TREE CONSERVATION REPORT FOR 1DOOR4CARE TREATMENT CENTRE 401 Smyth Road, City of Ottawa, Ontario

Prepared for:



Prepared by:

Colville Consulting Inc. 432 Niagara Street, Unit 2 St. Catharines, Ontario L2M 4W3



Issued for Construction Date: August 16, 2024 File: C23080 This Tree Conservation Report (TCR) has been prepared as part of a proposed 1D4C Treatment Centre development on the property located at 401 Smyth Road, in the City of Ottawa, henceforth referred to as the Subject Lands. Colville Consulting Inc was initially retained to complete an arborist report for the Childrens Hospital of Eastern Ontario (CHEO) in 2022 as part of the Integrated Design Brief. Colville Consulting Inc. was later retained by EllisDon in August 2023 to update the initial arborist report to reflect updates to the development plan proposed on the property.

Works undertaken as part of this report include a detailed inventory of trees on the Subject Lands and mitigation strategies to reduce impact on trees recommended to be retained. An initial inventory of trees within and adjacent to the development footprint of the proposed 1D4C Treatment Centre was completed on June 9th and 10th, 2022, with a follow up inventory and assessment completed on August 25th, 2023.

The general intent of the TCR is to identify trees within and adjacent the proposed development and provide input on which trees are anticipated to be removed based on the construction plans prepared by EllisDon, and which trees may be able to be retained. Information on trees to be removed includes the rational for removal in addition to information to be used during compensation discussions as part of the development review process with the city. It is our understanding that compensation type and extent will be determined by the total number and size of trees to be removed on site, as well as the ability to incorporate replacement trees into the landscape plan. Information on mitigation strategies has been included in for trees to be retained.

This TCR is required as per the City of Ottawa Tree By-law (No. 2020-340). Schedule E of the By-law outlines the guidelines required for the completion of a TCR and states:

"The Tree Conservation Report (TCR) provides essential information that must be integrated with all plans for a site, including the grading, servicing and landscape plans, to ensure that trees are retained in development scenarios, where feasible, and that new trees will be accommodated and planted to contribute to the City's forest cover target and to address a site's tree loss.

The purpose of the Tree Conservation Report is to demonstrate how tree cover will be retained on the site, including mature trees, stands of trees, and hedgerows, using a design with nature approach to planning and engineering. A design with nature approach incorporates the natural features of a site into the design and engineering of a proposed development. This includes, but is not limited to, measures such as retention of vegetation, consideration of wildlife habitats, and respect for natural drainage patterns..."

PROPOSED DEVELOPMENT

The Children's Hospital of Eastern Ontario (CHEO) is currently operating on the majority of the property located at 401 Smyth Road, in the City of Ottawa. The development proposed is located on the southwestern portion of the Subject Property to the east of Ring Road. Development proposed as part of this TCR is understood to include the construction of the 1Door4Care Treatment Centre. The proposed 1Door4Care Treatment Centre is being built as an addition to the existing CHEO operations on the Subject Lands

Modification to these plans may require further investigation to identity changes in accordance with the recommendations provided within this report.

ASSUMPTIONS AND LIMITING CONDITIONS

The observations and recommendations within this document are true for the period that staff were on site and therefore do not include any other activities and/or change in overall condition or health to any trees occurring on site before or after our site visit. The existence of any and all trees on site represent a certain inherent degree of risk and our evaluation and recommendation does not preclude all potential risk of failure. Inspection of trees was conducted using visual examination and limited to information gathered through visual observation.

In spite of our recommendations and conclusions in our report, it's important to understand that all trees are living organisms, meaning that their health and status has the potential to be in constant flux over time, and that trees are not immune to changes in site conditions or seasonal variations in weather conditions.

Possession of this report does not imply right of publication or use for any purpose other than to whom it is addressed to, without the prior expressed written or verbal consent of Colville Consulting Inc. This report shall be considered whole and should be considered incomplete if there are any pages missing.

