



February 12, 2024

Attention: Ms. Tijana Brkic

tijana@nakdesigngroup.com

NAK Design Group

411 Richmond Street East, Suite 104
Toronto, Ontario, M5A 3S5.

Re: Arborist Report and Tree Protection Plan – 6546 Fallsview Blvd (Parking) – Niagara Falls

Ms. Brkic,

As per your request, I have completed a site visit to 6546 Fallsview Blvd (Parking) – Niagara Falls, to complete an arborist report and TPP.

The enclosed report inventories all trees located on and within 6m of the proposed subject site as per your request. This inventory will include individual tag #s, both common and botanical names, DBH, condition and minimum tree protection zones. Fifty-four trees have been inventoried as part of this project, seven of which are located within the municipal road allowance. All seven City owned trees are in conflict with the proposed grading and are to be removed. Twenty-four trees located on the subject site are also in conflict with proposed grading and are to be removed. Authorization from the City is required prior to the removal of thirty-one trees.

I trust this report meets your needs, if you have any questions or concerns feel free to contact me at cgavin@canopyconsulting.ca.

Regards,

Cletus Gavin *B.Sc. Earth Science & Biology*
President & Consulting Arborist
ASCA Registered Consulting Arborist #613
ISA Certified Arborist (ON-1576A)
Butternut Health Assessor # 439
TRAQ Certified



Arborist Report
&
Tree Protection Plan

6546 Fallsview Blvd
(Parking)
Niagara Falls, ON

Prepared for:
Attention: Ms. Tijana Brkic
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February 12, 2024

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INTRODUCTION:

I have been commissioned by Ms. Tijana Brkic of NAK Design Group, to complete a tree inventory with drawing for all trees located on and within 6m of the subject sites. All field work and data collection has been completed by Cletus Gavin, RCA #613 on February 27, 2023

HISTORY AND ASSIGNMENT:

Ms. Brkic has provided a site plan illustrating the existing conditions and the proposed development located at 6546 Fallsview Blvd – Niagara Falls. Upon the request of the client or municipality, *Canopy Consulting*, can be further retained beyond the current scope of work to provide on-site monitoring services and to provide any remedial actions deemed necessary.

Scope of work:

1. Inventory all trees greater than 10cm DBH, both on and within 6m of the subject site. The inventory will include a tag #, species, DBH, condition, comments and recommendations.
2. Determine if any regulated trees are to be negatively impacted by the proposed development.
3. Provide a preservation strategy for all trees recommended for preservation.

ASSUMPTION AND LIMITING CONDITIONS:

1. Care has been taken to obtain all information from reliable sources. *Canopy Consulting* can neither guarantee nor be responsible for the accuracy of information provided by others.
2. This report may not be used for any expressed purpose other than its intended purpose and alteration of any part of this report invalidates the report. Excerpts or alterations to the report, without the authorization of the author or his company invalidates its intent and/or implied conclusions.
3. Unless expressed otherwise: 1) information contained in this report covers only those items that were examined and reflect the condition of those items at the time of inspection; and 2) the inspection was made using accepted arboricultural practices and is limited to visual examination of accessible items without climbing, dissection, probing or coring and detailed root examination involving excavation. While reasonable efforts have been made to assess trees outlined in this report, there is no warranty or guarantee, expressed or implied, that problems or deficiencies with the tree(s) or any part(s) of them may not arise in the future. All trees should be inspected and re-assessed periodically.
4. The determination of ownership of any subject tree(s) is the responsibility of the owner and any civil or common-law issues, which may exist between property owners with respect to trees, must be resolved by the owner. A recommendation to remove or maintain tree(s) does not grant authority to encroach in any manner onto adjacent private properties.

TREE SURVEY AND RECOMMENDATIONS:

See TI-1 plan in Appendix I for tree location, Table #1 for species identification, size, condition, and minimum tree protection zones and Appendix II for corresponding Digital Images.

