

M:\2024\124107\CAD\Landscape\124107_TCR.dwg, TCR.dwg, TCR-Commercial, Dec 06, 2024 - 12:58pm, kkanaflov

NOTE:
THE POSITION OF ALL POLE LINES, CONDUITS,
WATERMANS, SEWERS AND OTHER
UNDERGROUND AND OVERGROUND UTILITIES AND
STRUCTURES IS NOT NECESSARILY SHOWN ON
THE CONTRACT DRAWINGS, AND WHERE SHOWN,
THE ACCURACY OF THE POSITION OF SUCH
UTILITIES AND STRUCTURES IS NOT GUARANTEED.
BEFORE STARTING WORK, DETERMINE THE EXACT
LOCATION OF ALL SUCH UTILITIES AND
STRUCTURES AND ASSUME ALL LIABILITY FOR
DAMAGE TO THEM.

Owner:
Bank & Dun Developments Inc.
c/o Paul Pogliassini
209 Wicksteed Avenue, Suite 30
Toronto, ON, M4G 0B1
Phone: (416) 335-0090

NOT FOR
CONSTRUCTION

| No. | REVISION | DATE | BY |
|-----|----------------------------------|-----------|-----|
| 2. | ISSUED FOR COMPLETENESS COMMENTS | DEC 6/24 | RGJ |
| 1. | ISSUED FOR SITE PLAN APPLICATION | OCT 24/24 | RGJ |

SCALE

1:400

1:400
0 4 8 12 16

DESIGN

KEW

CHECKED

KEW

DRAWN

KEW

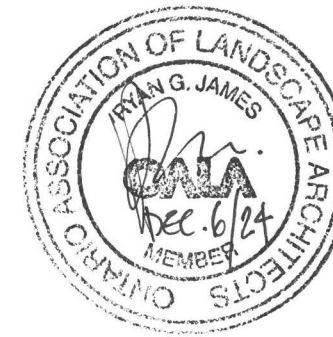
CHECKED

TB

APPROVED

RGJ

FOR REVIEW ONLY



NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6
Telephone (613) 254-9643
Facsimile (613) 254-5867
Website www.novatech-eng.com

LOCATION
CITY OF OTTAWA
150 DUN SKIPPER

DRAWING NAME

TREE CONSERVATION PLAN

PROJECT No.

124107

REV

REV # 2

DRAWING No.

124107-TCR

CITY DETAILS

Related details from City of Ottawa Standard Tender Documents
Volume No. 2 Standard Detail Drawings.

