

Fotenn Consultants Inc.

Tree Conservation Report

Carlingwood Shopping Centre Parking Renovation – 2085 Carling Avenue

File #D07-12-27-0021 / Plan #19443

May 6, 2026



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2085 Carling Avenue
Tree Conservation Report

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File #D07-12-27-0021 / Plan #19443
May 2026

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Version Control

Revision No.	Reviewed by	Date Issued	Description
000	DF	December 3, 2025	Draft report submitted for Client review.
001	DF, BVR	March 24, 2026	Minor revisions, Final Report for Client
002	BVR	April 17, 2026	Minor revisions, Final Report
003	BVR	May 5, 2026	Minor revisions, Final Report

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- Appendix A. Tree Inventory and Protection Plan**
- Appendix B. City of Ottawa Tree Protection Specification**
- Appendix C Site/Landscape Plan and Planting Plan Drawings**

1 Introduction

Arcadis Canada Inc. (Arcadis) has been retained by Fotenn Consultants Inc. (the 'Client') to prepare a Tree Conservation Report (TCR) for the proposed parking lot renovation at Carlingwood Shopping Centre located at 2085 Carling Avenue, on Part Lot 26, Concession 1, in Ottawa, ON – within the Urban boundary of the City of Ottawa (the 'Site').

1.1 Project Location and Site Description

The subject property occupies approximately 6.9 hectares comprised of several retail buildings, roadways and parking areas associated with Carlingwood Shopping Centre, considered a community hub for many in the Ottawa area. The Site is bounded by Carling Avenue to the south, Woodroffe Avenue to the west, Saville Row to the south, Haymarket Street to the east, and Iroquois Road to the southeast. Exterior features include extensive asphalt-surfaced parking areas, narrow bands of landscaped grassy margins, and several planted trees and shrubs. The subject property is fully serviced by the City of Ottawa's municipal water, sanitary sewer, stormwater, hydro, and telecommunications infrastructure.

The project involves the demolition of the existing parking structure located on the north-east portion of the Site, with frontage along Haymarket Street, Saville Row, and Iroquois Road, to construct a new interim surface parking lot.

Refer to **Figure 1** on the following page to view the Site Location.

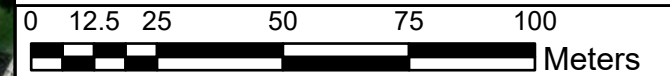
1.2 Objective

This Tree Conservation Report (TCR) follows the *City of Ottawa Tree Conservation Report Guidelines* (City of Ottawa, 2021), which required a site visit to identify trees larger than 10 cm in diameter that could be impacted by the project. Information on the individual trees and tree groupings, their species, size (diameter-at-breast height, dbh) and health were recorded. The TCR summarizes the results, identifies the ownership of the trees, and based on the current design plans provides commentary on which trees could be retained and those that are recommended to be pruned or removed. This information is depicted on the mandatory Map 1 and Map 2 of the TCR, as per the guidelines. In the paragraphs below, we have outlined the field methodology and findings of the tree inventory. This report will help determine the project's potential impact on existing trees and provide general recommendations to avoid and/or mitigate tree loss and injury.



Legend

- Site
- - - Tree Search Area (5m)



Scale: 1:1,500



Project:
**Carlingwood Shopping Centre
 Parking Renovation TCR**

Site and Study Area

Prepared By:
ARCADIS

Date: 12/3/2025
 Project: 103109569

Figure: 1

2 City of Ottawa Tree Protection By-Law

The Site is located within the City of Ottawa's Tree Protection By-law No. 2020-340 (January 1, 2021) limits. The intent of this By-Law is to respect the protection of municipal trees and municipal natural areas in the City of Ottawa and trees on private property in the urban area of the City of Ottawa.

Under the Tree Protection By-law, the following protected trees cannot be injured or removed without a tree permit from the city:

- *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 City's inner urban area.*
 - *Trees measuring 50 cm or more in diameter at breast height within the City's suburban area.*

The Tree Protection By-law requires permits to be obtained before City-owned trees or protected privately owned trees are removed. It also sets out requirements for compensation to be provided when trees are removed, so that they can be replaced.

A Tree Conservation Report (TCR) is required as a part of the application package for all Plans of Subdivision, Site Plan Control Applications, Common Elements Condominium Applications, and Vacant Land Condominium Applications where there is a tree of 10 centimeters in diameter or greater on the site and/or if there is a tree on an adjacent site that has a Critical Root Zone (CRZ) extending onto the development site. The purpose of the TCR is to demonstrate how tree cover will be retained and protected on the Site, including mature trees, stands of trees, and hedgerows, using a design with nature approach. A design with nature approach incorporates the natural features of a site into the design and engineering of a proposed development. The TCR also shows which trees must be removed on the site to accommodate the proposed development.

3 Limitations

The assessment presented in this report has been made using accepted standard arboriculture techniques as outlined in Chapter 4 (Data Collection) of the *Council of Tree and Landscape Appraisers Guide for Plant Appraisal, 10th Edition, Second Printing (2020)*. The trees observed were not climbed, cored, or dissected, and excavation for detailed root crown inspection was not performed. Since some symptoms may only be present seasonally, the extent of observations that can be made may be limited by the time of year the inspection took place.

As trees are living organisms, their health and vigor continually change over time due to seasonal variations, changes in site conditions, and other factors. For this reason, the assessment presented in this report is valid at the time of inspection, and no guarantee is made about the continued health of trees that are deemed to be in good condition. It is recommended that the trees be reassessed periodically to identify changes in condition. While every standing tree has the potential for failure and therefore poses some risk, a tree assessment is a good indication of present health and potential problems that could arise in the future.

4 Methodology

One site visit was completed on October 3, 2025, to assess the trees within the proposed impact areas. Tree locations and associated unique identification numbers were provided in the topographic survey completed by a certified Ontario Land Surveyor on (July 25, 2024), and all trees on Site were identified, measured, and assessed for condition. Information collected on the individual trees included:

- Species
- Diameter at breast height (DBH)
- Approximate crown spread
- Condition

The Tree Inventory and Assessment Table containing this information is included in **Appendix A**. Mandatory Map 1 as per City of Ottawa, 2021, is displayed in **Figure 2** below and depicts the locations of the numbered trees assessed. The assessment methodology is outlined in the sections below.

4.1 Tree Size

Size refers to trunk diameter at breast height (DBH or caliper) measured in centimeters (cm) at 1.4 meters (m) above the ground. Where trees had more than one trunk from the base, the size of each trunk was recorded. Where trees forked into codominant trunks the diameter was measured at the narrowest point below the fork.

4.2 Tree Assessment

The assessment involved a visual examination of the above-ground parts of each tree. The crown, trunk, and root structure of each tree were observed and assessed noting any abiotic and/or biotic disorders as well as structural defects present. Several structural defects and health problems were observed and are included in the Tree Inventory and Assessment Table (**Appendix A**). The following list provides an explanation of the short forms used in the table of the deficiencies observed on Site:

- SMD - Small dead branches are an indicator of crown dieback and can be an early sign of stress.
- UC - Unbalanced Crown is a tree's crown that is much more extensive in one direction than another, often due to competition from the crown of a nearby tree or exposure.
- FC - Frost cracking is a winter injury caused by temperature fluctuations on bark and inner wood when the sun warms a tree trunk and then temperatures drop quickly, causing splitting of the bark that can extend into the wood below. Frost cracking can be associated with snow reflection and southwest-facing trunk exposures and particularly affects young trees and species with thin bark.
- BNL - Broken / No Leader occurs if the central leader is broken, damaged or very weak, or has a dead terminal bud.
- DB - Dieback refers to the ends of branches dying, which is often associated with root problems.
- ADV – Adventitious shoots refer to vigorous growth of shoots from pruning cuts, inner branches, or along the trunk that usually occur in response to stress.
- LE – A tree with a lean can be more susceptible to windthrow and soil failure. Self-correcting lean refers to a natural correction of the lean by development of new growth that counteracts the lean of the trunk to provide a more balanced form.

- CA - Cavity are often the result of an injury followed by decay. Decay can begin by injury to the trunk, the loss of a large limb, topping or improper pruning. The inner dead wood begins to decay but living wood is protected by a barrier zone that compartmentalizes damage.
- EXR - Exposed surface roots can be a result of erosion and soil compaction combined with increasing root diameter. It is important to protect exposed roots from pedestrian and vehicular traffic, and lawn mowers. Damage to roots can cause stress and can result in canopy dieback.
- W - Woundwood is the thickened tissue growing around the edges of a wound. The rate of its development can be a sign of the tree's vigour.
- GR - Girdling roots are roots that cross over each other or around the trunk of the tree. As these roots grow larger, they can restrict the uptake of nutrients and water and inhibit structural anchorage.

4.3 Tree Condition

Each tree was given an overall health condition rating of: Very Good, Good, Fair, Poor, or Dead (**Figure 2**). The following is a summary of how the ratings are determined:

- EXCELLENT: No apparent health problems; excellent structural form.
- VERY GOOD: No apparent health problems; good structural form.
- GOOD: Minor problems with health and/or structural form.
- FAIR: Significant problems with health and/or structural form.
- POOR: Major problems with health and structural form.
- DEAD: Dead.

4.4 Tree Ownership

Majority of the trees inventoried are located on private property owned by Anthem Properties and Streamliner Properties, apart from 33 trees which are situated on adjacent lands and owned by the City of Ottawa. No impact is expected to any of the trees not located within the subject property.

4.5 Tree Protection and Impact Analysis

The Critical Root Zone (CRZ) was determined using the *City of Ottawa Tree Conservation Report Guidelines* (City of Ottawa, 2021). The CRZ is established as 10 cm from the trunk of a tree for every cm of trunk DBH.

Using data collected during the tree inventory and assessment, drawings showing the tree locations (collected through topographic survey), and the proposed development footprint and anticipated area of impact, a tree impact analysis was completed, resulting in recommendations to Retain, Prune and Protect, or Remove trees. The proposed project involves the demolition of the existing parking structure located on the north-east portion of the Site, with frontage along Haymarket Street, Saville Row, and Iroquois Road, to construct a new interim surface parking lot. Our understanding is that the at-grade parking area sits approximately one metre below the surrounding elevation, and the intent is to maintain the existing retaining walls along Haymarket Street and Iroquois Road to preserve this grade and support tree retention. We also understand that Landscape Plans being developed for the Site will minimize the requirement for tree removals, with efforts to integrate landscape improvements without impact to existing trees on the Site. The proposed limit of impact is shown on Map 2 (**Figure 3**).

The minimum CRZ of each tree canopy is also illustrated on Map 2 as per City of Ottawa, 2021 (displayed in **Figure 3** below) to help determine possible injury and branch pruning that may be required. The Comments section of the Tree Inventory and Assessment Table (**Appendix A**) also includes notes about tree form and canopy location that can help determine any pruning that may be required to accommodate construction equipment.

Tree Impact and associated recommendations (Retain, Prune and Protect, or Remove) have been determined and is described in Section 7, as well as included in the Tree Inventory and Assessment Table (**Appendix A**) and displayed on Map 2 (**Figure 3**).

For all trees to be retained, tree protection fencing must be installed to separate trees from the work area. Tree protection fencing must be installed no closer to the trunk than the Critical Root Zone but should be placed as far as possible from the tree. All construction activities (including demolition) will be completed without accessing the areas within the tree protection fencing.

5 Existing Conditions

The dates, timing, and environmental conditions at the time of the assessments are presented below in **Table 1**.

Table 1: Site Investigations Details

Date	Start/End Time	Survey Intent	Weather Conditions
2025/10/03	0930-1530	Visual assessment of all trees ≥10 cm dbh on-site	Temperature: 7°C Cloud cover / Precipitation: Mixed sun/clouds, Light wind.

The Site is flat with no presence of steep slopes, valleylands or escarpments. There are no valued woodlands designated as Urban Natural Features or Natural Environment Areas, or significant woodlands on or adjacent the Site. There are no riparian woodlots, rare communities, or other unique ecological features (i.e., Provincially Significant Wetlands, unevaluated wetlands). There are no surface water features, wetlands or watercourses on Site or in adjacent areas.

Majority of the subject lands where the parking renovation is planned consist of paved parking areas surrounded by commercial retail or raised parking buildings. The adjacent lands to the north, east and west are surrounded by residential homes, and the lands to the south are comprised of commercial retail businesses and residential homes.

A total of 139 individual trees were assessed as part of this inventory and can be seen on Map 1 (**Figure 2**). The condition of the trees on Site ranged from Excellent to Dead, approximately 83% of which were in Excellent - Good condition. The most common species are Red Pine (19%), Norway Spruce (16%), Norway Maple (13%), and Apple species (13%).

There are 40 trees that meet the definition of a 'Distinctive Tree' as per Tree Protection By-law No. 2020-340 (any tree located on private property with a DBH of 30 cm or greater, within the inner urban area). Trees 2, 321D2, 3469B, and 346A2 are Distinctive tree that require removal based on the current design plans.

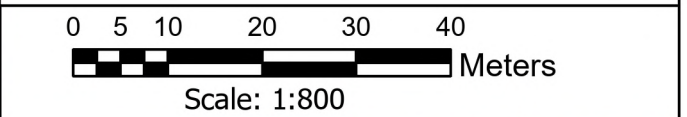


Legend

- Site
- Tree Search Area (5m)

Tree Inventory General Condition

- Excellent
- Very Good
- Good
- Fair
- Poor
- Dead
- Critical Root Zone



Project:
**Carlingwood Shopping Centre
 Parking Renovation TCR**

**Current Vegetation
 (Map 1 As per City Guidelines)**

Prepared By:
ARCADIS

Date: 2026-04-17
 Project: 103109569

Figure: 2a

6 Proposed Project Description

The project involves the demolition of the existing parking structure located on the north-east portion of the Site, with frontage along Haymarket Street, Saville Row, and Iroquois Road, to construct a new interim surface parking lot (**Figure 3**). This work will require both a Demolition Permit and a Site Plan Control (SPC) Application. The at-grade parking area sits approximately one metre below the surrounding elevation, and the intent is to maintain the existing retaining walls along Haymarket Street and Iroquois Road to preserve this grade and support tree retention. For the full scope of the site changes, refer to the Site/Landscape Plan (L1 – rev 03) and Planting Plan (L2 rev 03), as prepared by Fotenn Planning and Design dated 2026/05/06 (**Appendix C**).