Table #1: 6546 Fallsview Blvd (Parking) – Niagara Falls

Tree #	Species Common Name (Biological Name)	D ¹ B H (cm)	Condition ²	Category ³	Comments and Recommendations	Recommendation ⁴	M ⁵ T P Z (M)
130	Black Locust <i>Robinia pseudoacacia</i> (14)	11-28	F	1	- group of trees - clear of proposed development - shall retain its prescribed TPZ	P	1.8
131	Black Locust <i>Robinia pseudoacacia</i>	26	P	1	- deadwood, in decline, vines - in conflict with proposed grading	R	1.8
132	Black Locust <i>Robinia pseudoacacia</i>	15	F	1	- deadwood, vines - in conflict with proposed grading	R	1.8
133	Black Locust <i>Robinia pseudoacacia</i>	34	P	1	- deadwood, poor union - in conflict with proposed grading	R	2.4
134	Black Walnut <i>Juglans nigra</i>	22	P	1	- deadwood, in decline, cavity, poor form and union - in conflict with proposed grading	R	1.8
135	Tree of Heaven <i>Ailanthus altissima</i>	28	F	1	- deadwood, unbalanced - in conflict with proposed grading	R	1.8
136	Manitoba Maple <i>Acer negundo</i> (12)	16-39	F	1	- group of trees - in conflict with proposed grading	R	1.8-2.4
137	White Ash <i>Fraxinus americana</i>	36	D	1	- multi-stem, 100% dead EAB - in conflict with proposed grading	R	2.4
138	Black Locust <i>Robinia pseudoacacia</i>	32	F	1	- deadwood, in decline, poor union, cavity at base - in conflict with proposed grading	R	2.4
139	Black Locust <i>Robinia pseudoacacia</i>	50	P	1	- deadwood, multiple cavities, in decline, poor union - in conflict with proposed grading	R	3.6
140	Manitoba Maple <i>Acer negundo</i>	12	P	1	- deadwood, multiple cavities, poor form - in conflict with proposed grading	R	1.8

¹ **DAB:** Diameter at base is a measurement in centimeters, using a caliper tape, at the base of the tree directly above the root flare.

² **Condition:** A rating of **Hazardous/Dead/Poor/Fair/Good/Excellent** was determined for each tree by visually assessing all the above ground components of the tree, using acceptable arboricultural procedures as recommended in the “*Guide for Plant Appraisal*”, prepared under contract by the “*Council of Tree & Landscape Appraisers (CTLA)*, an official publication of the *International Society of Arboriculture (I.S.A.)*, 9th Edition, 2000”.

³ **Category #:**

1. Trees with diameters of 10 cm or more, situated on private property on the subject site.
2. Trees with diameters of 10 cm or more, situated on private property, within 6 m of the subject site.
3. Trees of all diameters situated on City owned parkland within 6 m of the subject site.
4. Trees of all diameters situated within the Municipal road allowance adjacent to the subject site.

⁴ **Recommendation:** Preserve (**P**), Preserve with Injury (**PI**), Remove (**R**), Transplant (**T**)

⁵ **MTPZ:** Minimum tree protection zone distance as mandated by City of Niagara Falls.

