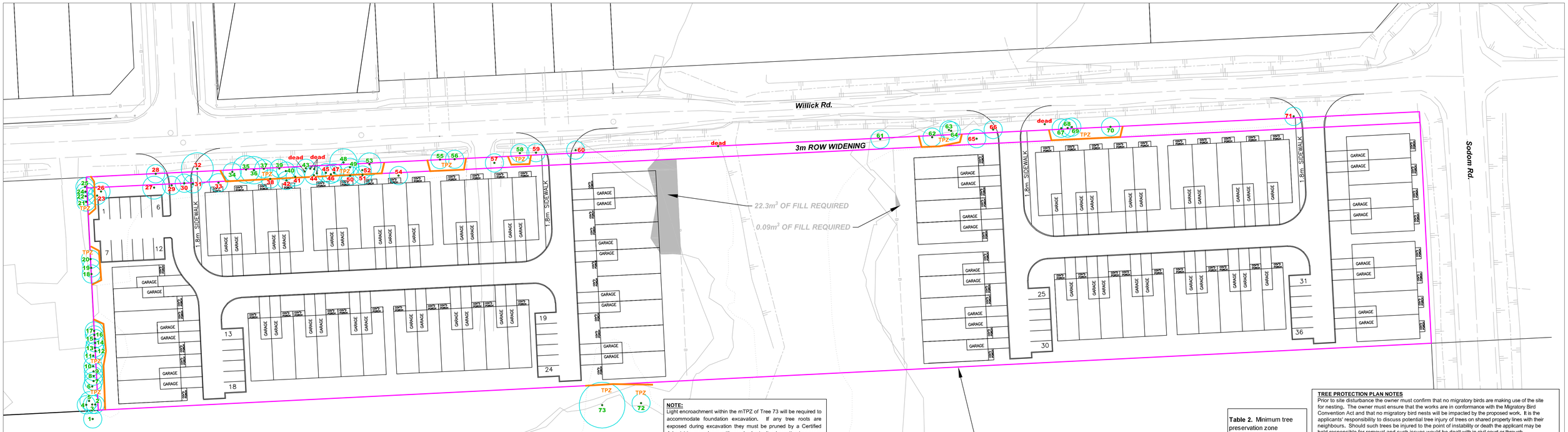


NOTE:
Light encroachment within the mTPZ of Tree 73 will be required to accommodate foundation excavation. If any tree roots are exposed during excavation they must be pruned by a Certified Arborist in accordance with good arboricultural practice to ensure that the root system is not damaged during construction.

