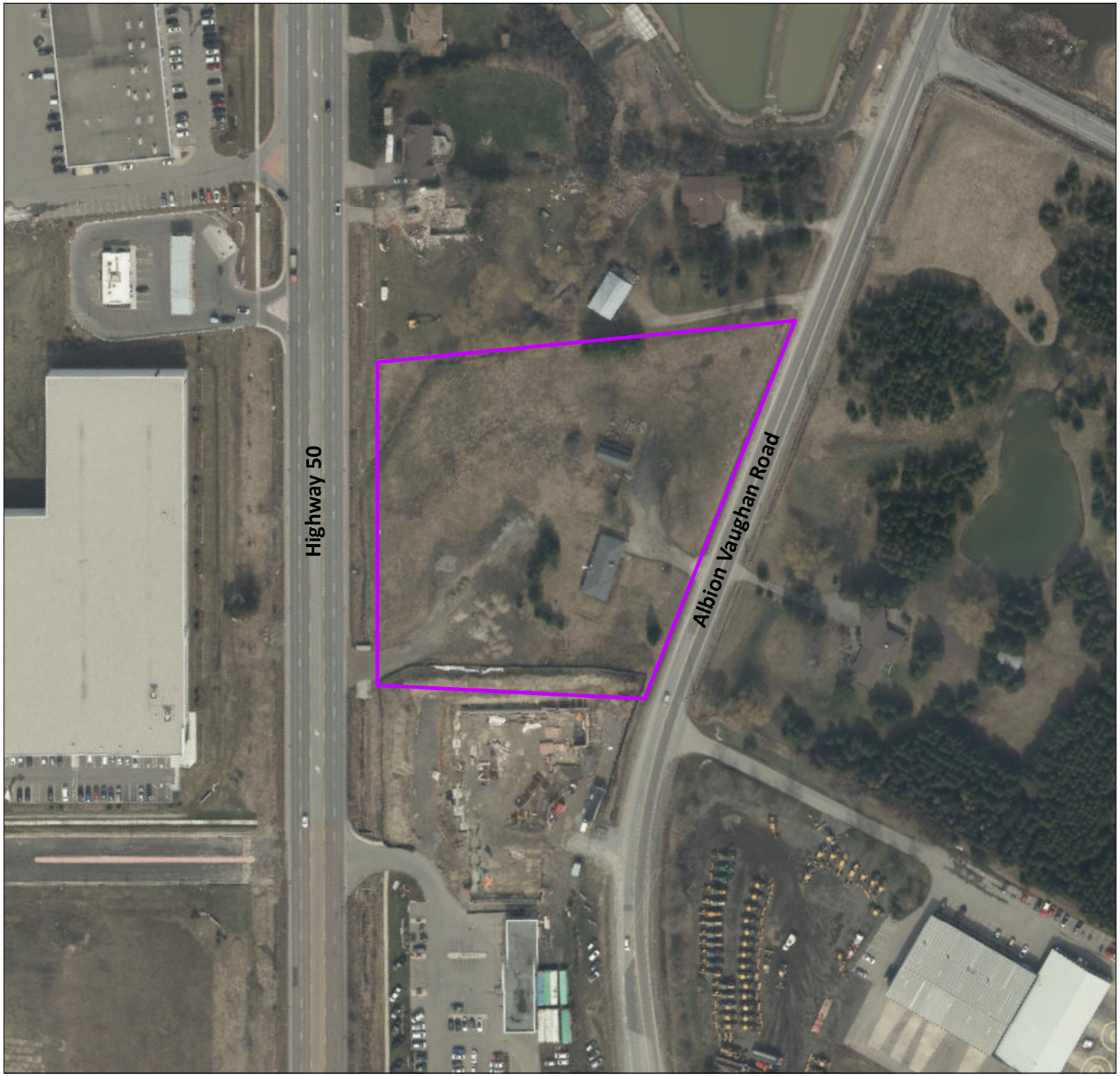


OVERVIEW

LEGEND

SUBJECT PROPERTY (1.57 ha)
12148 Albion Vaughan Road, Bolton, Town of Caledon

N

0 20 40 60 80
METRES

COORDINATE SYSTEM: NAD 1983 UTM ZONE 17N
SCALE: 1:2,000

DATA SOURCES: Imagery provided York Region (2018). Watercourse (edited) provided by Ontario Hydro Network. Overview basemap: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp.