Tree #	Species Common Name (Biological Name)	D B H (cm)	Condition	Category	Comments and Recommendations	Recommendation	M T P Z (M)
141	Manitoba Maple <i>Acer negundo</i>	29	P	1	- deadwood, vines, poor form, in decline - in conflict with proposed grading	R	1.8
142	Manitoba Maple <i>Acer negundo</i>	31	P	1	- deadwood, vines, severe lean, in decline - in conflict with proposed grading	R	2.4
143	Little Leaf linden <i>Tilia cordata</i>	11	F	1	- deadwood, lean, unbalanced - in conflict with proposed grading	R	1.2
C1	Manitoba Maple <i>Acer negundo</i>	45	F	4	- deadwood, poor union - in conflict with proposed grading	R	3.0
C2	Black Walnut <i>Juglans nigra</i>	43	F	4	- deadwood, storm break - in conflict with proposed grading	R	3.0
C3	Norway Maple <i>Acer platanoides</i>	44	F	4	- deadwood, unbalanced, poor form - in conflict with proposed grading	R	3.0
C4	Little Leaf Linden <i>Tilia cordata</i>	23	P	4	- 80% dead - in conflict with proposed grading	R	1.8
C5	Manitoba Maple <i>Acer negundo</i>	39	P	4	- 50% dead, in decline, large deadwood - in conflict with proposed grading	R	2.4
C6	Manitoba Maple <i>Acer negundo</i>	37	P	4	- deadwood, poor form, storm break, unbalanced, in decline - in conflict with proposed grading	R	2.4
C7	Manitoba Maple <i>Acer negundo</i>	49	P	4	- deadwood, poor form, unbalanced, in decline - in conflict with proposed grading	R	3.0
N1	Black Walnut <i>Juglans nigra</i>	23	F	2	- deadwood, unbalanced - clear of proposed development - shall retain its prescribed TPZ	P	1.8
N2	Manitoba Maple <i>Acer negundo</i>	40	P	2	- deadwood, poor form, multi-stem, in decline - clear of proposed development - shall retain its prescribed TPZ	P	3.0
N3	Manitoba Maple <i>Acer negundo</i>	18	P	2	- deadwood, poor form, vines - clear of proposed development - shall retain its prescribed TPZ	P	1.8
N4	Black Locust <i>Robinia pseudoacacia</i>	15	F	2	- deadwood, poor form, unbalanced - clear of proposed development - shall retain its prescribed TPZ	P	1.8
N5	Manitoba Maple <i>Acer negundo</i>	25	P	2	- deadwood, poor form, vines - clear of proposed development - shall retain its prescribed TPZ	P	1.8
N6	Manitoba Maple <i>Acer negundo</i>	12	P	2	- deadwood, vines - clear of proposed development - shall retain its prescribed TPZ	P	1.8
N7	Manitoba Maple <i>Acer negundo</i>	47	F	2	- deadwood, in decline, vines - clear of proposed development - shall retain its prescribed TPZ	P	3.0
N8	Black Walnut <i>Juglans nigra</i>	28	F	2	- deadwood, unbalanced - clear of proposed development - shall retain its prescribed TPZ	P	1.8
N9	Black Locust <i>Robinia pseudoacacia</i>	13	P	2	- deadwood, vines, lean - clear of proposed development - shall retain its prescribed TPZ	P	1.8

Discussion:

City Owned Trees:

1. As listed above, there are fifty-four trees greater than 10cm DBH involved with this project, seven of which are located within the City road allowance, being trees no. C1-C7. All seven City owned trees are in conflict with the proposed grading/landscaping and are to be removed. Authorization from the City is required prior to the removal of these seven trees.

Privately Owned Trees Located within 6m of the Subject Site:

1. These are nine trees greater than 10cm DBH within 6.0m of the subject site being trees no. N1-N9. These trees are clear of the proposed development, shall retain their prescribed TPZs and as such, will not be disturbed during construction.

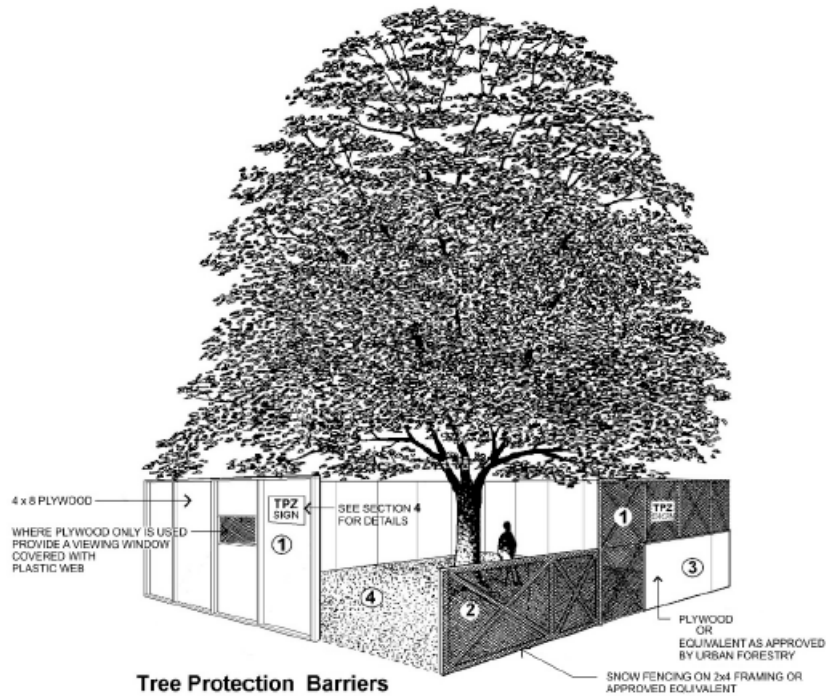
Privately Owned Trees Located on the Subject Site:

