



JACKSON ARBORICULTURE INC.

CONSULTING AND GIS ANALYSIS

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Tree Inventory and Preservation Plan Report

Subject Property:

4280 Fourth Avenue
Niagara Falls, ON

Prepared For:

1274505 Ontario Ltd.
4199 Renoak Court
Mississauga, ON L5C 4K3

Prepared By:

Jackson Arboriculture Inc.
118 Pleasant Ridge Road
Brantford, ON N3R 0B8

10 October 2023

Jackson Arboriculture Inc. Project No. P430



1.0 Introduction

Jackson Arboriculture Inc. was retained by 1274505 Ontario Ltd. to complete a Tree Inventory and Preservation Plan report for a property situated at 4280 Fourth Avenue in the City of Niagara Falls, Ontario, hereby referred to as the subject property. It is understood that an application will be filed with the City for the construction of a residential development.

2.0 Methodology

At the onset of the project the scope of work was coordinated with the client and the consulting team. Prior to conducting a site visit, the topographic survey and current aerial photography were overlaid utilizing geographic information system software for use on site during the completion of the tree inventory. The tree locations and the site plan were then overlaid and a tree preservation analysis was completed to determine the impacts to the trees included in the inventory.

2.1 Tree Inventory

A site visit was conducted on the 22nd of September 2023 to complete the tree inventory. All trees 10 cm in diameter and larger situated on subject property, on neighbouring property within 6 m and within the road allowance were included in the tree inventory. A visual assessment was completed on each tree included in the inventory and the following information is provided in the tree inventory table (Table 1):

- **Tree #:** A number assigned to each tree corresponding to the tree inventory (Table 1) and the Tree Preservation Plan (Sheet 1).
- **Species:** Common and scientific (Latin) species names.
- **DBH:** The trunk diameter at breast height, measured in centimeters at 1.4 m from the ground.
- **Condition:** The health of the tree considering the trunk integrity, the crown structure and the crown vigour; each rated as good, fair or poor. The condition ratings are based on the signs, symptoms and defects exhibited by each tree, considering the surroundings in which it is growing.
- **Dripline:** The distance from the trunk to the tips of the live branches.
- **Location:** The property where the tree is situated, based on the topographic survey and gps locations taken on site.
- **Comments:** Any additional notes relevant to the tree's health or growing conditions.
- **Recommendation:** The recommended removal or preservation of each tree based on the results of the impact assessment.

The trees included in the inventory are identified with numbers 1-53. Trees were located using the topographic survey provided and a tablet computer with a GPS receiver.

2.2 Impact Assessment

A tree preservation analysis was completed on each tree included in the inventory considering the impacts from the proposed development and many other factors including, but not limited to, tree condition, species, DBH and the existing site conditions. The impacts from the proposed development will occur where tree roots and branches conflict with machinery during pre-grading and construction.

During the tree preservation analysis the distance of dripline was used to assess the impacts to the trees included in the tree inventory. Where considerable encroachment is required within the dripline tree removal may be required.

3.0 Existing Conditions

The subject property is currently occupied by two ball hockey rinks, a club house and a gravel parking area. The property is bound by disturbed industrial land to the north, an unopened road allowance to the east, residential and commercial development to the south, and Fourth Avenue to the west.

4.0 Tree Inventory Results

The results of the tree inventory indicate that a total of 53 trees reside on subject property, on neighbouring property within 6 m and within the road allowance. The trees included in the inventory appear to be comprised of landscape plantings.

No rare, threatened or endangered tree species were documented in the tree inventory. Refer to Table 1 for the complete tree inventory and Sheet 1 for the tree locations.

5.0 Proposed Development

The proposed development is comprised of a 72-unit townhouse complex including a private laneway and asphalt parking. Access to the complex is proposed from Fourth Avenue.

6.0 Discussion

The following sections discuss the tree removal requirements, tree preservation opportunities and tree preservation recommendations based on the results of the impact assessment.

6.1 Tree Removal

The removal of Trees 32, 34, 36, 48 and 51-53 will be required to accommodate the proposed development.

