Tree Inventory and Preservation Plan 725 Westney Road South Ajax, Ontario

prepared for

Firearms Outlet Canada 725 Westney Road South, Unit 2 Ajax, Ontario L1S 7J7

prepared by



PO Box 1267 Lakeshore W PO 146 Lakeshore Road West Oakville ON L6K 0B3 289.837.1871 www.kuntzforestry.ca consult@kuntzforestry.ca

Introduction

Kuntz Forestry Consulting Inc. was retained by Firearms Outlet Canada to complete a Tree Inventory and Preservation Plan as part of a development application for the property located at 725 Westney Road South in Ajax, Ontario. The property is located on the northwest corner of the intersection between Westney Road South and Finley Avenue, within a commercial area.

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

- Prepare an inventory of tree resources measuring 6cm diameter at breast height (DBH) and greater on and within six metres of the subject property 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 17 October 2023. Tree resources were located using the topographic survey provided for the subject property and estimations made from known points in the field. Trees included in the inventory were identified as Trees 1326 – 1365, A, and B. Where appropriate, trees were tagged with their identification numbers. Trees that were not tagged were identified using the alphabetic sequence.

Individual 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 1.4 metres 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.

Where trees were situated in groups and their individual locations could not be deciphered, they were inventoried in polygons. One polygon, Polygon P-1, was inventoried. Trees within a polygon were inventoried using a 100% tally analysis by species, size class, and quality. Trees measuring 6cm DBH and greater were included in the stand tally analysis.

Trees within polygons were assessed utilizing the following parameters:

Species: Common and botanical names provided in the inventory table.

Size Class (DBH): 6cm –10cm, 10.5cm – 30cm, 30.5cm – 40cm, and 40.5cm and greater.

Quality Class: Acceptable Growing Stock (AGS), Unacceptable Growing Stock (UGS).

Trees classified as AGS are trees with no major defects in the bole and exhibit a relatively good crown structure and vigour. Trees classified as UGS are trees with a major defect in the bole or exhibiting a relatively poor crown structure or vigour.

Refer to Table 1 and Table 2 for the complete tree inventory and Figure 1 for the locations of the trees and polygon.

Existing Site Conditions

The subject property is currently occupied by a one-storey stucco and concrete commercial building, surface parking areas, and walkways. Vehicular access exists from Westney Road South and Finley Avenue. Tree resources exist in the form of landscape trees and self-seeded volunteers.

Individual Tree Resources

The inventory documented 42 trees and one polygon on and within six metres of the subject property and within the road right-of-way. Refer to Table 1 and Table 2 for the full tree inventory and Figure 1 for the locations of trees and polygon reported in the tree inventory.

Tree resources were comprised of Apple species (*Malus sp.*), Austrian Pine (*Pinus nigra*), Blue Spruce (*Picea pungens*), Little-leaf Linden (*Tilia cordata*), Manitoba Maple (*Acer negundo*), Norway Maple (*Acer platanoides*), and White Ash (*Fraxinus americana*).

Proposed Development

A portion of the existing building is to be retained while a portion is to be demolished. A new addition with a loading bay is proposed adjacent to the remaining portion of the building. The existing vehicular accesses are to remain unchanged. Modifications to the existing surface parking areas and the addition of new walkways are proposed. Refer to Figure 1 for the existing conditions and 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 / Tree Removal

The removal of three trees, including Trees 1329, 1343, and 1348, will be required to accommodate the proposed development. Tree 1329 requires removal due to its proximity to a proposed light post. Trees 1343 and 1348 require removal as they directly conflict with a proposed walkway.

The removal of two additional dead trees, identified as Trees 1333 and 1335, is recommended regardless of the proposed development due to their condition.

Trees 1333 and 1335 are located within the Westney Road South right-of-way and as such, permission from the Town of Ajax will be required prior to the removal of these trees. All other trees identified for removal are located fully within the boundaries of the subject property.

Refer to Figure 1 for the location of recommended tree removals.

