

Arborist Report

12100 Creditview Road

Site Plan Approval

Town of Caledon

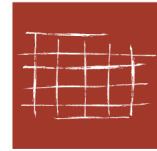


Prepared for:
Glen Schnarr & Associates Inc.

Project Number:
AA21-158A

Date:
October 4, 2024





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EXPERT OPINION
OMB TESTIMONY
LEGAL PROCEEDINGS
PEER REVIEW
RESEARCH
EDUCATION

Revised October 4, 2024

Our File No.: AA21-158A
Sent by email: stephaniem@gsai.ca

12100 Creditview Developments Limited

c/o

Glenn Schnarr & Associates, Inc.
700-10 Kingsbridge Garden Circle
Mississauga, ON L5R 3K6
Attention: Stephanie Matveeva

**Re: 12100 Creditview Road SPA application
Town of Caledon, Regional Municipality of Peel
Tree Preservation Plan and Arborist Report**

Dear Stephanie:

We have completed our study of the above referenced project. This arborist report has been prepared according to the requirements outlined in the Town of Caledon's, *Terms of Reference for Arborist Reports, Tree Preservation Plans and Tableland Tree Removal Compensation* (April 2020) and a request from the Town for an arborist report supporting the Site Plan Approval.

The following attached documents are part of this investigation.

- *Appendix 1. Tree Inventory and Assessment Methodology*
- *Appendix 2. Detailed Tree Data*
- *Appendix 3. Limitations of this Tree Assessment*
- *Appendix 4. Protection of Migratory Birds and Development*
- *Drawing TPP1-3 Tree Preservation Plan*

1. Introduction

1.1 Proposed Development and Existing Conditions

The owner of 12100 Creditview Road, Town of Caledon (“the property”) is proposing to develop the land. Currently proposed are seven proposed structures of varying size, a gas bar facility and associated surface parking areas. The property measures 10.28 hectares (25.3 acres) and is currently being used as agricultural land. The majority of the open grown trees on site are found proximate to the farmhouse, barns and driveway.

1.2 Legislative Context

Tree management is generally regulated in the Town of Caledon in two ways - through the Municipal Act and through the Planning Act. Through the Municipal Act, the Town of Caledon has enacted a Woodland Conservation By-law (By-law 2000-100) that regulates the removal of private trees for reasons that are generally exclusive of land development. As established in its Official Plan, through the Planning Act the Town of Caledon has required the preparation of an Arborist Report and Tree Preservation Plan to accompany any development or site alteration application where there are any trees located on the site and up to six metres of the subject property. These reports and plans may include public trees in their scope.

The Town of Caledon has developed its *Terms of Reference for Arborist Reports, Tree Preservation Plans and Tableland Tree Removal Compensation* (April 2020) (“the Town’s TOR”) to clarify the requirements of Arborist Reports and Tree Preservation Plans. Under the Town’s TOR, these studies “shall be submitted as part of a complete application for an Official Plan Amendment, Zoning By-law amendment, Plan of Subdivision, Site Plan Applications, Plan of Condominium, Consent and all other development streams.” They require information on vegetation that includes a detailed inventory of all onsite trees and offsite trees within six metres of the property boundary 10 cm or larger in DBH, aerial mapping, a photo-journal of trees inventoried, an analysis of the inventory data, an assessment of all potential impacts on the trees, recommended mitigation of tree injury and/or compensation for tree removal, proposed tree protection measures and a rationale for trees that cannot be preserved.

In addition to the municipal by-laws and requirements, it is required by law in the province of Ontario to obtain consent for the removal or injury of any boundary trees prior to injuring or removing that tree. Paragraph 10 of the Forestry Act, R.S.O. 1990, c. F.26 states that:

10. (2) Every tree whose trunk is growing on the boundary between adjoining lands is the common property of the owners of the adjoining lands. 1998, c. 18, Sched. I, s. 21.
- (3) Every person who injures or destroys a tree growing on the boundary between adjoining lands without the consent of the land owners is guilty of an offence under this Act. 1998, c. 18, Sched. I, s. 21.

