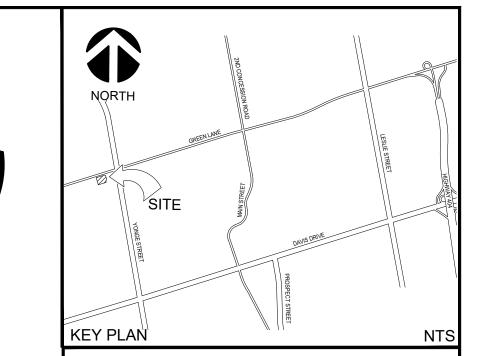


1 TREE PRESERVATION PLAN





T000 TREE INVENTORY NUMBER - TREE TO BE PRESERVED/RETAINED TOOO TREE INVENTORY NUMBER - TREE TO BE PRESERVED WITH INJURY

TO00 TREE INVENTORY NUMBER - TREE TO BE REMOVED SURVEYED TREE LOCATION

INDIVIDUAL TREE TO BE PRESERVED WITH INJURY

INDIVIDUAL TREE TO BE REMOVED DUE TO PROPOSED CONSTRUCTION

TREE PROTECTION ZONE (TPZ) FOR TREE LOCATED WITHIN YORK REGIONAL ROAD ALLOWANCE APPROXIMATE DRIPLINE OF TREE CANOPY

ENCROACHMENT WITHIN THE

TREE PRESERVATION FENCE PROPERTY BOUNDARY

— — TREE INVENTORY BOUNDARY

JD 2025-03-14 PM ISSUED FOR SPA ISSUED FOR SPA JD 2024-12-12 PM REVISIONS TO DRAWING

ALL PREVIOUS ISSUES OF THIS DRAWING ARE SUPERSEDED

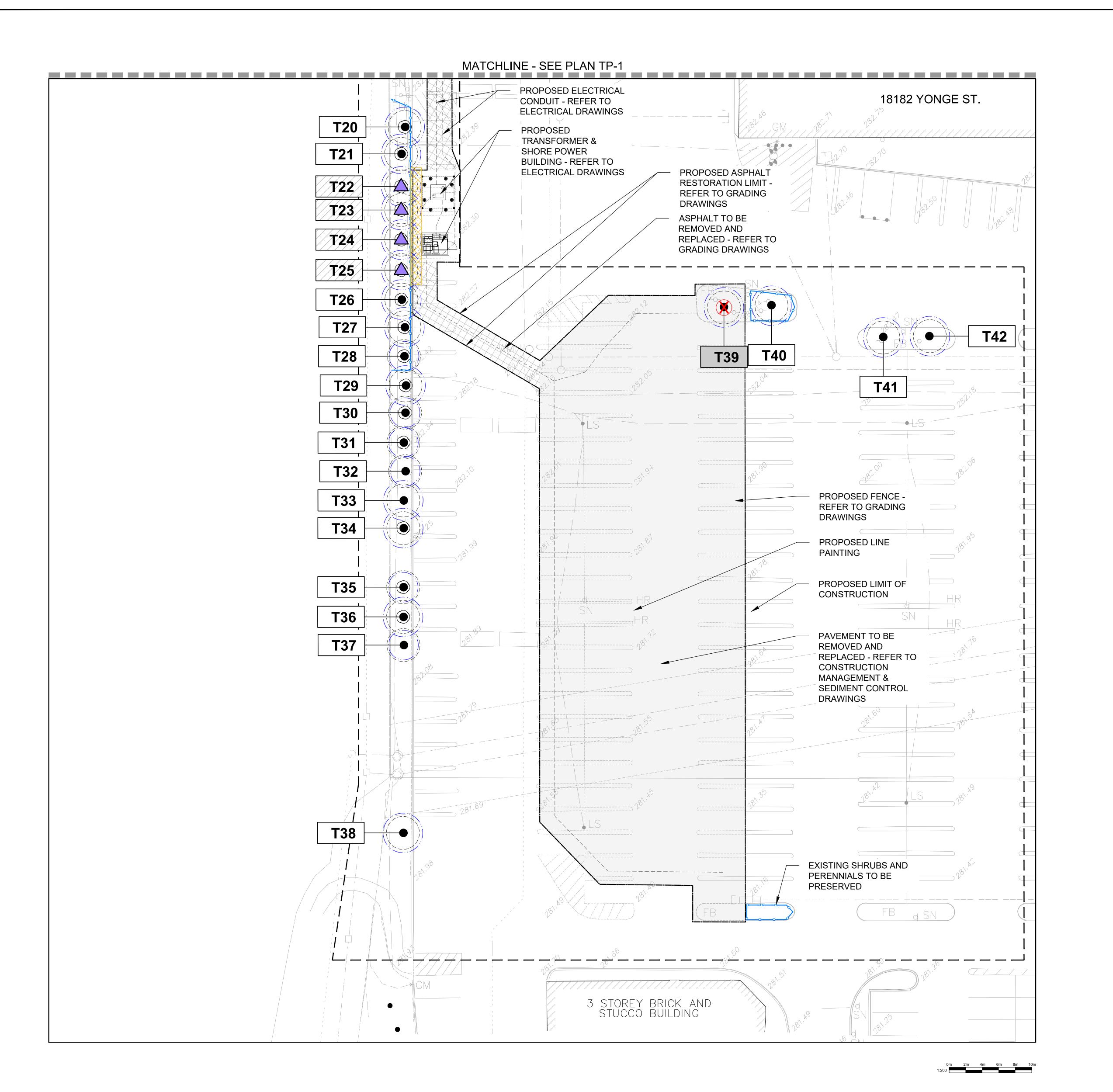
TOWN OF NEWMARKET

COSTCO **BUSINESS CENTRE** SHEET TITLE

TREE PRESERVATION PLAN



NOVEMBER 2024



NORTH



T000 TREE INVENTORY NUMBER - TREE TO BE PRESERVED/RETAINED TOOO TREE INVENTORY NUMBER - TREE TO BE PRESERVED WITH INJURY

SURVEYED TREE LOCATION

T000 TREE INVENTORY NUMBER - TREE TO BE REMOVED

INDIVIDUAL TREE TO BE PRESERVED WITH INJURY

INDIVIDUAL TREE TO BE REMOVED DUE TO PROPOSED CONSTRUCTION

TREE PROTECTION ZONE (TPZ) FOR TREE LOCATED WITHIN YORK

REGIONAL ROAD ALLOWANCE APPROXIMATE DRIPLINE OF TREE CANOPY

ENCROACHMENT WITHIN THE

TREE PRESERVATION FENCE

PROPERTY BOUNDARY — — TREE INVENTORY BOUNDARY

JD 2025-03-14 PM ISSUED FOR SPA ISSUED FOR SPA JD 2024-12-12 PM REVISIONS TO DRAWING

ALL PREVIOUS ISSUES OF THIS DRAWING ARE SUPERSEDED

TOWN OF NEWMARKET

COSTCO **BUSINESS CENTRE** SHEET TITLE

TREE PRESERVATION PLAN

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RTIFIED RBORIST	PETER McNAMAI ISA Certified Arbo ON-1140A John McHemme

