Tree Inventory and Preservation Plan
5969 and 5981 Dunn Street
Niagara Falls, Ontario

prepared for

D. Keith Callahan c/o NPG Planning Solutions
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prepared by

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6 December 2024

KUNTZ FORESTRY CONSULTING INC. Project P4318

Introduction

Kuntz Forestry Consulting Inc. was retained by NPG Planning Solutions on behalf of D. Keith Callahan to complete a Tree Inventory and Preservation Plan for the proposed development at 5969 and 5981 Dunn Street in Niagara Falls, Ontario. The subject site is located on the northeast corner of the intersection between Dunn Street and Orchard Avenue, within a residential area.

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

- Prepare an inventory of the tree resources measuring 10cm diameter at breast height (DBH) and greater on and within six metres of the subject site and trees of all sizes within the road right-of-way;
- Evaluate potential tree saving opportunities based on proposed development plans, and;
- Document the findings in a Tree Inventory and Preservation Plan.

The results of the evaluation are provided below.

Methodology

The tree inventory was conducted on 31 July 2024. Trees measuring 10cm DBH and greater on and within six metres of the subject site and trees of all sizes within the road right-of-way were included in the inventory. Trees were located using aerial imagery sourced from the City of Niagara Falls' Falls Viewer interactive mapping system. Trees included in the inventory were identified as Trees 624, 625, A, and B. Where appropriate, trees were tagged with their identification number. Trees that were not tagged were identified using the alphabetic sequence.

Tree resources were assessed utilizing the following parameters:

Tree # – Number assigned to trees that corresponds to Figure 1.
Species – Common and botanical names provided in the inventory table.
DBH – Diameter (cm) at breast height, measured at 1.4m above the ground.
Condition – Condition of tree considering trunk integrity (TI), crown structure (CS) and crown vigor (CV). Condition ratings include poor (P), fair (F), and good (G).
Crown Dieback – Percentage of dead branches within the crown.
Dripline – Crown radius (m).
Comments – Any other relevant tree condition information.

Refer to Figure 1 for the tree locations and Table 1 for the results of the tree inventory. See Appendix A for photographs of the trees.

Existing Site Conditions

The subject site is occupied by one one-storey dwelling, one two-storey dwelling, two detached garages, two driveways providing access to Dunn Street, and outdoor amenity areas. Refer to Figure 1 for the existing site conditions.

Individual Tree Resources

The inventory documented a total of four trees on and within six metres of the subject site and within the road right-of-way.

Tree resources were comprised of Emerald Cedar (*Thuja occidentalis 'Smaragd'*), Pear species (*Pyrus sp.*), and Thornless Honey Locust (*Gleditsia triacanthos var. inermis*).

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 the trees.

Proposed Development

The proposed development includes the construction of a two-storey townhouse building with walkways and driveways providing access to Orchard Avenue. The existing dwellings, garages, and driveways are to be retained as-is throughout the proposed works.

Refer to Figure 1 for the proposed development.

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 Removal

The removal of one tree, identified as Tree 624, will be required to accommodate the proposed development. Tree 624 conflicts directly with the footprint of the proposed townhouse building. Tree 624 is located fully within the boundaries of the subject site.

Refer to Figure 1 for the location of the tree identified for removal.

Tree Preservation

The preservation of the remaining three trees, identified as Trees 625, A, and B, will be possible with the use of appropriate tree protection measures as indicated on Figure 1. Tree protection measures must be implemented prior to the commencement of the proposed works to ensure tree resources designated for preservation are not impacted.

It should be noted that tree preservation fencing has not been prescribed for Trees 625 and B as these trees are located sufficiently far from the anticipated limit of disturbance. Should the areas adjacent to these trees be subject to construction-related disturbance of any kind, including material storage or equipment staging, additional tree preservation fencing will be required in order to sufficiently protect these trees.

Refer to Figure 1 for the location of required tree preservation fencing and the general Tree Protection Plan Notes.

Summary and Recommendations

Kuntz Forestry Consulting Inc. was retained by NPG Planning Solutions on behalf of D. Keith Callahan to complete a Tree Inventory and Preservation Plan as part of a development application for the properties located at 5969 and 5981 Dunn Street in the City of Niagara Falls, 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 four trees on and within six metres of the subject site and within the road right-of-way. The removal of one tree will be required to accommodate the proposed development. The remaining three trees can be saved provided appropriate tree protection measures are installed prior to the development.

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

- 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.

- 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 (i.e. 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: 5969 and 5981 Dunn Street, Niagara Falls Date: 31 July 2024 Surveyors: KNH

Tree #	Common Name	Scientific Name	DBH	TI	CS	CV	CDB	DL	Comments	Ownership	Action
624	Pear species	*Pyrus sp.*	18	PF	PF	PF	10	2	Decay (M) in trunk, epicormic branching (M), v-union at 2m with included bark, lean (L), poor form (L)	Subject	Remove
625	Thornless Honey Locust	*Gleditsia triacanthos var. inermis*	47	FG	F	F	10	6	Asymmetrical crown (M), bow (L), epicormic branching (L)	City	Preserve
A	Emerald Cedar	*Thuja occidentalis 'Smaragd'*	~6, 6, 4	G	G	G		1		City	Preserve
B	Thornless Honey Locust	*Gleditsia triacanthos var. inermis*	48	FG	F	F	10	6	Asymmetrical crown (M), bow (L), epicormic branching (L)	City	Preserve

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	(%)
DL	Dripline (Radius)	(m)
Ownership	Ownership of Tree	(Subject, City, Neighbour)
P = poor, F = fair, G = good, ~ = estimate (L) = light, (M) = moderate, (H) = heavy		

Appendix A. Site Photographs

Image 1. Tree 624

Image 2. Tree 625

Image 3. Tree A (far left) and four undersized Emerald Cedars (centre and right)

Image 4. Tree B