6.2 Tree Preservation

The preservation of Trees 1-31, 33, 35, 37-47, 49 and 50 will be possible with the use of appropriate tree protection measures, pending the review of grading and servicing plans.

Encroachment within the driplines of Trees 1, 4, 6, 8, 15, 17, 19, 24, 30, 35, 37-40, 43, 45 and 47 will be required to accommodate the proposed development. If any roots are exposed during construction they must be pruned by a Certified Arborist in accordance with good arboricultural practice to ensure that the root systems are not damaged during construction.

Tree protection fence must be installed at the dripline unless noted otherwise in this report and on Sheet 1. Tree protection fence must be installed prior to the commencement of construction (pre-grading) to ensure that the trees identified for preservation are not impacted by the proposed development.

Refer to Sheet 1 for the prescribed tree protection fence locations, additional tree protection plan notes and the tree protection fence detail.

6.3 Tree Preservation Recommendations

The following recommendations are made in attempts to reduce the impacts to trees identified for preservation:

- Tree protection fence must be installed at the locations outlined on Sheet 1 prior to the commencement of pre-grading, unless noted otherwise in this report and on Sheet 1.
- Once tree protection fence has been installed it must not be moved, relocated or altered in any way (unless repairing fallen fence etc.) for the duration of the construction period.
- No intrusion into an area identified on Sheet 1 as a tree preservation zone (TPZ) is allowed at anytime during construction unless noted otherwise in this report and on Sheet 1.
- No storage of machinery, construction debris, materials, waste or any other items is allowed within a TPZ.
- Any tree branches and roots that conflict with the proposed development must be pruned by a Certified Arborist in accordance with good arboricultural practice.
- Tree protection fencing should be inspected by a Certified Arborist prior to and during construction to ensure that the fencing remains intact and in good repair throughout the stages of development.

7.0 Summary

Jackson Arboriculture Inc. was retained by 1274505 Ontario Ltd. to complete a Tree Inventory and Preservation Plan report for a property situated at 4280 Fourth Avenue in the City of Niagara Falls, Ontario. A tree inventory was conducted and an impact assessment was completed in the context of the proposed development plan.

The tree inventory documented a total of 53 trees situated on subject property, in the road allowance and on neighbouring property within 6 m. The results of the impact assessment indicate that the removal of 7 trees will be required to accommodate the proposed development, pending the review of grading and servicing plans.

Respectfully submitted,
Jackson Arboriculture Inc.

Jeremy Jackson

Jeremy Jackson, H.B.Sc.,
ISA Certified Arborist #ON-1089A
GIS Analyst

Limitations of Assessment

It is our policy to attach the following limitations of assessment to ensure that the client, municipalities and agencies are fully aware of what is technically and professionally realistic when visually assessing and retaining trees.

The assessment of the trees presented in this report has been made using accepted arboricultural techniques. These include a visual examination of the above ground parts of each 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 and direction of any lean, the general condition of the trees and the surrounding site, and the proximity of property and people.

Notwithstanding the recommendations and conclusions made in this report, it must be realized that trees are living organisms and their health and vigour constantly change. They are not immune to changes in site conditions, or seasonal variations in the weather conditions, including severe storms with high-speed winds.

While reasonable efforts have been made to ensure that the trees recommended for retention are healthy no guarantees are offered, or implied, that these trees, or any parts of them, will remain standing. It is both professionally and practically impossible to predict with absolute certainty the behaviour of any single tree or group of trees or their component parts in all circumstances. Inevitably a standing tree will always pose some risk. Most trees have the potential for failure under adverse weather conditions, and the risk can only be eliminated if the tree is removed.

Although every effort has been made to ensure that this assessment is reasonably accurate, trees should be re-assessed periodically. The assessment presented in this report is valid as the time of the inspection.