1.3 Study Terms

The proposed development is subject to conditions imposed by the Town of Caledon, which include the preparation of a Tree Preservation Plan and Arborist Report. Aboud & Associates was retained by Glenn Schnarr & Associates to complete the Tree Preservation Plan and Arborist Report. The completion of these materials required an inventory of trees within and adjacent to the proposed limit of work to be performed by an ISA Certified Arborist.

2. Methodology

2.1 Site Context

The Town's TOR indicate the need for an arborist report to support the Site Plan Application. The tree inventory and assessment required for the arborist report was conducted by Julian Alvarez-Barkham, ISA Certified Arborist, on September 24, 2021. The tree locations were surveyed by J.D. Barnes Limited on December 13, 2021. The Concept Plan was provided by Glenn Schnarr & Associates (revised Feb 12, 2024) as well an updated version (revised Sept 6, 2024) was used as the base plan for *Drawing TPP1-2* to determine the preservation recommendations for existing trees.

2.2 Tree Inventory Requirements

Data for several categories of information were required for each tree included in the inventory. As such, the following data were collected for each tree:

- Tree identification number *
- Species (botanical and common names) *
- Diameter at Breast Height - "DBH" (cm) *
- Crown Reserve (dripline) (m)*
- Biological Health, Structural Condition and Overall Condition *
- Ownership of tree *
- Minimum Tree Protection Zone (MTPZ)
- Recommendation Based on Condition
- Recommendation Based on Development Impacts *
- Tree preservation measures / comments*
- Observations / comments *

* Categories for data collection required per the Town's TOR.

Appendix 1 provides a description of assessment methods and definitions of codes used in the Observations/Comments category. Recommendations to preserve or remove individual trees were assigned based on a tree's current condition and the expected impact from the construction. The final recommendation for each tree and other data listed above are provided in *Appendix 2*. Detailed rationale for the recommendations of select trees is given in Section 3.

We provide *Appendix 3 – Limitations of this Tree Assessment* to clarify what is reasonable and possible in our assessment of trees. *Appendix 4 – Protection of Migratory Birds and Development* is provided for reducing impacts to breeding birds.

3. Observations and Recommendations

3.1 Tree Inventory Data Summary

A total of 45 trees were recorded in the study area. Specific data for each individual tree are provided in *Appendix 2*. The locations, tag numbers, approximate crown reserve, MTPZ (as per City of Guelph Specifications for Trees (SS-31), February 2012) and preservation recommendations of trees are shown on *Drawing T1*. The City of Guelph specification for tree protection zones has been applied in this instance because the Town of Caledon does not prescribe MTPZs, yet MTPZs are a valuable tool in analyzing development impacts to trees.

There are 43 private trees; (32 trees on site and one 11 off site) and two Municipal trees in the study area. Species diversity is relatively high as 15 tree species divided into 12 genera were inventoried within the study area and none of the species had more than eight individual

specimens. The majority of the trees inventoried are deciduous, accounting for 91% of the inventory. The species with the highest counts were Norway Maple (*Acer platanoides*), Eastern Cottonwood (*Populus deltoides*) and Bur Oak (*Quercus macrocarpa*) with eight, eight and seven individual specimens, respectively. Six Ash (*Fraxinus* sp.) were also included in the inventory. Five Ash trees, one Norway Maple and one Eastern red cedar (*Juniperus virginiana*) were dead at the time of the inventory.

3.2 Recommendations for Preservation and Removal

3.2.1 Trees Recommended for Preservation

It is recommended that 13 of the studied trees be preserved. Of those trees, 11 (Trees 1-8, 27-28, and 40) are either in acceptable biological and structural condition or will not be affected (or will be minimally affected) by the proposed works. Two (2) trees offsite of the property area dead but do not interfere with the proposed work. These trees are assigned a Discretionary Preservation recommendation, meaning they can be managed at owners' discretion. Table A provides a summary of recommended action assigned to all inventoried trees.

3.2.2 Trees Recommended for Removal

There are 32 trees recommended for removal. 20 of them are recommended due to the interference with the proposed work and, 12 are suggested for removal due to their condition and the development. Table A provides a summary of recommended action assigned to all inventoried trees.