7 Impact Assessment and Recommendations

7.1 Impacts on Trees

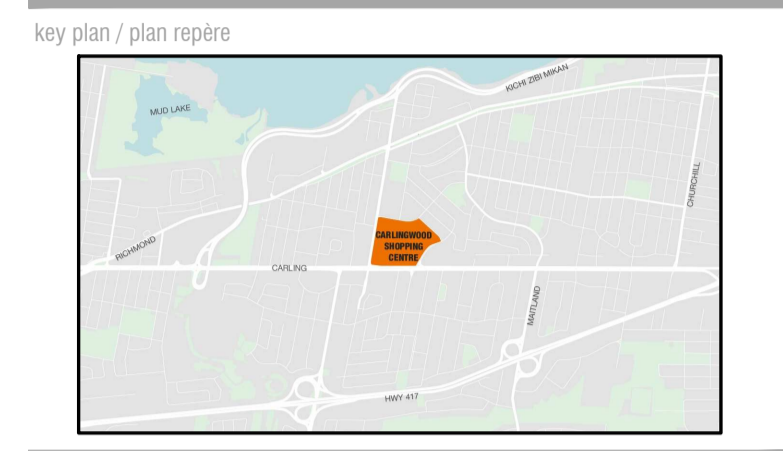
A review of the Site conditions indicates that most existing trees can be retained, except where the existing ramp will be demolished and drive lanes adjusted (**Figure 3**) and the far northeast corner of the garage structure. All trees within and slightly beyond the footprint of the existing structure have been surveyed, as additional inventory information may help inform future development options. Based on the conditions of the trees and extent of the proposed construction limits, **Table 2** summarizes the impact and recommended actions of the 139 trees assessed within the Site.

It is anticipated that nine (9) trees >10 cm diameter at breast height (DBH) will need to be removed, these nine trees are client owned trees. A total of 130 trees are to be retained, of these retained trees 97 are client owned and 33 are adjacent landowner (City of Ottawa) owned trees. These details of trees to be retained or removed are depicted on Mandatory Map 2 below, as per the City of Ottawa, 2021 (**Figure 3**), and outlined in the Tree Inventory and Assessment Table included in **Appendix A**.

Table 2: Impact Assessment and Recommendations for Trees on Site

Trees to be Removed	Trees to be Retained
9 (client owned)	130 (97 client owned, 33 City owned)

Refer to **Section 8.2** below for information on measures recommended to protect all remaining trees within the Site prior to and during construction.



legend / légende

- TREE PROTECTION FENCING
- PROPERTY LINE
- INDIVIDUAL TREES TO BE REMOVED AND KEY No. - REFER TO TABLE # & REPORT
- INDIVIDUAL TREES TO BE RETAINED AND KEY No. - REFER TO TABLE # & REPORT



rev'n	description / la description	yyyy/mm/dd
06	re-issue for site plan application	2026/06/22
05	re-issue for site plan application	2026/06/04
04	issue for tender	2026/05/08
03	re-issue for site plan application	2026/05/06
02	re-issue for site plan application	2026/04/27
01	re-issue for site plan application	2026/04/17
00	issue for site plan application	2026/03/09

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north / le nord

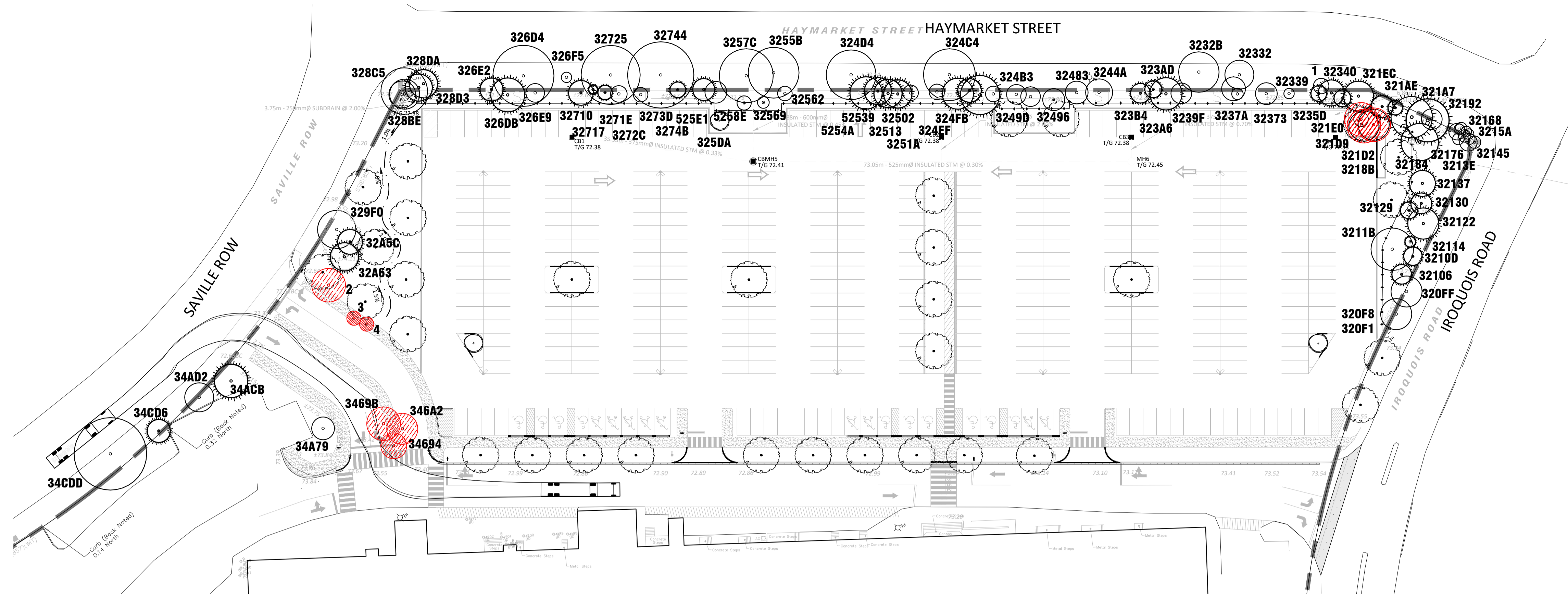
project / projet
2085 CARLING AVENUE
CARLINGWOOD MALL NORTH PARKING
STRUCTURE DEMOLITION & REDESIGN

drawing / dessin
TREE CONSERVATION PLAN

designed / conçu	drawn / dessiné	reviewed / examiné
ST / DF	ST	DF
date	project number / No. du projet	
SEPT 2025		

drawing number / No. du dessin

TCP 1



1 TREE CONSERVATION PLAN
TCP 1:500

NOTE: THIS PLAN IS TO BE READ IN CONJUNCTION WITH THE LATEST Tree Conservation Report AS PREPARED BY Arcadis.

PLAN VIEW

CRZ = DBH x 10CM
 CRZ IS TO BE MEASURED FROM THE OUTSIDE EDGE OF THE TREE BASE

1.2M MIN. HIGH TREE PROTECTION FENCING AS PER REQUIREMENT # 3

POSTS TO BE SPACED AT 1.4M O/C MAX AS PER REQUIREMENT # 3

ACCESSIBLE FORMATS AND COMMUNICATION SUPPORTS ARE AVAILABLE, UPON REQUEST

TREE PROTECTION REQUIREMENTS

- PRIOR TO ANY WORK ACTIVITY WITHIN THE CRITICAL ROOT ZONE (CRZ - 10 X DIAMETER) OF A TREE, TREE PROTECTION FENCING MUST BE INSTALLED SURROUNDING THE CRITICAL ROOT ZONE, AND REMAIN IN PLACE UNTIL THE WORK IS COMPLETE.
 - DO NOT PLACE ANY MATERIAL OR EQUIPMENT - INCLUDING OUTFITTERS,
 - DO NOT ATTACH ANY SIGNS, NOTICES OR POSTERS TO ANY TREE;
 - DO NOT RAISE OR LOWER THE EXISTING GRADE;
 - TUNNEL OR BORE WHEN DIGGING;
 - DO NOT DAMAGE THE ROOT SYSTEM, TRUNK, OR BRANCHES OF ANY TREE;
 - ENSURE THAT EXHAUST FUMES FROM ALL EQUIPMENT ARE NOT DIRECTED TOWARD ANY TREE CANOPY.
- DO NOT EXTEND HARD SURFACE OR SIGNIFICANTLY CHANGE LANDSCAPING.
- TREE PROTECTION FENCING MUST BE AT LEAST 1.2M IN HEIGHT, AND CONSTRUCTED OF RIGID OR FRAMED MATERIALS (E.G. MODULOC, STEEL, PLYWOOD HOARDING, OR SNOW FENCE ON A 2X4" WOOD FRAME) WITH POSTS 2.4M APART, SUCH THAT THE FENCE LOCATION CANNOT BE ALTERED. ALL SUPPORTS AND BRACING MUST BE PLACED OUTSIDE OF THE CRZ, AND INSTALLATION MUST MINIMIZE DAMAGE TO EXISTING ROOTS. (SEE DETAIL)
- THE LOCATION OF THE TREE PROTECTION FENCING MUST BE DETERMINED BY AN ARBORIST AND DETAILED ON ANY ASSOCIATED PLANS FOR THE SITE (E.G. TREE CONSERVATION REPORT, TREE INFORMATION REPORT, ETC.). THE PLAN AND CONSTRUCTED FENCING MUST BE APPROVED BY CITY FORESTRY STAFF PRIOR TO THE COMMENCEMENT OF WORK.
- IF THE FENCED TREE PROTECTION AREA MUST BE REDUCED TO FACILITATE CONSTRUCTION, MITIGATION MEASURES MUST BE PRESCRIBED BY AN ARBORIST AND APPROVED BY CITY FORESTRY STAFF. THESE MAY INCLUDE THE PLACEMENT OF PLYWOOD, WOOD CHIP, OR STEEL PLATING OVER THE ROOTS FOR PROTECTION OR THE PROPER PRUNING AND CARE OF ROOTS WHERE ENCOUNTERED.

THE CITY'S TREE PROTECTION BY-LAW, 2030-340 PROTECTS BOTH CITY-OWNED TREES, CITY-WIDE, AND PRIVATELY-OWNED TREES WITHIN THE URBAN AREA. PLEASE REFER TO WWW.OTTAWA.CA/TREELAW FOR MORE INFORMATION ON HOW THE TREE BY-LAW APPLIES.

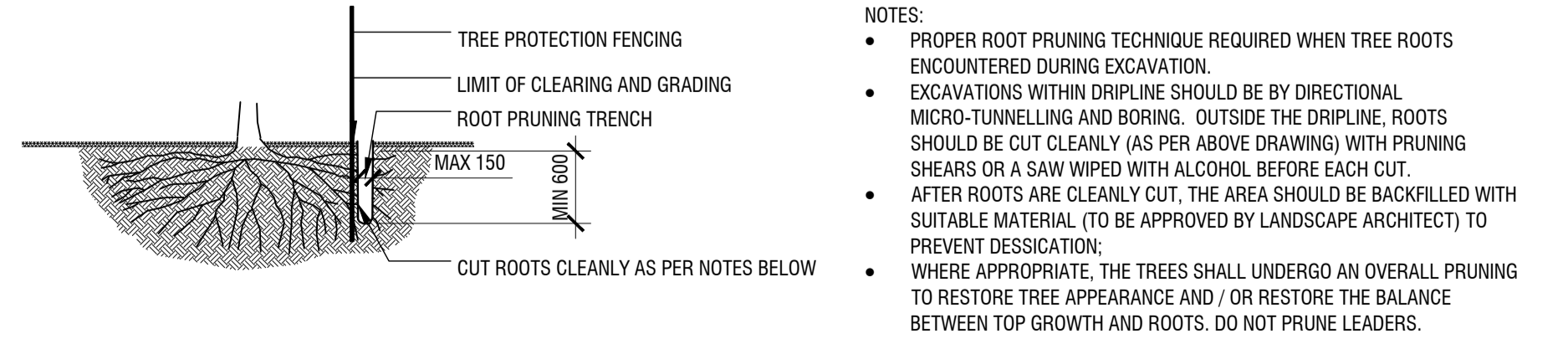
TREE PROTECTION SPECIFICATION

TO BE IMPLEMENTED FOR RETAINED TREES, BOTH ON SITE AND ON ADJACENT SITES, PRIOR TO ANY TREE REMOVAL OR SITE WORKS AND MAINTAINED FOR THE DURATION OF WORK ACTIVITIES ON SITE.

