



Arborist Report & Tree Preservation Plan

106 - 114 Robinson St & 71 Water Street
Oakville, ON

Prepared for:

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EXECUTIVE SUMMARY:

The subject site is scheduled for development. As mandated by the Town of Oakville's Site Plan Bylaw the client is required to submit an Engineering Permit Application which necessitates an Arborist Report and Tree Preservation Plan. Such a report must be completed in accordance with the Town of Oakville's Tree Protection During Construction Procedure policy, which takes into account both the Town of Oakville's *Private Tree Protection* (2017-038) and *Town Tree By-laws* (2009-025).

There are five (5) regulated trees involved with this project of which four (4) require removal and one (1) will incur minor injury as a consequence of construction. No tree preservation hoarding is for this development application. The client will submit a permit application to remove four (4) trees and injure one (1).

Using the Trunk Formula Method, the appraised value of town owned trees no. T1 – T5 is \$17,110.00.

Successful tree preservation requires both the client and all associated parties become privy to the recommendations in this report and that such recommendations are implemented accordingly. Alternatively, failure to implement all the recommendations will cause unnecessary injury predisposing each tree to the potential of decline and/or increased risk of failure. Lastly, it's the client responsibility to fulfill all additional conditions as outlined in the Town issued permit.

INTRODUCTION:

I have been retained by the client to complete an arborist report concerning the above subject site. As mandated by the Town of Oakville's *Site Plan Bylaw* the client is required to submit an Engineering Permit Application which necessitates an Arborist Report and Tree Preservation Plan. Such a report must be completed in accordance with the Town of Oakville's Tree Protection During Construction Procedure policy, which takes into account both the *Town of Oakville's Private Tree Protection (2017-038)* and *Town Tree By-laws (2009-025)*.

HISTORY AND ASSIGNMENT:

I have been advised by the client that the above subject site is scheduled for development which includes the construction of ten multi-storey townhouse dwellings with associated landscaping and the installation of a municipal sidewalk as per the Tree Preservation Plan (TPP-1) in Appendix I. In accordance to the below listed relevant Laws, By-laws, Policies and forms, the applicant is required to complete an Arborist Report and Tree Preservation Plan as part of the Site Plan application process:

- Planning Act, R.S.O. 1990, c. P.13 - <https://www.ontario.ca/laws/statute/90p13?search=planning+act>
- Site Plan By-law 2005-062 - <https://www.oakville.ca/assets/2011%20planning/SitePlanBylaw2005062.pdf>
- Town of Oakville Private Tree Protection By-law 2017-038 - <https://www.oakville.ca/assets/general%20-%20residents/2017-038-PrivateTreeBylaw.pdf>
- Town of Oakville Town Tree By-law 2009-025- <https://assets.oakville.ca/blis/BylawIndexLibrary/2009-025.pdf>
- Town of Oakville Tree Protection During Construction Procedure policy - <https://www.oakville.ca/townhall/en-tre-001-001.html>
- Building, Planning and Development Engineering Applications and Forms - <https://www.oakville.ca/business/application-forms-guidelines.html>
- Forestry Act - <https://www.ontario.ca/laws/statute/90f26>
- Endangered Species Act - <https://www.ontario.ca/laws/statute/07e06>

The assignment is as follows:

1. Survey all regulated trees that will be affected by the proposed project, assess their condition and determine if they are suitable for preservation.
2. Provide recommendations for tree preservation.
3. Determine if proposed construction will adversely affect the health of such trees.

All field and appraisal work was completed by the author of this report being Davide Carnevale ASCA Registered #370 on March 30, 2022.

As the consulting arborist retained for this project, *GreenPrint Consulting Arborists* can be further retained (if necessary) to act as the Project Consulting Arborist (PCA) to provide on-site monitoring and implement any necessary remedial actions as required by the municipality.

TREE SURVEY AND RECOMMENDATIONS:

See TPP-1 plan in Appendix I for tree location, Table #1 for species identification, condition, and recommendations and Appendix II for corresponding Digital Images.

