

**Tree Inventory and Preservation Plan Report
Bluffers Park
Toronto, Ontario**

prepared for

**City of Toronto
Parks, Forestry & Recreation
55 John Street
Toronto, Ontario M5V 3C6**

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

14 July 2022, revised 24 January 2023

KUNTZ FORESTRY CONSULTING INC Project P3334

Introduction

Kuntz Forestry Consulting Inc. was retained by the City of Toronto – Parks, Forestry and Recreation to complete a Tree Inventory and Preservation Plan in support of the proposed work at Bluffers Park in the City of Toronto, Ontario. The subject area is a landscaped area adjacent to Bluffer's Park Beach. The entire subject area is regulated by the City of Toronto Ravine and Natural Feature Protection By-law and protected by the Toronto and Region Conservation Authority.

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

- Prepare inventory of trees with the potential to be impacted by the proposed work.
- Evaluate potential tree saving opportunities based on proposed construction plans.
- Document the findings in a Tree Inventory and Preservation Plan Report.

The results of the evaluation are provided below.

Policy Framework

The subject areas are subject to the Private Tree-By-law (Chapter 813), which regulates tree injury and destruction of individual trees. Preliminary information is acquired on individual trees which are then categorized in compliance with the by-law in support of development applications (refer to Table 1). Tree categories range from one through five and are as follows:

Categories

- 1. Trees with diameters of 30 cm or more situated on private property on the subject site.*
- 2. Trees with diameters of 30 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. On lands designated under City of Toronto Municipal Code, Chapter 658, Ravine and Natural Feature Protection, trees of all diameters within 10 metres of any construction activity.*
- 5. Trees of all diameters situated within the City road allowance adjacent to the subject site. (City of Toronto, 2008).*

Methodology

Trees of all sizes with the potential to be impacted by the proposed work were included in the inventory. Tree locations are shown on Figure 1. Trees were located using the topographic survey provided for the property and a handheld GPS unit (Trimble GeoExplorer® 6000 series) accurate to ± 1 m. See Table 1 for the results of the inventory.

Tree resources were assessed utilizing the following parameters:

Tree # - tree number assigned to tree that corresponds to Figure 1.

Species - common and botanical names provided in the inventory table.

DBH - diameter (centimetres) at breast height, measured at 1.4 m above the ground.

Condition - condition of tree considering trunk integrity, crown structure, and crown vigour. Condition ratings include poor (P), fair (F) and good (G).

Comments - additional relevant detail.

Existing Site Conditions

The subject area includes a landscaped area with a public washroom building, asphalt pathways, and picnic areas. Tree resources exist in the form of landscape trees and natural generation. Refer to Figure 1 for the existing condition.

Tree Resources

The tree inventory was conducted on 23 June 2022. Tree inventory documented 238 trees with the potential to be impacted by the proposed work. Refer to Table 1 for the full tree inventory and Figure 1 for the location of trees reported in the tree inventory.

Tree resources were comprised of Freeman Maple (*Acer x freemanii*), Amur Maple (*Acer ginnala*), Manitoba Maple (*Acer negundo*), Norway Maple (*Acer platanoides*), Silver Maple (*Acer saccharinum*), Sugar Maple (*Acer saccharum*), Catalpa (*Catalpa speciosa*), Hackberry (*Celtis occidentalis*), Yellow wood (*Cladrastis lutea*), Russian Olive (*Elaeagnus angustifolia*), Green Ash (*Fraxinus pennsylvanica*), Shademaster Honey Locust (*Gleditsia triacanthos 'inermis'*), Kentucky coffeetree (*Gymnocladus dioica*), Black Walnut (*Juglans nigra*), Dawn Redwood (*Metasequoia glyptostroboides*), Norway Spruce (*Picea abies*), White Spruce (*Picea glauca*), Austrian Pine (*Pinus nigra*), Scots Pine (*Pinus sylvestris*), Eastern Cottonwood (*Populus deltoides*), Sweet Cherry (*Prunus avium*), Chokecherry (*Prunus virginiana*), White Oak (*Quercus alba*), Bur Oak (*Quercus macrocarpa*), Black Locust (*Robinia pseudoacacia*), White Willow (*Salix alba*), Weeping Willow (*Salix babylonica*), Basswood (*Tilia americana*), Little-leaf Linden (*Tilia cordata*), White Elm (*Ulmus americana*), Valley Forge Elm (*Ulmus americana 'Valley Forge'*), and Siberian Elm (*Ulmus pumila*).

Proposed Work

The proposed works include the demolition of the existing park facility and the construction of two new facilities, a new trail connected to the beach, and park features (i.e. lounge chairs, rock outcrop). The existing pathways will be removed and re-landscaped. Refer to Figure 1 for the proposed works.

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 Removals

The removal of 18 trees is required to accommodate the proposed work. Required tree removals include Trees 674, 682-686, 688, 689, 781, 782, and 790-797. All trees have direct conflicts with the proposed building or pathways.

The removal of Trees 775 and 479 is recommended due to poor and/or hazardous condition. Tree 775, a 65cm Eastern Cottonwood, has 90% crown-die-back and is located beside the existing pathways. Tree 479, a 47.5cm Eastern Cottonwood, has 40% crown-die-back and is located beside the proposed playground. Both Trees 775 and 479 are hazardous to park users and their removal is recommended.

All trees proposed for removal are located within the Ravine and Natural Feature By-law protected areas and a permit will be required prior to their removal. Refer to Figure 1 for the location of the proposed removal.

Tree Preservation

The preservation of the remaining 218 trees 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 proposed work. Refer to Figure 1 for the location of required tree preservation fencing, tree protection plan notes, and the hoarding details.

Encroachment into the minimum Tree Protection Zone (mTPZ) of 13 trees is required to accommodate the proposed work. Refer to Table 1 for the proposed works within the mTPZ of each tree and below section for mitigation measures.

