

Memorandum

Date: May 17, 2024

Project #: 2100803

To: Tony Vella, Argo Sherwood Forrest Limited
From: Carly Houghton and Austin Adams (Palmer)
cc: Dirk Janas (Palmer)
Re: **Sherwood Forrest Circle Arborist Tree Preservation and Protection Report**
1720 Sherwood Forrest Circle, City of Mississauga – Updated May 2024

1. Introduction and Background

This document represents the Arborist Report and Tree Preservation Plan prepared by Palmer for the proposed redevelopment at 1720 Sherwood Forrest Circle, City of Mississauga, Region of Peel (**Figure 1**). The Subject Property is approximately 11 acres (4.5 ha) and currently supports a building complex, maintained lawn with planted trees, and a forested valley slope.

This report has been developed to satisfy the City of Mississauga's *Private Tree Protection By-law 0021-2022* (City of Mississauga, 2022). The tree preservation and protection plan is intended to identify trees that can be retained, trees that may require pruning to prevent injury, and trees that require removal. Tree protection measures for trees to be retained are provided as well as tree replacement requirements.

2. Guidance Documents

City of Mississauga's Private Tree Protection By-law (0021-2022)

The removal of trees of private property must comply with the City's Private Tree Protection By-law (City of Mississauga, 2022). A permit is needed to injure, destroy or remove any individual tree greater than 15 cm in diameter at breast height (DBH). However, this Arborist Report has been prepared in support of a Development Application and Site Plan process. Tree removal as part of an approved Development Plan is an exempt activity under Part 7, Section 17(9) of the By-law.

As the proposed development requires an approval under the *Planning Act*, this Arborist Report provides the information and mitigation recommendations necessary to provide an exemption under Part 7 of the By-law. Regardless, replacement recommendations within this report are in keeping with the criteria of By-law 0021-2022.

City of Mississauga Official Plan

The City of Mississauga's Official Plan (Chapter 19, Section 19.4, sub-section 19.4.5) states that an Arborist Report including Tree Survey/Tree Preservation Plan may be required as part of a complete application submission for an official plan amendment, rezoning, draft plan of subdivision, condominium, consent application or site plan application to supplement the development proposal (City of Mississauga, 2019).

Terms of Reference – Arborist Reports, Tree Inventory/Survey and Tree Preservation Plans

The City of Mississauga created a Terms of Reference for Arborist Reports to ensure "*that the potential effects of proposed development on existing trees and vegetation and to ensure the proposal conforms to the relevant Official Plan policies, Urban Design Guidelines, standards and details of the City of Mississauga*" (City of Mississauga, 2019). This document details the trees that should be inventoried for a report and the data to be collected, the content and format for an Arborist Report (including compensation ratios), and the content and format for the companion Tree Preservation Plan.

Migratory Birds Convention Act



The *Migratory Birds Convention Act (MBCA)*, 1994 and Migratory Birds Regulations (MBR), 2014 protect most species of migratory birds and their nests and eggs anywhere they are found in Canada (Government of Canada, 1994). General prohibitions under the *MBCA* and MBR protect migratory birds, their nests and eggs and prohibit the deposition of harmful substances in waters / areas frequented by them. The MBR includes an additional prohibition against incidental take, which is the inadvertent harming or destruction of birds, nests or eggs.



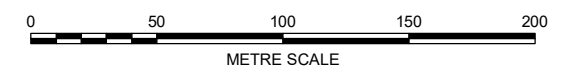
KEY MAP



LEGEND

-  Watercourse ¹
-  Study Area

1 - Land Information Ontario (LIO)



North American Datum 1983
Universal Transverse Mercator Projection Zone 17

Scale: 1:3,000
Page Size: Tabloid (11 x 17 inches)

Drawn: SM
Checked: CH
Date: May 17, 2024

Source Notes:
Base imagery (2020) provided by Peell region open GIS services. Contains information licensed under the Open Government Licence - Ontario.



CLIENT
Argo Sherwood Forrest Limited

PROJECT
Sherwood Forrest Circle

TITLE
Site Location

Palmer PART OF **SLR**

REF. NO. 2100803-1-1

Figure 1

3. Methods

A tree inventory was completed for all trees ≥10 cm DBH within and adjacent to the Subject Property, in accordance with the City of Mississauga *Terms of Reference* (City of Mississauga, 2019). All trees on Subject Property and within 6 metres (m) to the proposed work areas were inventoried to establish Tree Protection Zones (TPZ). Information collected during the inventory includes species scientific and common names, tree tag number, DBH, location, crown spread, a general health assessment (structure, vigour and overall), and notes on tree trunk and canopy conditions. Where adjacent property access was not obtained, visual estimates were made. Notes on ownership and proposed actions including preservation techniques were made.

Trees located on the Subject Property were inventoried by an International Society of Arboriculture (ISA) certified arborist on August 22, 2017 and trees directly adjacent to the Subject Property were inventoried from the Subject Property on January 19, 2021. Trees adjacent to the Subject Property were assigned identification letters (i.e., AA – AZ and BA – BL) and we’re not physically tagged due to access limitation. On June 16, 2023 the general location and condition of the trees were verified to be similar to the 2017 inventory. Tree growth is variable between species; however, existing data was used as the new development plan generally provides for a discrete division between trees to retain versus requiring removal, regardless of size.

The TPZ for each tree was calculated using the City of Mississauga’s *Tree Preservation and Protection Standards* (City of Mississauga, 2017) where the measured DBH of each tree corresponds to a predetermined minimum TPZ distance from the trunk of each tree (**Table 1**).

Table 1. City of Mississauga’s Tree Protection Zone

Trunk Diameter (cm)	Minimum Tree Protection Zone (TPZ) Distance from Trunk (m)	Minimum Tree Protection Zone (TPZ) Distance from Trunk (m) for trees in Open Spaces and Woodlands
<10 cm	1.2	2.4
10-20	1.5	2.4
21-30	1.8	3.6
31-40	2.4	4.8
41-50	3.0	6.0
51-60	3.6	7.2
61-70	4.2	8.4
71-80	4.8	9.6
81-90	5.4	10.8
91-100	6.0	12.0
>100	6 cm per 1 cm DBH	12 cm per 1 cm DBH

TREE PRESERVATION SPECIFICATIONS

TREE PROTECTION AND FENCING

- ALL EXISTING TREES, THAT ARE DESIGNATED TO REMAIN, MUST BE FULLY PROTECTED WITH TREE PROTECTION FENCING IN ACCORDANCE WITH CITY OF MISSISSAUGA DETAIL 02830-6, WHICH IS TO BE ERECTED BEYOND THE TREE PROTECTION ZONE.
- TREE PROTECTION ZONES ARE TO INCLUDE SIGNAGE (AS PER BELOW) AT REGULAR INTERVALS ON THE FENCING. THE SIGNS ARE TO BE 40.64 CM X 60.96 CM AND ON A WATERPROOF MATERIAL.

MISSISSAUGA

Tree Protection Zone (TPZ)

BY-LAW #

No construction activities, including grade changes, storage of materials or equipment, dumping, excavation is permitted within this TPZ

This tree protection barrier must remain in good condition and must not be removed or altered without the authorization of City of Mississauga, Urban Forestry.

Concerns or inquiries regarding this TPZ can be directed to:

(3-1-1) Dial 3-1-1 905-615-4311 outside city limits

- NO CONSTRUCTION EQUIPMENT OR MOTORIZED VEHICLES ARE PERMITTED WITHIN THE TREE PROTECTION ZONE AND ALL TREE PROTECTION ZONES MUST REMAIN UNDISTURBED AT ALL TIMES. THE FOLLOWING ACTIVITIES ARE ALSO PROHIBITED WITHIN THE TREE PROTECTION ZONES:
 - CONSTRUCTION ACTIVITIES;
 - STORAGE OF MATERIALS
 - STORAGE OF EQUIPMENT
 - EXCAVATION (UNLESS APPROVED FOR ROOT PRUNING)
 - GRADE CHANGES
 - CUTTING, TEARING, BREAKING TREE'S ROOTS, BRANCHES AN TRUNK
 - DUMPING
 - PARKING
 - STRINGING CABLES/WIRES

- TREE PROTECTION FENCING IS TO BE INSPECTED REGULARLY TO ENSURE IT IS PERFORMING ITS INTENDED FUNCTION. IF ANY SECTION IS FOUND TO BE DAMAGED OR NON-FUNCTIONAL, IT SHOULD BE REPLACED IMMEDIATELY.
- TREE PROTECTION FENCING MUST REMAIN IN EFFECTIVE CONDITION UNTIL ALL SITE ACTIVITIES INCLUDING LANDSCAPING ARE COMPLETE. IT MUST NOT BE REMOVED WITHOUT THE WRITTEN AUTHORIZATION OF THE CONSULTING LANDSCAPE ARCHITECT OR ARBORIST.

