

Tree Conservation Report

125 Colonnade Road, Ottawa, ON

March 14, 2022

Prepared for:
Access Property Development Inc.
Attn: Sean Farzaneh
100 Canadian Road
Toronto, ON M1R 4Z5

Prepared by:
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Summary

I have been retained by Sean Farzanah of Access Property Development Inc. to prepare a Tree Conservation Report for the proposed development at 125 Colonnade Road in Ottawa, ON.

This Tree Conservation report includes the following:

- Natural features on the site and in the surrounding landscape,
- Identification and descriptions of the vegetative cover on the site prior to development,
- Recommended tree management actions,
- Specifications for tree protection during development, and
- Techniques for mitigating injury to trees during development.

72 trees are included in this inventory. Of these, 46 trees are recommended for removal and 26 are recommended for retention. Given that the property has an area greater than 1 hectare, and that it is located in the inner urban area, it is anticipated that a permit will be required in order to injure and remove trees to enable project works. Although the area does not meet the criteria to be considered a Significant Woodland, it would be valuable to retain as much vegetation as possible adjacent to the railway corridor, as it likely provides cover for wildlife moving through the area.

Table 1: Proposed tree-related actions requiring permit approval at 125 Colonnade Rd., Ottawa, ON.

	<i>Private</i>	<i>Municipal</i>
<i>Remove</i>	#2, 15-48, 54-63, 67	N/A
<i>Injure</i>	#49, 66	N/A

Introduction

I have been retained by Sean Farzanah of Access Property Development Inc. to prepare a Tree Conservation Report (TCR) for the proposed development at 125 Colonnade Road, Ottawa, ON. The City of Ottawa, Ontario is located on the unceded traditional territory of the Algonquin Anishinaabeg people.

Site Information

125 Colonnade Road lies approximately 200 metres west of the Rideau River on the west side of Prince of Wales Drive. It is characterized by lawn and boulevard areas along the west, north, and eastern borders of the property, and by a lightly wooded area to the south, north of the railway. No surface water features are present, although water likely travels along the ditch of the old railway spur during times of high snowmelt or precipitation. The wooded area consists mainly of a stand of trembling aspen (*Populus tremuloides*) with an average diameter at breast height (DBH) of 10-15 cm, interspersed with individuals of black walnut (*Juglans nigra*), Manitoba maple (*Acer negundo*), and crack willow (*Salix fragilis*). The understory consists largely of buckthorn (*Rhamnus* sp.) and sumac (*Rhus* sp.). The wooded area does not meet the criteria for Significant Woodlands according to the City of Ottawa's *Environmental Impact Statement Guidelines*.

Methods

The tree inventory was undertaken on January 15, 2022 by Anna Mernieks, ISA #ON-2224A. Trees with a DBH of 10 cm or greater were surveyed. Trees which were not located on the survey were located approximately using geographic site markers. Tree groups were identified when appropriate. No trees were tagged as part of the inventory.

By-laws and Regulations

The City of Ottawa "Tree Protection By-law" (By-law No. 2020-340) regulates the following categories of trees:

- All City-owned trees throughout the urban and rural area
- All trees 10 cm or more in diameter at breast height on private properties within the urban area that are subject to a Planning Act application for Site Plan, Plan of Subdivision, or Plan of Condominium
- All trees 10 cm or more in diameter at breast height on private properties within the urban area that are over 1 hectare in size
- All distinctive trees on private properties 1 hectare or less in size, where distinctive trees are defined as:
 - Trees measuring 30 cm or more in diameter at breast height within the inner urban area (urban lands inside the Greenbelt)
 - Trees measuring 50 cm or more in diameter at breast height within the suburban area (urban lands outside the Greenbelt)

Given the location of the site at 125 Colonnade Road within the inner urban area, and its size of greater than 1 hectare, all 72 trees are regulated pursuant to this by-law.

Recommendations

These recommendations are provided based on an assessment of the suitability and potential longevity of each tree in the landscape based on individual factors such as species, condition, and habitat value. Recommendations are proposed based on the site plans presented at the time of assessment and are subject to change in the event that updated site plans are released.