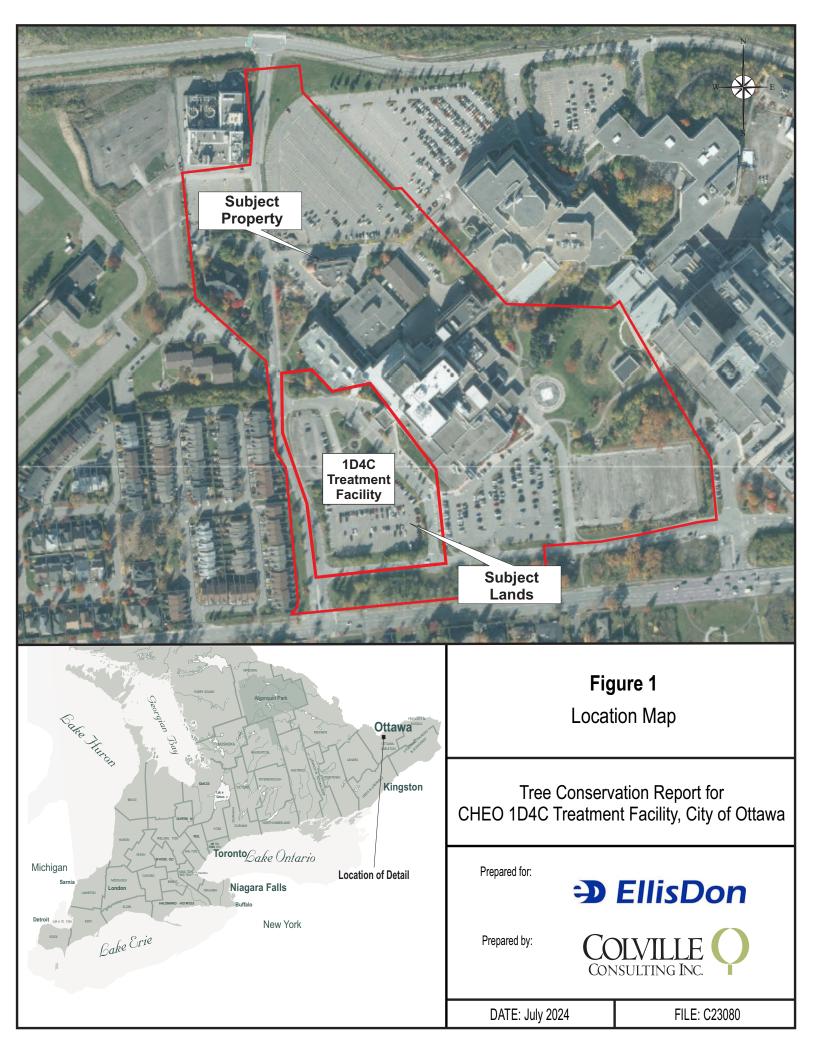
SUBJECT LANDS

The Subject Lands are located on the existing surface parking lot structures, driveways, and landscaped areas on the southwestern portion of the Subject Property. The overall CHEO Subject Property occupies an approximate area of 13.9 hectares, while the Subject Lands assessed as part of this report are approximately 1.8 hectares in size. CHEO shares a campus with the Ottawa General Hospital and the University of Ottawa's Roger Guindon Hall, both located at 451 Smyth Road to the east.

The Subject Property is primarily surrounded by residential development, as well as institutional and recreational uses. A hydro corridor runs north of the Subject Property and is separated by a moderately sized woodland feature. The Location of the Subject Property and Subject Lands are shown in Figure 1 below.

METHODS

This Report has been completed in general compliance with the City of Ottawa's Tree Protection By-Law (No. 2020-340), with the goal of retaining and protecting as many trees as reasonably possible on the site and providing mitigation strategies for trees to be retained. This report is intended to be read in conjunction with other design reports prepared for the project as part of the CHEO 1Door4Care Treatment Centre development plan prepared by EllisDon.



The work plan for this report included the following components:

- Field reconnaissance to collect tree inventory information for trees situated on the Subject Lands
- Preparation of summary mapping;
- Evaluation of potential tree saving opportunities based on the proposed site plan; and,
- Recommend appropriate mitigation measures to help preserve remaining trees on the site.

Tree inventories on the Subject lands were conducted on June 9^{th} and 10^{th} , 2022, and August 25^{th} , 2023. These inventories included the following parameters:

Species – common and botanical names provided in the inventory table.

DBH – diameter at breast height (cm), measured at 1.3 m above the ground.

Canopy Size – Approximate diameter of tree canopy.

Condition – condition of tree considering trunk integrity, crown structure and crown.

Vigor- Condition ratings include Dead (D), poor (P), fair (F), and good (G).

Location – UTM coordinates of the tagged tree.

