

APPENDIX J

TREE ASSESSMENT REPORT

ADELAIDE STREET NORTH MUNICIPAL CLASS ENVIRONMENTAL
ASSESSMENT

FROM FANSHAWE PARK ROAD EAST TO SUNNINGDALE ROAD EAST
LONDON, ONTARIO

Prepared

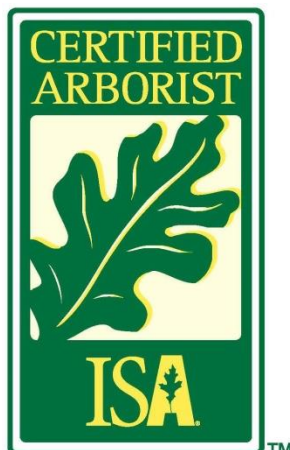
NOVEMBER 2019

Revised

OCTOBER 2020

Prepared by

MICHELLE PEETERS, ISA CERTIFIED ARBORIST ON-2129A



Michelle Peeters
ISA Certified Arborist®
ON-2129A

MICHELLE PEETERS
LANDSCAPE ARCHITECT
BLA, DIP. HORT. TECH, QALA, ISA CERTIFIED ARBORIST



RON KOUDYS
LANDSCAPE
ARCHITECTS

368 OXFORD STREET EAST, LONDON
ONTARIO, CANADA N6A 1V7
E: MICHELLE@RKLA.CA W: RKLA.CA
T: 519-667-3322 F: 519-645-2474

RKLA Project # 18-191

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INTRODUCTION

Ron Koudys Landscape Architects Inc. (RKLA) was retained by Parsons to conduct a tree inventory and assessment in conjunction with the proposed widening and upgrading of Adelaide Street North and associated infrastructure works in London, Ontario.

This report outlines the potential impacts of the preferred road design concept on trees within or close to the limits of the preferred road design concept and makes recommendations for tree removal and preservation strategies.

In total, 151 trees were identified, reviewed, and are addressed in this report.

This report should be read in conjunction with the plan and profile drawings for the preferred road design concept that has been prepared for the project.

EXECUTIVE SUMMARY

No rare or endangered species were observed during the tree inventory. All trees observed are common and typical of the varied current land uses.

Species Breakdown

The following list outlines the species and quantity of each species identified in this inventory.

23	<i>Acer platanoides</i>	3	<i>Pyrus</i> spp
13	<i>Picea pungens</i> var. <i>glauca</i>	3	<i>Quercus rubra</i>
12	<i>Acer freemanii</i>	3	<i>Syringa reticulata</i> 'Ivory Silk'
12	<i>Gleditsia triacanthos</i> var. <i>inermis</i>	3	<i>Ulmus</i> spp.
9	<i>Celtis occidentalis</i>	2	<i>Acer campestre</i>
7	<i>Pinus nigra</i>	2	<i>Aesculus hippocastanum</i>
6	<i>Picea abies</i>	1	<i>Acer negundo</i>
6	<i>Tilia cordata</i>	1	<i>Betula papyrifera</i>
5	<i>Acer rubrum</i>	1	<i>Catalpa speciosa</i>
5	<i>Acer saccharinum</i>	1	unknown
5	<i>Pinus sylvestris</i>	1	<i>Liriodendron tulipifera</i>
4	<i>Fraxinus</i> spp	1	<i>Phellodendron amurense</i>
4	<i>Picea omorika</i>	1	<i>Quercus alba</i>
4	<i>Populus tremuloides</i>	1	<i>Salix babylonica</i>
4	<i>Sorbus aucuparia</i>	1	<i>Salix</i> spp
3	<i>Acer saccharum</i>	1	<i>Zelkova serrata</i>
3	<i>Populus deltoides</i>		

Tree Ownership Breakdown

The following list outlines the general ownership of the 151 trees identified.

City owned trees	61
Privately owned trees	85
Boundary trees (straddling line between private property and City property)	5
Total tree quantity	151

Tree Removal and Preservation Recommendations Summary

Trees to be removed	City owned trees	55 (tree id #: 9, 12-16, 21, 22, 26, 29, 30, 32-34, 38, 42-45, 50, 51, 54-66, 69, 73, 76, 79, 81, 88, 89, 98, 116, 118, 119, 121, 122, 126, 129, 137 & 147-151)
	Privately owned trees*	6 (tree id #: 46-48, 87, 139 & 140)
	Boundary trees*	2 (tree id #: 24 and 142)
Trees to be preserved	City owned trees	6 (tree id#: 35, 67, 68, 95, 96 & 97)
	Privately owned trees	79 (tree id #: 1-8, 10, 11, 17-20, 23, 25, 27, 28, 31, 36, 37, 39, 40, 41, 49, 52, 53, 70, 71, 72, 74, 75, 77, 78, 80, 82-86, 90, 91, 92, 94, 99-111, 113, 114, 115, 117, 120, 123, 124, 125, 127, 128, 130-136, 138, 141, 143, 145 & 146)
	Boundary trees	3 (tree id#: 93, 112 & 144)

*Consent is required from private landowners to remove privately owned trees and boundary trees

Total number of trees to be removed 63

Total number of trees to be preserved 88

Note that this arborist report has been prepared using the latest drawings and information provided by the client. Any subsequent design or site plan changes affecting trees may require revisions to this report. Any new information or drawings are to be provided to RCLA prior to report submission to planning authorities.

ASSIGNMENT & SCOPE

The scope of this tree inventory and assessment is Adelaide Street North from Fanshawe Park Road East to 350m north of Sunningdale Road East, and Sunningdale Road East from Blackwater Road west of Adelaide Street North to Stoney Creek Community Centre Entrance east of Adelaide Street North. See figure 1.

Our firm was retained by Parsons to undertake an assessment of the existing trees located within the outlined scope to inform design decisions and establish a preservation strategy and a removals plan for the existing trees within the City ROW and any trees adjacent to the ROW on private property that may be affected by the preferred road design concept.

The report outlines specific trees to preserve; trees to remove; and recommendations for pre-construction, the construction period, and post-construction to mitigate potential construction impacts.

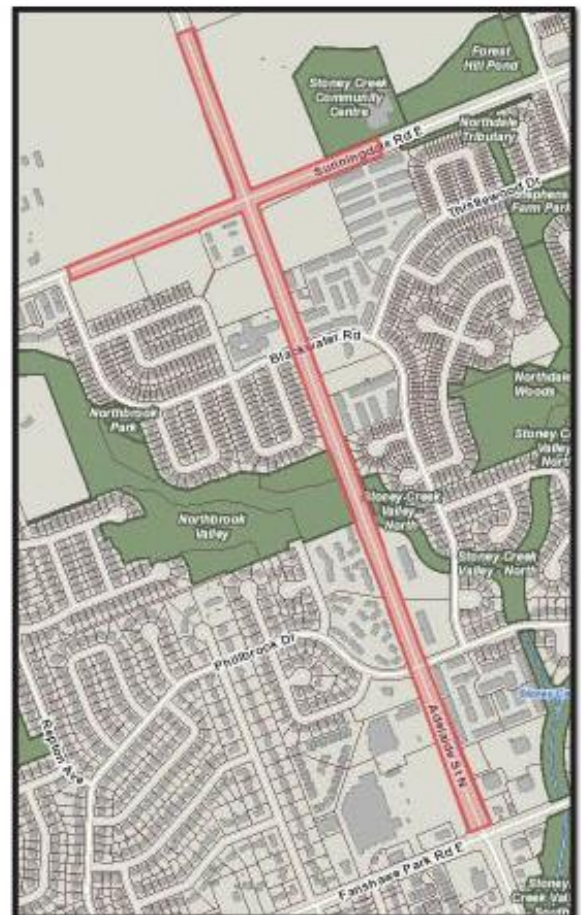


Figure 1 - scope of inventory
Not to scale

METHODOLOGY & HEALTH ASSESSMENT

Field work was completed on September 28, 2018 and October 22, 2019 by RKLA staff member Michelle Peeters, ISA certified arborist ON 2129A. Trees were assessed using the standard ISA evaluation criteria based upon tree vigour data, a detailed site-examination, and a review of the preferred road design concept plan and profile. The base plan and topographical survey were supplied Parsons. A comprehensive inventory of all trees ≥ 10 cm DBH (diameter at breast height) within the scope of service was completed. Trees were NOT tagged. Each tree was assigned a number which is identified in the table below and on the tree preservation plan. Tree numbers used include 1 through 151.

The following information was recorded for each tree:

- Species
- Diameter at breast height (DBH) (centimeters)
- Crown radius (meters)
- Crown Condition (overall general vigour of crown)
- Structural Condition (good, fair, poor)
- General Comments

The tree data collected was analyzed in conjunction with the preferred road design concept. This information was synthesized to make recommendations on which trees to preserve, which trees to remove and recommendations for preconstruction, during construction, and post construction strategies for minimizing damage for trees to be preserved.

Health Assessment Criteria

Trees were assessed following accepted arboricultural techniques and best practices using a limited visual inspection that included a 360 degree visual examination of the above-ground parts of each tree for structural defects (including cavities and wounds), scars, external indicators of internal decay, evidence of insect presence, discoloured or deformed foliage, canopy and root distribution, and the overall condition of the tree. Evaluation of tree health was based on visible tree health indicators including live buds, foliage condition, deadwood, structural defects, form, and signs of disease or insect infestation. Quantitative health assessments included in the inventory are explained here:

Crown Condition Classification

- 5 Healthy: less than 10% crown decline
- 4 Slight decline: 11% - 30% crown decline
- 3 Moderate decline: 31% - 60% crown decline
- 2 Severe decline: 61% - 90% crown decline
- 1 Dead

Structural Condition Classification

Good: Defects if present are minor (e.g. twig dieback, small wounds); defective tree part is small (e.g. 5-8 cm diameter limb) providing little if any risk.

Fair: Defects are numerous or significant (e.g. dead scaffold limbs); defective parts are moderate in size (e.g. limb greater than 5-8 cm in diameter).

Poor: Defects are severe (trunk cavity in excess of 50%); defective parts are large (e.g. majority of crown).

Dead: Tree exhibits no signs of life.

Critical Root Zones and Tree Preservation Barriers

The critical root zone of a tree is the portion of the root system that is the minimum necessary to maintain tree vitality and stability. Critical root zones are commonly prescribed by municipal bylaws based solely on DBH and/or drip line, and are typically expressed as a circular shape around the tree. There are a number of other factors, however, that are considered when establishing a critical root zone, particularly in a streetscape setting where there are physical barriers such as sidewalks and curbs that have shaped and limited typical root development patterns.

Factors that inform location and extent of a tree preservation barriers to protect the critical root zone include: species tolerance to root loss and other construction impacts (as established by authoritative resources and professional experience), tree trunk size (DBH), tree health and vigour, structural condition, landscape context, soil type, moisture availability, topography, ground cover, crown size and balance (drip line), current physical root restrictions, visible root arrangement, relationship to neighbouring trees, relationship between tree and proposed construction, type of proposed construction, etc.

Critical root zones will be protected in the field with tree preservation barriers.

INVENTORY DATA AND PRESERVATION/REMOVAL RECOMMENDATIONS

The following data was collected on September 27, 2018 (trees 1 - 138), and on October 22, 2019 (trees 139 - 151).

Recommendations are based on a combination of tree data and requirements of the preferred road design concept and water main location.

Grey indicates recommended removal.

GENERAL INFORMATION				SIZE		HEALTH			RECOMMENDATION		
ID #	BOTANICAL NAME	COMMON NAME	LOCATION	DBH (cm) ~ = approx	CANOPY RADIUS (m)	CROWN CONDITION	STRUCTURAL CONDITION	COMMENTS	PROPOSED ACTION	RATIONALE	CONSENT AND PRESERVATION REQUIREMENTS
1	<i>Acer saccharum</i>	Sugar Maple	1537 Adelaide St N	27	3.5	5	GOOD	minor dieback, buttressing trunk, no root flare	preserve	Private property, no expected construction impacts	
2	<i>Quercus rubra</i>	Red Oak	1537 Adelaide St N	17	3	1	POOR	dead	preserve - inform owner of dead tree and recommend removal	Private property, no expected construction impacts	
3	<i>Quercus rubra</i>	Red Oak	1537 Adelaide St N	23	3.5	5	GOOD	full form	preserve	Private property, no expected construction impacts	
4	<i>Picea abies</i>	Norway Spruce	600 Fanshawe Park Rd E	-40	4	5	GOOD	elevated root plate	preserve	Private property, no expected construction impacts	
5	<i>Picea abies</i>	Norway Spruce	600 Fanshawe Park Rd E	-40	4	5	GOOD	elevated root plate	preserve	Private property, no expected construction impacts	

6	<i>Picea abies</i>	Norway Spruce	600 Fanshawe Park Rd E	-40	4	5	GOOD	elevated root plate	preserve	Private property, no expected construction impacts	
7	<i>Picea abies</i>	Norway Spruce	600 Fanshawe Park Rd E	-40	4	5	GOOD	elevated root plate	preserve	Private property, no expected construction impacts	
8	<i>Picea abies</i>	Norway Spruce	600 Fanshawe Park Rd E		4	5	GOOD	elevated root plate	preserve	Private property, no expected construction impacts	
9	<i>Gleditsia triacanthos var. inermis</i>	Honeylocust	City ROW	25	3	5	GOOD	in boulevard	remove	direct conflict with west WM corridor	N/A
10	<i>Acer platanoides 'Royal Red'</i>	Royal Red Norway Maple	600 Fanshawe Park Rd E	11	1.5	5	POOR	metal stakes, girdled from stake wire at 50cm	preserve - inform owner of poor condition and recommend removal	Private property, no expected construction impacts	
11	<i>Picea abies</i>	Norway Spruce	600 Fanshawe Park Rd E	88	4	4	GOOD	limbed up to 4m, pruned, lean towards west, uneven crown	preserve	Private property, no expected construction impacts	
12	<i>Gleditsia triacanthos var. inermis</i>	Honeylocust	City ROW	21	4	5	GOOD	boulevard tree, hydro pruned	remove	direct conflict with WM west corridor	N/A
13	<i>Ulmus spp.</i>	Elm	City ROW	30	4	5	GOOD	boulevard tree, exposed roots	remove	direct conflict with west WM corridor	N/A
14	<i>Celtis occidentalis</i>	Hackberry	City ROW	9	1	5	GOOD	boulevard tree	remove	direct conflict with west WM corridor	N/A
15	<i>Acer saccharinum</i>	Silver Maple	City ROW	13	2	4	FAIR	boulevard tree, slight lean towards road, uneven crown, girdling roots	remove	direct conflict with west WM corridor	N/A
16	<i>Ulmus spp.</i>	Elm	City ROW	25	3.5	5	GOOD	boulevard tree, scars from pruning cuts, insect damage on leaves	remove	direct conflict with west WM corridor	N/A
17	<i>Gleditsia triacanthos var. inermis</i>	Honeylocust	600 Fanshawe Park Rd E	21	4	5	GOOD	on slope, excellent	preserve	Private property, minor construction impacts expected	
18	<i>Gleditsia triacanthos var. inermis</i>	Honeylocust	600 Fanshawe Park Rd E	24	4	5	GOOD	on slope, excellent	preserve	Private property, minor construction impacts expected	
19	<i>Gleditsia triacanthos var. inermis</i>	Honeylocust	1595 Adelaide St N	23	4.5	5	GOOD	on slope with rocks on low side, excellent	preserve	Private property, minor construction impacts expected	
20	<i>Gleditsia triacanthos var. inermis</i>	Honeylocust	1595 Adelaide St N	26	4.5	5	GOOD	on slope with rocks on low side, excellent	preserve	Private property, minor construction impacts expected	
21	<i>Quercus alba</i>	White Oak	City ROW	31	4	4	GOOD	boulevard tree, scaffold branch almost equal to main stem, circling roots on street side	remove	direct conflict with proposed road alignment	N/A
22	<i>Acer saccharinum</i>	Silver Maple	City ROW	29	5	5	GOOD	boulevard tree, dense leaves and buds, bulbous base	remove	direct conflict with proposed road alignment	N/A
23	<i>Picea pungens var. glauca</i>	Colorado Blue Spruce	1595 Adelaide St N	29	2.5	3	FAIR	on slope, rocks at base, general decline from the top down	preserve	Private property, minor construction impacts expected	
24	<i>Picea pungens var. glauca</i>	Colorado Blue Spruce	BOUNDARY - 1595 Adelaide St N and City ROW	9	1	1	POOR	dead, on slope, rocks at base	remove	condition and proximity to pedestrian path	consent to remove boundary tree required

25	<i>Picea pungens var. glauca</i>	Colorado Blue Spruce	1595 Adelaide St N	23	3	2	GOOD	on slope, rocks at base, significant decline	preserve, inform owner of poor condition and recommend removal	Private property, minor construction impacts expected, poor overall condition	
26	<i>Celtis occidentalis</i>	Hackberry	City ROW	25	4.5	5	GOOD	minor epicormic growth from trunk	remove	direct conflict with proposed road alignment	N/A
27	<i>Tilia cordata</i>	Littleleaf Linden	1593 Adelaide St N	25	4	5	GOOD	slight slope, rocks at base	preserve	Private property, minor construction impacts expected	
28	<i>Tilia cordata</i>	Littleleaf Linden	1593 Adelaide St N	28	4	2	POOR	included bark at primary union	preserve, inform owner of poor condition and recommend removal	Private property, minor construction impacts expected, poor overall condition	
29	<i>Acer saccharum</i>	Sugar Maple	City ROW	18	2	5	FAIR	boulevard tree, narrow form, major defects at base, mechanical damage	remove	direct conflict with proposed road alignment	N/A
30	<i>Quercus rubra</i>	Red Oak	City ROW	25	4	5	GOOD	boulevard tree	remove	conflict with proposed road alignment	N/A
31	<i>Picea pungens var. glauca</i>	Colorado Blue Spruce	1593 Adelaide St N	30	3	5	GOOD	in garden	preserve	Private property, minor construction impacts expected	
32	<i>Gleditsia triacanthos var. inermis</i>	Honeylocust	City ROW	30	5	5	GOOD	boulevard tree, exposed roots, minor interior dieback	remove	direct conflict with proposed road alignment	N/A
33	<i>Gleditsia triacanthos var. inermis</i>	Honeylocust	City ROW	26	5	5	GOOD	boulevard tree, exposed roots, minor interior dieback	remove	direct conflict with proposed road alignment	N/A
34	<i>Gleditsia triacanthos var. inermis</i>	Honeylocust	City ROW	31	5	5	GOOD	boulevard tree, low scaffold on west side	remove	direct conflict with proposed road alignment	N/A
35	<i>Acer platanoides 'Emerald Queen'</i>	Emerald Queen Norway Maple	City ROW	28	4.5	5	GOOD	clustered union, minor bowed trunk	preserve	Construction impacts expected	
36	<i>Acer platanoides</i>	Norway Maple	2081 Philbrook Drive	35	5	5	GOOD	exposed girdled roots, in garden	preserve	Private property, minor construction impacts expected	
37	<i>Catalpa speciosa</i>	Catalpa Tree	2081 Philbrook Drive	79	7	5	POOR	major cavity at primary union, low union, exposed roots, major vertical wound on main stem, exposed roots	preserve, inform owner of poor condition and recommend removal	Private property, no expected construction impacts, poor overall condition	
38	<i>Acer saccharinum</i>	Silver Maple	City ROW	106	10	5	poor	boulevard tree, major cavity x 2, significant included bark to base, potential hazard	remove	direct conflict with proposed road alignment and condition	N/A
39	<i>Pinus nigra</i>	Austrian Pine	2081 Philbrook Drive	34	3	4	GOOD	limbed up 3m, browning needles	preserve	Private property, no expected construction impacts	
40	<i>Pinus sylvestris</i>	Scotch Pine	2081 Philbrook Drive	23	2	4	GOOD	limbed up 2m, browning needles	preserve	Private property, no expected construction impacts	
41	<i>Picea pungens var. glauca</i>	Colorado Blue Spruce	2081 Philbrook Drive	25	2	5	GOOD	in garden, bowed trunk	preserve	Private property, no expected construction impacts	
42	<i>Acer saccharinum</i>	Silver Maple	City ROW	104	9	5	FAIR	boulevard tree, elevated root plate, minor cavities in minor stem	remove	direct conflict with proposed road alignment	N/A