F7. Tree Preservation Protection Fence

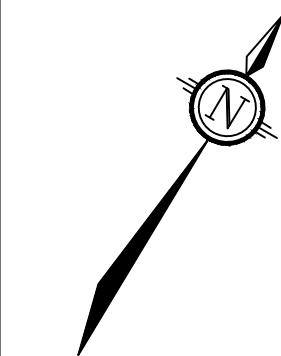
| No. | Botanical Name | Common Name | DBH (cm) | CRZ (m) | Condition | Owner | Remarks | Recomm. |
|-----|-------------------------------|----------------|----------|---------|-----------|------------|--|----------|
| 1 | <i>Fraxinus pennsylvanica</i> | Green Ash | 33.0 | 3.30 | F | City (ROW) | | PROTECT |
| 2 | Dead | | 57.0 | 5.70 | D | City (ROW) | | Remove |
| 3 | <i>Acer negundo</i> | Manitoba Maple | 46.0 | 4.60 | F | City (ROW) | 3 trunks, 30° and 45° lean, dead branches | PROTECT |
| 4 | <i>Fraxinus pennsylvanica</i> | Green Ash | 11.0 | 1.10 | F | Owner | dead branches | PROTECT |
| 5 | <i>Fraxinus pennsylvanica</i> | Green Ash | 28.0 | 2.80 | F | Owner | | Conflict |
| 6 | <i>Malus sp.</i> | Apple | 54.0 | 5.40 | VP | Owner | Trunk is wounded and rotten | Remove |
| 7 | <i>Acer saccharum</i> | Sugar Maple | 37.0 | 3.70 | G | Owner | | Conflict |
| 8 | <i>Acer saccharum</i> | Sugar Maple | 10.0 | 1.00 | G | Neighbour | | Conflict |
| 9 | <i>Ulmus americana</i> | White Elm | 46.0 | 4.60 | G | Owner | | Conflict |
| 10 | <i>Fraxinus pennsylvanica</i> | Green Ash | 39.0 | 3.90 | F | Neighbour | Bend in trunk, | PROTECT |
| 11 | <i>Acer saccharum</i> | Sugar Maple | 34.0 | 3.40 | G | Owner | | Conflict |
| 12 | <i>Ulmus americana</i> | White Elm | 28.0 | 2.80 | G | Owner | | Conflict |
| 13 | <i>Acer saccharum</i> | Sugar Maple | 34.0 | 3.40 | G | Owner | | Conflict |
| 14 | <i>Ulmus americana</i> | White Elm | 36.0 | 3.60 | G | Owner | | Conflict |
| 15 | <i>Acer saccharum</i> | Sugar Maple | 63.0 | 6.30 | F | Owner | Twin leader, evidence of internal rot | Remove |
| 16 | <i>Acer saccharum</i> | Sugar Maple | 27.0 | 2.70 | G | Owner | | Conflict |
| 17 | <i>Ulmus americana</i> | White Elm | 33.0 | 3.30 | G | Owner | | Conflict |
| 18 | <i>Acer saccharum</i> | Sugar Maple | 40.0 | 4.00 | G | Owner | | Conflict |
| 19 | <i>Picea sp.</i> | Spruce | 25.0 | 2.50 | G | Owner | | Conflict |
| 20 | <i>Picea sp.</i> | Spruce | 31.0 | 3.10 | G | Owner | | Conflict |
| 21 | <i>Picea sp.</i> | Spruce | 24.0 | 2.40 | G | Owner | | Conflict |
| 22 | <i>Picea sp.</i> | Spruce | 32.0 | 3.20 | G | Owner | | Conflict |
| 23 | <i>Picea sp.</i> | Spruce | 25.0 | 2.50 | G | Owner | | Conflict |
| 24 | <i>Picea sp.</i> | Spruce | 40.0 | 4.00 | G | Owner | | Conflict |
| 25 | <i>Acer saccharum</i> | Sugar Maple | 84.0 | 8.40 | P | Shared | Dead branches, multi-leader, rot | Remove |
| 26 | <i>Acer saccharum</i> | Sugar Maple | 30.0 | 3.00 | P | Owner | Black fungus, growing out of stump/wire fence | Remove |
| 27 | <i>Picea sp.</i> | Spruce | 39.0 | 3.90 | G | Owner | | Conflict |
| 28 | <i>Pinus banksiana</i> | Jack Pine | 30.0 | 3.00 | G | Owner | | Conflict |
| 29 | Dead | | 48.0 | 4.80 | D | Owner | | Remove |
| 30 | Dead | | 39.0 | 3.90 | D | Neighbour | | Remove |
| 31 | <i>Acer saccharum</i> | Sugar Maple | 140.0 | 14.00 | P | Shared | Internal rot, dead branches | Remove |
| 32 | <i>Malus sp.</i> | Apple | 43.0 | 4.30 | P | Owner | 60° lean | Remove |
| 33 | <i>Acer saccharum</i> | Sugar Maple | 12.0 | 1.20 | G | Owner | | Conflict |
| 34 | <i>Ulmus americana</i> | White Elm | 18.0 | 1.80 | G | Owner | | Conflict |
| 35 | <i>Acer saccharum</i> | Sugar Maple | 30.0 | 3.00 | G | Owner | | Conflict |
| 36 | <i>Acer saccharum</i> | Sugar Maple | 14.0 | 1.40 | G | Owner | | Conflict |
| 37 | <i>Acer saccharum</i> | Sugar Maple | 10.0 | 1.00 | G | Owner | | Conflict |