Table A. Summary of Recommended Action Assigned to Trees

Recommended Action	Based on Condition	Based on Construction Impacts	Based on Condition AND Construction Impacts
Preserve	33	13	13
Remove	12	32	32
Totals	45	45	45

3.3 Protection of Trees Recommended for Preservation and Off-site Trees

In order to preserve the identified on-site trees during and after construction, the following tree protection measures must be taken:

- Tree protection fencing (TPF) must be installed where shown on *Drawing T1*;
- TPF must be installed as shown in Detail 1 on *Drawing T1*;
- Root pruning is recommended prior to earthworks by pre-staking the development limit, exposing roots (by air-spading/hydro-vacuuming) along the development limit where it passes under the crown reserves or into MTPZs of trees to be preserved, cutting roots with appropriate tools (pruners, pole saws, or chainsaws as required), and backfilling immediately with clean topsoil;
- Root pruning within the crown reserves should be conducted or supervised by a Certified Arborist where the development encroaches within the crown reserves or MTPZs of trees recommended for preservation (indicated on *Drawing T1*); and

- Tree branches that are at risk of being damaged due to the movement of machinery on-site should be pruned to arboricultural standards by a Certified Arborist prior to the beginning of construction.

4. Compensation

Compensation for tree removals is prescribed according to the Town’s TOR. Compensation requirements are determined based on the diameter class they belong to and their condition. In addition, all healthy tree species deemed invasive that are proposed for removal are subject to the same compensation values as summarized below.

Of the 32 trees recommended for removal due to their condition and proposed development, 12 are dead or in poor condition and will not require compensation for their removal. The remaining 20 trees will require compensation as specified in the Town’s TOR, as summarized below.

Compensation Class	Tree Size (DBH)	Compensation Required
N/A	<10 cm	None
1	10 - 20 cm	None
2	21 - 35 cm	10 trees
3	36 - 50 cm	2 trees
4	51 – 65 cm	1 tree
5	>65 cm	7 trees

Where development cannot accommodate tree compensation numbers within the subject site, cash-in-lieu may be considered as an option at a rate determined by the Town of Caledon. Table B (on following page) summarizes the number of trees in each category and their resultant compensation requirements.

A total of 65 compensation trees is required for the removal of the onsite trees based on their current condition and the proposed developments. Compensation numbers for each individual tree can also be found on *Appendix 2*.

Table B. Town of Caledon Tree Cover Compensation Methodology. The explanation for each removed tree type and how they are compensated is explained in Section 4 of this report.

Removed Tree Type	Quantity for Current Project	Compensation Plantings Required per Removed Tree	Total Compensation
Dead / dying / poor condition	12	None	0
Healthy, Native Private Trees	20	Class 3 = 10 Class 4 = 2 Class 5 = 1 Class 6 = 7	65 Trees
Totals			65 Trees

5. Conclusion

The proposed development at 12100 Creditview Road in the Town of Caledon requires an Arborist Report and Tree Preservation Plan to support the Site Plan Application for the property. Through field study of the on-site vegetation and analysis of the proposed development, 13 of

45 trees are recommended for preservation. Tree protection will be achieved through the installation of TPF. Compensation for 20 proposed tree removals is calculated to be 65 trees. Where development cannot accommodate tree compensation numbers on site, cash-in-lieu may be considered as an option at a rate to be determined by the Town.

Report Prepared By:

ABOUD & ASSOCIATES INC.



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APPENDIX 1. TREE INVENTORY AND ASSESSMENT DEFINITIONS

Note: Not all definitions may apply.

DBH (cm): Diameter at breast height, 1.4 m above ground, measured in centimeters. Two or more numbers denotes the DBH of each stem/trunk for trees with multiple stems/trunks.

Height (metres): Height of tree from ground to top of crown. Height is estimated from visual ground observations.

Crown Reserve (metres): Crown diameter, or dripline, generalized to the greatest distance from the trunk.

Minimum Tree Protection Zone (MTPZ): The minimum setback required to maintain the structural integrity of the tree's anchor roots, based on generally accepted arboricultural principles. If trees are protected to the TPZ then the tree's anchor root structure is expected to be maintained. Protection zone distances may be applied from a different municipality if none are applied in the municipality pertinent to this application.