NOVEMBER 2024

211-07806-00-P01

TREE PRESERVATION PLAN

1:200

Tree #	Botanical Name	Common Name	Qty	DBH (cm)	Tre	e Condit	ion	Dripline	Tree Location /	Address	Tree Protection	Recommendation	Comments - Removal / Preservation
					TI	CS	CV	- Radius (m)	Applicable By- law		Zone		
Costco Wholesale - 18182 Yonge St. Newmarket													
T1	Picea pungens	Blue Spruce	1	31	G	G	G-F	3.5	Private	18182 Yonge St.	2.4	Preserve - TPZ Encroachment w/ no Injury	Lower deadwood approx. 15%. Pruned from light pole.
T2	Picea pungens	Blue Spruce	1	31	G	G	G	3.5	Private	18182 Yonge St.	2.4	Preserve - TPZ Encroachment w/ no Injury	
ТЗ	Picea pungens	Blue Spruce	1	32	G	F	F	3.5	Private	18182 Yonge St.	2.4	Preserve - TPZ Encroachment w/ no Injury	Deadwood approx. 15-20%. Brown needles. Secondary, smaller leader.
Т4	Quercus robur 'fastigiata'	Columnar Oak	1	22	G	G	G	3.0	Private	18182 Yonge St.	2.4	Preserve - TPZ Encroachment w/ no Injury	Multi-stemmed at base.
T5	Quercus robur 'fastigiata'	Columnar Oak	1	19	G	G	G	3.0	Private	18182 Yonge St.	2.4	Preserve - TPZ Encroachment w/ no Injury	
Т6	Acer rubrum	Red Maple	1	5	F	F	G	2.0	Private	18182 Yonge St.	1.8	Preserve - TPZ Encroachment w/	Injury at base. Witches Broom.
Т7	Acer rubrum	Red Maple	1	5	G	F	G	2.0	Private	18182 Yonge St.	1.8	Preserve - TPZ Encroachment w/	Witches Broom.
Т8	Acer rubrum	Red Maple	1	5	G-F	F	G	2.0	Private	18182 Yonge St.	1.8	Preserve - TPZ Encroachment w/	Buried root flare.
Т9	Quercus robur 'fastigiata'	Columnar Oak	1	17	G	G	G	2.5	Private	18182 Yonge St.	2.4	Preserve - TPZ Encroachment w/	
T10	Quercus robur 'fastigiata'	Columnar Oak	1	18,15	G	G	G	2.5	Private	18182 Yonge St.	2.4	Preserve - TPZ Encroachment w/	
T11	Quercus robur 'fastigiata'	Columnar Oak	1	22	G	G	G	2	Private	18182 Yonge St.	2.4	no Injury Preserve - TPZ Encroachment w/	
T12	Quercus robur 'fastigiata'	Columnar Oak	1	7	G	G	G	1.5	Private	18182 Yonge St.	1.8	no Injury Remove	Buried root flare.
T13	Quercus robur 'fastigiata'	Columnar Oak	1	7	G	G	G	1.5	Private	18182 Yonge St.	1.8	Remove	Buried root flare.
T14	Quercus robur 'fastigiata'	Columnar Oak	1	6	G	G	G	1.5	Private	18182 Yonge St.	1.8	Remove	Buried root flare.
			1										
T15	Quercus robur 'fastigiata'	Columnar Oak	1	6	G	G	G	1.5	Private	18182 Yonge St.	1.8	Remove Preserve - TPZ Encroachment w/	Buried root flare.
T16	Quercus robur 'fastigiata'	Columnar Oak	1	22	G	G	G	2.5	Private	18182 Yonge St.	2.4	no Injury Preserve - TPZ Encroachment w/	
T17	Quercus robur 'fastigiata'	Columnar Oak	1	15,10	G	G	G	2.5	Private	18182 Yonge St.	2.4	no Injury Preserve - TPZ Encroachment w/	
T18	Quercus robur 'fastigiata'	Columnar Oak	1	19	G	G	G	2	Private	18182 Yonge St.	2.4	no Injury Preserve - TPZ Encroachment w/	
T19	Quercus robur 'fastigiata'	Columnar Oak	1	19	G	G	G	2	Private	18182 Yonge St.	2.4	no Injury Preserve - TPZ Encroachment w/	
T20	Quercus robur 'fastigiata'	Columnar Oak	1	15,11	G	G	G	2	Private	18182 Yonge St.	2.4	no Injury	Multiple leaders.
T21	Quercus robur 'fastigiata'	Columnar Oak	1	16	G	G	G	2	Private	18182 Yonge St.	2.4	Preserve - TPZ Encroachment w/ no Injury	Deadwood approx. 10%
T22	Quercus robur 'fastigiata'	Columnar Oak	1	18	G	G	G	2	Private	18182 Yonge St.	2.4	Preserve - With injury	Injury will be mitigated through air-spade mitigation.
T23	Quercus robur 'fastigiata'	Columnar Oak	1	16	G	G	G	2	Private	18182 Yonge St.	2.4	Preserve - With injury	Deadwood approx. 10%. Injury will be mitigated through air-spade mitigation.
T24	Quercus robur 'fastigiata'	Columnar Oak	1	10,8,8	G	G	G	2	Private	18182 Yonge St.	2.4	Preserve - With injury	Injury will be mitigated through air-spade mitigation.
T25	Quercus robur 'fastigiata'	Columnar Oak	1	10,10	G	G	G	2	Private	18182 Yonge St.	2.4	Preserve - With injury	Deadwood approx. 10%. Injury will be mitigated through air-spade mitigation.
T26	Quercus robur 'fastigiata'	Columnar Oak	1	12	G	G	G	2	Private	18182 Yonge St.	2.4	Preserve - TPZ Encroachment w/ no Injury	Deadwood approx. 5%
T27	Quercus robur 'fastigiata'	Columnar Oak	1	10,10,9	G	G	G	2	Private	18182 Yonge St.	2.4	Preserve - TPZ Encroachment w/ no Injury	
T28	Quercus robur 'fastigiata'	Columnar Oak	1	9,8,8	G	G	G	2	Private	18182 Yonge St.	1.8	Preserve	Full TPZ to be preserved.
T29	Quercus robur 'fastigiata'	Columnar Oak	1	12,10	G	G-F	G	2	Private	18182 Yonge St.	2.4	Retain	Small broken limbs lower canopy.
T30	Quercus robur 'fastigiata'	Columnar Oak	1	9,7	G	G	G	2	Private	18182 Yonge St.	1.8	Retain	
T31	Quercus robur 'fastigiata'	Columnar Oak	1	10	G	G	G	2	Private	18182 Yonge St.	1.8	Retain	Lower canopy pruned from parking.
T32	Quercus robur 'fastigiata'	Columnar Oak	1	9,9,8	G	G	G	2	Private	18182 Yonge St.	1.8	Retain	Lower canopy pruned from parking.
T33	Quercus robur 'fastigiata'	Columnar Oak	1	11,9,9	G	G	G	2	Pri va te	18182 Yonge St.	2.4	Retain	
T34	Quercus robur 'fastigiata'	Columnar Oak	1	11	G	G	G-F	2	Private	18182 Yonge St.	2.4	Retain	Deadwood approx. 15%. Canopy thinner than others.
T35	Quercus robur 'fastigiata'	Columnar Oak	1	9,9,9	G-F	G	G	2	Pri va te	18182 Yonge St.	1.8	Retain	Injury lower trunk.
T36	Quercus robur 'fastigiata'	Columnar Oak	1	15,10	G	G	G	2	Private	18182 Yonge St.	2.4	Retain	
T37	Quercus robur 'fastigiata'	Columnar Oak	1	10	G	G	G	2	Private	18182 Yonge St.	1.8	Retain	Pruned from parking.
T38	Acer rubrum	Red Maple	1	13	G-F	G	F	2	Pri va te	18182 Yonge St.	2.4	Retain	20% deadwood. Decay at base.
T39	Gleditsia tricanthos	Honey Locust	1	13	G G	G	G	2	Private	18182 Yonge St.	2.4	Remove	Small injury mid-trunk.
T40	Gleditsia tricanthos	Honey Locust	1	12	G	G-F	G	2	Private	18182 Yonge St.	2.4	Preserve	Full TPZ to be preserved.
			1					2					· ·
T41	Gleditsia tricanthos	Honey Locust	1	11	G	G	G	2	Private	18182 Yonge St.	2.4	Retain	Root flare present
Costco Who	Gleditsia tricanthos Dlesale - Green Lane West, No	Honey Locust	1	11	G	G	G	2	Private	18182 Yonge St.	2.4	Retain	Root flare present.
T43	Acer tataricum	Tatarian Maple	1	5	G	G	G	1.5	Region	Green Ln. W	2.4	Preserve - With injury	Injury will be mitigated through air-spade mitigation.
T44	Acer tataricum	Tatarian Maple	1	6	G	G	G	1.5	Region	Green Ln. W	2.4	Preserve - With injury	Injury will be mitigated through air-spade mitigation.
	Acer tataricum		1										Injury will be mitigated through air-spade mitigation.
T45	Acertataneam	Tatarian Maple	1	5	G	G	G	1.5	Region	Green Ln. W	2.4	Preserve - With injury	injuly will be illugated tillough air-spade mitigation.

TREE PRESERVATION TABLE COLOUR LEGEND

TREE TO BE RETAINED

TREE TO BE PRESERVED

TREE TO BE PRESERVED

- TPZ ENCROACHMENT WITH NO INJURY

TREE TO BE PRESERVED

- TPZ ENCROACHMENT WITH INJURY

TREE TO BE REMOVED

TREE PRESERVATION TABLE LEGEND

Tree Assessment Criteria:

Trunk Integrity (T.I.): this is an assessment of the trunk for any defects or weaknesses .It is measured on a scale of poor, fair, good.

Canopy Structure (C.S.): this is an assessment of the scaffold branches, unions and the canopy of the tree. This is measured on a scale of poor, fair, good.

Canopy Vigour (C.V.): this is an assessment of the health of the tree and assess the amount of deadwood and the live growth in the crown as compared to a 100% healthy tree. the size, colour and amount of foliage are also considered in this category. This is measured on a scale of poor, fair,

Tree Condition:

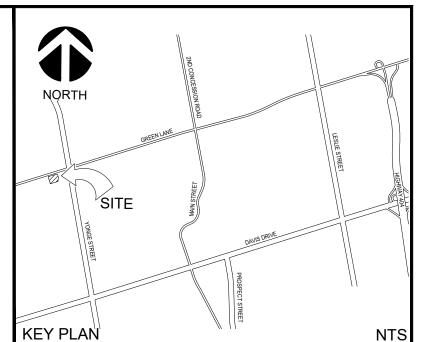
- G: Good tree displays less than 15% deficiency / defect within the given tree assessment criteria (TI,CS,CV)
- F: Fair tree displays 15-50% deficiency / defect within the given tree assessment criteria
- P: Poor tree displays greater than 40% deficiency / defect within the given tree assessment
- criteria (TI,CS,CV)

 D: Dead tree displays 100% deficiency / defect within the canopy vigour tree assessment

Recommendation:

Retain: tree is in good condition and will not be impacted by construction / grading as the tree is more than 6m the limits of work.

Remove: tree is either in poor condition or dead or will be significantly impacted by grading and construction limits and will not survive.



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JD 2025-03-14 PM

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JD 2024-12-12 PM

REVISIONS TO DRAWING

BY DATE APPR.