43	<i>Populus deltoides</i>	Eastern Cottonwood	City ROW	68, 51	8	5	GOOD	boulevard tree, ultistem 2, union at grade, in swale	remove	conflict with proposed road alignment	N/A
44	<i>Populus deltoides</i>	Eastern Cottonwood	City ROW	38, 36	9	5	FAIR	boulevard tree, ultistem 2, union just above grade, suppressed, lean west, near watermain	remove	conflict with proposed road alignment	N/A
45	<i>Populus deltoides</i>	Eastern Cottonwood	City ROW	53	9	5	GOOD	boulevard tree, open crown, near watermain	remove	conflict with proposed road alignment	N/A
46	<i>Populus tremuloides</i>	Trembling Aspen	1625 Adelaide St N	35	3	1	POOR	major basal damage, no bark at base	remove	condition and proximity to pedestrian path	consent to remove from private property required
47	<i>Populus tremuloides</i>	Trembling Aspen	1625 Adelaide St N	35	4	3	FAIR	thin crown	remove	condition and proximity to pedestrian path	consent to remove from private property required
48	<i>Populus tremuloides</i>	Trembling Aspen	1625 Adelaide St N	20	3	1	POOR	dead	remove	condition and proximity to pedestrian path	consent to remove from private property required
49	<i>Salix spp</i>	Willow	1625 Adelaide St N	10 - 30	7	5	FAIR	Multistem 7, low primary union	preserve	wild area beside SWM pond, minor construction impacts expected	
50	<i>Acer freemanii</i>	Freeman Maple	City ROW	11	1.5	5	GOOD	boulevard tree, minor epicormic growth	remove	direct conflict with west WM corridor	N/A
51	<i>Fraxinus spp</i>	Ash	City ROW	6 - 10	3	5	POOR	Multistem 4, 1 stem dead, low branched, shrub form	remove	direct conflict with west WM corridor	N/A
52	<i>Fraxinus spp</i>	Ash	1675 Adelaide St N	10 - 15	3.5	5	FAIR	Multistem - likely formed from single stem affected by Emerald Ash Borer	preserve	wild area beside SWM pond, minor construction impacts expected	
53	<i>Fraxinus spp</i>	Ash	1675 Adelaide St N	20	4	5	FAIR	Multistem - likely formed from single stem affected by Emerald Ash Borer	preserve	wild area beside SWM pond, minor construction impacts expected	
54	<i>Zelkova serrata</i>	Zelkova Tree	City ROW	10	1	5	FAIR	boulevard tree, included bark at tight unions, typical of species	remove	direct conflict with west WM corridor	N/A
55	<i>Phellodendron amurense</i>	Amur Cork Tree	City ROW	7	1.5	5	GOOD	boulevard tree, good form, trunk guard	remove	direct conflict with west WM corridor	N/A
56	<i>Fraxinus spp</i>	Ash	City ROW	15	5	2	POOR	suckers, dead leader, shrub understory	remove	direct conflict with west WM corridor	N/A
57	<i>Syringa reticulata 'Ivory Silk'</i>	Ivory Silk Lilac Tree	City ROW	2	1	5	GOOD	boulevard tree, excellent, lichen on trunk	remove	direct conflict with west WM corridor	N/A
58	<i>Acer campestre</i>	Hedge Maple	City ROW	13	2	5	GOOD	boulevard tree, low crown	remove	direct conflict with west WM corridor	N/A
59	<i>Ulmus spp.</i>	Elm	City ROW	16	2.5	5	GOOD	boulevard tree, low crown	remove	direct conflict with west WM corridor	N/A
60	<i>Acer campestre</i>	Hedge Maple	City ROW	13	2	5	GOOD	boulevard tree, split on southwest side of trunk, healing	remove	direct conflict with west WM corridor	N/A
61	<i>Celtis occidentalis</i>	Hackberry	City ROW	8	1.5	5	GOOD	boulevard tree, uneven crown	remove	direct conflict with west WM corridor	N/A
62	<i>Celtis occidentalis</i>	Hackberry	City ROW	8	1.5	5	GOOD	boulevard tree	remove	direct conflict with west WM corridor	N/A
63	<i>Celtis occidentalis</i>	Hackberry	City ROW	8	1	5	GOOD	boulevard tree, low crown	remove	direct conflict with west WM corridor	N/A
64	<i>Celtis occidentalis</i>	Hackberry	City ROW	10	1.5	5	GOOD	boulevard tree	remove	direct conflict with west WM corridor	N/A
65	<i>Celtis occidentalis</i>	Hackberry	City ROW	8	1.5	5	GOOD	boulevard tree	remove	direct conflict with west WM corridor	N/A

66	<i>Celtis occidentalis</i>	Hackberry	City ROW	7	1	5	GOOD	boulevard tree	remove	direct conflict with west WM corridor	N/A
67	<i>Betula papyrifera</i>	Paper Birch	City ROW	10, 5, 5	2	5	FAIR	Multistem 3, by decorative wall at street corner	preserve	Minor construction impacts expected	
68	<i>Acer freemanii</i>	Freeman Maple	City ROW	3	1	5	GOOD	boulevard tree, low crown	preserve	Minor construction impacts expected	
69	<i>Acer freemanii</i>	Freeman Maple	City ROW	18	3	5	GOOD	boulevard tree, included bark, co-dominant leaders	remove	direct conflict with west WM corridor	N/A
70	<i>Syringa reticulata 'Ivory Silk'</i>	Ivory Silk Lilac Tree	2000 Blackwater Rd	12	1.5	5	GOOD	low crown	preserve	Private property, no expected construction impacts	
71	<i>Syringa reticulata 'Ivory Silk'</i>	Ivory Silk Lilac Tree	2000 Blackwater Rd	11	1.5	5	GOOD	slight lean to street	preserve	Private property, no expected construction impacts	
72	<i>Picea omorika</i>	Serbian Spruce	2000 Blackwater Rd	12	2	5	GOOD	minor yellowing of leaves	preserve	Private property, no expected construction impacts	
73	<i>Liriodendron tulipifera</i>	Tulip Tree	City ROW	12	2.5	5	GOOD	boulevard tree, minimal root flare, uneven crown	remove	direct conflict with west WM corridor	N/A
74	<i>Picea omorika</i>	Serbian Spruce	2000 Blackwater Rd	12	1.5	5	GOOD	thin lower crown	preserve	Private property, no expected construction impacts	
75	<i>Picea omorika</i>	Serbian Spruce	2000 Blackwater Rd	10	1	5	GOOD	thin crown	preserve, inform owner of poor condition and recommend removal	Private property, no expected construction impacts, poor overall condition	
76	dead		City ROW	5	-	1	DEAD		remove	dead	N/A
77	<i>Aesculus hippocastanum</i>	Horse Chestnut	2000 Blackwater Rd	6	2	2	POOR	significant lean - looks as though it was hit by a vehicle	preserve, inform owner of poor condition and recommend removal	Private property, no expected construction impacts, poor overall condition	
78	<i>Picea omorika</i>	Serbian Spruce	2000 Blackwater Rd	12	1.5	5	GOOD	dead lower limbs	preserve	Private property, no expected construction impacts	
79	<i>Celtis occidentalis</i>	Hackberry	City ROW	16	2.5	5	GOOD	boulevard tree, low crown	remove	direct conflict with west WM corridor	N/A
80	<i>Aesculus hippocastanum</i>	Horse Chestnut	2000 Blackwater Rd	10	2	4	POOR	major split in trunk	preserve, inform owner of poor condition and recommend removal	Private property, no expected construction impacts, poor overall condition	
81	<i>Acer rubrum</i>	Red Maple	City ROW	7	1	4	FAIR	boulevard tree, epicormic growth, significant basal damage, low crown	remove	direct conflict with proposed path & west WM corridor	N/A
82	<i>Tilia cordata</i>	Littleleaf Linden	1825 Adelaide St N	10	2	5	GOOD		preserve	Private property, construction impacts expected	
83	<i>Tilia cordata</i>	Littleleaf Linden	1825 Adelaide St N	12	2	5	GOOD	basal damage on parking lot side	preserve	Private property, construction impacts expected	
84	<i>Acer saccharum</i>	Sugar Maple	1845 Adelaide St N	14	2	5	GOOD	minor buttressing trunk	preserve	Private property, construction impacts expected	
85	<i>Acer rubrum</i>	Red Maple	1845 Adelaide St N	16	2.5	5	GOOD	co-dominant leaders, elevated exposed roots at base	preserve	Private property, construction impacts expected	
86	<i>Acer rubrum</i>	Red Maple	1845 Adelaide St N	13	2.5	5	GOOD	bulbous roots	preserve	Private property, construction impacts expected	

87	<i>Acer rubrum</i>	Freeman Maple	1845 Adelaide St N	14	2	5	POOR	bulbous roots, on slope Oct 22, 2019 notes: significant bark splitting and cracking along entire trunk	remove	conflict with proposed cycle track alignment	consent to remove from private property required
88	<i>Acer freemanii</i>	Freeman Maple	City ROW	51	5	4	POOR	boulevard tree, significant hydropruning on street side, no leader, major cavity	remove	direct conflict with cycle track and condition	N/A
89	<i>Acer freemanii</i>	Freeman Maple	City ROW	38	3	3	POOR	low union, co-dominant leaders, major cavity	remove	direct conflict with cycle track and condition	N/A
90	<i>Acer platanoides</i>	Norway Maple	1740 Adelaide St N	36	5	5	GOOD	wide flare, exposed roots, vertical scar on southwest side	preserve	Private property, no expected construction impacts	
91	<i>Acer platanoides</i>	Norway Maple	1740 Adelaide St N	36	4.5	5	FAIR	vertical scar on southwest side, exposed girdled roots	preserve	Private property, limited expected construction impacts	
92	<i>Acer platanoides</i>	Norway Maple	1740 Adelaide St N	38	6	5	GOOD	wide flare, girdled wire, exposed roots, overhead wire in main branch	preserve	Private property, no expected construction impacts	
93	<i>Acer platanoides</i>	Norway Maple	BOUNDARY TREE - 1720 Adelaide St N and City ROW	58	7	5	FAIR	very low branched, no flare, major cavity at primary union	preserve - lower branches on street side will need to be removed	Private property, minor construction impacts expected	
94	<i>Salix babylonica</i>	Weeping Willow	1720 Adelaide St N	35,35,50, 25,19,27	8	5	FAIR	MS-6, exposed damage roots, gnarly base, union at grade	preserve	Private property, no expected construction impacts	
95	<i>Acer freemanii</i>	Freeman Maple	City ROW	21	3	5	GOOD	vertical fissures on trunk	preserve	Minor construction impacts expected	
96	<i>Acer freemanii</i>	Freeman Maple	City ROW	19	3	5	GOOD	included bark at primary union	preserve	Minor construction impacts expected	
97	<i>Acer freemanii</i>	Freeman Maple	City ROW	18	3	5	FAIR	significant southwest injury, bark peeling, slowly healing	preserve	Minor construction impacts expected	
98	<i>Acer negundo</i>	Manitoba Maple	City ROW	12 - 20	5	5	FAIR	multistem 5, on slope, low branched	remove	conflict with proposed sidewalk alignment	N/A
99	<i>Acer platanoides</i>	Norway Maple	1600 Adelaide St N	50	7.5	5	FAIR	on grassy slope, top of slope, exposed roots	preserve	Private property, minor construction impacts expected	
100	<i>Picea pungens var. glauca</i>	Colorado Blue Spruce	1600 Adelaide St N	30	2.5	5	GOOD	co-dominant leaders, low union, included bark	preserve	Private property, minor construction impacts expected	
101	<i>Picea pungens var. glauca</i>	Colorado Blue Spruce	1600 Adelaide St N	20	2	5	GOOD		preserve	Private property, minor construction impacts expected	
102	<i>Picea pungens var. glauca</i>	Colorado Blue Spruce	1600 Adelaide St N	15	2	5	GOOD		preserve	Private property, minor construction impacts expected	
103	<i>Picea pungens var. glauca</i>	Colorado Blue Spruce	1600 Adelaide St N	20	2	5	GOOD		preserve	Private property, minor construction impacts expected	
104	<i>Picea pungens var. glauca</i>	Colorado Blue Spruce	1600 Adelaide St N	30	2	5	GOOD		preserve	Private property, minor construction impacts expected	
105	<i>Picea pungens var. glauca</i>	Colorado Blue Spruce	1600 Adelaide St N	20	2	5	GOOD		preserve	Private property, minor construction impacts expected	

106	<i>Acer platanoides</i>	Norway Maple	600 Grenfell Dr	27	4	4	GOOD	minor dead branch, on slope	preserve	Private property, minor construction impacts expected	
107	<i>Pinus nigra</i>	Austrian Pine	600 Grenfell Dr	49	5	5	GOOD	exposed roots, in garden	preserve	Private property, minor construction impacts expected	
108	<i>Pinus nigra</i>	Austrian Pine	600 Grenfell Dr	41	5	5	GOOD	on slope, major exposed roots	preserve	Private property, minor construction impacts expected	
109	<i>Acer platanoides</i>	Norway Maple	600 Grenfell Dr	32	4.5	5	GOOD	on slope, major exposed roots	preserve	Private property, minor construction impacts expected	
110	<i>Acer platanoides</i>	Norway Maple	600 Grenfell Dr	24	4	5	GOOD	on slope, majorly suppressed	preserve	Private property, minor construction impacts expected	
111	<i>Pinus nigra</i>	Austrian Pine	600 Grenfell Dr	44	4.5	5	GOOD	in garden	preserve	Private property, minor construction impacts expected	
112	<i>Acer rubrum</i>	Red Maple	BOUNDARY TREE - 600 Grenfell Dr & City ROW	53	6.5	5	FAIR	minimal root flare, exposed roots, uneven crown	preserve	Minor construction impacts expected	
113	<i>Acer platanoides</i>	Norway Maple	600 Grenfell Dr	32	6	5	GOOD	top of slope, exposed roots	preserve	Private property, minor construction impacts expected	
114	<i>Pinus nigra</i>	Austrian Pine	600 Grenfell Dr	35	5	5	GOOD	excellent	preserve	Private property, minor construction impacts expected	
115	<i>Acer saccharinum</i>	Silver Maple	600 Grenfell Dr	96	6.5	5	FAIR	poor form, exposed damaged roots	preserve	Private property, minor construction impacts expected	
116	<i>Pyrus spp</i>	Pear Tree	City ROW	15, 10, 5	2	5	FAIR	boulevard tree, multistem 3, suckers emerging from base	remove	conflict with road alignment and cycle track	N/A
117	<i>Acer platanoides 'Royal Red'</i>	Royal Red Norway Maple	601 Grenfell Dr	15	3.5	5	GOOD		preserve	Private property, minor construction impacts expected	
118	<i>Sorbus aucuparia</i>	Mountain Ash	City ROW	15	3	5	GOOD	boulevard tree, low crown	remove	conflict with road alignment and cycle track	N/A
119	<i>Pyrus spp</i>	Pear Tree	City ROW	14	2	5	FAIR	boulevard tree, witches broom through canopy, epicormic growth, bulbous base	remove	conflict with road alignment and cycle track	N/A
120	<i>Acer platanoides 'Royal Red'</i>	Royal Red Norway Maple	601 Grenfell Dr	15	3	5	GOOD		preserve	Private property, minor construction impacts expected	
121	<i>Sorbus aucuparia</i>	Mountain Ash	City ROW	13	2	5	GOOD	boulevard tree, low crown	remove	conflict with road alignment and cycle track	N/A
122	<i>Sorbus aucuparia</i>	Mountain Ash	City ROW	26	4	5	GOOD	boulevard tree, low crown, epicormic growth, minor dieback interior	remove	conflict with road alignment and cycle track	N/A
123	<i>Acer platanoides</i>	Norway Maple	1580 Adelaide St N	49	6	5	GOOD	low clustered unions	preserve	Private property, minor construction impacts expected	
124	<i>Acer platanoides</i>	Norway Maple	1580 Adelaide St N	45	6	5	GOOD	exposed damaged roots	preserve	Private property, minor construction impacts expected	