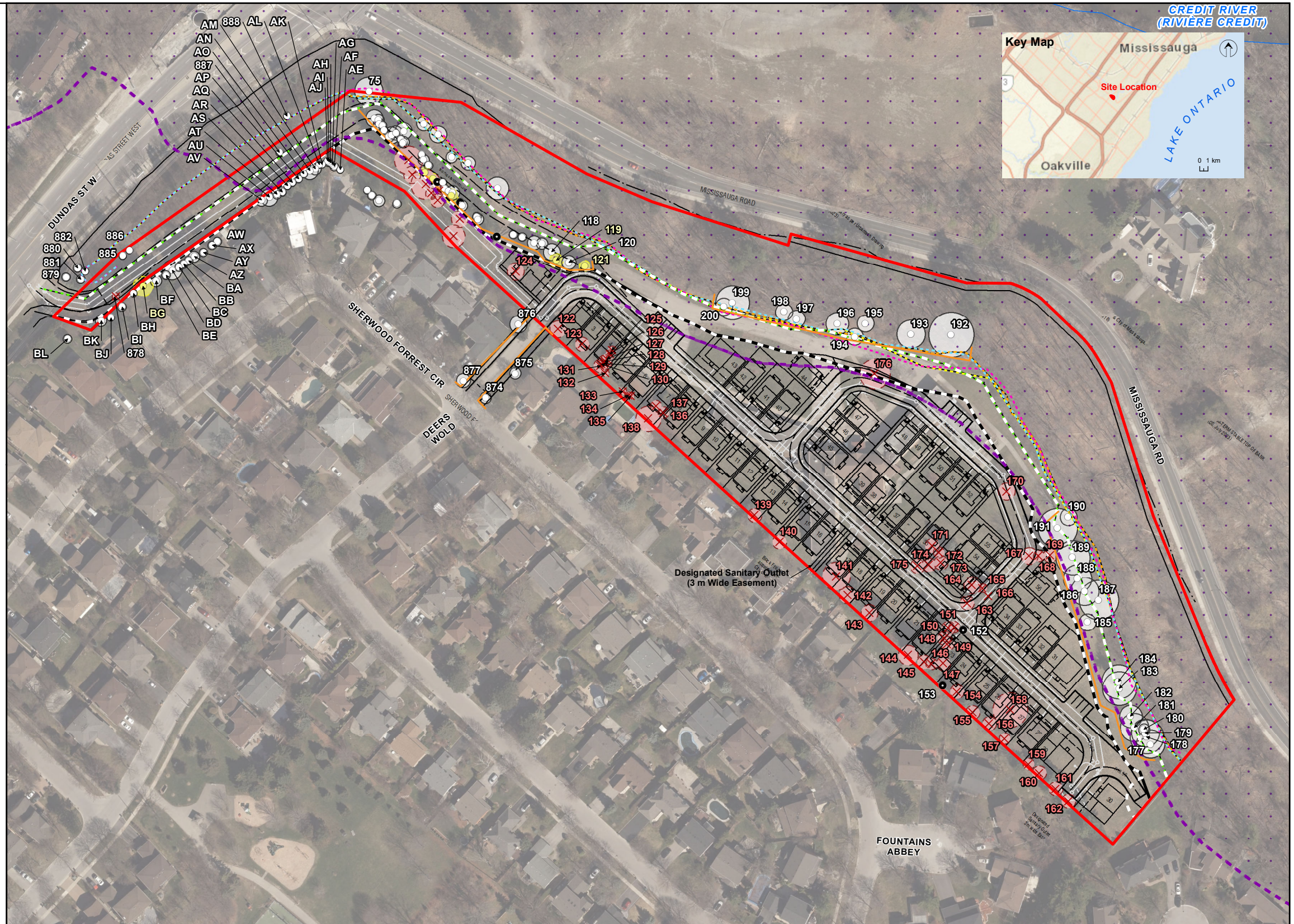
TREE AND ROOT PRUNING

- PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, PRUNE LIMBS THAT MAY BE NEGATIVELY IMPACTED DURING CONSTRUCTION UTILIZING PRUNING SHEARS, PRUNING SAW, OR CHAIN SAW. PRUNE CLEANLY THE ROOTS OF EXISTING TREES THAT ARE ANTICIPATED TO BE DISTURBED BY EXCAVATION. PRUNING SHOULD BE CARRIED OUT AS SPECIFIED BY AN ISA CERTIFIED ARBORIST.
- WHERE DIRECTED BY THE CITY'S ARBORIST, THE CONTRACTOR SHALL MAKE ALL DAMAGE CAUSE TO THE AREAS SURROUNDING PLANT MATERIAL, INCLUDING REPLACING DAMAGED OR DESTROYED PLANT MATERIALS, TO THE SATISFACTION OF THE CITY'S ARBORIST.
- DO NOT STOCKPILE MATERIAL WITHIN THE DRIP LINE OF TREES OR SHRUBS TO BE RETAINED.
- DO NOT ALLOW TRAFFIC, VEHICLES OR EQUIPMENT TO COMPACT SOIL WITHIN THE DRIP LINE OF TREES OR SHRUBS TO BE RETAINED.
- AVOID ANY DAMAGE TO OAK TREES BETWEEN APRIL 1 - OCTOBER 31 TO AVOID THE POTENTIAL SPREAD OF OAK WILT, WHICH HAS RECENTLY BEEN DETECTED IN SOUTHERN ONTARIO. THIS TIMING WINDOW IS FROM THE CANADIAN FOOD INSPECTION AGENCY (CFIA). THE HIRED CONTRACTOR PERFORMING THE REMOVALS SHOULD BE FAMILIAR WITH TREE DISEASES, INCLUDING OAK WILT, AND REPORT ANY SUSPICIOUS TREES TO THE CFIA AND COMMUNITY SERVICES/FORESTRY.

TREE REMOVAL:

TO AVOID INTERFERENCE WITH THE EGGS, NESTS OR YOUNG OF BIRDS PROTECTED UNDER THE FEDERAL MIGRATORY BIRDS CONVENTION ACT (GOVERNMENT OF CANADA, 1994), REMOVALS SHOULD NOT OCCUR FROM APRIL 1 TO AUGUST 31 OF ANY GIVEN YEAR. SHOULD REMOVAL BE REQUIRED WITHIN THE APRIL 1 TO AUGUST 31 NESTING PERIOD, A QUALIFIED AVIAN BIOLOGIST SHOULD CONDUCT A THOROUGH SURVEY IMMEDIATELY PRIOR TO THE DESIRED TREE REMOVAL TO CONFIRM PRESENCE OR ABSENCE OF PROTECTED SPECIES. REMOVAL CANNOT OCCUR WITHOUT A PERMIT FROM THE CANADIAN WILDLIFE SERVICE.

TO AVOID POTENTIAL NEGATIVE IMPACTS TO SAR BATS, AVOID TREE REMOVALS BETWEEN APRIL 1 TO SEPTEMBER 30 OF ANY GIVEN YEAR.



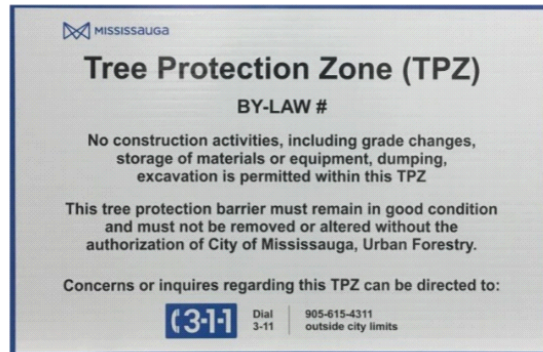
<p>LEGEND</p> <ul style="list-style-type: none"> Inventory Tree with TPZ to Retain Inventory Tree with TPZ at Risk to Potential Injury Inventory Tree with TPZ to Remove Dead Tree Protection Fencing Waterbody ¹ Regulated Area ² Woodland and Slope Setback (10 m) - displayed as white dash Study Area Long Term Stable Top of Bank (Tarasick, Sept 05, 2018) Long Term Stable Top of Bank (Terraprobe, Nov 23, 2017) Top of Bank (Staked by CVC and the city of Mississauga, Aug 3, 2018) Top of Bank (R-PE Surveying, May 18, 2023) Natural Feature (Staked by CVC and City of Mississauga, Aug 3, 2018) New Development Limit (Based on LTSTOS from Tarasick) 	<p>0 10 20 30 40 50</p> <p>METRE SCALE</p> <p>North American Datum 1983 Universal Transverse Mercator Projection Zone 17</p> <p>Scale: 1:1,800 Page Size: Tabloid (11 x 17 inches)</p> <p>Drawn: SM Checked: CH Date: May 17, 2024</p> <p>Source Notes: Base imagery (2020) provided by Peel region open GIS services. Contains information licensed under the Open Government Licence - Ontario.</p>
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	CLIENT Argo Development Group
	PROJECT Sherwood Forrest Circle
	TITLE Tree Preservation Plan
	REF. NO. 2100803-2-8
	Figure 2