ALL PREVIOUS ISSUES OF THIS DRAWING ARE SUPERSEDED

IFNT

TOWN OF NEWMARKET

COSTCO BUSINESS CENTRE

TREE PRESERVATION
TABLES





DESIGNED	DRAWN			CHECKED
JD		JD		PM
SCALE 1:200		DATE	١	NOVEMBER 2024
PROJECT NUMBER			D	WG. NUMBER

TREE PRESERVATION NOTES AND GUIDELINES

GENERAL TREE PRESERVATION GUIDELINES:

WORK WITHIN A TREE PROTECTION ZONE

- IF WORK MUST BE CONDUCTED WITHIN A TREE PROTECTION ZONE THE CONTRACTOR SHOULD
- MINIMIZE SOIL COMPACTION AND MECHANICAL ROOT DAMAGE BY UTILIZING ONE OF THE FOLLOWING
- 1. APPLYING 150-300mm OF MULCH TO AREA. UPON COMPLETION REMOVE EXCESS MULCH LEAVING A 100mm DEPTH LAYER OF MULCH.
- 2. LAYING 20mm THICK PLYWOOD OR 100X100mm WOOD BEAMS OVER A 100+MM THICK LAYER OF WOOD CHIP MULCH. UPON COMPLETION REMOVE PLYWOOD AND LEAVE MULCH LAYER IN PLACE.
- 3. APPLYING 100-150mm DEPTH OF GRAVEL OVER A TAUT. STAKED GEOTEXTILE FABRIC, UPON COMPLETION REMOVE GRAVEL AND GEOTEXTILE. 4. PLACING COMMERCIAL LOGGING OR ROAD MATS ON TOP OF A MULCH LAYER. UPON COMPLETION
- REMOVE MATS. STONE, GEOTEXTILE, AND MULCH EXCEEDING 100mm THICK WILL BE REMOVED FROM THE TREE PRESERVATION AREA ONCE THE THREAT OF SOIL OR ROOT DAMAGE HAS

TREE PROTECTION ZONE:

APPLIES TO TREES NOTED TO BE PRESERVED. THESE TREES ARE TO BE PRESERVED AND WILL HAVE SILT / TREE PROTECTION FENCING INSTALLED AT ALONG THE LIMIT OF GRADING / LIMIT OF WORK TO ESTABLISH THE TREE PROTECTION ZONE. ANY DAMAGE TO TREES SUCH AS BROKEN LIMBS, DAMAGE TO ROOTS, OR WOUNDS TO THE MAIN TRUNK OR STEM SYSTEMS ARE TO BE REPORTED TO THE CONSULTING ARBORIST SO THAT THE DAMAGE CAN BE ASSESSED IMMEDIATELY AND MITIGATION

- NO CONSTRUCTION NO ALTERING OF GRADE BY ADDING FILL, EXCAVATING, TRENCHING, SCRAPING, DUMPING OR
- DISTURBANCE OF ANY KIND NO STORAGE OF CONSTRUCTION MATERIALS, EQUIPMENT, SOIL, CONSTRUCTION WASTE OR

CAN BE PROMPTLY IMPLEMENTED. WITHIN A TREE PROTECTION ZONE THERE IS TO BE:

- DEBRIS WITHIN THE DRIP LINE NO MOVEMENT OF VEHICLES OR EQUIPMENT
- NO PARKING OF VEHICLES OR MACHINERY NO DIGGING OR BORING
- NO RIGGING CABLES SHALL BE WRAPPED AROUND OR INSTALLED IN TREES NO CONTAMINANTS WILL BE PLACED OVER ROOT SYSTEM
- NO CONTAMINANTS WILL BE DUMPED OR FLUSHED WHERE FEEDER ROOTS OF TREES EXIST.

TREE INJURY:

TYPICALLY TREE ROOTS EXTEND 1.5 TO 3 TIMES BEYOND THE DRIPLINE OF THE TREE AND ARE WITHIN THE TOP 150mm OF THE SOIL. TYPES OF DAMAGE FROM CONSTRUCTION INCLUDE:

- PHYSICAL INJURY SOIL COMPACTION
- SEVERING OF ROOTS SMOTHERING OF ROOTS
- SPLIT OR BROKEN BRANCHES EXCESSIVE PRUNING

SOIL COMPACTION REDUCES PORE SPACE AND OXYGEN AVAILABILITY TO THE ROOTS AND INCREASES CARBON DIOXIDE ACCUMULATION, RESTRICTS ROOT GROWTH AND THE ABILITY TO ABSORB WATER AND NUTRIENTS, AS WELL AS IMPAIRS DRAINAGE.

SMOTHERING OF ROOTS: 90% OF FINE ABSORBING ROOTS ARE WITHIN THE UPPER 150-300mm OF THE SOIL. SMOTHERING WITH THE ADDITION OF SOIL CAN KILL THE ROOTS AND STRESS THE TREE. PHYSICAL INJURY, SPLIT OR BROKEN BRANCHES HINDER THE TREES ABILITY TO COMPARTMENTALIZE (CLOSE) WOUNDS PROPERLY.

ROOT PRUNING PRACTICES:

 DURING EXCAVATION OPERATIONS IN WHICH THE ROOT AREA IS AFFECTED, THE CONTRACTOR IS TO PRUNE ALL EXPOSED ROOTS CLEANLY. PRUNED ROOT ENDS ARE TO BE NEATLY AND SQUARELY TRIMMED AND THE AREA IS TO BE BACKFILLED WITH CLEAN NATIVE FILL AS SOON AS POSSIBLE TO PREVENT DESICCATION AND PROMOTE ROOT GROWTH. THE EXPOSED ROOTS SHOULD NOT BE ALLOWED TO DRY OUT, AND THE CONTRACTOR SHALL DISCUSS WATERING OF THE ROOTS WITH THE CONSULTING ARBORIST SO THAT THE ROOTS SHALL MAINTAIN OPTIMUM SOIL MOISTURE DURING CONSTRUCTION AND BACKFILLING OPERATIONS, YET SO NOT TO INTERFERE WITH CONSTRUCTION OPERATIONS. BACKFILLING MUST BE WITH CLEAN UNCONTAMINATED TOPSOIL FROM AN APPROVED SOURCE. TEXTURE MUST BE COARSER THAN EXISTING SOILS, AND TO COME INTO CLEAN CONTACT WITH EXISTING SOILS

 TREE ROOTS SHOULD NOT BE EXCAVATED WITHIN THE CRITICAL STRUCTURAL ROOTING AREA. THIS IS THE MINIMUM AREA OF THE ROOT SYSTEM NECESSARY TO MAINTAIN VITALITY OR STABILITY OF THE TREE. TYPICALLY THIS AREA EXTENDS TO THE DRIPLINE OF THE TREE. THE SEVERING OF ONE ROOT CAN CAUSE APPROXIMATELY 5-20% LOSS OF THE ROOT SYSTEM. A REDUCTION OF THIS AREA BY GREATER THAN 30% CAN POSE STABILITY CONCERNS FOR THE

 CUTS SHALL BE MADE WITH HAND PRUNING SHEARS. BY-PASS BLADE OR A PRUNING SAW, ANVIL TYPE PRUNERS SHALL NOT BE USED.

 A SLOW RELEASE FERTILIZER EG: BONE MEAL OR APPROVED EQUAL TO BE APPLIED TO TREES WHERE ROOT PRUNING OR ROOT DAMAGE HAS OCCURRED. APPLY PER MANUFACTURER'S RECOMMENDATIONS.

 ROOTS OVER 2.5cm DIAMETER THAT ARE TO BE CUT SHOULD BE PRUNED RATHER THAN LEFT TORN OR CRUSHED. AT THE COMMENCEMENT OF CONSTRUCTION AND THROUGHOUT THE DURATION OF CONSTRUCTION UP TO THE RESTORATION PHASE, PRUNE ROOTS CLEANLY USING ACCEPTABLE ARBORICULTURAL PRACTICES AND IMMEDIATELY BACKFILL WITH APPROPRIATE MATERIAL. THE FOLLOWING ARE GENERAL METHODS OF ROOT PRUNING TO BE UTILIZED WHEN GRADING / CONSTRUCTION WILL OCCUR WITHIN THE DRIPLINE OF TREES:

TREE REMOVAL TIMING RESTRICTIONS TO REDUCE THE POSSIBILITY OF CONTRAVENTION OF THE MBCA, VEGETATION

REMOVAL SHOULD BE SCHEDULED TO OCCUR OUTSIDE OF THE OVERALL BIRD NESTING SEASON OF MARCH 31 TO AUGUST 31. SOME BIRDS MAY NEST BEFORE AND AFTER THIS PEAK BIRD NESTING SEASON DUE TO ANNUAL SEASONAL FLUCTUATIONS.

UNDERGROUND SERVICING AND UTILITIES

 PRIOR TO ANY EXCAVATION. TREE REMOVAL. OR TREE PLANTING CONTRACTOR SHALL PROVIDE UTILITY STAKE-OUT. ANY DAMAGE TO

UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR FOR ALL REPAIRS AND ASSOCIATED COSTS.

• CONTRACTOR TO MAKE GOOD ALL DISTURBED AREAS.

ARBORIST REPORT NOTE

 FOR A DETAILED DESCRIPTION OF TREE SPECIES, SIZE, CONDITION AND RECOMMENDATIONS REFER TO APPENDIX A: TREE PRESERVATION CHARTS IN THE ARBORIST REPORT PREPARED BY WSP CANADA INC., DATED: DECEMBER 12, 2024.

TPZ ENCROACHMENT MITIGATION MEASURES - AIR-SPADE /

HYDRO-VACUUM EXCAVATION WHERE EXCAVATION OR CONSTRUCTION ACTIVITIES WILL ENCROACH SIGNIFICANTLY INTO TREE

PROTECTION ZONES, AIR-SPADE / HYDRO-VACUUM EXCAVATION IS RECOMMENCED. PRIOR TO EXCAVATION AND CONSTRUCTION THIS MEASURE IS RECOMMENDED TO BE APPLIED AT 7 TREE

LOCATIONS AS LISTED BELOW: TREE #'S: T22, T23, T24, T25, T43, T44, T45

THE FOLLOWING METHODS MAY BE APPLIED WHEN UTILIZING AIR SPADE EXCAVATION: REFER TO TREE PRESERVATION TABLES IN ARBORIST REPORT.