Tree Removals Related to Development

The proposed works will require the removal of 45 privately-owned trees and/or tree groups:

- 27 trembling aspen (*Populus tremuloides*, trees #15-22, 24, 25, 28-31, 33-36, 39-43, 54-56), with diameters at breast height (DBH) ranging from 10 – 18 cm, are proposed for removal to enable the construction of new building area “B” and a parking amenity.
- 6 trembling aspen (*Populus tremuloides*, trees #23, 26, 27, 32, 37, 44), with diameters at breast height (DBH) ranging from 25-32 cm, are proposed for removal to enable the construction of new building area “B” and a parking amenity.
- 5 black walnut (*Juglans nigra*, trees #45, 46, 48, 58, 61), with diameters at breast height (DBH) ranging from 10 to 22 cm, are proposed for removal to enable the construction of new building areas “A” and “B” as well as a parking amenity.
- Trees #62 and 63, two Colorado spruce (*Picea pungens*), 38 and 82 cm DBH, are proposed for removal to enable the construction of new building area “A”.
- Tree #47, an eastern redbud (*Cercis canadensis*), 15 cm DBH, is proposed for removal to enable the construction of a parking amenity.
- Tree #57, a Manitoba maple (*Acer negundo*), 15 cm DBH, is proposed for removal to enable the construction of a parking amenity.
- Trees #59 and 60, two pyramidal English oak (*Quercus robur* ‘Fastigiata’), 15 and 15 cm DBH, are proposed for removal to enable the construction of a parking amenity.
- Tree #67, a multi-stemmed Siberian elm (*Ulmus pumila*), 68 and 39 cm DBH, is proposed for removal to enable the construction of building area “A”.

Tree Removals Based on Poor Condition

- Tree #2, a Colorado spruce (*Picea pungens*), 38 cm DBH, was assessed as standing dead at the time of field observations and is proposed for removal based on condition.

Tree Injuries Related to Development

Trees #49 and 66, a Siberian elm and a Colorado spruce located on the subject site, are proposed for injury to enable the construction of building area “A” and a parking amenity. Injury to these trees may be

minimized by making clean pruning cuts (i.e., no pulling/tearing) to any tree roots that are encountered during construction of the driveway. The destruction of any roots with a diameter greater than 25 mm should be avoided and the CRZ should be left undisturbed wherever possible. Given the hardy nature of these trees, it is anticipated that, with proper root pruning performed if necessary, these trees may be successfully retained. Arborist supervision may be required in order to ensure proper root pruning.

Tree Protection

Tree Protection (Appendix 2, Fig. 1) has been recommended for trees adjacent to site works which may otherwise be impacted by construction access and/or materials staging and storage. The City of Ottawa requires tree protection fencing to be constructed complete with signage posted to identify the tree protection fencing. A copy of the permit should be posted on any trees which are to be removed. The tree protection fencing must be constructed prior to the commencement of site works and to the following specifications:

- 1.2 m (4') tall (visibility on boulevards must be maintained)
- Fencing must be constructed of rigid or framed materials such as plywood, or snow fence with a 2"x4" wood frame)
- Spacing between vertical posts to be no further apart than 2.4 m (8')
- All supports and bracing must be placed outside of the CRZ and installation must minimize damage to existing roots
- Identification signs must be posted on the fencing (Appendix 2, Fig. 2).

Tree Preservation

6 trees (#1, 3, 4, 5, 6, 7) are located well away from proposed site works or are protected by existing landscape features and have been recommended for preservation. These trees are not anticipated to require tree protection fencing to enable their retention.

Tree_Risk Management

No inventoried trees were considered hazardous at the time of assessment.

Wildlife Protection

Given the substantial amount of canopy being removed from this site, it is possible that nesting birds or small mammals (including rabbits, signs of which were observed at the time of the tree inventory) may be disturbed or displaced during the course of the project. It is recommended that an authorized wildlife rehabilitator and a wildlife veterinarian be retained before the commencement of site works in order to provide further advice and to consult on their capacity to receive injured or orphaned wildlife during the time when construction is expected to take place.

