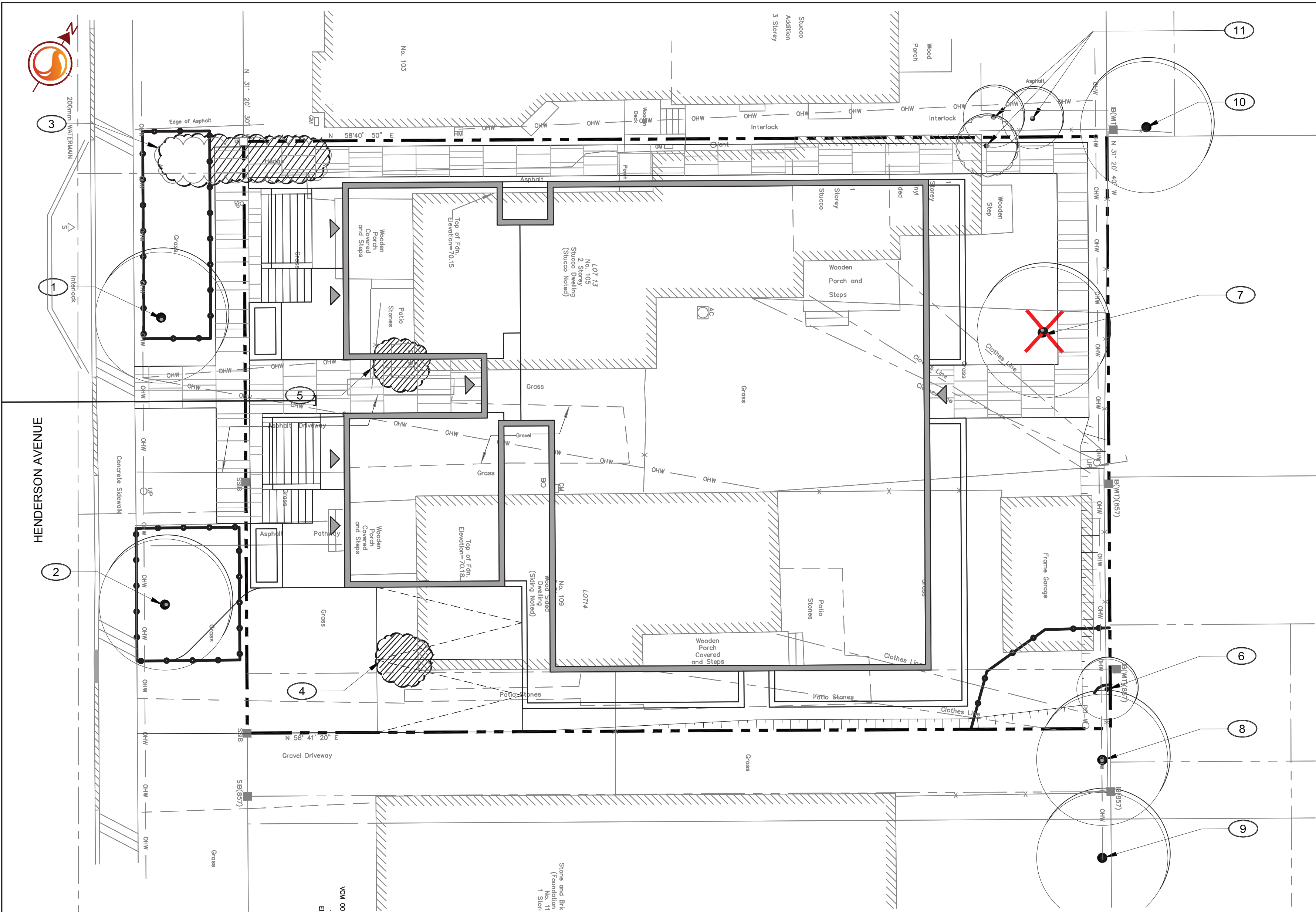


\\va-cad\proj\160401351_1105-109 Henderson design\drawing\160401351_1B.dwg
20/03/2019 12:31 PM By: cadman, lucas



