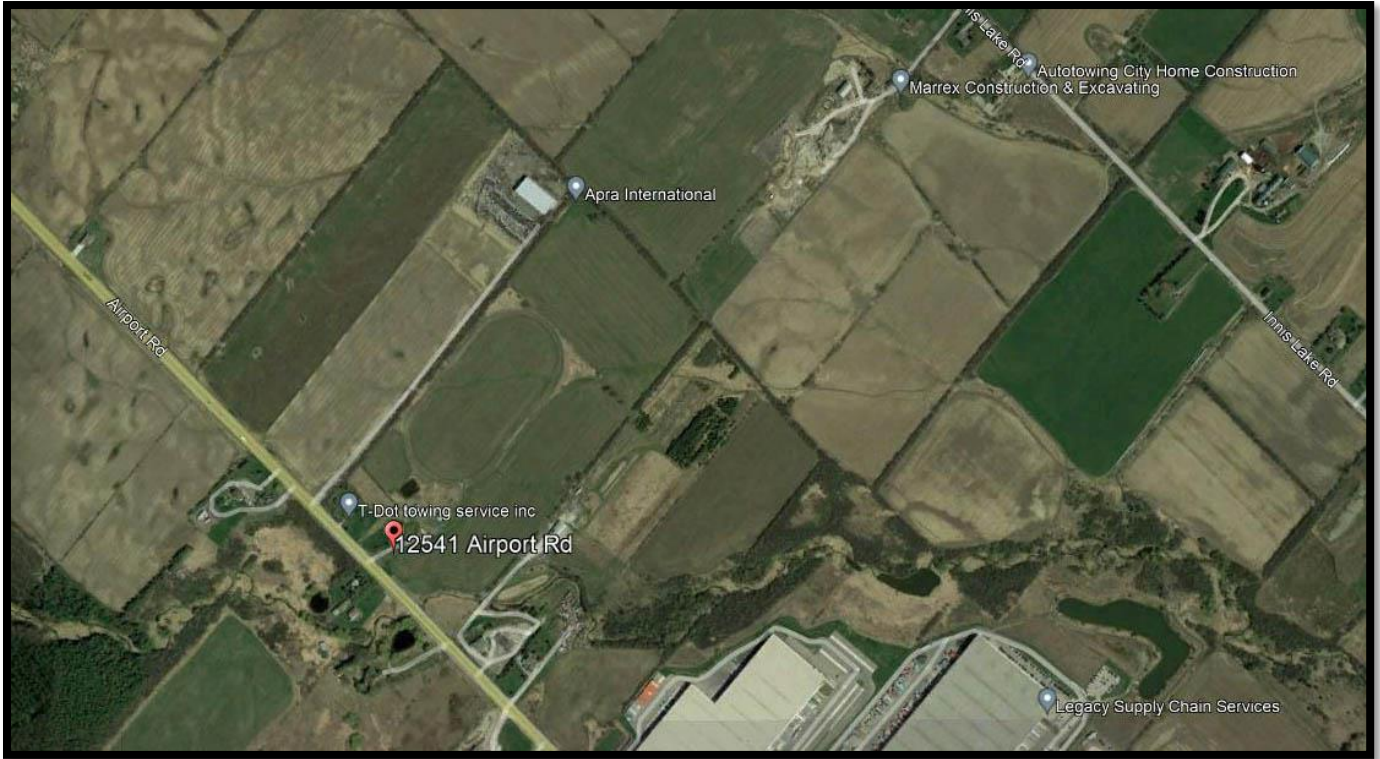


**12541 & 12577 Airport Road
Caledon, Ontario
Landscape Report
August 19, 2022**

Prepared by

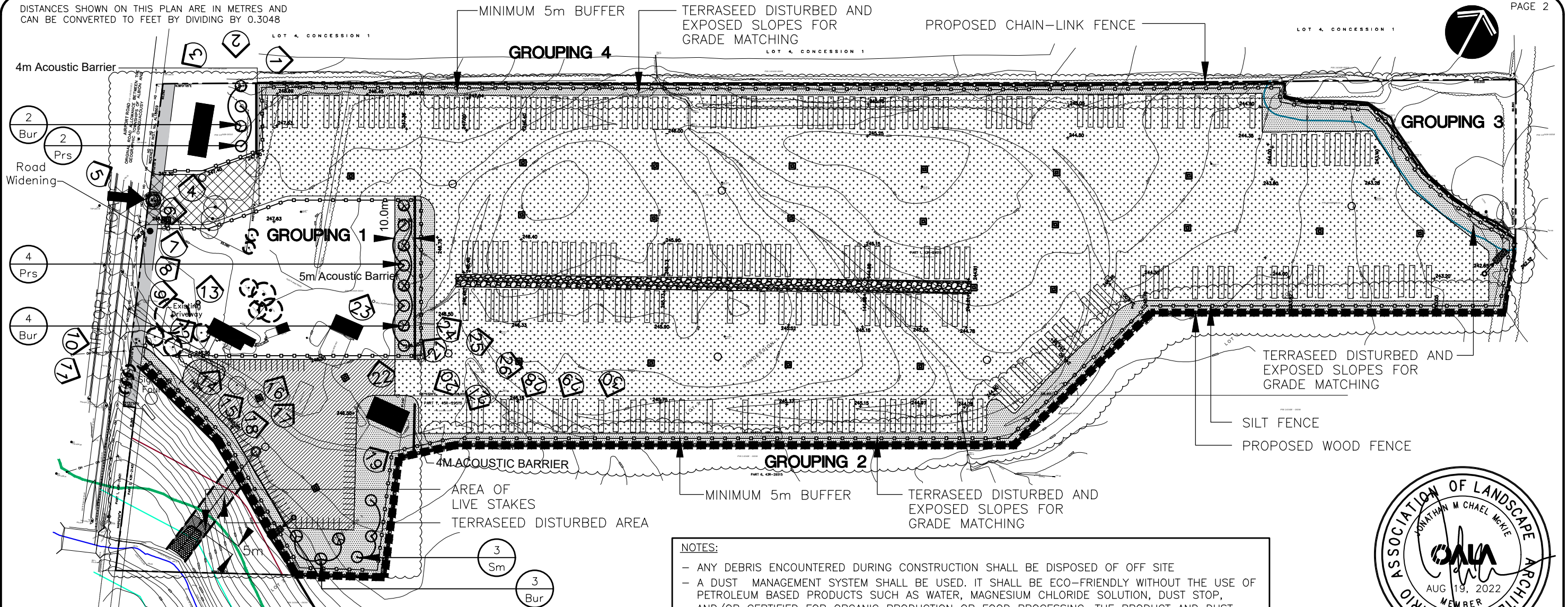
M&M Design Consultants

53 Doris Drive
Toronto, Ontario M4B-3C7
(416) 453-2803
jonathan.mckie@gmail.com
www.mandmdesignconsultants.ca



Key Map – 12541 & 12577 Airport Road, Caledon, Ontario

DISTANCES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048



SEPTIC BED:
 THE PROPOSED ENGINEERING WORKS AND TRUCK PARKING WILL INTERFERE WITH THE THE EXISTING SEPTIC BED LOCATION. A NEW SMALL FOOTPRINT SEPTIC SYSTEM SUCH AS AN AEROBIC SEPTIC SYSTEM OR CONNECTION TO THE MUNICIPAL SYSTEM SHOULD BE CONSIDERED.

