

# **Tree Inventory and Preservation Plan Report**

Subject Property:

**6529 St. John Street** Niagara Falls, ON

Prepared For:

Niagara Pines Developments Inc. 6102 Pekins St. Unit 6B Niagara Falls, ON L2E 5R8

Prepared By:

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

24 October 2023

Jackson Arboriculture Inc. Project No. P435



#### 1.0 Introduction

Jackson Arboriculture Inc. was retained by Niagara Pines Developments Inc. to complete a Tree Inventory and Preservation Plan report for a property situated at 6529 St. John Street 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 11<sup>th</sup> of October 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 1-43. 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 a single-family residential dwelling and amenity areas. The property is bound by a hydro corridor to the north, residential development to the east and west, and St. John Street to the south.

## 4.0 Tree Inventory Results

The results of the tree inventory indicate that a total of 43 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 and naturally occurring trees.

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 5-unit townhouse complex including a private laneway and visitor parking. Access to the complex is proposed from St. John Street. A portion of the property fronting onto St. John Street is not included in this application and will be reserved for future development. The existing dwelling on site will be demolished prior to the commencement of the proposed development.

#### 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 1-4, 6, 8, 14-18, 20-26, 30-36, 38 and 39 will be required to accommodate the proposed development.

Trees 22-24, 30-33, 35, 36, 38 and 39 reside on the property boundary or fully on neighbouring property. Permission from the respective property owner will be required prior to their removal as per the Forestry Act, R.S.O. 1990.

#### 6.2 Tree Preservation

The preservation of Trees 5, Unit 7, 9-13, 19, 27-29, 37 and 40-43 will be possible with the use of appropriate tree protection measures, pending the review of grading and servicing plans.

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 demolition 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 demolition, 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 Niagara Pines Developments Inc. to complete a Tree Inventory and Preservation Plan report for a property situated at 6529 St. John Street 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 43 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 27 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 of group of trees or their component parts in al 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: <u>6529 St. John St, Niagara Falls</u>
Date: <u>11 Oct. 2023</u> Surveyors: <u>JJJ</u>

Tree #	Common Name	Scientific Name	DBH	TI	cs	CV	DL	Location	Comments	Recom.
1	European Larch	Larix decidua	22	G	F	F	3	Subject Property	Crown bowed south - understorey	Remove
2	Eastern White Cedar	Thuja occidentalis	36, 20	FG	FG	F	2	Subject Property	Union at ground, understorey	Remove
3	Norway Maple	Acer platanoides	78	G	G	G	8	Subject Property		Remove
4	Apple species	Malus spp.	21	G	G	G	4	Subject Property		Remove
5	Manitoba Maple	Acer negundo	~10, 12	F	F	G	2	Neighbouring	Union at ground	Preserve
6	Black Locust	Robinia pseudoacacia	12, 8	F	FG	G	4	Subject Property	Union at 0.6 m	Remove
Unit 7	Eastern White Cedar	Thuja occidentalis	10-15	F	FG	G	1.5	Neighbouring	12 cedar trees	Preserve
8	Blue Spruce	Picea pungens	33	G	G	G	3	Subject Property		Remove
9	Norway Maple	Acer platanoides	~28	G	G	G	3	Neighbouring		Preserve
10	Manitoba Maple	Acer negundo	~12, 15	F	FG	G	5	Neighbouring	Union at ground	Preserve
11	White Mulberry	Morus alba	~7-15	F	F	FG	6	Neighbouring	Clump of 8 stems	Preserve
Unit 12	Eastern White Cedar	Thuja occidentalis	8-12	F	FG	FG	2	Neighbouring	7 cedar trees	Preserve
13	Manitoba Maple	Acer negundo	~25, 30	F	F	FG	4	Neighbouring	Union at ground, lean north	Preserve
14	European Larch	Larix decidua	20	G	G	G	3	Subject Property		Remove
15	Eastern White Cedar	Thuja occidentalis	16, 13,7,5	F	FG	FG	2	Subject Property	Union at 1.4 m	Remove
16	Eastern White Cedar	Thuja occidentalis	43	F	FG	G	4	Subject Property	Union at 1.5 m, diameter measured at 0.8 m due to union	Remove
17	White Pine	Pinus strobus	36	G	G	G	4	Subject Property		Remove
18	Mountain Ash species	Sorbus spp.	11	G	G	G	2	Subject Property		Remove
19	Eastern White Cedar	Thuja occidentalis	14, 7, 7	FG	G	G	1.5	Subject Property	Union at ground	Preserve
20	White Mulberry	Morus alba	12, 14	F	F	FG	4	Subject Property	Union at ground	Remove
21	White Mulberry	Morus alba	11	G	G	G	3	Subject Property		Remove
22	Siberian Elm	Ulmus pumila	~30, 23	F	FG	G	5	Boundary	Union at ground	Remove
23	Siberian Elm	Ulmus pumila	~12	G	G	G	2	Boundary		Remove
24	Siberian Elm	Ulmus pumila	~14	G	G	G	3	Boundary		Remove
25	White Mulberry	Morus alba	10	G	G	G	3	Subject Property	Crown bowed south - understorey	Remove
26	Siberian Elm	Ulmus pumila	15	G	G	G	3	Subject Property		Remove
27	White Pine	Pinus strobus	~40	G	G	G	4	Neighbouring		Preserve
28	White Pine	Pinus strobus	~35	G	G	G	4	Neighbouring		Preserve
29	White Pine	Pinus strobus	~26	G	G	G	3	Neighbouring		Preserve
30	Black Cherry	Prunus serotina	15	F	G	G	4	Boundary	Crook/bowed west	Remove
31	Siberian Elm	Ulmus pumila	~45, 45	F	F	FG	7	Neighbouring	Union at 0.5 m	Remove
32	Siberian Elm	Ulmus pumila	~55	F	F	PF	4	Neighbouring	Union at 1.4 m with included bark, diameter estimated at 1 m, 30% crown dieback	Remove

Tree #	Common Name	Scientific Name	DBH	TI	cs	CV	DL	Location	Comments	Recom.
33	Siberian Elm	Ulmus pumila	~50	F	F	PF	4	Neighbouring	Union at 1 m with included bark, 30% crown dieback, diameter estimated at 0.5 m due to union	Remove
34	Siberian Elm	Ulmus pumila	70	F	F	PF	4	Boundary	Pruning wound, 30% crown dieback, diameter measured at 0.5m m due to pruning wound	Remove
35	Siberian Elm	Ulmus pumila	~30	F	FG	F	4	Neighbouring	Light lean south, 20% crown dieback	Remove
36	Siberian Elm	Ulmus pumila	~20	G	FG	G	3	Neighbouring	Bowed southwest	Remove
37	Silver Maple	Acer saccharinum	~60	G	G	G	6	Neighbouring		Preserve
38	Apple species	Malus spp.	~30	G	G	G	5	Neighbouring	Union at 1.6 m	Remove
39	Siberian Elm	Ulmus pumila	~35	G	G	G	5	Neighbouring		Remove
40	Siberian Elm	Ulmus pumila	~40	G	FG	F	6	Neighbouring	20% crown dieback	Preserve
41	Siberian Elm	Ulmus pumila	~50	F	FG	FG	6	Neighbouring	Union at 1.8 m, bowed west	Preserve
42	Siberian Elm	Ulmus pumila	~35	G	G	G	4	Neighbouring		Preserve
43	Norway Maple	Acer platanoides	~65	G	G	G	9	Neighbouring	Union at 2 m	Preserve

#### **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
~ Estimate