Table 1. Tree Inventory

Location: 4280 Fourth Ave. Niagara Falls

Date: 22 Sep. 2023 Surveyors: JJJ

Tree #	Common Name	Scientific Name	DBH	TI	CS	CV	DL	Location	Comments	Recom.
1	Eastern Cottonwood	<i>Populus deltoides</i>	49, 43, 58, 30, 25	F	FG	G	8	Neighbouring	Unions at ground	Preserve
2	Black Walnut	<i>Juglans nigra</i>	20	G	G	G	3	Neighbouring		Preserve
3	Manitoba Maple	<i>Acer negundo</i>	19, 17, 17	F	F	F	3	Neighbouring	Union at ground, lean south, 30% crown dieback	Preserve
4	Eastern Cottonwood	<i>Populus deltoides</i>	58, 40	FG	G	G	8	Neighbouring	Union at 1.2 m	Preserve
5	Norway Maple	<i>Acer platanoides</i>	21	G	G	G	4	Neighbouring		Preserve
6	Eastern Cottonwood	<i>Populus deltoides</i>	68	G	G	G	8	Neighbouring		Preserve
7	Siberian Elm	<i>Ulmus pumila</i>	20, 13	F	FG	G	4	Neighbouring	Union at 1 m	Preserve
8	Eastern Cottonwood	<i>Populus deltoides</i>	45, 42, 40	F	FG	G	8	Neighbouring	Union at ground	Preserve
9	Manitoba Maple	<i>Acer negundo</i>	~30, 28, 20	F	PF	PF	5	Neighbouring	Union at ground, 30% crown dieback	Preserve
10	Manitoba Maple	<i>Acer negundo</i>	~15	FG	G	G	4	Neighbouring	Bowed south	Preserve
11	Siberian Elm	<i>Ulmus pumila</i>	13, 10	F	FG	G	3	Boundary	Union at ground	Preserve
12	Siberian Elm	<i>Ulmus pumila</i>	19, 13	F	FG	G	3	Subject Property	Union at 0.8 m	Preserve
13	Siberian Elm	<i>Ulmus pumila</i>	17	G	G	G	4	Subject Property		Preserve
14	Siberian Elm	<i>Ulmus pumila</i>	13	G	G	G	3	Subject Property	Bowed west	Preserve
15	Siberian Elm	<i>Ulmus pumila</i>	16, 17	F	FG	G	4	Subject Property	Union at 0.5 m	Preserve
16	Manitoba Maple	<i>Acer negundo</i>	~15	G	FG	G	3	Neighbouring	Understorey	Preserve
17	Manitoba Maple	<i>Acer negundo</i>	~11, 12, 13	F	FG	G	4	Neighbouring	Union at ground	Preserve
18	Siberian Elm	<i>Ulmus pumila</i>	~20	G	G	G	3	Neighbouring		Preserve
19	Manitoba Maple	<i>Acer negundo</i>	~14	G	G	G	4	Neighbouring	Bowed west	Preserve
20	Norway Maple	<i>Acer platanoides</i>	~25	G	G	G	3	Neighbouring		Preserve
21	Siberian Elm	<i>Ulmus pumila</i>	18	G	G	G	3	Neighbouring		Preserve
22	Siberian Elm	<i>Ulmus pumila</i>	~10, 11, 7	F	FG	G	3	Neighbouring	Union at ground	Preserve
23	Siberian Elm	<i>Ulmus pumila</i>	~14	F	FG	G	3	Neighbouring	Union at 1.5 m	Preserve
24	Black Walnut	<i>Juglans nigra</i>	13	FG	G	G	3	Subject Property	Included wire fence	Preserve
25	Silver Maple	<i>Acer saccharinum</i>	11	FG	G	G	2	Subject Property	Included wire fence	Preserve
26	Siberian Elm	<i>Ulmus pumila</i>	11, 12, 6	F	FG	G	2	Neighbouring	Union at ground	Preserve
27	Siberian Elm	<i>Ulmus pumila</i>	~11	G	G	G	2	Neighbouring		Preserve
28	Siberian Elm	<i>Ulmus pumila</i>	~11	G	G	G	2	Neighbouring		Preserve
29	Manitoba Maple	<i>Acer negundo</i>	~15, 8	F	P	P	2	Neighbouring	Union at ground, 80% crown dieback	Preserve
30	Manitoba Maple	<i>Acer negundo</i>	13, 12	F	FG	G	3	Neighbouring	Union at ground	Preserve
31	Manitoba Maple	<i>Acer negundo</i>	23, 23	F	FG	G	4	Boundary	Union at ground	Preserve
32	Manitoba Maple	<i>Acer negundo</i>	25, 20, 20, 30	F	FG	G	5	Subject Property	Union at ground	Remove
33	Sweet Cherry	<i>Prunus avium</i>	28	G	G	G	4	Boundary		Preserve
34	Manitoba Maple	<i>Acer negundo</i>	12, 10	F	FG	G	3	Subject Property	Union at ground	Remove