Biological Health: Related to presence and extent of disease/disease symptoms and the vigour of the tree.

H (High) - No diseases/disease symptoms present, and moderate to high vigour.

M (Moderate) - Presence of minor diseases/disease symptoms, and/or moderate vigour.

L (Low) - Presence of major diseases/disease symptoms, (i.e., extensive crown dieback), and/or poor vigour.

A further rating may be assigned of M(L) = Low side of Moderate, M(H) = High side of Moderate.

Structural Condition: Related to defects in a tree's structure, (i.e., lean, codominant trunks).

H (High) - No structural defects, well-developed crown.

M (Moderate) - Presence of minor structural defects.

L (Low) - Presence of major structural defects.

A further rating may be assigned of M(L) = Low side of Moderate, M(H) = High side of Moderate.

Development Tolerance: Related to the tree's combined overall rating of biological health and structural condition and the general tolerance to the development of each species. In addition to the health and condition of a tree, species type plays an important role in determining how a tree will respond to development pressures such as root severance, flooding, soil compaction and increases in light or heat due to the removal of other trees.

H (High) - Biological Health rating of greater than moderate AND Structural Condition rating greater than moderate, and high species tolerance to development (e.g. Biological Health = M(H) to H AND Structural Condition = MH to H).

M (Moderate) - Biological Health rating of moderate AND Structural Condition rating of moderate, and a moderate relative species tolerance to development.

L (Low) - Biological Health rating of less than moderate OR Structural Condition rating of less than moderate and a relatively low species tolerance to development.

Ownership:

Private Tree: Tree trunk located completely within the property boundary of the subject property.

Offsite Tree: Tree trunk located on private property completely outside of the property boundary of the subject property.

Municipal Tree: Tree is located on the property of the municipality/region, e.g., within Right-of-Way.

Shared Tree: Tree shared between the subject property and adjacent private or public property.

Recommended Action: A recommendation of the following three categories is assigned to preserve or remove a tree:

i) The tree's current biological health and structural condition

ii) The anticipated impacts from proposed development

iii) The summary of the previous two categories. Note: Only trees having a recommendation of preserve for both health and structure, and impacts from the proposed development are assigned a final recommendation of preserve.

P (Preserve) - Tree has a moderate to high biological health AND moderate to high structural condition, AND is likely to survive impact from the proposed development (if present). The tree is likely to survive for at least 3 to 5 years.

R (Remove) - Tree has low biological health, AND/OR low structural condition, AND/OR will not survive the proposed development impacts (if present). The tree is not likely to survive more than 1-3 years.

DP (Discretionary Preservation) - In some situations, a tree's preservation decision is not relevant to the development. Thorough tree assessments are required of arborists as a duty of care, but the decision to preserve any tree is entirely that of the tree owner. The recommendation for "Discretionary Preservation" applies in cases where a tree is in poor or dead condition, but its retention does not have any bearing on the development project and so any management decision for that tree shall be executed solely at the owner's discretion.

APPENDIX 1. TREE INVENTORY AND ASSESSMENT DEFINITIONS

Note: Not all definitions may apply.

Codes of Damage Descriptions

BA - branch attachment poor
BB – branches broken
BC - bark crack
BD - bark dead
BI - bark included
BS - basal trunk sprouts
CB - crown broken
CD - crown dieback
CK - canker (abnormal growth from disease or damage)
CL - crown live, CL20 - 20% live crown
CS - crown sprouts
CT - crown thin (having reduced foliage)
CU - crown unbalanced
CV - crown vines
DW - deadwood
FB - fungal bodies present
LC - leaves chlorotic (yellow)
LD - leaves defoliated
LP - leader poor/problem
MB - multi-branched node of limbs on stem
ML - multiple leaders
PH - planted high
PL - planted low
PP - past pruning problems
RC - root crown damage/abnormality
RE - roots exposed
RG - roots girdling
SC - stems co-dominant
SG - stem girdled
ST - soil on trunk
TB - trunk bent
TC - trunk cavity
TK - trunk crooked
TD - trunk decay
TE - trunk base enlarged abnormally
TF - trunk basal flair lacking / abnormal
TG - trunk/stem girdling
TL - trunk lean (L < 5°), (M 5-20°), (H > 20°)
TM - trunks multiple from at or below ground level
TS - trunk split
TT - trunk twisted
TW - trunk wound
WW - wet wood