125	<i>Acer platanoides</i>	Norway Maple	1580 Adelaide St N	56	6	5	GOOD	slight lean northeast	preserve	Private property, minor construction impacts expected	
126	<i>Pyrus spp</i>	Pear Tree	City ROW	20	2	4	POOR	boulevard tree, suckers emerging from base	remove	conflict with road alignment and cycle track	N/A
127	<i>Acer platanoides</i>	Norway Maple	1580 Adelaide St N	47	6	5	POOR	large dead branch, weak union, on slope, low crotch	preserve	Private property, minor construction impacts expected	
128	<i>Acer platanoides</i>	Norway Maple	1580 Adelaide St N	37	6	5	FAIR	exposed damaged roots, minor dead wood, 3 leaders	preserve	Private property, minor construction impacts expected	
129	<i>Sorbus aucuparia</i>	Mountain Ash	City ROW	17	3	5	GOOD	low crown, minor interior dead wood	remove	conflict with road alignment and cycle track	N/A
130	<i>Acer platanoides</i>	Norway Maple	1580 Adelaide St N	43	5	5	GOOD	exposed damaged roots, wide root flare	preserve	Private property, minor construction impacts expected	
131	<i>Acer platanoides</i>	Norway Maple	1580 Adelaide St N	42	7	5	GOOD	wide root flare, exposed damage roots	preserve	Private property, minor construction impacts expected	
132	<i>Acer platanoides</i>	Norway Maple	1580 Adelaide St N	46	7	5	GOOD		preserve	Private property, minor construction impacts expected	
133	<i>Acer platanoides</i> <i>'Royal Red'</i>	Royal Red Norway Maple	1570 Adelaide St N	40	4	5	GOOD	exposed damaged roots	preserve	Private property, minor construction impacts expected	
134	<i>Pinus nigra</i>	Austrian Pine	1570 Adelaide St N	48	5	5	GOOD	limbed up 8m	preserve	Private property, minor construction impacts expected	
135	<i>Acer freemanii</i>	Freeman Maple	614 Fanshawe Park Rd E	45	7	5	GOOD	wide root flare	preserve	Private property, minor construction impacts expected	
136	<i>Acer freemanii</i>	Freeman Maple	614 Fanshawe Park Rd E	37	3	1	POOR	dead	preserve, inform owner of poor condition and recommend removal	Private property, minor construction impacts expected and poor condition	
137	<i>Pinus nigra</i>	Austrian Pine	previously 614 Fanshawe Park Rd E / newly acquired property by the City	34	4.5	5	GOOD	limbed up 3m, no root flare, browning needles	remove	conflict with proposed sidewalk alignment	N/A
138	<i>Gleditsia triacanthos var. inermis</i>	Honeylocust	1536 Adelaide St N	42	5	5	GOOD	large pruning cuts, in garden	preserve	Private property, minor construction impacts expected	
139	<i>Acer freemanii</i>	Freeman Maple	1845 Adelaide St N	18	3	5	GOOD	exposed roots at base	remove	conflict with proposed cycle track alignment	consent to remove from private property required
140	<i>Acer freemanii</i>	Freeman Maple	1845 Adelaide St N	16	2	4	POOR	cracking bark along entire trunk, codominant leaders with tight union	remove	conflict with proposed cycle track alignment and condition	consent to remove from private property required
141	<i>Gleditsia triacanthos var. inermis</i>	Honeylocust	1835 Adelaide St N	15	2.5	5	GOOD		preserve	Private property, limited construction impacts	

142	<i>Tilia cordata</i>	Littleleaf Linden	BOUNDARY TREE - 1835 Adelaide St N and City ROW	18	2.5	5	GOOD	canopy heavy to the south, tight unions	remove	proposed sidewalk alignment	consent required from land owners
143	<i>Tilia cordata</i>	Littleleaf Linden	1835 Adelaide St N	22	3	5	GOOD	on slight slope	preserve	Private property, minor construction impacts expected	
144	<i>Picea pungens var. glauca</i>	Colorado Blue Spruce	BOUNDARY TREE - 2253 Blackwater Road and City ROW	-8	1	5	GOOD		preserve	Private property, minor construction impacts expected	
145	<i>Picea pungens var. glauca</i>	Colorado Blue Spruce	2253 Blackwater Road	-8	1	5	GOOD		preserve	Private property, minor construction impacts expected	
146	<i>Gleditsia triacanthos var. inermis</i>	Honeylocust	2251 Blackwater Road	-6	1	5	GOOD		preserve	Private property, minor construction impacts expected	
147	<i>Populus tremuloides</i>	Trembling Aspen	City ROW	-40	5	5	GOOD		remove	direct conflict with proposed sidewalk	N/A
148	<i>Pinus sylvestris</i>	Scotch Pine	City ROW	-10	2	5	GOOD		remove	direct conflict with proposed sidewalk	N/A
149	<i>Pinus sylvestris</i>	Scotch Pine	City ROW	-12	2.5	5	GOOD		remove	direct conflict with proposed sidewalk	N/A
150	<i>Pinus sylvestris</i>	Scotch Pine	City ROW	-20	3	5	GOOD		remove	direct conflict with proposed sidewalk	N/A
151	<i>Pinus sylvestris</i>	Scotch Pine	City ROW	-15	3	5	GOOD		remove	direct conflict with proposed sidewalk	N/A

POTENTIAL CONSTRUCTION IMPACTS

Several trees have been recommended for removal due to direct and unavoidable conflict with the proposed layout and required grading and servicing. Other trees that may be in proximity to the proposed construction are candidates for preservation. Trees to be preserved may be affected by the construction process, or by the construction itself. It is imperative that the design team and the construction crew understand the potential for, and the causes of tree damage. Trees recommended for preservation may experience some or all of the following potential construction impacts. Strategies and methods to avoid these impacts are outlined in the Construction Impact Mitigation Recommendations section of this report.

Soil Compaction

Soil compaction is caused by heavy or repeated compression or vibration of the soil around the tree. Soil compaction reduces the amount and size of macro and micro pore space that is vital for subsurface movement of air and water. The harmful effects of soil compaction include, but are not limited to: slower water infiltration, poor aeration, reduced root growth and an overall increased susceptibility to biotic and abiotic stressors.

Grade Changes

Lowering of the grade around trees has immediate and long term effects on trees. Lowering of grade requires immediate root loss from cutting the roots which results in water stress from the root removal and potential reduced structural stability. Note that it is commonly accepted that healthy trees can tolerate the removal of approximately 33% to 50% of their root zone, with sensitivity to extent of acceptable removal dependent on individual species characteristics, root loss distribution, and site specific conditions (*ref. Trees and Development: A Technical Guide to Preservation of Trees During Land Development by Nelda Matheny and James R. Clark, 1998. Pg 72*).

Raising the grade around a tree can be equally damaging. The addition of fill over the root zone of a tree alters the roots' ability for normal water and gas exchange that is necessary for healthy root growth and stability. Fill essentially suffocates the roots and can lead to the eventual decline of the tree.

Mechanical Damage

Mechanical damage is caused by physical contact with a tree that damages the tree to any degree. During land development and construction activities, there is an increased risk of minor and fatal mechanical damage to trees from construction equipment. Minor damage can create entry points for insects and pathogens, and fatal damage can cause irreparable structural damage.

Increased Exposure

Trees can experience increased exposure to sun or wind when neighbouring trees are removed. Sudden and increased exposure to these elements to trees that have developed in a sheltered location are susceptible to leaf scald and instability or failure.

Soil Contamination

Soil health around a tree can be compromised by contamination from spills or leaks of fuels, solvents, or other construction related fluids.

Water Availability

Grading and servicing requirements for development can affect water availability for trees. Trees may experience a loss of available water due to a lowered water table or the capture or redirection of subsurface and/or overland flow. Conversely, trees may experience an increase of available water due to changes in site grading and storm water retention efforts.

The successful survival of the trees to be preserved is largely dependent on adhering to the recommendations that follow.

CONSTRUCTION IMPACT MITIGATION RECOMMENDATIONS

The following general recommendations are provided to guide the removal process, mitigate construction impacts, and ensure compliance with regulatory requirements. Some of the recommendations listed below are noted to be undertaken by an ISA certified arborist.

Pre-construction recommendations

1. Prior to any construction activity, tree preservation fencing is to be installed as per the attached tree preservation drawings and detail. See appendix A and B.
2. Where high quality specimens to be preserved are adjacent to areas subject to intensive construction activities, these trees are to have additional protection measures implemented to protect their trunks from mechanical damage. These measures may include surrounding the trunk with wood planks. Trees that require additional protection will be clearly identified on the tree preservation plan with detailed information on specific protection measures.
3. Trees to be removed are to be marked with spray paint by the project arborist or landscape architect prior to any tree removal operations. All removals to be undertaken by an ISA certified arborist.
4. In accordance with the Migratory Birds Convention Act, 1994 and to coincide with the appropriate bat timing windows, all removals must take place from October 1st to March 31st to avoid disturbing nesting migratory birds and bats. If trees, shrubs or ground vegetation removal occurs between April 1st and September 30th, a biologist is required to complete a search for nests / bat habitat potential (in the event that a snag tree needs to be removed) and once cleared, the contractor has 48 hours to remove. If removal does not occur within 48 hours, another search will be required.
5. Care should be taken during the felling operation to avoid damaging the branches, stems, trunks, and roots of the trees to be preserved. Where possible, all trees are to be felled towards the construction zone to minimize impacts on adjacent vegetation. All removals to be undertaken by an ISA certified arborist.
6. It is recommended that the existing ground-layer vegetation at the base of trees remain intact so as not to disturb the soil around the base of the existing trees.
7. Final site grading plans should ensure that the existing soil moisture conditions are maintained.

8. Some trees are candidates for pre-construction root pruning to help reduce stress and prepare the tree for nearby construction activity. These trees are identified on the tree preservation plan. To be undertaken by an ISA certified arborist.

Root Pruning Specifications:

pre-construction root pruning required prior to excavation. (approx. 300 linear meters)

1. stake out the line of tree preservation - as indicated by the tree preservation barrier.
2. using an air spade, cut a trench 6" - 10" wide and min. 18" deep.
3. exposed roots to be cleanly cut with a hand saw, chain saw, or bypass pruners.
4. cuts to be made parallel with the street along the tree preservation line. Root pruning perpendicular to the street is not required.
5. once all cuts are made, replace soil in the trench. 'root rescue' or a similar product with active mycorrhizal fungi to be incorporated into backfill as per manufacturer specifications. if additional soil is required, 2-way mix topsoil can also be incorporated into the backfill. backfilling to occur within same day as cuts are made.
6. trees to be watered within one day following root pruning - with water directed to the trench to settle large air pockets.

Recommendations related to the construction process

1. Tree preservation fencing is to be maintained in good condition and effective for the duration of construction until all construction activity is complete or as per the project arborist or landscape architect.
2. Tree preservation fencing is to remain intact as per the tree preservation drawings, and can only be temporarily removed with the express written consent from the project arborist or landscape architect. Should tree preservation fencing be temporarily relocated or moved, it is to be reinstated as per the tree preservation plans as soon as possible.
3. Where underground servicing exists or is proposed within a critical root zone, alternative excavation methods such as trenchless or vacuum excavation is to be used where soil and site conditions allow to prevent root damage. Alternative excavation methods must be coordinated with the consulting engineer during the design process. Locations where alternative excavation methods are required will be noted on the tree preservation drawings.
4. No construction, excavation, adding of fill, stockpiling of construction material, or heavy equipment is permitted within the critical root zone.
5. When excavation near a tree is required, and it is anticipated that roots will be severed and exposed, duration of exposure is to be minimized to prevent root desiccation.
6. During the excavation process, roots 25mm or larger that are severed and exposed should be hand pruned to leave a clean-cut surface. To be undertaken by an ISA certified arborist. Exposed severed roots that cannot be covered in soil on the same day as the cuts are made are to be kept moist. Exposed roots are to be kept moist by covering them with water soaked burlap or any other means available to prevent them from drying out.

Adequate moisture levels are to be maintained until such time as topsoil and sod has been replaced satisfactorily or as otherwise directed by the contract administrator.

7. Avoid idling heavy equipment under or within close proximity to trees to be preserved to prevent canopy damage from exposure to the heat of the exhaust.
8. Broken branches on trees within the subject site to be preserved should be cleanly cut as soon as possible after the damage has occurred. *To be undertaken by an ISA certified arborist.* Should branches on City owned trees be damaged by or during construction, the contractor is to notify the local municipal forestry or urban forestry department as soon as possible. No person(s) other than City staff or the City's designated contractor may perform work on any City tree.
9. Open trenching within a critical root zone is prohibited. Alternative excavation methods such as horizontal boring and vacuum excavation are required where proposed services or installation requirements conflict with critical root zones. If, during construction, there is concern regarding the feasibility of employing trenchless excavation methods, the contractor is to immediately inform the contract administrator, consulting engineer and consulting arborist on the project.
10. Form concrete sidewalk, if proposed, with fibre expansion material in place of wood forms where roots conflict with existing concrete sidewalks.
11. Sidewalks to be replaced that are in close proximity to trees should remain in place as long as possible or until the replacement sidewalks are ready to be installed. Existing aggregate base material to be left in place if suitable.
12. Regular communication with the site supervisor and regular monitoring of the site by the project arborist or landscape architect is recommended to ensure proper procedures are followed and protection barriers are maintained. It is the responsibility of the site supervisor to promptly contact the project arborist if any concerns or questions arise regarding trees.
13. Watering of preserved trees may be required during construction. Watering details including frequency, timing, method, and volume will be determined by the consulting arborist and the contract administrator.

Post-construction recommendations

1. Avoid discharging rain water leaders adjacent to retained trees. This may result in an overly moist environment which will cause the tree roots to rot.
2. After all work is completed, snow fences and other barriers can be removed under the direction of the project arborist or landscape architect.
3. A final review must be undertaken by the project arborist or landscape architect to ensure that all mitigation measures as described above have been met.
4. Post construction monitoring of trees may be required. Monitoring schedule to be determined with design team and City consensus.

CITY OF LONDON TREE PROTECTION

Note that this project is located in the City of London. It follows therefore, that all applicable City of London rules, regulations, and by laws are to be respected. The City of London has several by-laws and specifications related to trees that must be understood and followed by the design team, the contractor, and all sub-contractors working on projects within the City.

All project parties to be aware of and familiar with the following City of London documents in their entirety and potential penalties noted therein for noncompliance:

City of London 2019 Design Specifications and Requirements Manual (updated August 2019)

Section 12 - Tree Planting and Protection Guidelines

Section 12.5.3 states:

“Failure to maintain an approved Tree Protection Plan will result in a warning by the City with 1 day to comply and bring the tree protection measures in line with the approved Tree Protection Plan. A second infraction may be dealt with by the issuance of a Stop Work order and possible fines as per the Boulevard Tree Protection By-law or the Tree Conservation By-law or as listed in the Standard Contract Documents for Municipal Construction Section 5 part B.”

Standard Contract Documents for Municipal Construction (2020 Edition)

Section B - Part 5 - Tree Planting and Protection Guidelines (TPP)

PENALTY TABLE

Infraction: Tree damaged by Contractor or Sub-Contractor

Diameter at breast height*	Additional Penalty
<10cm	\$1,240
11cm-20 cm	\$1,890
21cm-30cm	\$2,240
31cm-40cm	\$2,590
41cm-50cm	\$3,740
51cm-60cm	\$4,090
61cm-70cm	\$4,440
71cm-80cm	\$5,490
81cm-90cm	\$5,840
91cm-100cm	\$7,190
101cm-120cm	\$9,040
121cm-130cm	\$9,390
131cm-140cm	\$10,940
141cm-150cm	\$11,290
151cm-160cm	\$11,640
161cm-170cm	\$11,990
171cm-180cm	\$12,340
181cm-190cm	\$12,690
>191cm	\$13,040
To be deducted per incident, in addition to any other fines associated with tree damage	\$250 **

Penalty Table from page 387 of Standard Contract Documents for Municipal Construction (2020 Edition)

* Diameter of tree 1.5m above ground level

** Plus administration fees

Infraction: Failure to maintain or remove (without permission of Construction Administration) tree protection zone barrier

Diameter at breast height*	Additional Penalty
To be deducted per incident, in addition to any other fines associated with tree damage	\$250 **

* Diameter of tree 1.5m above ground level

** Plus administration fees

DISCLAIMER

Trees have been assessed using standard arboricultural techniques. This includes a visual examination of the above-grade parts of each tree to observe structural defects, scars, external indications of decay, evidence of insects, deterioration of foliage, general condition of the trees and their immediate habitat, and the proximity of targets, including people and property. None of the trees examined were dissected, cored, probed, or climbed, and detailed root crown examinations involving excavation were not undertaken. Trees are living organisms and their health and vigour changes over time, and are dependent on multiple factors. They are susceptible to changes in site conditions, such as recent development, and to seasonal variations in weather. Reasonable efforts have been made to ensure that the trees recommended for preservation are able to withstand changing site conditions; however, we cannot guarantee that the assessed trees or their parts will remain intact. It is both professionally and practically impossible to predict with certainty the health and structural capacity of any single tree or group of trees in all circumstances. A tree that remains standing will always pose a varying degree of risk in the presence of a target. All trees may fail provided that they are exposed to the necessary combinations of stresses. The risk for failure is only eliminated if the tree is removed. It is the recommendation of this report that trees be re-assessed periodically to determine ongoing levels of risk. The assessment presented in this report is valid only at the time of inspection.

Note that this arborist report has been prepared using the latest drawings and information provided by the client. Any subsequent design or site plan changes affecting trees may require revisions to this report. Any new information or drawings are to be provided to RKLA prior to report submission to planning authorities.

CONTACT INFORMATION

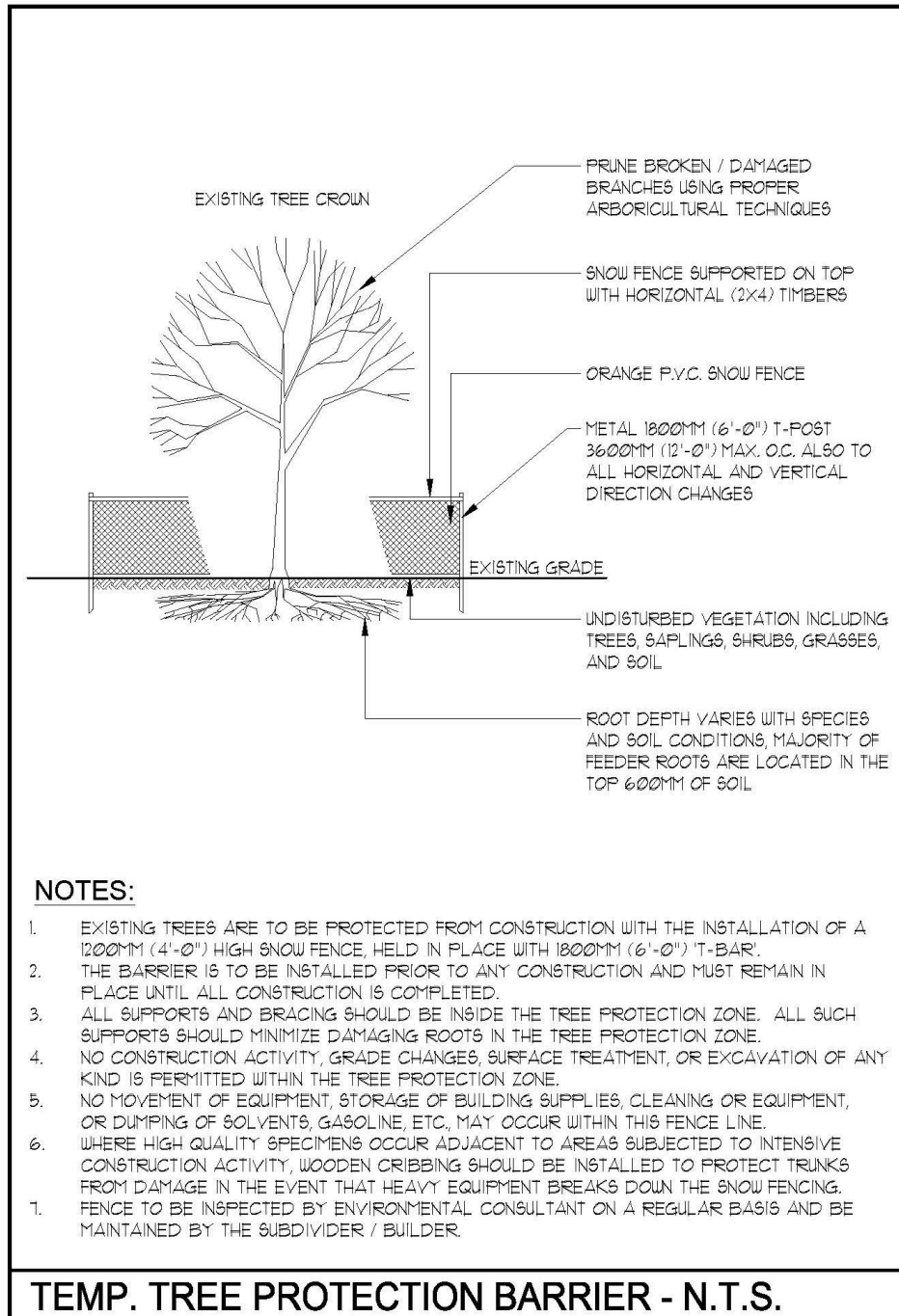
Office:

