

**Tree Inventory and Preservation Plan Report
1437 Queen Street West
Toronto, Ontario**

prepared for

**STUDIO tla
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prepared by



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KUNTZ FORESTRY CONSULTING INC Project P3718

Introduction

Kuntz Forestry Consulting Inc. was retained by STUDIO tla to complete a Tree Inventory and Preservation Plan as part of a development application for the property located at 1437 Queen Street West in Toronto. The property is located on the southwest corner of Queen Street West and Jameson Avenue, within a mixed-use area.

The work plan for this tree preservation study included the following:

- Prepare inventory of the tree resources greater than 15cm diameter at breast height (DBH) on and within six metres of the subject property, and trees of all sizes within the road right-of-ways surrounding the property;
- Evaluate potential tree saving opportunities based on proposed development plans; and
- Document the findings in a Tree Inventory and Preservation Plan Report.

The results of the evaluation are provided below.

Policy Framework

The property is subject to the Private Tree-By-law (Chapter 813), which regulates tree injury and destruction of individual trees. Preliminary information is acquired on individual trees which are then categorized in compliance with the by-law in support of development applications (refer to Table 1). Tree categories range from one through five and are as follows:

Categories

- 1. Trees with diameters of 30 cm or more situated on private property on the subject site.*
- 2. Trees with diameters of 30 cm or more, situated on private property, within 6 m of the subject site.*
- 3. Trees of all diameters situated on City owned parkland within 6 m of the subject site.*
- 4. On lands designated under City of Toronto Municipal Code, Chapter 658, Ravine and Natural Feature Protection, trees of all diameters within 10 metres of any construction activity.*
- 5. Trees of all diameters situated within the City road allowance adjacent to the subject site.*

Methodology

Trees over 15cm DBH on and within six metres of the subject property, and trees of all sizes within the road right-of-way were included in the inventory. Trees were located using the topographic survey provided and estimations made in-field. Trees were identified as Trees 1-11.

See Table 1 for the results of the inventory, Figure 1 for their locations, and Appendix A for photographs of trees.

Tree resources were assessed utilizing the following parameters:

Tree # - number assigned to tree that corresponds to Table 1 and Figure 1.

Species - common and botanical names provided in the inventory table.

DBH - diameter (centimetres) at breast height, measured at 1.4 m above the ground.

Crown width – diameter (metres) of crown

Condition - condition of tree considering trunk integrity, crown structure, and crown vigour.

Condition ratings include poor (P), fair (F) and good (G).

Comments - additional relevant detail.

Existing Site Conditions

The subject site is currently occupied by commercial buildings and surface parking. Tree resources are comprised primarily of self-seeded volunteers. Refer to Figure 1 for the existing conditions.

Individual Tree Resources

The tree inventory was conducted on 24 April 2023. The inventory documented 11 trees on and within six metres of the subject property. Refer to Table 1 for the full tree inventory, Figure 1 for the location of trees reported in the tree inventory, and Appendix A for photographs of trees.

Tree resources were comprised of Norway Maple (*Acer platanoides*), Tree-of-Heaven (*Ailanthus altissima*), and Manitoba Maple (*Acer negundo*).

Proposed Development

The construction of a new 12-storey mixed-use building is proposed for the subject site, with one level of underground parking. Refer to Figure 1 for the proposed site plan.

Discussion

The following sections provide a discussion and analysis of tree impacts and tree preservation relative to the proposed development and existing conditions.

Development Impacts/Tree Removals

The removal of Trees 1-3 and 6-11 will be required to accommodate the proposed development. These trees conflict directly with the proposed construction including subsurface parking/shoring.

Trees 1-3 and 6 are located on the subject property and are greater than 30cm DBH (Category 1 trees). A permit is required prior to the removal of these trees.

Additional undersized trees (<15cm DBH) are noted on Figure 1, also to be removed, but are not included in the inventory. Two are shared with neighbouring property owners; permission from these property owners will be required prior to their removal.

Refer to Figure 1 for the locations of trees identified for removal.