QUANTIFIED CONDITIONS (defects, diseases)

L (low, minor), M (moderate), H (high, severe)

E.G. CT(H) = severe crooked trunk
TD(L) = minor trunk decay
TF(H) = severely poor basal trunk flare

CARDINAL COORDINATES (N, S, E, W)

e.g., LN(L-S) = minor lean to the south

Codes of Recommendations

A - Add mulch
B - Remove attachments (burlap, wire, stake, guard)
C - Cable
F - Fertilize
L - lower soil level
M - Monitor
N - None Needed
P - Prune
R - Remove
S - Soil bulk density (compaction) lower
V - soil volume (increase)
W – Water
~ - Denotes approximate

Life Expectancy

1 - Less than 5 years
2 - 5 to 10 years
3 - 11 to 20 years
4 - 21 to 50 years
5 - 51 to 100 years
6 - 101 to 200 years

Priority: An action priority schedule (i.e. general timing) to provide arboricultural treatment(s).

E - Extremely Urgent (within a week)
U - Urgent (within 3 months)
H - High (within a year)
M - Moderate (within 3 years)
L - Low (little or no action required for at least 5 years)

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Tree No.	Tree Species	DBH (cm) ^{1,2}	Crown Reserve (diameter, m)	Minimum Tree Protection Zone Radius (m) ³	Biological Health(High, Mod., Low)	Structural Condition(High, Mod., Low)	Development Tolerance(High, Mod., Low)	Ownership: Private, Offsite, Municipal, Shared	Rec. Action - Private	Rec. Action - Offsite	Rec. Action - Municipal	Rec. Action - Shared	Final Recommendation ⁵	Compensation Required (Number required)	Comments
1	<i>Populus deltoides</i> Eastern Cottonwood	21	2	1.8	M	L	Fair	O	P	P	P	P	N		
2	<i>Populus deltoides</i> Eastern Cottonwood	17	2	1.8	H	M(H)	Good	O	P	P	P	P	N		
3	<i>Populus deltoides</i> Eastern Cottonwood	20 [15,9,8,7]	3	1.8	M(H)	M	Good	O	P	P	P	P	N		
4	<i>Populus deltoides</i> Eastern Cottonwood	26 [23,10,7]	4	1.8	M(H)	M	Good	O	P	P	P	P	N		
5	<i>Populus deltoides</i> Eastern Cottonwood	20 [15,10, 7,5]	3	1.8	M(H)	M(L)	Fair	O	P	P	P	P	N		
6	<i>Populus deltoides</i> Eastern Cottonwood	36 [20,20, 16,13,9]	4	2.4	M(H)	M(L)	Fair	O	P	P	P	P	N		
7	<i>Populus deltoides</i> Eastern Cottonwood	14 [13,6]	3	1.8	M(H)	M	Good	M	P	P	P	P	N		
8	<i>Populus deltoides</i> Eastern Cottonwood	13 [11,6,4]	2	1.8	M(H)	M	Good	M	P	P	P	P	N		
12	<i>Quercus macrocarpa</i> Bur Oak	74	9	4.8	M(H)	M(L)	Fair	P	P	R	RD	Y(5)			
13	<i>Acer platanoides</i> Norway Maple	32 [25,20]	4	2.4	M(H)	M	Good	P	P	R	RD	Y(2)			
14	<i>Thuja occidentalis</i> Eastern White Cedar	45	4	3.0	M(H)	M	Good	P	P	R	RD	Y(3)			
15	<i>Salix alba</i> White Willow	120	9	7.2	M	L	Poor	P	R	R	RCD	N		Decayed & hollowed trunk, root plate lifting	
16	<i>Quercus macrocarpa</i> Bur Oak	87 [79,37]	9	5.4	M(H)	M	Good	P	P	R	RD	Y(5)			
17	<i>Quercus macrocarpa</i> Bur Oak	67	8	4.2	M(H)	M(H)	Excellent	P	P	R	RD	Y(5)			
18	<i>Acer platanoides</i> Norway Maple	27	4	1.8	M(H)	M(H)	Excellent	P	P	R	RD	Y(2)			
19	<i>Fraxinus americana</i> White Ash	29 [21,20]	3	1.8	L	L	Dead	P	R	R	RCD	N		Lots of root suckers	
20	<i>Juniperus virginiana</i> Red Cedar	22 [17,14]	3	1.8	M(H)	M	Good	P	P	R	RD	Y(2)			
21	<i>Malus pumila</i> Apple	70 [46,44,28]	5	4.2	L	L	Poor	P	R	R	RCD	N			
22	<i>Acer negundo</i> Manitoba Maple	22 [14,12, 11,5]	3	1.8	M(H)	M(L)	Fair	P	P	R	RD	Y(2)			
23	<i>Acer negundo</i> Manitoba Maple	26 [21,15]	3	1.8	M(H)	M(L)	Good	P	P	R	RD	Y(2)			
24	<i>Fraxinus americana</i> White Ash	72	5	4.8	L	L	Dead	O	P	P	DP	N			
25	<i>Morus alba</i> White Mulberry	150 [130,59, 47]	5	9.0	M	L	Poor	P	R	R	RCD	N		Massive cavity at the base	
26	<i>Pyrus sp.</i> Pear	45	4	3.0	M(H)	M	Good	P	P	R	RD	Y(3)			
27	<i>Aesculus hippocastanum</i> Horse Chestnut	41	3	3.0	M(L)	M(L)	Fair	O	P	P	P	N			
28	<i>Aesculus hippocastanum</i> Horse Chestnut	55 [43,35]	5	3.6	M	M(L)	Fair	O	P	P	P	N			