Project: 12148 Albion Vaughan
Client: Aztec Restoration

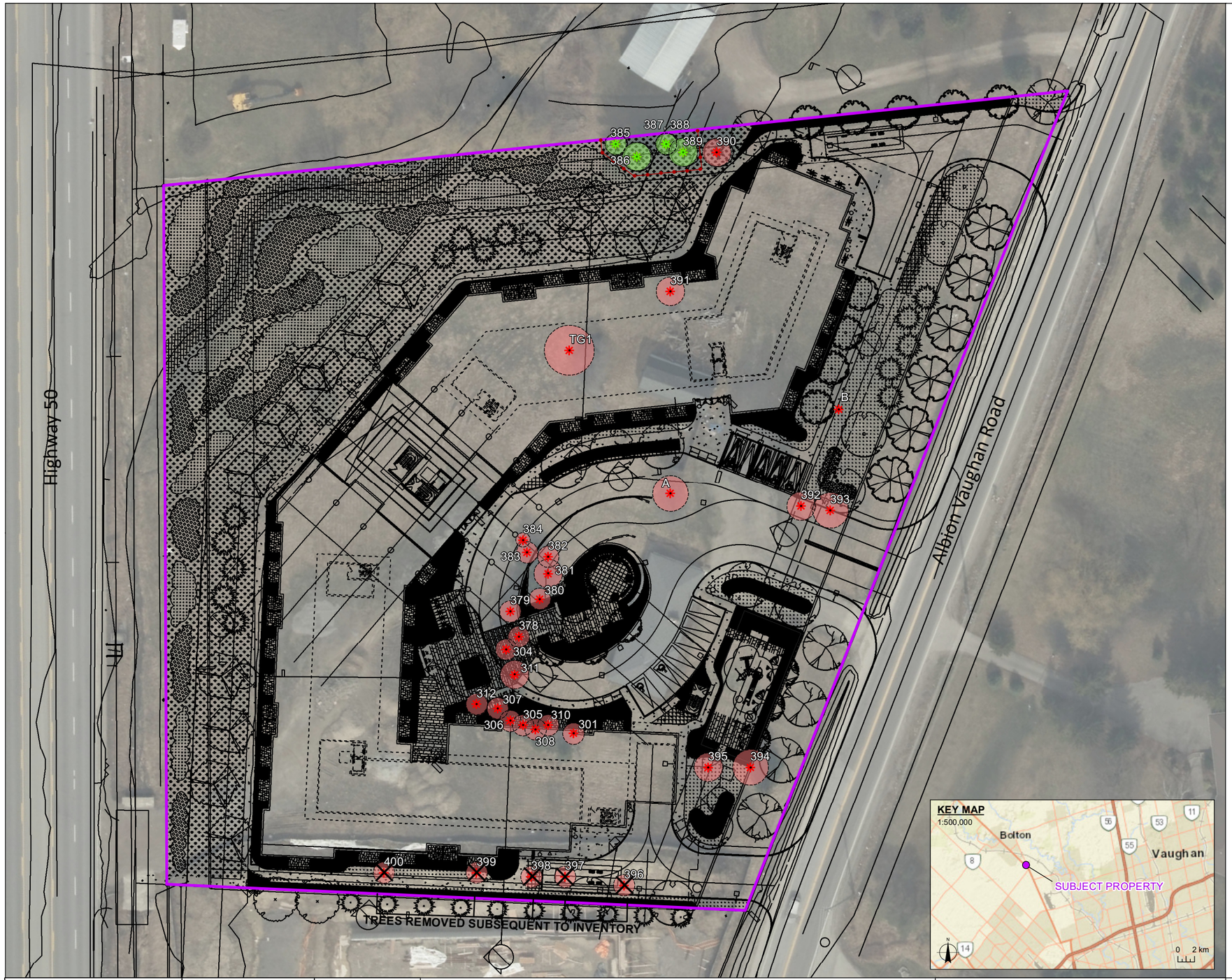
PREPARED BY:
Palmer

DRAWN: B. Elder
CHECKED: A. Adams
PROJECT: 160461
DATE: Nov 25, 2020

Site Location

FIGURE 1

Document Path: G:\Shared drives\Projects 2016\16046 - Aztec Restoration\1604601 - 12148 Albion Vaughan Inc\Mapping\mxd\160461_Figure1_StudyArea.mxd



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. This Tree Protection Plan is designed to work in concert with the Arborist Report for the project.

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 (TPZ), as shown. 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 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 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. Concerns or inquires regarding this TPZ can be directed to Caledon Development and Planning at 905.584.2272 X 4291

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

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 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 tress 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.
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.