LOCATES
 UNDERGROUND UTILITY LOCATES MUST BE DONE PRIOR TO CONSTRUCTION

EXISTING HEALTHY TREE REMOVALS
 9 HEALTHY TREES WILL BE REMOVED, At a 2:1 RATIO, 18 COMPENSATION TREES ARE REQUIRED.

LEGEND

---	PROPERTY LINE	[Dotted pattern]	GRAVEL TRUCK PARKING
—●—●—●—	PROP. CHAIN-LINK FENCE	[Horizontal line pattern]	HYDROSEED/TERRASEED
—○—○—○—	SILT FENCE	[Cross-hatch pattern]	TRUCK ENTRANCE
—■—■—■—	EXISTING WOOD FENCE	[Circle with cross pattern]	PROPOSED TREES
—■—■—■—	PROPOSED WOOD FENCE		
75	PICTURE LOCATION REFER TO APPENDIX B		

NOTES:

- ANY DEBRIS ENCOUNTERED DURING CONSTRUCTION SHALL BE DISPOSED OF OFF SITE
- A DUST MANAGEMENT SYSTEM SHALL BE USED. IT SHALL BE ECO-FRIENDLY WITHOUT THE USE OF PETROLEUM BASED PRODUCTS SUCH AS WATER, MAGNESIUM CHLORIDE SOLUTION, DUST STOP, AND/OR CERTIFIED FOR ORGANIC PRODUCTION OR FOOD PROCESSING. THE PRODUCT AND DUST MANAGEMENT SYSTEM MUST BE APPROVED BY THE LOCAL AUTHORITY PRIOR TO USE.

POST SITE REHABILITATION & VEGETATION GROUNDCOVER:

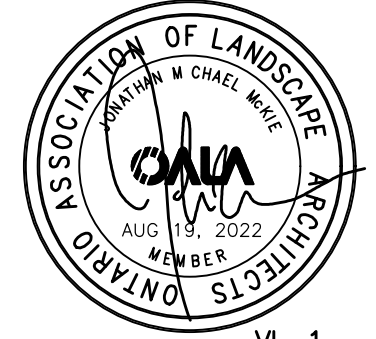
- IF RESTORED WITH 4"-6" (0.1-0.15m) OF TOPSOIL HYDROSEED MAY BE USED. IF NOT, TERRASEED SHALL BE USED. THE SEED MIXTURE MUST BE APPROVED BY THE LOCAL AUTHORITY PRIOR TO USE.

SILTATION CONTROL & HOARDING

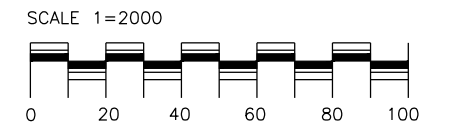
- SILTATION CONTROL AND HOARDING MUST BE IN PLACED AND APPROVED BY THE AUTHORITY PRIOR TO CONSTRUCTION
- THE SILTATION CONTROL ALONG COMMON PROPERTY LINES AND IN FRONT OF HOARDING MUST REMAIN IN PLACE UNTIL THE COMPLETION OF CONSTRUCTION

PROPOSED VEGETATION

- ALL VEGETATION SUPPLIED MUST BE NUMBER 1 GRADE AND MUST CONFORM WITH THE CURRENT CANADIAN STANDARDS FOR NURSERY STOCK. SUPPLIED CALIPER TREES SHALL BE MEASURED AT BREAST HEIGHT (DBH), AND NOT MEASURED AT THE ROOT CROWN.
- ALL TREES SHALL BE MULCHED. THE MULCH DEPTH SHALL BE BETWEEN 5cm-10cm OF ORGANIC MULCH AND SHALL NOT BE PLACED AGAINST THE STEM OF THE TREE, RATHER ±15cm AWAY, AND EXTEND A MINIMUM OF 1.8m AWAY FROM THE TRUNK. PLASTIC OR FILTER CLOTH MUST NOT BE PLACED UNDER THE MULCH. TREE GUARDS OF BLACK PLASTIC PIPE MUST NOT BE USED. THE TREE GUARD USED MUST HAVE VENTILATION HOLES TO PERMIT THE TREE TO BREATHE AND EXPAND AS THE TREE GROWS TO HELP TO PROTECT AGAINST RODENT DAMAGE.
- IF WEED GROWTH IS PRESENT, IT SHALL BE CUT BACK TO GRADE TO A DISTANCE DOUBLE THE MULCHED AREA



VL-1
 MGP File: 19-2852
 AUGUST 19, 2022
CONCEPTUAL TRANSPORT TRUCK/TRAILER PARKING LAYOUT
 12541 & 12577 AIRPORT ROAD
 Town of Caledon
 Regional Municipality of Peel



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General Town of Caledon Standard Notes

- During construction and prior to final approval by the Town, the consulting Arborist along with appropriate Town staff shall intermittently inspect the entire site. Any noted hazardous trees must be identified and removed prior to Assumption or earlier if deemed hazardous at the sole cost of the Owner/Applicant. Any records of maintenance or removals are to be submitted to the Town.
- Compensation will be required for all tree removals at a rate as determined by the Town's Tableland Tree Removal Compensation. Tree compensation planting will be in addition to the standard required planting. In the event tree compensation cannot be accommodated for in the planting design, financial compensation shall be collected at a rate (per tree) as determined by the Town. Based on the compensation ratio, (insert number) replacement trees are required to compensate for the removal of trees on the subject property.
- Removals should occur outside of the breeding bird season (April 1- August 1). If this is not possible, clearance with an ecologist should occur prior to construction to ensure no loss of bird nest, egg or unfledged young.
- Any trees located on the property line or on the adjacent property that are proposed to be removed, pruned or injured, will require written consent from the adjacent landowner. All correspondence is to be forwarded to the Town prior to any removals.
- Minor grading works may be permitted at the edge of the preservation zone as required to correct localized grading issues adjacent to the proposed development at the discretion of the Town. This work is to be undertaken under the supervision of the consulting Arborist. The consulting Arborist is to verify in writing to the Town, confirming that the work has been completed as per the approved design using best arboricultural practices.
- Areas within the tree protection zone shall remain undisturbed for the duration of site construction and shall not be used for the storage of excavated fill, building/construction material, structures or equipment.
- The limit of tree protection hoarding shall be confirmed in the field by the consulting arborist, Town staff and conservation authority (if applicable). The Owner/Applicant shall be responsible for ongoing maintenance and repairs to tree protection fencing to the satisfaction of the Town, until final approval by the Town and conservation authority (if applicable). The Owner/Applicant shall not remove and not cause or permit any tree preservation fencing to be removed without the approval of the Town and conservation authority (if applicable).

HOARDING DISTANCES (TO BE INSTALLED PRIOR TO THE COMMENCEMENT OF ANY SITE ACTIVITY)

<u>TRUNK DIAMETER (DBH)</u>	<u>MIN. PROTECTION DISTANCES REQUIRED</u>
less than 10cm	1.2m
10cm – 29cm	1.8m
30cm – 40cm	2.4m
41cm – 50cm	3.0m
51cm – 60cm	3.6m
61cm – 70cm	4.2m
71cm – 80cm	4.8m
81cm – 90cm	5.4m
91cm – 100cm	6.0m
greater than 100cm	6cm protection for each 1cm diameter

DBH REFERS TO DIAMETER AT BREAST HEIGHT – MEASUREMENT TAKEN AT 1.4m ABOVE THE GROUND.