SCALE: NTS
 DATE: MARCH 2021
 DRAWING NO.: 1 of 1

2 TREE PROTECTION FENCING
TCP NTS

NOTE: SHOULD ROOTS BE ENCOUNTERED OUTSIDE OF THE CRZ DURING EXCAVATION, THE FOLLOWING DETAIL SHALL APPLY



3 ROOT PRUNING DETAIL
TCP NTS

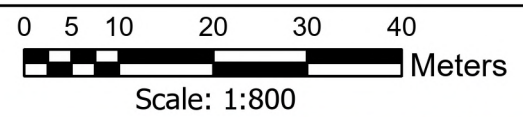
NO.	Common Name	Scientific Name	DBH (cm) (approx)	CRZ (m)	Condition	No. Stems	Comments	Impact / Recommendation
1	Siberian Elm	Ulmus pumila	15	1.5	Good	1	40cm away from manhole	Retain
2	Little-leaf Linden	Tilia cordata	32	3.2	Fair	1		To be Removed
3	Honey-locust	Gleditsia triacanthos	13	1.3	Good	1		To be Removed
320F1	Unknown	Unknown	0	0.0	Dead	1	Tree cut down	
320F8	Norway Maple	Acer platanoides	30	3.0	Very Good	1		Retain
320F8	Norway Maple	Acer platanoides	30	3.0	Very Good	1		Retain
32106	Norway Spruce	Picea abies	19	1.9	Excellent	1		Retain
32100	Norway Spruce	Picea abies	18	1.8	Very Good	1		Retain
32114	Norway Spruce	Picea abies	10	1.0	Very Good	1		Retain
*3211B	Norway Maple	Acer platanoides	41	4.1	Good	1		Possible soil to be added in CRZ
32122	Norway Spruce	Picea abies	30	3.0	Good	1		Retain
32129	Norway Spruce	Picea abies	16	1.6	Very Good	1	Leaking sap	Retain
32130	Norway Spruce	Picea abies	20	2.0	Very Good	1		Retain
32137	White Pine	Pinus strobus	25	2.5	Very Good	1		Retain
3213E	Norway Maple	Acer platanoides	12	1.2	Good	1		Retain
32145	Norway Spruce	Acer platanoides	10	1.0	Good	1		Retain
3214C	Norway Maple	Acer platanoides	17	1.7	Fair	1		Retain
32153	Norway Maple	Acer platanoides	12	1.2	Very Good	1		Retain
3215A	Norway Maple	Acer platanoides	10	1.0	Very Good	1		Retain
32161	Norway Maple	Acer platanoides	10	1.0	Very Good	3		Retain
32168	Norway Maple	Acer platanoides	11	1.1	Very Good	1		Retain
3216F	Norway Maple	Acer platanoides	10	1.0	Very Good	1		Retain
32176	Norway Maple	Acer platanoides	16	1.6	Good	1	Liab shrub at base	Retain
3217D	Norway Maple	Acer platanoides	11	1.1	Very Good	1		Retain
32184	Eastern White Pine	Pinus strobus	36	3.6	Good	1		Retain
3218B	Eastern White Cedar	Thuja occidentalis	42	4.2	Good	4		Retain
32192	Norway Spruce	Acer platanoides	20	2.0	Very Good	1		Retain
321A7	Eastern White Pine	Pinus strobus	40	4.0	Very Good	1		Retain
321AE	Norway Spruce	Picea abies	14	1.4	Very Good	1		Retain
321B5	Norway Spruce	Picea abies	21	2.1	Very Good	1		Retain
321D2	Norway Spruce	Acer platanoides	30	3.0	Very Good	1		To be Removed
321D9	American Basswood	Tilia americana	29	2.9	Very Good	2		To be Removed
321E0	Norway Spruce	Acer platanoides	14	1.4	Good	1		To be Removed
321E1	Norway Spruce	Acer platanoides	29	2.9	Very Good	1		Retain
3232B	Northern Red Oak	Quercus rubra	39	3.9	Very Good	1		Retain
32332	Norway Spruce	Acer platanoides	28	2.8	Fair	1		Retain
32339	Common Buckthorn	Rhamnus cathartica	10	1.0	Very Good	4		Retain
32340	Norway Spruce	Picea abies	25	2.5	Very Good	1		Retain
32350	Norway Spruce	Picea abies	16	1.6	Good	1		Retain
3235D	Norway Spruce	Picea abies	15	1.5	Fair	1		Retain
32373	Apple Spp.	Malus spp.	21	2.1	Good	1		Retain
3237A	Apple Spp.	Malus spp.	11	1.1	Fair	1		Retain
3237A	Norway Spruce	Picea abies	23	2.3	Good	1		Retain
3239F	Apple Spp.	Malus spp.	20	2.0	Fair	2		Retain
323A0	Norway Spruce	Acer platanoides	31	3.1	Very Good	1		Retain
323A0	Norway Spruce	Picea abies	19	1.9	Very Good	1		Retain
323B4	Norway Spruce	Picea abies	19	1.9	Good	1		Retain
32443	Apple Spp.	Malus spp.	26	2.6	Good	1		Retain
3244A	Apple Spp.	Malus spp.	22	2.2	Good	2		Retain
32483	Apple Spp.	Malus spp.	21	2.1	Very Good	2		Retain
32496	Apple Spp.	Malus spp.	19	1.9	Fair	2		Retain
324B3	Apple Spp.	Malus spp.	14	1.4	Good	1		Retain
324B3	Apple Spp.	Malus spp.	15	1.5	Good	1		Retain
324C4	Siberian Elm	Ulmus pumila	50	5.0	Very Good	1		Retain
324D4	Siberian Elm	Ulmus pumila	48	4.8	Very Good	1		Retain
324E4	Red Spruce	Picea rubens	38	3.8	Very Good	1		Retain
324F8	Red Pine	Pinus resinosa	23	2.3	Very Good	1		Retain
32502	Red Pine	Pinus resinosa	30	3.0	Very Good	1		Retain
32513	Apple Spp.	Malus spp.	15	1.5	Good	3		Retain
3251A	Apple Spp.	Malus spp.	15	1.5	Poor	3		Retain
32521	Red Pine	Pinus resinosa	27	2.7	Very Good	1		Retain
32532	Red Pine	Pinus resinosa	27	2.7	Good	1		Retain
32562	Siberian Elm	Ulmus pumila	49	4.9	Very Good	1		Retain
32562	Apple Spp.	Malus spp.	14	1.4	Good	1		Retain
32569	Apple Spp.	Malus spp.	11	1.1	Good	1		Retain
3257C	Siberian Elm	Ulmus pumila	52	5.2	Fair	1		Retain
325DA	Apple Spp.	Malus spp.	21	2.1	Very Good	2		Retain
326D4	Siberian Elm	Ulmus pumila	59	5.9	Very Good	1		Retain
326D6	Norway Spruce	Picea abies	33	3.3	Good	1		Retain
326E2	White Spruce	Picea glauca	22	2.2	Excellent	1		Retain
326E9	Apple Spp.	Malus spp.	18	1.8	Very Good	1		Retain
326F5	American Basswood	Tilia americana	10	1.0	Excellent	1		Retain

NO.	Common Name	Scientific Name	DBH (cm)	CRZ (m)	Condition	No. Stems	Comments	Impact / Recommendation
32710	White Spruce	Picea glauca	24	2.4	Very Good	1		Retain
32717	White Spruce	Picea glauca	8	0.8	Very Good	1		Retain
3271E	Norway Spruce	Picea abies	14	1.4	Good	1		Retain
32725	Siberian Elm	Ulmus pumila	57	5.7	Good	1		Retain
3272C	Apple Spp.	Malus spp.	16	1.6	Fair	3		Retain
32730	Apple Spp.	Malus spp.	14	1.4	Fair	2		Retain
32744	Siberian Elm	Ulmus pumila	64	6.4	Fair	1		Retain
32748	White Spruce	Picea glauca	15	1.5	Very Good	1		Retain
32807	Siberian Elm	Ulmus pumila	26	2.6	Good	1		Retain
3280E	Siberian Elm	Ulmus pumila	29	2.9	Very Good	1		Retain
3280C5	Siberian Elm	Ulmus pumila	45	4.5	Excellent	1		Retain
328D3	Siberian Elm	Ulmus pumila	26	2.6	Fair	1		Retain
328DA	Eastern White Cedar	Thuja occidentalis	27	2.7	Good	3		Retain
329F0	Little-leaf Linden	Tilia cordata	37	3.7	Very Good	1		Retain
32A5C	Red Pine	Pinus resinosa	24	2.4	Very Good	1		Retain
32A53	Red Pine	Pinus resinosa	27	2.7	Good	1		Retain
34684	Honey-locust	Gleditsia triacanthos	25	2.5	Excellent	2		To be Removed
3469B	Honey-locust	Gleditsia triacanthos	32	3.2	Excellent	1		To be Removed
346A2	Honey-locust	Gleditsia triacanthos	30	3.0	Excellent	1		To be Removed
347A9	Little-leaf Linden	Tilia cordata	22	2.2	Very Good	1		Retain
34C00	Red Pine	Pinus resinosa	32	3.2	Very Good	1		Retain
34A32	Siberian Elm	Ulmus pumila	28	2.8	Fair	4		Retain
34C68	Honey-locust	Gleditsia triacanthos	37	3.7	Excellent	1		Retain
34C94	Honey-locust	Gleditsia triacanthos	21	2.1	Very Good	1		Retain
34CA4	Honey-locust	Gleditsia triacanthos	30	3.0	Very Good	1		Retain
34CD6	Red Pine	Pinus resinosa	22	2.2	Good	1		Retain
34CDD	Siberian Elm	Ulmus pumila	70	7.0	Good	1		Retain
34E18	Honey-locust	Gleditsia triacanthos	17	1.7	Good	1		Retain
35206	Honey-locust	Gleditsia triacanthos	30	3.0	Very Good	1		Retain
35374	Red Maple	Acer rubrum	13	1.3	Very Good	1		Retain
3537B	Little-leaf Linden	Tilia cordata	12	1.2	Good	1		Retain
35382	Red Maple	Acer rubrum	14	1.4	Good	1		Retain
35686	Red Pine	Pinus resinosa	27	2.7	Good	1		Retain
35695	Red Pine	Pinus resinosa	19	1.9	Fair	1		Retain
3569C	Red Pine	Pinus resinosa	29	2.9	Good	1		Retain
356A3	Red Pine	Pinus resinosa	25	2.5	Good	1		Retain
356AA	Red Pine	Pinus resinosa	26	2.6	Good	1	Large nest	Retain
356B1	Red Pine	Pinus resinosa	30	3.0	Good	1		Retain
356B8	Red Pine	Pinus resinosa	34	3.4	Good	1		Retain
356F6	Red Pine	Pinus resinosa	23	2.3	Good	1		Retain
356C6	Red Pine	Pinus resinosa	26	2.6	Fair	1		Retain
356C0	Red Pine	Pinus resinosa	21	2.1	Fair	1		Retain
356D4	Red Pine	Pinus resinosa	19	1.9	Fair	1		Retain
356D6	Red Pine	Pinus resinosa	26	2.6	Fair	1		Retain
356E2	Red Pine	Pinus resinosa	29	2.9	Good	1		Retain
35C50	Honey-locust	Gleditsia triacanthos	24	2.4	Excellent	1		Retain
35D33	Honey-locust	Gleditsia triacanthos	21	2.1	Good	1		Retain
35E88	Red Pine	Pinus resinosa	55	5.5	Excellent	1		Retain
35EA4	Red Pine	Pinus resinosa	55	5.5	Good	1		Retain
35EAD	Red Pine	Pinus resinosa	55	5.5	Excellent	1		Retain
35E81	Red Maple	Acer rubrum	29	2.9	Good	1		Retain
35F10	Little-leaf Linden	Tilia cordata	13	1.3	Fair	1	Growing between iron gate	Retain
35F17	Manitoba Maple	Acer negundo	15	1.5	Fair	3		Retain
35F1E	Red Maple	Acer rubrum	21	2.1	Good	1		Retain
35F25	Red Maple	Acer rubrum	35	3.5	Very Good	1		Retain
35F36	Norway Spruce	Picea abies	32	3.2	Excellent	1		Retain
35F30	Norway Spruce	Picea abies	2					



Legend

- Site
 - - - Tree Search Area (5m)
- Recommended Action**
- Retain
 - ✗ Remove
 - Critical Root Zone
 - Tree Protection Fencing



Project:
**Carlingwood Shopping Centre
 Parking Renovation TCR**

Tree Impact Assessment and
 Recommendations
 (Map 2 As per City Guidelines)

Prepared By:
ARCADIS

Date: 2026-05-06
 Project: 103109569

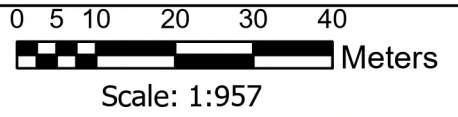
Figure: 3b



Legend

- Site
- - - Tree Search Area (5m)
- Retain
- ✗ Remove
- Critical Root Zone
- Tree Protection Fencing

Recommended Action



Project:
**Carlingwood Shopping Centre
 Parking Renovation TCR**

Tree Impact Assessment and
 Recommendations
 (Map 2 As per City Guidelines)

Prepared By:
ARCADIS

Date: 2026-05-06
 Project: 103109569

Figure: 3c

8 Mitigation Measures and Construction Management

8.1 Tree Removal

Based on the proposed project design and existing conditions of the trees on site, 9 trees have been recommended for removal in order to accommodate the demolition of the existing structure, existing ramp and adjustment of the drive lanes at this location (**Figure 3**). The following recommendations are provided:

- Retain a Certified Arborist during site layout operations to confirm recommended tree removals, pruning, and tree protection fencing in proximity to the construction limits.

8.2 Tree Protection Measures

The most typical construction damage to trees is root damage from compaction and severance. While the drip line of a tree's canopy is typically thought to be associated with the root area, the root zones can extend significantly beyond the drip line of the tree, sometimes up to 2 or 3 times the height of the tree. Some of the trees inventoried are growing close to the edge of proposed construction and will be at risk of contact with, and damage from, heavy equipment. To protect trees, grade changes and construction activities that could cause soil compaction should generally be kept away from trees as much as possible.

To successfully preserve trees that are recommended for on-site retention, the following series of mitigation measures is recommended. These recommended measures largely center on the minimum CRZ of trees (The CRZ is calculated as DBH x 10 cm), as defined by the City's *Tree Conservation Report Guidelines*. The following measures are recommended to protect the CRZ of all trees slated for retention and/or impact:

- Delineation of the disturbance limits within work areas will be clearly defined in drawings and on the site prior to construction.
- Install Tree Protection Fencing prior to commencement of construction activities, and retain fencing until construction activities have been completed, as per City of Ottawa's Tree Protection (By-law No. 2020-340), Part VI:
 - Tree protection fencing shall be at least 1.2 m in height and installed in such a way that the fence cannot be altered.
 - Refer to **Appendix B** for the City of Ottawa's Tree Protection Fencing Specification.
- Ensure that site clearing is carried out only in areas where it is specifically required, and that the areas to be cleared are carefully and clearly delineated.
- Do not place any material or equipment within the CRZ of a tree.
- Do not raise or lower the existing grade within the CRZ of a tree.
- Do not extend any hard surface or significantly change landscaping.
- If the construction will have to encroach into a tree's minimum CRZ, installing a temporary layer of 150 mm deep partially composed wood chips, or mulch over the root zone can help to protect roots from compaction damage, and conserve soil moisture levels.
- Equipment and materials should not be stored near trees.
- Ensure that exhaust fumes from all equipment are not directed towards any tree's canopy.
- Do not attach any signs, notices, or posters to trees.