Removal/Replacement of the Existing Pathways

The removal and relocation of the existing asphalt pathways is proposed within the mTPZ of 11 trees including Trees 692, 699, 783, 789, 799, 467, 477, 478, 494, 496, and 497. The existing asphalt pathways will be demolished. The extent of new pathways will be farther from the trees or the pathways will be removed completely from the mTPZ of these trees. Given the presence the existing pathways, long-term adverse impacts are not anticipated to the trees. The following mitigation is required to minimize the impacts on the trees.

- Tree preservation fence must be installed as indicated on Figure 1 with a combination of thick **magenta and orange** lines.
- The existing asphalt within the mTPZ of these trees must be demolished using small equipment.
- The existing subbase must be removed by hand.
- The area can be amended using high quality topsoil.
- After amendment, tree preservation fence must be expanded to protect sodded area as indicated on Figure 1 with thick **magenta** line.

Construction of New Pathways

The construction of new pathways is proposed within the mTPZ of Trees 692, 697, and 474. The existing lawn or sand paths will be removed and excavation for the new asphalt pathways is required within the mTPZ of these trees. Given that encroachment is limited to small areas, long-term adverse impacts are not anticipated to the trees.

- Tree preservation fence must be installed as indicated on Figure 1.
- Excavation for the new asphalt pathways must be completed using a low-pressure hydro vac or air spade excavation methods and supervised by a Certified Arborist to ascertain the extent of roots.

- After the completion of excavation, exposed roots must be pruned by a Certified Arborist in accordance with Good Arboricultural Standards.

Permits

Types of Permit	Number of Trees	Tree #
Removal – construction related	18	674, 682, 683, 684, 685, 686, 688, 689, 781, 782, 790, 791, 792, 793, 794, 795, 796, 797
Removal – poor condition	2	775, 479
Injury	13	692, 697, 699, 783, 789, 799, 467, 474, 477, 478, 494, 496, 497

Replacement Trees

The City of Toronto requires replacement for any by-law protected tree removal and tree injury on RNFP land. The ratio of required replacement plantings per tree is below:

Ratio of Replacement Tree per Tree Removal	Ratio of Replacement Tree per Tree Injury
3:1 for trees in good condition	1:1 for trees in all condition
1:1 for trees in poor condition	

As a result, planting of 52 replacement trees is required. Refer to Landscape Plan for the proposed plantings.

Summary and Recommendations

Kuntz Forestry Consulting Inc. was retained by the City of Toronto – Parks, Forestry and Recreation to complete a Tree Inventory and Preservation Plan in support of proposed construction in Bluffers Park in the City of Toronto, Ontario. A tree inventory was conducted and reviewed in the context of the proposed construction plan.

The findings of the study indicate a total of 238 trees with the potential to be impacted by the proposed work. The removal of 18 trees is required to accommodate the proposed work. The removal of additional 2 trees is recommended due to poor/hazardous conditions. The remaining 218 trees can be saved provided appropriate tree protection measures are installed prior to construction.

The following recommendations are suggested to minimize impacts to trees identified for preservation. Refer to Figure 1 for additional tree preservation notes and the preservation hoarding details.

- Tree protection barriers and fencing shall be erected at locations prescribed on Figure 1.
- Tree protection measures will have to be implemented prior to demolition to ensure the trees identified for preservation are not impacted by the development. Barriers should be maintained throughout construction.
- Special protection measures are required adjacent to select trees; refer to the *Tree Preservation* section for details.

- Branches and roots that extend past 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 shall also be inspected for damage incurred during construction to ensure appropriate pruning or other mitigation measures are implemented.

Respectfully Submitted,
Kuntz Forestry Consulting Inc.

Kaho Hayashi

Kaho Hayashi, B.Sc., M.Sc.F.
Associate Forest Ecologist
ISA Certified Arborist #ON-2153A

Limitations of Assessment

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: Bluffers Park, Toronto

Date: 23 June 2022

Surveyors: KH

Tag#	Common Name	Scientific Name	DBH	TI	CS	CV	CDB	Cat.	DL	mTPZ	Comments	Action	Comp.
601	White Willow	<i>Salix alba</i>	74	F	G	F	15	4	6.0	9.6	Co-dominance at 3m with included bark (M), seam (L), epicormic branches (H)	Preserve	
602	White Willow	<i>Salix alba</i>	59.5	FG	G	F		4	6.0	7.2	Lean (L) to southeast, epicormic branches (H)	Preserve	
603	White Willow	<i>Salix alba</i>	16	G	G	G		4	2.0	3.6	Previously tagged 4619	Preserve	
604	White Willow	<i>Salix alba</i>	42	FG	G	G		4	4.0	6.0	Co-dominance at 2m with included bark (L)	Preserve	
605	Green Ash	<i>Fraxinus pennsylvanica</i>	11	FG	G	G		4	2.0	3.6	Sweep (L)	Preserve	
606	Green Ash	<i>Fraxinus pennsylvanica</i>	15	FG	G	G		4	2.0	3.6	Crook (L)	Preserve	
607	Green Ash	<i>Fraxinus pennsylvanica</i>	21	G	G	G		4	2.5	3.6		Preserve	
608	Green Ash	<i>Fraxinus pennsylvanica</i>	20	G	G	FG		4	2.5	3.6	Epicormic branches (M)	Preserve	
609	Green Ash	<i>Fraxinus pennsylvanica</i>	10.5	G	G	FG		4	1.5	3.6	Epicormic branches (M)	Preserve	
610	Green Ash	<i>Fraxinus pennsylvanica</i>	14.5	G	G	G		4	2.0	3.6		Preserve	
611	Basswood	<i>Tilia americana</i>	9	FG	G	G		4	3.0	1.2	Sweep (L)	Preserve	
612	Manitoba Maple	<i>Acer negundo</i>	18	FG	G	FG	10	4	3.0	3.6	Lean (L), sweep (L), crook (L)	Preserve	
613	Green Ash	<i>Fraxinus pennsylvanica</i>	19	G	G	F		4	3.0	3.6	Epicormic branches (M)	Preserve	
614	Green Ash	<i>Fraxinus pennsylvanica</i>	15	G	G	G		4	2.0	3.6		Preserve	
615	Green Ash	<i>Fraxinus pennsylvanica</i>	10.5	G	G	F	10	4	1.5	3.6		Preserve	
616	Green Ash	<i>Fraxinus pennsylvanica</i>	12	G	G	G		4	2.0	3.6		Preserve	