TREE PRESERVATION SPECIFICATIONS

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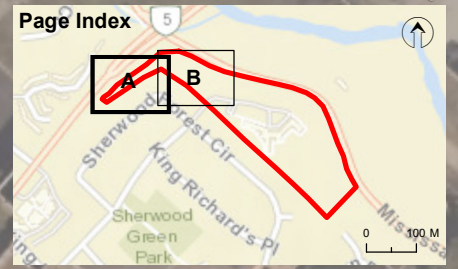
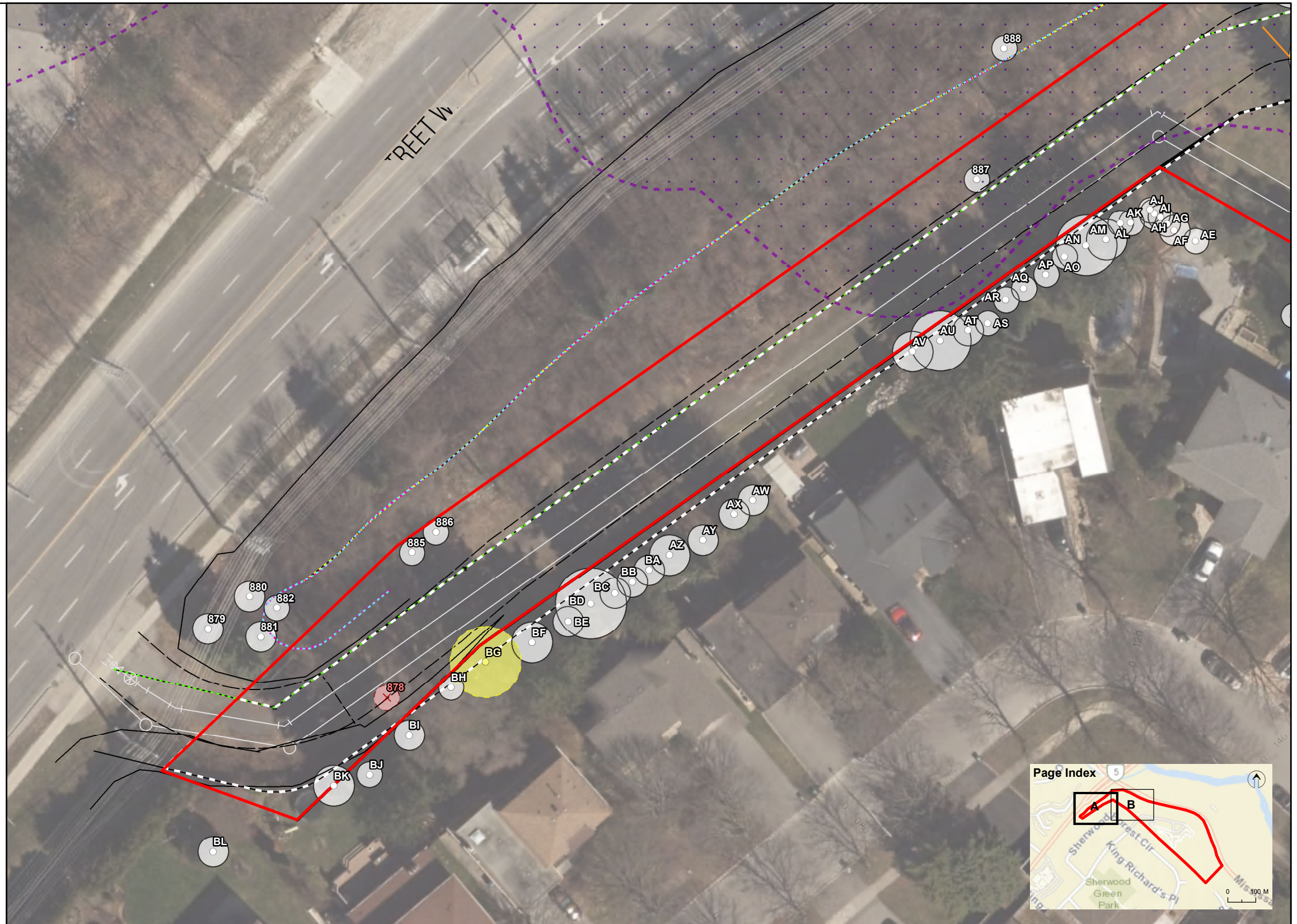
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4. Results

Tree Inventory

A total of 183 tree were inventoried; however, five (5) trees have fallen due to strong winds following completion of the inventory. These trees are #95, 101, 113, 152, and 153, which are now considered deadfall and have been removed from the inventory. Thus, this report includes the findings of 178 trees in total (**Figures 2, 2A, 2B**). This includes 72 (40%) native trees, 103 (58%) non-native trees, and 3 (2%) which were identified to genus only (**Table 2**). A total of 73 inventoried trees are located within Credit Valley Conservation (CVC) regulated area.

Most of the inventoried trees within the Subject Property included non-native Norway Spruce (*Picea abies*) and native Eastern White Cedar (*Thuja occidentalis*). The majority of the inventoried trees located on the property tablelands have been planted and are largely comprised of non-native species. The trees inventoried along the edge of the woodland feature are mostly comprised of naturally occurring native species.

No Species at Risk (SAR) such as Butternut (*Juglans cinerea*) were observed or inventoried on the Subject Property. Two Green Ash (*Fraxinus pennsylvanica*), known to be at high risk of disease or infestation were recorded within the Subject Property. Based on the general health and condition of the trees, 171 (97%) trees are in fair to good health and condition, six (6) of trees are in poor condition, and one tree was dead. A full list of all the inventoried trees is provided in **Appendix A**.

Table 2. Summary of Tree Inventory

Common Name	Scientific Name	Fair to Good Health and Condition	Poor Health and Condition	Total
American Basswood*	<i>Tilia americana</i>	3	0	3
Apple	<i>Malus</i> sp.	1	0	1
Black Cherry*	<i>Prunus serotina</i>	4	0	4
Black Walnut*	<i>Juglans nigra</i>	2	0	2
Bur Oak*	<i>Quercus macrocarpa</i>	1	0	1
Colorado Spruce	<i>Picea pungens</i>	17	1	18
Common Apple	<i>Malus pumila</i>	1	0	1
Eastern White Cedar*	<i>Thuja occidentalis</i>	23	1	24
Eastern White Pine*	<i>Pinus strobus</i>	11	0	11
English Walnut	<i>Juglans regia</i>	1	1	2
Freeman’s Maple*	<i>Acer freemanii</i>	1	0	1
Green Ash*	<i>Fraxinus pennsylvanica</i>	0	1 poor, 1 dead	2
Honey Locust	<i>Gleditsia triacanthos</i>	1	0	1
Northern Catalpa	<i>Catalpa speciosa</i>	1	0	1
Norway Maple	<i>Acer platanoides</i>	8	0	8
Norway Spruce	<i>Picea abies</i>	54	1	55
Pine	<i>Pinus</i> sp.	1	0	1
Red Maple*	<i>Acer rubrum</i>	2	0	2

Common Name	Scientific Name	Fair to Good Health and Condition	Poor Health and Condition	Total
Red Oak*	<i>Quercus rubra</i>	5	0	5
Red Pine*	<i>Pinus resinosa</i>	1	0	1
Scots Pine	<i>Pinus sylvestris</i>	14	1	15
Siberian Elm	<i>Ulmus pumila</i>	1	0	1
Sugar Maple*	<i>Acer saccharum</i>	10	0	10
Weeping Willow	<i>Salix babylonica</i>	1	0	1
White Spruce*	<i>Picea glauca</i>	6	0	6
Willow	<i>Salix sp.</i>	1	0	1
Total		171	7	178

*Native species

Trees to be Retained

An assessment of trees to be retained has been completed based on the proposed grading and development plans. A total of 111 of the inventoried trees are identified to be retained (**Table 3**). This includes 107 trees in fair to good health and condition and four (4) trees in poor health and condition. The majority of trees to be retained (72 trees, 65%) are non-native species, most of which are Norway Spruce. Additionally, CVC planted 179 individual tree saplings and shrubs along the top edge of the FOD5-3 to prevent erosion. These plantings are proposed to be retained or replanted within the 10 m development buffer to the degree feasible.