8.3 Branch and Root Pruning

- If branches are likely to hang in the way of passing equipment, the branches should be pruned by a Certified Arborist or Registered Forester to avoid tearing and undue injury to the tree.
- All pruning work must be performed under the supervision and guidance of a qualified tree professional in accordance with the latest ANSI A300 Pruning Standards and best management practices identified by the International Society of Arboriculture.
- Do not damage the root system, trunk, or branches of any tree; if any roots are encountered during excavation while working outside the CRZ, they should be cut off cleanly with sharp pruning tools rather than allow them to be torn by large equipment; clean cuts will help to minimize decay and entry points for disease.
- All exposed roots of trees to be retained should be covered in a minimum of 5 cm of firm soil within 24 hours of exposure.
- If root pruning is implemented, the crown of the tree should be reduced proportionately under the direction of a Certified Arborist or Registered Forester, to decrease wind sail. Pruning should be kept to thinning cuts (no major limb removal), and crowns should be monitored, and maintenance carried out for two (2) years after root pruning to remove any dieback under the direction of a Certified Arborist or Registered Forester.

8.4 Tree Planting Recommendations

For new tree planting(s) the Landscape Plan considerations may include:

- Prioritizing the use of native species, where appropriate.
- Where post-development growing conditions and landscape management requirements are not favorable for native species, the use of known invasive species shall be restricted.
- The species and health of existing tree as an indicator of appropriateness.
- The age of existing trees and potential for succession planting.
- Seek to mitigate any loss of canopy cover.
- Diversity of species in newly planted and existing trees.
- Micro-climatic conditions.

9 Permits and Approvals

The City of Ottawa's Tree Protection By-law No. 2020-340 describes the rules that govern tree ownership in Ottawa and the responsibility of tree maintenance, including administration and enforcement. As per Part IV: Sections 42 – 44 Prohibition: *No person shall injure or destroy a tree without a permit.* Sections 45 to 48 - Application for tree permit stipulates the process of applying for a permit under this by-law.

Therefore, it is recommended that consultation should be undertaken with the city prior to construction to confirm the requirements for tree removal permits associated with the municipal tree protection by-law. Where required, tree removal permits must be obtained from the city prior to the start of construction.

10 Summary

One hundred and thirty-nine (139) trees were inventoried within the proposed development area located at 2085 Carling Avenue, in Ottawa, Ontario. Based on the proposed design, the inventory resulted in one hundred and thirty (130) trees to be retained, and nine (9) trees proposed for removal. A list of proposed avoidance and mitigation measures have been included in Section 8 of this report in relation to tree removals, tree protection, and tree preservation.

11 Certification and Closure

We certify that all the statements of fact in this assessment are true, complete, and correct to the best of our knowledge and belief, and that they are made in good faith.

Appendix A

Tree Inventory and Assessment Table

Appendix A: Carlingwood Shopping Centre Parking Renovation - Tree Inventory and Recommendations

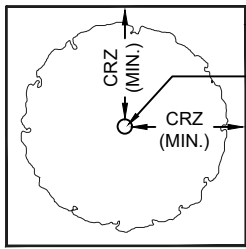
Tree ID	Common Name	Scientific Name	No. Stems	DBH (cm) approx.	Crown Spread (m)	Structural Defects ¹										Condition ²	CRZ (m from trunk)	Boundary Tree	Ownership	Impact / Recommendation	
						SMD	UC	FC	BNL	DB	AVD	LE	CA	EXR	W						GR
1	Siberian Elm	<i>Ulmus pumila</i>	1	15	2						√			√			Good	1.5	No	Client	Retain
2	Little-leaf Linden	<i>Tilia cordata</i>	1	32	4	√	√	√		√	√		√				Fair	3.2	No	Client	Remove to accommodate construction
3	Honey-locust	<i>Gleditsia triacanthos</i>	1	13	2		√		√								Good	1.3	No	Client	Remove to accommodate construction
4	Honey-locust	<i>Gleditsia triacanthos</i>	1	13	3												Very Good	1.3	No	Client	Remove to accommodate construction
5	Common Pear	<i>Pyrus communis</i>	2	13	2					√	√						Fair	1.3	No	Adjacent Land Owner (City of Ottawa)	Retain
6	Honey-locust	<i>Gleditsia triacanthos</i>	1	20	2												Very Good	2.0	No	Client	Retain
321E0	Norway Maple	<i>Acer platanoides</i>	1	14	2	√								√			Good	1.4	No	Client	Remove to accommodate construction
525E1	Norway Spruce	<i>Picea abies</i>	1	21	3			√							√		Good	2.1	Yes	Adjacent Land Owner (City of Ottawa)	Retain
32106	Norway Spruce	<i>Picea abies</i>	1	19	5									√			Excellent	1.9	No	Client	Retain
32114	Norway Spruce	<i>Picea abies</i>	1	10	1												Very Good	1.0	No	Client	Retain
32122	Norway Spruce	<i>Picea abies</i>	1	30	5	√								√			Good	3.0	No	Client	Retain
32129	Norway Spruce	<i>Picea abies</i>	1	16	2	√								√			Very Good	1.6	No	Client	Retain
32130	Norway Spruce	<i>Picea abies</i>	1	20	4	√								√			Very Good	2.0	No	Client	Retain
32137	White Pine	<i>Pinus Strobus</i>	1	25	8									√	√		Very Good	2.5	No	Client	Retain
32145	Norway Maple	<i>Acer platanoides</i>	1	10	1								√				Good	1.0	No	Adjacent Land Owner (City of Ottawa)	Retain
32153	Norway Maple	<i>Acer platanoides</i>	1	12	2						√	√					Very Good	1.2	Yes	Adjacent Land Owner (City of Ottawa)	Retain
32161	Norway Maple	<i>Acer platanoides</i>	3	10	2							√					Very Good	1.0	No	Adjacent Land Owner (City of Ottawa)	Retain
32168	Norway Maple	<i>Acer platanoides</i>	1	11	2												Very Good	1.1	No	Adjacent Land Owner (City of Ottawa)	Retain
32176	Norway Maple	<i>Acer platanoides</i>	1	16	3	√						√					Good	1.6	Yes	Adjacent Land Owner (City of Ottawa)	Retain
32184	Eastern White Pine	<i>Pinus strobus</i>	1	36	6	√	√					√		√			Good	3.6	No	Client	Retain
32192	Norway Maple	<i>Acer platanoides</i>	1	20	3									√	√		Very Good	2.0	Yes	Adjacent Land Owner (City of Ottawa)	Retain
32332	Norway Maple	<i>Acer platanoides</i>	1	28	4	√	√	√		√			√	√	√		Fair	2.8	No	Adjacent Land Owner (City of Ottawa)	Retain
32339	Common Buckthorn	<i>Rhamnus cathartica</i>	4	10	2									√			Very Good	1.0	No	Client	Retain
32340	Norway Spruce	<i>Picea abies</i>	1	25	3		√										Very Good	2.5	Yes	Client	Retain
32356	Norway Spruce	<i>Picea abies</i>	1	16	2		√							√			Good	1.6	No	Client	Retain
32373	Apple Spp.	<i>Malus spp.</i>	1	21	21	√		√				√		√	√		Good	2.1	Yes	Client	Retain
32443	Apple Spp.	<i>Malus spp.</i>	1	26	3	√					√						Good	2.6	Yes	Client	Retain
32483	Apple Spp.	<i>Malus spp.</i>	2	21	3						√			√			Very Good	2.1	No	Client	Retain
32496	Apple Spp.	<i>Malus spp.</i>	2	19	3	√					√			√			Fair	1.9	No	Client	Retain
32502	Red Pine	<i>Pinus resinosa</i>	1	30	3									√			Very Good	3.0	Yes	Client	Retain
32513	Apple Spp.	<i>Malus spp.</i>	3	15	2					√				√			Good	1.5	Yes	Client	Retain
32521	Red Pine	<i>Pinus resinosa</i>	1	27	2												Very Good	2.7	Yes	Client	Retain
32532	Red Pine	<i>Pinus resinosa</i>	1	27	2	√		√		√				√	√		Good	2.7	Yes	Client	Retain
32562	Apple Spp.	<i>Malus spp.</i>	1	14	2			√									Good	1.4	Yes	Client	Retain
32569	Apple Spp.	<i>Malus spp.</i>	1	11	2						√			√			Good	1.1	No	Client	Retain
326E2	White Spruce	<i>Picea glauca</i>	1	22	4												Excellent	2.2	Yes	Client	Retain
32710	White Spruce	<i>Picea glauca</i>	1	24	4		√										Very Good	2.4	Yes	Client	Retain
32717	White Spruce	<i>Picea glauca</i>	1	8	1												Very Good	0.8	Yes	Adjacent Land Owner (City of Ottawa)	Retain
32725	Siberian Elm	<i>Ulmus pumila</i>	1	57	5		√										Good	5.7	Yes	Adjacent Land Owner (City of Ottawa)	Retain
32744	Siberian Elm	<i>Ulmus pumila</i>	1	64	6		√					√		√			Fair	6.4	Yes	Adjacent Land Owner (City of Ottawa)	Retain
34694	Honey-locust	<i>Gleditsia triacanthos</i>	2	25	5												Excellent	2.5	No	Client	Remove to accommodate construction
35206	Honey-locust	<i>Gleditsia triacanthos</i>	1	30	3							√					Very Good	3.0	No	Client	Retain
35374	Red Maple	<i>Acer rubrum</i>	1	13	3							√					Very Good	1.3	No	Client	Retain
35382	Red Maple	<i>Acer rubrum</i>	1	14	3							√					Good	1.4	No	Client	Retain

Tree ID	Common Name	Scientific Name	No. Stems	DBH (cm) * approx.	Crown Spread (m)	Structural Defects ¹											Condition ²	CRZ (m from trunk)	Boundary Tree	Ownership	Impact / Recommendation
						SMD	UC	FC	BNL	DB	AVD	LE	CA	EXR	W	GR					
356E2	Red Pine	<i>Pinus resinosa</i>	1	29	4	√											Good	2.9	Yes	Client	Retain
35695	Red Pine	<i>Pinus resinosa</i>	1	19	1		√										Fair	1.9	Yes	Client	Retain
52539	Red Pine	<i>Pinus resinosa</i>	1	26	3	√											Good	2.6	Yes	Client	Retain
326E9	Apple Spp.	<i>Malus spp.</i>	1	18	2												Very Good	1.8	Yes	Client	Retain
35E98	Red Pine	<i>Pinus resinosa</i>	1	55	6												Excellent	5.5	No	Client	Retain
320F1	Unknown	<i>Unknown</i>	1	0	0												Dead	0.0	No	Adjacent Land Owner (City of Ottawa)	Retain
320F8	Norway Maple	<i>Acer platanoides</i>	1	30	2								√	√			Very Good	3.0	Yes	Adjacent Land Owner (City of Ottawa)	Retain
320FF	Norway Maple	<i>Acer platanoides</i>	1	30	4								√	√			Very Good	3.0	Yes	Adjacent Land Owner (City of Ottawa)	Retain
3210D	Norway Spruce	<i>Picea abies</i>	1	18	3									√			Very Good	1.8	No	Client	Retain
3211B	Norway Maple	<i>Acer platanoides</i>	1	41	5	√			√				√	√			Good	4.1	No	Client	Retain
3213E	Norway Maple	<i>Acer platanoides</i>	1	12	1									√			Good	1.2	No	Adjacent Land Owner (City of Ottawa)	Retain
3214C	Norway Maple	<i>Acer platanoides</i>	1	17	1	√				√				√			Fair	1.7	Yes	Adjacent Land Owner (City of Ottawa)	Retain
3215A	Norway Maple	<i>Acer platanoides</i>	1	10	1								√	√			Very Good	1.0	No	Adjacent Land Owner (City of Ottawa)	Retain
3216F	Norway Maple	<i>Acer platanoides</i>	1	10	2								√				Very Good	1.0	No	Adjacent Land Owner (City of Ottawa)	Retain
3217D	Norway Maple	<i>Acer platanoides</i>	1	11	2									√			Very Good	1.1	No	Client	Retain
3218B	Eastern White Cedar	<i>Thuja occidentalis</i>	4	42	6	√							√	√			Good	4.2	Yes	Client	Retain
321A7	Eastern White Pine	<i>Pinus strobus</i>	1	40	8					√				√			Very Good	4.0	Yes	Client	Retain
321AE	Norway Spruce	<i>Picea abies</i>	1	14	2									√			Very Good	1.4	No	Client	Retain
321B5	Norway Spruce	<i>Picea abies</i>	1	21	2									√			Very Good	2.1	No	Client	Retain
321D2	Norway Maple	<i>Acer platanoides</i>	1	30	4								√	√			Very Good	3.0	No	Client	Remove to accommodate construction
321D9	American Basswood	<i>Tilia americana</i>	2	29	4									√			Very Good	2.9	No	Client	Remove to accommodate construction
321EC	Norway Spruce	<i>Picea abies</i>	1	29	3									√			Very Good	2.9	Yes	Client	Retain
3232B	Northern Red Oak	<i>Quercus rubra</i>	1	39	6												Very Good	3.9	No	Adjacent Land Owner (City of Ottawa)	Retain
3235D	Norway Spruce	<i>Picea abies</i>	1	15	1					√							Fair	1.5	Yes	Client	Retain
3237A	Apple Spp.	<i>Malus spp.</i>	1	11	2	√							√	√	√		Fair	1.1	No	Client	Retain
3237A	Norway Spruce	<i>Picea abies</i>	1	23	2	√				√							Good	2.3	Yes	Adjacent Land Owner (City of Ottawa)	Retain
3239F	Apple Spp.	<i>Malus spp.</i>	2	20	3					√				√	√		Fair	2.0	Yes	Client	Retain
323A6	Norway Maple	<i>Acer platanoides</i>	1	31	3					√							Very Good	3.1	Yes	Client	Retain
323AD	Norway Spruce	<i>Picea abies</i>	1	16	3	√								√			Fair	1.6	Yes	Adjacent Land Owner (City of Ottawa)	Retain
323B4	Norway Spruce	<i>Picea abies</i>	1	19	3	√											Good	1.9	Yes	Client	Retain
3244A	Apple Spp.	<i>Malus spp.</i>	2	22	2								√		√		Good	2.2	Yes	Client	Retain
3249D	Apple Spp.	<i>Malus spp.</i>	3	19	2								√				Very Good	1.9	No	Client	Retain
324B3	Apple Spp.	<i>Malus spp.</i>	1	15	2					√				√	√		Good	1.5	No	Client	Retain
324C4	Siberian Elm	<i>Ulmus pumila</i>	1	50	5					√				√			Very Good	5.0	No	Adjacent Land Owner (City of Ottawa)	Retain
324D4	Siberian Elm	<i>Ulmus pumila</i>	1	48	5									√			Very Good	4.8	No	Adjacent Land Owner (City of Ottawa)	Retain
324EF	Red Spruce	<i>Picea rubens</i>	1	38	4												Very Good	3.8	Yes	Client	Retain
324FB	Red Pine	<i>Pinus resinosa</i>	1	23	4									√			Very Good	2.3	Yes	Client	Retain
3251A	Apple Spp.	<i>Malus spp.</i>	3	15	1	√			√	√					√		Poor	1.5	Yes	Client	Retain
3255B	Siberian Elm	<i>Ulmus pumila</i>	1	49	4												Very Good	4.9	No	Adjacent Land Owner (City of Ottawa)	Retain
3257C	Siberian Elm	<i>Ulmus pumila</i>	1	52	5	√			√	√							Fair	5.2	Yes	Adjacent Land Owner (City of Ottawa)	Retain
325DA	Apple Spp.	<i>Malus spp.</i>	2	21	2									√			Very Good	2.1	Yes	Client	Retain
326D4	Siberian Elm	<i>Ulmus pumila</i>	1	59	4												Very Good	5.9	Yes	Adjacent Land Owner (City of Ottawa)	Retain
326DB	Norway Spruce	<i>Picea abies</i>	1	33	4					√				√			Good	3.3	Yes	Client	Retain
326F5	American Basswood	<i>Tilia americana</i>	1	10	2												Excellent	1.0	Yes	Adjacent Land Owner (City of Ottawa)	Retain
3271E	Norway Spruce	<i>Picea abies</i>	1	14	2									√			Good	1.4	Yes	Client	Retain