The inventory of trees on this property was limited to trees 10cm in DBH and larger for trees located within and adjacent to areas anticipated to be impacted through the proposed 1Door4Care Treatment Centre. For the purpose of this assessment, the limit of disturbance is understood to be the entirety of the Subject Lands.

TREE INVENTORY RESULTS

Tree Inventory data for all trees surveyed as part of the proposed 1Door4Care Treatment Centre is provided in Appendix A. A total of sixty-three (63) trees were inventoried and tagged with unique tree ID numbers on and adjacent the Subject Lands during the site assessment. To facilitate the proposed development on the site, nine (9) of the trees inventoried are recommended to be retained, while fifty-one (54 are proposed for removal.

Trees have been recommended for removal for a number of reasons including direct impacts from development, impacts from site grading, poor overall tree health, or that they are considered invasive.

Tree to be retained are primarily located in landscaped areas north of the proposed footprint of the development along the existing CHEO building. Further information is provided in the Tree Care Recommendations section below.

Of the trees to be removed, nine (9) are invasive common buckthorn. A significant amount of smaller common buckthorn was also observed within the thickets adjacent to Ring Road on the southern and western edges of the Subject Lands. Small thickets of Buckthorn were also observed along the northern edge of the Subject Lands.

Detailed information and recommendations for each tree inventoried is provided within Appendix A. Mapping in Appendix B shows all trees inventoried on and adjacent the Subject Lands and Critical Root Zones (CRZ). Tree protection fencing and limits of construction are also shown on Mapping in Appendix B. A selection of site photographs taken during field inventories are provided in Appendix C.

TREE CARE RECOMMENDATIONS

The following are minimum standards for tree care recommendations that shall be applied to trees recommended to be retained as identified in Appendix A. Any additional specific standards or specifications required by the City of Ottawa shall supersede the following recommendations and be adhered to accordingly.

Tree Protection Zone

The Tree Protection Zone (TPZ) is required for trees to be retained and in order to protect roots and soil within the critical root zone (CRZ). The CRZ is the immediate root zone surrounding the trunk of the tree and is integral to tree for tree health and stability. During construction, no machinery, grading, or general work should be conducted within the limits of TPZ. The TPZ should be delineated through the installation of tree hoarding.

The following recommendations should be adhered to prevent unintended works from occurring within the CRZ.

- Tree protection zone fencing shall be installed following design criteria as outlined by the City of Ottawa Tree Protection Specifications provided in Appendix D.
- Signage should be adhered to the tree hoarding protection identifying it and explaining the TPZ and that no works are permitted within the limits of the tree hoarding.
- Construction materials, equipment, soil, construction waste, or debris shall not be stored within the Tree Protection Zone.
- TPZ fencing must be installed prior the start of construction activities on the site and inspected by City forestry staff.
- Tree Protection should be maintained throughout the duration of construction. Should any damage occur to tree protection, it should be repaired as soon as possible.
- Tree hoarding should remain installed until all construction works have been completed.

Trunk Protection

In areas where construction activities cannot avoid encroachment into the TPZ, and the project arborist has been consulted, protection should be applied to trunks and buttress roots.

- Thick wood planks installed around the trunk overtop of foam padding and secured with straps or wires are recommended.
- Barriers should be installed at an angle to protect trunk flare and buttress roots.

Root Maintenance

Root health is essential for tree health and stability. Roots can extend approximately 2-3 times the distance of the dripline. This can result in a significant loss of feeder roots during construction and may require further mitigation.

- If root cuts are required, the cut should be made as far from the trunk as possible and not occur within the dripline.
- Any roots over 2.5cm in diameter should be pruned rather the torn or crushed. Two methods that may be employed are soil excavation followed by selective root cutting, or mechanical root

pruning tools designed to cut roots. Root pruning should only be completed by a trained and experienced arborist.

• Mulch may be used as a temporary measure to protect roots systems. Mulch applied at a thickness of 15cm to 30cm can help disperse weight and reduce root compaction.

Retained Trees - Work within CRZ

Generally, no work should be conducted within the CRZ of trees to be retained. However, where trees are recommended to be retained and minor encroachment into the CRZ is required, additional mitigation should be implemented. Trees inventoried that were in good health and with one third (33%) or less of their TPZ impacted through development have been recommended to be retained where possible. It is anticipated that any injury to these trees will not result in significant overall decline where the appropriate mitigation measures as outlined below are adhered to.