Table 3. Trees to be Retained

Common Name	Scientific Name	Fair to Good Health and Condition	Poor Health and Condition	Total
American Basswood*	<i>Tilia americana</i>	3	0	3
Apple	<i>Malus sp.</i>	1	0	1
Black Cherry*	<i>Prunus serotina</i>	4	0	4
Black Walnut*	<i>Juglans nigra</i>	1	0	1
Bur Oak*	<i>Quercus macrocarpa</i>	1	0	1
Colorado Spruce	<i>Picea pungens</i>	6	1	7
Eastern White Cedar*	<i>Thuja occidentalis</i>	6	0	6
Eastern White Pine*	<i>Pinus strobus</i>	3	0	3
Green Ash*	<i>Fraxinus pennsylvanica</i>	0	1 poor, 1 dead	2
Northern Catalpa	<i>Catalpa speciosa</i>	1	0	1
Norway Maple	<i>Acer platanoides</i>	5	0	5
Norway Spruce	<i>Picea abies</i>	46	1	47
Pine	<i>Pinus sp.</i>	1	0	1
Red Oak*	<i>Quercus rubra</i>	5	0	5
Red Pine*	<i>Pinus resinosa</i>	1	0	1
Scots Pine	<i>Pinus sylvestris</i>	11	0	11

Sugar Maple*	<i>Acer saccharum</i>	9	0	9
White Spruce*	<i>Picea glauca</i>	2	0	2
Willow	<i>Salix</i> sp.	1	0	1
Total		107	4	111

*Native species

Potential Tree Injury

For trees near construction areas, ‘injury’ is defined as encroachment into the identified TPZ. This arborist report provides recommendations for appropriate treatment of trees that will be retained and protected but may suffer injury due to encroachment into their respective TPZs (**Figure 2**). Tree injury may occur where a TPZ will be reduced and construction activity will impact roots and/or branches. In general, pruning of branches and roots up to 25-30% of a TPZ will result in tree injury, but may be retainable considering tree health and appropriate mitigation treatments.

Given their location, five trees may have damage to the roots or branches through grading, compaction and works of machinery (**Table 4**). With appropriate mitigation measures outlined in **Section 5** including tree protection fencing, these trees are not anticipated to experience significant tree decline, mortality, or loss of rooting stability, and are considered retainable.

Table 4. Trees with Potential for Injury due to TPZ Reduction

Common Name	Scientific Name	Tag Number	Good to Fair Health	Poor Health	Total Count
Eastern White Cedar*	<i>Thuja occidentalis</i>	119, 121	2	0	2
Norway Spruce	<i>Picea abies</i>	92, 100	2	0	2
Siberian Elm	<i>Ulmus pumila</i>	BG	1	0	1
Total Trees with potential injury			5	0	5

*Native species

Trees to be Removed

A total of 62 trees will need to be removed to accommodate the proposed development (**Table 5**). This includes 59 trees in fair to good health and condition and three (3) trees in poor health and condition. All of the trees proposed to be removed are located within the proposed grading area for the development works (**Figure 2**). Additionally, certain trees within the proposed Open Space Land Use/Natural Heritage System (**Figure 2B**) are proposed for removal due to watermain and forcemain servicing route, which will also be used as temporary access during construction, using the existing access at that location. This access route and area will be part of a restoration plan post-construction; see the Environmental Impact Study for the project for further details.

Just over half the trees proposed to be removed are native species (33 trees, 53%), most of which are Eastern White Cedar. Some trees along the southern property boundary may partially be located on an

adjacent private residential property. If any part of the tree trunk is located on more than one lot, written consent of the impacted property will be required.

Table 5. Trees to be Removed

Common Name	Scientific Name	Fair to Good Health and Condition	Poor Health and Condition	Total
Black Walnut*	<i>Juglans nigra</i>	1	0	1
Colorado Spruce	<i>Picea pungens</i>	11	0	11
Common Apple	<i>Malus pumila</i>	1	0	1
Eastern White Cedar*	<i>Thuja occidentalis</i>	15	1	16
Eastern White Pine*	<i>Pinus strobus</i>	8	0	8
English Walnut	<i>Juglans regia</i>	1	1	2
Freeman’s Maple*	<i>Acer freemanii</i>	1	0	1
Honey Locust	<i>Gleditsia triacanthos</i>	1	0	1
Norway Maple	<i>Acer platanoides</i>	3	0	3
Norway Spruce	<i>Picea abies</i>	6	0	6
Red Maple*	<i>Acer rubrum</i>	2	0	2
Scots Pine	<i>Pinus sylvestris</i>	3	1	4
Sugar Maple	<i>Acer saccharum</i>	1	0	1
Weeping Willow	<i>Salix babylonica</i>	1	0	1
White Spruce*	<i>Picea glauca</i>	4	0	4
Total		59	3	62

*Native species

5. Tree Protection Plan

General and tree-specific tree protection measures are outlined below. The specifications for protection of retained trees are detailed on the Tree Protection Plan (**Figure 2**), including the locations of required tree protection fencing. The Tree Protection Plan is intended to act in concert with this Arborist Report; it is expected that the recommendations of both instruments be implemented for the project. Trees proposed to be retained will be primarily protected by tree protection fencing, as per the City’s *Tree Preservation Hoarding Specification (Appendix B)*.

Demolition

It is recommended that any removal of existing asphalt within TPZs (example, Tree #199, 200) are to be hand dug where feasible to minimize impacts to roots. This includes the existing road system on the tablelands and the existing access route from Dundas Street. Additionally, there will be minor fill placement in certain areas of the woodland setback (~0 – 30 cm) to allow for matching of existing to built grades. This fill will be naturalized per the restoration plan outlined in the EIS. This amount of fill is not predicted to create appreciable differences to the health of well-established trees in that area.

Tree Protection Fencing

Certain trees to be retained are located in close proximity to the limits of development or on adjacent private property. The implementation of tree protection measures is recommended to protect tree limbs from mechanical damage and the root systems from compaction during construction activities.

Framed hoarding is to be installed and inspected to the satisfaction of the Urban Forestry section encompasses the entire dripline area (**Figure 2**). The tree protection fencing should be installed per The City's Detail 02830-6 for plastic snow fence framed hoarding, and signage should be displayed (**Appendix B**). The plastic snow fence framed hoarding is to consist of 1.2 m high plastic orange snow fence secured to steel T-bars with wire ties and 2" x 4" timber rails along the top and bottom.

Signage measuring 40 cm x 60 cm to be mounted to the construction side of each TPZ barrier (**Photo 1**). Signage to indicate that work including grading, construction access and material storage is prohibited within the boundaries of the TPZ. No other signage is permitted to be fixed onto any tree protection hoarding.

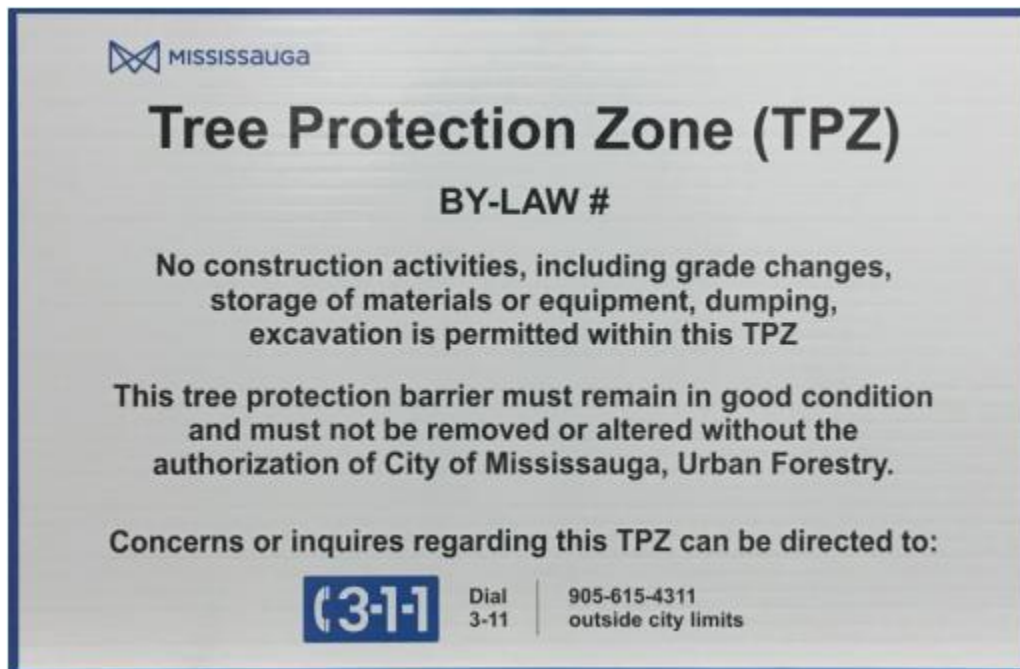


Photo 1: Example of TPZ signage

For a City Tree hoarding inspection, please contact Ryan Cormier at 905-615-3200 x 4580. No construction activity is permitted within the tree preservation zones (TPZ). Should you need to remove or alter the hoarding at any time during construction, please advise City of Mississauga Forestry prior to doing so. All tree protection measures must be implemented and installed prior to the commencement of construction and maintained until all construction related activities are complete.