Table 1. Tree Inventory

Location: 4336 Willick Rd, Niagara Falls Date: 19 March 2025 Surveyors: JJJ

Tree #	Common Name	Scientific Name	DBH	TI	CS	CV	DL	mTPZ	Location	Comments	Action
1	Pin Oak	*Quercus palustris*	~28	G	G	G	3	2.4	Neighbouring - Private		Preserve
2	Blue Spruce	*Picea pungens*	~10	G	G	G	1	2.4	Neighbouring - Private	Planted in raised bed with wood retaining eall before property line	Preserve
3	Blue Spruce	*Picea pungens*	~11	G	G	G	1	2.4	Neighbouring - Private	Planted in raised bed with wood retaining eall before property line	Preserve
4	Blue Spruce	*Picea pungens*	~15	G	G	G	2	2.4	Neighbouring - Private	Planted in raised bed with wood retaining eall before property line	Preserve
5	Blue Spruce	*Picea pungens*	~11	G	G	G	2	2.4	Neighbouring - Private	Planted in raised bed with wood retaining eall before property line	Preserve
6	Blue Spruce	*Picea pungens*	~14	G	G	G	2	2.4	Neighbouring - Private	Planted in raised bed with wood retaining eall before property line	Preserve
7	Blue Spruce	*Picea pungens*	~12	G	G	G	1.5	2.4	Neighbouring - Private	Planted in raised bed with wood retaining eall before property line	Preserve
8	Blue Spruce	*Picea pungens*	~15	G	G	G	1.5	2.4	Neighbouring - Private	Planted in raised bed with wood retaining eall before property line	Preserve
9	Blue Spruce	*Picea pungens*	~10	G	G	G	1	2.4	Neighbouring - Private	Planted in raised bed with wood retaining eall before property line	Preserve
10	Blue Spruce	*Picea pungens*	~10	G	G	G	1	2.4	Neighbouring - Private	Planted in raised bed with wood retaining eall before property line	Preserve
11	Blue Spruce	*Picea pungens*	~17	G	G	G	1.5	2.4	Neighbouring - Private		Preserve
12	Blue Spruce	*Picea pungens*	~11	G	G	G	1	2.4	Boundary - Private		Preserve
13	Blue Spruce	*Picea pungens*	~12	G	G	G	1	2.4	Boundary - Private		Preserve
14	Blue Spruce	*Picea pungens*	~10	G	G	G	1	2.4	Boundary - Private		Preserve
15	Blue Spruce	*Picea pungens*	~10	G	G	G	1	2.4	Boundary - Private		Preserve
16	Blue Spruce	*Picea pungens*	~12	G	G	G	1	2.4	Boundary - Private		Preserve
17	Blue Spruce	*Picea pungens*	~14	G	G	G	1	2.4	Boundary - Private		Preserve
18	Balsam Fir	*Abies balsamea*	~20	G	G	G	2	2.4	Boundary - Private		Preserve
19	Balsam Fir	*Abies balsamea*	~15	G	G	G	1	2.4	Boundary - Private		Preserve
20	Balsam Fir	*Abies balsamea*	~14	G	G	G	1.5	2.4	Boundary - Private		Preserve
21	Balsam Fir	*Abies balsamea*	~17	G	G	G	2	2.4	Neighbouring - Private		Preserve
22	Balsam Fir	*Abies balsamea*	~13	G	G	G	1.5	2.4	Neighbouring - Private		Preserve
23	Pin Oak	*Quercus palustris*	31	G	G	G	4	2.4	Subject Property		Remove
24	Balsam Fir	*Abies balsamea*	~17	G	G	G	2	2.4	Neighbouring - Private		Preserve
25	Balsam Fir	*Abies balsamea*	~19	G	G	G	2	2.4	Neighbouring - Private		Preserve
26	Pin Oak	*Quercus palustris*	21	G	G	G	3	2.4	Subject Property		Remove
27	Pin Oak	*Quercus palustris*	45	G	G	G	5	3.0	Subject Property		Remove
28	Swamp White Oak	*Quercus bicolor*	14	G	G	G	3	2.4	Boundary - Private /ROW		Remove
29	Swamp White Oak	*Quercus bicolor*	23	G	G	G	3	2.4	Subject Property		Remove
30	Pin Oak	*Quercus palustris*	17	G	G	G	3	2.4	Subject Property		Remove
31	Pin Oak	*Quercus palustris*	28	G	G	G	6	2.4	Subject Property		Remove
32	Swamp White Oak	*Quercus bicolor*	65	G	G	G	6	4.2	City ROW		Remove
33	Pin Oak	*Quercus palustris*	22	G	F	F	2	2.4	Subject Property	Poor form, epicormic branching	Remove
34	Basswood	*Tilia americana*	29	G	G	G	4	2.4	Subject Property		Remove
35	Pin Oak	*Quercus palustris*	59	G	F	FG	4	3.6	Boundary - Private /ROW	Union at base of crown, epicormic branching	Preserve
36	Pin Oak	*Quercus palustris*	52	G	G	G	4	3.6	Subject Property		Preserve
37	Pin Oak	*Quercus palustris*	38	G	F	F	4	2.4	Boundary - Private /ROW	Included wire fence, poor form	Preserve
38	Shagbark Hickory	*Carya ovata*	24	G	G	G	3	2.4	Subject Property		Remove
39	Shagbark Hickory	*Carya ovata*	12	G	FG	G	2	2.4	Boundary - Private /ROW		Preserve
40	Pin Oak	*Quercus palustris*	24	G	G	G	3	2.4	Subject Property		Preserve
41	Pin Oak	*Quercus palustris*	20	G	G	G	3	2.4	Subject Property		Remove
42	Pin Oak	*Quercus palustris*	27	G	G	G	3	2.4	Subject Property		Remove
43	Pin Oak	*Quercus palustris*	25	G	G	G	4	2.4	Subject Property		Preserve
44	Pin Oak	*Quercus palustris*	14	G	G	G	3	2.4	Subject Property		Remove
45	Pin Oak	*Quercus palustris*	23	G	G	G	3	2.4	Subject Property		Remove
46	Pin Oak	*Quercus palustris*	32	G	G	FG	4	2.4	Subject Property		Remove
47	Pin Oak	*Quercus palustris*	16	G	F	F	2	2.4	Subject Property	20% crown dieback	Remove
48	Pin Oak	*Quercus palustris*	56	G	FG	FG	5	3.6	City ROW		Preserve
49	Pin Oak	*Quercus palustris*	27	G	G	G	3	2.4	Subject Property		Preserve
50	Pin Oak	*Quercus palustris*	29	G	G	G	4	2.4	Subject Property		Remove
51	Shagbark Hickory	*Carya ovata*	23	G	G	G	3	2.4	Subject Property		Remove
52	Pin Oak	*Quercus palustris*	17	G	G	G	3	2.4	Subject Property		Remove
53	Pin Oak	*Quercus palustris*	41	G	G	G	5	3.0	Subject Property		Preserve
54	White Elm	*Ulmus americana*	33	G	G	G	5	2.4	Subject Property		Remove
55	Shagbark Hickory	*Carya ovata*	16	G	G	G	3	2.4	Boundary - Private /ROW		Preserve
56	Shagbark Hickory	*Carya ovata*	10, 10	FG	G	G	2	2.4	Boundary - Private /ROW	Union at ground	Preserve
57	Pin Oak	*Quercus palustris*	24	G	G	G	4	2.4	Subject Property		Remove
58	Pin Oak	*Quercus palustris*	29	G	G	G	5	2.4	City ROW		Preserve
59	Pin Oak	*Quercus palustris*	14	G	G	G	3	2.4	City ROW		Remove
60	Siberian Elm	*Ulmus pumila*	28, 23	F	F	F	7	2.4	City ROW	Union at 1.2 m, bowed south,	Remove
61	Eastern Red Cedar	*Juniperus virginiana*	~25	G	G	G	3	2.4	Subject Property		Preserve
62	White Elm	*Ulmus americana*	22, 20	FG	G	G	4	2.4	Subject Property	Union at 0.3 m	Preserve
63	Green Ash	*Fraxinus pennsylvanica*	11	F	F	F	2	2.4	City ROW	Peeling bark, epicormic branching, EAB infestation	Preserve
64	Green Ash	*Fraxinus pennsylvanica*	10	F	F	F	2	2.4	City ROW	Peeling bark, epicormic branching, EAB infestation	Preserve
65	Green Ash	*Fraxinus pennsylvanica*	10	F	F	F	2	2.4	Subject Property	Peeling bark, epicormic branching, EAB infestation	Remove
66	Green Ash	*Fraxinus pennsylvanica*	14, 17	PF	F	F	3	2.4	City ROW	Union at ground, peeling bark, epicormic branching, EAB infestation	Remove
67	White Elm	*Ulmus americana*	14, 16, 15, 11	FG	FG	G	4	2.4	City ROW	Union at ground	Preserve
68	White Elm	*Ulmus americana*	19, 8	FG	G	G	4	2.4	City ROW	Union at ground	Preserve
69	White Elm	*Ulmus americana*	16, 18, 9	F	FG	G	4	2.4	City ROW	Union at ground	Preserve
70	White Elm	*Ulmus americana*	23, 22	FG	G	G	3	2.4	Boundary - Private /ROW	Union at ground	Preserve
71	Pin Oak	*Quercus palustris*	37	G	FG	FG	5	2.4	City ROW	Epicormic branching	Remove
72	White Spruce	*Picea glauca*	~31	G	G	G	3	2.4	Subject Property		Preserve
73	Red Oak	*Quercus rubra*	92	F	FG	G	7	6.0	Subject Property	Cavities at flare with heart rot, lean southwest, cavity in crown, seam	Preserve