617	Black Locust	<i>Robinia pseudoacacia</i>	18, 13	FG	G	G		4	3.5	3.6	Co-dominance at base and 1.4m	Preserve	
618	Black Locust	<i>Robinia pseudoacacia</i>	17, 13.5	FG	FG	FG		4	3.5	3.6	Co-dominance at 0.5m with included bark (M), asymmetrical crown (M)	Preserve	
619	Basswood	<i>Tilia americana</i>	12	G	G	G		4	2.0	3.6		Preserve	
620	Green Ash	<i>Fraxinus pennsylvanica</i>	11.5	PF	F	F	20	4	3.0	3.6	Bow (M) to east, crack, Emerald Ash Borer (M)	Preserve	
621	Green Ash	<i>Fraxinus pennsylvanica</i>	13	FG	G	FG		4	2.0	3.6	Crook (L)	Preserve	
622	Basswood	<i>Tilia americana</i>	10.5	FG	G	G		4	2.5	3.6	Crook (L)	Preserve	
623	Green Ash	<i>Fraxinus pennsylvanica</i>	9	F	F	FG		4	2.0	1.2	Bow (M) to northeast	Preserve	
624	Green Ash	<i>Fraxinus pennsylvanica</i>	8.5	F	F	FG		4	2.0	1.2	Bow (L) to north, crook (M), grape vine competition (M)	Preserve	
625	Green Ash	<i>Fraxinus pennsylvanica</i>	15	FG	F	FG		4	2.5	3.6	Lean (L), crook (M)	Preserve	
626	Basswood	<i>Tilia americana</i>	12, 10.5	FG	G	G		4	2.0	3.6	2 trees, sweep (L)	Preserve	
627	Manitoba Maple	<i>Acer negundo</i>	17	F	F	F		4	3.0	3.6	Bow (M) to west, crook (M), grape vine competition (L)	Preserve	
628	Basswood	<i>Tilia americana</i>	13	FG	G	G		4	3.0	3.6	Crook (M)	Preserve	
629	Black Walnut	<i>Juglans nigra</i>	17.5	G	G	F	20	4	2.5	3.6		Preserve	
630	Basswood	<i>Tilia americana</i>	21	FG	G	G		4	3.0	3.6	Co-dominance at 3m	Preserve	
631	Basswood	<i>Tilia americana</i>	11	FG	G	G		4	1.5	3.6	Bow (L)	Preserve	
632	Amur Maple	<i>Acer ginnala</i>	11, 9, 7	FG	G	FG		4	3.5	3.6	Union at base, crook (L)	Preserve	
633	Green Ash	<i>Fraxinus pennsylvanica</i>	8	F	G	FG		4	2.0	1.2	Bow (M) to north, crook (M)	Preserve	
634	Green Ash	<i>Fraxinus pennsylvanica</i>	7.5	F	G	FG		4	2.0	1.2	Crook (H), bow (L)	Preserve	
635	Green Ash	<i>Fraxinus pennsylvanica</i>	6.5	FG	G	FG		4	1.5	1.2	Crook (M)	Preserve	
636	Manitoba Maple	<i>Acer negundo</i>	8.5	F	G	FG		4	1.5	1.2	Crook (H), epicormic branches (H)	Preserve	
637	Manitoba Maple	<i>Acer negundo</i>	20	P	F	PF	30	4	3.0	3.6	Lean (L) to east, stem wound (H) at base, co-dominance at 2m, dead leader, epicormic branches (H)	Preserve	

638	Manitoba Maple	<i>Acer negundo</i>	15	PF	P	P	90	4	1.5	3.6	Stem wounds (H), missing bark, co-dominance at 2m, 1 stem dead	Preserve	
639	Green Ash	<i>Fraxinus pennsylvanica</i>	11	G	G	FG		4	1.5	3.6		Preserve	
640	Green Ash	<i>Fraxinus pennsylvanica</i>	9	G	G	G		4	1.0	1.2		Preserve	
641	Green Ash	<i>Fraxinus pennsylvanica</i>	9	G	G	G		4	1.5	1.2		Preserve	
642	Green Ash	<i>Fraxinus pennsylvanica</i>	9	G	G	G		4	1.0	1.2		Preserve	
643	Green Ash	<i>Fraxinus pennsylvanica</i>	11.5	F	G	G		4	2.0	3.6	Lean (M) to south, crook (M)	Preserve	
644	Green Ash	<i>Fraxinus pennsylvanica</i>	8	FG	G	G		4	1.0	1.2	Bow (L), crook (M)	Preserve	
645	Manitoba Maple	<i>Acer negundo</i>	9.5	FG	G	FG		4	2.0	1.2	Lean (L)	Preserve	
646	Manitoba Maple	<i>Acer negundo</i>	18.5	FG	G	F	20	4	3.0	3.6	Crook (M)	Preserve	
647	Green Ash	<i>Fraxinus pennsylvanica</i>	7	G	G	G		4	1.5	1.2		Preserve	
648	Green Ash	<i>Fraxinus pennsylvanica</i>	9	F	G	G		4	1.5	1.2	Cracked bark, Emerald Ash Borer (L)	Preserve	
649	Manitoba Maple	<i>Acer negundo</i>	9	FG	G	FG		4	2.0	1.2	Lean (L) to east, crook (M)	Preserve	
650	Green Ash	<i>Fraxinus pennsylvanica</i>	6	FG	G	G		4	2.0	1.2	Crook (H)	Preserve	
651	Norway Maple	<i>Acer platanoides</i>	17, 14.5	FG	G	G		4	3.5	3.6	Union at base	Preserve	
652	Green Ash	<i>Fraxinus pennsylvanica</i>	17	G	G	G		4	2.5	3.6		Preserve	
653	Basswood	<i>Tilia americana</i>	7	FG	G	G		4	1.5	1.2	Crook (M)	Preserve	
654	Basswood	<i>Tilia americana</i>	13	G	G	G		4	2.0	3.6		Preserve	
655	Green Ash	<i>Fraxinus pennsylvanica</i>	18	G	G	PF	30	4	2.0	3.6	Sparse crown (M), epicormic branches (H), Emerald Ash Borer (L)	Preserve	
656	Basswood	<i>Tilia americana</i>	28, 10	G	G	G		4	4.0	3.6	Union at base	Preserve	
657	Manitoba Maple	<i>Acer negundo</i>	7	FG	G	F		4	1.5	1.2	Bow (L) to east, crook (M)	Preserve	
658	Green Ash	<i>Fraxinus pennsylvanica</i>	8.5	G	G	G		4	1.0	1.2		Preserve	