The City of Ottawa's *Protocol for Wildlife Protection during Construction* also recommends that a biologist be retained to inspect the habitat for the presence of migratory birds, small mammals, and other wildlife in order to determine the presence of sensitive time windows (i.e., breeding season).

Compensation

Where trees must be injured or removed to enable project works, compensation is required in order to offset the negative effects of vegetation loss. Tree compensation requirements are detailed in Schedule B of the "Tree Protection By-law". Requirements for private property in the urban area, over 1 hectare in size, are as follows:

- Application for removal not associated with a Planning Act application or infill development:
 - 1:1 – Plant a tree for each protected tree removed, to be planted on the same private property, implemented by putting it as a condition of the tree permit.
- For private property in the urban area, of any size, subject to a Planning Act application (Site Plan, Plan of Subdivision):
 - To be determined through development review process.
- For private property in the urban area, of any size, where the tree removed is dead, hazardous, or an ash tree:
 - 1:1 replacement planting

Replacement plantings should be carefully chosen according to site conditions. Given that the site is not in an area of Sensitive Marine Clay Soils, and specific care is not needed to protect watercourses or steep slopes, a range of native species would be suitable choices for tree compensation at 125 Colonnade Road in Ottawa, including but not limited to the following full-size trees:

- Black Walnut (*Juglans nigra*)
- Bur Oak (*Quercus macrocarpa*)
- Hackberry (*Celtis occidentalis*)
- Hop Hornbeam (*Ostrya virginiana*)
- Shagbark Hickory (*Carya ovata*)

Where site conditions limit the size of tree which may be planted, smaller stature native trees or large shrubs such as serviceberry (*Amelanchier canadensis*), witch hazel (*Hamamelis virginiana*), and dogwood (*Cornus alternifolia* or *C. racemosa*) may be suitable choices for planting.

Tree planting should be undertaken in accordance with ANSI A300 Standards, which can be found online here:

<https://west-chester.com/DocumentCenter/View/10143/A300-6#:~:text=ANSI%20A300%20performance%20standards%20shall,shrubs%2C%20or%20other%20woody%20plants.&text=The%20purpose%20of%20this%20document,and%20transplanting%20trees%20and%20shrubs.>

Conclusion

This inventory for the proposed site development at 125 Colonnade Road in Ottawa, ON details the species, location, and condition of 72 trees. Of these, 46 trees are recommended for removal and 26 are recommended for retention. 2 trees are recommended for retention with injury. Given that the property has an area greater than 1 hectare, and that it is located in the inner urban area, it is anticipated that a tree permit will be required in order to injure and remove trees to enable project works.

It is recommended that proper implementation of tree protection fencing, root pruning, wildlife protection, and planting techniques are employed to ensure the lowest possible impact of this development on the surrounding area. Additional expertise may be retained in these areas to ensure compliance during the course of site works.

A handwritten signature in black ink, appearing to read 'Anna Mernieks', written in a cursive style.

Anna Mernieks, Hon. B.Sc. Forest Conservation, ISA #ON-2224A
amernieks@gmail.com

Appendix 1 – Tree Inventory

Table 2: Details of tree inventory conducted on January 15, 2022 by Anna Mernieks ISA #ON-2224A