Tree Preservation

The preservation of the remaining 37 trees and one polygon, including Trees 1326 – 1328, 1330 – 1332, 1334, 1336 – 1342, 1344 – 1347, 1349 – 1365, A, and B, and Polygon P-1, 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 the commencement of the proposed works to ensure trees identified for preservation are not impacted. Refer to Figure 1 for the location of required tree preservation fencing, protection plan notes, and the preservation fencing detail.

Where the dripline plus one metre of a tree cannot be respected, special mitigation measures have been prescribed and are described below.

<u>Trees 1326, 1327, 1330, 1331, 1336, 1338, 1341, 1342, 1344, 1345, 1347, 1352, 1354, 1357, 1359, 1360, and 1361</u>

Encroachment into the dripline plus one metre of Trees 1326, 1327, 1330, 1331, 1336, 1338, 1341, 1342, 1344, 1345, 1347, 1352, 1354, 1357, 1359, 1360, and 1361 will be required to accommodate the removal of the existing asphalt surface parking areas and curbs. In some areas, new asphalt and curbs are to be installed in-situ. Given the existing hardscape within the areas of encroachment, it is anticipated that few roots extend into these areas. Tree preservation fencing should be installed as shown on Figure 1 prior to the commencement of the proposed works. These hardscape features are to be removed carefully using small machinery (i.e. a skidsteer or miniature excavator) under the supervision of a Certified Arborist. Hardscape material should be pulled away radially from the trunks of these trees. Any roots encountered in the subsurface material are to be left intact. Where the new asphalt and curbs are proposed, they should be constructed atop the existing subsurface material. Any soft scaping to occur within the dripline plus one metre of these trees should occur by hand.

<u>Trees 1326, 1327, 1330, 1331, 1336, 1337, 1341, 1342, 1344, 1347, 1349, 1351 – 1353, 1357, and 1359</u>

Encroachment into the dripline plus one metre of Trees 1326, 1327, 1330, 1331, 1336, 1337, 1341, 1342, 1344, 1347, 1349, 1351 – 1353, 1357, and 1359 will be required to accommodate the installation of proposed fence pillars, curbs, light posts, and / or walkways. Tree preservation fencing should be installed as shown on Figure 1 prior to the commencement of the proposed works. Where the tree preservation fencing conflicts with the proposed fence pillar installation, the tree preservation fencing may be temporarily adjusted to accommodate the installation of these pillars. Where excavation is required within the dripline plus one metre of Trees 1326, 1327, 1330, 1331, 1336, 1337, 1341, 1342, 1344, 1347, 1349, 1351 – 1353, 1357, and 1359, it should occur by hand or using low-pressure hydro-vacuum technology, and under the supervision of a Certified Arborist. Non-structural roots (i.e. roots smaller than 5cm diameter) may be

pruned as required by a Certified Arborist in accordance with Good Arboricultural Standards. Should larger, structural roots be encountered, these roots should be preserved in-situ if possible and accommodated during the installation of the proposed fence pillars, curbs, light posts, and / or walkways.

It should be noted that Trees A and B, and Polygon P-1 have not been prescribed tree preservation fencing. The dripline plus one metre of Trees A and B do not intersect the subject property and as such, these trees are not expected to be impacted by the proposed works. Polygon P-1 is located below a retaining wall. As this retaining wall is to remain intact throughout the proposed works, it is anticipated that the trees within Polygon P-1 will not be impacted by the proposed works.

Summary and Recommendations

Kuntz Forestry Consulting Inc. was retained by Firearms Outlet Canada to complete a Tree Inventory and Preservation Plan as part of a development application for the property located at 725 Westney Road South in Ajax, Ontario. A tree inventory was conducted and reviewed in the context of the proposed development plan.

The findings of the study indicate a total of 42 trees and one polygon on and within six metres of the subject property and within the road right-of-way. The removal of three trees will be required to accommodate the proposed development. The removal of two additional dead trees is recommended regardless of the proposed development due to their condition. The remaining trees and polygon can be preserved provided appropriate tree protection measures are installed prior to the commencement of the proposed works.

The following recommendations are suggested to minimize impacts to trees identified for preservation. Refer to Figure 1 for the locations of the required tree preservation fencing, the preservation fence detail, and 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 protection 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 have been prescribed for select trees, as outlined in the *Tree Preservation* section of this report.
- 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.