659	Green Ash	<i>Fraxinus pennsylvanica</i>	9	F	G	F		4	1.0	1.2	Cracked bark, Emerald Ash Borer (M)	Preserve	
660	Manitoba Maple	<i>Acer negundo</i>	6	F	G	G		4	1.5	1.2	Bow (M) to east, crook (M)	Preserve	
661	Green Ash	<i>Fraxinus pennsylvanica</i>	13	F	G	F		4	2.0	3.6	Cracked bark, Emerald Ash Borer (L)	Preserve	
662	Green Ash	<i>Fraxinus pennsylvanica</i>	11.5, 7	G	G	FG		4	1.5	3.6	2 trees	Preserve	
663	Green Ash	<i>Fraxinus pennsylvanica</i>	11.5	F	G	PF	20	4	1.0	3.6	Crook (L), Emerald Ash Borer (M)	Preserve	
664	Green Ash	<i>Fraxinus pennsylvanica</i>	10	F	G	PF	30	4	1.0	3.6	Crook (L), Emerald Ash Borer (M)	Preserve	
665	Green Ash	<i>Fraxinus pennsylvanica</i>	15	P	P	P	80	4	1.5	3.6	Emerald Ash Borer (H)	Preserve	
666	Green Ash	<i>Fraxinus pennsylvanica</i>	8	F	G	F	20	4	1.5	1.2	Crook (M), Emerald Ash Borer (M)	Preserve	
667	Green Ash	<i>Fraxinus pennsylvanica</i>	9.5	FG	G	PF	30	4	1.0	1.2	Bow (L), Emerald Ash borer (M)	Preserve	
668	Green Ash	<i>Fraxinus pennsylvanica</i>	6	G	G	G		4	1.0	1.2		Preserve	
669	Green Ash	<i>Fraxinus pennsylvanica</i>	6.5	G	G	G		4	1.0	1.2		Preserve	
670	Basswood	<i>Tilia americana</i>	7	F	G	G		4	1.5	1.2	Crook (M)	Preserve	
671	Green Ash	<i>Fraxinus pennsylvanica</i>	8.5	G	G	G		4	1.0	1.2	Crook (L)	Preserve	
672	Basswood	<i>Tilia americana</i>	7	FG	G	G		4	1.5	1.2	Crook (M)	Preserve	
673	Green Ash	<i>Fraxinus pennsylvanica</i>	6	FG	G	G		4	1.0	1.2	Crook (L)	Preserve	
674	Basswood	<i>Tilia americana</i>	18, 7.5	FG	FG	G		4	2.5	3.6	Union at base, lean (L-M)	Remove	3
675	Green Ash	<i>Fraxinus pennsylvanica</i>	15	G	G	FG		4	2.5	3.6		Preserve	
676	Norway Maple	<i>Acer platanoides</i>	28, 19	FG	G	G		4	3.5	3.6	Co-dominance at 0.3m	Preserve	
677	Green Ash	<i>Fraxinus pennsylvanica</i>	9	G	G	G		4	1.5	1.2		Preserve	
678	Green Ash	<i>Fraxinus pennsylvanica</i>	9	F	G	G		4	1.5	1.2	Crack, Emerald Ash borer (L)	Preserve	

679	Green Ash	<i>Fraxinus pennsylvanica</i>	9	G	G	F		4	1	1.2		Preserve	
680	Green Ash	<i>Fraxinus pennsylvanica</i>	7	PF	G	G		4	1	1.2	Emerald Ash borer (M), crack	Preserve	
681	Manitoba Maple	<i>Acer negundo</i>	12.5, 11, 8, 7	F	G	G		4	2.5	3.6	Union at base	Preserve	
682	Manitoba Maple	<i>Acer negundo</i>	6-11 (avg. 8)	FG	G	G		4	2.5	3.6	Union at base with 8 stems	Remove	3
683	Norway Spruce	<i>Picea abies</i>	~25	FG	G	P	50	4	3	3.6	Previously tagged 6633, Lean (L), dead leader	Remove	1
684	Black Locust	<i>Robinia pseudoacacia</i>	12, 11, 11	FG	G	G		4	3	3.6	Previously tagged 187, union at 1m with included bark (M)	Remove	3
685	Freeman Maple	<i>Acer x freemanii</i>	11	G	G	G		4	1.5	3.6		Remove	3
686	Freeman Maple	<i>Acer x freemanii</i>	9.5	G	G	G		4	1.5	1.2		Remove	1
687	Weeping Willow	<i>Salix babylonica</i>	20-37 (avg. 33)	FG	G	G		4	6	4.8	Union at base with 7 stems	Preserve	
688	Manitoba Maple	<i>Acer negundo</i>	22	PF	F	G		4	3.5	3.6	Bow (M) to east, crook (M)	Remove	1
689	Manitoba Maple	<i>Acer negundo</i>	15	PF	F	FG		4	3	3.6	Lean (H) to east, stem wounds (L)	Remove	1
690	Manitoba Maple	<i>Acer negundo</i>	13.5	PF	G	G		4	2	3.6	Bow (M) to south, co-dominance at 1.6m	Preserve	
691	Weeping Willow	<i>Salix babylonica</i>	48.5, 37.5, 23	FG	G	FG		4	6	6.0	Union at base, epicormic branches (H)	Preserve	
692	Silver Maple	<i>Acer saccharinum</i>	51	F	G	FG		4	6	7.2	Stem wounds (M) at base, co-dominance at 4m	Injure	1
693	Silver Maple	<i>Acer saccharinum</i>	8-15 (avg. 11)	FG	G	G		4	3	3.6	Union at base with 7 stems	Preserve	
694	Manitoba Maple	<i>Acer negundo</i>	13-21 (avg. 16)	F	F	FG		4	4	3.6	Union at base with 5 stems, stem wounds (M), lean (L-M), sweep (L)	Preserve	
695	Freeman Maple	<i>Acer x freemanii</i>	5	F	G	FG		4	1.5	1.2	Lost leader at 1.8m, alternate leader growing	Preserve	