Tree ID	Common Name	Scientific Name	No. Stems	DBH (cm) * approx.	Crown Spread (m)	Structural Defects ¹										Condition ²	CRZ (m from trunk)	Boundary Tree	Ownership	Impact / Recommendation		
						SMD	UC	FC	BNL	DB	AVD	LE	CA	EXR	W						GR	
3272C	Apple Spp.	<i>Malus spp.</i>	3	16	3	√					√	√						Fair	1.6	No	Client	Retain
3273D	Apple Spp.	<i>Malus spp.</i>	2	14	2		√	√		√								Fair	1.4	No	Client	Retain
3274B	White Spruce	<i>Picea glauca</i>	1	15	2	√												Very Good	1.5	Yes	Adjacent Land Owner (City of Ottawa)	Retain
328B7	Siberian Elm	<i>Ulmus pumila</i>	1	26	3						√							Good	2.6	Yes	Client	Retain
328BE	Siberian Elm	<i>Ulmus pumila</i>	1	29	3						√							Very Good	2.9	Yes	Client	Retain
328C5	Siberian Elm	<i>Ulmus pumila</i>	1	45	3													Excellent	4.5	Yes	Client	Retain
328D3	Siberian Elm	<i>Ulmus pumila</i>	1	26	2	√	√				√	√						Fair	2.6	Yes	Adjacent Land Owner (City of Ottawa)	Retain
328DA	Eastern White Cedar	<i>Thuja occidentalis</i>	3	27	3							√						Good	2.7	Yes	Adjacent Land Owner (City of Ottawa)	Retain
329F0	Little-leaf Linden	<i>Tilia cordata</i>	1	37	4									√				Very Good	3.7	No	Client	Retain
32A5C	Red Pine	<i>Pinus resinosa</i>	1	24	3		√											Very Good	2.4	No	Client	Retain
32A63	Red Pine	<i>Pinus resinosa</i>	1	27	3										√			Good	2.7	No	Client	Retain
3469B	Honey-locust	<i>Gleditsia triacanthos</i>	1	32	5													Excellent	3.2	No	Client	Remove to accommodate construction
346A2	Honey-locust	<i>Gleditsia triacanthos</i>	1	30	4													Excellent	3.0	No	Client	Remove to accommodate construction
34A79	Little-leaf Linden	<i>Tilia cordata</i>	1	22	4													Very Good	2.2	No	Client	Retain
34AcB	Red Pine	<i>Pinus resinosa</i>	1	32	3													Very Good	3.2	Yes	Client	Retain
34AD2	Siberian Elm	<i>Ulmus pumila</i>	4	28	4			√						√	√			Fair	2.8	Yes	Client	Retain
34C88	Honey-locust	<i>Gleditsia triacanthos</i>	1	37	4													Excellent	3.7	No	Client	Retain
34C94	Honey-locust	<i>Gleditsia triacanthos</i>	1	21	2										√			Very Good	2.1	No	Client	Retain
34CA4	Honey-locust	<i>Gleditsia triacanthos</i>	1	30	2		√											Very Good	3.0	No	Client	Retain
34CD6	Red Pine	<i>Pinus resinosa</i>	1	22	3		√											Good	2.2	Yes	Adjacent Land Owner (City of Ottawa)	Retain
34CDD	Siberian Elm	<i>Ulmus pumila</i>	1	70	8		√					√		√				Good	7.0	No	Adjacent Land Owner (City of Ottawa)	Retain
34F1B	Honey-locust	<i>Gleditsia triacanthos</i>	1	17	2										√			Good	1.7	No	Client	Retain
3537B	Little-leaf Linden	<i>Tilia cordata</i>	1	12	3													Good	1.2	No	Client	Retain
3568E	Red Pine	<i>Pinus resinosa</i>	1	27	3				√						√			Good	2.7	Yes	Client	Retain
3569C	Red Pine	<i>Pinus resinosa</i>	1	29	3	√			√									Good	2.9	Yes	Client	Retain
356A3	Red Pine	<i>Pinus resinosa</i>	1	25	3	√	√		√									Good	2.5	No	Client	Retain
356AA	Red Pine	<i>Pinus resinosa</i>	1	26	3	√			√									Good	2.6	Yes	Client	Retain
356B1	Red Pine	<i>Pinus resinosa</i>	1	30	3	√			√									Good	3.0	Yes	Client	Retain
356B8	Red Pine	<i>Pinus resinosa</i>	1	34	3				√									Good	3.4	Yes	Client	Retain
356BF	Red Pine	<i>Pinus resinosa</i>	1	23	3		√		√									Good	2.3	Yes	Client	Retain
356C6	Red Pine	<i>Pinus resinosa</i>	1	26	3	√	√		√	√								Fair	2.6	Yes	Client	Retain
356CD	Red Pine	<i>Pinus resinosa</i>	1	21	3		√		√	√					√			Fair	2.1	Yes	Client	Retain
356D4	Red Pine	<i>Pinus resinosa</i>	1	19	3		√		√	√					√			Fair	1.9	Yes	Client	Retain
356DB	Red Pine	<i>Pinus resinosa</i>	1	26	3	√	√		√	√								Fair	2.6	Yes	Client	Retain
35CB0	Honey-locust	<i>Gleditsia triacanthos</i>	1	24	3													Excellent	2.4	No	Client	Retain
35D33	Honey-locust	<i>Gleditsia triacanthos</i>	1	21	3				√									Good	2.1	No	Client	Retain
35EA4	Red Pine	<i>Pinus resinosa</i>	1	55	6	√	√											Good	5.5	No	Client	Retain
35EAB	Red Pine	<i>Pinus resinosa</i>	1	55	6													Excellent	5.5	No	Client	Retain
35EF8	Red Maple	<i>Acer rubrum</i>	1	29	4				√									Good	2.9	Yes	Client	Retain
35F10	Little-leaf Linden	<i>Tilia cordata</i>	1	13	3							√			√			Fair	1.3	No	Client	Retain
35F17	Manitoba Maple	<i>Acer negundo</i>	3	15	4						√	√			√			Fair	1.5	No	Client	Retain
35F1E	Red Maple	<i>Acer rubrum</i>	1	21	4				√									Good	2.1	Yes	Client	Retain
35F25	Red Maple	<i>Acer rubrum</i>	1	35	4				√						√			Very Good	3.5	Yes	Client	Retain
35F36	Norway Spruce	<i>Picea abies</i>	1	32	3													Excellent	3.2	No	Client	Retain
35F3D	Norway Spruce	<i>Picea abies</i>	1	28	3													Very Good	2.8	No	Client	Retain
35F44	Norway Spruce	<i>Picea abies</i>	2	22	3													Very Good	2.2	No	Client	Retain
35F4B	Norway Spruce	<i>Picea abies</i>	2	30	2										√			Good	3.0	No	Client	Retain
3R9F8	Honey-locust	<i>Gleditsia triacanthos</i>	1	47	10	√				√								Very Good	4.7	No	Client	Retain
5254A	Red Pine	<i>Pinus resinosa</i>	1	31	3										√			Good	3.1	Yes	Client	Retain
5258E	Apple Spp.	<i>Malus spp.</i>	1	13	2	√					√							Good	1.3	No	Client	Retain

Appendix B

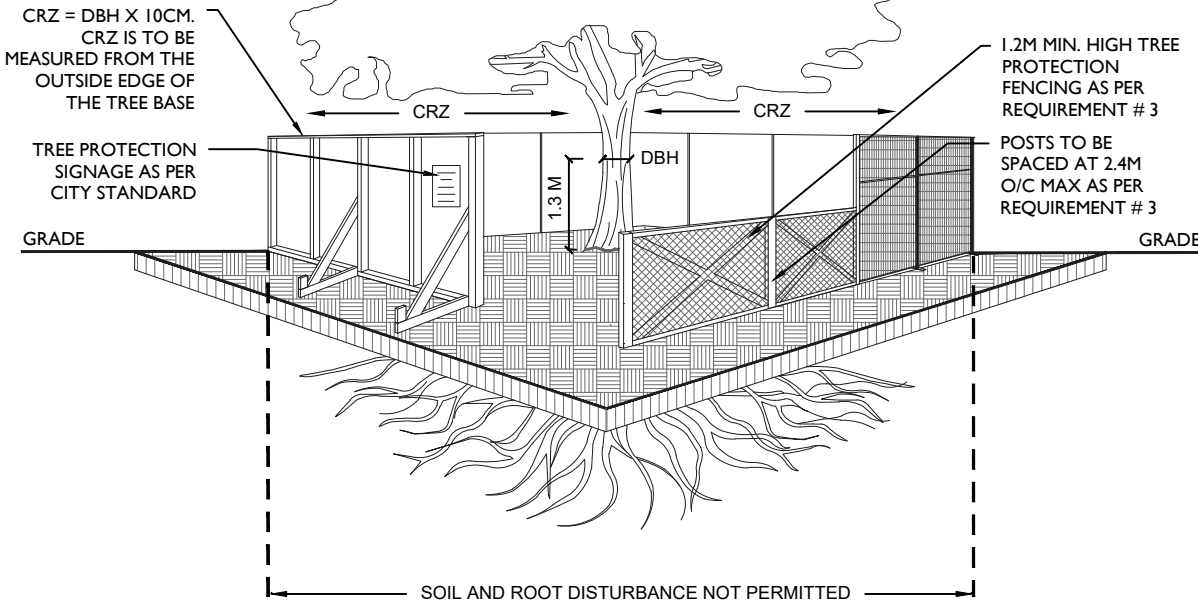
Tree Protection Specification (City of Ottawa, 2021)



TREE PROTECTION FENCING

TREE TRUNK

PLAN VIEW



CRZ = DBH X 10CM.
CRZ IS TO BE MEASURED FROM THE OUTSIDE EDGE OF THE TREE BASE

TREE PROTECTION SIGNAGE AS PER CITY STANDARD

GRADE

1.2M MIN. HIGH TREE PROTECTION FENCING AS PER REQUIREMENT # 3

POSTS TO BE SPACED AT 2.4M O/C MAX AS PER REQUIREMENT # 3

GRADE

SOIL AND ROOT DISTURBANCE NOT PERMITTED

TREE PROTECTION REQUIREMENTS:

1. PRIOR TO ANY WORK ACTIVITY WITHIN THE CRITICAL ROOT ZONE (CRZ = 10 X DIAMETER) OF A TREE, TREE PROTECTION FENCING MUST BE INSTALLED SURROUNDING THE CRITICAL ROOT ZONE, AND REMAIN IN PLACE UNTIL THE WORK IS COMPLETE.
2. UNLESS PLANS ARE APPROVED BY CITY FORESTRY STAFF, FOR WORK WITHIN THE CRZ:
 - DO NOT PLACE ANY MATERIAL OR EQUIPMENT - INCLUDING OUTHOUSES;
 - DO NOT ATTACH ANY SIGNS, NOTICES OR POSTERS TO ANY TREE;
 - DO NOT RAISE OR LOWER THE EXISTING GRADE;
 - TUNNEL OR BORE WHEN DIGGING;
 - DO NOT DAMAGE THE ROOT SYSTEM, TRUNK, OR BRANCHES OR ANY TREE;
 - ENSURE THAT EXHAUST FUMES FROM ALL EQUIPMENT ARE NOT DIRECTED TOWARD ANY TREE CANOPY.
 - DO NOT EXTEND HARD SURFACE OR SIGNIFICANTLY CHANGE LANDSCAPING
3. TREE PROTECTION FENCING MUST BE AT LEAST 1.2M IN HEIGHT, AND CONSTRUCTED OF RIGID OR FRAMED MATERIALS (E.G. MODULOC - STEEL, PLYWOOD HOARDING, OR SNOW FENCE ON A 2"X4" WOOD FRAME) WITH POSTS 2.4M APART, SUCH THAT THE FENCE LOCATION CANNOT BE ALTERED. ALL SUPPORTS AND BRACING MUST BE PLACED OUTSIDE OF THE CRZ, AND INSTALLATION MUST MINIMISE DAMAGE TO EXISTING ROOTS. (SEE DETAIL)
4. THE LOCATION OF THE TREE PROTECTION FENCING MUST BE DETERMINED BY AN ARBORIST AND DETAILED ON ANY ASSOCIATED PLANS FOR THE SITE (E.G. TREE CONSERVATION REPORT, TREE INFORMATION REPORT, ETC). THE PLAN AND CONSTRUCTED FENCING MUST BE APPROVED BY CITY FORESTRY STAFF PRIOR TO THE COMMENCEMENT OF WORK.
5. IF THE FENCED TREE PROTECTION AREA MUST BE REDUCED TO FACILITATE CONSTRUCTION, MITIGATION MEASURES MUST BE PRESCRIBED BY AN ARBORIST AND APPROVED BY CITY FORESTRY STAFF. THESE MAY INCLUDE THE PLACEMENT OF PLYWOOD, WOOD CHIPS, OR STEEL PLATING OVER THE ROOTS FOR PROTECTION OR THE PROPER PRUNING AND CARE OF ROOTS WHERE ENCOUNTERED.