Kaylee Harper

Kaylee Harper, B.Sc.Env. Ecology Ecologist, ISA Certified Arborist #ON-2749A Tree Risk Assessment Qualified Email: kaylee.harper@kuntzforestry.ca Office: 289-837-1871 ext. 105

Cell: 519-572-5949

<u>Limitations of Assessment</u>

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: <u>725 Westney Road South, Ajax</u>

Date: <u>17 October 2023</u> Surveyors: <u>KNH</u>

Tree #	Common Name	Scientific Name	DBH	TI	cs	cv	CDB	DL	DL+1	Comments	Ownership	Action
1326	Austrian Pine	Pinus nigra	37	FG	FG	FG		4.5	5.5	Asymmetrical crown (L), bow (L)	Subject Property	Preserve
1327	Austrian Pine	Pinus nigra	26.5	F	Р	Р	80	3.0	4.0	Crook (M), asymmetrical crown (M)	Subject Property	Preserve
1328	Austrian Pine	Pinus nigra	30.5	F	PF	F	30	3.0	4.0	Lean (L), asymmetrical crown (L)	Subject Property	Preserve
1329	Austrian Pine	Pinus nigra	34.5	F	FG	FG		3.0	4.0	Lean (L), v-union in crown with included bark	Subject Property	Remove
1330	Austrian Pine	Pinus nigra	30.5	F	F	F	20	3.0	4.0	Crook (L), included branch stub (M)	Subject Property	Preserve
1331	Apple species	Malus sp.	22	FG	FG	FG		3.5	4.5	Epicormic branching (L), bow (L)	Subject Property	Preserve
1332	Norway Maple	Acer platanoides	39	F	F	PF	20	4.0	5.0	Multiple branch attachments	Town	Preserve
1333	Norway Maple	Acer platanoides	29	D	D	D	100	-	-	Dead	Town	Remove (Condition)
1334	Norway Maple	Acer platanoides	34	PF	PF	PF	40	3.5	4.5	Multiple branch attachments, poor branch unions, v-union at 2m with included bark	Town	Preserve
1335	Norway Maple	Acer platanoides	35	D	D	D	100	-	-	Dead	Town	Remove (Condition)
1336	Blue Spruce	Picea pungens	30	F	G	F		2.5	3.5	Sap oozing	Subject Property	Preserve
1337	Blue Spruce	Picea pungens	39	G	G	G		3	4.0		Subject Property	Preserve
1338	Blue Spruce	Picea pungens	25.5	G	G	FG		2.0	3.0		Subject Property	Preserve
1339	Little-leaf Linden	Tilia cordata	35	G	G	G		2.5	3.5		Subject Property	Preserve
1340	Little-leaf Linden	Tilia cordata	34	G	G	G		2.5	3.5		Subject Property	Preserve
1341	Austrian Pine	Pinus nigra	38	F	PF	F		3.0	4.0	Co-dominance at 2m with poor union, poor form (M)	Subject Property	Preserve
1342	Austrian Pine	Pinus nigra	27	F	F	F	30	2	3.0	Sweep (L), crook (L)	Subject Property	Preserve
1343	Austrian Pine	Pinus nigra	28	G	F	F	20	3.0	4.0		Subject Property	Remove
1344	Austrian Pine	Pinus nigra	29	F	F	F	10	3.0	4.0	Lean (L), crook (M)	Subject Property	Preserve
1345	Austrian Pine	Pinus nigra	35	F	FG	F		4.0	5.0	Asymmetrical crown (L), crook (M), sap oozing	Subject Property	Preserve
1346	Austrian Pine	Pinus nigra	29	F	G	FG		3.0	4.0	Lean (M)	Subject Property	Preserve
1347	Apple species	Malus sp.	20.5	FG	F	FG		4.0	5.0	Lean (L), epicormic branching (L), asymmetrical crown (L)	Subject Property	Preserve
1348	Apple species	Malus sp.	21	G	F	FG		3.5	4.5	Asymmetrical crown (L), epicormic branching (L)	Subject Property	Remove
1349	Apple species	Malus sp.	23	FG	F	F		3.5	4.5	Asymmetrical crown (L), epicormic branching (M), lean (L)	Subject Property	Preserve