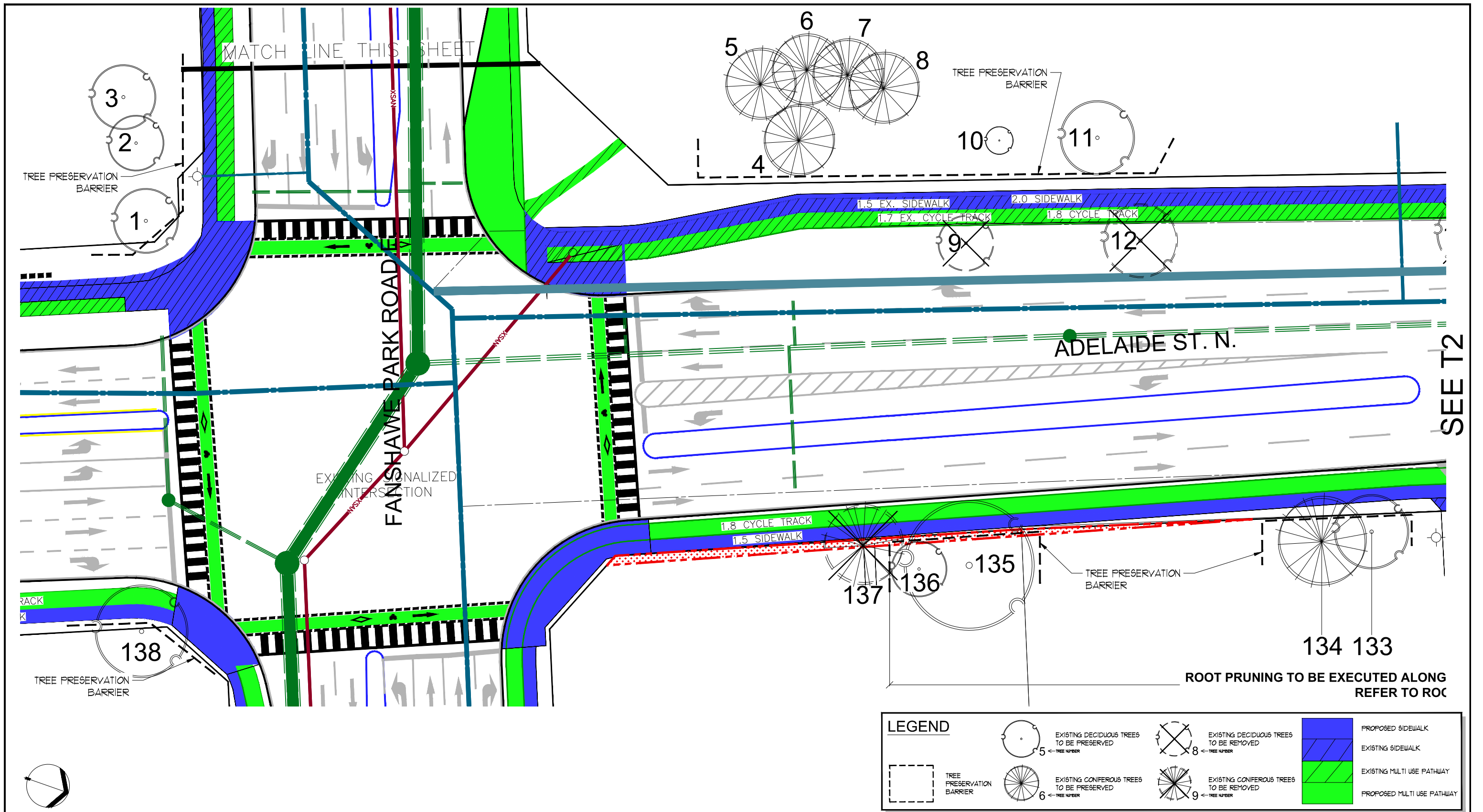
Ron Koudys Landscape Architects Inc.
368 Oxford Street East
London, Ontario
N6A 1V7
Ph: 519-667-3322
Fax: 519-645-2474

Staff:

Field work and report author
Michelle Peeters - michelle@rkla.ca
Qualifications ISA Certified Arborist ON-2129A
ISA Tree Risk Assessment Qualified
Qualified Butternut Health Assessor BHA #710
OALA full member - landscape architect

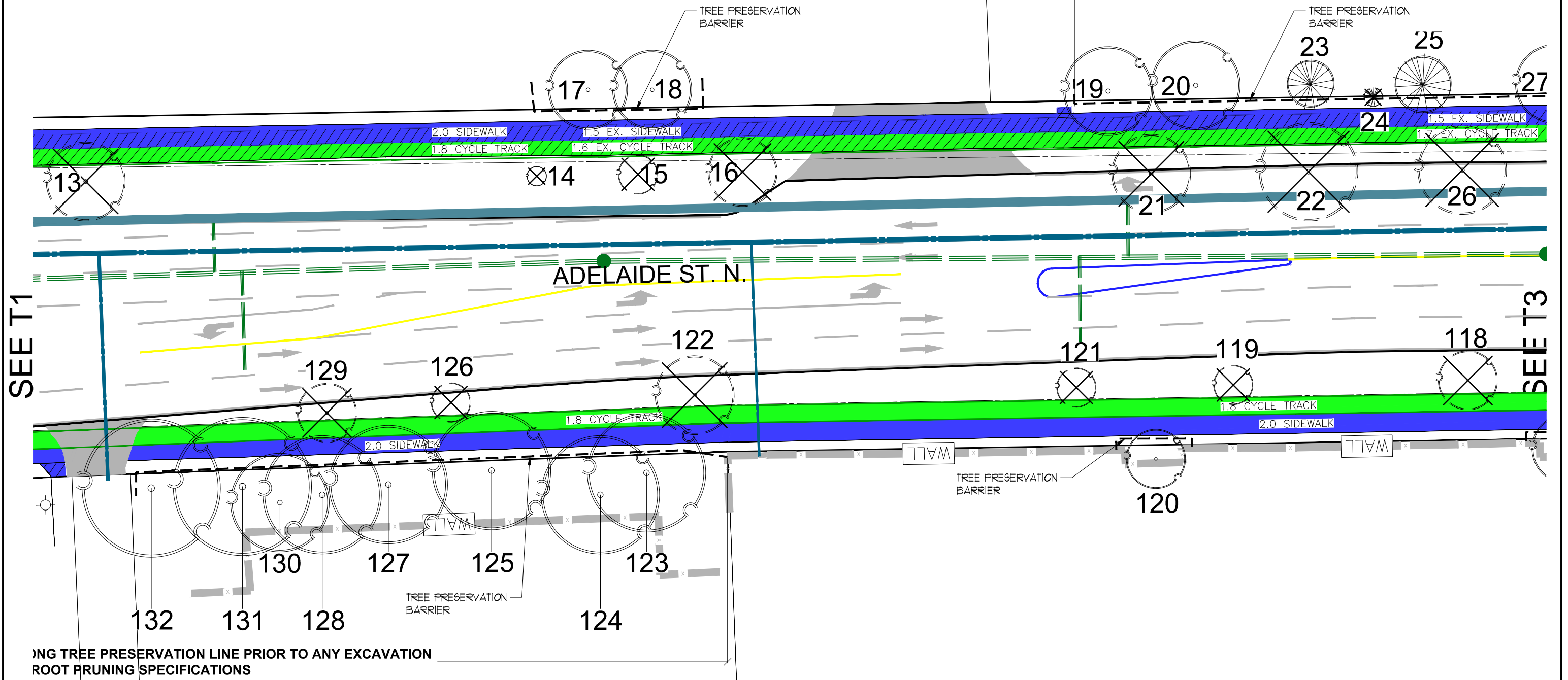
APPENDIX A – TREE PROTECTION ZONE FENCE DETAILS





MN 600

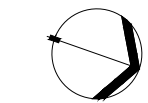
EXCAVATION FOR WATER MAIN INSTALLATION
WESTERN EDGE OF PROPOSED SIDEWALK TC



ING TREE PRESERVATION LINE PRIOR TO ANY EXCAVATION
ROOT PRUNING SPECIFICATIONS

LEGEND

TREE PRESERVATION BARRIER	EXISTING DECIDUOUS TREES TO BE PRESERVED ← TREE NUMBER	EXISTING DECIDUOUS TREES TO BE REMOVED ← TREE NUMBER	PROPOSED SIDEWALK
	EXISTING CONIFEROUS TREES TO BE PRESERVED ← TREE NUMBER	EXISTING CONIFEROUS TREES TO BE REMOVED ← TREE NUMBER	EXISTING SIDEWALK
			EXISTING MULTI USE PATHWAY
			PROPOSED MULTI USE PATHWAY



**RON KOUDYS
LANDSCAPE
ARCHITECTS**
388 Oxford Street East, London, Ontario, N6A 1V7
Tel: (519) 667-3322, Fax: (519) 645-2474

TITLE:

STREET TREE ASSESSMENT - ADELAIDE STREET NORTH
FANSHAWE PARK ROAD EAST TO SUNNINGDALE ROAD EAST
LONDON, ON

PROJECT NUMBER:

18-191Lg

SCALE:

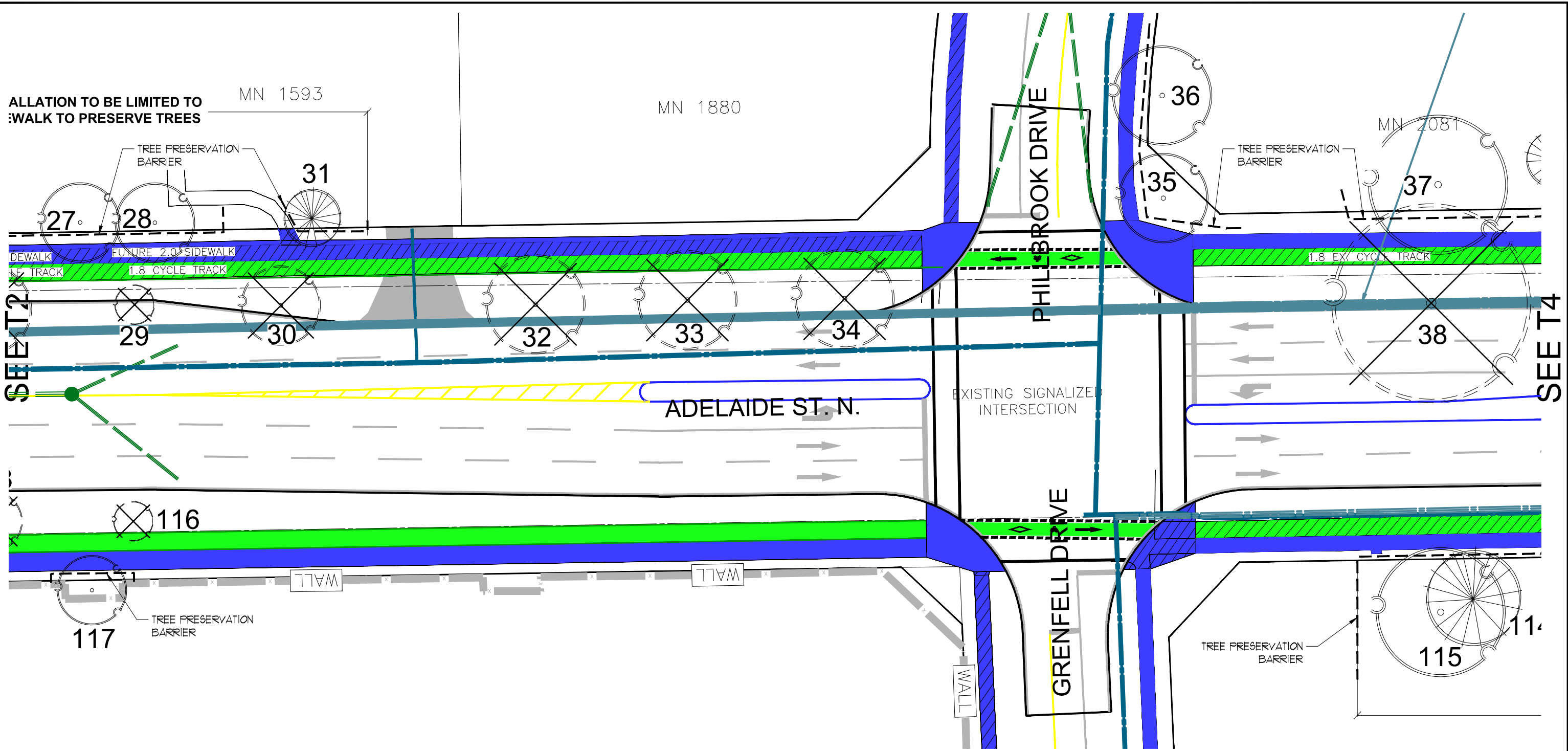
1:400

DRAWN BY: RKLA Inc.

DATE: 2020.11.06

DRAWING NUMBER:

T-2



SEE T2

SEE T4

LEGEND

TREE PRESERVATION BARRIER	EXISTING DECIDUOUS TREES TO BE PRESERVED ← TREE NUMBER	EXISTING DECIDUOUS TREES TO BE REMOVED ← TREE NUMBER	PROPOSED SIDEWALK
	EXISTING CONIFEROUS TREES TO BE PRESERVED ← TREE NUMBER	EXISTING CONIFEROUS TREES TO BE REMOVED ← TREE NUMBER	EXISTING SIDEWALK
			EXISTING MULTI USE PATHWAY
			PROPOSED MULTI USE PATHWAY

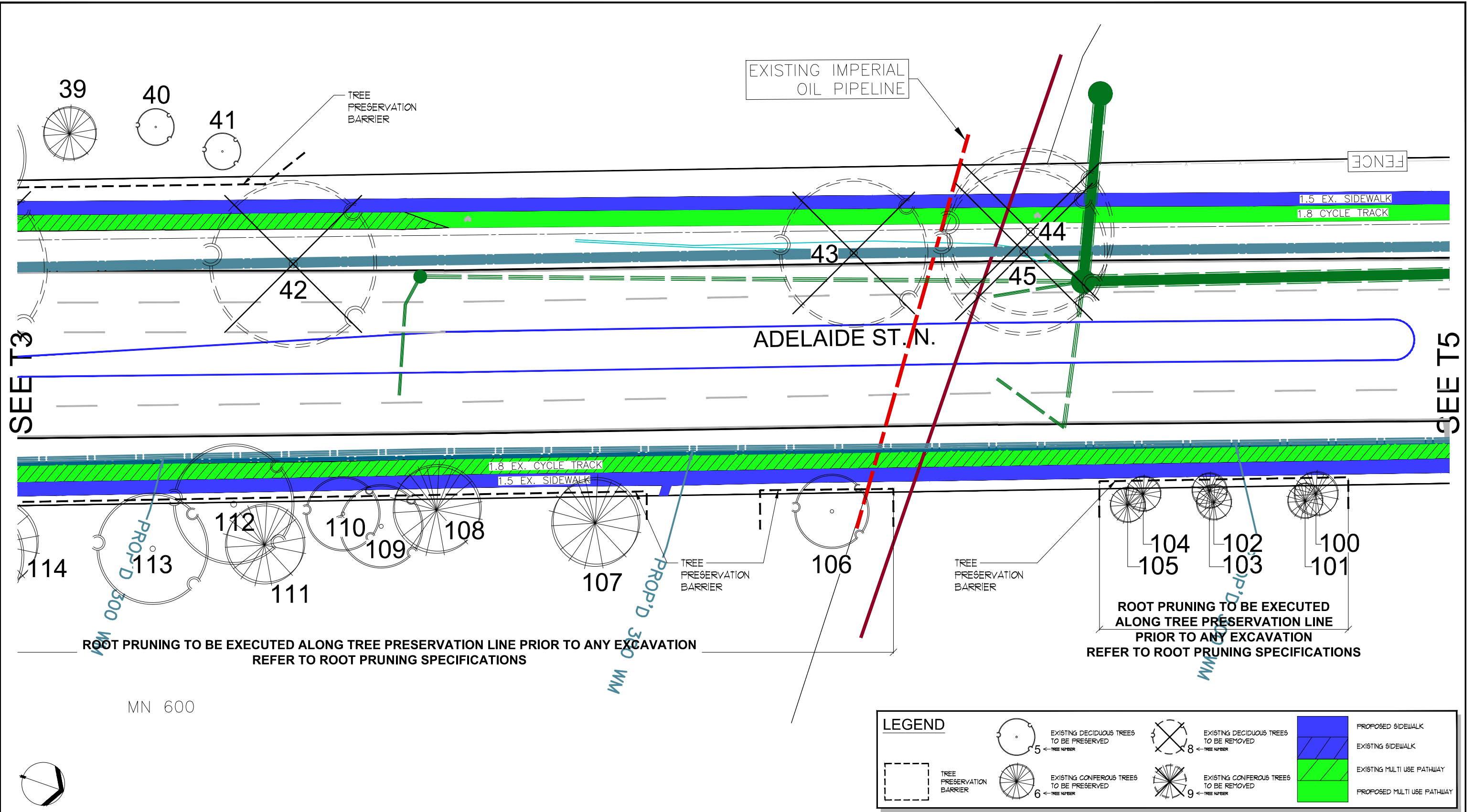
RON KOUDYS
LANDSCAPE ARCHITECTS

388 Oxford Street East, London, Ontario, N6A 1V7
Tel: (519) 667-3322, Fax: (519) 645-2474

TITLE:

STREET TREE ASSESSMENT - ADELAIDE STREET NORTH
FANSHAWE PARK ROAD EAST TO SUNNINGDALE ROAD EAST
LONDON, ON

PROJECT NUMBER: 18-191Lg	SCALE: 1:400
DRAWN BY: RKLA Inc.	DATE: 2020.11.06
DRAWING NUMBER:	T-3



SEE T3

SEE T5

EXISTING IMPERIAL OIL PIPELINE

FENCE

1.5 EX. SIDEWALK
1.8 CYCLE TRACK

ADELAIDE ST. N.