1 TREE PRESERVATION PLAN

1:100

TREE PRESERVATION NOTES

1. NO VEGETATION SHALL BE REMOVED WITHOUT MUNICIPAL WRITTEN APPROVAL.
2. LOCATION OF EXISTING TREES IS FOR REFERENCE ONLY AND SHALL BE CONFIRMED BY AN ARBORIST AND SURVEYOR.
3. NO VEGETATION REMOVAL SHALL OCCUR BETWEEN APRIL 15 AND JULY 31 OF ANY YEAR TO PROTECT BREEDING MIGRATORY BIRDS, AS WELL AS AT RISK BAT SPECIES. SHALL TREE REMOVAL DURING THIS PERIOD BY UNAVOIDABLE, THE CONTRACTOR IS REQUIRED TO CONDUCT A NESTING SURVEY BY A REGISTERED PROFESSIONAL AVIAN BIOLOGIST TO IDENTIFY AND ENSURE NO NESTING ACTIVITIES ARE PRESENT. TREE REMOVAL WILL BE ALLOWED WITHIN FIVE (5) DAYS OF CONDUCTING THE SURVEY.
4. CONTRACTOR SHALL ENSURE THE PROTECTION OF MATURE TREES IDENTIFIED TO BE RETAINED. TREE PROTECTION FENCING SHALL BE INSTALLED AT THE CRITICAL ROOT ZONE (CRZ) OF TREES WHERE THE CRZ IS ESTABLISHED AS BEING 10 CENTIMETRES FROM THE TRUNK OF A TREE FOR EVERY CENTIMETRE OF TRUNK DIAMETER AT BREAST HEIGHT (DBH). THE CRZ IS CALCULATED AS DBH X 10 CM. TREE PROTECTION FENCING SHALL BE INSTALLED AS DESIGNED.
5. DURING EXCAVATION EQUIPMENT MUST BE MAINTAINED WITHIN THE CONFINES OF THE WORK AREA SO AS NOT TO DISRUPT ANY TURF OR TREE ROOTS UNNECESSARILY. DO NOT PLACE ANY MATERIAL OR EQUIPMENT WITHIN THE CRITICAL ROOT ZONE (CRZ) OF ANY TREE TO BE RETAINED.
6. CONTRACTOR SHALL ENSURE THAT NO FILL WILL BE ALLOWED TO OCCUR ON THE SURFACE ABOVE THE CRITICAL ROOT ZONE (CRZ) OF TREES.
7. ALL EXCAVATED MATERIAL, INCLUDING IMPORTED MATERIAL, MUST BE REMOVED IMMEDIATELY AND NOT PLACED ON GRASS OR NEAR TREES IN ORDER TO PREVENT ROOT DAMAGE, ACCIDENTAL HITTING OF ADJACENT TREES, AND TURF DAMAGE OUTSIDE OF WORK AREA.
8. CONTRACTOR SHALL MINIMIZE SOIL COMPACTION BY KEEPING OPERATION OF MACHINERY AND EQUIPMENT CONFINED TO DESIGNATED WORK AREA.
9. CONTRACTOR SHALL KEEP A SPILL KIT ON SITE.
10. CONTRACTOR SHALL DEVELOP AN EMERGENCY RESPONSE PLAN.
11. CONTRACTOR SHALL AVOID SOIL CONTAMINATION AND FUTURE LIABILITY BY CONFINING THE OILING AND REFUELING OF MACHINERY AND EQUIPMENT TO DESIGNATED STAGING AREA.
12. NO FUEL IS TO BE STORED WITHIN THE CRITICAL ROOT ZONE (CRZ) OF ANY TREE AND EXHAUST FUMES FROM ALL EQUIPMENT MUST NOT BE DIRECTED TOWARDS ANY TREE'S CANOPY.
13. CONTRACTOR SHALL PREVENT ANY DAMAGE TO THE ROOT SYSTEM, TRUNK OR BRANCHES OF ANY TREES TO BE RETAINED ON SITE AND ON ADJACENT PROPERTIES.
14. STORAGE OF EQUIPMENT AND VEHICLES WITHIN THE CRITICAL ROOT ZONE (CRZ) OF EXISTING TREES IS STRICTLY PROHIBITED.
15. WHERE LIMBS OR PORTIONS OF TREES ARE REMOVED TO ACCOMMODATE CONSTRUCTION WORK, THEY WILL BE REMOVED CAREFULLY IN ACCORDANCE WITH ACCEPTED ARBORICULTURAL PRACTICES.
16. WHERE NECESSARY, THE TREES WILL BE GIVEN AN OVERALL PRUNING TO RESTORE THEIR APPEARANCE. NOT MORE THAN ONE THIRD OF THE TOTAL BRANCHING SHALL BE REMOVED DURING A SINGLE OPERATION. THE SERVICES OF A CERTIFIED ARBORIST SHALL BE RETAINED FOR THIS TASK.