- Any work required within he CRZ should occur as far away from the trunk as feasible.
- The use of air spading should be considered when working with the CRZ. Forced air is used to loosen compacted soil, exposing the trees root structure. This should be completed where soil compaction within the CRZ has occurred, or significant root pruning is required.
- Where above ground work is required, wood chip mulch may be used as a temporary measure to protect roots systems. Mulch applied at a thickness of 15cm to 30cm can help disperse weight and reduce root compaction. Mulch should be removed once work has been completed.
- If more than one-third of the trees root system is required for removal, the structural stability may be compromised, and it is recommended that the tree be removed to prevent creating a hazard. Consultation with City staff should occur prior to removal.
- No changes to the final grade within the CRZ should occur.
- When work within the CRZ has been completed, the area should be returned to a suitable condition and tree hoarding reinstalled to the full extent of the CRZ to prevent further work within CRZ.

CONCLUSION

The proposed development of the 1Door4Care Treatment Centre is anticipated to require the removal of fifty-four (54) trees to facilitate grading and construction. Some trees recommended for retention are located in close proximity to the proposed 1Door4Care Treatment Centre and may need to be removed as part of additional design requirements. Additional assessments are recommended to address these changes as required.

Prior to any works being conducted along property lines, or within the drip lines of trees growing on adjacent properties that have the potential to be impacted, a consent letter from the neighboring property owners is required.

Tree Protection measures should be incorporated into design plans as recommended in this report for trees that may be impacted through development.

Based on background research, our site visits, and review of our findings, we have come to a few important recommendations and conclusions which include the following:

- It is anticipated that to facilitate the proposed development of the 1Door4Care Treatment Centre, 51 trees will need to be removed on the Subject Lands.
- Recommendations for the retention and removal of individual trees are subject to change pending modifications to the final development plan and/or grading requirements associated with construction.
- As per the City of Ottawa By-law (No. 2020-340), The removal of trees on the site cannot occur until written approval of a Tree Conservation Report has been granted through a tree permit.
- A limit of work fence/ tree hoarding should be installed along the CRZ of trees to be retained.
- Where work within the CRZ cannot be avoided for trees recommended to be retained, mitigation measures described in the above tree care recommendations should be followed to reduce potential damage to the tree.
- Tree hoarding for trees to be retained shall meet the City of Ottawa Tree Protection Specifications, as attached in Appendix D.
- Any required vegetation removal should be conducted in a manner to avoid impacts to nesting birds that may be utilizing habitats on the property. The breeding bird period for this area is generally March 15 to August 31. A survey for active bird nests should be conducted prior to any vegetation removal or site alteration planned to occur during this window.
- Any Common Buckthorn or other invasive tree species observed during construction should be removed and replaced with native species where possible.
- Tree care recommendations provided should be considered a minimum standard and applied to all trees to be retained in development areas.
- Tree protection measures and recommendations will not guarantee tree protection, and the potential for damage may still occur. Ongoing monitoring to ensure tree protection measures are effective is recommended.

Respectfully submitted by:

Brett Espensen, B.A. (Hons.), E.P., CISEC I.S.A. Certified Arborist (ID: ON-2656A) Colville Consulting Inc. <u>Brett@colvilleconsultinginc.ca</u>

REFERENCES:

Bond, J. 2013. Tree Inventories, Second Edition. International Society of Arboriculture.

City of Ottawa, 2022. Tree Protection (By-law No. 2020-340)

City of Ottawa, 2021. Tree Protection Specifications- Drawing No. 1 of 1. March, 2021.

EllisDon, 2023. Design inputs and Site Plans.

Fite, K and E.T. Smiley, 2016. Managing Trees During Construction, Second Edition. International Society of Arboriculture.

GeoOttawa, 2022. https://maps.ottawa.ca/geoottawa/ Accessed December, 2023.

RFP Respondent's Meeting. Children's Hospital of eastern Ontario – Ottawa Children's Treatment Centre (CHEO) 1Door4Care Integrated Treatment Centre. Planning, Design, and Conformance Consulting Services. RFP 21-083 – August 10, 2021.

Vertechs Design Landscape Architects, 2023. 1Door4Care (1D4C) RFP CHEO Integrated Treatment Landscape Pland and Tree Georeferencing Information.