1. There are thirty-eight trees greater than 10cm DBH located on the subject site, being trees no. 130-143 (Trees no. 130 and 136 are groups containing fourteen trees and twelve trees respectively). Tree no. 130 is clear of the proposed development, shall retain their prescribed TPZs and as such, will not be disturbed during construction.
2. Trees no. 131-143 are in conflict with the proposed grading and as such, are to be removed. Authorization from the City is required prior to the removal of these twenty-four trees.
3. All other trees located on or within 6m of the subject site are less than 10cm in diameter and as such, were not included in this report.
4. To further protect each tree scheduled for preservation from the potential of construction disturbance, it is recommended that the below listed tree preservation recommendations are implemented.

1.0 ESTABLISH TREE PROTECTION ZONE

The purpose of the tree protection zone (TPZ) is to prevent root damage, soil compaction and soil contamination. Workers and machinery shall not disturb the tree protection zone in any way. To prevent access, the following is required:

- 1.1 Install hoarding as per attached Tree Protection Plan in Appendix I.
- 1.2 Hoarding shall consist of the following:



Tree Protection Barriers

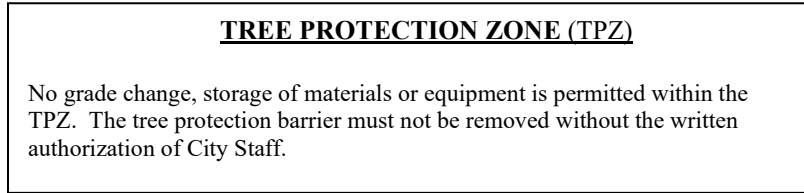
- ① Tree protection barriers must be constructed with a solid wood frame clad with plywood or approved equivalent. Height of hoarding may be less than 8 ft. to accommodate any branches that may be lower.
- ② Tree protection barriers for trees situated on the City road allowance where visibility must be maintained can be 1.2m (4ft.) high and consist of orange plastic web snow fencing on a wood frame made of 2 x 4s.
- ③ Where some excavate or fill has to be temporarily located near a tree protection barrier, plywood must be used to ensure no material enters the Tree Protection Zone.
- ④ No construction activity, grade changes, surface treatment or excavations of any kind is permitted within the Tree Protection Zone.

Note:

Sediment control fencing shall be installed in locations indicated in an Urban Forestry approved Tree Protection Plan. The sediment control fencing must be installed to Ontario Provincial Standards (OPSD-219.130) heavy duty silt fence barrier and to the satisfaction of Urban Forestry. See Detail TP- 2

- 1.3 When visibility is a consideration and **upon approval from the City**, 1.2-meter-high orange plastic web snow fencing on a 2”X4” frame is recommended.
- 1.4 No fill, equipment or supplies are to be stored within the tree protection zone.
- 1.5 Activities, which are likely to injure or destroy tree(s), are not permitted within the TPZ.
- 1.6 No objects may be attached to tree(s) within the TPZ.
- 1.7 Tree protection barriers are to be erected prior to the commencement of any construction or grading activities on the site and are to remain in place in good condition throughout the entire duration of the project.
- 1.8 Once all tree/site protection measures have been installed you must notify City staff to arrange for an inspection of the site and approval of the site protection requirements.
- 1.9 All Hoarding shall not be removed until all construction activity is complete.

- 1.10 A sign that is similar to the illustration below must be mounted on all sides of a tree protection barrier for the duration of the project. The sign should be a minimum of 40cm x 60cm and made of white gatorboard, laminates or equivalent material.