Table #1: 106 - 114 Robinson St & 71 Water Street – Oakville

Tree #	Species	D ¹ B H (c m)	Dripline diameter (m)	Condition ²	Category ³	Comments	Suitability ⁴ for Conservation	Recommendation ⁵	M ⁶ T P Z (M)
T1	<i>Acer platanoides</i> Norway maple	17	4	F	5	- vigorous, average form and structure; large bark scar at base - in conflict with proposed landscaping	M	Rv	2.4
T2	<i>Juglans nigra</i> Black walnut	39	8	F	5	- twin stem (25/30) - vigorous, average form and structure - located on raised mound requiring grading to curb level to accommodate construction and proposed landscaping	M	Rv	3.0
T3	<i>Fraxinus americana</i> White ash	30	5	P	5	- poor vigour, form and structure; growing on severe lean, infected with EAB, marked by Town for removal - in conflict with proposed construction and landscaping	P	Rv	2.4
T4	<i>Acer negundo</i> Manitoba maple	53	5	H	5	- potential hazard; advanced decay at main union and throughout remaining leaders; growing on severe lean - in conflict with proposed construction and landscaping	P	Rv	3.6
T5	<i>Aesculus hippocastanum</i> Horsechestnut	80	18	F	5	- vigorous, average form and structure - tree currently hoarded for preservation due to site development at neighbouring property - proposed construction encroaches upon prescribed TPZ by 1%	M	PsI	4.8

¹ **DBH:** Diameter at Breast Height is a measurement in centimeters, using a caliper tape, of the tree stem at 1.37 meters above existing grade. Neighbouring trees may be estimated due to restricted access.

² **Condition:** A rating of **H**azardous/**D**ead/**P**oor/**F**air/**G**ood/**E**xcellent was determined for each tree by visually assessing all the above ground components of the tree, using acceptable arboricultural procedures as recommended in the “*Guide for Plant Appraisal*”, prepared under contract by the “*Council of Tree & Landscape Appraisers (CTLA)*, an official publication of the *International Society of Arboriculture (I.S.A.)*, 9th Edition, 2000”.

³ **Category:** 1. Trees with diameters of 15 cm or more situated on private property on the subject site.
2. Trees with diameters of 15 cm or more situated on private property, within 6 m of the subject site.
3. Trees of all diameters situated on Town owned parkland within 6 m of the subject site.
4. Trees of all diameters situated within a designated natural feature.
5. Trees of all diameters situated within the Municipal road allowance adjacent to the subject site.

⁴ **Suitability for Conservation:**

A rating of **P**oor/**M**oderate/**G**ood is assigned to each tree taking in to account four factors which include, 1) Tree health 2) Structural integrity 3) Species response and 4) Tree Age and longevity, as recommended in the “*For Tree Care Operation – Trees, Shrubs, and Other Woody Plant Maintenance Standard Practice*” prepared as part of the “*ANSI A300 Standards*.”

⁵ **Recommendation:** Preserve (**Ps**), Preserve with Injury (**PsI**), Remove (**Rv**), Transplant (**Tp**)

⁶ **MTPZ:** Minimum tree protection zone distance radius as mandated by the Town of Oakville as per the Oakville Parks and Open Space Policy – Procedure no. 01-03-08 - “*Tree Protection Specification For Construction Near Trees*” – http://www.oakville.ca/Media_Files/DevelopmentProcess/TreeProtectionPolicy-Appendix3.pdf

SITE NOTES AND COMMENTS:

As listed above there are five (5) regulated trees involved with this project of which all 5 are Town-owned located within the municipal road allowance, being trees no. T1 – T5. Due to construction hoarding and limited access, the DBH measured was estimated for tree no. N1.

Tree Removal as a Consequence of Construction:

1. From the list above, trees no. T1-T4 are in conflict with the proposed development and as such require removal as a consequence of construction and/or landscaping.
2. Tree no. T3 is terminally infected with EAB, has been marked for removal, and is no longer listed in the Town of Oakville Street and Park Trees Inventory.
3. Tree no. T4 represents a potential hazard, is growing on a severe lean with advanced decay evident at the main union and throughout its leaders. This tree is not a suitable candidate for preservation and as such is recommended for removal regardless of this proposed development application.
4. Pursuant to the Town of Oakville Town Tree By-law, the client will submit a permit application to remove four (4) trees.

Tree Injury due to Encroachment within Prescribed TPZ

1. Proposed construction encroaches upon the prescribed TPZ of tree no. N1 by 1%. This encroachment is located outside of the root zone responsible for structural support along the edge of the tree preservation zone. Feeder roots disturbed within this area is likely to be no larger than 0.25cm in diameter and can easily be ameliorated by retaining a qualified arborist to supervise excavation, root prune as required and fertilize to promote root regeneration. This tree has an excess of stored energy (carbohydrates) to recover from this very minor disturbance. In this case, as mandated by the Town of Oakville's Town Tree Bylaw, a permit to injure one (1) tree is required as it's not possible to protect 100% of its prescribed TPZ.

General Notes:

1. No tree preservation hoarding is required for this project.
2. During the time of inspection, no endangered species were surveyed while on site.
3. All remaining trees located on or within 6.0m of the subject site have a DBH less than 15cm, are non-regulated trees and therefore, were not included in this report.