 INSTALL TREE PROTECTION HOARDING AS SHOWN ON SHEETS TP-01 TP-08; AIR SPADE / HYDRO-VACUUM EXCAVATION ON THE OUTSIDE OF TREE PROTECTION HOARDING:

 ENSURE THAT THE PRESSURE USED FROM THE AIR SPADE / HYDRO-VACUUM IS SUCH THAT IT WILL NOT DAMAGE ROOTS DURING EXCAVATION;

 AT THE LIMIT OF THE EXCAVATION FOR THE MULTI-USE TRAILS AND SIDEWALKS, ALONG THE EDGE OF THE TREE PROTECTION FENCING, AIR-SPADE / HYDRO-VACUUM EXCAVATE TO A DEPTH OF

300MM AND AT A WIDTH OF 0.5M TO EXPOSE ROOTS SO THEY CAN EXAMINED BY A QUALIFIED TREE PROFESSIONAL AND/OR THE REGION;

 PRUNE ANY ROOTS 60MM IN DIAMETER OR SMALLER USING GOOD ARBORICULTURAL PRACTICES PER THE GUIDELINES IN THIS REPORT OR UNDER THE SUPERVISION OF A CERTIFIED ARBORIST;

IF AN ABUNDANCE OF ROOTS IS ENCOUNTERED, RELOCATE EXCAVATION WHERE POSSIBLE;

 BACKFILL WITH EXCAVATED MATERIAL OR OTHER NATIVE SOIL IMMEDIATELY AFTER COMPLETION OF AIR-SPADE / HYDRO-VACUUM EXCAVATION TO PREVENT ROOTS FROM DRYING OUT;

 WATER TREES PERIODICALLY DURING CONSTRUCTION; APPLY A LAYER OF 50MM DEPTH MULCH IN A 2M RADIUS AROUND THE TREES. IT IS RECOMMENDED THAT THIS MEASURE BE APPLIED WHILE A CERTIFIED ARBORIST IS PRESENT

TREE COMPENSATION NOTES:

 TREE REPLACEMENT AND COMPENSATION MUST BE DESCRIBED IN THIS REPORT. ALL TREES OVER 20 CM. IF NOT. PRESERVED, WILL REQUIRE COMPENSATION IN THE FORM OF PLANTING OR CASH-IN-LIEU PAID TO THE TOWN. IF TREES ARE GOING TO BE TRANSPLANTED ON SITE THE COMPENSATION COULD BE REDUCED.

 SECURITIES WILL NEED TO BE CALCULATED FOR TREES ON MUNICIPAL LANDS AND TREES TO BE PRESERVED. THERE ARE NO TREES PROPOSED FOR REMOVAL THAT ARE OVER 20cm DBH

COMPENSATION IS NOT REQUIRED

TREE REMOVAL CRITERIA

 ANY ENCROACHMENT RELATED TO CONSTRUCTION OR SITE DISTURBANCES WITHIN 1m OF THE TRUNK OF TREES OF ANY SIZE WILL REQUIRE THE REMOVAL OF THE TREE;

TREES THAT ARE IN POOR CONDITION OR DEAD WILL BE RECOMMENDED TO BE REMOVED.

TREE PROTECTION FENCING

• FOR TREES WITHIN THE REGIONAL ROAD ALLOWANCE OF GREEN LANE WEST, CONTACT YORK REGION FORESTRY, 48 HOURS IN ADVANCE OF INSTALLATION OF TREE PROTECTION

FENCING TO ARRANGE FOR AN INSPECTION AFTER IT HAS BEEN INSTALLED. • TREE PROTECTION FENCING FOR REGION TREES TO BE 1.2m HIGH ORANGE CONSTRUCTION

FENCE ATTACHED TO A 2"x4" WOOD FRAME AS PER THE DETAIL ON THIS SHEET. TREE PROTECTION FENCING FOR TREES WITHIN THE SUBJECT PROPERTY TO CONSIST OF

• REFER TO DETAILS NHF-400 TO NHF-405.

BRANCH PRUNING PRACTICES:

 ALL DAMAGED OR BROKEN LIMBS DURING THE COURSE OF CONSTRUCTION SHALL BE PRUNED CLEANLY UTILIZING BY-PASS SECATEURS IN ACCORDANCE WITH APPROVED HORTICULTURAL PRACTICES. SHOULD THERE BE A POTENTIAL RISK OF TRANSFER OF DISEASE FROM INFECTED TO NON-INFECTED TREES. TOOLS MUST BE DISINFECTED AFTER PRUNING EACH TREE BY DIPPING IN METHYL HYDRATE.

 ALL PRUNING CUTS SHALL BE MADE AT A GROWING POINT SUCH AS A BUD, TWIG OR BRANCH. CUT JUST OUTSIDE THE BRANCH COLLAR (THE SWOLLEN AREA AT THE BASE OF THE BRANCH THAT SOMETIMES HAS A BARK RIDGE). AND PERPENDICULAR TO THE BRANCH BEING PRUNED RATHER THAN AS CLOSE TO THE TRUNK AS POSSIBLE. THIS MINIMIZES THE SITE OF THE WOUND. NO STUBS SHOULD BE LEFT. POOR CUT LOCATION, POOR CUT ANGLE AND TORN CUTS ARE NOT ACCEPTABLE.

• PRUNING SHOULD BE LIMITED TO THE REMOVAL OF NO MORE THAN 25% OF THE TOTAL BUD AND LEAF BEARING BRANCHES. PRUNING SHOULD INCLUDE THE CAREFUL REMOVAL OF

• IF EXTENSIVE PRUNING (OVER 25% OF CANOPY) IS REQUIRED, PRUNING SHALL BE COMPLETED BEFORE PLANTS

BRANCHES THAT ARE WEAK, DAMAGED, DISEASED OR WHICH WILL INTERFERE WITH CONSTRUCTION

ACTIVITY SECONDARY LEADERS OF CONIFERS,

TRUNK AND ROOT SUCKERS, TRUNK WATERSPOUTS, AND

TIGHT V-SHAPED OR WEAK CROTCHES (INCLUDED UNIONS)

 THE CONTRACTOR MUST IMMEDIATELY REPORT ANY DAMAGE TO TREES SUCH AS BROKEN LIMBS, DAMAGE TO ROOTS, OR WOUNDS TO THE MAIN TRUNK OR STEM SYSTEMS TO THE CONSULTING ARBORIST SO THAT THE DAMAGE CAN BE ASSESSED IMMEDIATELY.

 THE TREE PROTECTION FENCING WILL BE MAINTAINED UNTIL ALL CONSTRUCTION IS COMPLETED, SOILS ARE STABILIZED, AND ALL OF THE EQUIPMENT HAS BEEN REMOVED FROM THE SITE. • ANY BRANCHES THAT OVERHANG THE WORK AREA AND REQUIRE PRUNING SHALL BE PRUNED USING GOOD

HORTICULTURAL PRACTICES AND/OR AMERICAN NATIONAL STANDARD (ANSI) A300 (PART 1) - 2008 PRUNING

ARBORICULTURAL PRACTICES UTILIZING BY-PASS SECATEURS IN ACCORDANCE WITH APPROVED

TPZ ENCROACHMENT MITIGATION MEASURES - AIR-SPADE /

HYDRO-VACUUM EXCAVATION IN INSTANCES WHERE EXCAVATION OR CONSTRUCTION ACTIVITIES WILL ENCROACH INTO TREE PROTECTION ZONES, AIR-SPADE / HYDRO-VACUUM EXCAVATION IS RECOMMENDED IN SELECT LOCATIONS WHERE ANTICIPATED IMPACTS

MAY BE SEVERE. PRIOR TO EXCAVATION AND CONSTRUCTION THIS MEASURE IS RECOMMENDED TO BE APPLIED AT 7 TREE LOCATIONS: T22, T23, T24, T25, T43, T44, T45 INSTALL TREE PROTECTION HOARDING AS SHOWN ON PLAN

• AT THE LIMIT OF EXCAVATION FOR THE MUP, AIR-SPADE / HYDRO-VACUUM EXCAVATE TO A WIDTH OF 0.5m AND TO A DEPTH OF 300mm TO EXPOSE ROOTS SO THEY CAN BE PRUNED;

 AIR SPADE / HYDRO-VACUUM EXCAVATE ON THE OUTSIDE OF THE TREE PROTECTION HOARDING LIMIT; ENSURE THAT THE AIR / WATER PRESSURE USED IS SUCH THAT IT WILL NOT DAMAGE ROOTS DURING EXCAVATION PRUNE ROOTS IN ACCORDANCE WITH THE NOTES ON THIS SHEET OR UNDER THE SUPERVISION OF A CERTIFIED

• TEMPORARILY BACKFILL WITH EXCAVATED MATERIAL UNTIL CONSTRUCTION COMMENCES, TO PROTECT ROOTS

 WATER TREES PERIODICALLY DURING CONSTRUCTION; • AT THE COMPLETION OF CONSTRUCTION, APPLY 50mm DEPTH SHREDDED BARK MULCH IN A MINIMUM 2m RADIUS

AROUND THE TREE (MAY VARY DEPENDING ON TREE LOCATION); • IT IS RECOMMENDED THAT ROOT PRUNING WITH AN AIR-SPADE OR HYDRO-VACUUM BE PERFORMED WHILE A CERTIFIED ARBORIST IS PRESENT

TREE PROTECTION ZONE (TPZ):

FROM DRYING OUT

See table below for examples of how to calculate the minimum Tree Protection Zone.