Felling and Grinding

Trees to be removed will be felled into the Subject Property by a qualified arborist using good arboricultural practices. Tree protection fencing shall be installed for trees to be retained prior to tree removal unless the fencing will directly interfere with undertaking of approved tree removal.

For removals adjacent to trees to be retained, it is recommended that they be stumped and grinded as required rather than root removal (e.g., stump pulling), as root pulling has the potential to adversely affect trees to be retained.

Pruning

Pruning is not anticipated to be required for this project, as removals are to occur on discrete tablelands. However, any roots or limbs of trees to be retained that extend beyond the tree protection fencing may require pruning. Pruning should be carried out as specified by an ISA certified arborist.

Trees can typically withstand up to 30% encroachment into their TPZ. The City of Mississauga prohibits many activities within the TPZ but may approve excavation for root pruning. Any pruning of tree roots and branches of trees necessary to accommodate the fencing or nearby construction work should be completed by a qualified arborist using best arboricultural practices. Various methods are deemed acceptable (i.e., Air Spade) by the City and must be either conducted or supervised by a Certified Arborist.

Prune limbs utilizing pruning shears, pruning saw, or chain saw. Root systems of protected trees that are exposed or damaged by construction work, shall be trimmed neatly by a Qualified Arborist in accordance to good arboricultural practices and the area is to be back filled with appropriate material to maintain moisture/prevent desiccation. Roots should be excavated using a low pressure airspade. Roots should be pruned in a similar fashion as branches, taking care to maintain the integrity of the root bark ridge, where present.

Oak Wilt

Oak wilt is a disease caused by fungus, resulting in tree death within a single season. Red Oaks are particularly susceptible and due to the presence of Bur Oak and Red Oak within the Subject Property, the Canadian Food Inspection Agency recommends avoiding pruning Oak trees between April and November (Government of Canada, 2023).

6. Management and Monitoring Phase

Pre-Construction Phase

To avoid an offence under the *Migratory Bird Convention Act, 1994 (MBCA)* for the destruction of active nests and/or eggs during bird nesting periods, it is recommended that all vegetation (including tree) removal works are conducted between September 1 and March 31 of any given year. Should tree removal during bird nesting season be unavoidable, a qualified biologist should conduct a nesting survey immediately before any vegetation removal is conducted, as defined by the *Act*.

To avoid potential negative impacts to SAR bats, tree removals should occur between April 1 to September 30. Avoid any damage to Oak trees between April 1 - October 31 to avoid the potential spread of Oak Wilt, which has recently been detected in Southern Ontario. This timing window is from the Canadian Food Inspection Agency (CFIA). The hired contractor performing the removals should be familiar with tree diseases, including Oak Wilt, and report any suspicious trees to the CFIA and Community Services/Forestry.

The erection of tree protection fencing (**Figure 2**) as per the Site Plan is to be conducted under the supervision of an ISA Certified Arborist, prior to the commencement of site clearance, demolition, or any other type of construction. Any pruning or trimming of trees to accommodate the fencing will be completed by a Certified Arborist using best industry practices. All trees to be removed will be felled into the proposed development area as to avoid damage to the adjacent trees. Fencing must remain intact through the completion of construction.

Construction Phase

Tree protection fencing will be regularly inspected for damage and proper function by construction personnel. Any damage will be reported to the construction supervisor and repaired immediately. Protective fencing shall remain in place throughout the duration of construction and shall not allow traffic, vehicles, foot traffic or equipment to compact soil within the TPZ. Any build up of sediments at tree bases will be removed as part of fencing repairs. To avoid sediment build ups, Erosion and Sediment Control (ESC) fencing (Drawing C401, provided separately) should be integrated with the tree protection fencing, and would largely avoid the movement of sediment into the natural heritage system.

Periodic monitoring of the Site during demolition, excavation and construction may be required to ensure tree protection measures are performed or remain in place throughout the duration of the construction. If required, monitoring will be performed by the developer's Consulting Arborist.

Post-Construction Phase

The removal of tree protection barriers will only be initiated once all construction activities have been completed and landscaping has been implemented. The TPZ barriers and any additional tree care measures must remain in place until approval is given by the City of Mississauga.

Planting of trees as per Section 7 will be initiated as part of landscaping and be completed by nursery professionals or a Certified Arborist. Planting will occur solely during the spring or fall planting seasons; being April 15 - July 1, and September 15 – November 15 respectively.

Monitoring of tree establishment should be completed for a minimum of two growing seasons post-planting. Monitoring will be designed to assess the growth and establishment of the planted trees, ensuring that the conditions any nursery guarantees are met.

7. Replacement Trees

The City's by-law states that replacement plantings are required when individual healthy trees (good to fair condition) which are greater than 15 cm DBH, including both native and non-native species. A tree

replacement is required for every 15 cm (6 inches) of diameter of the tree removed (City of Mississauga, 2023).

Of the inventoried trees to be removed, three (3) trees are in poor condition and one (1) tree is below 15 cm DBH and will not require replacement. The trees proposed to be removed range between 15 and 124 cm DBH, thus requiring a wide range of replacement trees (**Table 6**). Three (3) trees are to be removed within Credit Valley Conservation regulated lands (CVC, 2020), which have specific replacement requirements (**Table 7**). A total of 261 trees must be planted in compensation for the removal of the 62 trees on the Subject Property.

Table 6. Tree Replacement Requirement for City of Mississauga

	Trees 15-29 cm DBH (1:1)	Trees 30-44 cm DBH (2:1)	Trees 45-59 cm DBH (3:1)	Trees 60 – 74 cm DBH (4:1)	Trees 75-89 cm DBH (5:1)	Trees 90-104 cm DBH (6:1)	Trees 105-119 cm DBH (7:1)	Trees 120-134 cm DBH (8:1)	Total
Total number of removals	9	20	18	3	2	1	1	1	55
Total number of replacement trees	9	40	54	12	10	6	7	8	146

Table 7. Tree Replacement Requirement for Credit Valley Conservation

	Trees >5 – 10 cm DBH (1:1)	Trees 10.1 – 20 cm DBH (3:1)	Trees 20.1 – 30 cm DBH (10:1)	Trees 30.1 – 40 cm DBH (15:1)	Trees 40.1 – 50 cm DBH (20:1)	Trees 50.1 – 60 cm DBH (30:1)	Trees 60.1 – 70 cm DBH (40:1)	Trees 70.1 + cm DBH (50:1)	Total
Total number of removals	0	0	0	1	0	0	0	2	3
Total number of replacement trees	0	0	0	15	0	0	0	100	115

Compensation trees to replace the ones removed (261 total), their sizes, locations, and quantities are to be reviewed by City of Mississauga Community Services and Forestry. All replacement trees must be native and common to the Credit River Watershed. The replacement trees must be at least 1.8 m tall for a coniferous tree or at least 6 cm in diameter for a deciduous tree in accordance with the City’s By-law (City of Mississauga, 2023).

The Credit Valley Conservation Authority (CVC) has previously completed restoration plantings on the Subject Property. To continue this relationship, Argo Sherwood Forrest Limited proposes to continue to

work with CVC to provide for the appropriate compensation plantings. Once servicing is installed, the replacement plantings are proposed to first target the abandoned lane on the north side of the Subject Property. The species and locations will be determined by a Landscape Architect.

8. Conclusion

In summary, a total of 183 trees were inventoried, although 178 trees are currently present and assessed in this report due to the natural falling of five trees (deadfall). Of these, 72 (40%) are native species, and 103 (57%) are non-native species, and three identified to genus only. It is estimated that 62 trees are proposed to be removed within the redevelopment area, five are proposed to be retained but may be injured and 111 trees are proposed to be retained.

The trees to be retained should be protected by pruning overhanging limbs (where applicable such as tree in close proximity to the construction works), by pruning exposed roots, and installing tree protection fencing around the limit of development and/or beyond the tree protection zone of the tree.

A total of 62 trees are to be replaced with 261 replacement trees. Replacement plantings should solely be comprised of species that are native to the Credit River watershed.