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)
mTPZ	Minimum Tree Preservation (m)
S	Suppressed
G	Good
F	Fair
P	Poor
EAB	emerald ash borer
~	Estimate

Table 2. Minimum tree preservation zone distances.

DBH (cm)	Min. Tree Preservation Zone Distance (m)*
	Radius
< 10	1.8
11 – 40	2.4
41 – 50	3
51 – 60	3.6
61 – 70	4.2
71 – 80	4.8
81 – 90	5.4
91 – 100	6
101 – 110	6.6

*As measured from the outside of the tree trunk.

TREE PROTECTION PLAN NOTES

Prior to site disturbance the owner must confirm that no migratory birds are making use of the site for nesting. The owner must ensure that the works are in conformance with the Migratory Bird Convention Act and that no migratory bird nests will be impacted by the proposed work. It is the applicants' responsibility to discuss potential tree injury of trees on shared property lines with their neighbours. Should such trees be injured to the point of instability or death the applicant may be held responsible for removal and such issues would be dealt with in civil court or through negotiation.

TREE PROTECTION ZONE: No construction activity including grade changes, surface treatments or excavations of any kind is permitted within the area identified on the Tree Protection Plan or Site Plan as a Tree Protection Zone (TPZ). No root cutting is permitted. No storage of materials or fill is permitted within the TPZ. No movement or storage of vehicles or equipment is permitted within the TPZ. Grade changes are not permitted within established TPZ. The area(s) identified as a TPZ must remain undisturbed at all times.