Tree Trunk Diameter (DBH)	Minimum Tree Protection Zone (TPZ)
Less than 10 cm	1.8 m
11 to 40 cm	2.4 m
41 to 50 cm	3.0 m
51 to 60 cm	3.6 m
61 to 70 cm	4.2 m
71 to 80 cm	4.8 m
81 to 90 cm	5.4 m
91 to 100 cm	6.0 m
Greater than 100 cm	60 m + 10 cm per 1cm DBH

- IF PRUNING IS REQUIRED, IT MUST BE DONE BY AN ISA OR MTCU CETIFIED ARBORIST
- NO DUMPING OF MATERIALS DO NOT STORE EQUIPMENT OR MATERIALS WITHIN TPZ

NO DUMPING OF MACHINES OR MATERIALS WITHIN THE TPZ

 DO NOT USE THE TPZ TO STORE TEMPORARY FILLING MATERIALS FENCING MUST BE MAINTAINED THROUGHOUT THE CONSTRUCTION PROCESS

REGION OF YORK NOTES AND GUIDELINES

TREE PROTECTION ZONE (TPZ)

- THE TPZ IS THE AREA AROUND AN EXISTING TREE WHERE TREE PROTECTION MEASURES MUST BE IMPLEMENTED IF SITE DISTURBANCE IS PLANNED WITHIN THE AREA OR IF AN ENCROACHMENT OF ANY FORM WILL OCCUR WITHIN THIS AREA. THE INTENT OF THE TPZ IS TO PREVENT OR MITIGATE ADVERSE
- UNLESS APPROVED BY THE REGION AND OR MITIGATED THROUGH IMPLEMENTATION OF SPECIFIED
- TREE PROTECTION MEASURES, THE FOLLOWING ACTIVITIES SHALL BE STRICTLY PROHIBITED WITHIN THE TPZ PRIOR TO, DURING AND FOLLOWING CONSTRUCTION / DISTURBANCE ACTIVITIES:
- •• INSTALLATION OR ATTACHMENT OF ANY ITEMS TO THE TREE: •• OPERATION OF EQUIPMENT OR MACHINERY; •• STORAGE OF EQUIPMENT, MACHINERY OR MATERIALS;
- ACCESS BY ANY PERSONNEL •• PLACEMENT OF TRAILERS, TEMPORARY BUILDINGS OR STRUCTURES; •• FLUSHING, STORAGE OR DUMPING OF FUELS, CHEMICALS OR OTHER CONTAMINANTS;
- STOCKPILING OF SOIL: DIGGING, TRENCHING OR EXCAVATION; •• CHANGE TO EXISTING GRADE
- VERTICAL TREE HOARDING TO BE INSTALLED AT THE OUTER LIMIT OF THE MINIMUM REQUIRED TPZ FOR EACH TREE TO BE PRESERVED AND SHALL ENCLOSE THE ENTIRE TPZ.
- HOARDING IS TO BE INSTALLED PRIOR TO THE COMMENCEMENT OF DISTURBANCE, INCLUDING TREE REMOVALS. WORKS SHALL NOT COMMENCE UNTIL THE INSTALLATION OF ALL TPZ BARRIERS HAS BEEN COMPLETED AND HAS BEEN VERIFIED AND APPROVED BY THE REGION OR ITS DESIGNATE. TPZ HOARDING SHALL NOT BE MOVED, MODIFIED, OR RELOCATED AT ANY TIME WITHOUT THE APPROVAL OF THE REGION OR ITS DESIGNATE. TPZ BARRIERS SHALL BE INSPECTED BY A QUALIFIED TREE PROFESSIONAL, OR A PERSON DESIGNATED TO DO SO BY THE REGION ONCE WEEKLY OR ON A

SCHEDULE APPROVED BY THE REGION OR ITS DESIGNATE. ANY TPZ BARRIERS FOUND TO BE IN

SUBSTANDARD CONDITION SHALL BE REPAIRED, MODIFIED, OR REPLACED AS NECESSARY WITHIN 48 HOURS OF RECEIVING NOTIFICATION TO DO SO. SIGNAGE, AS SPECIFIED IN NHF-401, SHALL BE INSTALLED ON AT LEAST TWO SIDES OF THE TPZ BARRIER AND/OR EVERY 10M ON CONTIGUOUS TPZ BARRIERS.

TREE PRESERVATION ZONES

THE FOLLOWING TABLE ILLUSTRATES THE REQUIRED TREE PROTECTION ZONES REQUIRED FOR TREES WITHIN REGION OF YORK PROPERTY

TRUNK DIAMETER	MINIMUM PROTECTION DISTANCES REQUIRED FOR STREET TREES	EXAMPLE
<24cm	2.4m	2.4m
>25cm	DBH (cm) X 10 / 100 = TPZ	43cm x 10 / 100 = 4.3m TPZ

*YORK REGION (2016). STREET TREE AND FOREST PRESERVATION GUIDELINES,

ROOT ZONE COMPACTION PROTECTION

HEAVY (VEHICLE ACCESS OR SIMILAR IMPACTS)

WHEREVER COMPACTION IS PROBABLE WITHIN A TREE'S TPZ, ROOT ZONE COMPACTION PROTECTION MUST BE INSTALLED. ROOT COMPACTION OCCURS WHEN AT-GRADE WORKS RELATED TO CONSTRUCTION MAY OCCUR. THIS INCLUDES BUT IS NOT LIMITED TO: PEDESTRIAN OR EQUIPMENT TRAFFIC, ACCESS, STORAGE, OR STAGING AREAS, DEPENDING ON THE INTENSITY OF ENCROACHMENT, ROOT ZONE PROTECTION MUST BE IN PLACE AS DETAILED IN YORK REGION'S NHF-404 DETAIL:

- LIGHT (NON-VEHICULAR) •• INSTALL PERMEABLE GEOTEXTILE WITH 150MM OF WOOD CHIP MULCH OVER TOP: •• 3/4" PLYWOOD MAY BE NECESSARY TO FACILITATE MOVEMENT OVERTOP MULCH.
- MODERATE (FREQUENT NON-VEHICULAR OR LIGHT VEHICLE) •• INSTALL PERMEABLE GEOTEXTILE WITH 200MM OF WOOD CHIP MULCH OVERTOP: •• INSTALL ¾" PLYWOOD OVER MULCH.

•• INSTALL PERMEABLE GEOTEXTILE OVER STONE LAYER WITH 150MM OF WOOD CHIP MULCH •• INSTALL ¾" PLYWOOD OR STEEL PLATE OVER MULCH.

- TREE PROTECTION ZONE ENCROACHMENT / REDUCTION ENCROACHMENTS INTO THE TPZ ARE DEFINED AS ENTRY BY PERSONEL, MACHINERY,
- EQUIPMENT OR MATERIALS INTO THE TPZ WHETHER THE TPZ IS PROTECTED OR NOT. • ENCROACHMENTS INCLUDE BUT ARE NOT LIMITED TO: EXCAVATION, GRADE CHANGE, STORAGE. STAGING, OR TRANSIT THAT HAVE THE POTENTIAL TO CAUSE ADVERSE IMPACTS TO THE TREE; ENCROACHMENTS ARE TO BE REDUCED BY THE IMPLEMENTATION OF MITIGATIVE MEASURES

•• INSTALL STAKED-DOWN PERMEABLE GEOTEXTILE WITH 100MM OF CLEAR STONE OVERTOP;

FXCAVATION (SEE NOTES ON THIS SHEET). TREE PROTECTION ZONE ENCROACHMENTS AND TREE ID'S HAVE BEEN IDENTIFIED ON PLANS AND IN THE 'TREE PROTECTION FOR AREAS TO BE SODDED /GRADED' SECTION.

SUCH AS ROOT AND BRANCH PRUNING (SEE NOTES ON THIS SHEET) AND HYDRO-VACUUM

REGION OF YORK NOTES AND GUIDELINES

TREE STEM PROTECTION

TREE STEM PROTECTION

ACCEPTABLE STANDARDS.

EARTHWORK.

WHERE A TPZ ENCROACHMENT OCCURS AND THERE IS REASONABLE POSSIBILITY OF ACCIDENTAL IMPACT ON THE MAIN STEM OR SCAFFOLD BRANCHES OF A TREE. TREE STEM PROTECTION MUST BE INSTALLED. TREE STEM PROTECTION IS NOT AN ALTERNATIVE TO TPZ FENCING AND ARE ONLY TO BE USED WHEN NO OTHER ALTERNATIVES ARE AVAILABLE.

- TREE STEM PROTECTION MUST BE INSTALLED AS FOLLOWS (REFER TO YORK REGION'S STANDARD DRAWING NHF-405: • ENTIRE MAIN STEM MUST BE TIGHTLY TRIPLE-WRAPPED IN BURLAP TO A MINIMUM HEIGHT OF 2.4M (8') AND MUST BE CLAD WITH 2X4S TO A MINIMUM HEIGHT OF 2.4M (8'), SECURED WITH WIRE; •• ALTERNATIVE MATERIALS, SUCH AS PLYWOOD ON A 2X4 FRAME, MAY BE APPROVED BY THE
- REGION OR ITS DESIGNATE •• STEM PROTECTION GREATER THAN THE MINIMUM 2.4M (8') HEIGHT MAY BE REQUIRED BY THE REGION OR ITS DESIGNATE. • SIMILAR PROTECTION OF SIGNIFICANT SCAFFOLD LIMBS MAY BE REQUIRED BY THE REGION. IF REQUIRED, SUCH PROTECTION SHALL ONLY BE INSTALLED BY AN ISA CERTIFIED ARBORIST OR AN

ONTARIO COLLEGE OF TRADES 444A ARBORIST OR ARBORIST APPRENTICE.

WHERE SEDIMENT CONTROL MEASURES ARE REQUIRED TO PROTECT REGION TREES FROM SEDIMENT DEBRIS, BARRIERS MUST CONFORM TO YORK REGION'S STANDARDS AND PRACTICES. WHERE SILTATION FENCING IS PROPOSED, IT MUST BE INSTALLED ALONG THE OUTSIDE EDGE OF THE TPZ FENCING AND MUST BE INSTALLED USING A 'NO-DIG' METHOD. • IF SILT FENCING HAS BEEN PROPOSED, CONTACT YORK REGION FOR THE MOST CURRENT

YORK REGION TREE PRESERVATION NOTES

FROM THE NATURAL HERITAGE AND FORESTRY GROUP.

FOREST PRESERVATION GUIDELINES;

HERITAGE AND FORESTRY STAFF.