D. 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: Palmer™

PROJECT NO.	1604601	REVISION:	#1-April 2023
DATE:	Mar 30, 2023	SCALE:	1:700
DRAWN:	BE	DATUM:	NAD 1983
CHECKED:	AA	PROJECTION:	UTM zone 17

LEGEND:
- Tree to be retained
- Tree to be removed
- Subject Property
- Critical Root Protection Zone - Retained
- Critical Root Protection Zone - Removed
- Tree Protection Fencing

APPLICATION FILE # POPA 2021-0001, RZ 2021-0003 & SPA 2021-0004

0 10 20 30 40
metres

CLIENT: Aztec Restoration
PROJECT: 12148 Albion Vaughan

Fig. 2 - Tree Preservation Plan

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Appendix A

- Tree Inventory

Appendix A. Tree Inventory

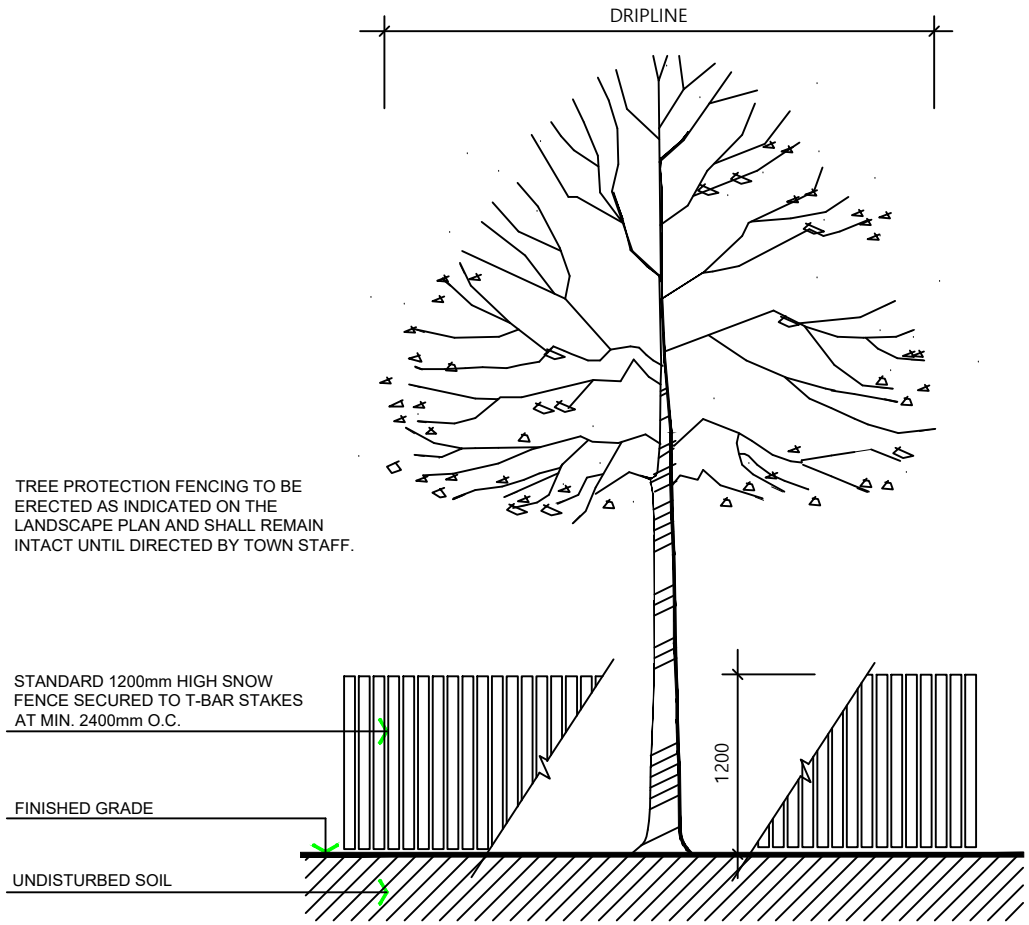
Tree ID	Common Name	Species Name	# of trunks	DBH (cm)	Effective DBH (cm)*	Tree Protection Zone (m)	Health/ Condition	Recommendation	Ownership	Comments
400	Ash sp.	*Fraxinus* sp.	1	21.5	21.5	1.8	F	previously removed	Private	3 stems, 2 cut, EAB
399	Ash sp.	*Fraxinus* sp.	1	23.6	23.6	1.8	F	previously removed	Private	EAB, large wound at base
398	Ash sp.	*Fraxinus* sp.	1	22	22	1.8	F	previously removed	Private	No signs of decay or wounds, EAB
397	Ash sp.	*Fraxinus* sp.	1	27.7	27.7	1.8	F	previously removed	Private	Significant branch dieback, piece of fence through tree, epicormic branching
396	Ash sp.	*Fraxinus* sp.	1	21.2	21.2	1.8	P	previously removed	Private	EAB, epicormic branching, top is broken, branch dieback
395	Apple sp.	*Malus* sp.	1	39.5	39.5	2.4	G	remove	Private	Callused wound on trunk, slight lean, good canopy vigour
394	Blue Spruce	*Picea pungens*	1	42.5	42.5	3	G	remove	Private	Lower branches pruned
393	Walnut sp.	*Juglans* sp.	1	48.6	48.6	3	G	remove	Private	
392	Walnut sp.	*Juglans* sp.	1	35	35	2.4	G	remove	Private	Minor branch dieback
A, No tag	Spruce sp.	*Picea* sp..	1	44.6	44.6	3	Dead	remove	Private	Woodpecker damage, beetle holes
391	Freeman's Maple	*Acer* x *freemanii*	1	32.7	32.7	2.4	G	remove	Private	Minor epicormics, possible butt rot, mechanical damage at base, good canopy
B, No tag	Ash sp.	*Fraxinus* sp.	1	N/A	N/A	N/A	Dead	remove	Private	Top broken, codominant stems
390	Eastern White Pine	*Pinus strobus*	1	34.5	34.5	2.4	G	remove	Private	
389	Eastern White Pine	*Pinus strobus*	1	34.2	34.2	2.4	G	retain	Private	Top broken
388	Eastern White Pine	*Pinus strobus*	1	25	25	1.8	G	retain	Private	