Tree	Common Name	Botanical Name	DBH	DBH_M	CW	TI	CS	CV	CRZ	Loc.	Rec.	Comments
1	Honey Locust	<i>Gleditsia triacanthos</i>	33		6	F	F	G	3.3	M	-	
2	Colorado Spruce	<i>Picea pungens</i>	38		6	G	G	-	-	S	R (Cond.)	
3	Norway Maple	<i>Acer platanoides</i>	42		8	G	F	G	4.2	S	-	
4	Norway Maple	<i>Acer platanoides</i>	52		8	G	F	G	5.2	S	-	
5	Manitoba Maple	<i>Acer negundo</i>	18	15, 7	6	G	F	G	1.8	M	-	
6	Ash Species	<i>Fraxinus</i> sp.	12		3	P	F	-	-	M	-	
7	Norway Maple	<i>Acer platanoides</i>	66		10	F	F	F	6.6	S	-	
8	Norway Maple	<i>Acer platanoides</i>	39		12	F	F	G	3.9	N	P	
9	Norway Maple	<i>Acer platanoides</i>	30		6	G	F	G	3.0	N	P	
10	Norway Maple	<i>Acer platanoides</i>	43		12	G	F	G	4.3	N	P	DBH measured at 1.0 m.
11	Black Walnut	<i>Juglans nigra</i>	20	13	8	G	F	G	2.0	N	P	
12	Trembling Aspen	<i>Populus tremuloides</i>	10		3	F	G	G	1.0	S	P	
13	Trembling Aspen	<i>Populus tremuloides</i>	10	10	3	G	F	G	1.0	S	P	
14	Trembling Aspen	<i>Populus tremuloides</i>	11		4	G	G	G	1.1	S	P	
15	Trembling Aspen	<i>Populus tremuloides</i>	10		3	G	F	G	1.0	S	R	
16	Trembling Aspen	<i>Populus tremuloides</i>	12		5	G	F	G	1.2	S	R	
17	Trembling Aspen	<i>Populus tremuloides</i>	12		4	G	G	G	1.2	S	R	
18	Trembling Aspen	<i>Populus tremuloides</i>	13		4	G	G	G	1.3	S	R	
19	Trembling Aspen	<i>Populus tremuloides</i>	12		4	G	G	G	1.2	S	R	
20	Trembling Aspen	<i>Populus tremuloides</i>	12		4	G	F	G	1.2	S	R	
21	Trembling Aspen	<i>Populus tremuloides</i>	13		4	G	G	G	1.3	S	R	
22	Trembling Aspen	<i>Populus tremuloides</i>	15		4	G	G	G	1.5	S	R	
23	Trembling Aspen	<i>Populus tremuloides</i>	25		6	G	G	G	2.5	S	R	
24	Trembling Aspen	<i>Populus tremuloides</i>	14		4	G	G	G	1.4	S	R	
25	Trembling Aspen	<i>Populus tremuloides</i>	17		4	G	G	G	1.7	S	R	
26	Trembling Aspen	<i>Populus tremuloides</i>	28	24	6	F	F	G	2.8	S	R	
27	Trembling Aspen	<i>Populus tremuloides</i>	32		6	G	G	G	3.2	S	R	

28	Trembling Aspen	<i>Populus tremuloides</i>	15		6	G	F	F	1.5	S	R	
29	Trembling Aspen	<i>Populus tremuloides</i>	12		6	G	G	G	1.2	S	R	