1.8 EX. CYCLE TRACK
1.5 EX. SIDEWALK

ROOT PRUNING TO BE EXECUTED ALONG TREE PRESERVATION LINE PRIOR TO ANY EXCAVATION
REFER TO ROOT PRUNING SPECIFICATIONS

ROOT PRUNING TO BE EXECUTED ALONG TREE PRESERVATION LINE
PRIOR TO ANY EXCAVATION
REFER TO ROOT PRUNING SPECIFICATIONS

MN 600

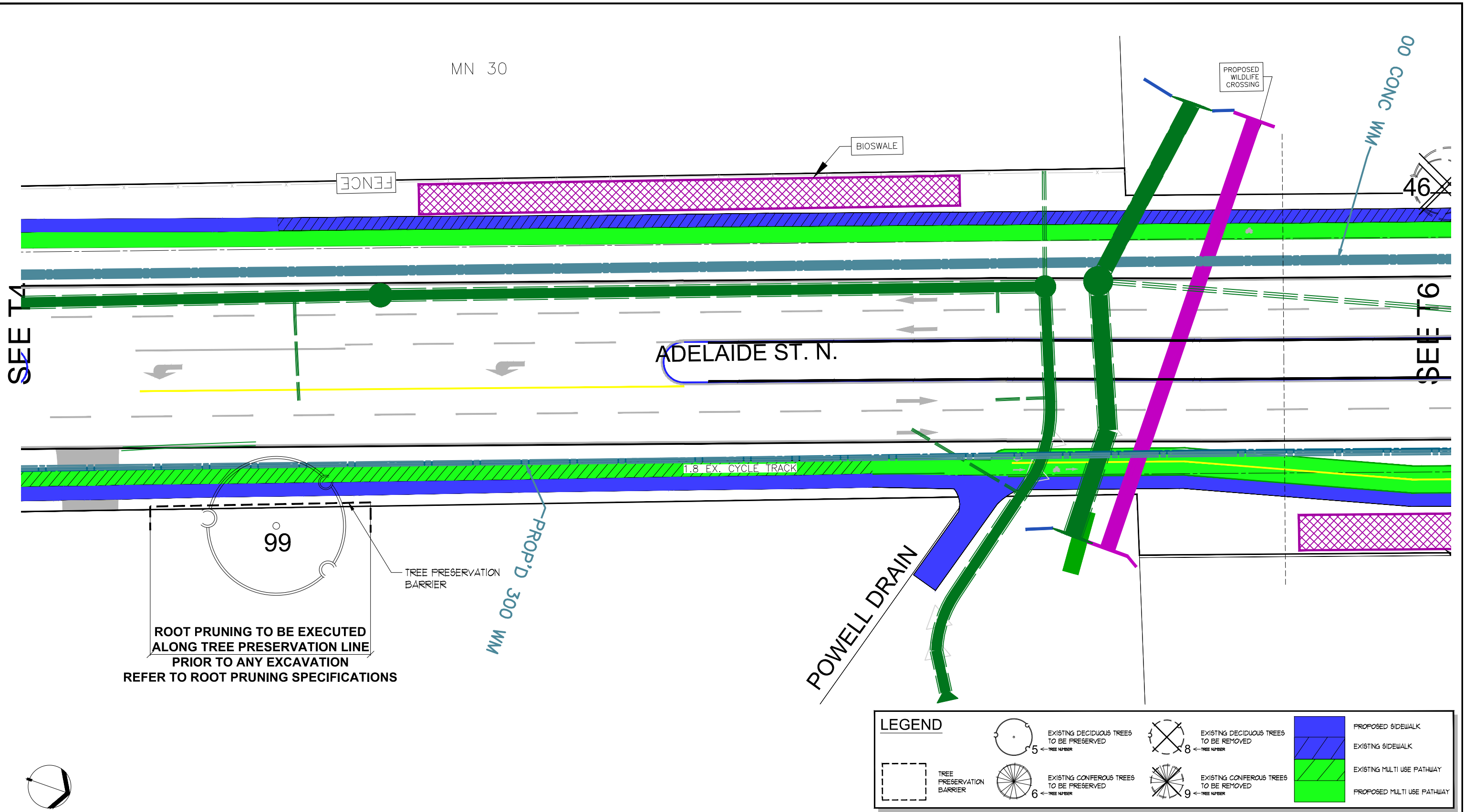
LEGEND

TREE PRESERVATION BARRIER	EXISTING DECIDUOUS TREES TO BE PRESERVED 5 - TREE NUMBER	EXISTING DECIDUOUS TREES TO BE REMOVED 8 - TREE NUMBER	PROPOSED SIDEWALK
	EXISTING CONIFEROUS TREES TO BE PRESERVED 6 - TREE NUMBER	EXISTING CONIFEROUS TREES TO BE REMOVED 9 - TREE NUMBER	EXISTING SIDEWALK
			EXISTING MULTI USE PATHWAY
			PROPOSED MULTI USE PATHWAY

**RON KOUDYS
LANDSCAPE
ARCHITECTS**
388 Oxford Street East, London, Ontario, N6A 1V7
Tel: (519) 667-3322, Fax: (519) 645-2474

TITLE:
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FANSHAWE PARK ROAD EAST TO SUNNINGDALE ROAD EAST
LONDON, ON**

PROJECT NUMBER: 18-191Lg	SCALE: 1:400
DRAWN BY: RKLA Inc.	DATE: 2020.11.06
DRAWING NUMBER:	T-4



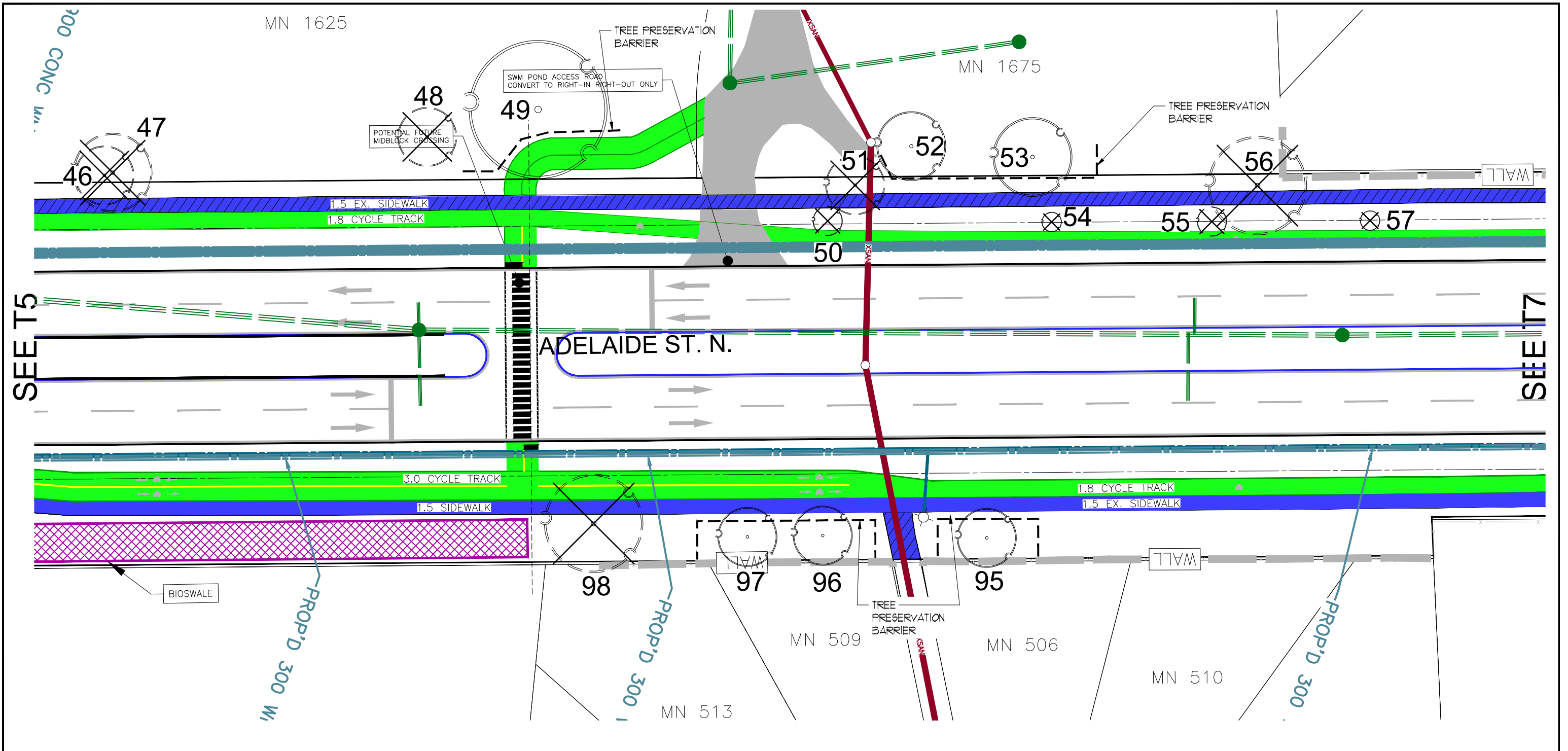
ROOT PRUNING TO BE EXECUTED
ALONG TREE PRESERVATION LINE
PRIOR TO ANY EXCAVATION
REFER TO ROOT PRUNING SPECIFICATIONS

LEGEND			
	TREE PRESERVATION BARRIER		EXISTING DECIDUOUS TREES TO BE PRESERVED ← TREE NUMBER
			EXISTING DECIDUOUS TREES TO BE REMOVED ← TREE NUMBER
			EXISTING CONIFEROUS TREES TO BE PRESERVED ← TREE NUMBER
			EXISTING CONIFEROUS TREES TO BE REMOVED ← TREE NUMBER
			PROPOSED SIDEWALK
			EXISTING SIDEWALK
			EXISTING MULTI USE PATHWAY
			PROPOSED MULTI USE PATHWAY

**RON KOUDYS
LANDSCAPE
ARCHITECTS**
388 Oxford Street East, London, Ontario, N6A 1V7
Tel: (519) 667-3322, Fax: (519) 645-2474

TITLE:
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FANSHAWE PARK ROAD EAST TO SUNNINGDALE ROAD EAST
LONDON, ON**

PROJECT NUMBER: 18-191Lg	SCALE: 1:400
DRAWN BY: RKLA Inc.	DATE: 2020.11.06
DRAWING NUMBER: T-5	

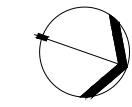


SEE T5

SEE T7

LEGEND

TREE PRESERVATION BARRIER	EXISTING DECIDUOUS TREES TO BE PRESERVED ← TREE NUMBER	EXISTING DECIDUOUS TREES TO BE REMOVED ← TREE NUMBER	PROPOSED SIDEWALK
	EXISTING CONIFEROUS TREES TO BE PRESERVED ← TREE NUMBER	EXISTING CONIFEROUS TREES TO BE REMOVED ← TREE NUMBER	EXISTING SIDEWALK
			EXISTING MULTI USE PATHWAY
			PROPOSED MULTI USE PATHWAY

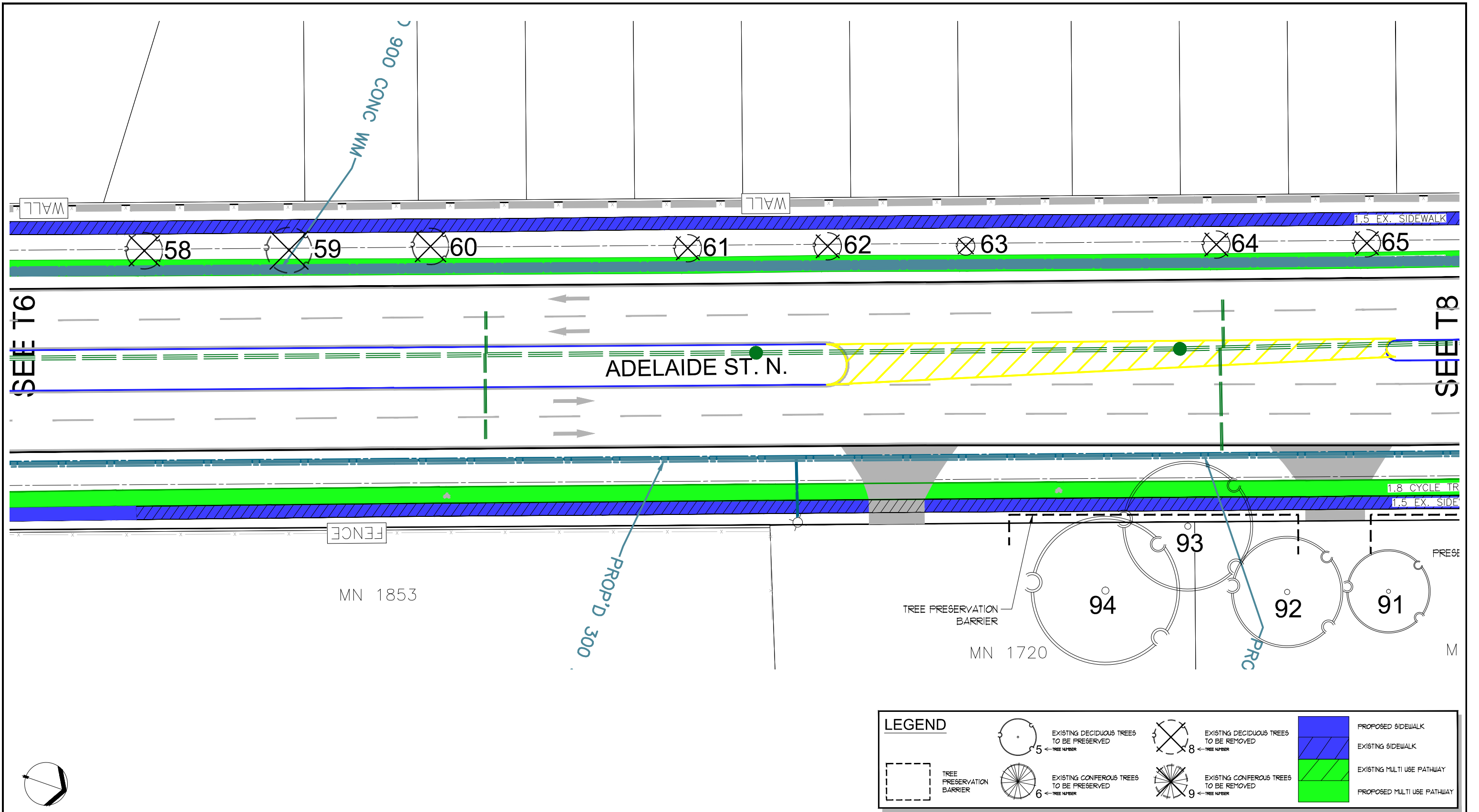


**RON KOUDYS
LANDSCAPE
ARCHITECTS INC.**
388 Oxford Street East, London, Ontario, N6A 1V7
Tel: (519) 667-3322, Fax: (519) 645-2474

TITLE:

**STREET TREE ASSESSMENT - ADELAIDE STREET NORTH
FANSHAWE PARK ROAD EAST TO SUNNINGDALE ROAD EAST
LONDON, ON**

PROJECT NUMBER: 18-191Lg	SCALE: 1:400
DRAWN BY: RKLA Inc.	DATE: 2020.11.06
DRAWING NUMBER:	T-6



SEE T6

SEE T8

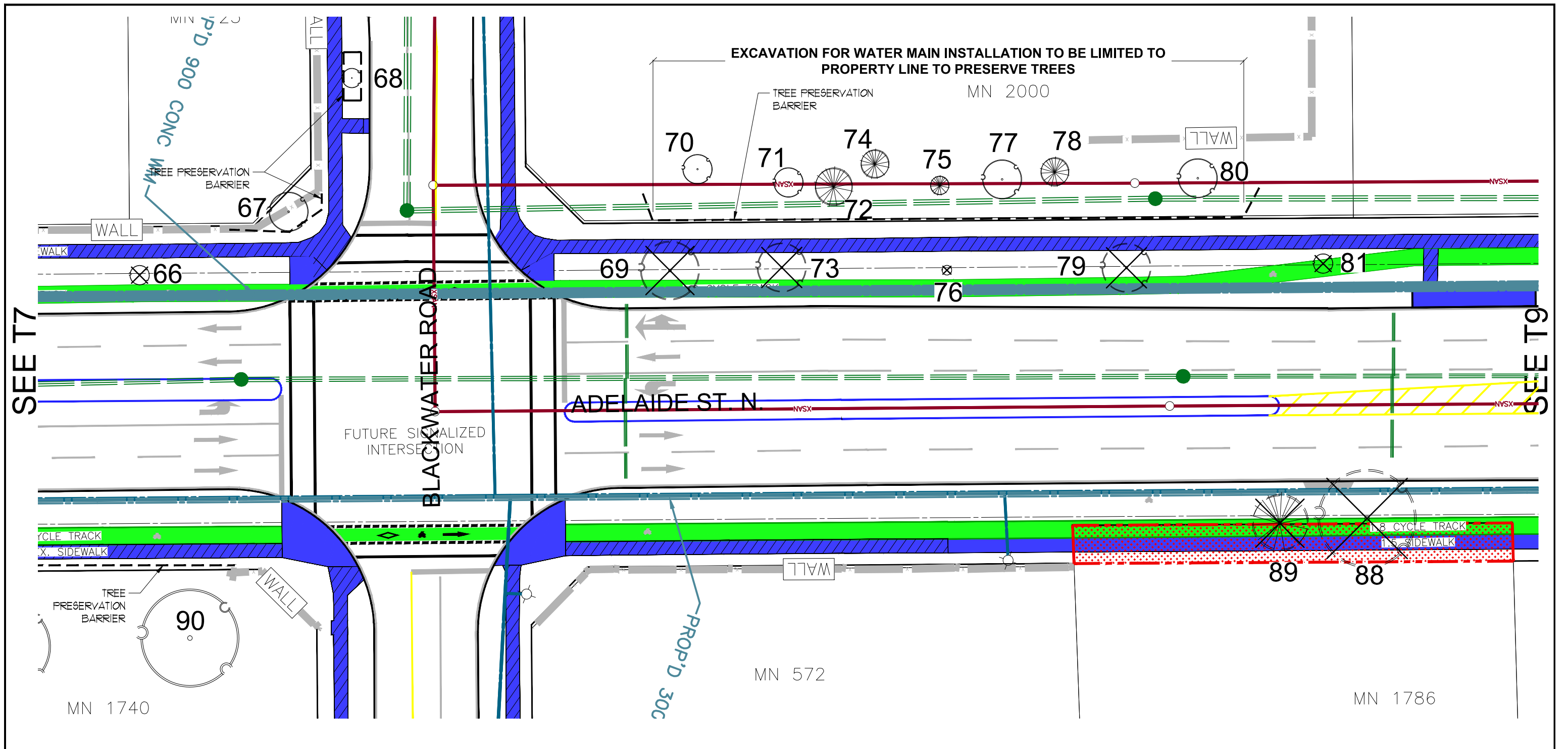
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	TREE PRESERVATION BARRIER		EXISTING DECIDUOUS TREES TO BE PRESERVED ← TREE NUMBER		EXISTING DECIDUOUS TREES TO BE REMOVED ← TREE NUMBER		PROPOSED SIDEWALK
	EXISTING CONIFEROUS TREES TO BE PRESERVED ← TREE NUMBER		EXISTING CONIFEROUS TREES TO BE REMOVED ← TREE NUMBER		EXISTING SIDEWALK		EXISTING MULTI USE PATHWAY
					PROPOSED MULTI USE PATHWAY		

**RON KOUDYS
LANDSCAPE
ARCHITECTS**
388 Oxford Street East, London, Ontario, N6A 1V7
Tel: (519) 667-3322, Fax: (519) 645-2474

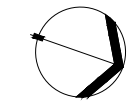
TITLE:
**STREET TREE ASSESSMENT - ADELAIDE STREET NORTH
FANSHAWE PARK ROAD EAST TO SUNNINGDALE ROAD EAST
LONDON, ON**

PROJECT NUMBER: 18-191Lg	SCALE: 1:400
DRAWN BY: RKLA Inc.	DATE: 2020.11.06
DRAWING NUMBER: T-7	



LEGEND

TREE PRESERVATION BARRIER	EXISTING DECIDUOUS TREES TO BE PRESERVED ← TREE NUMBER	EXISTING DECIDUOUS TREES TO BE REMOVED ← TREE NUMBER	PROPOSED SIDEWALK
	EXISTING CONIFEROUS TREES TO BE PRESERVED ← TREE NUMBER	EXISTING CONIFEROUS TREES TO BE REMOVED ← TREE NUMBER	EXISTING SIDEWALK
			EXISTING MULTI USE PATHWAY
			PROPOSED MULTI USE PATHWAY



**RON KOUDYS
LANDSCAPE
ARCHITECTS INC.**
388 Oxford Street East, London, Ontario, N6A 1V7
Tel: (519) 667-3322, Fax: (519) 645-2474

TITLE:

**STREET TREE ASSESSMENT - ADELAIDE STREET NORTH
FANSHAWE PARK ROAD EAST TO SUNNINGDALE ROAD EAST
LONDON, ON**

PROJECT NUMBER: 18-191Lg	SCALE: 1:400
DRAWN BY: RKLA Inc.	DATE: 2020.11.06
DRAWING NUMBER: T-8	

MN 690

MN 680

TREE PRESERVATION BARRIER

82

83

1.5 EX. SIDEWALK
1.8 CYCLE TRACK

SEE T8

SEE T10

ADELAIDE ST. N.