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9. Certification

This memorandum was prepared and reviewed by the undersigned:

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Reviewed By:



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Appendix A

Tree Inventory

Appendix A: Tree Inventory

Tree ID	Common Name	Scientific Name	DBH (cm)	Effective DBH (cm)	Dripline (m)	Condition Rating (Good/Fair/Poor)	TPZ (m)	Retain / Remove
75	Norway Spruce	<i>Picea abies</i>	42	42		F	3	Retain
76	Norway Spruce	<i>Picea abies</i>	51	51		F	3.6	Retain
77	Norway Spruce	<i>Picea abies</i>	34.4	34.4		F	2.4	Retain
78	Norway Spruce	<i>Picea abies</i>	38	38		F	2.4	Retain
79	Norway Spruce	<i>Picea abies</i>	20.8	20.8		F	1.8	Retain
80	Norway Spruce	<i>Picea abies</i>	28	28		F	1.8	Retain
81	Norway Spruce	<i>Picea abies</i>	34.5	34.5		F	2.4	Retain
82	Norway Spruce	<i>Picea abies</i>	38.2	38.2		F	2.4	Retain
83	Norway Spruce	<i>Picea abies</i>	52	52		F	3.6	Retain
84	Norway Spruce	<i>Picea abies</i>	42.5	42.5		F	3	Retain
85	Norway Spruce	<i>Picea abies</i>	23.4	23.4		F	1.8	Retain
86	Norway Spruce	<i>Picea abies</i>	33.6	33.6		F	2.4	Retain
87	Norway Spruce	<i>Picea abies</i>	21	21		F	1.8	Retain
88	Norway Spruce	<i>Picea abies</i>	36.7	36.7		F	2.4	Retain
89	Norway Spruce	<i>Picea abies</i>	18.2	18.2		F	1.5	Retain
90	Norway Spruce	<i>Picea abies</i>	30.4	30.4		F	2.4	Retain
91	Norway Spruce	<i>Picea abies</i>	22.8	22.8		F	1.8	Retain
92	Norway Spruce	<i>Picea abies</i>	14.2, 11.2, 26.5	32		F	2.4	Injure
93	Norway Spruce	<i>Picea abies</i>	30.8	30.8		F	2.4	Retain
94	Norway Spruce	<i>Picea abies</i>	21.5	21.5		F	2.4	Retain
95	Deadfall tree							
96	Norway Spruce	<i>Picea abies</i>	23.4	22		F	1.8	Retain
97	Norway Spruce	<i>Picea abies</i>	16	23.4		F	1.8	Retain
98	Norway Spruce	<i>Picea abies</i>	40.7	16		F	1.5	Retain

Tree ID	Common Name	Scientific Name	DBH (cm)	Effective DBH (cm)	Dripline (m)	Condition Rating (Good/Fair/Poor)	TPZ (m)	Retain / Remove
99	Norway Spruce	<i>Picea abies</i>	22	40.7		F	3	Retain
100	Norway Spruce	<i>Picea abies</i>	40.2	40.2		F	3	Injure
101	Deadfall tree							
102	Norway Spruce	<i>Picea abies</i>	37.9	37.9		F	2.4	Retain
103	Norway Spruce	<i>Picea abies</i>	26.8	26.8		F	1.8	Retain
104	Norway Spruce	<i>Picea abies</i>	37	37		P	2.4	Retain
105	Norway Spruce	<i>Picea abies</i>	51	51		F	3.6	Remove
106	Scots Pine	<i>Pinus sylvestris</i>	49.7	49.7		P	3	Remove
107	Scots Pine	<i>Pinus sylvestris</i>	39	39		F	2.4	Remove
108	Norway Spruce	<i>Picea abies</i>	35.5	35.5		F	2.4	Remove
109	Weeping Willow	<i>Salix babylonica</i>	105	105		F	6.3	Remove
110	English Walnut	<i>Juglans regia</i>	52	52		F	3.6	Remove
111	English Walnut	<i>Juglans regia</i>	92	92		P	6	Remove
112	Sugar Maple	<i>Acer saccharum</i>	36, 35.2, 48.9, 24, 19.6	77		G	4.8	Remove
113	Deadfall tree							
114	Eastern White Cedar	<i>Thuja occidentalis</i>	6.5, 7, 8.5, 10.4, 16, 7, 10, 19.3, 10, 8, 8.3	30		F	1.8	Retain
115	Eastern White Cedar	<i>Thuja occidentalis</i>	16.5, 8.4, 20, 8, 9, 10	30		F	1.8	Retain
116	Eastern White Cedar	<i>Thuja occidentalis</i>	28, 26.6, 16, 7, 8	43		F	3	Retain
117	Eastern White Cedar	<i>Thuja occidentalis</i>	10, 6.5, 13, 16.7, 22, 5, 20.5, 5, 4, 4, 17, 5, 19, 9.4, 4, 3, 7, 7	39		F	2.4	Retain

Tree ID	Common Name	Scientific Name	DBH (cm)	Effective DBH (cm)	Dripline (m)	Condition Rating (Good/Fair/Poor)	TPZ (m)	Retain / Remove
118	Eastern White Cedar	<i>Thuja occidentalis</i>	37, 16, 27, 7, 22, 18.5, 8, 7, 22.6, 9, 15, 12, 22, 5, 5, 5, 5, 5, 7.5, 13, 18	55		G	3.6	Retain
119	Eastern White Cedar	<i>Thuja occidentalis</i>	5, 14.5, 5, 18.6, 22, 18.3, 30, 4, 5, 6, 3, 22.5	48		F	3	Injure
120	Eastern White Cedar	<i>Thuja occidentalis</i>	20, 4, 12, 18, 6, 6, 21, 6, 5.3, 16.6, 14, 3, 3, 5, 6, 17, 22, 16	42		F	3	Retain
121	Eastern White Cedar	<i>Thuja occidentalis</i>	20, 6, 13, 5, 11, 5, 18, 14, 19, 6.5, 19	40		F	2.4	Injure
122	Eastern White Pine	<i>Pinus strobus</i>	51	51		G	3.6	Remove
123	Norway Maple	<i>Acer platanoides</i>	45.4	45.4		G	3	Remove
124	Honey Locust	<i>Gleditsia triacanthos</i>	51	51		F	3.6	Remove
125	Eastern White Cedar	<i>Thuja occidentalis</i>	20.5, 14	25		F	1.8	Remove
126	Eastern White Cedar	<i>Thuja occidentalis</i>	17.5, 9.5, 15, 10	27		G	1.8	Remove
127	Eastern White Cedar	<i>Thuja occidentalis</i>	15.5, 20, 18.5, 7, 15.5	36		G	2.4	Remove
128	Eastern White Cedar	<i>Thuja occidentalis</i>	18, 11, 16, 12, 20	49		G	3	Remove
129	Eastern White Cedar	<i>Thuja occidentalis</i>	15.5	15.5		F	1.5	Remove
130	Eastern White Cedar	<i>Thuja occidentalis</i>	28	28		G	1.8	Remove
131	Eastern White Cedar	<i>Thuja occidentalis</i>	19.5, 35, 16, 18	47		G	3	Remove
132	Eastern White Cedar	<i>Thuja occidentalis</i>	16	16		G	1.5	Remove
133	Eastern White Cedar	<i>Thuja occidentalis</i>	17	17		G	1.5	Remove
134	Eastern White Cedar	<i>Thuja occidentalis</i>	17.5	17.5		G	1.5	Remove
135	Eastern White Cedar	<i>Thuja occidentalis</i>	16	16		G	1.5	Remove
136	Eastern White Cedar	<i>Thuja occidentalis</i>	16, 17, 16.5, 7, 7, 17, 5.8, 12, 5, 6, 16.5	37		F	2.4	Remove

Tree ID	Common Name	Scientific Name	DBH (cm)	Effective DBH (cm)	Dripline (m)	Condition Rating (Good/Fair/Poor)	TPZ (m)	Retain / Remove
137	Eastern White Cedar	<i>Thuja occidentalis</i>	8, 15, 18.5, 10.6, 20, 6, 3, 5, 16, 9.2	34		F	2.4	Remove
138	Red Maple	<i>Acer rubrum</i>	46.5, 32.5, 50, 48	89		F	5.4	Remove
139	Scots Pine	<i>Pinus sylvestris</i>	50	50		F	3	Remove
140	Scots Pine	<i>Pinus sylvestris</i>	43	43		F	3	Remove
141	Norway Spruce	<i>Picea abies</i>	91	91		G	6	Remove
142	Norway Spruce	<i>Picea abies</i>	52	52		G	3.6	Remove
143	Norway Spruce	<i>Picea abies</i>	60	60		G	3.6	Remove
144	Norway Spruce	<i>Picea abies</i>	66.5	66.5		G	4.2	Remove
145	Eastern White Pine	<i>Pinus strobus</i>	40.2	40.2		F	3	Remove
146	Eastern White Pine	<i>Pinus strobus</i>	35	35		G	2.4	Remove
147	Eastern White Pine	<i>Pinus strobus</i>	50	50		G	3	Remove
148	Eastern White Pine	<i>Pinus strobus</i>	42.7	42.7		F	3	Remove
149	Eastern White Pine	<i>Pinus strobus</i>	50	50		G	3	Remove
150	Eastern White Pine	<i>Pinus strobus</i>	40.5	40.5		F	3	Remove
151	Eastern White Pine	<i>Pinus strobus</i>	34	34		F	2.4	Remove
152	Deadfall tree							
153	Deadfall tree							
154	Colorado Spruce	<i>Picea pungens</i>	32.8, 35	48		G	3	Remove
155	White Spruce	<i>Picea glauca</i>	30, 31	43		G	3	Remove
156	Colorado Spruce	<i>Picea pungens</i>	42	42		G	3	Remove
157	Colorado Spruce	<i>Picea pungens</i>	30.3	30.3		G	2.4	Remove
158	Freeman's Maple	<i>Acer freemanii</i>	124	124		F	7.4	Remove
159	Colorado Spruce	<i>Picea pungens</i>	40	40		G	2.4	Remove
160	Colorado Spruce	<i>Picea pungens</i>	50	50		G	3	Remove
161	White Spruce	<i>Picea glauca</i>	40.5	40.5		G	3	Remove
162	Colorado Spruce	<i>Picea pungens</i>	40.1	40.1		G	3	Remove
163	Common Apple	<i>Malus pumila</i>	43.5	43.5		G	3	Remove