Tree ID	Common Name	Species Name	# of trunks	DBH (cm)	Effective DBH (cm)*	Tree Protection Zone (m)	Health/ Condition	Recommendation	Ownership	Comments
387	Eastern White Pine	*Pinus strobus*	1	26.3	26.3	1.8	G	retain	Private	
386	Eastern White Pine	*Pinus strobus*	1	37	37	2.4	G	retain	Private	
385	Eastern White Pine	*Pinus strobus*	1	28.7	28.7	1.8	G	retain	Private	
No tag, TG1	Eastern White Cedar	*Thuja occidentalis*	~50	~10	70	4.2	Dead	remove	Private	Majority of stems ≤10 cm dbh, width 5 m, approx. 50 stems. Surrounded by thicket of buckthorn.
384	Ash sp.	*Fraxinus* sp.	1	6.5	6.5	1.2	G	remove	Private	
383	Norway Spruce	*Picea abies*	1	19	19	1.8	G	remove	Private	
382	Norway Spruce	*Picea abies*	1	14.7	14.7	1.8	G	remove	Private	
381	Norway Spruce	*Picea abies*	1	33	33	2.4	G	remove	Private	
380	Norway Spruce	*Picea abies*	1	19.8	19.8	1.8	G	remove	Private	
379	Norway Spruce	*Picea abies*	1	19	19	1.8	G	remove	Private	
378	Norway Spruce	*Picea abies*	1	14	14	1.8	G	remove	Private	
304	Norway Spruce	*Picea abies*	1	12.5	12.5	1.8	G	remove	Private	
311	Norway Spruce	*Picea abies*	1	30.8	30.8	2.4	G	remove	Private	Lower branches pruned
312	White Spruce	*Picea glauca*	1	12.9	12.9	1.8	G	remove	Private	
307	White Spruce	*Picea glauca*	1	18	18	1.8	G	remove	Private	
306	White Spruce	*Picea glauca*	1	14.2	14.2	1.8	G	remove	Private	
305	White Spruce	*Picea glauca*	1	17.5	17.5	1.8	G	remove	Private	
308	White Spruce	*Picea glauca*	1	16.9	16.9	1.8	F	remove	Private	Top broken
310	White Spruce	*Picea glauca*	1	17	17	1.8	G	remove	Private	
301	White Spruce	*Picea glauca*	1	14	14	1.8	P	remove	Private	Top broken, majority of leaves dead.

* Effective DBH calculated as the square root of the sum of squares for all tree stems.
**Dead trees in various stages of decay.

Appendix B

- **Town of Caledon Standard #606 – Tree Preservation**



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	APR'D	DATE
3	STANDARD 707 NOW 606		JAN 18
2	STANDARD No. 1135 NOW 707, NOTES EDIT		JUNE 08
1	NOTE NO. 9 ADDED		MARCH 08

APR'D: C.C. DATE: JUNE 08

DRAWN: abal SCALE: NTS

STANDARD No. 606