THE CITY'S TREE PROTECTION BY-LAW, 2020-340 PROTECTS BOTH CITY-OWNED TREES, CITY-WIDE, AND PRIVATELY-OWNED TREES WITHIN THE URBAN AREA. PLEASE REFER TO WWW.OTTAWA.CA/TREEBYLAW FOR MORE INFORMATION ON HOW THE TREE BY-LAW APPLIES.

ACCESSIBLE FORMATS AND COMMUNICATION SUPPORTS ARE AVAILABLE, UPON REQUEST



TREE PROTECTION SPECIFICATION

TO BE IMPLEMENTED FOR RETAINED TREES, BOTH ON SITE AND ON ADJACENT SITES, PRIOR TO ANY TREE REMOVAL OR SITE WORKS AND MAINTAINED FOR THE DURATION OF WORK ACTIVITIES ON SITE.

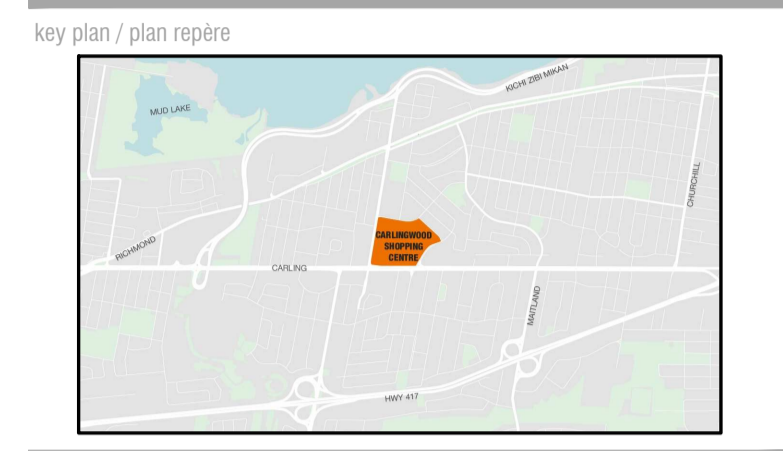
SCALE: NTS

DATE: MARCH 2021

DRAWING NO.: 1 of 1

Appendix C

Site/Landscape Plan and Planting Plan Drawings



legend / légende

- TREE PROTECTION FENCING
- PROPERTY LINE
- INDIVIDUAL TREES TO BE REMOVED AND KEY No. - REFER TO TABLE # & REPORT
- INDIVIDUAL TREES TO BE RETAINED AND KEY No. - REFER TO TABLE # & REPORT



DO NOT SCALE DRAWINGS

rev'n	description / la description	yyyy/mm/dd
06	re-issue for site plan application	2026/06/22
05	re-issue for site plan application	2026/06/04
04	issue for tender	2026/05/08
03	re-issue for site plan application	2026/05/06
02	re-issue for site plan application	2026/04/27
01	re-issue for site plan application	2026/04/17
00	issue for site plan application	2026/03/09

FOTENN Planning + Design
 420 O'Connor Street
 Ottawa, ON, CANADA K2P 1W4
 613.730.5709
 fotenn.com

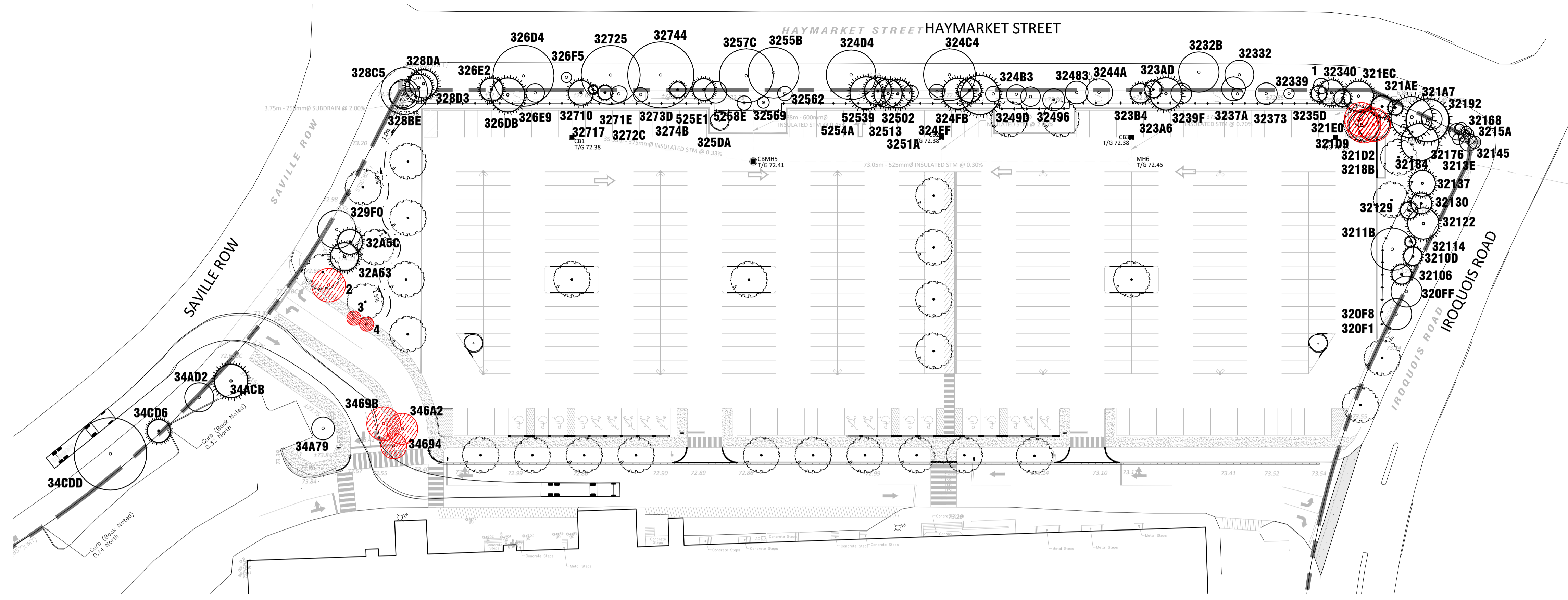
north / le nord

project / projet
2085 CARLING AVENUE
CARLINGWOOD MALL NORTH PARKING
STRUCTURE DEMOLITION & REDESIGN

drawing / dessin
TREE CONSERVATION PLAN

designed / conçu	drawn / dessiné	reviewed / examiné
ST / DF	ST	DF
date	project number / No. du projet	
SEPT 2025		
drawing number / No. du dessin		

TCP 1



NOTE: THIS PLAN IS TO BE READ IN CONJUNCTION WITH THE LATEST Tree Conservation Report AS PREPARED BY Arcadis.

1 TREE CONSERVATION PLAN
TCP 1:500

PLAN VIEW

CRZ - DBH x 1.0CM
 CRZ IS TO BE MEASURED FROM THE OUTSIDE EDGE OF THE TREE BASE

1.2M MIN. HIGH TREE PROTECTION FENCING AS PER REQUIREMENT # 3

POSTS TO BE SPACED AT 1.4M O.C. MAX AS PER REQUIREMENT # 3

ACCESSIBLE FORMATS AND COMMUNICATION SUPPORTS ARE AVAILABLE, UPON REQUEST

TREE PROTECTION REQUIREMENTS

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- UNLESS PLANS ARE APPROVED BY CITY FORESTRY STAFF, FOR WORK WITHIN THE CRZ:
 - DO NOT PLACE ANY MATERIAL OR EQUIPMENT - INCLUDING OUTFITTERS;
 - DO NOT ATTACH ANY SIGNS, NOTICES OR POSTERS TO ANY TREE;
 - DO NOT RAISE OR LOWER THE EXISTING GRADE;
 - TUNNEL OR BORE WHEN DIGGING;
 - DO NOT DAMAGE THE ROOT SYSTEM, TRUNK, OR BRANCHES OF ANY TREE;
 - ENSURE THAT EXHAUST FUMES FROM ALL EQUIPMENT ARE NOT DIRECTED TOWARD ANY TREE CANOPY;
 - DO NOT EXTEND HARD SURFACE OR SIGNIFICANTLY CHANGE LANDSCAPING.
- TREE PROTECTION FENCING MUST BE AT LEAST 1.2M IN HEIGHT, AND CONSTRUCTED OF RIGID OR FRAMED MATERIALS (E.G. MODULOC, STEEL, PLYWOOD HOARDING, OR SNOW FENCE ON A 2X4" WOOD FRAME) WITH POSTS 2.4M APART, SUCH THAT THE FENCE LOCATION CANNOT BE ALTERED. ALL SUPPORTS AND BRACING MUST BE PLACED OUTSIDE OF THE CRZ, AND INSTALLATION MUST MINIMIZE DAMAGE TO EXISTING ROOTS. (SEE DETAIL)
- THE LOCATION OF THE TREE PROTECTION FENCING MUST BE DETERMINED BY AN ARBORIST AND DETAILED ON ANY ASSOCIATED PLANS FOR THE SITE (E.G. TREE CONSERVATION REPORT, TREE INFORMATION REPORT, ETC.). THE PLAN AND CONSTRUCTED FENCING MUST BE APPROVED BY CITY FORESTRY STAFF PRIOR TO THE COMMENCEMENT OF WORK.
- IF THE FENCED TREE PROTECTION AREA MUST BE REDUCED TO FACILITATE CONSTRUCTION, MITIGATION MEASURES MUST BE PRESCRIBED BY AN ARBORIST AND APPROVED BY CITY FORESTRY STAFF. THESE MAY INCLUDE THE PLACEMENT OF PLYWOOD, WOOD CHIP, OR STEEL PLATING OVER THE ROOTS FOR PROTECTION OR THE PROPER PRUNING AND CARE OF ROOTS WHERE ENCOUNTERED.

THE CITY'S TREE PROTECTION BY-LAW, 2030-340 PROTECTS BOTH CITY-OWNED TREES, CITY-WIDE, AND PRIVATELY-OWNED TREES WITHIN THE URBAN AREA. PLEASE REFER TO WWW.OTTAWA.CA/TREELAW FOR MORE INFORMATION ON HOW THE TREE BY-LAW APPLIES.

TREE PROTECTION SPECIFICATION

TO BE IMPLEMENTED FOR RETAINED TREES, BOTH ON SITE AND ON ADJACENT SITES, PRIOR TO ANY TREE REMOVAL OR SITE WORKS AND MAINTAINED FOR THE DURATION OF WORK ACTIVITIES ON SITE.

SCALE: NTS
 DATE: MARCH 2021
 DRAWING NO.: 1 of 1

2 TREE PROTECTION FENCING
TCP NTS

NOTE: SHOULD ROOTS BE ENCOUNTERED OUTSIDE OF THE CRZ DURING EXCAVATION, THE FOLLOWING DETAIL SHALL APPLY

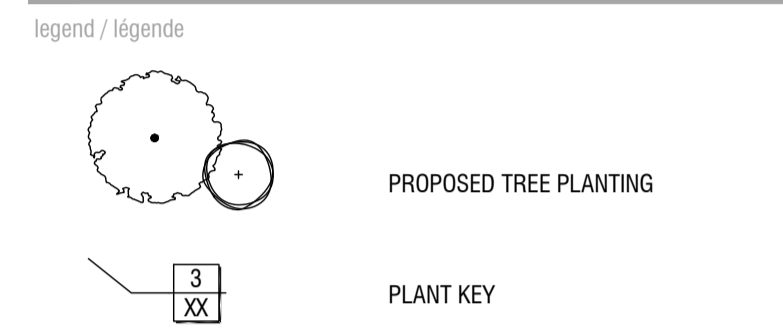
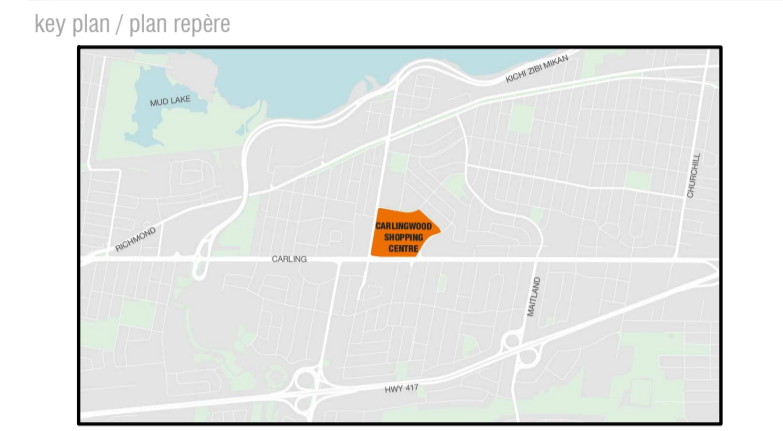
NOTES:

- PROPER ROOT PRUNING TECHNIQUE REQUIRED WHEN TREE ROOTS ENCOUNTERED DURING EXCAVATION.
- EXCAVATIONS WITHIN DRIPLINE SHOULD BE BY DIRECTIONAL MICRO-TUNNELLING AND BORING, OUTSIDE THE DRIPLINE, ROOTS SHOULD BE CUT CLEANLY (AS PER ABOVE DRAWING) WITH PRUNING SHEARS OR A SAW WIPED WITH ALCOHOL BEFORE EACH CUT.
- AFTER ROOTS ARE CLEANLY CUT, THE AREA SHOULD BE BACKFILLED WITH SUITABLE MATERIAL (TO BE APPROVED BY LANDSCAPE ARCHITECT) TO PREVENT DESICCATION;
- WHERE APPROPRIATE, THE TREES SHALL UNDERGO AN OVERALL PRUNING TO RESTORE TREE APPEARANCE AND / OR RESTORE THE BALANCE BETWEEN TOP GROWTH AND ROOTS. DO NOT PRUNE LEADERS.