Tree No.	Tree Species	DBH (cm) ^{1,2}	Crown Reserve (diameter, m)	Minimum Tree Protection Zone Radius (m) ³	Biological Health (High, Mod., Low)	Structural Condition (High, Mod., Low)	Development Tolerance (High, Mod., Low)	Ownership: Private, Offsite, Municipal, Shared	Rec. Action - Private, Offsite, Municipal, Shared	Rec. Action - Condition ⁵	Final Recommendation ⁵	Compensation Required (Number required)	Comments
29	<i>Fraxinus americana</i> White Ash	39	4	2.4	L	L	Dead	P	R	R	RCD	N	
30	<i>Acer platanoides</i> Norway Maple	67 [46,35, 33]	7	4.2	M	L	Poor	P	R	R	RCD	N	Decay at base on N side
31	<i>Juniperus virginiana</i> Red Cedar	13	1	1.8	L	L	Dead	P	R	R	RCD	N	
32	<i>Aesculus hippocastanum</i> Horse Chestnut	65	5	4.2	M(L)	L	Poor	P	R	R	RCD	N	
33	<i>Sorbus decora</i> Showy Mountain-Ash	31 [23,18, 10]	4	2.4	M	M	Fair	P	P	R	RD	Y(2)	
34	<i>Thuja occidentalis</i> Eastern White Cedar	23 [19,13]	3	1.8	M(H)	M(H)	Excellent	P	P	R	RD	Y(2)	
35	<i>Fraxinus americana</i> White Ash	26 [21,15]	3	1.8	L	L	Dead	O	P	P	DP	N	
36	<i>Fraxinus americana</i> White Ash	14	2	1.8	L	L	Dead	P	R	R	RCD	N	
37	<i>Quercus macrocarpa</i> Bur Oak	73	7	4.8	M(H)	M	Good	P	P	R	RD	Y(5)	
38	<i>Acer platanoides</i> Norway Maple	18	2	1.8	L	L	Dead	P	R	R	RCD	N	
39	<i>Fraxinus</i> sp. Ash	70	5	4.8	M(L)	M(L)	Fair	P	P	R	RD	Y(5)	No tag; values approximate.
40	<i>Salix fragilis</i> Crack Willow	24 [15,10, 10,9,8]	2	1.8	M	M	Fair	O	P	P	P	N	Neighbour's, on fenceline
1872	<i>Quercus macrocarpa</i> Bur Oak	64	8	4.2	M(L)	M(L)	Fair	P	P	R	RD	Y(4)	Crown dieback 25%, hydro pruned, first tagged as 9
1873	<i>Quercus macrocarpa</i> Bur Oak	70	8	4.2	M(H)	M	Good	P	P	R	RD	Y(5)	Initially tagged as 10
1874	<i>Quercus macrocarpa</i> Bur Oak	66	8	4.2	M(L)	M	Fair	P	P	R	RD	Y(5)	Initially tagged as 11
1876	<i>Acer negundo</i> Manitoba Maple	24 [20,14]	3	1.8	M(H)	M(L)	Fair	P	P	R	RD	Y(2)	
1878	<i>Acer platanoides</i> Norway Maple	22	2	1.8	L	L	Poor	P	R	R	RCD	N	
1879	<i>Acer platanoides</i> Norway Maple	20	2	1.8	M(L)	L	Poor	P	R	R	RCD	N	
1880	<i>Acer platanoides</i> Norway Maple	21	3	1.8	M(L)	M(L)	Fair	P	P	R	RD	Y(2)	Girdling stakes
1881	<i>Acer platanoides</i> Norway Maple	23	3	1.8	M	M(L)	Fair	P	P	R	RD	Y(2)	Girdling stakes