30	Trembling Aspen	<i>Populus tremuloides</i>	12		6	G	G	G	1.2	S	R	
31	Trembling Aspen	<i>Populus tremuloides</i>	18		6	G	G	P	1.8	S	R	
32	Trembling Aspen	<i>Populus tremuloides</i>	26		6	G	F	G	2.6	S	R	
33	Trembling Aspen	<i>Populus tremuloides</i>	14		6	G	G	G	1.4	S	R	
34	Trembling Aspen	<i>Populus tremuloides</i>	16		6	G	G	G	1.6	S	R	
35	Trembling Aspen	<i>Populus tremuloides</i>	12		6	G	G	G	1.2	S	R	
36	Trembling Aspen	<i>Populus tremuloides</i>	15		6	G	G	G	1.5	S	R	
37	Trembling Aspen	<i>Populus tremuloides</i>	28	15	8	F	F	G	2.8	S	R	
38	Trembling Aspen	<i>Populus tremuloides</i>	16	13	8	G	F	F	1.6	S	R	
39	Trembling Aspen	<i>Populus tremuloides</i>	14		8	G	G	G	1.4	S	R	
40	Trembling Aspen	<i>Populus tremuloides</i>	15	12	6	G	F	G	1.5	S	R	
41	Trembling Aspen	<i>Populus tremuloides</i>	15		6	G	G	G	1.5	S	R	
42	Trembling Aspen	<i>Populus tremuloides</i>	11		6	G	G	G	1.1	S	R	
43	Trembling Aspen	<i>Populus tremuloides</i>	11		6	G	F	G	1.1	S	R	
44	Trembling Aspen	<i>Populus tremuloides</i>	25		6	G	G	G	2.5	S	R	Clump of 10 individuals, approx. 15-25 cm each
45	Black Walnut	<i>Juglans nigra</i>	22		6	G	G	G	2.2	S	R	
46	Black Walnut	<i>Juglans nigra</i>	10	10, 10	6	G	F	G	1.0	S	R	DBH estimated
47	Eastern Redbud	<i>Cercis canadensis</i>	15		6	G	F	G	1.5	S	R	DBH estimated
48	Black Walnut	<i>Juglans nigra</i>	16		6	G	F	G	1.6	S	R	
49	Siberian Elm	<i>Ulmus pumila</i>	50		10	G	F	G	5.0	S	I	DBH estimated at 0.8 m.
50	Siberian Elm	<i>Ulmus pumila</i>	21		5	G	F	G	2.1	S	P	
51	Siberian Elm	<i>Ulmus pumila</i>	25	20	12	G	F	G	2.5	S	P	DBH estimated
52	Siberian Elm	<i>Ulmus pumila</i>	35	25	10	F	F	G	3.5	S	P	
53	Siberian Elm	<i>Ulmus pumila</i>	65	40	15	F	F	G	6.5	S	P	
54	Trembling Aspen	<i>Populus tremuloides</i>	15		5	G	G	G	1.5	S	R	Clump of approx. 5 stems
55	Trembling Aspen	<i>Populus tremuloides</i>	15		5	G	G	G	1.5	S	R	Clump of approx. 3 stems
56	Trembling Aspen	<i>Populus tremuloides</i>	15		5	G	G	G	1.5	S	R	Row of approx. 10 individuals; DBH estimated
57	Manitoba Maple	<i>Acer negundo</i>	15		5	F	F	G	1.5	S	R	DBH estimated