696	Green Ash	<i>Fraxinus pennsylvanica</i>	9,7	FG	G	FG		4	1.5	1.2	Union at base	Preserve	
697	Siberian Elm	<i>Ulmus pumila</i>	17	FG	G	G		4	2.5	3.6	Co-dominance at 3m, epicormic branches (M)	Injure	1
698	Willow	<i>Salix spp.</i>	4-13 (avg. 8)	F	FG	FG		4	3.5	3.6	Clump of 8 stems, epicormic branches (M)	Preserve	
699	Silver Maple	<i>Acer saccharinum</i>	36	F	G	FG		4	4	4.8	Stem wounds (M) at base, co-dominance at 3.5m	Injure	1
700	Silver Maple	<i>Acer saccharinum</i>	37.5	FG	G	FG		4	5	4.8	Co-dominance at 3.5m with 4 stems, epicormic branches (H)	Preserve	
701	Siberian Elm	<i>Ulmus pumila</i>	64	F	PF	F	20	4	5	8.4	Co-dominance at 1.8m with included bark (M), broken branches (H), stem wounds (L), epicormic branches (H)	Preserve	
702	Siberian Elm	<i>Ulmus pumila</i>	5.5	F	G	G		4	1.5	1.2	Bow (L), co-dominance at 2.5m, stem wounds (L)	Preserve	
703	Siberian Elm	<i>Ulmus pumila</i>	25, 18, 14	F	F	F	25	4	4	3.6	Union at 0.2m and 0.8m, epicormic branches (H), sparse crown (M)	Preserve	
704	Silver Maple	<i>Acer saccharinum</i>	35	F	FG	F		4	4	4.8	Sweep (M), epicormic branches (H), crook (M)	Preserve	
705	Siberian Elm	<i>Ulmus pumila</i>	20.5, 19.5, 14	F	FG	FG		4	4	3.6	Union at base, asymmetrical crown (M), lean (L), crook (M), epicormic branches (M)	Preserve	
706	Weeping Willow	<i>Salix babylonica</i>	52.5	FG	G	G		4	5	7.2	Lean (L), sweep (L)	Preserve	
707	White Spruce	<i>Picea glauca</i>	14	F	F	F	20	4	2	3.6	Pruning wounds (M), sweep (L), sparse crown (M)	Preserve	
708	Kentucky coffeetree	<i>Gymnocladus dioica</i>	7	G	G	G		4	1	1.2	Stem wounds (L)	Preserve	
709	White Spruce	<i>Picea glauca</i>	20	F	F	F	25	4	2.5	3.6	Stem wounds (L), pruning wounds (M), asymmetrical crown (L)	Preserve	
710	Norway Maple	<i>Acer platanoides</i>	33	FG	G	G		4	4	4.8	Sweep (L), co-dominance at 3m	Preserve	
711	White Spruce	<i>Picea glauca</i>	24	P	F	PF	40	4	2	3.6	Stem wounds (H)	Preserve	
712	Siberian Elm	<i>Ulmus pumila</i>	16.5	G	G	FG		4	3	3.6	Epicormic branches (M)	Preserve	
713	Siberian Elm	<i>Ulmus pumila</i>	14, 13	FG	G	FG		4	3	3.6	Co-dominance at 1.2m with included bark (M)	Preserve	