APPENDICES

- Appendix A Tree Inventory Data
- Appendix B Figure #2 Tree Inventory and CRZ for Proposed 1Door4Care Treatment Centre
- Appendix C– Site Photographs 1Door4Care Treatment Centre
- Appendix D- City of Ottawa Tree Protection Specifications

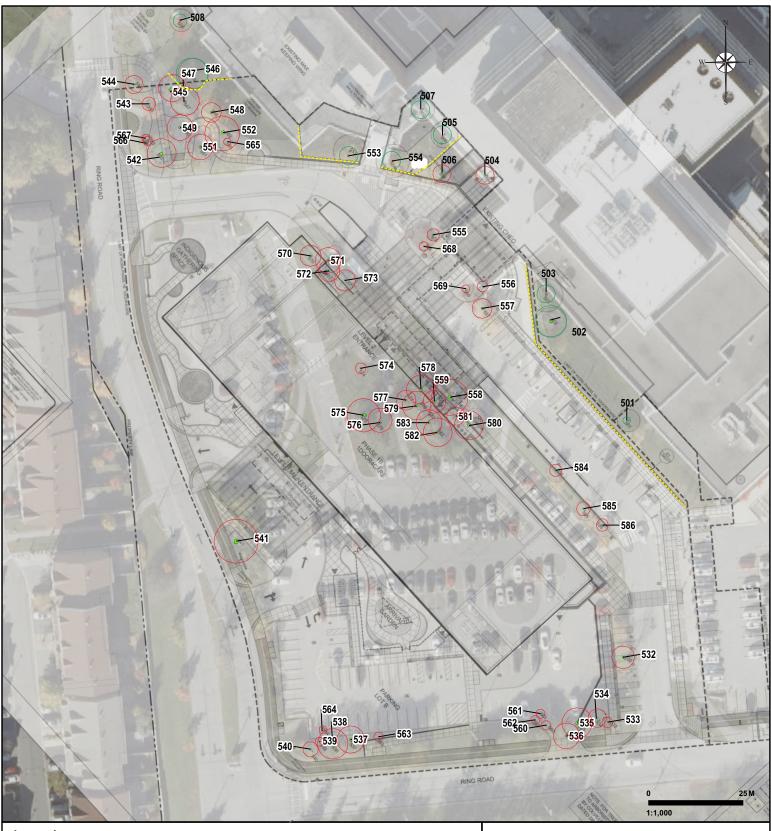
Appendix A Tree Inventory Data

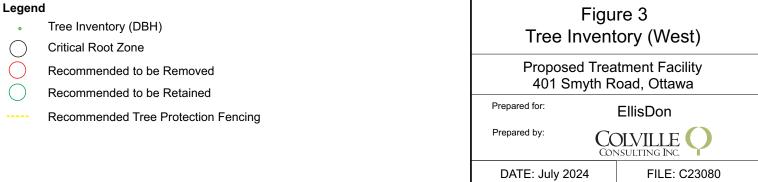
Tag #	Species	Scientific Name	Location	DBH (cm)	Critical Root Zone (CRZ) (cm)	Dripline	Health	Recommendation	Field Notes/Condition Comments	Zone	Northing	Easting
531	American Basswood	Tilia Americana	Treatment Facility	10	100	2	Good/Fair	Remove, construction	Multi stem, Good canopy	18T	5027582.53	448997.83
532	American Elm	Ulnus americana	Treatment Facility	30	300	4	Good/Fair	Remove, construction	Union at 2m, 80% canopy, some dieback	18T	5027568.94	448999.76
533	Cherry Plum	Prunus cerasifera	Treatment Facility	14,14,12,12	140	5	Good	Remove, construction	Coppice, at corner of driveway	18T	5027553.42	448996.89
534	American Elm	Ulnus americana	Treatment Facility	24	240	4	Fair/Poor	Remove, construction	60% canopy dieback	18T	5027552.34	448994.68
535	Red Pine	Pinus resinosa	Treatment Facility	40	400	4	Poor	Remove, construction	Lots of dieback, epicormic growth	18T	5027553.27	448988.94
536	Red Pine	Pinus resinosa	Treatment Facility	34	340	3	Good	Remove, construction	Good canopy, good taper	18T	5027549.83	448986.09
537	American Elm	Ulnus americana	Treatment Facility	36	360	6	Good	Remove, construction	Compacted soils, union at 2m	18T	5027547.43	448932.10
538	Sugar Maple	Acer saccharum	Treatment Facility	40	400	6	Fair/Poor	Remove, construction	Significant canopy dieback, missing codominant stem	18T	5027546.44	448926.75
539	American Elm	Ulnus americana	Treatment Facility	12	120	4	Good/Fair	Remove, construction	Sweep, good taper.	18T	5027546.74	448923.17
540	Cherry Plum	Prunus cerasifera	Treatment Facility	20,18	200	5	Good	Remove, grading	Multi-stem, sprawling	18T	5027547.09	448919.14
541	Scots Pine	Pinus sylvestris	Treatment Facility	58	580	6	Good	Remove, grading	slight lean, Good canopy.	18T	5027600.80	448896.76
542	White Spruce	Picea glauca	Treatment Facility	38	380	4	Fair	Remove, grading	Some canopy dieback, minor root damage	18T	5027705.26	448878.47
543	Cherry Plum	Prunus cerasifera	Treatment Facility	18	180	3	Good	Remove, grading	Good taper, healthy canopy.	18T	5027718.07	448875.28
544 545	Cherry Plum	Prunus cerasifera	Treatment Facility	24,18,14 36	240 360	3	Good Cood/Fair	Remove, grading	Multi Stem	18T 18T	5027723.48 5027722.56	448871.84 448881.28
545	White Spruce	Picea glauca	Treatment Facility	42		5	Good/Fair	Remove, grading	Some canopy dieback	18T	5027727.87	448885.80
540	Sugar Maple White Spruce	Acer saccharum	Treatment Facility Treatment Facility	38	420 380	5	Good/Fair Good	Retain Remove grading	Union at 1.5m, codominant No sign of disease	18T	5027721.64	448884.34
548	Norway Maple	Picea glauca	Treatment Facility	26	260	4	Good	Remove, grading		18T	5027718.03	448891.44