1350	Little-leaf Linden	Tilia cordata	26.5	FG	FG	F		2.5	3.5	Crook (L), epicormic branching (L)	Subject Property	Preserve
1351	Little-leaf Linden	Tilia cordata	23	FG	FG	F		2.5	3.5	Crook (L), epicormic branching (L)	Subject Property	Preserve
1352	Blue Spruce	Picea pungens	29	FG	G	FG		2.5	3.5	Exposed roots (L)	Subject Property	Preserve
1353	Blue Spruce	Picea pungens	37	G	G	FG		3.0	4.0		Subject Property	Preserve
1354	Blue Spruce	Picea pungens	30	FG	G	FG		2.5	3.5	Exposed roots (L)	Subject Property	Preserve
1355	Little-leaf Linden	Tilia cordata	35	FG	FG	F		3.0	4.0	Epicormic branching (L), lean (L), buried root flare	Subject Property	Preserve
1356	Little-leaf Linden	Tilia cordata	31	FG	FG	F		3.0	4.0	Buried root flare, epicormic branching (L)	Subject Property	Preserve
1357	Austrian Pine	Pinus nigra	27	F	F	F	10	3.0	4.0	Lean (L), v-union at 2m with included bark, asymmetrical crown (M)	Subject Property	Preserve
1358	Austrian Pine	Pinus nigra	34	G	F	F	10	3.5	4.5	Asymmetrical crown (L)	Subject Property	Preserve
1359	Austrian Pine	Pinus nigra	37	FG	FG	FG		4.5	5.5	Lean (L), asymmetrical crown (L)	Subject Property	Preserve
1360	Austrian Pine	Pinus nigra	35	G	F	F	10	2.5	3.5	Asymmetrical crown (L)	Subject Property	Preserve
1361	Austrian Pine	Pinus nigra	31	FG	FG	G		3.0	4.0	Bow (L), asymmetrical crown (L)	Subject Property	Preserve
1362	Apple species	Malus sp.	37	F	F	F	20	3.5	4.5	Multiple branch attachments, poor branch unions	Town	Preserve
1363	Apple species	Malus sp.	41	F	F	F	20	3.5	4.5	Multiple branch attachments, poor branch unions	Town	Preserve
1364	Apple species	Malus sp.	40	PF	F	FG		3.5	4.5	Multiple branch attachments, poor branch unions, lean (L), girdling roots (L)	Town	Preserve
1365	Apple species	Malus sp.	33.5	PF	F	FG		3.5	4.5	Multiple branch attachments, poor branch unions, girdling roots (L)	Town	Preserve
А	Apple species	Malus sp.	~6, 5, 5, 5	FG	FG	F		1.5	2.5	Union at base, epicormic branching (L), lean (L)	Neighbour	Preserve
В	Little-leaf Linden	Tilia cordata	~9	F	G	G		1.0	2.0	Sweep (M)	Neighbour	Preserve
P-1	See Table 2										Neighbour	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)								
DL+1	Dripline (Radius) Plus One Metre	(m)								
Ownership	Ownership of Tree	Subject Property, Neighbour, Town								
P = poor, F = fai	r, G = good, D = dead, ~ = estimate, (VL) = ve	ry light, (L) = light, (M) = moderate, (H) = heavy								

Table 2. Stand Tally Analysis

Tree Size Class	6cm - 10cm		10.5cm - 30cm		30.5cm - 40cm		40.5+ cm		Total All Sizes	
Species	AGS	UGS	AGS	UGS	AGS	UGS	AGS	UGS	AGS	UGS
Manitoba Maple (Acer negundo)	1	0	0	0	0	0	0	0	1	0
Little-leaf Linden (Tilia cordata)	3	0	0	0	0	0	0	0	3	0
Apple species (Malus sp.)	1	0	0	0	0	0	0	0	1	0
White Ash (Fraxinus americana)	0	1	0	0	0	0	0	0	0	1
Total Number of Trees	5	1	0	0	0	0	0	0	5	1