TREE PROTECTION ZONE DISTANCES ARE TO BE MEASURED FROM THE OUTSIDE EDGE OF THE BASE OF THE TREE.

THE DRIP LINE IS DEFINED AS THE AREA BENEATH THE OUTER MOST BRANCH TIPS OF A TREE.

NO CONSTRUCTION ACTIVITY INCLUDING GRADE CHANGES, SURFACE TREATMENTS OR EXCAVATIONS OF ANY KIND, ROOT CUTTING STORAGE OF MATERIALS OR FILL, MOVEMENT OR STORAGE OF VEHICLES OR EQUIPMENT IS PERMITTED WITHIN THE TREE PROTECTION ZONE. THE TREE PROTECTION MUST REMAIN UNDISTURBED AT ALL TIMES.

(REFERENCES – THE ISA – INTERNATIONAL SOCIETY OF ARBORICULTURE.)

PLANT LIST**COMPENSATION VEGETATION**

KEY	BOTANICAL NAME	COMMON NAME	HEIGHT	SPREAD	CALIPER	ROOT	REMARKS
9 Bur	Quercus macrocarpa	Bur Oak	3.5m	1m	45mm	W.B.	NATIVE
6 Prs	Prunus serotina	Black Cherry	3.5m	1m	45mm	W.B.	NATIVE
3 Sm	Acer saccharinum	Silver Maple	3.5m	1m	45mm	W.B.	NATIVE

ALL VEGETATION SUPPLIED MUST BE NUMBER 1 GRADE AND MUST CONFORM WITH THE CURRENT CANADIAN STANDARDS FOR NURSERY STOCK
NEWLY PLANTED TREES AND SHRUBS ARE SUBJECT TO A 2 YEAR WARRANTY PERIOD

TOPSOIL REQUIREMENTS

- 1 ALL TOPSOIL MUST BE SHREDDED, FERTILE, FRIABLE NATURAL LOAM CONTAINING 2%–5% ORGANIC MATTER. ACIDITY OF TOPSOIL SHALL RANGE FROM 6–5–7.0 pH. (LEVELS OF NPK AND Mg ARE TO BE NOTED). IT SHALL BE FREE OF ANY MIXTURE OF SUBSOIL, CLAY LUMPS, STONES AND ROOTS OVER 50mm ϕ AS WELL AS ANY FOREIGN OBJECTS, AND SHALL BE REASONABLY FREE OF WEEDS AND WEED SEEDS. THE BULK DENSITY NOT TO EXCEED 1.3g/cm³. IT SHALL CONTAIN 50%–60% SAND, 20%–40% SILT, AND 6%–10% CLAY.
- 2 TEST TOPSOIL FROM SOURCE PROVIDING 0.5kg SAMPLES TO AN APPROVED TESTING LABORATORY, AND INDICATE PRESENT USE, TYPE OF SUBSOIL AND QUALITY OF DRAINAGE. PREPARE AND SHIP THE SAMPLES IN ACCORDANCE WITH PROVINCIAL REGULATIONS AND TESTING LABORATORY REQUIREMENTS.
- 3 THE TESTING MUST IDENTIFY IF THE FOLLOWING ELEMENTS ARE PRESENT IN HARMFUL LEVELS; ATRAZINE, SALTS, PRE-EMERGENT HERBICIDE GROWTH INHIBITORS OR SOIL STERILANTS AND HEAVY METALS.
- 4 SHOULD THE TEST RESULTS INDICATE THE TOPSOIL IS NOT SATISFACTORY, THE REPORT SHALL INCLUDE RECOMMENDATIONS TO IMPROVE THE SOIL. THE CITY RESERVES THE RIGHT TO REJECT TOPSOIL THAT DOES NOT MEET STANDARDS.

AUGUST 19, 2022

NOTES & DETAILS
CONCEPTUAL TRANSPORT
TRUCK/TRAILER PARKING LAYOUT
12541 & 12577 AIRPORT ROAD

Town of Caledon
Regional Municipality of Peel

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SEED MIX – SPECIES:	% OF MIX	SEED MIXTURE (ONTARIO SEED COMPANY LTD.)
BLACK EYED SUSAN (<i>Rudbeckia hirta</i>)	15	RECOMMENDED SEEDING RATE 250g/90 sq m or 1/2lbs./1,000 sq. ft.
NEW ENGLAND ASTER (<i>Aster novae-angliae</i>)	15	
SHOWY TICK TREFOIL (<i>Desmodium canadense</i>)	15	SEED SHALL BE TERRASEED AT A MINIMUM DEPTH OF 50mm
SENSITIVE FERN (<i>Onoclea sensibilis</i>)	15	
BEARDTONGUE (<i>Pentstemon digitalis</i>)	10	
BOTTLEBRUSH GRASS (<i>Elymus hystrix</i>)	10	
OX EYE SUNFLOWER (<i>Heliopsis helianthoides</i>)	10	
ELDERBERRY (<i>Sambucus canadensis</i>)	5	
GOLDEN ALEXANDER (<i>Zizia aurea</i>)	5	

USE A NURSE CROP OF CANADA WILD RYE GRASS (*Elymus canadensis*) 259g/90 sq. m. (1/2lb/1000 sq. ft.)

SEEDING SHALL OCCUR AS SOON AS POSSIBLE FOLLOWING THE COMPLETION OF WORKS; HOWEVER, SHOULD NOT BE EXECUTED DURING THE DROUGHT PRONE SEASON (JUNE THROUGH AUGUST) UNLESS ADEQUATE IRRIGATION CAN BE SUPPLIED. APPLY A MINIMUM OF 5cm OF TOPSOIL TO THE DISTURBED AREA PRIOR TO SEEDING.

EROSION CONTROL MEASURES MUST REMAIN IN PLACE UNTIL SEEDING HAS ACHIEVED GREATER THAN 80% COVERAGE.

LIVE STAKE NOTES

- 1 USE LIVE STAKES. THEY CAN BE HARVESTED FROM EXISTING VEGETATION FOUND ON SITE OR SUPPLIED. THE STAKES MUST BE APPROXIMATELY 1m IN LENGTH AND MUST BE HARVESTED AND INSTALLED PRIOR TO THE BUDS OPENING UP.
- 2 THE END CUTS SHALL BE MADE AT A 45° ANGLE TO INCREASE THE EXPOSED SURFACE AREA. THE BOTTOM 0.3m SHALL BE SCARIFIED AND HAVE A LIQUID ROOTING HORMONE APPLIED. THE CUTS AND THE ROOTING HORMONE ROOTING HORMONE MUST BE APPLIED IMMEDIATELY PRIOR THEIR INSERTION INTO THE SLOPE.
- 3 THE RECOMMENDED MINIMUM SPACING SHALL BE 4STAKES PER 1 M SQ. ENSURE THE STAKES ARE ANGLED APPROXIMATELY 30° WITH THE DIRECTION OF WATER FLOW. THE STAKES SHOULD BE INSERTED 1/3 OF ITS LENGTH INTO THE GROUND IN A STAGGERED PATTERN.

(LIVE-STAKES SPECIES)

KEY	BOTANICAL NAME	COMMON NAME	HEIGHT	SPREAD	CALIPER	ROOT	REMARKS
Dg	<i>Cornus stolonifera</i>	Red Osier Dogwood	±1.0m	/	/	/	.
Vd	<i>Viburnum lentago</i>	Nannyberry	±1.0m	/	/	/	.
Sm	<i>Acer saccharinum</i>	Silver Maple	±1.0m	/	/	/	.