Tree Preservation

The preservation of Trees 4 and 5 will be possible with the use of appropriate tree protection measures as indicated on Figure 1. Tree protection measures will have to be implemented prior to demolition to ensure tree resources designated for retention are not impacted by the development. Refer to Figure 1 for the location of required tree preservation fencing, general Tree Protection Plan Notes, and the tree preservation fence details. Tree protection fencing is to be installed on the property boundary adjacent to trees identified for preservation as indicated on Figure 1.

mTPZ Encroachment

Excavation into the minimum tree protection zone (mTPZ's) of Trees 4 and 5 will be required to accommodate shoring. These trees are located on neighbouring properties and are greater than 30cm DBH (Category 2 trees). A permit to injure these trees will be required.

There is existing asphalt/concrete on the subject property within their mTPZ's; as such, we would not expect substantial roots to be growing onto the subject site and into the disturbance zone. However, the following mitigation measures are required to ensure the trees respond well to construction:

- The tree protection fencing as shown on Figure 1 must be installed and maintained throughout construction.
- The existing building adjacent to these trees should be demolished carefully to avoid injury to these trees; crown pruning should occur prior to demolition if required.
- The existing asphalt/concrete within the mTPZ's of these trees should be removed carefully, by hand or using small equipment (ie. a skidsteer).
- Excavation to occur within the gravel subsurface and the soil below within mTPZ's of these trees must occur by air spading and be supervised by a certified Arborist. This must occur to a depth of 90cm if possible. Excavation below this limit can occur via traditional means.
- Exposed roots must be pruned in accordance with Good Arboricultural Standards.
- Any crown pruning should occur by a certified Arborist in accordance with Good Arboricultural Standards.

Summary and Recommendations

Kuntz Forestry Consulting Inc. was retained by STUDIO tla to complete a Tree Inventory and Preservation Plan as part of a development application for the property located at 1437 Queen Street West in Toronto, Ontario. A tree inventory was conducted and reviewed in the context of the proposed site plan.

The findings of the study indicate a total of 11 trees on and within six metres of the subject property. The removal of nine trees will be required to accommodate the proposed development. All other trees can be saved provided appropriate tree protection measures are installed prior to construction.

The following recommendations are suggested to minimize impact to trees identified for preservation. Refer to Figure 1 for the location of required tree preservation fencing, general Tree Protection Plan Notes, and the tree preservation fence detail.

- Tree protection barriers and fencing should be erected at locations as prescribed on Figure 1. All tree protection measures should follow the guidelines as set out in the tree preservation plan notes and the tree preservation fencing detail.
- No construction activity including surface treatments, excavations of any kind, storage of materials or vehicles, unless specifically outlined above, is permitted within the area identified on Figure 1 as a tree protection zone (TPZ) at any time during or after construction.
- Special mitigation measures are required adjacent to select trees; refer to the *Tree Preservation* section for details.
- Branches and roots that extend beyond prescribed tree protection zones that require pruning must be pruned by a qualified Arborist or other tree professional. All pruning of tree roots and branches must be in accordance with Good Arboricultural Standards.
- Site visits, pre, during, and post construction are recommended by either a certified consulting arborist (I.S.A.) or registered professional forester (R.P.F.) to ensure proper utilization of tree protection barriers. Trees should also be inspected for damage incurred during construction to ensure appropriate pruning or other measures are implemented.

Respectfully Submitted,

Kuntz Forestry Consulting Inc.

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Limitations of Assessment

Only the tree(s) identified in this report were included in the inventory. The assessment of the trees presented in this report has been made using accepted arboricultural techniques. These may include a visual examination taken from the ground of all the above-ground parts of the tree for structural defects, scars, external indications of decay such as fungal fruiting bodies, evidence of attack by insects, discoloured foliage, the condition of any visible root structures, the degree of lean (if any), the general condition of the trees and the identification of potentially hazardous trees or recommendations for removal (if applicable). Where trees could not be directly accessed (ie. due to obstructions, and/or on neighbouring properties), trees were assessed as accurately as possible from nearby vantage points.

Locations of trees provided in the report are determined as accurately as possible based on the best information available. If official survey information is not provided, tree location in the report may not be exact. In this case, if trees occur on or near property boundaries, an official site survey may be required to determine ownership utilizing specialized survey protocol to gain precise location.