| 38 | <i>Acer saccharum</i> | Sugar Maple | 24.0 | 2.40 | G | Owner | | Conflict |
| 39 | <i>Acer saccharum</i> | Sugar Maple | 59.0 | 5.90 | F | Neighbour | "braided" trunks | PROTECT |
| 40 | Dead | | 43.0 | 4.30 | D | Neighbour | | N/A |
| 41 | <i>Picea sp.</i> | Spruce | 28.0 | 2.80 | G | Owner | | Conflict |
| 42 | <i>Acer saccharum</i> | Sugar Maple | 24.0 | 2.40 | G | Owner | | Conflict |
| 43 | <i>Acer saccharum</i> | Sugar Maple | 36.0 | 3.60 | G | Owner | | Conflict |
| 44 | <i>Acer saccharum</i> | Sugar Maple | 53.0 | 5.30 | P | Owner | Twining trunk, rot, split in trunk | Remove |
| 45 | <i>Malus sp.</i> | Apple | 34.0 | 3.40 | P | Owner | Twin trunk, dead branches, Sever bend | Remove |
| 46 | <i>Ulmus americana</i> | White Elm | 43.0 | 4.30 | G | Owner | | Conflict |
| 47 | <i>Acer saccharum</i> | Sugar Maple | 79.0 | 7.90 | P | Neighbour | Twining trunk, rot, split | Remove |
| 48 | <i>Acer saccharum</i> | Sugar Maple | 53.0 | 5.30 | G | Owner | | Conflict |
| 49 | <i>Acer saccharum</i> | Sugar Maple | 39.0 | 3.90 | G | Neighbour | | PROTECT |
| 50 | <i>Acer saccharum</i> | Sugar Maple | 29.0 | 2.90 | G | Neighbour | | PROTECT |
| 51 | <i>Acer saccharum</i> | Sugar Maple | 25.0 | 2.50 | G | Owner | | Conflict |
| 52 | <i>Acer saccharum</i> | Sugar Maple | 32.0 | 3.20 | G | Neighbour | | PROTECT |
| 53 | <i>Acer saccharum</i> | Sugar Maple | 45.0 | 4.50 | G | Neighbour | | PROTECT |
| 54 | <i>Acer saccharum</i> | Sugar Maple | 57.0 | 5.70 | F | Neighbour | Three trunks - 1 dead | PROTECT |
| 55 | <i>Acer saccharum</i> | Sugar Maple | 64.0 | 6.40 | G | Owner | | Conflict |
| 56 | Dead | | 47.0 | 4.70 | D | Owner | | Remove |
| 57 | <i>Acer saccharum</i> | Sugar Maple | 92.0 | 9.20 | G | Owner | | Conflict |
| 58 | Dead | | 52.0 | 5.20 | D | Owner | Fallen Butternut - see BHE report | Remove |
| 59 | <i>Acer saccharum</i> | Sugar Maple | 99.0 | 9.90 | G | Neighbour | | Conflict |
| 60 | Dead | | 76.0 | 7.60 | D | Owner | | Remove |
| 61 | <i>Acer saccharum</i> | Sugar Maple | 40.0 | 4.00 | G | Neighbour | | PROTECT |
| 62 | Dead | | 48.0 | 4.80 | D | Neighbour | Butternut - see BHE report | N/A |
| 63 | <i>Acer saccharum</i> | Sugar Maple | 39.0 | 3.90 | G | Owner | | Conflict |
| 64 | <i>Acer saccharum</i> | Sugar Maple | 37.0 | 3.70 | G | Neighbour | | Conflict |
| 65 | <i>Ulmus americana</i> | White Elm | 56.0 | 5.60 | G | Owner | | Conflict |
| 66 | <i>Acer saccharum</i> | Sugar Maple | 65.0 | 6.50 | P | Neighbour | Twin trunk, split, rot | Conflict |
| 67 | <i>Acer saccharum</i> | Sugar Maple | 73.0 | 7.30 | G | Owner | | Conflict |
| 68 | <i>Acer saccharum</i> | Sugar Maple | 20.0 | 2.00 | G | Neighbour | | PROTECT |
| 69 | <i>Acer saccharum</i> | Sugar Maple | 34.0 | 3.40 | G | Neighbour | | PROTECT |
| 70 | <i>Ulmus americana</i> | White Elm | 37.0 | 3.70 | F | Owner | bow in trunk, | PROTECT |
| 71 | <i>Acer saccharum</i> | Sugar Maple | 10.0 | 1.00 | F | Owner | intertwined with dead tree | PROTECT |
| 72 | <i>Acer saccharum</i> | Sugar Maple | 12.0 | 1.20 | G | Owner | | PROTECT |
| 73 | <i>Acer saccharum</i> | Sugar Maple | 41.0 | 4.10 | P | Owner | Twin trunk, rot, dead tree fallen between two trunks, split trunks | Remove |
| 74 | <i>Acer saccharum</i> | Sugar Maple | 32.0 | 3.20 | G | Neighbour | | PROTECT |
| 75 | <i>Ulmus americana</i> | White Elm | 60.0 | 6.00 | F | Neighbour | Minor splitting | PROTECT |
| 76 | <i>Acer saccharum</i> | Sugar Maple | 37.0 | 3.70 | G | Owner | | PROTECT |
| 77 | <i>Picea sp.</i> | Spruce | 10.0 | 1.00 | G | Owner | | Conflict |