Tree ID	Common Name	Scientific Name	DBH (cm)	Effective DBH (cm)	Dripline (m)	Condition Rating (Good/Fair/Poor)	TPZ (m)	Retain / Remove
164	Eastern White Cedar	<i>Thuja occidentalis</i>	41, 30.6, 22.4	56		F	3.6	Remove
165	Eastern White Cedar	<i>Thuja occidentalis</i>	21.1	21.1		F	1.8	Remove
166	Eastern White Cedar	<i>Thuja occidentalis</i>	50, 26.7	57		P	3.6	Remove
167	Black Walnut	<i>Juglans nigra</i>	60	60		F	3.6	Remove
168	White Spruce	<i>Picea glauca</i>	38.6	38.6		F	2.4	Remove
169	White Spruce	<i>Picea glauca</i>	50	50		F	3	Remove
170	Red Maple	<i>Acer rubrum</i>	51	51		F	3.6	Remove
171	Colorado Spruce	<i>Picea pungens</i>	49	49		G	3	Remove
172	Colorado Spruce	<i>Picea pungens</i>	39.4	39.4		G	2.4	Remove
173	Colorado Spruce	<i>Picea pungens</i>	44	44		G	3	Remove
174	Colorado Spruce	<i>Picea pungens</i>	41	41		G	3	Remove
175	Colorado Spruce	<i>Picea pungens</i>	49.2	49.2		G	3	Remove
176	Norway Maple	<i>Acer platanoides</i>	108	108		F	6.5	Remove
177	Black Cherry	<i>Prunus serotina</i>	43.8	43.8	6	G	3	Retain
178	Red Oak	<i>Quercus rubra</i>	51	51	12	G	3.6	Retain
179	Bur Oak	<i>Quercus macrocarpa</i>	45	45	8	F	3	Retain
180	Red Oak	<i>Quercus rubra</i>	18.8	18.8	6	G	1.5	Retain
181	Black Cherry	<i>Prunus serotina</i>	33.2, 37.9	50	8	F	3	Retain
182	Black Cherry	<i>Prunus serotina</i>	33	33	8	F	2.4	Retain
183	Eastern White Pine	<i>Pinus strobus</i>	51.5	51.5	4	G	3.6	Retain
184	Black Cherry	<i>Prunus serotina</i>	45.8, 28.8	54	6	F	3.6	Retain
185	American Basswood	<i>Tilia americana</i>	55	55	6	F	3.6	Retain
186	Norway Spruce	<i>Picea abies</i>	49	49	3.5	G	3	Retain
187	American Basswood	<i>Tilia americana</i>	14.2, 31.8, 35.7, 34	61	5	G	4.2	Retain
188	Norway Maple	<i>Acer platanoides</i>	41.7	41.7	5	F	3	Retain
189	Norway Spruce	<i>Picea abies</i>	52	52	5	G	3.6	Retain
190	Norway Spruce	<i>Picea abies</i>	25.5	25.5	3	F	1.8	Retain
191	Red Oak	<i>Quercus rubra</i>	62	62	6	F	8.4	Retain

Tree ID	Common Name	Scientific Name	DBH (cm)	Effective DBH (cm)	Dripline (m)	Condition Rating (Good/Fair/Poor)	TPZ (m)	Retain / Remove
192	Red Oak	<i>Quercus rubra</i>	52, 56	76	11	F	4.8	Retain
193	Black Walnut	<i>Juglans nigra</i>	43.2	43.2	9	F	3	Retain
194	Colorado Spruce	<i>Picea pungens</i>	25.4	25.4	0.5	P	1.8	Retain
195	Sugar Maple	<i>Acer saccharum</i>	56	56	6	F	3.6	Retain
196	White Spruce	<i>Picea glauca</i>	31.6	31.6	2.5	F	2.4	Retain
197	Colorado Spruce	<i>Picea pungens</i>	26	26	3	F	1.8	Retain
198	Sugar Maple	<i>Acer saccharum</i>	24.5	24.5	6	F	1.8	Retain
199	Red Oak	<i>Quercus rubra</i>	46.5, 27.9	55	7	F	3.6	Retain
200	Colorado Spruce	<i>Picea pungens</i>	21.7, 11.9	25	2	F	1.8	Retain
201	Sugar Maple	<i>Acer saccharum</i>	76	76	12	G	4.8	Retain
202	Sugar Maple	<i>Acer saccharum</i>	46.2	46.2	9	G	3	Retain
203	Sugar Maple	<i>Acer saccharum</i>	36.5	36.5	9	F	2.4	Retain
204	Sugar Maple	<i>Acer saccharum</i>	24, 49.5	55	8	G	3.6	Retain
205	American Basswood	<i>Tilia americana</i>	44.7, 11.6	47	6	G	3	Retain
206	Sugar Maple	<i>Acer saccharum</i>	50.5	50.5	7	G	3.6	Retain
874	Norway Maple	<i>Acer platanoides</i>	40	40	5	g	2.4	Retain
875	Willow	<i>Salix sp.</i>	21,18,17	32	3	F	2.4	Retain
876	White Spruce	<i>Picea glauca</i>	51	51	5	F	3.6	Retain
877	Norway Maple	<i>Acer platanoides</i>	48	48	7	G	3	Retain
878	Norway Maple	<i>Acer platanoides</i>	14	14	3	F	1.5	Remove
879	Colorado Spruce	<i>Picea pungens</i>	30	30	2	F	1.8	Retain
880	Colorado Spruce	<i>Picea pungens</i>	24	24	2	F	1.8	Retain
881	Colorado Spruce	<i>Picea pungens</i>	30	30	2	F	1.8	Retain
882	Colorado Spruce	<i>Picea pungens</i>	16	16	2	F	1.5	Retain
885	Sugar Maple	<i>Acer saccharum</i>	10	10	3	F	1.5	Retain
886	Sugar Maple	<i>Acer saccharum</i>	12	12	3	F	1.5	Retain
887	Northern Catalpa	<i>Catalpa speciosa</i>	10	10	2	F	1.5	Retain

Tree ID	Common Name	Scientific Name	DBH (cm)	Effective DBH (cm)	Dripline (m)	Condition Rating (Good/Fair/Poor)	TPZ (m)	Retain / Remove
888	Green Ash	<i>Fraxinus pennsylvanica</i>	19	19	2	Dead	1.5	Retain
AA	Red pine	<i>Pinus resinosa</i>	30	30	3	G	1.8	Retain
AB	Scots Pine	<i>Pinus sylvestris</i>	35	35	3	G	2.4	Retain
AC	Scots Pine	<i>Pinus sylvestris</i>	20	20	3	G	1.5	Retain
AD	Scots Pine	<i>Pinus sylvestris</i>	25	25	3	G	1.8	Retain
AE	Scots Pine	<i>Pinus sylvestris</i>	20	20	2	G	1.5	Retain
AF	Scots Pine	<i>Pinus sylvestris</i>	22	22	4	G	1.8	Retain
AG	Scots Pine	<i>Pinus sylvestris</i>	18	18	2	G	1.5	Retain
AH	Norway Maple	<i>Acer platanoides</i>	15	15	4	G	1.5	Retain
AI	Scots Pine	<i>Pinus sylvestris</i>	23	23	3	G	1.8	Retain
AJ	Green Ash	<i>Fraxinus pennsylvanica</i>	15	15	4	P	1.5	Retain
AK	Scots Pine	<i>Pinus sylvestris</i>	10	10	4	G	1.5	Retain
AL	Scots Pine	<i>Pinus sylvestris</i>	20	20	3	G	1.5	Retain
AM	Norway Spruce	<i>Picea abies</i>	40	40	5	G	2.4	Retain
AN	Norway Spruce	<i>Picea abies</i>	55	55	5	G	3.6	Retain
AO	Norway Spruce	<i>Picea abies</i>	15	15	3	G	1.5	Retain
AP	Scots Pine	<i>Pinus sylvestris</i>	20	20	4	G	1.5	Retain
AQ	Scots Pine	<i>Pinus sylvestris</i>	20	20	2	F	1.5	Retain
AR	Eastern White Pine	<i>Pinus strobus</i>	10	10	2	G	1.5	Retain
AS	Eastern White Pine	<i>Pinus strobus</i>	20	20	3	G	1.5	Retain
AT	Pine	<i>Pinus sp.</i>	30	30	2	G	1.8	Retain
AU	Norway Spruce	<i>Picea abies</i>	60	60	5	G	3.6	Retain
AV	Norway Spruce	<i>Picea abies</i>	40	40	5	G	2.4	Retain
AW	Apple	<i>Malus sp.</i>	25	25	7	F	1.8	Retain
AX	Norway Spruce	<i>Picea abies</i>	30	30	3	F	1.8	Retain
AY	Norway Spruce	<i>Picea abies</i>	25	25	1	F	1.8	Retain
AZ	Norway Spruce	<i>Picea abies</i>	40	40	3	F	2.4	Retain