549	Sugar Maple	Acer platanoides Acer saccharum	Treatment Facility	34	340	4	Fair	Remove, grading Remove, construction	Good canopy, good taper. dieback in crown, broken branches removed.	18T	5027713.09	448883.92
551	White Spruce	Picea glauca	Treatment Facility	34	340	3	Fair	Remove, construction	Dieback in crown, good taper.	18T	5027707.69	4488883.92
552	Norway Maple	Acer platanoides	Treatment Facility	46	460	3	Good	Remove, construction	Good canopy	18T	5027709.60	448895.52
553	Norway Maple	Acer platanoides	Treatment Facility	24	240	4	Good	Retain	On slope, adjacent existing CHEO	18T	5027705.62	448928.51
554	Norway Maple	Acer platanoides	Treatment Facility	18	180	3	Good	Retain	On slope, adjacent existing CHEO	18T	5027703.71	448939.10
555	Japanese Lilac	Syringa reticulata	Treatment Facility	16	160	3	Good	Remove, construction	Multi Stem, >90% canopy	18T	5027685.39	448950.76
556	Japanese Lilac	Syringa reticulata	Treatment Facility	14	140	2	Fair/Poor	Remove, construction	Significant frost damage, reduced canopy.	18T	5027670.48	448963.15
557	Silver Maple	Acer saccharinum	Treatment Facility	20,26	260	4	Good	Remove, construction	Union at base.	18T	5027664.20	448963.95
558	Sugar Maple	Acer saccharum	Treatment Facility	48	480	5	Fair	Remove, construction	Two leaders, weak union at 2m.	18T	5027641.76	448955.31
559	White Spruce	Picea glauca	Treatment Facility	30	300	2	Fair/Poor	Remove, construction	leaning, codominant at top.	18T	5027640.56	448951.23
560	Common Buckthorn	Rhamnus cathartica	Treatment Facility	12	120	3	Good	Remove, grading	Multi-stem, Invasive	18T	5027551.53	448979.88
561	Common Buckthorn	Rhamnus cathartica	Treatment Facility	12	120	3	Good	Remove, grading	Multi-stem, Invasive	18T	5027554.55	448978.41
562	Common Buckthorn	Rhamnus cathartica	Treatment Facility	12	120	3	Good	Remove, grading	Multi-stem, Invasive	18T	5027552.96	448977.06
563	Common Buckthorn	Rhamnus cathartica	Treatment Facility	12	120	3	Good	Remove, grading	Multi-stem, Invasive	18T	5027548.44	448940.28
564	Common Buckthorn	Rhamnus cathartica	Treatment Facility	10	100	2	Good	Remove, grading	Multi-stem, Invasive	18T	5027550.42	448924.11
565	Common Buckthorn	Rhamnus cathartica	Treatment Facility	10	100	4	Good	Remove, construction	Multi-stem, Invasive	18T	5027705.30	448896.19
566	Common Buckthorn	Rhamnus cathartica	Treatment Facility	10,10,12	120	4	Good	Remove, construction	Multi-stem, Invasive	18T	5027708.98	448874.98
567	Common Buckthorn	Rhamnus cathartica	Treatment Facility	10	100	4	Good	Remove, construction	Multi-stem, Invasive	18T	5027710.35	448875.82
568	Japanese Lilac	Syringa reticulata	Treatment Facility	12	120	2	Good	Remove, construction	Mulched, Good condition	18T	5027680.89	448949.42
569	Japanese Lilac	Syringa reticulata	Treatment Facility	10	100	2	Good	Remove, construction	Mulched, good canopy	18T	5027668.64	448959.35
570	White Spruce	Picea glauca	Treatment Facility	28	280	3	Fair	Remove, construction	Codominant at top, branch die back throughout	18T	5027673.39	448922.22
571	White Spruce	Picea glauca	Treatment Facility	34	340	4	Fair	Remove, construction	Some Branch dieback, good taper.	18T	5027671.57	448926.09