3 ROOT PRUNING DETAIL
TCP NTS

NO.	Common Name	Scientific Name	DBH (cm) (approx)	CRZ (m)	Condition	No. Stems	Comments	Impact / Recommendation
1	Siberian Elm	Ulmus pumila	15	1.5	Good	1	40cm away from manhole	Retain
2	Little-leaf Linden	Tilia cordata	32	3.2	Fair	1		To be Removed
3	Honey-locust	Gleditsia triacanthos	13	1.3	Good	1		To be Removed
320F1	Unknown	Unknown	0	0.0	Dead	1	Tree cut down	
320F8	Norway Maple	Acer platanoides	30	3.0	Very Good	1		Retain
320F8	Norway Maple	Acer platanoides	30	3.0	Very Good	1		Retain
32106	Norway Spruce	Picea abies	19	1.9	Excellent	1		Retain
32100	Norway Spruce	Picea abies	18	1.8	Very Good	1		Retain
32114	Norway Spruce	Picea abies	10	1.0	Very Good	1		Retain
*3211B	Norway Maple	Acer platanoides	41	4.1	Good	1		Possible soil to be added in CRZ
32122	Norway Spruce	Picea abies	30	3.0	Good	1		Retain
32129	Norway Spruce	Picea abies	16	1.6	Very Good	1	Leaking sap	Retain
32130	Norway Spruce	Picea abies	20	2.0	Very Good	1		Retain
32137	White Pine	Pinus strobus	25	2.5	Very Good	1		Retain
3213E	Norway Maple	Acer platanoides	12	1.2	Good	1		Retain
32145	Norway Spruce	Acer platanoides	10	1.0	Good	1		Retain
3214C	Norway Maple	Acer platanoides	17	1.7	Fair	1		Retain
32153	Norway Maple	Acer platanoides	12	1.2	Very Good	1		Retain
3215A	Norway Maple	Acer platanoides	10	1.0	Very Good	1		Retain
32161	Norway Maple	Acer platanoides	10	1.0	Very Good	3		Retain
32168	Norway Maple	Acer platanoides	11	1.1	Very Good	1		Retain
3216F	Norway Maple	Acer platanoides	10	1.0	Very Good	1		Retain
32176	Norway Maple	Acer platanoides	16	1.6	Good	1	Liab shrub at base	Retain
3217D	Norway Maple	Acer platanoides	11	1.1	Very Good	1		Retain
32184	Eastern White Pine	Pinus strobus	36	3.6	Good	1		Retain
3218B	Eastern White Cedar	Thuja occidentalis	42	4.2	Good	4		Retain
32192	Norway Spruce	Acer platanoides	20	2.0	Very Good	1		Retain
321A7	Eastern White Pine	Pinus strobus	40	4.0	Very Good	1		Retain
321AE	Norway Spruce	Picea abies	14	1.4	Very Good	1		Retain
321B5	Norway Spruce	Picea abies	21	2.1	Very Good	1		Retain
321D2	Norway Spruce	Acer platanoides	30	3.0	Very Good	1		To be Removed
321D9	American Basswood	Tilia americana	29	2.9	Very Good	2		To be Removed
321E0	Norway Spruce	Acer platanoides	14	1.4	Good	1		To be Removed
321E1	Norway Spruce	Acer platanoides	29	2.9	Very Good	1		Retain
3232B	Northern Red Oak	Quercus rubra	39	3.9	Very Good	1		Retain
32332	Norway Spruce	Acer platanoides	28	2.8	Fair	1		Retain
32339	Common Buckthorn	Rhamnus cathartica	10	1.0	Very Good	4		Retain
32340	Norway Spruce	Picea abies	25	2.5	Very Good	1		Retain
32350	Norway Spruce	Picea abies	16	1.6	Good	1		Retain
3235D	Norway Spruce	Picea abies	15	1.5	Fair	1		Retain
32373	Apple Spp.	Malus spp.	21	2.1	Good	1		Retain
3237A	Apple Spp.	Malus spp.	11	1.1	Fair	1		Retain
3237A	Norway Spruce	Picea abies	23	2.3	Good	1		Retain
3239F	Apple Spp.	Malus spp.	20	2.0	Fair	2		Retain
323A0	Norway Spruce	Acer platanoides	31	3.1	Very Good	1		Retain
323A0	Norway Spruce	Picea abies	19	1.9	Very Good	1		Retain
323B4	Norway Spruce	Picea abies	19	1.9	Good	1		Retain
32443	Apple Spp.	Malus spp.	26	2.6	Good	1		Retain
3244A	Apple Spp.	Malus spp.	22	2.2	Good	2		Retain
32483	Apple Spp.	Malus spp.	21	2.1	Very Good	2		Retain
32496	Apple Spp.	Malus spp.	19	1.9	Fair	2		Retain
32496	Apple Spp.	Malus spp.	19	1.9	Very Good	3		Retain
324B3	Apple Spp.	Malus spp.	15	1.5	Good	1		Retain
324C4	Siberian Elm	Ulmus pumila	50	5.0	Very Good	1		Retain
324D4	Siberian Elm	Ulmus pumila	48	4.8	Very Good	1		Retain
324E4	Red Spruce	Picea rubens	38	3.8	Very Good	1		Retain
324F8	Red Pine	Pinus resinosa	23	2.3	Very Good	1		Retain
32502	Red Pine	Pinus resinosa	30	3.0	Very Good	1		Retain
32513	Apple Spp.	Malus spp.	15	1.5	Good	3		Retain
3251A	Apple Spp.	Malus spp.	15	1.5	Poor	3		Retain
32521	Red Pine	Pinus resinosa	27	2.7	Very Good	1		Retain
32532	Red Pine	Pinus resinosa	27	2.7	Good	1		Retain
32562	Siberian Elm	Ulmus pumila	49	4.9	Very Good	1		Retain
32569	Apple Spp.	Malus spp.	14	1.4	Good	1		Retain
32569	Apple Spp.	Malus spp.	11	1.1	Good	1		Retain
3257C	Siberian Elm	Ulmus pumila	52	5.2	Fair	1		Retain
325DA	Apple Spp.	Malus spp.	21	2.1	Very Good	2		Retain
326D4	Siberian Elm	Ulmus pumila	59	5.9	Very Good	1		Retain
326D6	Norway Spruce	Picea abies	33	3.3	Good	1		Retain
326E2	White Spruce	Picea glauca	22	2.2	Excellent	1		Retain
326E9	Apple Spp.	Malus spp.	18	1.8	Very Good	1		Retain
326F5	American Basswood	Tilia americana	10	1.0	Excellent	1		Retain

32710	White Spruce	Picea glauca	24	2.4	Very Good	1		Retain
32717	White Spruce	Picea glauca	8	0.8	Very Good	1		Retain
3271E	Norway Spruce	Picea abies	14	1.4	Good	1		Retain
32725	Siberian Elm	Ulmus pumila	57	5.7	Good	1		Retain
3272C	Apple Spp.	Malus spp.	16	1.6	Fair	3		Retain
32730	Apple Spp.	Malus spp.	14	1.4	Fair	2		Retain
32744	Siberian Elm	Ulmus pumila	64	6.4	Fair	1		Retain
32748	White Spruce	Picea glauca	15	1.5	Very Good	1		Retain
32807	Siberian Elm	Ulmus pumila	26	2.6	Good	1		Retain
3280E	Siberian Elm	Ulmus pumila	29	2.9	Very Good	1		Retain
3280C5	Siberian Elm	Ulmus pumila	45	4.5	Excellent	1		Retain
328D3	Siberian Elm	Ulmus pumila	26	2.6	Fair	1		Retain
328DA	Eastern White Cedar	Thuja occidentalis	27	2.7	Good	3		Retain
329F0	Little-leaf Linden	Tilia cordata	37	3.7	Very Good	1		Retain
32A5C	Red Pine	Pinus resinosa	24	2.4	Very Good	1		Retain
32A53	Red Pine	Pinus resinosa	27	2.7	Good	1		Retain
34684	Honey-locust	Gleditsia triacanthos	25	2.5	Excellent	2		To be Removed
3469B	Honey-locust	Gleditsia triacanthos	32	3.2	Excellent	1		To be Removed
346A2	Honey-locust	Gleditsia triacanthos	30	3.0	Excellent	1		To be Removed
347A9	Little-leaf Linden	Tilia cordata	22	2.2	Very Good	1		Retain
34C0D	Red Pine	Pinus resinosa	32	3.2	Very Good	1		Retain
34A32	Siberian Elm	Ulmus pumila	28	2.8	Fair	4		Retain
34C68	Honey-locust	Gleditsia triacanthos	37	3.7	Excellent	1		Retain
34C94	Honey-locust	Gleditsia triacanthos	21	2.1	Very Good	1		Retain
34CA4	Honey-locust	Gleditsia triacanthos	30	3.0	Very Good	1		Retain
34CD6	Red Pine	Pinus resinosa	22	2.2	Good	1		Retain
34CDD	Siberian Elm	Ulmus pumila	70	7.0	Good	1		Retain
34E18	Honey-locust	Gleditsia triacanthos	17	1.7	Good	1		Retain
35206	Honey-locust	Gleditsia triacanthos	30	3.0	Very Good	1		Retain
35374	Red Maple	Acer rubrum	13	1.3	Very Good	1		Retain
3537B	Little-leaf Linden	Tilia cordata	12	1.2	Good	1		Retain
35382	Red Maple	Acer rubrum	14	1.4	Good	1		Retain
35686	Red Pine	Pinus resinosa	27	2.7	Good	1		Retain
35695	Red Pine	Pinus resinosa	19	1.9	Fair	1		Retain
3569C	Red Pine	Pinus resinosa	29	2.9	Good	1		Retain
356A3	Red Pine	Pinus resinosa	25	2.5	Good	1		Retain
356AA	Red Pine	Pinus resinosa	26	2.6	Good	1	Large nest	Retain
356B1	Red Pine	Pinus resinosa	30	3.0	Good	1		Retain
356B8	Red Pine	Pinus resinosa	34	3.4	Good	1		Retain
356F6	Red Pine	Pinus resinosa	23	2.3	Good	1		Retain
356C6	Red Pine	Pinus resinosa	26	2.6	Fair	1		Retain
356C0	Red Pine	Pinus resinosa	21	2.1	Fair	1		Retain
356D4	Red Pine	Pinus resinosa	19	1.9	Fair	1		Retain
356D6	Red Pine	Pinus resinosa	26	2.6	Fair	1		Retain
356E2	Red Pine	Pinus resinosa	29	2.9	Good	1		Retain
35C50	Honey-locust	Gleditsia triacanthos	24	2.4	Excellent	1		Retain
35D33	Honey-locust	Gleditsia triacanthos	21	2.1	Good	1		Retain
35E88	Red Pine	Pinus resinosa	55	5.5	Excellent	1		Retain
35EA4	Red Pine	Pinus resinosa	55	5.5	Good	1		Retain
35E4B	Red Pine	Pinus resinosa	55	5.5	Excellent	1		Retain
35E5F	Red Maple	Acer rubrum	29	2.9	Good	1		Retain
35F10	Little-leaf Linden	Tilia cordata	13	1.3	Fair	1	Growing between iron gate	Retain
35F17	Manitoba Maple	Acer negundo	15	1.5	Fair	3		Retain
35F1E	Red Maple	Acer rubrum	21	2.1	Good	1		Retain
35F25	Red Maple	Acer rubrum	35	3.5	Very Good	1		Retain
35F36	Norway Spruce	Picea abies	32	3.2	Excellent	1		Retain
35F30	Norway Spruce	Picea abies	28	2.8	Very Good	1		Retain
35F44	Norway Spruce	Picea abies	22	2.2	Very Good</			