Tree ID	Common Name	Scientific Name	DBH (cm)	Effective DBH (cm)	Dripline (m)	Condition Rating (Good/Fair/Poor)	TPZ (m)	Retain / Remove
BA	Norway Spruce	<i>Picea abies</i>	30	30	2	F	1.8	Retain
BB	Norway Spruce	<i>Picea abies</i>	30	30	3	F	1.8	Retain
BC	Norway Spruce	<i>Picea abies</i>	25	25	3	F	1.8	Retain
BD	Norway Spruce	<i>Picea abies</i>	70	70	6	F	4.2	Retain
BE	Norway Spruce	<i>Picea abies</i>	25	25	4	F	1.8	Retain
BF	Norway Spruce	<i>Picea abies</i>	35	35	4	F	2.4	Retain
BG	Siberian Elm	<i>Ulmus pumila</i>	70	70	6	F	4.2	Injure
BH	Norway Spruce	<i>Picea abies</i>	15	15	3	F	1.5	Retain
BI	Norway Spruce	<i>Picea abies</i>	30	30	4	F	1.8	Retain
BJ	Norway Spruce	<i>Picea abies</i>	15	15	3	F	1.5	Retain
BK	Norway Spruce	<i>Picea abies</i>	40	40	5	F	2.4	Retain
BL	Norway Maple	<i>Acer platanoides</i>	25	25	4	G	1.8	Retain

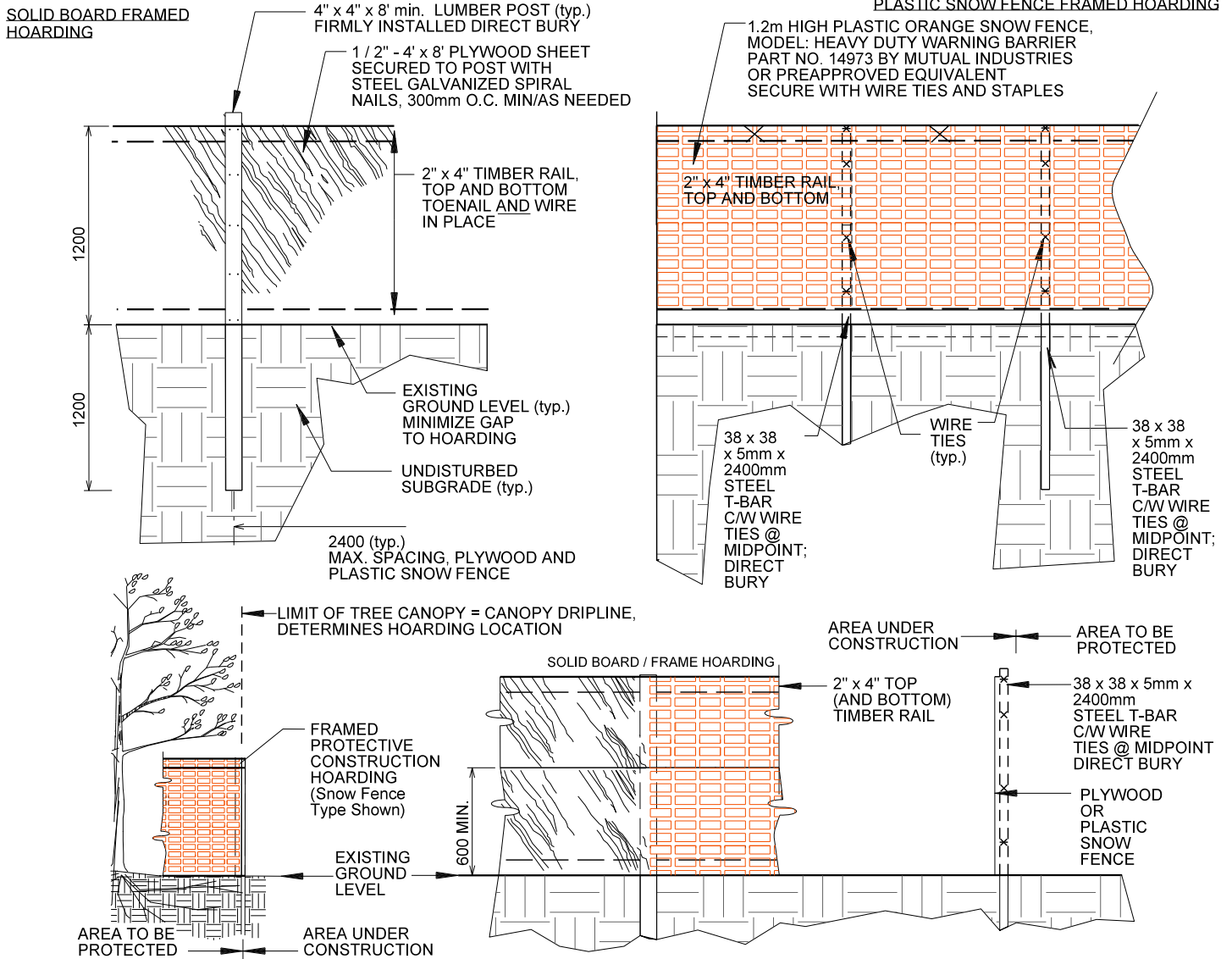
Appendix B

Tree Preservation Fencing (Detail 02830-6) and Approved Tree Preservation Sign Specification

02830-6

Hoarding Framed Protective Construction Hoarding Solid Board- Plastic Snow Fence

NOTE:
TO BE USED AS A GUIDELINE ONLY.
NOT TO SCALE. REMOVE CITY TITLE BLOCK
AND REDRAW TO REPRESENT SITE SPECIFIC
CONDITIONS. ALL SITE SPECIFIC CONDITIONS
ARE TO BE CONFIRMED BY THE PROJECT
CONSULTANT.



NOTES:

1. HOARDING LOCATION AS PER DRAWINGS. HOARDING INSTALLATIONS ARE TO INCLUDE WOVEN GEOTEXTILE FABRIC FOR SEDIMENT CONTROL.
2. NO MOBILIZATION OR CONSTRUCTION WORK TO OCCUR UNTIL HOARDING HAS BEEN INSPECTED AND APPROVED BY COMMUNITY SERVICES PROJECT MANAGER (CSPM). CONTRACTOR TO ARRANGE FOR A HOARDING INSPECTION WITH (CSPM), 48 HOUR NOTICE REQUIRED.
3. HOARDING TO BE SUPPLIED, INSTALLED AND MAINTAINED BY THE CONTRACTOR THROUGH ALL PHASES OF WORK ON SITE.
4. THE CONTRACTOR IS TO REMOVE AND DISPOSE THE HOARDING OFF SITE WHEN DIRECTED BY THE (CSPM).
5. ALL WOOD PRODUCTS TO BE NEW AND LUMBER KILN DRIED SPF.
6. ALL FASTENERS TO BE NEW GALVANIZED STEEL AND SECURELY INSTALLED. WIRE TIES MIN 3.5mm DIA. GALVANIZED STEEL.
7. DO NOT ALLOW WATER TO COLLECT AND/OR POND ON EITHER SIDE OF THE HOARDING.
8. WHEN INSTALLING DIRECT BURY TIMBER POSTS AND T-BARS, TAKE CARE TO AVOID VISIBLE AND ASCERTAINABLE TREE ROOTS.
9. PLACE HOARDING AT LIMIT OF TREE CANOPY DRIP LINE OR BEYOND (E.G. FURTHER AWAY FROM TRUNK) OF TREE.
10. HOARDED OFF AREA TO REMAIN UNDISTURBED. NO STOCKPILING, STAGING OR MOVEMENT OF VEHICLES TO OCCUR WITHIN PROTECTED AREA.
11. FOR PROTECTION OF TREE'S AND ROOT SYSTEM, CONTRACTOR MAY BE REQUIRED TO PROVIDE WATERING, MULCHING, FERTILIZING, PRUNING OR OTHER ACTIVITIES TO ENSURE THE HEALTH OF THE TREE(S).
12. ALL MEASUREMENTS IN MILLIMETRES UNLESS NOTED OTHERWISE (E.G. DIMENSIONAL LUMBER).
13. CONTRACTOR RESPONSIBLE FOR LOCATES

N.T.S.