572	White Spruce	Picea glauca	Treatment Facility	28	280	3	Fair	Remove, construction	Moderate branch dieback	18T	5027668.78	448926.34
573	Cherry Plum	Prunus cerasifera	Treatment Facility	16,18,18,28	280	7	Good	Remove, construction	Some rot on limb, multi stem	18T	5027667.81	448930.46
574	Cherry Plum	Prunus cerasifera	Treatment Facility	14,12,12	140	6	Good	Remove, construction	Multi-stem, good canopy.	18T	5027648.40	448931.45
575	White Spruce	Picea glauca	Treatment Facility	44	440	4	Fair	Remove, construction	Branch dieback, topped.	18T	5027636.29	448931.60
576	White Spruce	Picea glauca	Treatment Facility	32	320	3	Fair	Remove, construction	Branch dieback, topped.	18T	5027633.51	448934.92
577	White Spruce	Picea glauca	Treatment Facility	26	260	3	Fair/Poor	Remove, construction	Sweep mid trunk, branch dieback, trunk wound	18T	5027640.96	448943.74
578	White Spruce	Picea glauca	Treatment Facility	38	380	6	Good/Fair	Remove, construction	Branch dieback in crown, good taper	18T	5027643.79	448947.66
579	White Spruce	Picea glauca	Treatment Facility	38	380	4	Good/Fair	Remove, construction	Dieback at top of crown	18T	5027639.51	448946.53
580	White Spruce	Picea glauca	Treatment Facility	38	380	4	Good/Fair	Remove, construction	Good taper, some branch dieback	18T	5027634.29	448960.37
581	Cherry Plum	Prunus cerasifera	Treatment Facility	20,20,24	240	7	Good	Remove, construction	Multi-stem, suckering at previous limb removal	18T	5027636.73	448956.91
582	White Spruce	Picea glauca	Treatment Facility	38	380	3	Fair	Remove, construction	Slight lean, branch dieback	18T	5027632.45	448952.08
583	White Spruce	Picea glauca	Treatment Facility	34	340	4	Fair	Remove, construction	Branch dieback, reduced canopy.	18T	5027635.02	448949.80
584	Norway Maple	Acer platanoides	Treatment Facility	16	160	3	Fair	Remove, construction	Dead branch, reduced canopy	18T	5027620.37	448982.23
585	Norway Maple	Acer platanoides	Treatment Facility	18	180	2	Fair	Remove, construction	Frost crack on trunk, weak union at 170cm.	18T	5027610.32	448990.41
586	Norway Maple	Acer platanoides	Treatment Facility	16	160	2	Fair	Remove, construction	Branch dieback, reduced canopy.	18T	5027605.30	448995.24
501	Apple sp.	Malus sp.	Treatment Facility	10,10	100	4	Good	Retain	multi stem, fruit bearing, mid slope adjacent roadway	18T	5027632.37	449001.93
502	American Basswood	Tilia american	Treatment Facility	42	420	6	Good	Retain	Top of slope along terraced area, wide canopy.	18T	5027659.74	448980.56
503	Russian Olive	Elaeagnus angustifolia	Treatment Facility	30	300	6	Good	Retain	Along top of slop, recommend pruning, overhang onto sidewalk	18T	5027667.16	448980.26
504	Chinese Crab Apple	Malus hupehensis	Treatment Facility	18	180	4	Fair/Good	Remove, construction	Reduced photo period due to location, heavy groundcover, some dieback	18T	5027701.43	448962.01
505	Cherry Plum	Prunus cerasifera	Treatment Facility	12	120	4	Fair/Good	Retain	Reduced photo period due to location, heavy groundcover, some dieback	18T	5027711.28	448952.41