714	Siberian Elm	<i>Ulmus pumila</i>	18	FG	FG	FG		4	2	3.6	Co-dominance at 3m, asymmetrical crown (M)	Preserve	
715	Siberian Elm	<i>Ulmus pumila</i>	28	FG	G	G		4	3.5	3.6	Crook (M)	Preserve	
716	White Willow	<i>Salix alba</i>	11	F	F	FG		4	1.5	3.6	Crook (M), bow (M)	Preserve	
717	Green Ash	<i>Fraxinus pennsylvanica</i>	6.5	G	G	G		4	1	1.2		Preserve	
718	Siberian Elm	<i>Ulmus pumila</i>	13	FG	G	G		4	1.5	3.6	Union at 1.6m	Preserve	
719	Siberian Elm	<i>Ulmus pumila</i>	13.5	G	G	G		4	1.5	3.6		Preserve	
720	Green Ash	<i>Fraxinus pennsylvanica</i>	12.5	P	G	PF	25	4	1.5	3.6	Crack, Emerald Ash borer (M)	Preserve	
721	Siberian Elm	<i>Ulmus pumila</i>	18, 10	FG	G	FG		4	3	3.6	Union at 0.6m with included bark (L) , epicormic branches (M)	Preserve	
722	Siberian Elm	<i>Ulmus pumila</i>	22, 18	FG	G	FG		4	3.5	3.6	Union at 0.3m, crook (M)	Preserve	
723	White Elm	<i>Ulmus americana</i>	10	F	G	G		4	1.5	3.6	Lost leader at 1.6m, coppice growth (M)	Preserve	
724	Chokecherry	<i>Prunus virginiana</i>	~13, 8	F	G	G		4	2.5	3.6	Growing beside rock, union at base	Preserve	
725	Manitoba Maple	<i>Acer negundo</i>	14.5	FG	G	G		4	2	3.6	Growing beside rock, crook (L)	Preserve	
726	Eastern Cottonwood	<i>Populus deltoides</i>	50.5	F	P	P	50	4	5	6.0	Crack, dead leader, deadwood	Preserve	
727	Eastern Cottonwood	<i>Populus deltoides</i>	41	P	P	P	75	4	4	6.0	Canker (L), crack, deadwood	Preserve	
728	Sugar Maple	<i>Acer saccharum</i>	18.5	G	G	G		4	3.5	3.6	Memorial tree	Preserve	
729	Sugar Maple	<i>Acer saccharum</i>	14	G	G	G		4	2	3.6		Preserve	
730	Sugar Maple	<i>Acer saccharum</i>	10	G	G	G		4	2	3.6	Stem wounds (L)	Preserve	
731	Sugar Maple	<i>Acer saccharum</i>	9.5	G	G	G		4	2	1.2		Preserve	
732	White Spruce	<i>Picea glauca</i>	39	G	G	F	15	4	3	4.8	Exposed roots (M)	Preserve	
733	White Spruce	<i>Picea glauca</i>	31	G	G	F	15	4	3.5	4.8	Exposed roots (L), sparse crown (M)	Preserve	
734	Norway Maple	<i>Acer platanoides</i>	21	G	G	G		4	4	3.6		Preserve	
735	Sweet Cherry	<i>Prunus avium</i>	24	FG	G	G		4	4	3.6	L(L) to east, sweep (L), crook (M)	Preserve	
736	Amur Maple	<i>Acer ginnala</i>	13.5, 13, 11, 9	FG	G	F	20	4	2	3.6	Union at base, 11cm stem dead	Preserve	
737	Amur Maple	<i>Acer ginnala</i>	7	FG	G	P	60	4	1.5	1.2	Stem wounds (L), crook (M), dead leader	Preserve	
738	Green Ash	<i>Fraxinus pennsylvanica</i>	26	PF	F	PF	60	4	3.5	3.6	Co-dominance at 3m, 1 stem dead	Preserve	

739	Green Ash	<i>Fraxinus pennsylvanica</i>	13	FG	G	FG		4	2.5	3.6	Crook (M)	Preserve	
740	Weeping Willow	<i>Salix babylonica</i>	75	F	FG	FG		4	7	9.6	Co-dominance at 2m, stem wounds (L), epicormic branches (H)	Preserve	
741	Green Ash	<i>Fraxinus pennsylvanica</i>	36.5	G	G	FG		4	4.5	4.8	Previously tagged but not readable, green paint	Preserve	
742	Amur Maple	<i>Acer ginnala</i>	13-18 (avg. 16)	PF	F	F	20	4	4	3.6	Union at base with 5 stems, stem wounds (M), crook (M), epicormic branches (M), dead branches (L)	Preserve	
743	Amur Maple	<i>Acer ginnala</i>	6-15 (avg. 12)	FG	F	F	25	4	3.5	3.6	Previously tagged 151, union at base with 7 stems, crook (M), dead branches (L)	Preserve	
744	Amur Maple	<i>Acer ginnala</i>	10, 8	F	F	F		4	3.5	3.6	Union at base, lean (H) to north, stem wounds (L)	Preserve	
745	Amur Maple	<i>Acer ginnala</i>	6-13 (avg. 11)	F	FG	FG	10	4	3	3.6	Previously tagged 152, union at base with 6 stems, crook (M), epicormic branches (M)	Preserve	
746	Amur Maple	<i>Acer ginnala</i>	8-11 (avg. 9)	FG	G	FG		4	3	3.6	Union at base with 8 stems, crook (M), epicormic branches (M)	Preserve	
747	Amur Maple	<i>Acer ginnala</i>	12, 7	F	F	FG		4	2	3.6	Union at base, sweep (M), crook (M)	Preserve	
748	Amur Maple	<i>Acer ginnala</i>	7	PF	F	F		4	1.5	1.2	Union at base, 1 stem removed, lean (M), crook (M)	Preserve	
749	Amur Maple	<i>Acer ginnala</i>	8.5, 6	PF	F	F	20	4	1.5	3.6	Union at base with 4 stems but 2 stems lost, crack, bow (M)	Preserve	
750	Amur Maple	<i>Acer ginnala</i>	6-12 (avg. 9)	FG	G	FG		4	2	3.6	Previously tagged 154, union at base with 5 stems, crook (M)	Preserve	
751	Amur Maple	<i>Acer ginnala</i>	6-9 (avg. 8)	FG	G	G		4	2.5	3.6	Union at base with 4 stems	Preserve	
752	Amur Maple	<i>Acer ginnala</i>	7-12 (avg. 9)	F	G	FG		4	2	3.6	Union at 0.6m with 3 stems	Preserve	
753	Amur Maple	<i>Acer ginnala</i>	4-16 (avg. 10)	PF	G	FG		4	3	3.6	Union at 0.3m and 0.5m with 8 stems, crack, stem wounds (M), epicormic branches (M), previously tagged 156	Preserve	