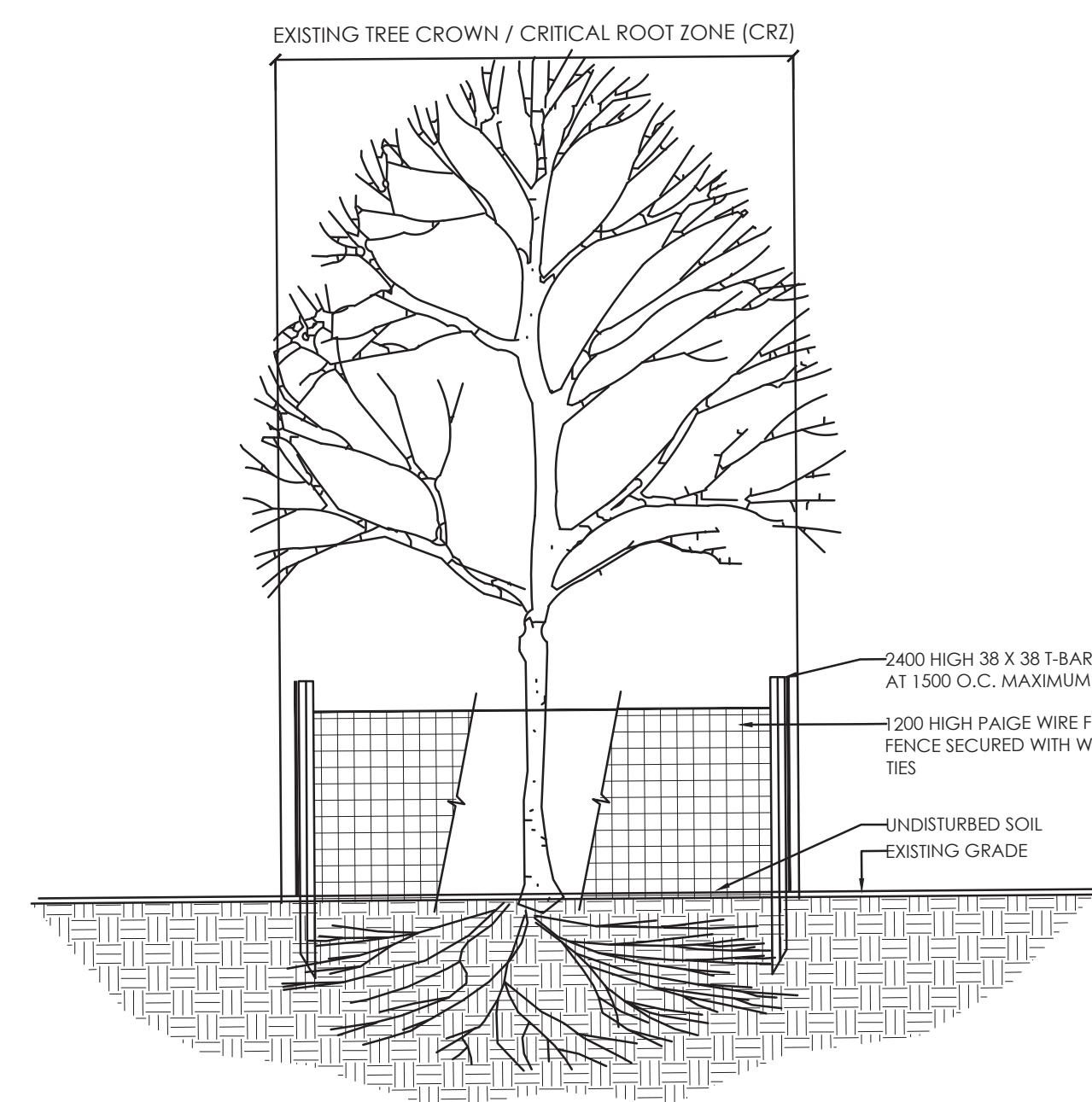
WORK WITHIN PROTECTED AREAS

1. EXCAVATION WORK:
 - TO ENSURE THE ROOTS ARE NOT DISTURBED MORE THAN NECESSARY AND WHERE EXCAVATION WORKS ARE UNAVOIDABLE WITHIN THE CRZ OF TREES, THE FOLLOWING MITIGATION MEASURES SHALL BE USED:
 - BALL EXCAVATION WITHIN THE CRZ OF TREES SHALL BE BY HAND OR HYDRO EXCAVATION USING THE SMALLEST TOOLS. ROOT CUTTING SHALL BE MADE USING A SHARP SPADE OR KNIFE AT THE LIMIT OF DISTURBANCE PRIOR TO ANY CONSTRUCTION ACTIVITIES.
 - THE CONTRACTOR SHALL ONLY TUNNEL OR BORE WITHIN THE CRZ, INSTEAD OF CREATING A TRENCH.
 - ANY ROOTS THAT ARE EXPOSED BY CONSTRUCTION ACTIVITIES MUST BE COVERED WITH NATIVE TOPSOIL IMMEDIATELY, TO ENSURE THAT THE ROOTS DO NOT DRY OUT OR HAVE ANY FURTHER DAMAGE OCCUR TO THEM.
 - IN ALL THOSE INSTANCES WHERE ROOT PRUNING IS REQUIRED, THE SERVICE OF A CERTIFIED ARBORIST OR QUALIFIED TREE WORKER UNDER THE SUPERVISION OF A CERTIFIED ARBORIST SHALL BE RETAINED. IN ADDITION, ALL REMEDIAL WORKS MUST BE CONDUCTED BY A CERTIFIED CARE PROFESSIONAL TO ENSURE PROPER CARE IS ADMINISTERED IN ORDER TO ENABLE THE CONTINUED HEALTH OF THE TREES.
2. GRADING WORK:
 - WHERE RE-GRADING IS REQUIRED WITHIN THE CRZ, IT SHOULD BE PERFORMED BY HAND UNDER THE SUPERVISION OF A CERTIFIED ARBORIST.

EXISTING VEGETATION SCHEDULE

TREE ASSESSMENT CONDUCTED: March 20, 2018

PLANT ID	BOTANICAL NAME	COMMON NAME	DBH (cm)	HEALTH/ CONDITION	REMARKS
1	Acer spp	Maple	30	Good	Street tree; TO BE RETAINED
2	Tilia americana	Basswood	50	Good	Street tree; TO BE RETAINED
3	Syringa vulgaris	Common Lilac	N/A	Good	Group of shrubs; partly inside right-of-way; SHRUB ADJACENT TO SIDEWALK TO BE RETAINED
4	Syringa vulgaris	Common Lilac	N/A	Good	Shrub; TO BE REMOVED
5	Syringa vulgaris	Common Lilac	N/A	Good	Shrub; TO BE REMOVED
6	Acer negundo	Manitoba Maple	34.6	Fair	Tree shoot from dead stump located at 408 Nelson. Existing wood fence separate tree shoot from stump; TO BE RETAINED
7	Acer negundo	Manitoba Maple	20	Good	Specimen tree; TO BE REMOVED
8	Acer negundo	Manitoba Maple	50	Good	Shared property of 113 Henderson Ave and 408 Nelson Street; Existing Wood Fence separate the ground section of the tree from the trunk; TO BE RETAINED
9	Acer negundo	Manitoba Maple	70	Good	410 Nelson Street
10	Acer spp	Maple	50	Good/Fair	392 Nelson Street
10	Acer negundo	Manitoba Maple	15	Good	99 Henderson Avenue