1.8 CYCLE TRACK
1.5 SIDEWALK

MN 1796

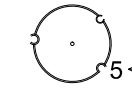
MN 1830

PROP'D 300 WM

PROP'D 300 WM

PROPOSED PROJECT PHASE LIMIT

LEGEND



EXISTING DECIDUOUS TREES TO BE PRESERVED
← TREE NUMBER



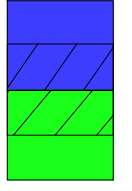
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← TREE NUMBER



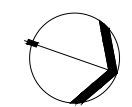
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← TREE NUMBER



EXISTING CONIFEROUS TREES TO BE REMOVED
← TREE NUMBER



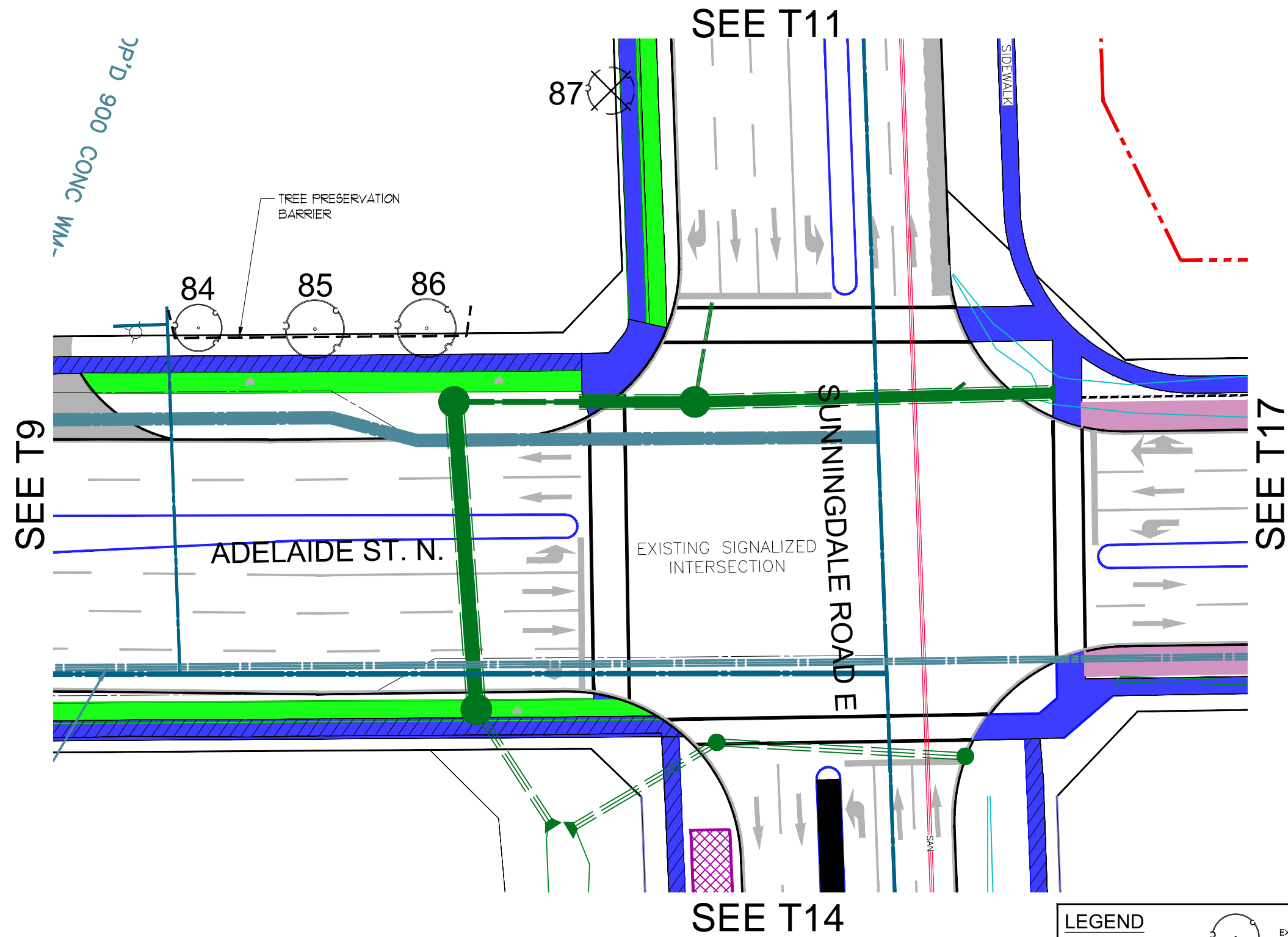
PROPOSED SIDEWALK
EXISTING SIDEWALK
EXISTING MULTI USE PATHWAY
PROPOSED MULTI USE PATHWAY



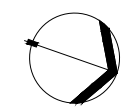
RON KOUDYS LANDSCAPE ARCHITECTS
 388 Oxford Street East, London, Ontario, N6A 1V7
 Tel: (519) 667-3322, Fax: (519) 645-2474

TITLE: STREET TREE ASSESSMENT - ADELAIDE STREET NORTH
 FANSHAWE PARK ROAD EAST TO SUNNINGDALE ROAD EAST
 LONDON, ON

PROJECT NUMBER: 18-191Lg	SCALE: 1:400
DRAWN BY: RKLA Inc.	DATE: 2020.11.06
DRAWING NUMBER:	T-9



LEGEND	
	EXISTING DECIDUOUS TREES TO BE PRESERVED ← TREE NUMBER
	EXISTING DECIDUOUS TREES TO BE REMOVED ← TREE NUMBER
	EXISTING CONIFEROUS TREES TO BE PRESERVED ← TREE NUMBER
	EXISTING CONIFEROUS TREES TO BE REMOVED ← TREE NUMBER
	TREE PRESERVATION BARRIER
	PROPOSED SIDEWALK
	EXISTING SIDEWALK
	EXISTING MULTI USE PATHWAY
	PROPOSED MULTI USE PATHWAY



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ARCHITECTS

388 Oxford Street East, London, Ontario, N6A 1V7
Tel: (519) 667-3322, Fax: (519) 645-2474

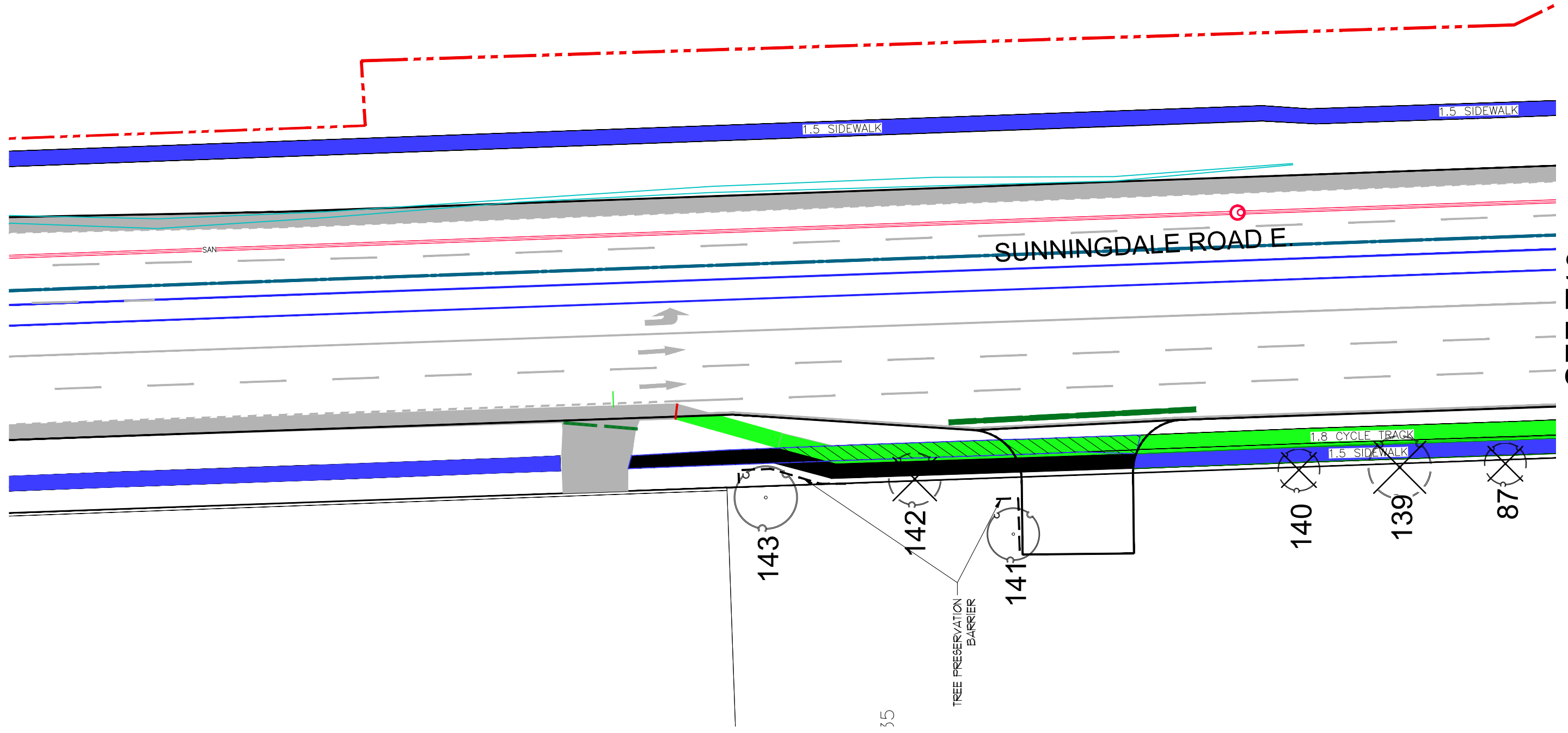
TITLE:

STREET TREE ASSESSMENT - ADELAIDE STREET NORTH
FANSHAWE PARK ROAD EAST TO SUNNINGDALE ROAD EAST
LONDON, ON

PROJECT NUMBER: 18-191Lg	SCALE: 1:400
DRAWN BY: RKLA Inc.	DATE: 2020.11.06
DRAWING NUMBER:	T-10

SEE T12

SEE T10



LEGEND

	TREE PRESERVATION BARRIER		EXISTING DECIDUOUS TREES TO BE PRESERVED ← TREE NUMBER		EXISTING DECIDUOUS TREES TO BE REMOVED ← TREE NUMBER		PROPOSED SIDEWALK
			EXISTING CONIFEROUS TREES TO BE PRESERVED ← TREE NUMBER		EXISTING CONIFEROUS TREES TO BE REMOVED ← TREE NUMBER		EXISTING SIDEWALK
							EXISTING MULTI USE PATHWAY
							PROPOSED MULTI USE PATHWAY



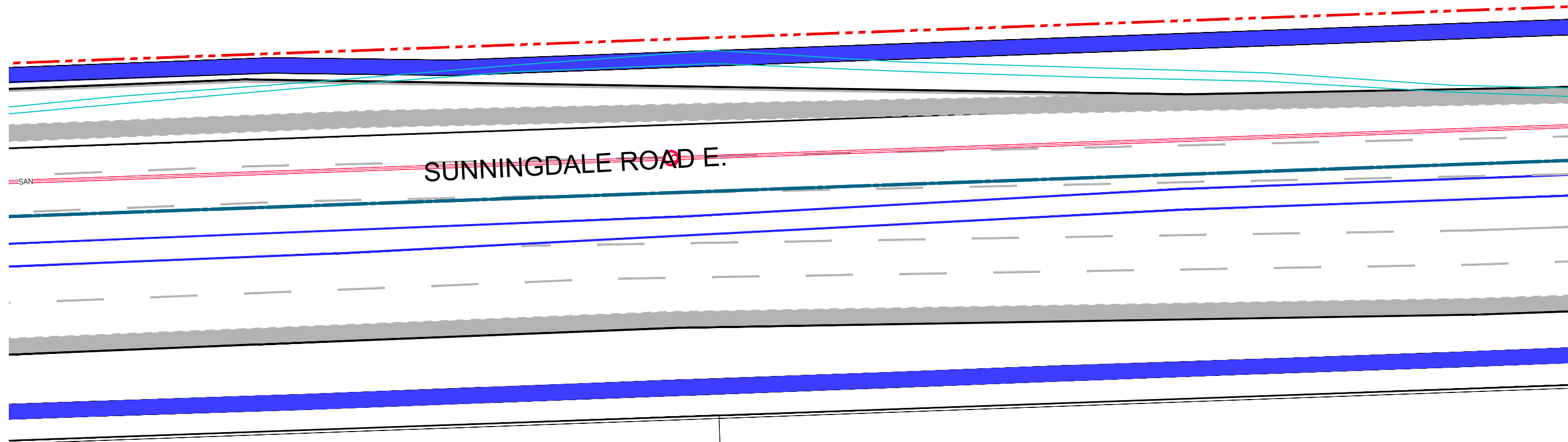
TITLE:

STREET TREE ASSESSMENT - ADELAIDE STREET NORTH
 FANSHAWE PARK ROAD EAST TO SUNNINGDALE ROAD EAST
 LONDON, ON

PROJECT NUMBER: 18-191Lg	SCALE: 1:400
DRAWN BY: RKLA Inc.	DATE: 2020.11.06
DRAWING NUMBER:	T-11

SEE T13


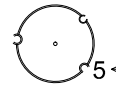







SEE T11



AN 2230



LEGEND

	TREE PRESERVATION BARRIER		EXISTING DECIDUOUS TREES TO BE PRESERVED ← TREE NUMBER 5		EXISTING DECIDUOUS TREES TO BE REMOVED ← TREE NUMBER 8		PROPOSED SIDEWALK
			EXISTING CONIFEROUS TREES TO BE PRESERVED ← TREE NUMBER 6		EXISTING CONIFEROUS TREES TO BE REMOVED ← TREE NUMBER 9		EXISTING SIDEWALK
							EXISTING MULTI USE PATHWAY
							PROPOSED MULTI USE PATHWAY

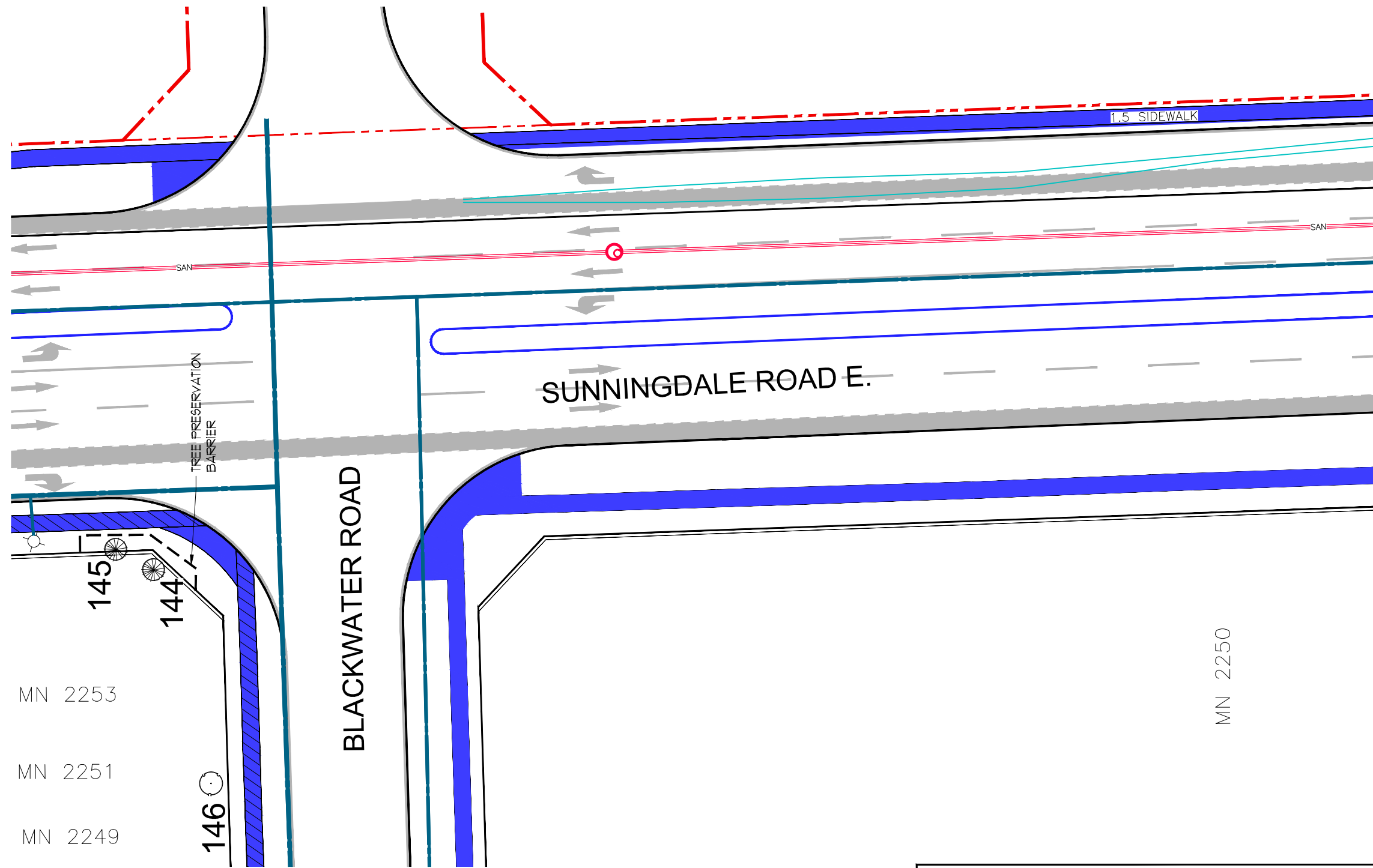


**RON KOUDYS
LANDSCAPE
ARCHITECTS**
388 Oxford Street East, London, Ontario, N6A 1V7
Tel: (519) 667-3322, Fax: (519) 645-2474

