

**Tree Inventory and Preservation Plan Report
1159 Bellview Crescent
Burlington, ON**

prepared for

**Markay Homes
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prepared by



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Introduction

Kuntz Forestry Consulting was retained by Markay Homes to complete a Tree Inventory and Preservation Plan report in support of a development application for a property situated at 1159 Bellview Crescent in Burlington, Ontario. The subject property is located northeast of North Shore Boulevard East and Queen Elizabeth Way.

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

- Prepare inventory of tree resources with a diameter at breast height (DBH) greater than 15 cm on and within 6m of the subject property and trees of all sizes within the City road allowance;
- Evaluate potential tree saving opportunities based on proposed development plans; and
- Document the findings in a Tree Inventory and Preservation Plan Report.

Methodology

Tree resources were assessed utilizing the following parameters:

Tree # - number assigned to tree that corresponds to 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.

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.

The tree inventory was conducted on 17 October 2017. Trees over 15cm DBH on and within six metres of the subject property and trees of all sizes within the City road allowance, were included in the tree inventory. Trees were numbered 1-8. Trees were located by topographic survey or aerial photo interpretation and estimations made in the field. Refer to Table 1 for the results of the inventory.

The results of the evaluation are provided below.

Existing Site Conditions

The subject property is comprised of an existing 2-storey brick dwelling and driveway, frame shed and vacant open space. Tree resources are composed of landscape trees. Refer to Figure 1 for the existing conditions.

Tree Resources

The tree inventory documented a total of 8 trees situated on subject property, on neighbouring property and within the City road allowance. Refer to Table 1 for the full tree inventory and Figure 1 for the location of the trees reported in the tree inventory.

Trees included in the inventory are comprised of Norway Maple (*Acer platanoides*), Blue Spruce (*Picea pungens*), Black Walnut (*Juglans nigra*) and Cherry species (*Prunus serotina*).

Proposed Development

The proposed development includes the demolition of the existing building and structures and the development of five residential lots with driveway and condominium access road. A portion of the condominium road is proposed within a future residential area owned by the Applicant. Refer to Figure 1 for the proposed site plan.

Discussion

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

Development Impacts

The minimum Tree Preservation Zones (mTPZ) distances, as outlined in the City of Burlington's Specifications For Tree Protection and Preservation (Spec No. SS12A), were used in the preservation planning process to determine tree removal requirements. Where encroachment is required within the mTPZ there is the potential to damage tree roots, requiring tree removal.

Tree Removal

Removal of 2 trees, including Trees 5 and 7 will be required to accommodate the proposed development of Lot 5. Tree 3 is a hazard and its removal is recommended prior to the start of construction. Tree 3 is a shared tree and permission from neighbouring property owners will be required prior to its removal. Refer to Figure 1 for the location of the required tree removals.

Tree Preservation

Preservation of the remaining five trees, including Trees 1, 2, 4, 6, and 8 may be possible with the use of appropriate tree protection measures. Refer to Figure 1 for the location of the required tree preservation fencing, the fence detail and fence signage.

The preservation of Tree 1 may be possible if the existing driveway can be re-used or re-located outside of the mTPZ of this tree. Removal and re-surfacing of the existing driveway should be conducted using hand tools only, if necessary. The new driveway should be placed at existing grades. Any work within the mTPZ should be supervised by a Certified Arborist. If the existing driveway is to be removed and the new driveway located outside of the mTPZ of this tree, the tree protection fencing should be expanded to the full distance of the mTPZ following driveway removal and remain in place for the remainder of construction. The mTPZ area must then be amended with healthy topsoil to grade and stabilized (sodded or seeded).

The location of the foundation for the house on Lot 5 is unknown at this time. Encroachment into the mTPZ of Tree 4 may be required to accommodate the proposed house on Lot 5. Should the proposed foundation location encroach into the mTPZ of Tree 4, low pressure hydro-vac excavation will be used at the limit of excavation to explore the root zone of the tree. The excavation will be supervised by a Certified Arborist and the supervising Arborist will determine if the tree can be retained or if the tree will be destabilized by the proposed construction and associated root pruning and require removal.

Summary and Recommendations

Kuntz Forestry Consulting was retained by Markay Homes to complete a Tree Inventory and Preservation Plan report in support of a development application for a property situated at 1159 Bellview Crescent in Burlington, 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 8 trees situated on subject property, on neighbouring property and in the road allowance within six metres of the subject property. The removal of 2 trees will be required to accommodate the proposed development. The removal of one hazard tree is recommended. All other trees may be saved provided appropriate tree protection measures are installed prior to construction.

The following recommendations are suggested to minimize impacts to trees identified for preservation. Refer to Figure 1 for additional tree preservation notes and the preservation fence detail.

- Tree protection barriers and fencing should be erected at locations prescribed on Figure 1.
- Tree protection measures will have to be implemented prior to construction to ensure the trees identified for preservation are not impacted by the development.
- Branches and roots that extend past 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 mitigation measures are implemented.

Respectfully Submitted,
Kuntz Forestry Consulting Inc.

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Table 1. Detailed Tree Inventory Table

Location: 1159 Bellview Crescent, Burlington

Date: 17 October 2017 Surveyors: AC

Tree #	Common Name	Scientific Name	DBH	TI	CS	CV	CDB	mTPZ	Comments	Action
1	Norway Maple	<i>Acer platanoides</i>	65.5, 41.5	FG	F	FG		4.8m	Union at 1m with included bark(L), vertical scaffold limbs with included bark(L), pruning wounds(M)	Retain
2	Blue Spruce	<i>Picea pungens</i>	~40	FG	FG	FG		2.4m	Pruning wounds(L) from raise crown	Retain
3	Norway Maple	<i>Acer platanoides</i>	~50,50	PF	PF	F		-	Shared tree, 1 stem dead/broken at 4m with heavy rot, union at base with included bark(H), lean(M), stem wound(H) with sloughing bark, dead branches(M), Hazard => Removal recommended	Remove
4	Black Walnut	<i>Juglans nigra</i>	34	FG	FG	FG		2.4m	Lean(L), seam(L)	Retain - Tentative
5	Black Walnut	<i>Juglans nigra</i>	35	FG	F	FG		2.4m	Lean(L), co-dominant at 4m with included bark(L)	Remove
6	Cherry species	<i>Prunus sp.</i>	~10,10,11,14,12	F	F	F		2.4m	Union at base and 0.5m, gummosis(L), asymmetrical crown(L)	Retain
7	Black Walnut	<i>Juglans nigra</i>	32	G	FG	FG		2.4m	Co-dominant at 4m with included bark(L)	Remove
8	Black Walnut	<i>Juglans nigra</i>	24.5	G	FG	FG		2.4m	Co-dominant at 4m with included bark(L)	Retain
END										

Legend		
DBH	Diameter at Breast Height	(cm); ~ = estimate
TI	Trunk Integrity	G=good, F=fair, P=poor
CS	Crown Structure	G=good, F=fair, P=poor
CV	Crown Vigor	G=good, F=fair, P=poor
CDB	Crown Die Back	(%)
Comments	Relevant comments to health and condition of the tree (L) = light; (M) = moderate; (H) = heavy	
Action	Retain or Remove	