Tree No.	Tree Species	DBH (cm) ^{1, 2}	Crown Reserve (diameter, m)	Minimum Tree Protection Zone Radius (m) ³	Biological Health (High, Mod., Low)	Structural Condition (High, Mod., Low)	Development Tolerance (High, Mod., Low)	Ownership: Private, Offsite, Municipal, Shared	Rec. Action - Condition ⁵	Rec. Action - Development	Final Recommendation ⁵	Compensation Required (Number required)	Comments				
SUMMARY																	
Ownership		Private (On Site) Trees		32		Private (Off Site) Trees		11		Municipal Trees		2		Shared Trees		0	
Total				45													
Recommendation based on Tree Condition		Preserve Tree Based on Condition		33		Remove Tree Based on Condition		12									
Total				45													
Recommendation based on Development		Preserve Tree Based on Development Impacts		13		Remove Tree Based on Development Impacts		32									
Total				45													
Final Recommendations		Final Recommendation: Preserve (P)		11		Final Recommendation: Remove Due to Condition (RC)		0		Final Recommendation: Discretionary Preservation (DP)		2		Final Recommendation: Remove Due to Development (RD)		20	
		Final Recommendation: Remove due to Condition and Development (RCD)		12													
Total				45													
Compensation		Trees recommended for removal requiring compensation		20													
Total compensation trees required				65													

¹ DBH (Diameter at breast Height): Measurement of tree stem diameter at 1.4 metres above ground.

² [XX, YY,] Denotes DBH's of Each Stem of Tree with Multiple Stems

³ Tree Protection Zones, Specifications for Trees (SS-31) City of Guelph. February, 2012.

⁴ The Town of Caledon requires compensation for the removal of healthy tableland trees per their *Terms of Reference for Arborist Reports, Tree Preservation Plans and Tableland Tree Removal* (April 2020).

Diameter at Breast Height (cm)	Compensation Ratio
<10	Not Applicable
10-20	1:1
21-35	2:1
36-50	3:1
51-65	4:1
>65	5:1

APPENDIX 3. LIMITATIONS OF TREE ASSESSMENT

It is the policy of Aboud & Associates Inc. to attach the following clause regarding limitations. We do this to ensure that developers, agencies, municipalities and owners are clearly aware of what is technically and professionally realistic in retaining trees.

The assessment of the trees presented in this report has been made using accepted arboricultural techniques. These include a visual examination of the above-ground parts of each tree for structural defects, scars, external indications of decay such as fungal fruiting bodies, evidence of insect attack and crown dieback, discoloured foliage, the condition of any visible root structures, the degree and direction of lean (if any), the general condition of the tree(s) and the surrounding site, and the proximity of property and people. Except where specifically noted in the report, none of the trees examined were dissected, cored, probed, or climbed, and detailed root crown examinations involving excavation were not undertaken.