TREE PROTECTION BARRIERS:

Tree protection barriers must be installed around trees to be protected using paige wire fence supported on metal T-bars. All supports and bracing to safely secure the barrier should be outside the TPZ. All such supports and bracing should minimize damage to roots outside the TPZ.

General Note:

Prior to the commencement of any site activity the tree protection barriers specified on this plan must be installed. Established tree protection zones must not be used as construction access, storage or staging areas. The tree protection barriers must remain in effective condition until all site activities including landscaping are complete. Permission from the City/Town must be provided prior to the removal of tree protection fence.

ARBORICULTURAL WORK:

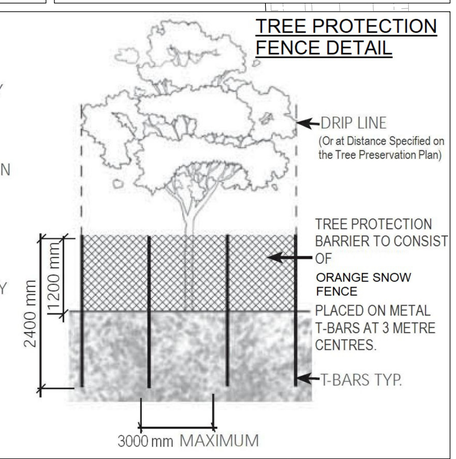
Any roots or branches which extend beyond the TPZ indicated on this plan which require pruning, must be pruned by a Certified Arborist. All pruning of tree roots and branches must be in accordance with good arboricultural standards. Roots located outside the TPZ that have received approval from the City/Town to be pruned must first be exposed by hand digging or by using an air spade. This will allow a proper pruning cut and minimize tearing of the roots.

TREE PROTECTION FENCE DETAIL

NOTES:

1. THIS DETAIL DOES NOT REPRESENT ANY PARTICULAR TREE SPECIES

2. NO CONSTRUCTION ACTIVITY, GRADE CHANGE, SURFACE TREATMENT, COMPACTION, EXCAVATION OR STOCKPILING OF ANY KIND IS PERMITTED WITHIN THE PROTECTED AREA.



LEGEND

- GPS Tree Location
- 10 Tree Number Identified for Preservation (GREEN)
- 15 Tree Number Identified for Removal (Red)
- TPZ Tree Preservation Zone Symbol
- Minimum Tree Protection Zone (mTPZ)
- Tree Protection Fence Location
- Property Boundary

No.	Description	Date	By
1	Issued for Submission	21 Mar., 2025	JJ

Data Source: Upper Canada Consultants

Tree Inventory

A site visit was conducted on the 19th of March 2025 by ISA Certified Arborist Jeremy Jackson (ON-1089A) 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 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 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 poor, fair or good. The condition ratings are based on the signs, symptoms and defects exhibited by each tree, considering the conditions in which it is growing.
- **Dripline:** The distance from the trunk to the tips of the live branches.
- **mTPZ:** Minimum Tree Preservation Zone distance, measured in meters from the trunk of the tree.
- **Location:** The property where the tree is situated, based on the topographic survey.
- **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 impact assessment.

Tree Preservation

The preservation of Trees 1-22, 24, 25, 34-37, 39, 40, 43, 48, 49, 53, 55, 56, 58, 61-64, 67-70, 72 and 73 will be possible with the use of appropriate tree protection measures. Tree protection measures must be implemented prior to the commencement of construction to ensure that the trees are not damaged. Tree protection fence must be installed at the mTPZ distances as outlined on this drawing and on Table 1.

Tree Removal

The removal of Trees 23, 26-33, 38, 41, 42, 44-47, 50-52, 54, 57, 59, 60, 65, 66 and 71 will be required to accommodate the proposed development.

Trees 28, 32, 59, 60, and 71 appear to reside partially or fully within the City owned road allowance. Permission from the appropriate City department will be required prior to removal.

Tree Protection 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 mTPZ distance prior to the commencement of construction (pre-grading), unless noted otherwise on this drawing.
- 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 on this drawing.
- 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.

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Niagara Falls, ON

Achievers Exim Consultants Inc.
8304 Mulberry Drive
Niagara Falls, ON L2H 0K4

Tree Preservation Plan

JACKSON ARBORICULTURE INC. CONSULTING AND GIS ANALYSIS
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Project #	Sheet #
P556	1
Date: 21 March 2025	
Scale: 1:500 @ 24x36	