IN GENERAL, PLANTING SPACING IS ±1.0m O/C FOR POTTED SHRUBS AND ±5.0m O/C FOR POTTED TREES

AUGUST 19, 2022
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APPENDIX A

PICTURES

12541 & 12577 AIRPORT ROAD

Town of Caledon



Image 1



Image 2



Image 3



Image 4



Image 5



Image 6



Image 7



Image 8



Image 9



Image 10



Image 11



Image 12



Image 13



Image 14



Image 15



Image 16



Image 17



Image 18



Image 19



Image 20



Image 21



Image 22



Image 23



Image 24



Image 25



Image 26



Image 27



Image 28



Image 29



Image 30

APPENDIX B
VEGETATION
SURVEY

August 15, 2022

Jonathan McKie
M&M Design Consultants
53 Doris Drive
East York, Ontario
M4B 3C7

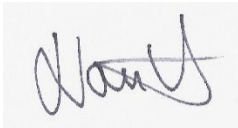
**RE: 12541 and 12577 Airport Road and 12434 Dixie Road
Caledon, Ontario Caledon, Ontario
L7C 2X4 L7C 2K4**

Maple Hill Tree Services has been retained by Jonathan McKie of M&M Design Consultants to provide a grouping inventory of existing vegetation on site that may or may not be impacted by the proposed site development. Replacement planting recommendations have also been requested as part of this project.

Both sites are proposed for the development of temporary truck parking, and as a result, will not have water service connection for either property. There will, however, be storm sewer connections on both sites.

Should you have any questions, please do not hesitate to call.

Respectfully yours,



Jessica Van Vliet
Consulting Arborist
ISA Certification Number: ON-2018AUT



WWW.MAPLEHILLTREE.COM

1220 HERITAGE RD
BURLINGTON
ONTARIO, CANADA
L7L 4X9
T: 905-824-2100
F: 905-824-1561

Introduction

Maple Hill Tree Services has completed a site inventory for the proposed development of 12541 and 12577 Airport Road, and 12434 Dixie Road in Caledon.

Existing Site Conditions

Both the Airport Road and Dixie Road properties currently have existing dwellings and multiple buildings on site. The Airport Road properties are currently occupied, and there are two existing driveways. The remainder of the Airport Road properties are bordered by mixed vegetation on all property boundaries (see inventory tables below), and the remainder of the property is currently used as a Soybean plantation.

The Dixie Road property is currently partially used as a truck parking centre. All property borders are mixed vegetation or groundcover (see inventory tables below), and the remainder of the property is currently used as a Soybean plantation.

Field Investigations

The purpose of the site visit (s) was to gather site-specific information regarding the extent and species composition of each vegetation grouping, as well as the percentage of species in each grouping. The inventories were conducted by Jessica Van Vliet, ISA Certified Arborist ON-2018AUT on August 4, 2022.

Tree Protection Zone recommendations are supplemented by the City of Toronto *Tree Protection Policy and Specifications for Construction Near Trees* (2016), and replacement planting specifications are guided by the Town of Caledon *Development Standards Manual* (Town of Caledon, 2019).

Vegetation Inventory – 12541 and 12577 Airport Road

Field investigations served to confirm the type and extent of groupings through vegetation inventory.

All vegetation inventoried was done so in groupings with the exception of stand alone trees, or trees of significant size (greater than 30cm DBH), and are documented in the tables by grouping below.

Table 1 Vegetation Inventory - 12541 and 12577 Airport Road – Grouping 1

Common Name	Scientific Name	Diameter at Breast Height	Percentage of Grouping	Site Plan Recommendations
Canada Goldenrod	<i>Solidago canadensis var. canadensis</i>	<1	10%	Remove – current site plan conflict - gravel vehicle parking area.
Common Buckthorn	<i>Rhamnus cathartica</i>	Various 5-15	20%	Remove – current site plan conflict - gravel vehicle parking area.
Creeping Thistle	<i>Cirsium arvense</i>	<1	5%	Remove – current site plan conflict - gravel vehicle parking area.
Grass-leaved Goldenrod	<i>Euthamia graminifolia</i>	<1	5%	Remove – current site plan conflict -

				gravel vehicle parking area.
Manitoba Maple	<i>Acer negundo</i>	Various 5-30	5%	Retain and protect. Minimum Recommended Tree Protection Zone is 2.4 metres.
Grapevine		<1	5%	Remove – current site plan conflict - gravel vehicle parking area.
Staghorn Sumac	<i>Rhus typhina</i>	Various 1-15	5%	Retain and protect. Minimum Recommended Tree Protection Zone is 1.8 metres.
Common Reed	<i>Phragmites australis</i>	1-2	>5%	Remove – current site plan conflict - gravel vehicle parking area.
Sandbar Willow	<i>Salix exigua Nutt</i>	<1	>5%	Remove – current site plan conflict - gravel vehicle parking area.
Ragweed	<i>Ambrosia artemisiifolia L.</i>	<1	10%	Remove – current site plan conflict - gravel vehicle parking area.
Peach Leaved Willow	<i>Salix amygdaloides</i>	<1	>5%	Remove – current site plan conflict - gravel vehicle parking area.
Littleleaf Linden	<i>Tilia Cordata</i>	30	N/A	Retain and protect. Minimum Recommended Tree Protection Zone is 2.4 metres. Remove Linden beside existing dwelling for gravel truck entrance.
Poplar	<i>Populus sp.</i>	15-35	>5%	Retain and protect. Minimum Recommended Tree Protection Zone is 2.4 metres.
Norway Maple	<i>Acer platanoides</i>	20-40	5%	Retain and protect trees on North side of existing dwelling. Minimum Recommended Tree Protection Zone is 2.4 metres. Remove trees on South side of existing driveway.
Cedar	<i>Thuja occidentalis</i>	2-10	5%	Retain and protect. Minimum

				Recommended Tree Protection Zone is 1.8 metres. Remove Cedar in front of existing dwelling for gravel truck entrance.
Blue Spruce	<i>Picea pungens</i>	15-30		Retain and protect. Minimum Recommended Tree Protection Zone is 2.4 metres. Remove Spruce South of dwelling – in conflict with gravel truck entrance.
Honey Locust	<i>Gleditsia triacanthos var. Inermis</i>	30, 30, 35	>5%	Remove – current site plan conflict - gravel truck entrance.
Birch	<i>Betula papyrifera</i>	20 - 30	>5%	Retain and protect. Minimum Recommended Tree Protection Zone is 2.4 metres.
Crabapple	<i>Malus sp.</i>	35, 45	>5%	Remove – current site plan conflict - gravel vehicle parking area.
Weeping Willow	<i>Salix babylonica</i>	70	N/A	Retain and protect. Minimum Recommended Tree Protection Zone is 4.2 metres.