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FANSHAWE PARK ROAD EAST TO SUNNINGDALE ROAD EAST
LONDON, ON

PROJECT NUMBER: 18-191Lg	SCALE: 1:400
DRAWN BY: RKLA Inc.	DATE: 2020.11.06
DRAWING NUMBER:	T-12

LIMIT OF TREE INVENTORY



SEE T12

LEGEND

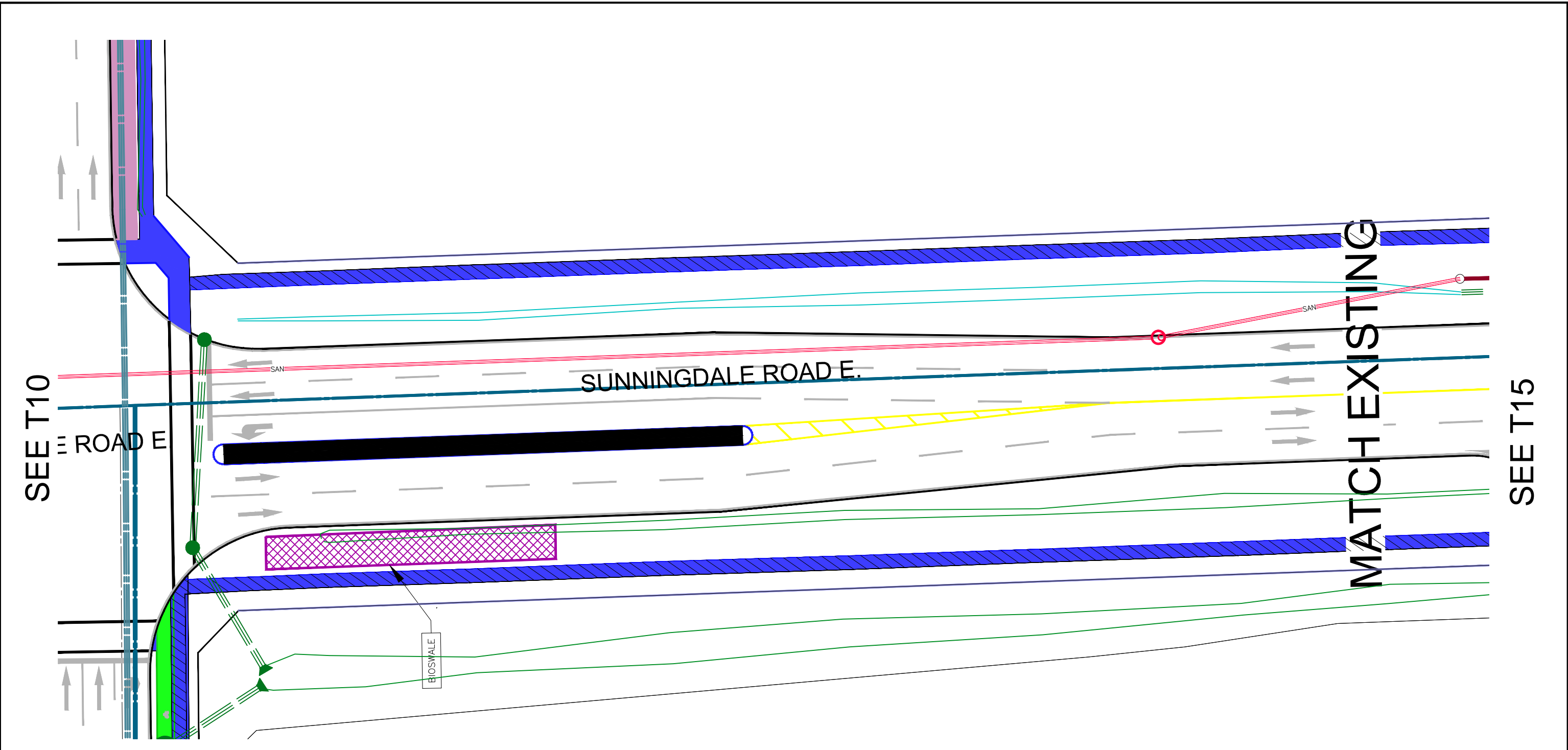
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			EXISTING CONIFEROUS TREES TO BE PRESERVED ← TREE NUMBER		EXISTING CONIFEROUS TREES TO BE REMOVED ← TREE NUMBER		EXISTING MULTI USE PATHWAY
							EXISTING SIDEWALK
							PROPOSED MULTI USE PATHWAY



RON KOUDYS LANDSCAPE ARCHITECTS
388 Oxford Street East, London, Ontario, N6A 1V7
 Tel: (519) 667-3322, Fax: (519) 645-2474

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 FANSHAWE PARK ROAD EAST TO SUNNINGDALE ROAD EAST
 LONDON, ON

PROJECT NUMBER: 18-191Lg	SCALE: 1:400
DRAWN BY: RKLA Inc.	DATE: 2020.11.06
DRAWING NUMBER:	T-13



LEGEND			
	TREE PRESERVATION BARRIER		EXISTING DECIDUOUS TREES TO BE PRESERVED ← TREE NUMBER
	EXISTING CONIFEROUS TREES TO BE PRESERVED ← TREE NUMBER		EXISTING DECIDUOUS TREES TO BE REMOVED ← TREE NUMBER
	EXISTING CONIFEROUS TREES TO BE REMOVED ← TREE NUMBER		PROPOSED SIDEWALK
	PROPOSED MULTI USE PATHWAY		EXISTING MULTI USE PATHWAY
	EXISTING SIDEWALK		

RON KOUDYS
LANDSCAPE ARCHITECTS INC.
388 Oxford Street East, London, Ontario, N6A 1V7
Tel: (519) 667-3322, Fax: (519) 645-2474

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**STREET TREE ASSESSMENT - ADELAIDE STREET NORTH
FANSHAWE PARK ROAD EAST TO SUNNINGDALE ROAD EAST
LONDON, ON**

PROJECT NUMBER: 18-191Lg	SCALE: 1:400
DRAWN BY: RKLA Inc.	DATE: 2020.11.06
DRAWING NUMBER: T-14	


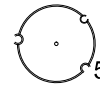





SEE T14

SEE T16

SUNNINGDALE ROAD E.

MN 620

LEGEND

	TREE PRESERVATION BARRIER		EXISTING DECIDUOUS TREES TO BE PRESERVED ← TREE NUMBER 5		EXISTING DECIDUOUS TREES TO BE REMOVED ← TREE NUMBER 8		PROPOSED SIDEWALK
			EXISTING CONIFEROUS TREES TO BE PRESERVED ← TREE NUMBER 6		EXISTING CONIFEROUS TREES TO BE REMOVED ← TREE NUMBER 9		EXISTING MULTI USE PATHWAY
							PROPOSED MULTI USE PATHWAY



RON KOUDYS
LANDSCAPE ARCHITECTS
388 Oxford Street East, London, Ontario, N6A 1V7
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FANSHAWE PARK ROAD EAST TO SUNNINGDALE ROAD EAST
LONDON, ON

PROJECT NUMBER:
18-191Lg

SCALE:
1:400

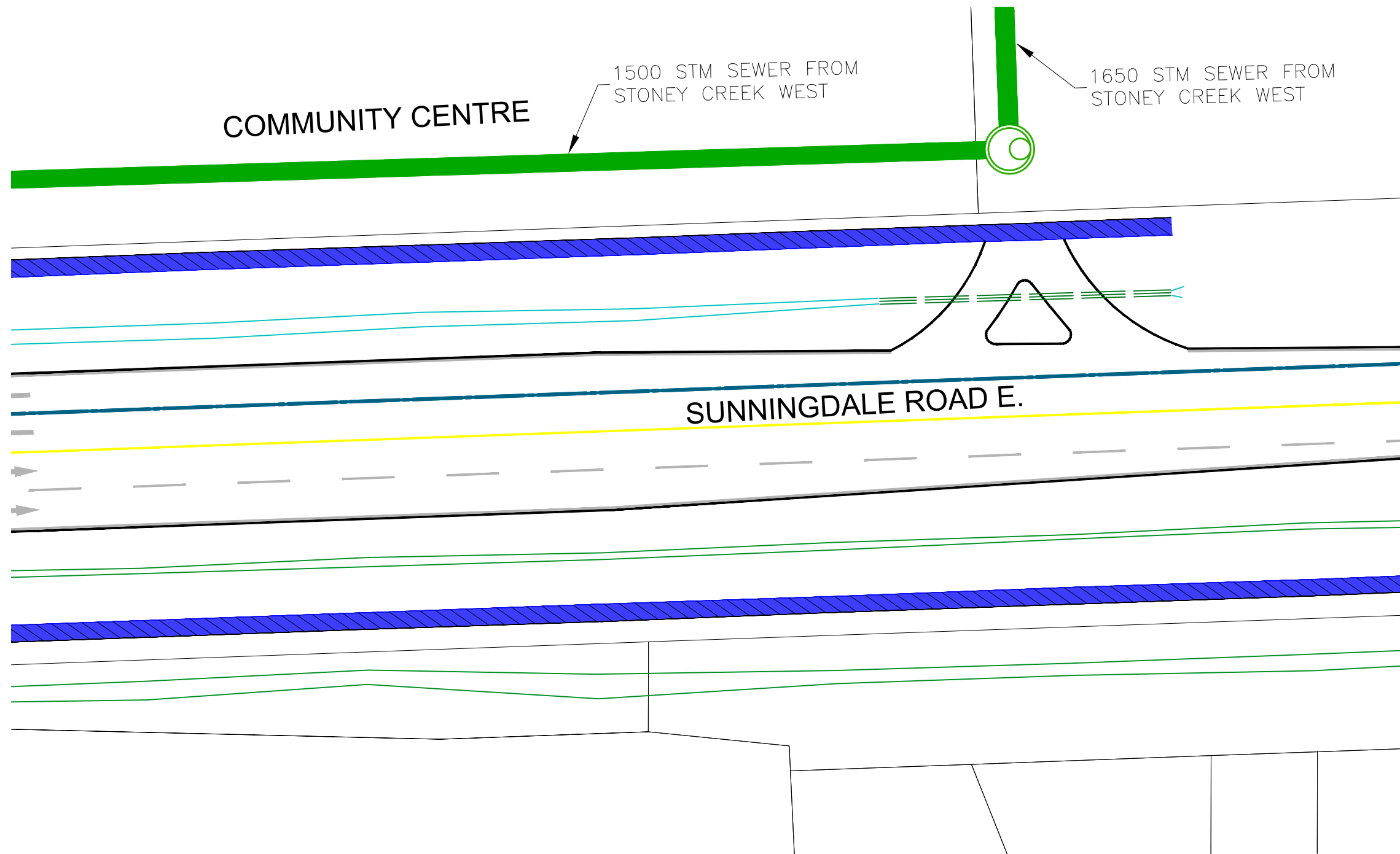
DRAWN BY: RKLA Inc.

DATE: 2020.11.06

DRAWING NUMBER:








T-15

SEE T15



LIMIT OF TREE INVENTORY

LEGEND

	TREE PRESERVATION BARRIER		EXISTING DECIDUOUS TREES TO BE PRESERVED ← TREE NUMBER 5		EXISTING DECIDUOUS TREES TO BE REMOVED ← TREE NUMBER 8		PROPOSED SIDEWALK
			EXISTING CONIFEROUS TREES TO BE PRESERVED ← TREE NUMBER 6		EXISTING CONIFEROUS TREES TO BE REMOVED ← TREE NUMBER 9		EXISTING MULTI USE PATHWAY
							PROPOSED MULTI USE PATHWAY



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 LONDON, ON

PROJECT NUMBER:
18-191Lg

SCALE:
1:400

DRAWN BY: RKLA Inc.

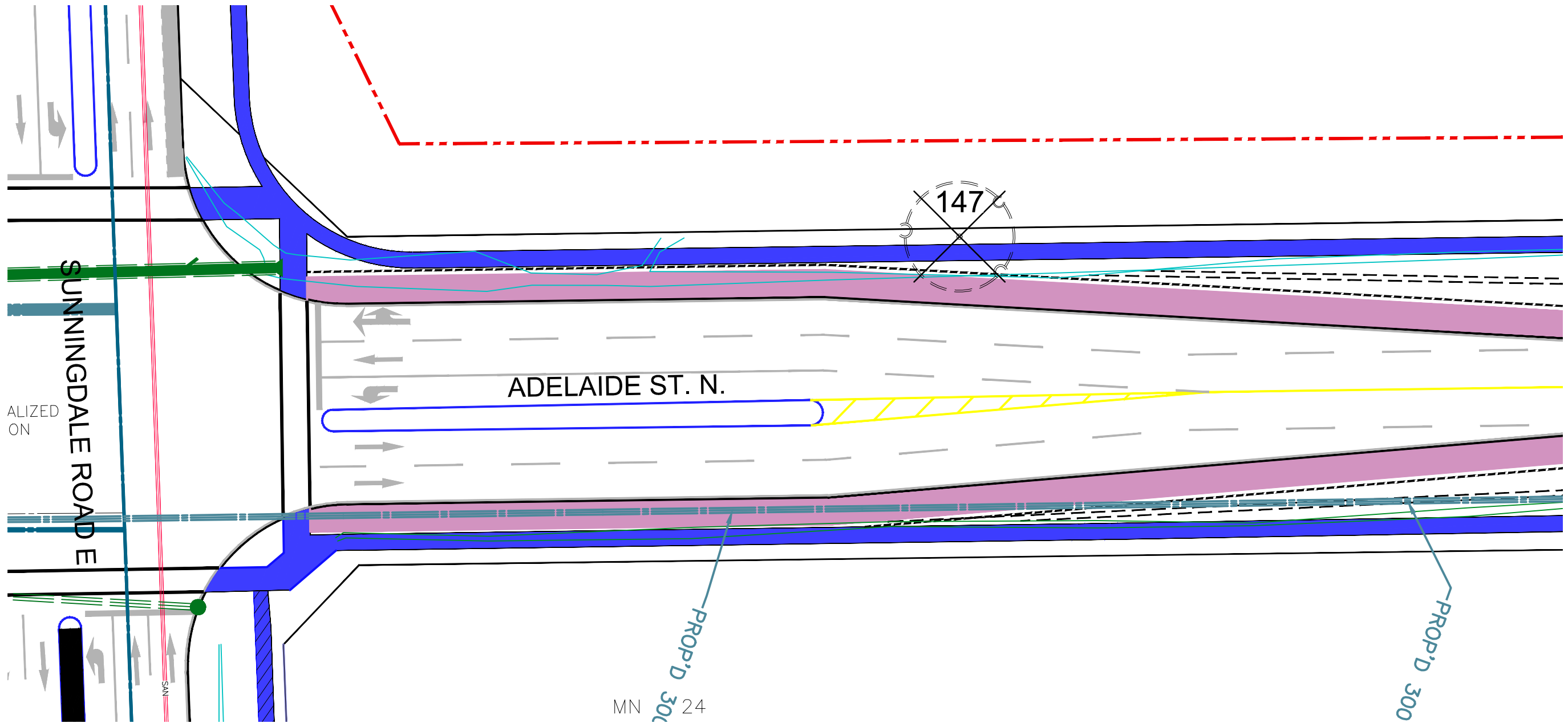
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DRAWING NUMBER:

T-16

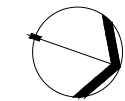
SEE T10

SEE T18



LEGEND

	TREE PRESERVATION BARRIER		EXISTING DECIDUOUS TREES TO BE PRESERVED ← TREE NUMBER		EXISTING DECIDUOUS TREES TO BE REMOVED ← TREE NUMBER		PROPOSED SIDEWALK
			EXISTING CONIFEROUS TREES TO BE PRESERVED ← TREE NUMBER		EXISTING CONIFEROUS TREES TO BE REMOVED ← TREE NUMBER		EXISTING MULTI USE PATHWAY
							EXISTING SIDEWALK
							PROPOSED MULTI USE PATHWAY