58	Black Walnut	<i>Juglans nigra</i>	12	5	G	G	G	1.2	S	R	
59	Pyramidal English Oak	<i>Quercus robur</i> 'Fastigiata'	15	2	F	F	F	1.5	S	R	DBH estimated.
60	Pyramidal English Oak	<i>Quercus robur</i> 'Fastigiata'	15	2	G	F	G	1.5	S	R	DBH measured at 0.8 m.
61	Black Walnut	<i>Juglans nigra</i>	12	5	G	F	G	1.2	S	R	DBH measured at 0.8 m.
62	Colorado Spruce	<i>Picea pungens</i>	38	6	G	G	G	3.8	S	R	
63	Colorado Spruce	<i>Picea pungens</i>	32	6	G	G	G	3.2	S	R	
64	Colorado Spruce	<i>Picea pungens</i>	37	6	G	G	G	3.7	S	P	
65	Colorado Spruce	<i>Picea pungens</i>	36	6	G	G	G	3.6	S	P	
66	Colorado Spruce	<i>Picea pungens</i>	33	6	G	G	G	3.3	S	I	
67	Siberian Elm	<i>Ulmus pumila</i>	68	39	20	F	F	G	6.8	S	R
68	Colorado Spruce	<i>Picea pungens</i>	41	6	G	F	G	4.1	S	P	
69	Colorado Spruce	<i>Picea pungens</i>	38	6	G	F	G	3.8	S	P	
70	Colorado Spruce	<i>Picea pungens</i>	31	6	G	G	G	3.1	S	P	
71	Colorado Spruce	<i>Picea pungens</i>	37	6	G	F	G	3.7	S	P	
72	Colorado Spruce	<i>Picea pungens</i>	28	6	G	F	G	2.8	S	P	