Table 2 Vegetation Inventory - 12541 and 12577 Airport Road - Grouping 2

Common Name	Scientific Name	Diameter at Breast Height	Percentage of Grouping	Site Plan Recommendations
Canada Goldenrod	<i>Solidago canadensis var. canadensis</i>	<1	10%	Retain and protect. Minimum
Common Buckthorn	<i>Rhamnus cathartica</i>	Various 5-15	50%	Retain and protect. Minimum Recommended Tree Protection Zone is 1.8 metres.
Creeping Thistle	<i>Cirsium arvense</i>	<1	5%	Retain and protect.
Grass-leaved Goldenrod	<i>Euthamia graminifolia</i>	<1	15%	Retain and protect.
Manitoba Maple	<i>Acer negundo</i>	Various 5-30	10%	Retain and protect. Minimum Recommended Tree Protection Zone is 2.4 metres.
Grapevine	<i>Vitis</i>	<1	5%	
Staghorn Sumac	<i>Rhus typhina</i>	Various 1-15	5%	Retain and protect.

				Minimum Recommended Tree Protection Zone is 1.8 metres.
Ragweed	<i>Ambrosia artemisiifolia L.</i>	<1		Retain and protect.
Crabapple	<i>Malus sp.</i>	35, 45	>5%	Retain and protect. Minimum Recommended Tree Protection Zone is 3.0 metres.
White Oak	<i>Quercus alba</i>	85, 50, 30	N/A	Retain and protect. Minimum Recommended Tree Protection Zone is 3.0 metres. 85cm White Oak to be removed to accommodate gravel truck parking area.

Table 3 Vegetation Inventory - 12541 and 12577 Airport Road - Grouping 3

Common Name	Scientific Name	Diameter at Breast Height	Percentage of Grouping	Site Plan Recommendations
Canada Goldenrod	<i>Solidago canadensis var. canadensis</i>	<1	5%	Retain and protect.
Common Buckthorn	<i>Rhamnus cathartica</i>	Various 5-15	30%	Retain and protect. Minimum Recommended Tree Protection Zone is 1.8 metres.
Creeping Thistle	<i>Cirsium arvense</i>	<1	5%	Retain and protect.
Staghorn Sumac	<i>Rhus typhina</i>	Various 1-15	5%	Retain and protect.
Common Reed	<i>Phragmites australis</i>	1-2	35%	Retain and protect.
Ragweed	<i>Ambrosia artemisiifolia L.</i>	<1		Retain and protect.
Crabapple	<i>Malus sp.</i>	Various 5-25	20%	Retain and protect. Minimum Recommended Tree Protection Zone is 2.4 metres.

Table 4 Vegetation Inventor - 12541 and 12577 Airport Road - Grouping 4

Common Name	Scientific Name	Diameter at Breast Height	Percentage of Grouping	Site Plan Recommendations
Common Buckthorn	<i>Rhamnus cathartica</i>	Various 5-15	75%	Retain and protect. Minimum Recommended Tree Protection Zone is 1.8 metres. Clear out approximately 2-3 metres to

				accommodate proposed gravel parking area.
Creeping Thistle	<i>Cirsium arvense</i>	<1	5%	Retain and protect.
Staghorn Sumac	<i>Rhus typhina</i>	Various 1-15	5%	Retain and protect.
Ragweed	<i>Ambrosia artemisiifolia L.</i>	<1	5%	Retain and protect.

Tree Protection and Restoration Recommendations

Wherever possible, all existing established vegetation is to be left undisturbed. Where the removal of existing groundcover/vegetation is required, rehabilitation is recommended in the form of Terraseed, Hydroseed, or planting of trees, live stakes, and whips.

During construction, there is a risk of increasing soil compaction in the area through the use of heavy equipment and vehicle traffic. Soil compaction restricts the successful establishment of newly planted vegetation, as well as the health and vigor of established trees.

Soil compaction near trees to be protected, as well as newly planted vegetation should be avoided, and heavy equipment traffic should be restricted in these areas. Where soil compaction may be unavoidable, the ground should be tilled or disturbed prior to seeding and/or planting to prevent/mitigate compaction.

Planted trees and shrubs should be monitored for survival, and an 80% survival rate should be obtained for the area.

Based on current site conditions, species for this area should be selected for high sun exposure and moderate moisture tolerance. A list of suitable native tree and shrub species is provided in **Table 9**. Trees and shrubs should be planted at a density of 1 tree or shrub per square metre. The mixture of trees and shrubs should be 50/50.

- For **Grouping 1** (West/ Airport Road side of property), it is recommended to use the existing driveway where possible to minimize the removal of existing trees and vegetation. Most of the trees were observed to be in good to fair condition, with the exception of several dead Ash trees. These trees are recommended for removal for safety reasons and are not subject to compensation plantings.
 - Should healthy existing trees require removal for construction access/development and grading purposes, a tree compensation ratio of 2:1 is recommended. Planting and restoration efforts will aim to restore the natural areas where disturbances have occurred.
- For **Groupings 2 and 3** (Southern and Eastern border of property), a minimum buffer of 5 metres shall be observed to protect existing vegetation and groundcover.
- For **Grouping 4**, it is recommended to clear out approximately 2-3 metres of existing Buckthorn and groundcover to accommodate the proposed gravel vehicle parking area. As Buckthorn is an invasive species, no compensation plantings are required.

Vegetation Inventory – 12434 Dixie Road

Field investigations served to confirm the type and extent of groupings through vegetation inventory.

All vegetation inventoried was done so in groupings with the exception of stand alone trees, or trees of significant size (greater than 30cm DBH), and are documented in the tables by grouping below.

Table 5 Vegetation Inventory 12434 Dixie Road – Grouping 1

Common Name	Scientific Name	Diameter at Breast Height	Percentage of Grouping	Site Plan Recommendations
Blue Spruce	<i>Picea pungens</i>	35	N/A	Retain and protect. Minimum Recommended Tree Protection Zone is 2.4 metres.
Blue Spruce	<i>Picea pungens</i>	30	N/A	Retain and protect. Minimum Recommended Tree Protection Zone is 2.4 metres.
Crimson King Norway Maple	<i>Acer platanoides</i> 'Crimson King'	45	N/A	Retain and protect. Minimum Recommended Tree Protection Zone is 3.0 metres.
Sugar Maple	<i>Acer saccharum</i>	40	N/A	Retain and protect – recently suffered limb loss due to storm damage. Minimum Recommended Tree Protection Zone is 2.4 metres.
Blue Spruce	<i>Picea pungens</i>	30	N/A	Retain and protect. Minimum Recommended Tree Protection Zone is 2.4 metres.
White Pine	<i>Pinus strobus</i>	Various 10-30	<5%	Retain and protect. Minimum Recommended Tree Protection Zone is 2.4 metres.
Black Walnut	<i>Juglans nigra</i>	Various 5-30	5%	Retain and protect. Minimum Recommended Tree Protection Zone is 2.4 metres.
Wild Carrot	<i>Daucus carota</i>	<1	10%	Retain and protect.
Manitoba Maple	<i>Acer negundo</i>	Various 5-30	20%	Retain and protect. Minimum Recommended Tree Protection Zone is 2.4 metres.
Horsechestnut	<i>Aesculus hippocastanum</i>	Various 5-25	>5%	Retain and protect. Minimum Recommended Tree Protection Zone is 1.8 metres.
Cedar	<i>Thuja occidentalis</i>	Various 1-15	5%	Retain and protect. Minimum Recommended Tree Protection Zone is 1.8 metres.
Buckthorn	<i>Rhamnus cathartica</i>	Various 5-15	15%	Retain and protect. Minimum

				Recommended Tree Protection Zone is 1.8 metres.
White Poplar	<i>Populus alba</i>	Various 5-30	30%	Retain and protect. Minimum Recommended Tree Protection Zone is 2.4 metres.
Sumac	<i>Rhus typhina</i>	Various 1-10	5%	Retain and protect. Minimum Recommended Tree Protection Zone is 1.2 metres.
Mulberry	<i>Morus alba</i>	Various 1-10	<5%	Retain and protect. Minimum Recommended Tree Protection Zone is 1.2 metres.