Furthermore, recommendations made in this report are based on the site plans that have been provided at the time of reporting. These recommendations may no longer be applicable should changes be made to the site plan and/or grading, servicing, or landscaping plans following report submission.

Notwithstanding the recommendations and conclusions made in this report, it must be recognized that trees are living organisms, and their health and vigor constantly change over time. They are not immune to changes in site conditions or seasonal variations in the weather conditions. Any tree will fail if the forces applied to the tree exceed the strength of the tree or its parts.

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 inspection.

Table 1. Tree Inventory

Location: 1437 Queen Street West

Date: 24 April 2023 Surveyors: MT

Tree#	Common Name	Scientific Name	DBH	TI	CS	CV	CW	CDB	mTPZ	Cat.	Comments	Action
1	Norway Maple	<i>Acer platanoides</i>	~60	F	F	G	14	5	3.6	1	Co-dominant at 3m and 4m, stem wound (M), pruning wounds (M), deadwood (L), asymmetrical crown (M), cavity (L)	Remove
2	Norway Maple	<i>Acer platanoides</i>	~37	FG	F	G	9.5		2.4	1	Crook (H), broken branches (L), poor form	Remove
3	Tree-of-heaven	<i>Ailanthus altissima</i>	~35	FG	G	G	10.5		2.4	1	Cavity (L), union at 6m	Remove
4	Manitoba Maple	<i>Acer negundo</i>	~43	FG	G	G	12		3	2	Lean (M) north, stem wound (L), deadwood (L), co-dominant at 6m	Retain (injure)
5	Manitoba Maple	<i>Acer negundo</i>	~45	F	F	F	11	10	3	2	Bow (M) west, stem wound (M) with rot, pruning wounds (M) with rot, deadwood (L), fruiting body, coppice growth (M)	Retain (injure)
6	Tree-of-heaven	<i>Ailanthus altissima</i>	40	F	G	G	8.5		2.4	1	Co-dominant at 1.6m with included bark, 5 stems, broken branches (L), growing against building, impervious surface in root zone	Remove
7	Tree-of-heaven	<i>Ailanthus altissima</i>	28.5, 26.5	FG	FG	FG	9		1.8	-	Co-dominant at 0.3m with included bark and 3.5m, broken branches (M), growing against building, impervious surface in root zone	Remove
8	Tree-of-heaven	<i>Ailanthus altissima</i>	28, 18	FG	FG	FG	10		1.8	-	Co-dominant at 0.2m with included bark, broken branches (L), deadwood (L), growing against building, impervious surface in root zone	Remove
9	Tree-of-heaven	<i>Ailanthus altissima</i>	25, 24	FG	FG	FG	7		1.8	-	Co-dominant at 0.3m with included bark, broken branches (L), growing against building, impervious surface in root zone	Remove
10	Tree-of-heaven	<i>Ailanthus altissima</i>	22.5	G	FG	FG	7.5		1.8	-	Crook (L), growing against building, impervious surface in root zone	Remove
11	Tree-of-heaven	<i>Ailanthus altissima</i>	~28, 14	F	FG	FG	9		1.8	-	Union at 0.4m with included bark, Included fence (H), sweep (L), impervious surface in root zone	Remove

Codes		
DBH	Diameter at Breast Height	(cm)
TI	Trunk Integrity	(G, F, P)
CS	Crown Structure	(G, F, P)
CV	Crown Vigor	(G, F, P)
CDB	Crown dieback	%
cat	City of Toronto By-law Category	1-5
CW	Crown Width	(m)
mTPZ	Minimum tree protection zone, as measured from edge of tree	(m)
P = poor, F = fair, G = good, ~ = estimate, (VL) = very light, (L) = light, (M) = moderate, (H) = heavy		

Appendix A. Photographs of Trees



Image 1. Tree 1 (left), Tree 2 (right)



Image 2. Tree 3



Image 3. Tree 4 (left), Tree 5 (right)



Image 4. Tree 6



Image 6. Trees 7-10 (right-left)



Image 7. Tree 11