4. The Private Tree Protection By-law 2008-156 amended as per 2009-145 regulates all trees, regardless of size, up until the Site Plan application date. During the Site Plan process trees shall not be removed as they are part of the formal submission. Once final Site Plan approval has been granted, the by-law is then superseded by conditions that are set out in the approved Site Plan.
5. The appraised value of trees no. T1 – T5 is \$17,110.00. The Trunk Formula Method (TFM) was used to appraise the tree as described in the “Guide for Plant Appraisal”, prepared under contract by the “Council of Tree and Landscape Appraisers, an official publication of the International Society of Arboriculture (I.S.A.), 9th Edition, 2000”, see Appendix III for Key Inputs and Trunk Formula Summary.

SUMMARY TABLE:

Tree Category	Total	Scheduled for Preservation		Remove	
		Preserve	Preserve with Injury	Due to construction	Regardless of construction
Town (regulated tree located within municipal road allowance)	5	0	1	4	0
Total	5	0	1	4	0

CONCLUSIONS:

As listed in the Summary Table above, there are five (5) regulated trees involved with this project of which four (4) require removal and one (1) will incur injury as a consequence of construction. No tree preservation hoarding is required or scheduled for this project.

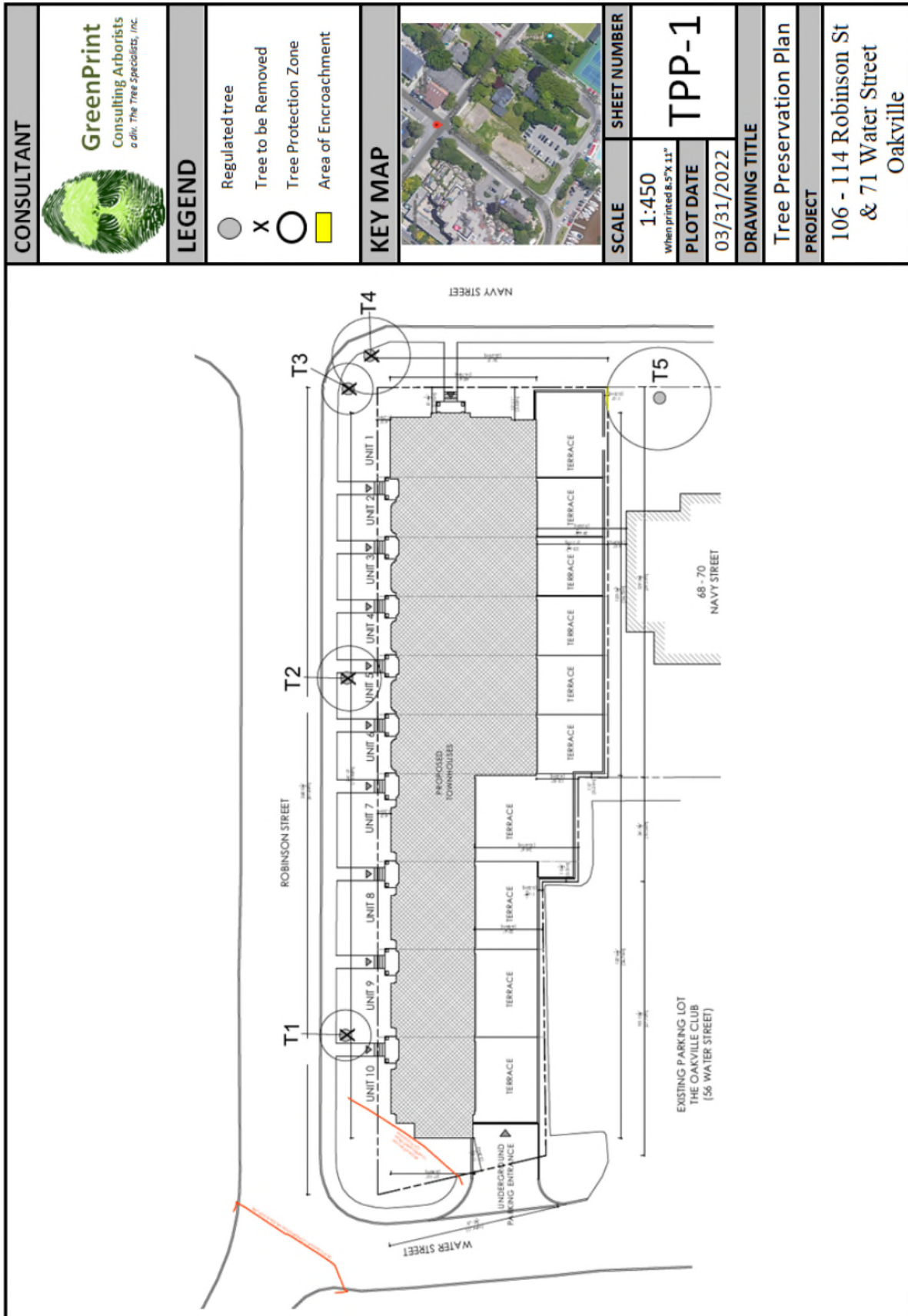
Trusting this report meets your needs. For further information, you may contact me directly at (289) 813-9250 or at dcarnevale@greenprintca.com