Table 6 Vegetation Inventory 12434 Dixie Road - Grouping 2

Common Name	Scientific Name	Diameter at Breast Height	Percentage of Grouping	Site Plan Recommendations
Buckthorn	<i>Rhamnus cathartica</i>	Various 1-10	45%	Retain and protect. approximately 5m for buffer. Clear approximately 5m for grading slope.
Sumac	<i>Rhus typhina</i>	Various 1-15	5%	Retain and protect approximately 5m for buffer. Clear approximately 5m grading slope.
Sugar Maple	<i>Acer saccharum</i>	25	N/A	Retain and protect. Recommended minimum Tree Protection Zone is 1.8metres.
Cherry	<i>Prunus sp.</i>	Various 15-25	<5%	Retain and protect. Recommended minimum Tree Protection Zone is 1.8 metres.
White Oak	<i>Quercus alba</i>	Various 15-20	<5%	Retain and protect. Recommended minimum Tree Protection Zone is 1.8 metres.
American Elm	<i>Ulmus americana</i>	Various 10-20	<5%	Retain and protect. Recommended minimum Tree Protection Zone is 1.8 metres.
Hawthorn	<i>Crataegus sp.</i>	Various 1-15	10%	Retain and protect. Recommended minimum Tree Protection Zone is 1.8 metres.
White Oak	<i>Quercus alba</i>	Various		

Table 7 Vegetation Inventory 12434 Dixie Road - Grouping 3

Common Name	Scientific Name	Diameter at Breast Height	Percentage of Grouping	Site Plan Recommendations
Poplar	<i>Populus sp.</i>	Various 10-30	15%	Retain and protect. Recommended minimum Tree Protection Zone is 2.4 metres.
Basswood	<i>Tilia americana</i>	Various 10-40	10%	Retain and protect. Recommended minimum Tree Protection Zone is 2.4 metres.
Willow	<i>Salix sp.</i>	Various 10-40	5%	Retain and protect. Recommended minimum Tree Protection Zone is 2.4 metres.
Ironwood	<i>Ostrya virginiana</i>	Various 5-25	10%	Retain and protect. Recommended minimum Tree Protection Zone is 1.8 metres.
Sugar Maple	<i>Acer saccharum</i>	Various 5-40	20%	Retain and protect. Recommended minimum Tree Protection Zone is 2.4 metres.
White Oak	<i>Quercus alba</i>	Various 10-40	10%	Retain and protect. Recommended minimum Tree Protection Zone is 2.4 metres.
Buckthorn	<i>Rhamnus cathartica</i>	Various 1-10	15%	Retain and protect. Recommended minimum Tree Protection Zone is 1.8 metres.
Raspberry	<i>Rubus idaeus</i>	<1	5%	Retain and protect.
Creeping Thistle	<i>Cirsium</i>	<1	5%	Retain and protect.

Table 8 Vegetation Inventory 12434 Dixie Road - Grouping 4

Common Name	Scientific Name	Diameter at Breast Height	Percentage of Grouping	Site Plan Recommendations
Creeping Thistle	<i>Cirsium arvense</i>	>1	10%	Retain and protect. Recommended minimum Tree Protection Zone is 1.2 metres.
Ragweed	<i>Ambrosia</i>	>1	30%	Retain and protect. Recommended minimum Tree Protection Zone is 1.2 metres.
Wild Carrot	<i>Daucus carota</i>	>1	10%	Retain and protect.

				Minimum Recommended Tree Protection Zone is 1.2 metres.
Goldenrod	<i>Solidago canadensis</i>	>1	50%	Retain and protect. Recommended minimum Tree Protection Zone is 1.2 metres.

Tree Protection and Restoration Recommendations

Wherever possible, all existing established vegetation is to be left undisturbed. Where the removal of existing groundcover/vegetation is required, rehabilitation is recommended in the form of Terraseed, Hydroseed, or planting of live stakes and whips.

During construction, there is a risk of increasing soil compaction in the area through the use of heavy equipment and vehicle traffic. Soil compaction restricts the successful establishment of newly planted vegetation, as well as the health and vigor of established trees.

Soil compaction near trees to be protected, as well as newly planted vegetation should be avoided, and heavy equipment traffic should be restricted in these areas. Where soil compaction may be unavoidable, the ground should be tilled or disturbed prior to seeding and/or planting to prevent/mitigate compaction.

Planted trees and shrubs should be monitored for survival, and an 80% survival rate should be obtained for the area.

- For **Grouping 1** (East side of property), it is recommended that all existing trees and vegetation in this area be retained and protected as there are no proposed grading changes in this area.
- For **Grouping 2** (North side of property), it is recommended to clear approximately 5 metres back to the buffer prior to installation of gravel to ensure all vegetation is removed safely and the remaining vegetative ground cover survives in good health and structural condition.
- For **Grouping 3** (West side of property), a minimum buffer of 10 metres shall be observed to protect existing vegetation in bordering woodlot.

Table 9 Native Trees and Shrubs for Restoration and Compensation

Common Name	Scientific Name
Common Elderberry	<i>Sambucus canadensis</i>
Highbush Cranberry	<i>Viburnum opulus</i>
Nannyberry	<i>Viburnum lentago</i>
Red-osier Dogwood	<i>Cornus sericea</i>
Bur Oak	<i>Quercus macrocarpa</i>
Serviceberry	<i>Amelanchier sp.</i>
Meadow Willow	<i>Salix petiolaris</i>
Staghorn Suma	<i>Rhus typhina</i>
Tamarack	<i>Larix laricina</i>
Paper Birch	<i>Betula papyrifera</i>
Silver Maple	<i>Acer saccharinum</i>
Black Cherry	<i>Prunus serotina</i>

Assumptions and Limitations:

The observations documented are true for only the period that the Consulting Arborist was on site and therefore do not include any other activity that may have occurred on site or to the trees before or after that period.

If the health of the tree was assessed while it was dormant, there may be some inaccuracy in the assigned health rating of the tree.

All trees represent a certain inherent degree of risk, and this evaluation does not preclude all risk of failure.

Notwithstanding the recommendations and conclusions made in this report, it must be realized that trees are living organisms, and their health and vigor constantly change over time. They are not immune to changes in site conditions, or seasonal variations in the weather conditions.

We accept no responsibility for materials and information submitted to us that are incorrect. Any survey boundaries marked on plans or on the ground is not the responsibility of Maple Hill Tree Services Inc.

This report shall be considered whole, no sections are severable, and the report shall be considered incomplete if any pages are missing.

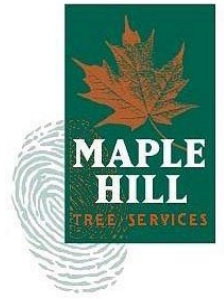
The consultant/appraiser shall not be required to give testimony or to attend court by reason of this report unless subsequent contractual arrangements are made, including payment of an additional fee for such services.

Possession of this report or copy thereof does not imply right of publication or use for any purpose by any other than the person to whom it is addressed, without the prior expressed written or verbal consent of the consultant/appraiser.