Tree #	Common Name	Scientific Name	DBH	TI	CS	CV	DL	Location	Comments	Recom.
35	Green Ash	<i>Fraxinus pennsylvanica</i>	~16	F	P	P	3	Neighbouring	Epicormic branching, 30% crown dieback, EAB infestation	Preserve
36	Green Ash	<i>Fraxinus pennsylvanica</i>	11, 7	F	G	G	2	Subject Property	Union at ground	Remove
37	Green Ash	<i>Fraxinus pennsylvanica</i>	~12	P	P	P	3	Boundary	Peeling bark, epicormic branching, EAB infestation	Preserve
38	Green Ash	<i>Fraxinus pennsylvanica</i>	~12	P	P	P	3	Boundary	Peeling bark, epicormic branching, EAB infestation	Preserve
39	Green Ash	<i>Fraxinus pennsylvanica</i>	~12	P	P	P	3	Neighbouring	Peeling bark, epicormic branching, EAB infestation	Preserve
40	Green Ash	<i>Fraxinus pennsylvanica</i>	~12	P	P	P	3	Neighbouring	Peeling bark, epicormic branching, EAB infestation	Preserve
41	Silver Maple	<i>Acer saccharinum</i>	~5	FG	FG	FG	3	Neighbouring	Lean east	Preserve
42	Green Ash	<i>Fraxinus pennsylvanica</i>	~10	P	P	P	2	Neighbouring	Peeling bark, epicormic branching, EAB infestation	Preserve
43	Silver Maple	<i>Acer saccharinum</i>	~15	FG	G	G	4	Boundary		Preserve
44	Green Ash	<i>Fraxinus pennsylvanica</i>	~15, 12	P	P	P	1	Neighbouring	Union at ground, peeling bark, epicormic branching, 80% crown dieback	Preserve
45	Green Ash	<i>Fraxinus pennsylvanica</i>	~14	F	F	F	3	Neighbouring	Bowed north, peeling bark, epicormic branching, EAB infestation	Preserve
46	Green Ash	<i>Fraxinus pennsylvanica</i>	~10	P	P	P	1	Neighbouring	Peeling bark, epicormic branching, 60% crown dieback, EAB infestation	Preserve
47	Green Ash	<i>Fraxinus pennsylvanica</i>	~13	F	F	F	3	Neighbouring	Peeling bark, epicormic branching, EAB infestation	Preserve
48	Manitoba Maple	<i>Acer negundo</i>	13, 13	F	F	G	5	Subject Property	Union at ground, bowed north	Remove
49	Green Ash	<i>Fraxinus pennsylvanica</i>	~13	P	P	P	2	Neighbouring	peeling bark, Epicormic branching, 60% crown dieback, EAB infestation	Preserve
50	Green Ash	<i>Fraxinus pennsylvanica</i>	~17	P	P	P	3	Neighbouring	Peeling bark, epicormic branching, 30% crown dieback, EAB infestation	Preserve
51	Northern Catalpa	<i>Catalpa speciosa</i>	22	FG	G	G	3	Subject Property	Lean west	Remove
52	Silver Maple	<i>Acer saccharinum</i>	11	G	G	G	3	Subject Property		Remove
53	Siberian Elm	<i>Ulmus pumila</i>	10	G	G	G	3	Subject Property		Remove

Table Legend

DBH	Diameter at Breast Height (cm)
TI	Trunk Integrity (G, F, P)
CS	Crown Structure (G, F, P)
CV	Crown Vigor (G, F, P)
DL	Dripline (m)
Recom.	Recommendation (preserve/remove)
G	Good
F	Fair
P	Poor
EAB	Emerald Ash Borer
~	Estimate