754	Amur Maple	<i>Acer ginnala</i>	6-12 (avg. 8)	F	G	FG		4	2	3.6	Union at base with 6 stems, crack	Preserve	
755	Russian Olive	<i>Elaeagnus angustifolia</i>	~10	P	P	PF		4	3	3.6	Lean (H) to south, asymmetrical crown (H)	Preserve	
756	Russian Olive	<i>Elaeagnus angustifolia</i>	17	P	P	P	75	4	2.5	3.6	Lean (H) to south, stem wounds (H)	Preserve	
757	Russian Olive	<i>Elaeagnus angustifolia</i>	17	P	P	P	40	4	2.5	3.6	Lean (H) to south, crook (H), stem wounds (H) at base	Preserve	
758	White Willow	<i>Salix alba</i>	15.5	P	P	P	80	4	2	3.6	Lean (M) to north, crook (H)	Preserve	
759	White Willow	<i>Salix alba</i>	13.5	PF	G	P	80	4	1.5	3.6	Crook (H), sweep (M), grape vine competition (H)	Preserve	
760	White Willow	<i>Salix alba</i>	6-16 (avg. 12)	FG	G	FG		4	3	3.6	Union at base	Preserve	
761	Manitoba Maple	<i>Acer negundo</i>	16-20 (avg. 18)	PF	F	FG		4	3	3.6	Union at base, lean (H) to south with 3 stems	Preserve	
762	Basswood	<i>Tilia americana</i>	9.5	G	G	G		4	2	1.2	Lean (L)	Preserve	
763	White Willow	<i>Salix alba</i>	11, 9, 7	F	F	PF	30	4	2.5	3.6	Union at base, epicormic branches (H)	Preserve	
764	Basswood	<i>Tilia americana</i>	7, 6.5	FG	G	G		4	1.5	3.6	Union at base	Preserve	
765	Sugar Maple	<i>Acer saccharum</i>	12.5	G	G	G		4	1.5	3.6		Preserve	
766	White Willow	<i>Salix alba</i>	10, 7	F	FG	FG		4	2	3.6	Bow (M), union at base, epicormic branches (H)	Preserve	
767	Manitoba Maple	<i>Acer negundo</i>	25	F	G	F	20	4	3	3.6	Lean (M) to south, co-dominance at 1.5m with included bark (M)	Preserve	
768	Basswood	<i>Tilia americana</i>	8	G	G	G		4	1.5	1.2		Preserve	
769	Basswood	<i>Tilia americana</i>	7	G	G	G		4	1	1.2		Preserve	
770	White Willow	<i>Salix alba</i>	7.5	FG	G	G		4	1.5	1.2	Lean (L)	Preserve	
771	Sugar Maple	<i>Acer saccharum</i>	12.5	G	G	G		4	1.5	3.6	Previously tagged 173	Preserve	
772	Basswood	<i>Tilia americana</i>	6.5	G	G	G		4	1	1.2		Preserve	
773	White Willow	<i>Salix alba</i>	12-13	FG	G	PF	30	4	2.5	3.6	Previously tagged 174, union at base, lean (L) to north	Preserve	
774	Basswood	<i>Tilia americana</i>	9.5, 9	FG	G	G		4	2	3.6	Union at base, lean (L)	Preserve	

775	Eastern Cottonwood	<i>Populus deltoides</i>	65	P	P	P	90	4	4	8.4	Only epicormic branches (L) alive, top removed	Remove (condition)	1
776	Black Walnut	<i>Juglans nigra</i>	9	G	G	G		4	2	1.2		Preserve	
777	White Willow	<i>Salix alba</i>	42, 21	F	F	PF	40	4	5	6.0	Union at base	Preserve	
778	White Willow	<i>Salix alba</i>	14.5, 14	F	F	P	60	4	2.5	3.6	Previously tagged 6602, co-dominance at 1.2m with included bark (M), bow (M) to west	Preserve	
779	Norway Maple	<i>Acer platanoides</i>	38	G	G	G		4	4.5	4.8	Exposed roots (M)	Preserve	
780	White Willow	<i>Salix alba</i>	20, 15	F	F	F	20	4	2.5	3.6	Union at base, crook (M)	Preserve	
781	Silver Maple	<i>Acer saccharinum</i>	23	FG	G	G		4	3	3.6	Co-dominance at 2.5m	Remove	3
782	Silver Maple	<i>Acer saccharinum</i>	23.5	FG	G	G		4	3.5	3.6	Co-dominance at 2.5m with included bark (L)	Remove	3
783	Silver Maple	<i>Acer saccharinum</i>	23	PF	G	F	20	4	3	3.6	Frost crack (H), dead branches (L)	Injure	1
784	Scots Pine	<i>Pinus sylvestris</i>	22, 20.5	FG	G	F		4	4	3.6	Co-dominance at 0.5m with included bark (L), sparse crown (M)	Preserve	
785	Scots Pine	<i>Pinus sylvestris</i>	16	FG	FG	F		4	2	3.6	Sweep (L), lean (L), asymmetrical crown (M)	Preserve	
786	Basswood	<i>Tilia americana</i>	31	G	G	G		4	4	4.8	Sweep (L)	Preserve	
787	Scots Pine	<i>Pinus sylvestris</i>	30.5	FG	G	FG		4	3	4.8	Union at 1.6m	Preserve	
788	Scots Pine	<i>Pinus sylvestris</i>	18.5	FG	G	F		4	2	3.6	Crook (L)	Preserve	
789	Freeman Maple	<i>Acer x freemanii</i>	10	G	G	G		4	2	3.6		Injure	1
790	Silver Maple	<i>Acer saccharinum</i>	23	P	F	FG	30	4	3	3.6	Frost crack (H), lost leader	Remove	1
791	Little-leaf Linden	<i>Tilia americana</i>	21	FG	G	G		4	3	3.6	Previously tagged 6607, co-dominance at 2m	Remove	3
792	Hackberry	<i>Celtis occidentalis</i>	5	G	G	G		4	1.5	1.2		Remove	1
793	Hackberry	<i>Celtis occidentalis</i>	7	G	G	G		4	1.5	1.2		Remove	1
794	Silver Maple	<i>Acer saccharinum</i>	36.5	FG	G	G		4	5	4.8	Co-dominance at 3m	Remove	3
795	Amur Maple	<i>Acer ginnala</i>	7-22 (avg. 14)	F	G	FG		4	4	3.6	Previously tagged 185, union at base with 10 stems, lean (H)	Remove	3
796	Little-leaf Linden	<i>Tilia americana</i>	18	FG	G	F	20	4	2	3.6	Sweep (L)	Remove	3
797	Yellow wood	<i>Cladrastis lutea</i>	6.5	G	G	PF	30	4	1.5	1.2	Dead leader	Remove	1
798	Dawn Redwood	<i>Metasequoia glyptostroboides</i>	7	G	G	FG		4	1.5	1.2		Preserve	