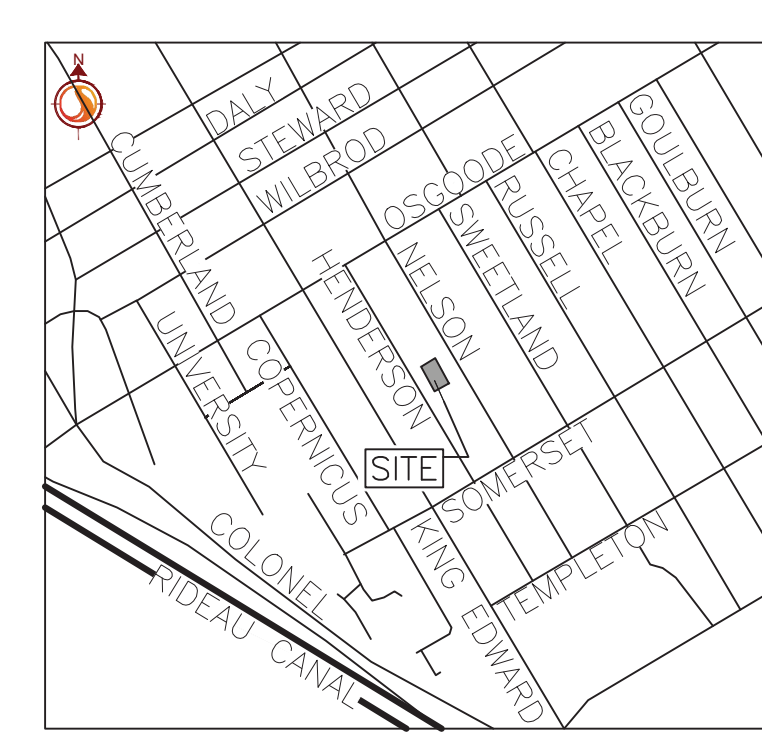


NOTES:

1. GROUPS OF TREES TO BE PROTECTED SHALL BE TREATED IN A LIKE MANNER WITH FENCING AROUND THE ENTIRE STAND(S).
2. PRUNE BRANCHES TO REMOVE DAMAGED OR OBJECTIONABLE BRANCHES. DO NOT PRUNE LEADERS.
3. TREE PROTECTION SHALL REMAIN UNTIL SUBSTANTIAL PERFORMANCE OF THE PROJECT.
4. IF TREES ARE BEING AFFECTED BY CONSTRUCTION, A WATER AND FERTILIZING PROGRAM WILL BE REQUIRED TO THE SATISFACTION OF THE CITY.

2 TEMPORARY TREE PROTECTION FENCE - SECTION

N.T.S.



Copyright Reserved
The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.
The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Legend

- EXISTING DECIDUOUS TREE
- EXISTING SHRUBS AREA
- TREE IDENTIFICATION KEY
- EXISTING TREE TO BE REMOVED
- EXISTING WOODED AREA TO BE REMOVED
- PROPOSED TEMPORARY TREE PROTECTION FENCE
- PROPERTY LINE

Notes

1. TOPOGRAPHIC SURVEY AND BENCHMARK COMPLETED BY ANNIS, O'SULLIVAN, VOLLEBEKK LTD. DATED AUGUST 25, 2017
2. SITE PLAN PREPARED BY PROJECT1 STUDIO DATED APRIL 3, 2018
3. GEOTECHNICAL REPORT CP-17-0638 PREPARED BY McIntOSH PERRY DATED MARCH 2018.

1	ISSUED FOR SITE PLAN APPROVAL	ILL	ILL	18.05.07
Revision		By	Appd.	YY.MM.DD

File Name:	160401405-DB	AWO	ILL	ILL	18.05.03
		Dwn.	Chkd.	Dsgn.	YY.MM.DD

Permit-Seal



Client/Project

TC UNITED GROUP
800 INDUSTRIAL AVENUE

APARTMENT BUILDING
105-109 HENDERSON AVENUE
OTTAWA, ONTARIO

Title

TREE PRESERVATION PLAN

Project No. 160401351	Scale 1:100	0 1 3 5m
Drawing No.	Sheet	Revision