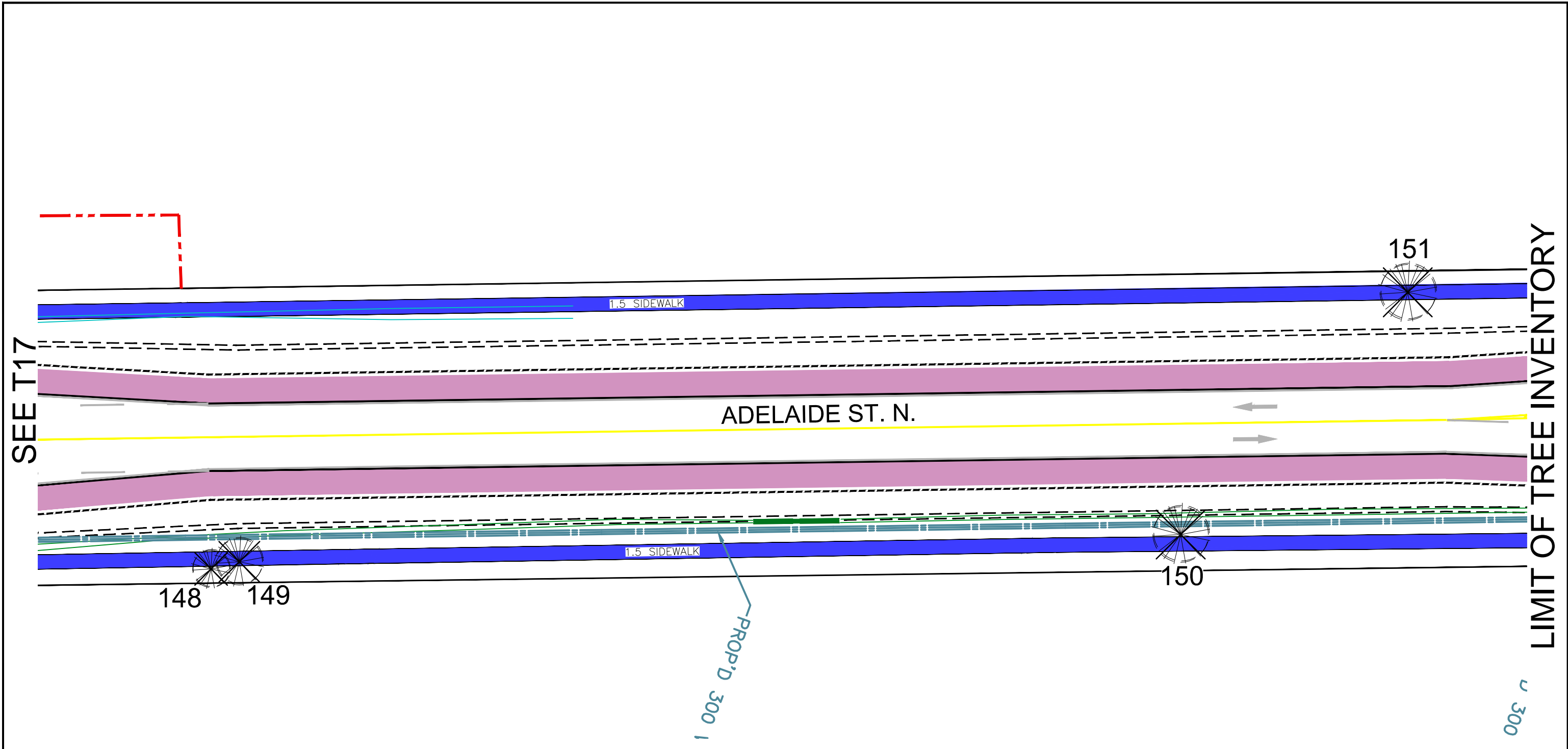


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 388 Oxford Street East, London, Ontario, N6A 1V7
 Tel: (519) 667-3322, Fax: (519) 645-2474

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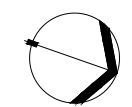
STREET TREE ASSESSMENT - ADELAIDE STREET NORTH
 FANSHAWE PARK ROAD EAST TO SUNNINGDALE ROAD EAST
 LONDON, ON

PROJECT NUMBER: 18-191Lg	SCALE: 1:400
DRAWN BY: RKLA Inc.	DATE: 2020.11.06
DRAWING NUMBER:	T-17



LEGEND

	TREE PRESERVATION BARRIER		EXISTING DECIDUOUS TREES TO BE PRESERVED ← TREE NUMBER		EXISTING DECIDUOUS TREES TO BE REMOVED ← TREE NUMBER		PROPOSED SIDEWALK
			EXISTING CONIFEROUS TREES TO BE PRESERVED ← TREE NUMBER		EXISTING CONIFEROUS TREES TO BE REMOVED ← TREE NUMBER		EXISTING SIDEWALK
							EXISTING MULTI USE PATHWAY
							PROPOSED MULTI USE PATHWAY



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LANDSCAPE
ARCHITECTS**

388 Oxford Street East, London, Ontario, N6A 1V7
Tel: (519) 667-3322, Fax: (519) 645-2474

TITLE:

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FANSHAWE PARK ROAD EAST TO SUNNINGDALE ROAD EAST
LONDON, ON**

PROJECT NUMBER: 18-191Lg	SCALE: 1:400
DRAWN BY: RKLA Inc.	DATE: 2020.11.06
DRAWING NUMBER: T-18	

APPENDIX C - TREE PHOTOS

All photographs taken by M Peeters of RKL A during field work.
September 27, 2018 (trees 1 - 138), and
October 22, 2019 (trees 139 - 151).



Tree # 1 – Sugar Maple
1537 Adelaide St. N.



Tree # 2 – Red Oak
1537 Adelaide St. N.



Tree # 3 – Red Oak
1537 Adelaide St. N.



Trees # 4-8 – Norway Spruce
600 Fanshawe Park Road



Tree # 9 – Honeylocust
600 Fanshawe Park Road



Tree # 10 – Royal Red Norway Maple
600 Fanshawe Park Road



Tree # 11 – Norway Spruce
600 Fanshawe Park Road



Tree # 12 – Honeylocust
600 Fanshawe Park Road



Tree # 13 – Elm
600 Fanshawe Park Road



Tree # 14 – Hackberry
600 Fanshawe Park Road



Tree # 15– Silver Maple
600 Fanshawe Park Road



Tree # 16 – Elm
600 Fanshawe Park Road



Tree # 17 – Honeylocust
600 Fanshawe Park Road



Tree # 18 - Honeylocust
600 Fanshawe Park Road



Tree # 19 - Honeylocust
1595 Adelaide St. North



Tree # 20 – Honeylocust
1595 Adelaide St. North



Tree # 21 – White Oak
1595 Adelaide St. North



Tree # 22 – Silver Maple
1595 Adelaide St. North



Tree # 23 – Colorado Blue Spruce
1595 Adelaide St. N



Tree # 24 – Colorado Blue Spruce
1595 Adelaide St. N



Tree # 25 – Colorado Blue Spruce
1595 Adelaide St. N



Tree # 26 – Hackberry
1595 Adelaide St. N



Tree # 27 – Littleleaf Linden
1595 Adelaide St. N



Trees # 28 – Littleleaf Linden
1595 Adelaide St. N



Tree # 29 – Sugar Maple
1595 Adelaide St. N



Tree # 30 – Red Oak
1593 Adelaide St. N



Tree # 31 – Colorado Blue Spruce
1593 Adelaide St. N



Tree # 32 – Honeylocust
1880 Phillbrook Dr.



Tree # 33 - Honeylocust
1880 Phillbrook Dr.



Tree # 34 – Honeylocust
1880 Phillbrook Dr.



Tree # 35 – Emerald Queen Norway Maple Tree
2081 Phillbrook Dr.



36 – Norway Maple
2081 Phillbrook Dr.



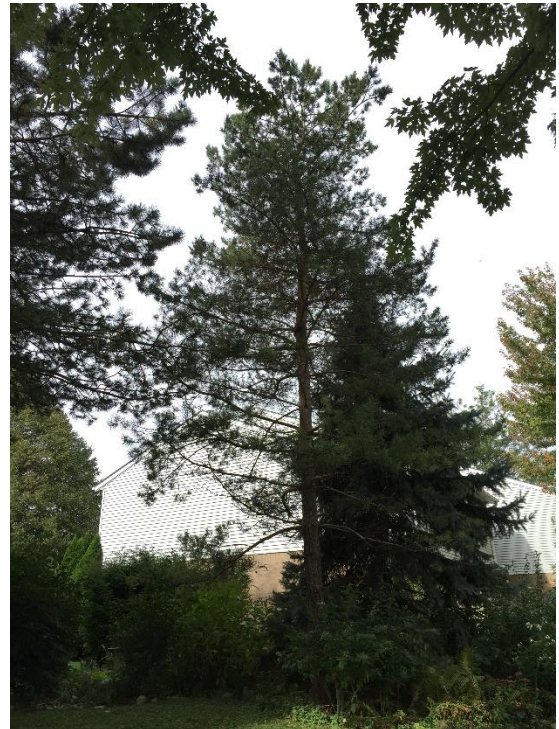
Tree # 37 – Northern Catalpa
2081 Phillbrook Dr.



Tree #38 – Silver Maple
2081 Phillbrook Dr.



Tree # 39 – Austrian Pine
2081 Phillbrook Dr.



Tree # 40 – Scotch Pine
Tree # 41 – Colorado Spruce
2081 Phillbrook Dr.



Tree # 42 – Silver Maple
2081 Phillbrook Dr.



Tree # 43 – Eastern Cottonwood
2081 Phillbrook Dr.



Trees # 44 & 45 – Eastern Cottonwood
30 Adelaide St. N



Trees # 46 & 47 – Trembling Aspen
1625 Adelaide St. N



Tree # 48 – Trembling Aspen
1625 Adelaide St. N



Tree # 49 – Willow spp.
1625 Adelaide St. N



Tree # 50 – Freeman Maple
1675 Adelaide St. N



Tree # 51 – Ash spp.
1675 Adelaide St. N



Tree # 52 – Ash spp.
1675 Adelaide St. N



Tree # 53 – Ash spp.
1675 Adelaide St. N



Tree # 54 – Zelkova
1675 Adelaide St. N



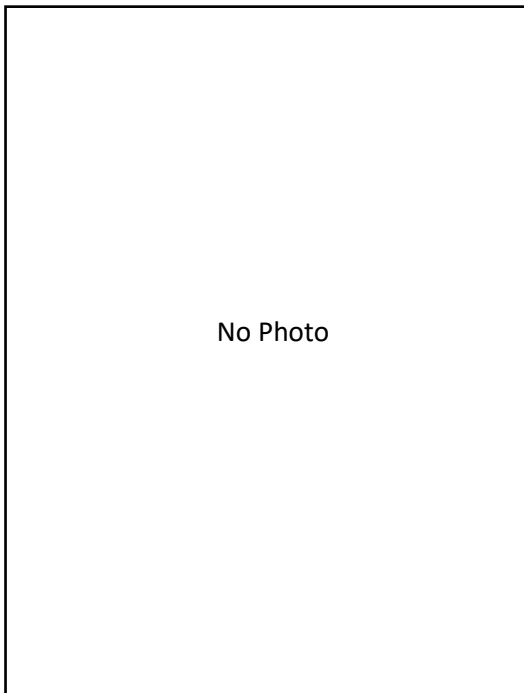
Tree # 55 – Amur Cork Tree
1675 Adelaide St. N



Tree # 56 – Ash spp.
1675 Adelaide St. N



Tree # 57 – Ivory Silk Tree Lilac
855 Garibaldi Ave / Adelaide St. N



Tree # 58 – Hedge Maple
859 Garibaldi Ave / Adelaide St. N



Tree # 59 – Elm
859 Garibaldi Ave / Adelaide St. N



Tree # 60 – Hedge Maple
869 Garibaldi Ave / Adelaide St. N



Tree # 61 – Hackberry
879 Garibaldi Ave / Adelaide St. N



Trees # 62 & 63 – Hackberry
885 Garibaldi Ave / Adelaide St. N



Tree # 64 – Hackberry
895 Garibaldi Ave / Adelaide St. N



Tree # 65 – Hackberry
907 Garibaldi Ave / Adelaide St. N



Tree # 66 – Hackberry
925 Garibaldi Ave / Adelaide St. N



Tree # 67 – Paper Birch
925 Garibaldi Ave / Adelaide St. N



Tree # 68 – Freeman Maple
925 Garibaldi Ave / Adelaide St. N



Tree # 69 – Freeman Maple
2000 Blackwater Rd.



Tree # 70 – Ivory Silk Tree Lilac
2000 Blackwater Rd.



Tree # 71 – Ivory Silk Tree Lilac
2000 Blackwater Rd.



Tree # 72 – Serbian Spruce
2000 Blackwater Rd.



Tree # 73 – Tulip Tree
2000 Blackwater Rd.



Tree # 74 – Serbian Spruce
2000 Blackwater Rd.



Tree # 75 – Serbian Spruce
2000 Blackwater Rd.



Tree # 76 - unknown
2000 Blackwater Rd.



Tree # 75 – Serbian Spruce
2000 Blackwater Rd.



Tree # 76 - unknown
2000 Blackwater Rd.



Tree # 77 – Horse Chestnut
2000 Blackwater Rd.



Tree # 78 – Serbian Spruce
2000 Blackwater Rd.



Tree # 79 – Hackberry
2000 Blackwater Rd.



Tree # 80 – Horse Chestnut
2000 Blackwater Rd.



Tree # 81 – Red Maple
690 Adelaide St. N



Tree # 82 – Littleleaf Linden
1825 Adelaide St. N



Tree # 83 – Littleleaf Linden
1825 Adelaide St. N



Tree # 84 – Sugar Maple
1825 Adelaide St. N



Tree # 85 – Red Maple
1825 Adelaide St. N



Tree # 86 – Red Maple
1825 Adelaide St. N



Tree # 87 – Freeman Maple
1825 Adelaide St. N



Tree # 88 – Freeman Maple
1786 Adelaide St. N



Tree # 89 – Red Maple
1786 Adelaide St. N



Tree # 90 – Norway Maple
1740 Adelaide St. N



Tree # 91 – Norway Maple
1740 Adelaide St. N



Tree # 92 – Norway Maple
1740 Adelaide St. N



Tree # 93 – Norway Maple
1720 Adelaide St. N



Tree # 94 – Weeping Willow
1720 Adelaide St. N



Tree # 95 – Freeman Maple
506 Blackwater Pl.



Tree # 96 – Freeman Maple
509 Blackwater Pl.



Tree # 97 – Freeman Maple
509 Blackwater Pl.



Tree # 98 – Norway Maple
509 Blackwater Pl.



Tree # 99 – Norway Maple
1600 Adelaide St. N



Trees # 100 & 101 – Colorado Blue Spruce
1600 Adelaide St. N



Trees # 102 & 103 – Colorado Blue Spruce
1600 Adelaide St. N



Trees # 104 & 105 – Colorado Blue Spruce
1600 Adelaide St. N



Trees # 102 & 103 – Colorado Blue Spruce
1600 Adelaide St. N



Trees # 104 & 105 – Colorado Blue Spruce
1600 Adelaide St. N



Tree # 106 – Norway Maple
600 Adelaide St. N



Tree # 107 – Austrian Pine
600 Adelaide St. N



Tree # 108 – Austrian Pine
600 Adelaide St. N



Tree # 109 – Norway Maple
600 Adelaide St. N



Tree # 110 – Norway Maple
600 Adelaide St. N



Tree # 111 – Austrian Pine
600 Adelaide St. N



Tree # 112 – Red Maple
600 Adelaide St. N



Tree # 113 – Norway Maple
600 Adelaide St. N



Tree # 114 – Austrian Pine
Tree # 115 – Silver Maple
600 Adelaide St. N



Tree # 116 – Pear
601 Adelaide St. N



Tree # 117 – Royal Red Norway Maple
601 Adelaide St. N



Tree # 118 – Mountain Ash
601 Adelaide St. N



Tree # 119 – Pear
601 Adelaide St. N



Tree # 120 – Royal Red Norway Maple
601 Adelaide St. N



Tree # 121 – Mountain Ash
601 Adelaide St. N



Tree # 122 – Mountain Ash
601 Adelaide St. N



Tree # 123 – Norway Maple
1580 Adelaide St. N



Tree # 124 – Mountain Ash
1580 Adelaide St. N



Tree # 125 – Mountain Ash
1580 Adelaide St. N



Tree # 126 – Pear
1580 Adelaide St. N



Tree # 127 – Norway Maple
1580 Adelaide St. N



Tree # 128 – Norway Maple
1580 Adelaide St. N



Tree # 129 – Mountain Ash
1580 Adelaide St. N



Tree # 130 – Norway Maple
1580 Adelaide St. N



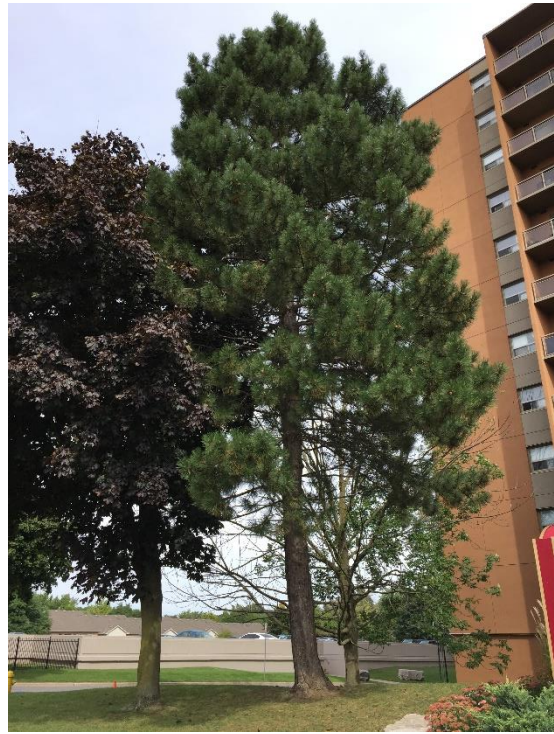
Tree # 131 – Norway Maple
1580 Adelaide St. N



Tree # 132 – Norway Maple
1580 Adelaide St. N



Tree # 133 – Royal Red Norway Maple
1570 Adelaide St. N



Tree # 134 – Austrian Pine
1570 Adelaide St. N



Tree # 135 – Freeman Maple
614 Fanshawe Park Rd.



Tree # 136 – Austrian Pine
614 Fanshawe Park Rd.



Tree # 137 – Austrian Pine
614 Fanshawe Park Rd.



Tree # 138 - Honeylocust
1536 Fanshawe Park Rd.



Tree # 139 – Freeman Maple
1845 Adelaide Rd N



Tree # 140 - Freeman Maple
1845 Adelaide Rd N



Tree # 141 – Honeylocust
1835 Adelaide Rd N



Tree # 142 - Littleleaf Linden
BOUNDARY - 1835 Adelaide Rd N and City ROW



Tree # 143 – Littleleaf Linden
1835 Adelaide Rd N



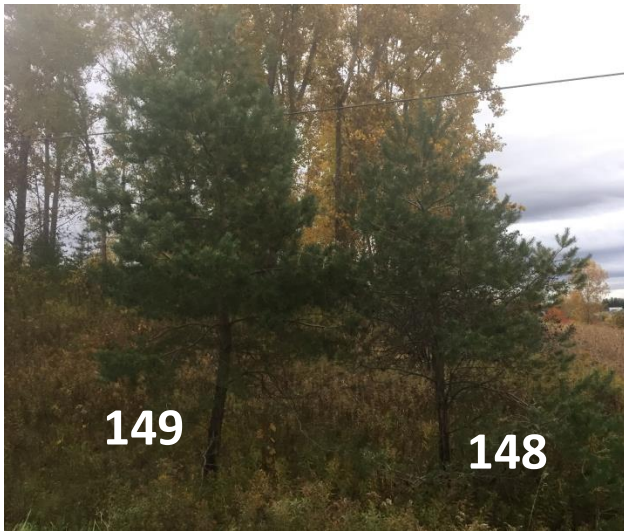
Tree # 144 and 145- Colorado Blue Spruce
1845 Adelaide Rd N and BOUNDARY TREE - with City



Tree # 146 – Honeylocust
2251 Blackwater Road



Tree # 147 - Trembling Aspen
City ROW



Tree # 148 & # 149 – Scotch Pine
City ROW



Tree # 150 - Scotch Pine
City ROW



Tree # 151 - Scotch Pine

City ROW