799	Little-leaf Linden	<i>Tilia americana</i>	17	FG	G	FG		4	2	3.6	Co-dominance at 2m with included bark (M), epicormic branches (H)	Injure	1
800	Valley Forge Elm	<i>Ulmus americana</i> 'Valley Forge'	13	G	G	G		4	2	3.6		Preserve	
460	Bur Oak	<i>Quercus macrocarpa</i>	6.5	G	G	G		4	1	1.2		Preserve	
461	Valley Forge Elm	<i>Ulmus americana</i> 'Valley Forge'	12.5	G	G	G		4	2	3.6		Preserve	
462	Bur Oak	<i>Quercus macrocarpa</i>	6.5	G	G	G		4	1	1.2		Preserve	
463	Freeman Maple	<i>Acer x freemanii</i>	15	G	G	G		4	3	3.6		Preserve	
464	Valley Forge Elm	<i>Ulmus americana</i> 'Valley Forge'	12	FG	G	G		4	2.5	3.6	Co-dominance at 1.4m	Preserve	
465	Green Ash	<i>Fraxinus pennsylvanica</i>	25	G	G	F	20	4	3	3.6	Previously tagged 6628	Preserve	
466	White Oak	<i>Quercus alba</i>	7	G	G	G		4	1.5	1.2		Preserve	
467	Eastern Cottonwood	<i>Populus deltoides</i>	55	F	F	P	40	4	5	7.2	Co-dominance at 3m with vertical crack, larger stem has dead leader	Injure	1
468	White Spruce	<i>Picea glauca</i>	20	G	G	F		4	2	3.6	Previously tagged 6621	Preserve	
469	Catalpa	<i>Catalpa speciosa</i>	6.5	G	G	G		4	1.5	1.2	Stem wounds (L)	Preserve	
470	White Spruce	<i>Picea glauca</i>	23	G	G	FG		4	2.5	3.6		Preserve	
471	White Spruce	<i>Picea glauca</i>	23.5	F	G	F	15	4	2.5	3.6	Sap oozing	Preserve	
472	Little-leaf Linden	<i>Tilia americana</i>	24	G	G	G		4	3	3.6		Preserve	
473	White Spruce	<i>Picea glauca</i>	27, 17, 15	FG	G	F		4	3.5	3.6	Union at 0.5m and 1m	Preserve	
474	White Spruce	<i>Picea glauca</i>	31	FG	G	F	20	4	3	4.8	Co-dominance at 1.6m	Injure	1
475	Honey Locust (shademaster)	<i>Gleditsia triacanthos</i> 'inermis' cv.	8.5	G	G	G		4	2	1.2		Preserve	
476	Honey Locust (shademaster)	<i>Gleditsia triacanthos</i> 'inermis' cv.	7	G	G	G		4	1.5	1.2		Preserve	
477	Austrian Pine	<i>Pinus nigra</i>	30	G	G	G		4	3.5	4.8		Injure	0
478	Austrian Pine	<i>Pinus nigra</i>	33	F	G	FG		4	3.5	4.8	Co-dominance at 2m, poor form, crook (L)	Injure	1
479	Eastern Cottonwood	<i>Populus deltoides</i>	47.5	FG	G	P	40	4	6	6.0	Sweep (L), dead leader, deadwood	Remove (condition)	1
480	Little-leaf Linden	<i>Tilia americana</i>	35	FG	G	G		4	5	4.8	Co-dominance at 2m	Preserve	

481	Little-leaf Linden	<i>Tilia americana</i>	16.5	FG	FG	FG	15	4	2.5	3.6	Asymmetrical crown (M), crook (L)	Preserve	
482	Little-leaf Linden	<i>Tilia americana</i>	24.5	FG	G	FG		4	2.5	3.6	Sweep (L)	Preserve	
483	Little-leaf Linden	<i>Tilia americana</i>	31	FG	G	G		4	4	4.8	Sweep (L), co-dominance at 2m, crook (L)	Preserve	
484	Freeman Maple	<i>Acer x freemanii</i>	18.5	G	G	G		4	2.5	3.6	Previously tagged 6614	Preserve	
485	Weeping Willow	<i>Salix babylonica</i>	51.5	FG	G	FG		4	6	7.2	Co-dominance at 3m, broken branches (L)	Preserve	
486	White Spruce	<i>Picea glauca</i>	20	G	G	F	20	4	2	3.6	Previously tagged 6613	Preserve	
487	Weeping Willow	<i>Salix babylonica</i>	41.5	FG	G	F	10	4	5	6.0	Crook (M)	Preserve	
488	Basswood	<i>Tilia americana</i>	19	FG	G	F		4	3.5	3.6	Crook (L)	Preserve	
489	Basswood	<i>Tilia americana</i>	8.5	G	G	G		4	1.5	1.2		Preserve	
490	Little-leaf Linden	<i>Tilia americana</i>	7	G	G	G		4	1.5	1.2		Preserve	
491	White Spruce	<i>Picea glauca</i>	24	G	G	F	20	4	2	3.6	Previously tagged 176	Preserve	
492	White Spruce	<i>Picea glauca</i>	24	G	G	F	20	4	3	3.6	Previously tagged 177	Preserve	
493	White Spruce	<i>Picea glauca</i>	21	G	G	F	15	4	2.5	3.6	Previously tagged 6611	Preserve	
494	White Spruce	<i>Picea glauca</i>	18.5	G	G	F		4	2	3.6	Previously tagged 6610	Injure	1
495	White Spruce	<i>Picea glauca</i>	18	G	G	F		4	2	3.6		Preserve	
496	Kentucky coffeetree	<i>Gymnocladus dioicus</i>	16.5	G	G	G		4	2.5	3.6	Previously tagged 6609	Injure	1
497	Amur Maple	<i>Acer ginnala</i>	6-21 (avg. 13)	F	F	PF	30	4	4	3.6	Union at base with 8 stems, stem wounds (M), crack, dead branches (M)	Injure	1
												TOTAL	52

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 in radius	(m)
mTPZ	minimum Tree Protection Zone	(m)
Comp.	Compensation	
~ = Estimate, (VL) = very light, (L) = light, (M) = moderate, (H) = heavy		