Notwithstanding the recommendations and conclusions made in this report, it must be realized that trees are living organisms, and their health and vigour constantly change over time. They are not immune to changes in site conditions, or seasonal variations in the weather conditions, including severe storms with high-speed winds.

While reasonable efforts have been made to ensure that the trees recommended for retention are healthy no guarantees are offered, or implied, that these trees, or any parts of them, will remain standing. It is both professionally and practically impossible to predict with absolute certainty the behaviour of any single tree or group of trees or their component parts in all circumstances. Inevitably, a standing tree will always pose some risk. Most trees have the potential for failure in the event of adverse weather conditions, and this risk can only be eliminated if the tree is removed.

Although every effort has been made to ensure that this assessment is reasonably accurate, the trees should be re-assessed periodically. The assessment presented in this report is valid at the time of the inspection.

APPENDIX 4. PROTECTION OF MIGRATORY BIRDS AND DEVELOPMENT

Most species of birds in Ontario are protected under the federal Migratory Birds Convention Act, 1994 (MBCA) or the provincial Fish and Wildlife Conservation Act, 1997. The “incidental take” of migratory bird nests or the disturbance, destruction or taking of the nest of a migratory bird are prohibited under section 6 of the *Migratory Bird Regulations* (MBRs), under the authority of the MBCA. “Incidental take” is defined as the harming of migratory bird nests due to actions such as construction activities. No permit can be issued for the incidental take of migratory birds or their nests as a result of economic activities.

The provincial Fish and Wildlife Conservation Act, 1997, provides protection for some species excluded from the MBCA, including raptors, gamebirds and specially protected birds. Under the Act (Section 7 (1)) a person shall not destroy, take or possess the nest or eggs of a bird that belongs to a species that is wild by nature. With the exception of the nest or eggs of an American crow, brown-headed cowbird, common grackle, house sparrow, red-winged blackbird or starling (Section 7(2)).

Project construction, operation or maintenance activities such as vegetation clearing, tree removal/harvesting, site grubbing, site access, excavation and stockpiling of soil/fill could result in the incidental take of migratory birds or their nests if conducted in migratory bird habitat. Construction activities could also disturb nearby breeding birds and disrupt breeding. It is the proponent’s responsibility to meet the requirements of the MBRs and should projects or activities result in the contravention of the MBRs, prosecution under the MBCA may be initiated.

In order to ensure compliance with the MBRs, Aboud & Associates recommends the following:

1. Activities resulting in the disturbance, destruction or removal of potential breeding bird habitat should, where possible, not take place during the General Nesting Period as outlined by Environment Canada (2014). The General Nesting Period is identified in ‘Environment Canada’s Avoidance Guidelines for Incidental Take’ (2014) as the period between the end of March and August 31 in Nesting Zones C1 and C2 in Ontario, located in the Lower Great Lakes/St. Lawrence Plain (Bird Conservation Region (BCR) 13).
2. When it is absolutely necessary that work must take place during the General Nesting Period, a qualified wildlife biologist must carry out a comprehensive survey to identify areas on the subject property where birds are building nests, incubating eggs, rearing young, etc. All disruptive activities in the nesting area should be halted and identified nests should be protected with a buffer (i.e. nest protection zone/no disturbance zone) appropriate for the species, the disturbance intensity level and the surrounding habitat. Disruptive activities can continue inside the buffered area once the biologist has deemed that fledglings have naturally left the vicinity of the nest.
3. Disruptive activities taking place outside of the General Nesting Period can be preceded by an assessment by a qualified wildlife biologist to ensure that the identification of stick nests of owls and raptors is undertaken in suitable habitat. Most raptor species, with the exception of species protected under the ESA are excluded from the MBCA; as a result, the nesting period for this group is not included under Environment Canada’s general nesting periods.

References:

Environment Canada. 2014. Incidental take of Migratory Birds in Canada.
<https://www.ec.gc.ca/paom-itmb/default.asp?lang=En&n=C51C415F-1>. Accessed: April 7, 2015.

Fish and Wildlife Conservation Act, 1997.

Migratory Birds Convention Act, 1994.

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