NOTICE PRIOR TO WORKING WITHIN THE TP7'S:

TREES LOCATED ON THE REGIONAL ROAD ALLOWANCE TO BE PRESERVED SHALL CONFORM TO THE

 ALL TREE PRESERVATION SHALL BE IN ACCORDANCE WITH THE YORK REGION STREET TREE AND FOREST PRESERVATION GUIDELINES YORK REGION NHF SHALL BE NOTIFIED WHEN TREE PROTECTION MEASURES HAVE BEEN

 ALL TREE PROTECTION FENCING SHALL BE INSTALLED PRIOR TO CONSTRUCTION AND MUST REMAIN IN GOOD REPAIR FOR THE DURATION OF CONSTRUCTION

 AT THE SOLE DISCRETION OF YR NHF ANY EXISTING TREES THAT DIE OR EXHIBIT A DECLINE IN HEALTH PRIOR TO FINAL ACCEPTANCE SHALL BE REPLACED OR COMPENSATION SHALL BE MIGRATORY BIRD WINDOW IS MARCH 31 TO AUGUST 31. THE CONTRACTOR SHALL NOT REMOVE

ANY/ALL TREE CUTTING MUST BE APPROVED IN WRITING BY A QUALIFIED AVIAN BIOLOGIST DEVELOP SPECIFICATIONS WITH THE ASSISTANCE OF THE REGIONAL FORESTER.

ANY TREES WITHIN THIS PERIOD WITHOUT THE CONSENT OF THE CONTRACT ADMINISTRATOR.

• CONTACT THE YORK REGION NATURAL HERITAGE AND FORESTRY GROUP AT 1-877-464-9675 PRIOR TO ANY EXCAVATION ADJACENT TO TREES A TREE INSPECTION MUST BE MADE BEFORE CUTTING ANY ROOTS CLEARLY MARK WITH SURVEY TAPE THE CLEARING LIMITS OF THE CONSTRUCTION SITE SHOWN ON THE LAYOUT, REMOVAL AND TREE PRESERVATION PLANS PRIOR TO BEGINNING ANY

 DURING CONSTRUCTION, MAINTAIN THE MARKED CLEARING LIMITS AND DO NOT DISTURB THE AREAS OUTSIDE OF THE CONSTRUCTION SITE. OFTEN TREE PROTECTION FENCING IS

TREE PROTECTION BARRIERS SHALL BE USED IN HIGHLY SENSITIVE AREAS OR AS REQUESTED.

WHEN WORK WITHIN A TPZ HAS BEEN DEEMED APPROPRIATE BY YORK REGION, THE FOLLOWING NOTES ARE TO BE INCLUDED ON ALL TREE PRESERVATION PLANS; WORK REQUIRED TO OCCUR WITHIN A TREE PROTECTION ZONE (TPZ) SHALL CONFORM TO THE FOLLOWING REQUIREMENTS; ALL TREE PRESERVATION SHALL BE IN ACCORDANCE WITH YORK REGION'S STREET TREE AND

 A QUALIFIED TREE PROFESSIONAL MUST BE PRESENT FOR ALL WORK WITHIN THE IDENTIFIED YORK REGION NATURAL HERITAGE AND FORESTRY STAFF SHALL BE NOTIFIED WITH 24HRS

PROVISIONS SHALL BE FOLLOWED WHEN DEEMED NECESSARY BY YORK REGION NATURAL

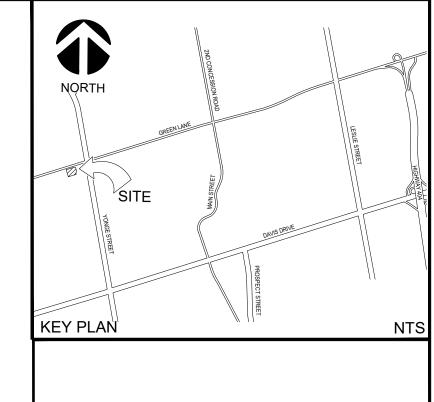
CONSTRUCTION UNLESS WITH THE OVERSIGHT OF A QUALIFIED TREE PROFESSIONAL; ROOT ZONE COMPACTION PROTECTION PROVISIONS MUST BE FOLLOWED; ROOT SENSITIVE EXCAVATION PROVISIONS MUST BE FOLLOWED;

AFTER THE COMPLETION OF CONSTRUCTION, SOIL COMPACTION AND RESTORATION

THE TREE PROTECTION BARRIER SHALL NOT BE MOVED AT ANY TIME DURING

DRAWING TITLE TREE PROTECTION FENCE -**LIGHT DUTY**

DIMENSIONS IN MILLIMETRES AND/OR METRES, DRAWING NOT TO SCALE TABLE | - TREE PROTECTION ZONE MIN. PROTECTION TRUNK DIA. (DBH) DIMENSION REQUIRED** ||cm - 40cm 41cm - 50cm 5|cm - 60cm 6 | cm - 70 cm |7 | cm - 80 cm8|cm - 90cm 9|cm - 100cm+ **THE TPZ IS MEASURED AS A RADIUS FROM THE EDGE OF THE TREE TRUNK AND IS DEPENDANT ON DISH MEASURED AS THE DIAMETER OF THE TRUNK IAM ABOVE THE GROUND TREE PROTECTION ZONE (TPZ) FOR MIN DISTANCE - TREE PROTECTION SEE TABLE | FOR MIN. DIMENSION <u>PLAN VIEW</u> TRUNK DIAMETER AT BREAST HEIGHT (DBH) SEE TABLE | TO DETERMINE MIN. TPZ DIMENSION REQUIRED – METAL T-BARS (TYP) <u>TREE PROTECTION FENCE:</u> ORANGE PLASTIC SAFETY FENCE WIRED TO METAL INSPECTED AND APPROVED BY TOWN PRIOR TO COMMENCEMENT OF WORK MAINTAIN IN 600D CONDITION AND DO NOT REMOVE OR ALTER WITHOUT AUTHORIZATION OF THE TOWN CONFIRM WITH TOWN STAFF THE TYPE OF TREE PROTECTION FENCE TO BE USED (LIGHT, MEDIUM OR HEAVY DUTY). 2. THIS DETAIL DOES NOT REPRESENT ANY PARTICULAR TREE SPECIES 3. ALL CONSTRUCTION RELATED ACTIVITIES INCLUDING. BUT NOT LIMITED TO, GRADE ALTERATION, EXCAVATION, SOIL COMPACTION, DISPOSAL OF ANY LIQUIDS, STOCKPILING, EQUIPMENT STORAGE AND VEHICULAR TRAFFIC ARE NOT PERMITTED WITHIN THE TREE PROTECTION ZONE (TPZ). 4. MAINTAIN SOD/VEGETATION WITHIN FENCED AREA FOR DURATION OF CONSTRUCTION. DWG. NO SCALE N.T.S. DRAWN BY UNITS MM APPROVED BY PARK STANDARDS MANUAL DATE FEB.2024 PROJECT NO. X



ISSUED FOR SPA JD 2025-03-14 PM ISSUED FOR SPA JD | 2024-12-12 | PM REVISIONS TO DRAWING BY DATE APP ALL PREVIOUS ISSUES OF THIS DRAWING ARE SUPERSEDED

TOWN OF NEWMARKET

BUSINESS CENTRE

COSTCO

TREE PRESERVATION **DETAILS & NOTES**

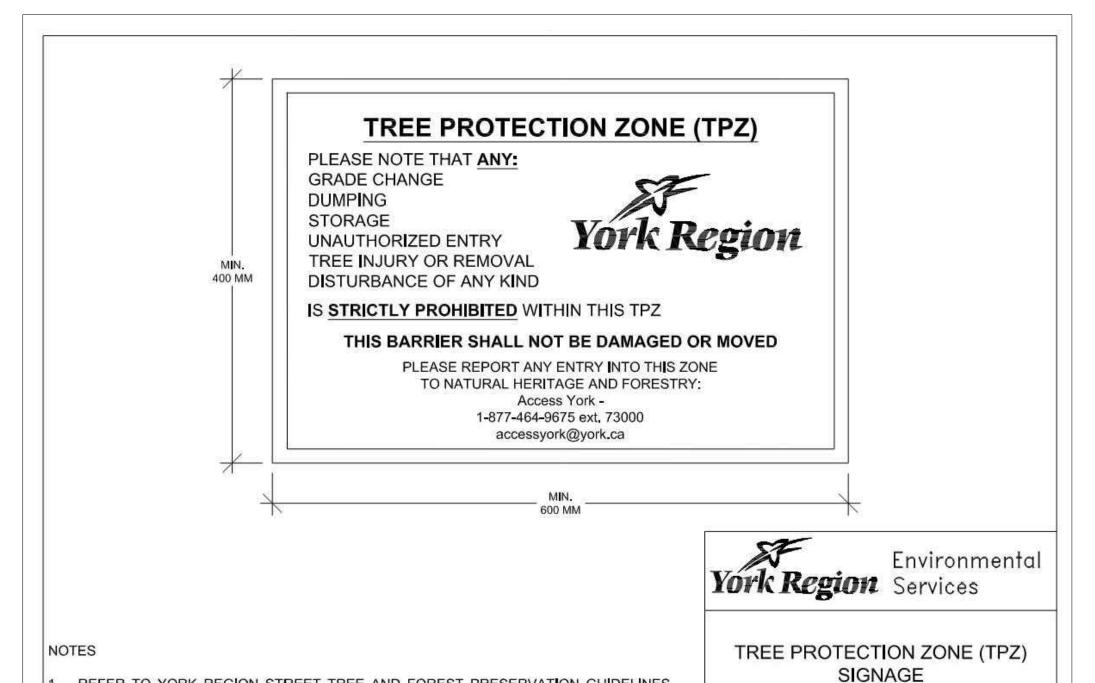


PROJECT TITLE

CONSULTANT

PETER McNAMARA ISA Certified Arborist ON-1140A Daty myseman

NOVEMBER 2024 DWG. NUMBER



DATE: JANUARY 2022

SCALE N.T.S.

NHF - 401

REFER TO YORK REGION STREET TREE AND FOREST PRESERVATION GUIDELINES FOR COMPLETE TREE PRESERVATION REQUIREMENTS.

TPZ SIGNAGE SHALL BE INSTALLED ON AT LEAST TWO SIDES OF THE TPZ BARRIER WITH DISTANCE BETWEEN SIGNS NOT TO EXCEED 10 METRES ON ANY ONE SIDE.