TREE IMPACT ANALYSIS

Using data collected during the tree inventory and assessment, a tree impact analysis was performed. Determination of each Tree's recommended action (i.e. Retain, Protect, Remove/Conflict) were based on several factors including each tree's current condition and its location in relation to the limits of construction. As outlined in the City's Tree Preservation By-law (2020), a Critical Root Zone (CRZ) was applied around each tree. The CRZ is defined as an area around each tree and is typically established based on the species and size of the tree and are intended to provide a buffer protecting the tree from potential impacts, including root and soil compaction and mechanical damage to above-ground parts. Based on the City's guidelines, the CRZ is established as being 10cm from the trunk of a tree for every 1cm of trunk diameter. The CRZ for multi-stemmed trees was based on the DBH of the largest stem.

Generally, the following guidelines are followed in deriving a tree's recommendation:

- Trees with equal or greater than 40% of its CRZ affected by proposed work activities (**Conflict**) are recommended for **Removal** as there would likely be detrimental impacts to the tree.
- Trees with 0-39% of its CRZ affected by the proposed work activities are recommended for **Protection** as outlined in the Tree Protection Notes on the plan.
- Trees with CRZs that are outside the proposed work areas are recommended for **Retention** with no protection as it is unlikely that there will be negative impacts to the tree.



NORTH

LEGEND

- 3-D1 DETAIL SHEET # NOVATECH OR CITY
EG. L1, L2, ETC. DETAIL NUMBER SEE LIST FOR CODE
- PROPERTY LIMIT
- EXISTING TREE TO REMAIN,
SYMBOL SIZE REFLECTS CRZ
- EXISTING TREE TO REMOVE,
SYMBOL SIZE REFLECTS CRZ
- TREE PROTECTION FENCE
- EXISTING VEGETATION WITH
DBH LESS THAN 10cm

CONSTRUCTION

- All general site information and conditions are compiled from Consultant field notes and plans provided by the Owner and are supplied for information purposes only. It is the responsibility of the Contractor to verify the accuracy of all the information obtained from this plan.
- Together with all Subcontractors involved, the Contractor is to examine all surfaces or conditions relating to the work, in order to determine the acceptability of such surfaces or conditions for the work to commence. Notify the Contract Administrator in writing of conditions which could be detrimental to installation and do not commence work until instructed by the Contract Administrator. The commencement of work implies Contractor acceptance of the conditions.
- Contractor to check and report any discrepancies before commencing work. No responsibility is borne by the Consultants for subsurface conditions.
- Contractor to check and verify all dimensions and quantities on site and report any errors or omissions to the Consultant.
- Contractor is responsible for all fees arising from the completion of works conveyed by these drawings, details, and specifications.
- Carry out all construction in accordance with the most current provincial and municipal standards and specifications.
- Contractor to coordinate all access and protect the public and users of the site with appropriate control fence and supervision throughout the construction period, to the satisfaction of the Consultant.
- Contract Administrator is to approve access point(s) prior to mobilization.
- A Contractor flagman is required to direct all deliveries of machinery or materials to the site.
- Contractor to coordinate and schedule all work with other trades and contractors. Contractor is to notify Contract Administrator of any schedule difficulties.
- Contractor responsible for the removal and off-site disposal of all materials as required to facilitate new construction. Store all items and materials identified by the Consultant for salvage at a location on site as identified by the Consultant. Excavate and remove from site any contaminated material. Dispose all contaminated material at a licensed landfill facility.
- Maintain site in a clean and orderly state for the duration of construction; perform all work in accordance with the Occupational Health and Safety Act. Remove all excess materials, packaging, and debris from the site.
- Contractor is responsible to take all necessary measures to control dust on the project site and to the satisfaction of the Contract Administrator.
- Contractor is responsible for all layout for construction purposes.
- Contractor is to protect all iron bars. Replace any disturbed bars by Owner at the Contractor expense.
- The Contractor is to notify the Contract Administrator upon completion of the required works to schedule an inspection for acceptance.