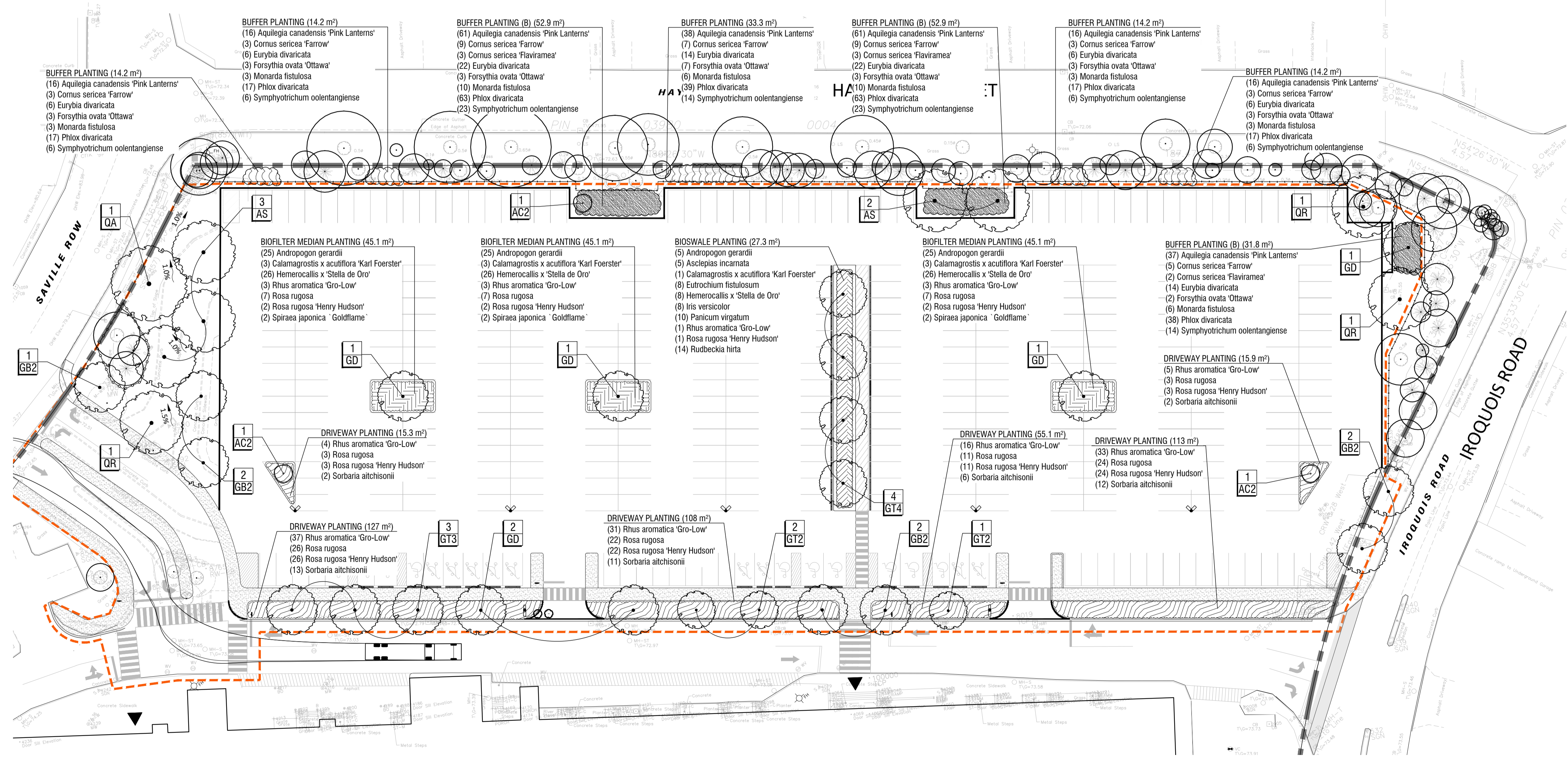


TREE PLANTING SCHEDULE

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE / CONDITION / SPACING	NATIVE
DECIDUOUS TREES					
AS	5	Acer saccharum	Sugar Maple	70mm cal. / W.B.	Native
AC2	3	Amelanchier canadensis	Canadian Serviceberry	50mm cal. / W.B. (single stem, tree form)	Native
GB2	7	Ginkgo biloba 'Autumn Gold'	Autumn Gold Maidenhair Tree	70mm cal. / W.B.	Non-Native
GT3	3	Gleditsia triacanthos inermis 'Shademaster'	Shademaster Honey Locust	70mm cal. / W.B.	Cultivar
GT2	3	Gleditsia triacanthos inermis 'Sunburst'	Sunburst Honey Locust	60mm cal. / W.B.	Cultivar
GT4	4	Gleditsia triacanthos inermis 'Suncoke'	Sunburst Honey Locust	60mm cal. / W.B.	Cultivar
GD	6	Gymnocladus dioica 'Espresso'	Kentucky Coffeetree 'Espresso'	60mm cal. / W.B.	Native
QA	1	Quercus alba	White Oak	70mm cal. / W.B.	Native
QR	3	Quercus rubra	Northern Red Oak	60mm cal. / W.B.	Native

PERENNIAL PLANTING SCHEDULE

BIOFILTER MEDIAN PLANTING 135.3 m ²					
Andropogon gerardii / Big Bluestem	75	#1 Pot / 75cm sp.			
Calamagrostis x acutiflora 'Karl Foerster' / Karl Foerster Feather Reed Grass	9	#1 Pot / 60cm sp.			
Hemerocallis x 'Stella de Oro' / Stella de Oro Daylily	78	#1 Pot / 60cm sp.			
Rhus aromatica 'Gro-Low' / Gro-Low Fragrant Sumac	9	#1 Pot / Refer to plan for spacing			
Rosa rugosa / Rugosa Rose	21	#2 Pot / 90cm sp.			
Rosa rugosa 'Henry Hudson' / Henry Hudson Rose	6	#3 Pot / 100cm sp.			
Spiraea japonica 'Goldflame' / Goldflame Japanese Spirea	6	#2 Pot / 100cm sp.			
BIOSWALE PLANTING 94 m ²					
Andropogon gerardii / Big Bluestem	17	#1 Pot / 75cm sp.			
Asclepias incarnata / Swamp Milkweed	17	#1 Pot / 75cm sp.			
Calamagrostis x acutiflora 'Karl Foerster' / Karl Foerster Feather Reed Grass	4	#1 Pot / 60cm sp.			
Eutrochium fistulosum / Hollow Joe Pye Weed	27	#1 Pot / 60cm sp.			
Hemerocallis x 'Stella de Oro' / Stella de Oro Daylily	27	#1 Pot / 60cm sp.			
Iris versicolor / Blue Flag	27	#1 Pot / 60cm sp.			
Panicum virgatum / Switch Grass	34	#1 Pot / 75cm sp.			
Rhus aromatica 'Gro-Low' / Gro-Low Fragrant Sumac	3	#1 Pot / Refer to plan for spacing			
Rosa rugosa 'Henry Hudson' / Henry Hudson Rose	5	#3 Pot / 100cm sp.			
Rudbeckia hirta / Black-eyed Susan	48	#1 Pot / 45cm sp.			
DRIVEWAY PLANTING 434.3 m ²					
Rhus aromatica 'Gro-Low' / Gro-Low Fragrant Sumac	126	#1 Pot / Refer to plan for spacing			
Rosa rugosa / Rugosa Rose	89	#2 Pot / 90cm sp.			
Rosa rugosa 'Henry Hudson' / Henry Hudson Rose	89	#3 Pot / 100cm sp.			
Sorbaria atchisonii / False Spiraea	46	#2 Pot / 100cm sp.			
BUFFER PLANTING 90.1 m ²					
Aquilegia canadensis 'Pink Lanterns' / Pink Lanterns Eastern Columbine	102	#1 Pot / 30cm cp.			
Cornus sericea 'Farrow' / Arctic Fire® Red Twig Dogwood	19	#3 Pot / 125cm sp.			
Eurybia divaricata / White Wood Aster	38	#1 Pot / 50cm sp.			
Forsythia ovata 'Ottawa' / Early Forsythia	19	#3 Pot / 100cm sp.			
Monarda fistulosa / Bergamot	18	#1 Pot / 75cm sp.			
Phlox divaricata / Woodland Phlox	107	#1 Pot / 30cm cp.			
Symphytichum oolentangiense / Sky Blue Aster	38	#1 Pot / 50cm sp.			
BUFFER PLANTING (B) 137.6 m ²					
Aquilegia canadensis 'Pink Lanterns' / Pink Lanterns Eastern Columbine	159	#1 Pot / 30cm cp.			
Cornus sericea 'Farrow' / Arctic Fire® Red Twig Dogwood	23	#3 Pot / 125cm sp.			
Cornus sericea 'Flaviramea' / Yellow Twig Dogwood	8	#3 Pot / 200cm sp.			
Eurybia divaricata / White Wood Aster	58	#1 Pot / 50cm sp.			
Forsythia ovata 'Ottawa' / Early Forsythia	8	#3 Pot / 100cm sp.			
Monarda fistulosa / Bergamot	26	#1 Pot / 75cm sp.			
Phlox divaricata / Woodland Phlox	164	#1 Pot / 30cm cp.			
Symphytichum oolentangiense / Sky Blue Aster	60	#1 Pot / 50cm sp.			



DO NOT SCALE DRAWINGS

rev'n	description / la description	yyyy/mm/dd
06	re-issue for site plan application	2026/06/22
05	re-issue for site plan application	2026/06/04
04	issue for tender	2026/05/08
03	re-issue for site plan application	2026/05/06
02	re-issue for site plan application	2026/04/27
01	re-issue for site plan application	2026/04/17
00	issue for site plan application	2026/03/09

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project / projet
2085 CARLING AVENUE
CARLINGWOOD MALL NORTH PARKING
STRUCTURE DEMOLITION & REDESIGN

drawing / dessin

PLANTING PLAN

designed / conçu ST / DF	drawn / dessiné ST	reviewed / examiné DF
date SEPT 2025		
drawing number / No. du dessin		

L2

1
L2
PLANTING PLAN
1:400



key plan / plan repère



legend / légende

- LIMIT OF WORK
- EXISTING TREES AND HEDGEROW CANOPY (REFER TO NOTES)
- CRITICAL ROOTING ZONE (CRZ)
- APPROXIMATE CANOPY AT 40 YEARS
- PROPOSED TREE
- EXTENT OF GROWING MEDIUM



SCALE 1:400

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06	re-issue for site plan application	2026/06/22
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drawing / dessin
TREE 40YR PROJECTED
CANOPY COVER AND SOIL
VOLUME PLAN

designed / conçu
ST / DF

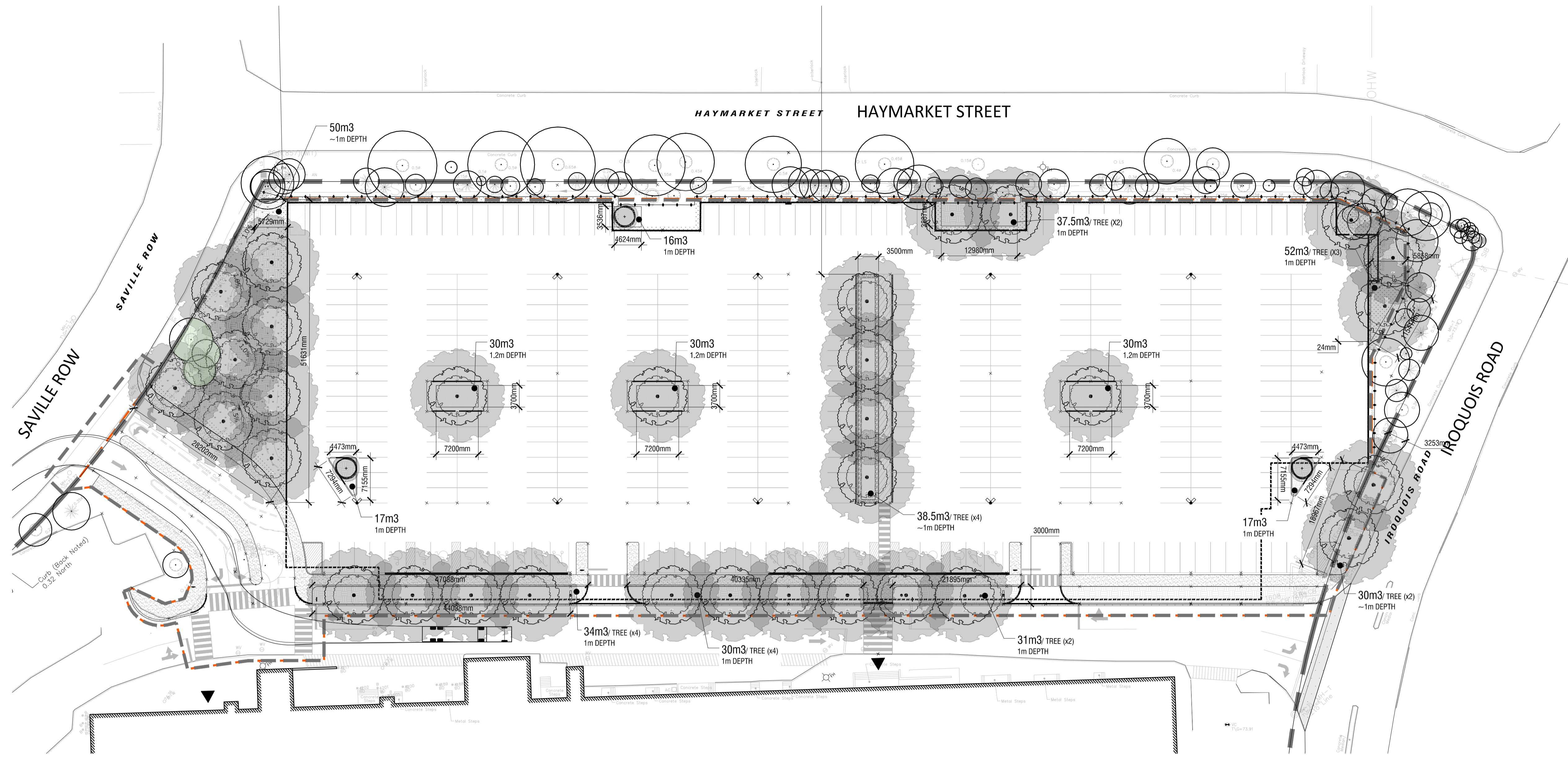
drawn / dessiné
ST

reviewed / examiné
DF

date
SEPT 2025

project number / No. du projet

drawing number / No. du dessin
L3



1 TREE 40YR PROJECTED CANOPY COVER AND SOIL VOLUME PLAN
L3 1:400

PROPOSED TREE CANOPY PROJECTIONS (40 DEEP) & SOIL VOLUME REQUIREMENTS

CANOPY PROJECTIONS (NTS)	AVERAGE CROWN AREA PER TREE (m²)	QTY OF TREES	TOTAL TREE CANOPY COVERAGES	PROPOSED CANOPY COVERAGE	SOIL VOLUME REQUIREMENT*	CONTINUOUS SPACE SOIL VOLUME (i.e. 2 TREES/1 GREENSPACE)
SMALL DECIDUOUS TREE (AVG. CANOPY DIAMETER = 4.5m)	16m²	3	48m²	6480m²	25m³ 4100mm	2500mm 30m³ 8000mm
MEDIUM DECIDUOUS TREE (AVG. CANOPY DIAMETER = 8.5m)	57m²	0	0m²	64m²	30m³ 4000mm	2400mm 36m³ 10000mm
LARGE DECIDUOUS TREE (AVG. CANOPY DIAMETER = 16m)	201m²	32	6,432m²	14,921m²	6300mm 30m³ 3160mm	2400mm 38m³ 10000mm
				TOTAL COVERAGE		
				6,544m²		
				44%		

- NOTES:**
- CALCULATIONS HAVE BEEN MADE TO PROJECT A 40 YEAR HORIZON AND TYPICAL GROWTH RATES FOR ALL TREES
 - PROJECTED CANOPY DIAMETERS AND AREAS ARE BASED ON AN AVERAGE OF THE TREES PROPOSED FOR THE SITE
 - PROJECTED CANOPY AREAS FOR EXISTING TREES ARE BASED ON AVERAGE OF THE TREES PLANTED AS PART OF PREVIOUS PHASES
 - OVERLAPPING CANOPIES AREAS FOR EXISTING TREES ARE ONLY COUNTED ONCE WHERE APPLICABLE
 - CANOPY CALCULATION DOES NOT ACCOUNT FOR EXISTING TREE CANOPY ON ADJACENT SITES IN ROW OVERLAPPING SITE
 - CANOPY CALCULATIONS INCLUDE OVERLAPPING OF ADJACENT TREE CANOPIES WHERE APPLICABLE
 - *SOIL VOLUME REQUIREMENT IS BASED ON THE CITY OF OTTAWA'S 'Tree Planting in Sensitive Marine Clay Soils - 2017 Guidelines' DRAFT Version 2.0 DATED JANUARY 11, 2019

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