York Region Street Tree and Forest Preservation Guidelines (the "Guidelines") must be implemented where site disturbance is proposed in the Regional road allowance and any Region-owned street trees and/or natural vegetation is within 10m or less of the limit of proposed site disturbance. These Guidelines must also be implemented where site disturbance is proposed outside of the Regional road allowance and Region-owned street trees and/or natural vegetation are situated within 10m of the limit of potential site disturbance and/or where Region-owned street trees and/or natural vegetation are situated more than 10m but may be adversely impacted by the proposed site disturbance.

All tree preservation measures shall be in accordance with the Guidelines. All proposed tree preservation measures must be described in the Arborist Report and shown on the Tree Protection Plan and approved by York Region Environmental Services Department, Natural Heritage and Forestry, Refer to the Guidelines for tree inventory, tree removal compensation and other requirements.

formal notific All tree protection zone barriers shall be installed prior to any site disturbance, including tree removals, and must remain in good repair for the duration of construction. At the sole discretion of York Region Natural Heritage and Forestry, any existing trees that die or exhibit a decline in health prior to final acceptable shall be compensated for in accordance with the Guidelines. York Region Natural Heritage and Forestry shall be notified when tree protection measures have been installed, and before tree removals, if applicable.

A minimum Tree Protection Zone (TPZ) will be established around every tree to be preserved in accordance with the Guidelines and a York Region—approved Tree Protection Plan. No entry or activity shall be permitted within the TPZ without prior written approval of York Region Notural Heritage and Forestry.

Prohibited activities within the TPZ include but are not limited to installation or attachment of any items to the tree; operation of equipment or machinery, storage of equipment, machinery or materials; access by any personnel; placement of trailers, temporary buildings or structures; flushing, storage or dumping

of fuels, chemicals or other contaminants, stoeppung or son, against change to existing grade.

Permitted activities within the TPZ, with prior written approval of York Region Natural Heritage and Forestry and overseen by a qualified tree professional, include but are not limited to encroachment activities related to tree protection provisions such as canopy clearance pruning, root—sensitive excavation and root pruning, tree stem protection and other arboricultural maintenance. of fuels, chemicals or other contaminants; stockpiling of soil; digging, trenching, or excavation; and/or Tree Protection Zone (TPZ) Barrier

A Tree Protection Zone (TPZ) barrier shall be constructed around the TPZ of every tree to be preserved in accordance with the Guidelines and a York Region-approved Tree Protection Plan. The TPZ barrier shall follow York Region standard drawing 'Tree Protection Zone (TPZ) Barrier NHF-400' Where trees to be protected are located in close proximity to each other, the TPZ barrier shall be installed to protect trees in contiguous groups.

The TPZ barrier shall be installed prior to commencement of any site disturbance. Site disturbance shall not commence until the installation of all TPZ barriers has been completed and has been verified and approved by York Region or its designate. The TPZ barrier shall be constructed on a 2x4 frame. The height of the frame shall measure a minimum of 1.2m (4 feet), and the width of individual frame sections shall not exceed 2.4m (8 feet).

The frame shall be supported by diagonal 2x4 support legs installed inside the TPZ, secured to the frame using wood screws, and secured to the ground using a wooden stake installed a minimum of 125mm into the ground. A minimum of 1 support leg shall be installed per 2.4m (8 feet) of linear TPZ barrier distance, or per frame section.

Framed construction fencing is the primary method for TPZ barrier construction. Orange construction safety fencing shall be securely and tightly stapled to the outside of the TPZ barrier frame to construct

the framed construction fencing TPZ barrier type. Other fencing materials (e.g., chicken wire, green snow fence, etc.) shall not be used. Solid hoarding shall be installed where there is a significant risk of fill or other material being piled against the TPZ barrier, or where heavy machinery is to be operated in close proximity to the TPZ barrier. Plywood or oriented strand board (OSB) sheathing with a minimum thickness of 3/8" shall be affixed using wood screws to the outside of the TPZ barrier frame to construct the solid hoarding TPZ barrier type. Nails, staples or other fasteners shall not be used. If required, and as approved in the Arborist Report, silt barrier fencing shall be installed using a 'no-dig' method as described in the Guidelines.

Tree Protection Zone (TPZ) Signage All Tree Protection Zone (TPZ) signage shall be in accordance with the Guidelines.
 Signage shall follow York Region standard drawing 'Tree Protection Zone (TPZ) Signage NHF-401' and shall be installed on at least two sides of the TPZ barrier. The distance between individual signs shall not exceed 10m on any one side of the TPZ barrier.

TPZ barriers shall remain in place and in good working order and appearance throughout the duration of TPZ barriers shall not be moved, modified, or relocated at any time without the approval of York Region

TPZ barriers shall be inspected by a qualified tree professional once-weekly or on a schedule approved by York Region or its designate. Any deficiencies shall be noted in writing and any TPZ barriers found to be in substandard condition shall be repaired, modified or replaced as necessary within 48 hours of formal notification by York Region or its designate. All encroachment work shall be in accordance with the Guidelines and a York Region-approved Tree Protection Plan and Arborist Report.

A qualified tree professional must be present for all encroachment work within the TPZ.

28. TPZ barriers shall be placed at the limit of encroachment and not be moved at any time during construction unless under the supervision of a qualified tree professional.

29. Below-grade encroachment: root sensitive excavation and root pruning shall be undertaken prior to conventional excavation as per standard drawing NHF-403. At-grade encroachment: root zone compaction protection provisions must be followed as per standard drawing NHF-404. Above-grade encroachment: tree stem protection provisions must be followed as per standard drawing NHF-405. After the completion of construction, soil compaction and restoration provisions shall be followed when deemed necessary by York Region Natural Heritage and Forestry.

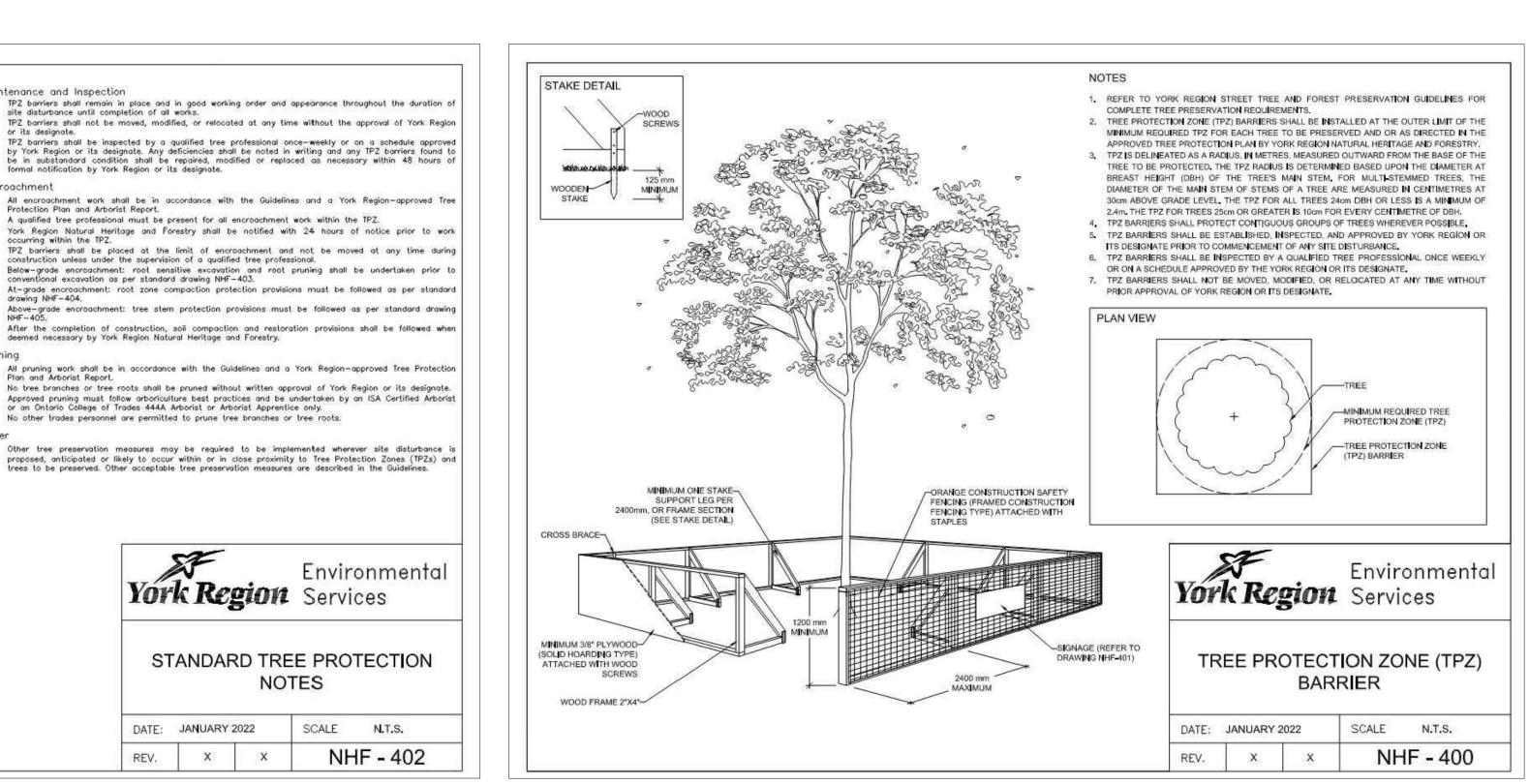
All pruning work shall be in accordance with the Guidelines and a York Region—approved Tree Protection Plan and Arborist Report. No tree branches or tree roots shall be pruned without written approval of York Region or its designate. Approved pruning must follow arboriculture best practices and be undertaken by an ISA Certified Arborist or an Ontario College of Trades 444A Arborist or Arborist Apprentice only. No other trades personnel are permitted to prune tree branches or tree roots.