2.0 ROOT PRUNING

When working within the tree protection zone, hand dig areas closest to each tree to prevent any unnecessary tearing or pulling of roots. Removal of roots that are greater than 2.5 centimeters in diameter or roots that are injured or diseased should be performed as follows:

- 2.1 Preserve the root bark ridge (similar in structure to the branch bark ridge). Directional Root Pruning (DRP) is the recommended technique and should be used during hand excavation around tree roots. Roots are like branches in their response to pruning practices. With DRP, objectionable and severely injured roots are properly cut to a lateral root that is growing downward or in a favorable direction.
- 2.2 All roots needing to be pruned or removed shall be cut cleanly with sharp hand tools, by a Certified Arborist or by the PCA.
- 2.3 No wound dressings\pruning paint shall be used to cover the ends of each cut.
- 2.4 All roots requiring pruning shall be cut using any of the following tools:
 - Large or small loppers
 - Hand pruners
 - Small hand saws
 - Wound scribes
- 2.5 Avoid prolonged exposure of tree roots during construction - keep exposed roots moist and dampened with mulching materials, irrigation or wrap in burlap if exposed for longer than 4 hours.

3.0 ESTABLISH MAINTENANCE PROGRAM

All maintenance work must be completed by the approved Project Consulting Arborist or an equivalent qualified arborist.

Pre-Construction:

- 3.1 Prune trees to remove deadwood, objectionable limbs while maintaining crown form.

During- Construction:

- 3.2 Irrigate tree preservation zones during drought conditions, June – September, to reduce drought stress.
- 3.3 Inspect the site every month to ensure that all hoarding is in place and in good condition. Inspect the trees to monitor condition.

Post-Construction:

- 3.4 Inspect the trees two times per year – May and September – to monitor condition for a minimum of 2 additional years.

4.0 LANDSCAPING

Any landscaping completed within the tree preservation zones, after construction is completed and hoarding has been removed, cannot cause damage to any of the trees or their roots. The trees must be protected for the same reasons listed above but without using hoarding.

- 4.1 **No grade changes** are permitted which include adding and/or removing soil.
- 4.2 **No excavation** is permitted that can cause damage to the roots of the tree.
- 4.3 **No heavy equipment** can be used to compact the soil within the tree preservation zone.
- 4.4 Any hard -surface sidewalks, paths, etc. should be constructed using permeable products such as interlocking stone, etc.

SUMMARY TABLE:

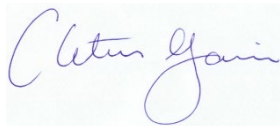
Tree Category	Total	Preserve	Preserve with Injury	Remove	Transplant
1 (Private tree located on the subject site)	38	14	0	24	0
2 (Private tree located on adjacent property)	9	9	0	0	0
4 (City owned tree)	7	0	0	7	0
Total	54	23	0	31	0

CONCLUSIONS:

Fifty-four trees have been inventoried as part of this project, seven of which are located within the municipal road allowance. All seven City owned trees are in conflict with the proposed grading and are to be removed. Twenty-four trees located on the subject site are also in conflict with proposed grading and are to be removed. Authorization from the City is required prior to the removal of thirty-one trees. Finally, with the above in mind, it is the consultant's opinion that if the above tree preservation recommendations are implemented, which includes installing tree protection hoarding as outlined in this report, proposed construction will not adversely affect the long-term health, safety and/or existing condition of all trees scheduled for preservation.

Trusting this report meets your needs. For further information, you may contact me directly at (416) 300-2957 or by email at cgavin@canopyconsulting.ca.

Sincerely,



Cletus Gavin *B.Sc. Earth Science & Biology*
President & Consulting Arborist
ASCA Registered Consulting Arborist #613
ISA Certified Arborist (ON-1576A)
Butternut Health Assessor # 439
TRAQ Certified

Appendix I: Tree Protection Plan – TPP-1



LEGEND

- Tree to be preserved
- Tree to be removed
- Prescribed TPZ
- Group of trees to be removed
- Group of trees to be preserved

KEY MAP



TPP-B

DATE: 02/12/2024

PROJECT No: 23004

PROJECT Name: 6546 Fallsview Blvd – Niagara Falls

Appendix II: Digital Images



Photo #1: Trees no. 130-142, C1-C2 and trees less than 10cm DBH looking south.



Photo #2: Trees no. C3-C7 looking east.