GENERAL

- Read and interpret this drawing/ drawing set in conjunction with all the contract details and specifications, including related civil, utility, structural, architectural, mechanical, electrical, environmental, geotechnical, and survey information.
- The Contractor is to determine the exact location, size, material, and elevation of all existing utilities prior to commencing construction. Protect and assume responsibility for all existing utilities regardless of being shown on the drawings.
- It is essential to use the plans and details in conjunction with the specifications and notes.
- Do not scale drawings. Work to dimensions only.
- Protect all existing and retained vegetation for the duration of construction according to the contract details and specifications.
- Reinstate all areas and items damaged or disturbed, beyond the Limit of Work, because of construction activities, including but not limited to construction staging areas, haul roads, stockpile areas, etc. to the satisfaction of the Consultant. Unless otherwise noted, Contractor is to reinstate all areas to pre-construction condition or better to the satisfaction of the Contract Administrator.

TREE PROTECTION

Implement the following protection measures for retained trees, both on site and on adjacent sites, prior to any work activity, including tree removal. Maintain tree protection fence in place and in good condition for the duration of site works:

- The Landscape Architect or Certified Arborist is to determine the location of the tree protection fencing and detail it on any associated plans for the site (e.g. tree conservation report, tree disclosure report, etc.).
- Under the guidance of a Landscape Architect or Certified Arborist, erect a fence at the critical root zone (CRZ) of trees. Diameter at breast height (DBH) is the trunk diameter measured at 1.3m height on the tree trunk. The CRZ is calculated as DBH x 10. Refer to the Tree Protection Fence detail.
- Refer to the Tree Protection Plan for fence location. City Forestry Staff are to approve both the plan and the installed fence prior to work commencement.
- Do not place any material or equipment within 2m of the CRZ of any tree, including outhouses.
- Do not attach any signs, notices, or posters to any tree.
- Do not disturb, raise, or lower the existing grade within the CRZ without approval.
- Only tunnel or bore when digging within the CRZ of a tree. Hand work only where required within the CRZ; absolutely no machinery permitted.
- Do not damage the root system, trunk, or branches, or any tree.
- Do not extend hard surface or significantly change landscaping.
- Ensure that exhaust fumes from all equipment are directed away from any tree canopy.
- When trees marked for removal overlap with the CRZ of trees marked for preservation, cut roots at the edge of the CRZ and grind down stumps after tree removals, do not pull out stumps. Ensure there is not root pulling or disturbance of the ground within the CRZ.
- Prior to work taking place, notify and consult the Landscape Architect and City Forestry Staff if roots must be cut. Roots 20mm or larger should be cut at right angles with clean, sharp horticultural tools without tearing, crushing, or pulling. Refer to City of Ottawa Specification S.P. F-8011 Tree Protection, Excavation of Root Zone.
- If damaged or objectionable branches are observed, consult the Landscape Architect, before any work is conducted. Do not prune leaders. Do not prune more than 1/4 of crown.
- Set up a water and fertilizing program, if trees are being affected by site works, to the satisfaction of the Landscape Architect.
- The Landscape Architect is to prescribe mitigation measures if the protected fenced area must be reduced to facilitate construction. Measures may include the placement of plywood, wood chips, or steel plating over the roots for protection. City Forestry Staff are to approve said measures prior to fence movement.
- City of Ottawa By-law: Protects 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 (2020-340).

07-00-00-0000

PLANTING & REMOVAL

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