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Appendix I: Tree Preservation Plan – TPP-1



Appendix: II

DIGITAL IMAGES

Photo #1:



Photo #2:



Photo #3:



Photo #4:



Photo #5:



**Tree T4 showing
advanced decay
in leader**

Photo #6:



Appendix III:

TRUNK FORMULA METHOD

The method that will be used to appraise the tree is the Trunk Formula Method (TFM) as described in the “*Guide for Plant Appraisal*”, prepared under contract by the “*Council of Tree and Landscape Appraisers*, an official publication of the *International Society of Arboriculture (I.S.A.)*, 9th Edition, 2000”. The trunk formula method is used to appraise the monetary value of trees considered too large to be replaced with nursery or field-grown stock. Determination of the value of a tree is based on the cost of the largest commonly available transplantable tree and its cost of installation, plus the increase in value due to the larger size of the tree being appraised. These values are adjusted according to the species, health and location. This method of appraisal is endorsed by several reputable organizations including the *American Society of Consulting Arborist*, the *I.S.A.* and the *Tree Care Industry*.

TABLE 1: KEY INPUTS

Replacement Cost	\$815.00
Species factor ⁷	
<ul style="list-style-type: none"> ▪ Norway maple (<i>Acer platanoides</i>) ▪ Black walnut (<i>Juglans nigra</i>) ▪ White ash (<i>Fraxinus americana</i>) ▪ Manitoba maple (<i>Acer negundo</i>) ▪ Horsechestnut (<i>Aesculus hippocastanum</i>) 	68% 67% 69% 39% 65%
Basic Price ⁸	\$6.51 cm²
Location Factor taking into account the following:	
<ul style="list-style-type: none"> ▪ Site Rating – (75%) ▪ Contributing Rating – (77%) ▪ Placement Rating – (78%) 	77%

TABLE 2: TRUNK FORMULA SUMMARY

TREE #	DBH (CM)	Replacement Cost	BASIC PRICE \$	TRUNK AREA DIFFERENCE	SPECIES %	CONDITION %	LOCATION %	APPRAISED VALUE \$
T1	17	815	6.51	227	0.68	0.60	0.77	660
T2	39	815	6.51	1195	0.67	0.65	0.77	2,820
T3	30	815	6.51	707	0.69	0.00	0.77	0
T4	53	815	6.51	2206	0.39	0.25	0.77	1,130
T5	80	815	6.51	2206	0.65	0.75	0.77	12,500
							TOTAL	\$17,110.00

⁷ Ontario Supplement to the Guide for Plant Appraisal, 8th Edition

⁸ See above.

Appendix IV:

ASSUMPTION AND LIMITING CONDITIONS

1. Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible; however *GreenPrint Consulting Arborists* can neither guarantee nor be responsible for the accuracy of information provided by others.
2. Excerpts or alterations to the report, without the authorization of the author or his company invalidates its intent and/or implied conclusions. This report may not be used for any expressed purpose other than its intended purpose and alteration of any part of this report invalidates the report.
3. Unless expressed otherwise: 1) information contained in this report covers only those items that were examined and reflect the condition of those items at the time of inspection; and 2) the inspection was made using accepted arboricultural techniques and is limited to visual examination of accessible items without climbing, dissection, probing or coring and detailed root examination involving excavation. While reasonable efforts have been made to assess trees outlined in this report, there is no warranty or guarantee, expressed or implied, that problems or deficiencies with the tree(s) or any part(s) of them may not arise in the future. All trees should be inspected and re-assessed periodically.
4. This Report has been prepared by using the latest drawings and information provided by the client and may be intended for inclusion in a site plan approval or a similar planning submission. However, any subsequent design or site plan alteration affecting regulated trees may require revisions to this report.
5. Links / URLs found within the report to access web-based resources are current to the date of the report.
6. The determination of ownership of any subject tree(s) is the responsibility of the owner and any civil or common-law issues, which may exist between property owners with respect to trees, must be resolved by the owner. A recommendation to remove or maintain tree(s) does not grant authority to encroach in any manner onto adjacent private properties.