Tag #	Species	Scientific Name	Location	DBH (cm)	Critical Root Zone (CRZ) (cm)	Dripline	Health	Recommendation	Field Notes/Condition Comments	Zone	Northing	Easting
506	Common Buckthorn	Rhamnus cathartica	Treatment Facility	12	120	4	Good	Remove, Invasive	On slope, smaller specimens in vicinity	18T	5027701.75	448950.95
507	Cherry Plum	Prunus cerasifera	Treatment Facility	18	180	4	Fair/Good	Retain	Reduced photo period due to location, heavy groundcover, some dieback	18T	5027717.49	448947.75
508	Red Maple	Acer rubrum	Treatment Facility	18	180	4	Good	Retain	Fresh mulch, good taper, healthy canopy.	18T	5027740.45	448882.87

Appendix B

Figure #2 - Tree Inventory and CRZ for 1DOOR4CARE Treatment Centre





Appendix C

Site Photographs - Proposed 1DOOR4CARE Treatment Centre

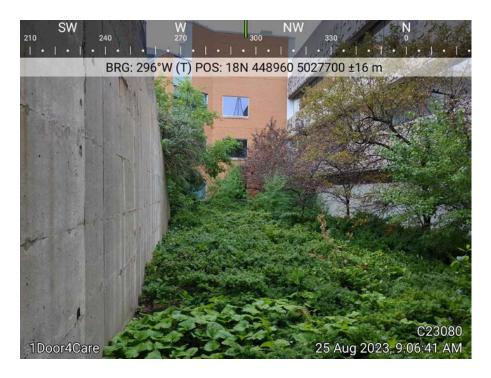


Photo 1: Landscaping adjacent existing hospital below drop off area.



Photo 2: Viewing northwest at manicured area north of drop off area.



Photo 3: Trees adjacent walking path on northwest portion of proposed development



Photo 4: Vegetation adjacent existing hospital staff access



Photo 5: View of trees to be removed in footprint of new building.



Photo 6: View of landscaped trees southeast of existing patient drop off door.



Photo 7: View of trees to be removed southwest of patient drop off door.



Photo 8: View of trees and vegetation in hedgerow adjacent Ring Road.



Photo 9: Example of vegetation conditions within hedgerow along Ring Road.



Photo 10: Cluster of trees in landscaped area southwest of CHEO main entrance.



Photo 11: Tree #534 in poor/fair condition with significant canopy dieback.



Photo 12: Tree #556 adjacent CHEO main entrance, fair condition with reduced canopy.



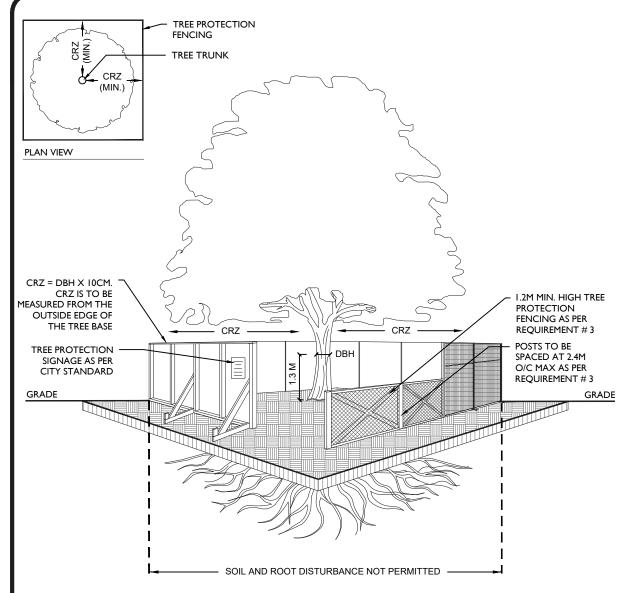
Photo 13: Tree #546, weak union at 1.5 metres.



Photo 14: Tree #562, example of larger DBH Common Buckthorn present in hedgerows around parking area.

Appendix D

City of Ottawa Tree Protection Specifications



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 CR2, 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



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