Appendix 1 – Tree Inventory Attributes

- **Tree:** The tree number referenced in the report and on the Tree Protection Plan
- **Common Name:** A name by which the individual tree is commonly known
- **Botanical Name:** A name by which the individual tree is more universally known (i.e. Latin name)
- **DBH:** The diameter of a single-stemmed, or the three largest stems of a multiple-stemmed, tree, presented in centimetres and measured at breast height (1.4 m above grade), unless otherwise described in the comments
- **CW:** The crown width, estimated on average in metres
- **TI:** The trunk integrity of a tree, assessed from a structural and vascular transport point-of-view
- **CS:** Crown structure, which includes an assessment of current and foreseeable structural issues
- **CV:** Canopy vitality, which is an overall assessment of the health of the tree, based on twig and foliage size, colour and distribution
- **CRZ:** The critical root zone of a tree, calculated at 10 cm of protection for each 1 cm DBH
- **Loc:** The location of the tree, whether on the subject site (S), municipal property (M), or a neighbouring property (N)
- **Rec:** Specific recommendations for the tree, which may be removal (R), injury (I), protection (P), or preservation (-)
- **Comments:** Any other comments regarding tree condition, maintenance suggestions, or modifications to the assessment protocol

Appendix 2 – Related Figures and Site Photographs

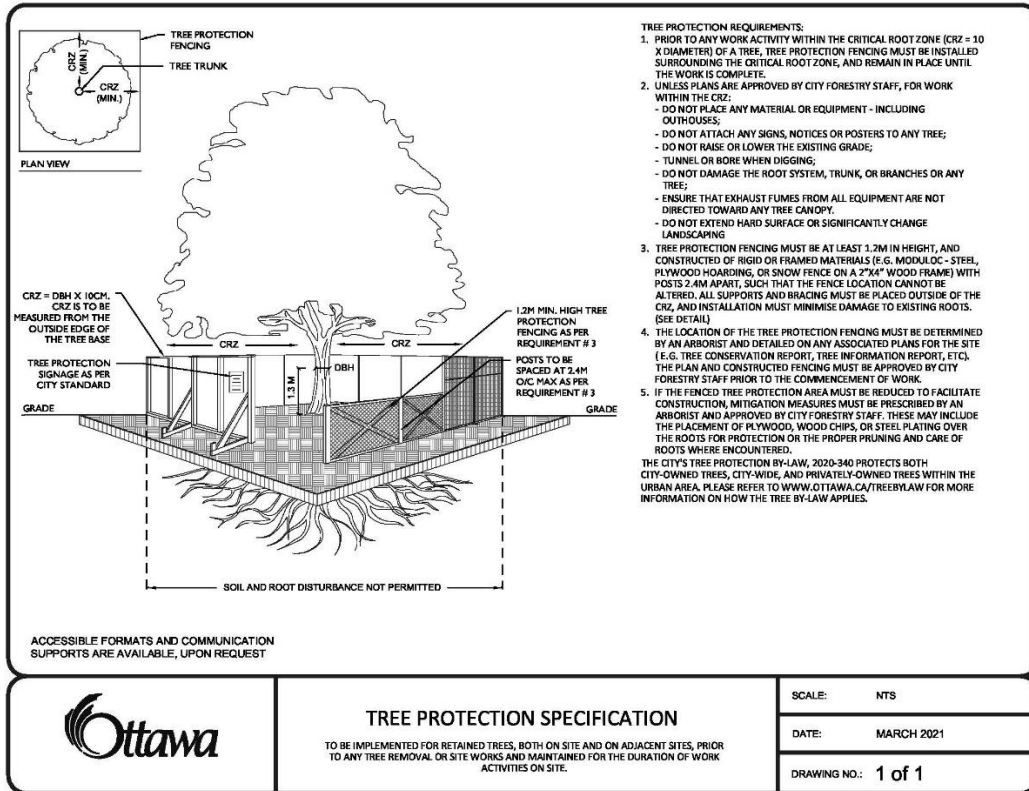


Figure 1: City of Ottawa Tree Protection Barrier Specifications

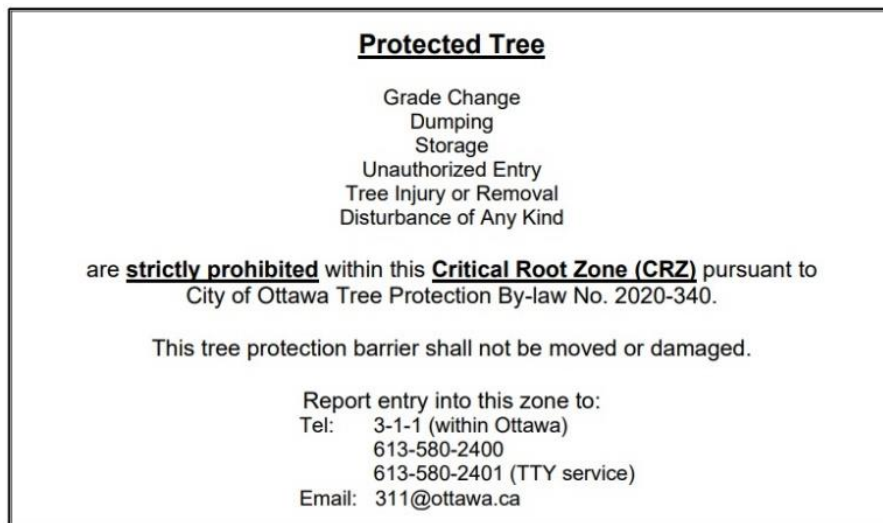


Figure 2: City of Ottawa Sample Tree Protection Barrier Signage



Figure 3: Tree #2 is recommended for removal based on condition.



Figure 4: Tree #49 is recommended for retention with injury, trees 50-53 are recommended for protection. The sumac group, although unregulated, should also be protected where possible.



Figure 5: Trees #3-7 are recommended protection.



Figure 6: Neighbouring trees #9-10 are recommended for protection.



Figure 7: Trees #15-44, a stand of trembling aspen, are recommended for removal.



Figure 8: Trees along the railway spur, including trees #57 and 60, are recommended for removal.



Figure 9: Trees #45 and #48 are recommended for removal.



Figure 10: Trees #62, 63, and 67 are recommended for removal, tree #66 is recommended for retention with injury, and trees #64 and 65 are recommended for protection.

Appendix 3 – Tree Protection Plan

See attached Current Vegetation Map and Tree Protection Plan (2 Pages)