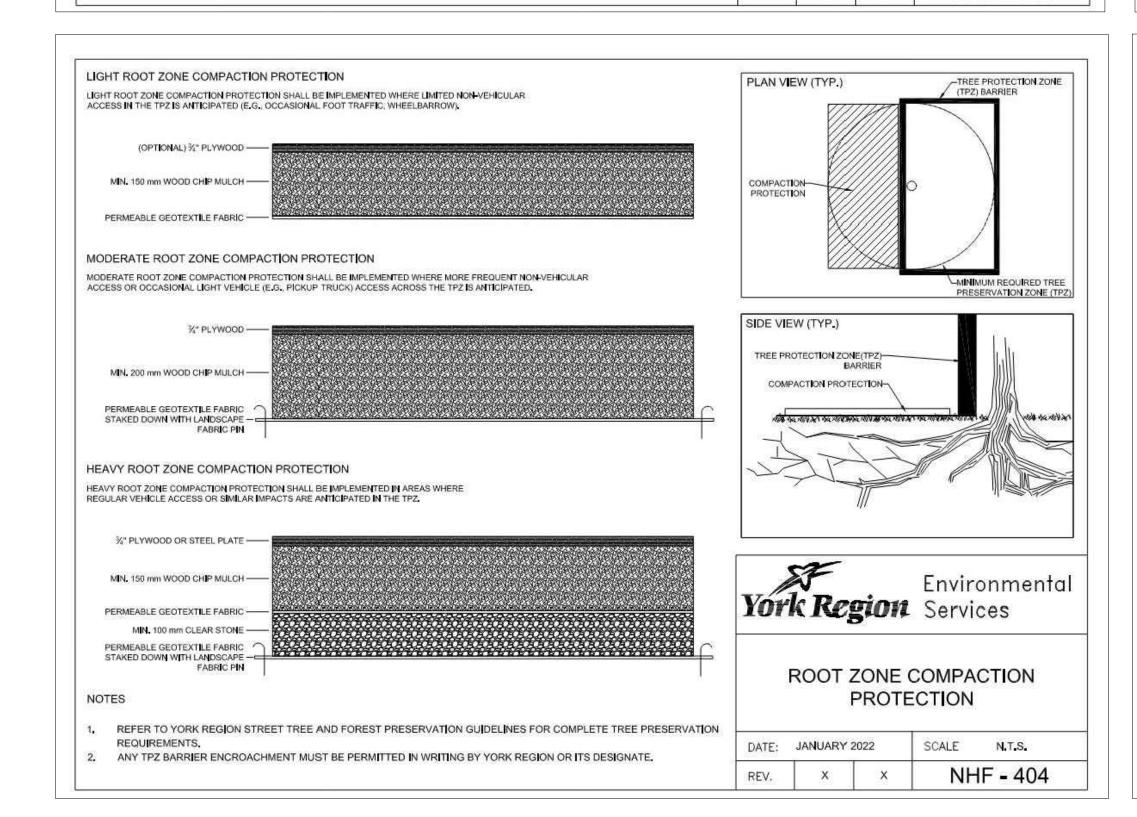
37. Other tree preservation measures may be required to be implemented wherever site disturbance is proposed, anticipated or likely to occur within or in close proximity to Tree Protection Zones (TPZs) and trees to be preserved. Other acceptable tree preservation measures are described in the Guidelines.

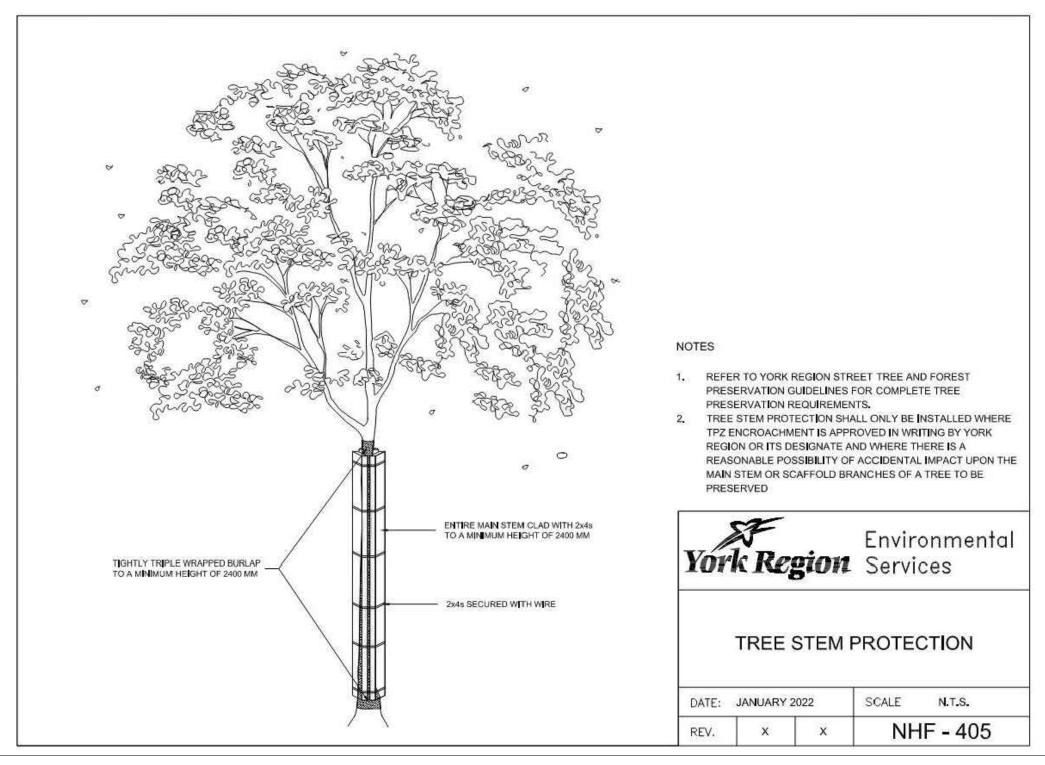


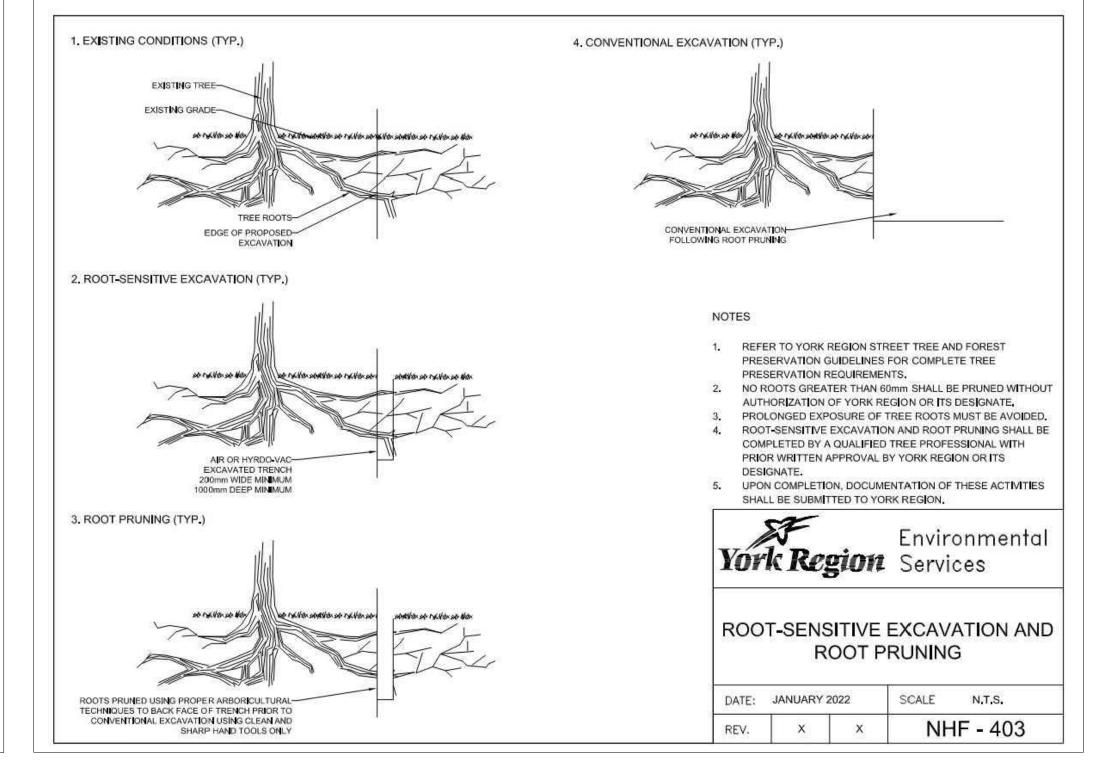
STANDARD TREE PROTECTION NOTES

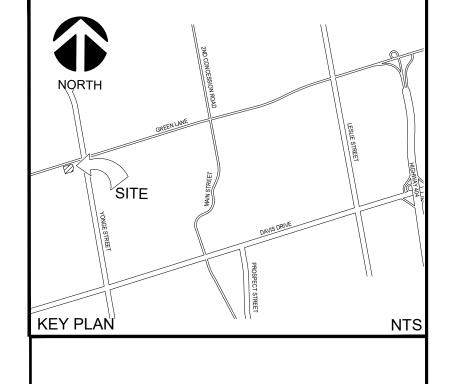
DATE: JANUARY 2022 SCALE N.T.S. NHF - 402

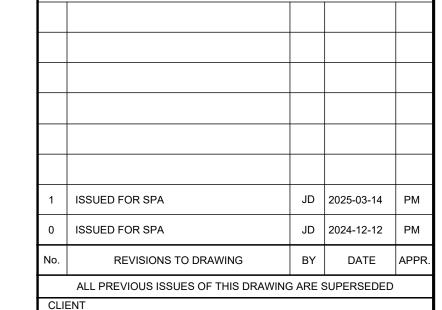












TOWN OF NEWMARKET

PROJECT TITLE COSTCO **BUSINESS CENTRE**

TREE PRESERVATION **DETAILS**





NOVEMBER 2024