125 Colonnade Road - Aerial View

March 2022



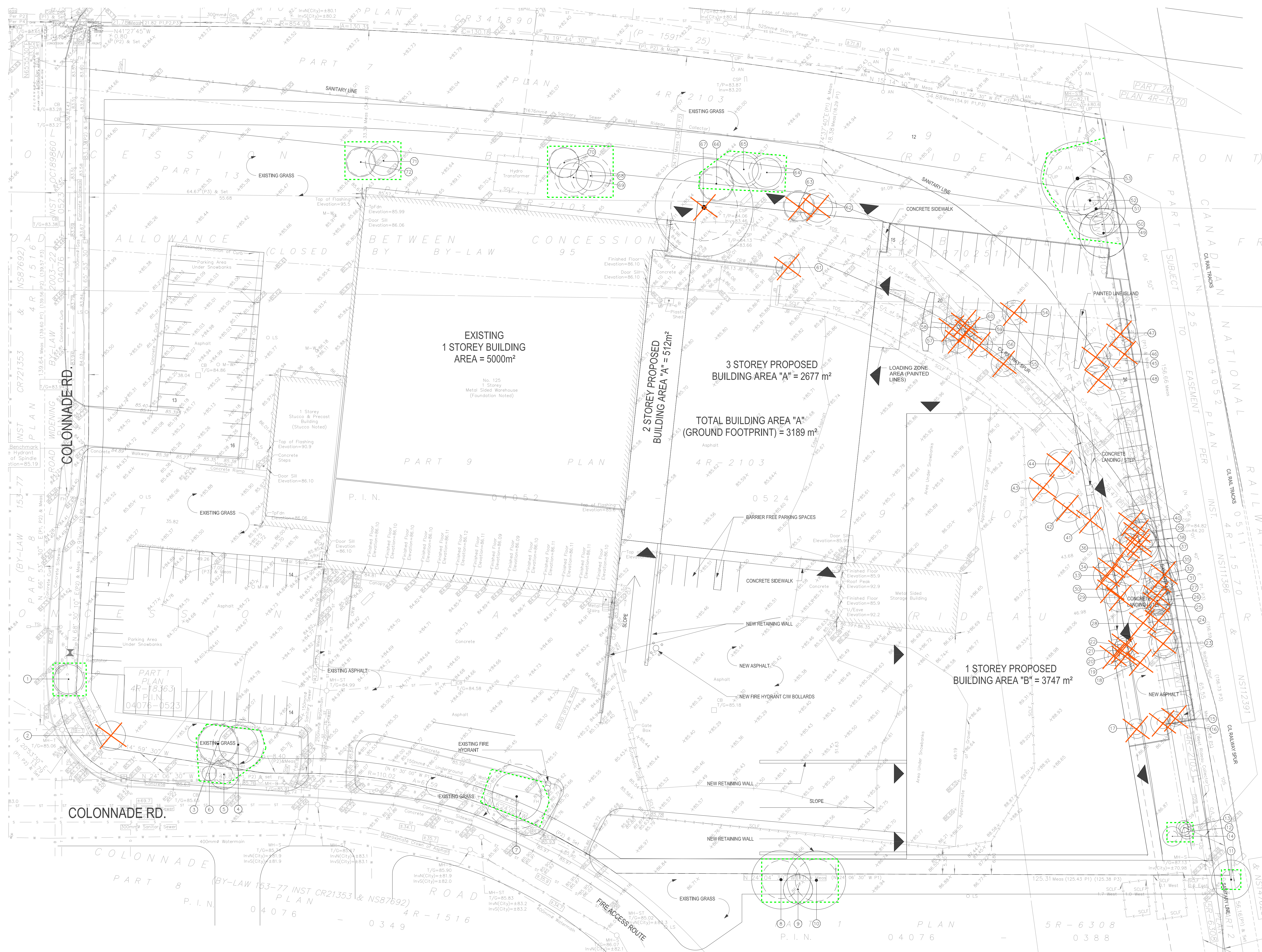
GENERAL NOTES

- VERIFY ALL DIMENSIONS.
- DO NOT SCALE DRAWINGS.
- REPORT ANY DISCREPANCIES, DISCOVERED ERRORS, OR OMISSIONS TO THE LANDSCAPE ARCHITECT BEFORE PROCEEDING.
- IT IS ADVISED THAT CONTRACTORS CONTACT THE LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION TO ENSURE THE USE OF THE LATEST REVISED DRAWINGS.
- DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF THE LANDSCAPE ARCHITECT.

KEY MAP (N.T.S.)

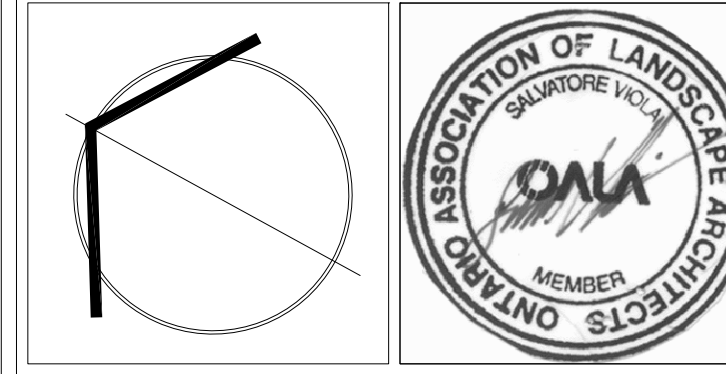


Tree Protection Fencing



No.	DATE	REVISION	BY
1	JAN. 14, 2022	ISSUED FOR CLIENT REVIEW	S.V.

It is the responsibility of the Contractor and/or Owner to ensure that the drawings with the latest revisions are used for construction.



SBK
STRYBOS BARRON KING
 LANDSCAPE ARCHITECTURE

PROJECT:
**ACCESS STORAGE:
 PROPOSED BUILDING ADDITIONS
 125 COLONNADE ROAD
 NEPEAN, OTTAWA**

DRAWING TITLE:
**EXISTING TREE INVENTORY
 AND PRESERVATION PLAN**

SCALE: 1:300	PROJECT No. 5709
DATE: JANUARY 14, 2022	DRAWING No. V100
DRAWN BY: J.M.	
CHECKED BY: S.V.	