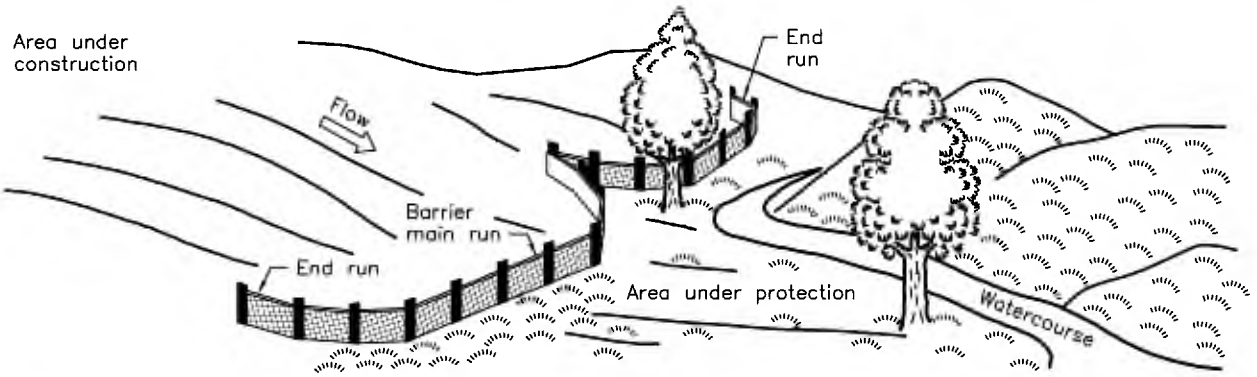
Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible; however, the consultant/appraiser can neither guarantee nor be responsible for the accuracy of information provided by others.

This report and any values expressed herein represent the opinion of the author and their fee is in no way contingent upon the reporting of a specified value, a stipulated result, the occurrence of a subsequent event, nor upon any finding to be reported.

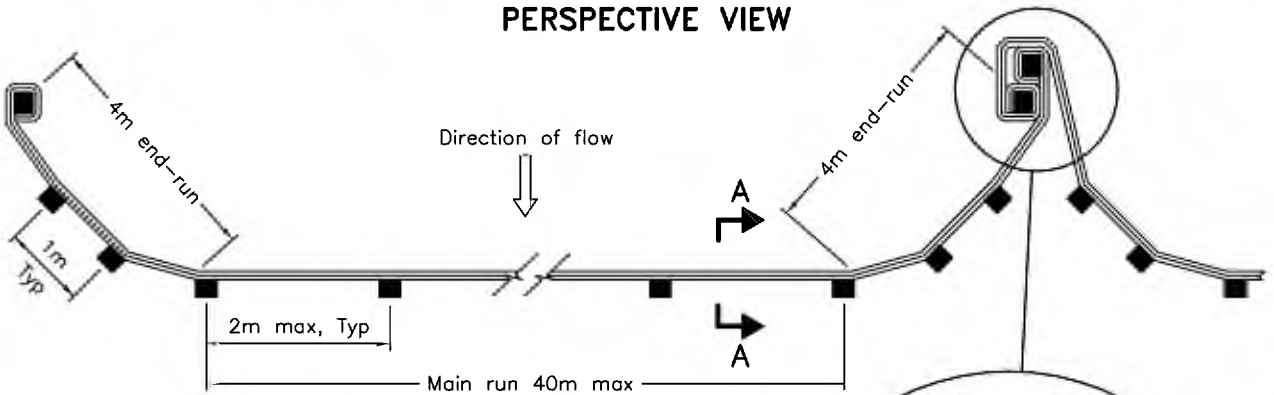
The details obtained from any photographs and outlined in the sketch plan are intended as visual aids and are not to scale. They should not be construed as engineering reports or surveys.



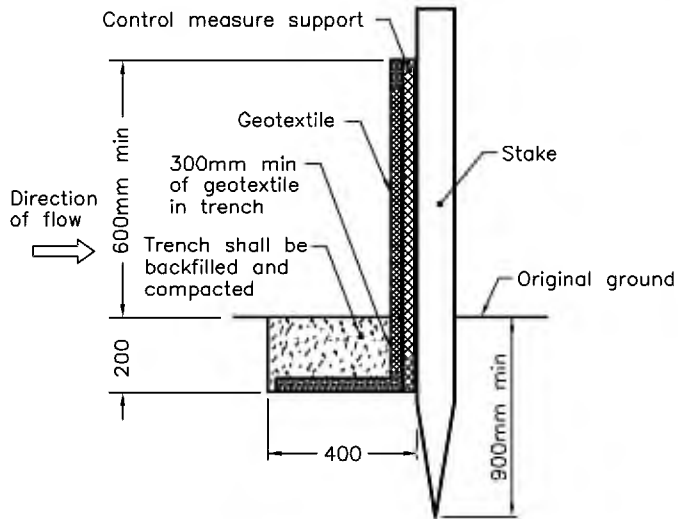
APPENDIX C
STANDARD
DETAILS



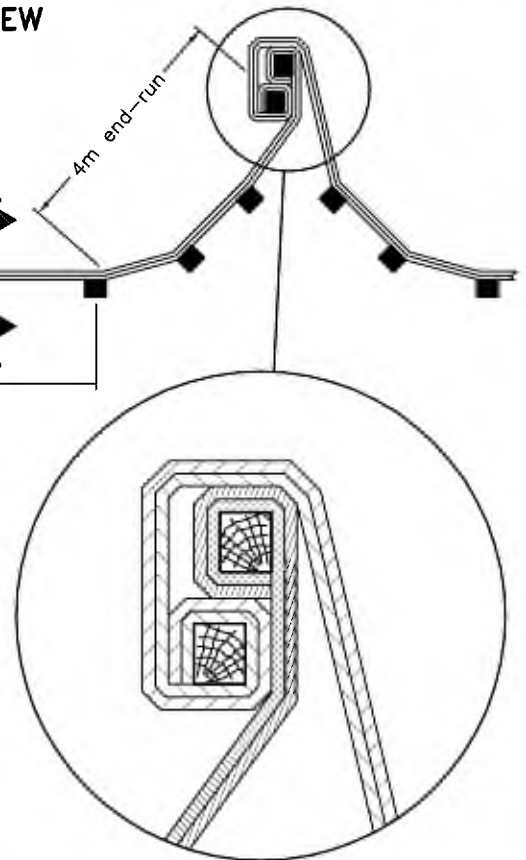
PERSPECTIVE VIEW



PLAN



SECTION A-A



JOINT DETAIL

NOTE:

A All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING

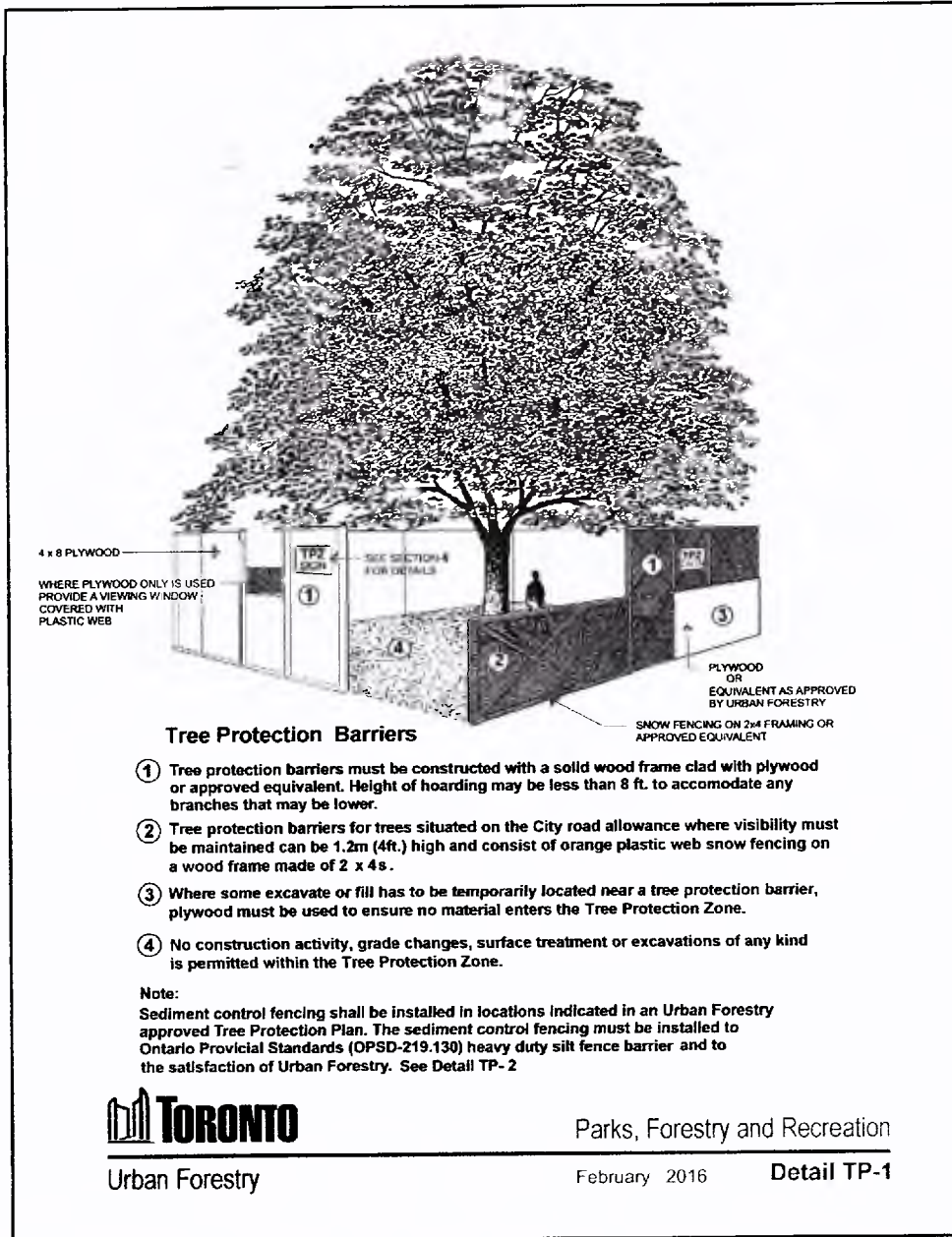
Nov 2015

Rev 2

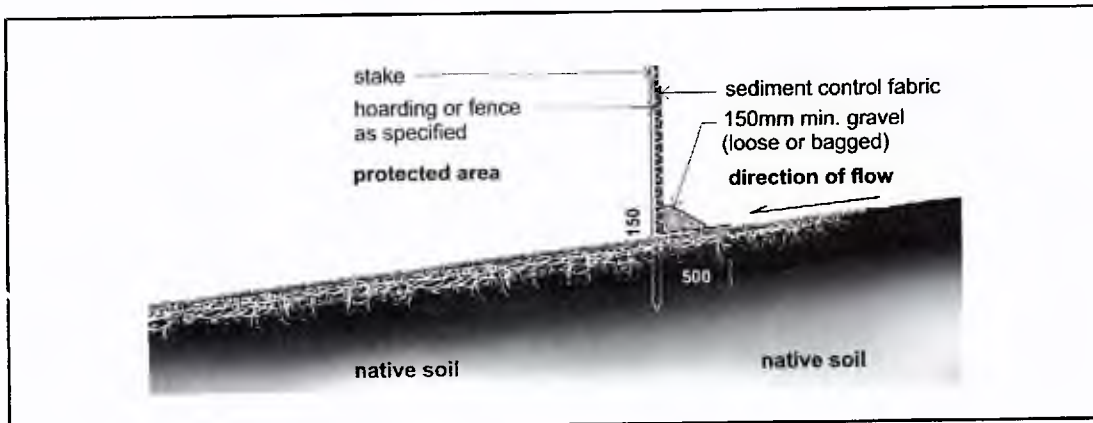
HEAVY-DUTY
SILT FENCE BARRIER



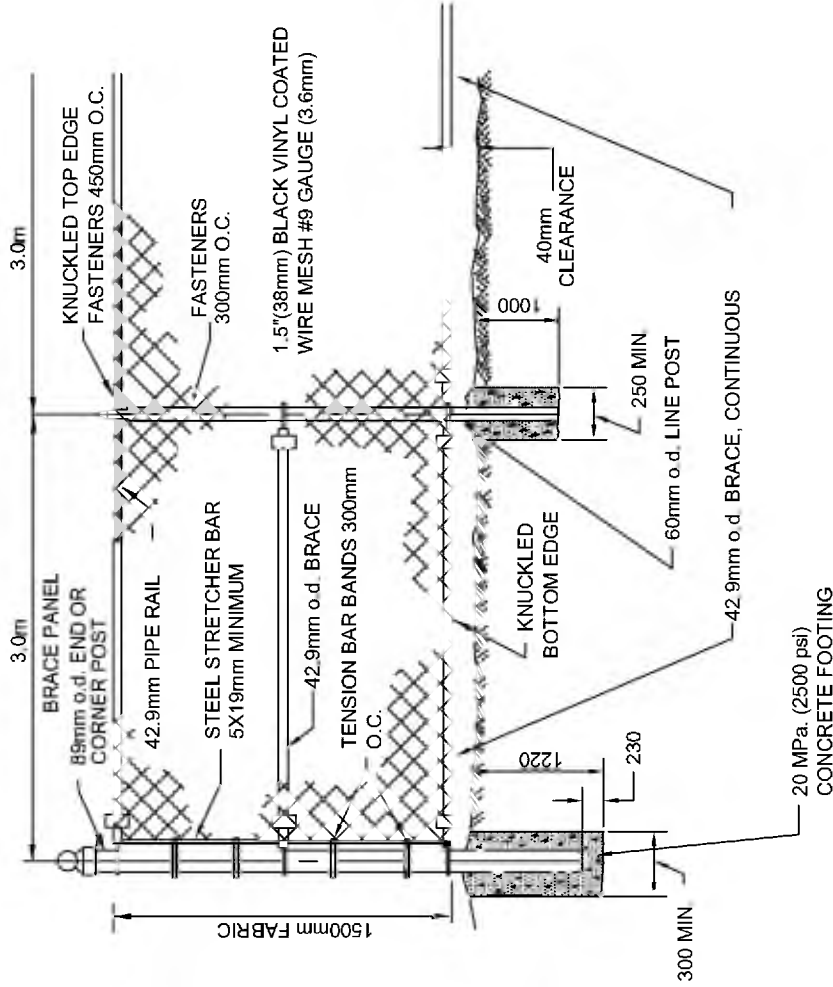
OPSD 219.130



Urban Forestry Detail TP-1



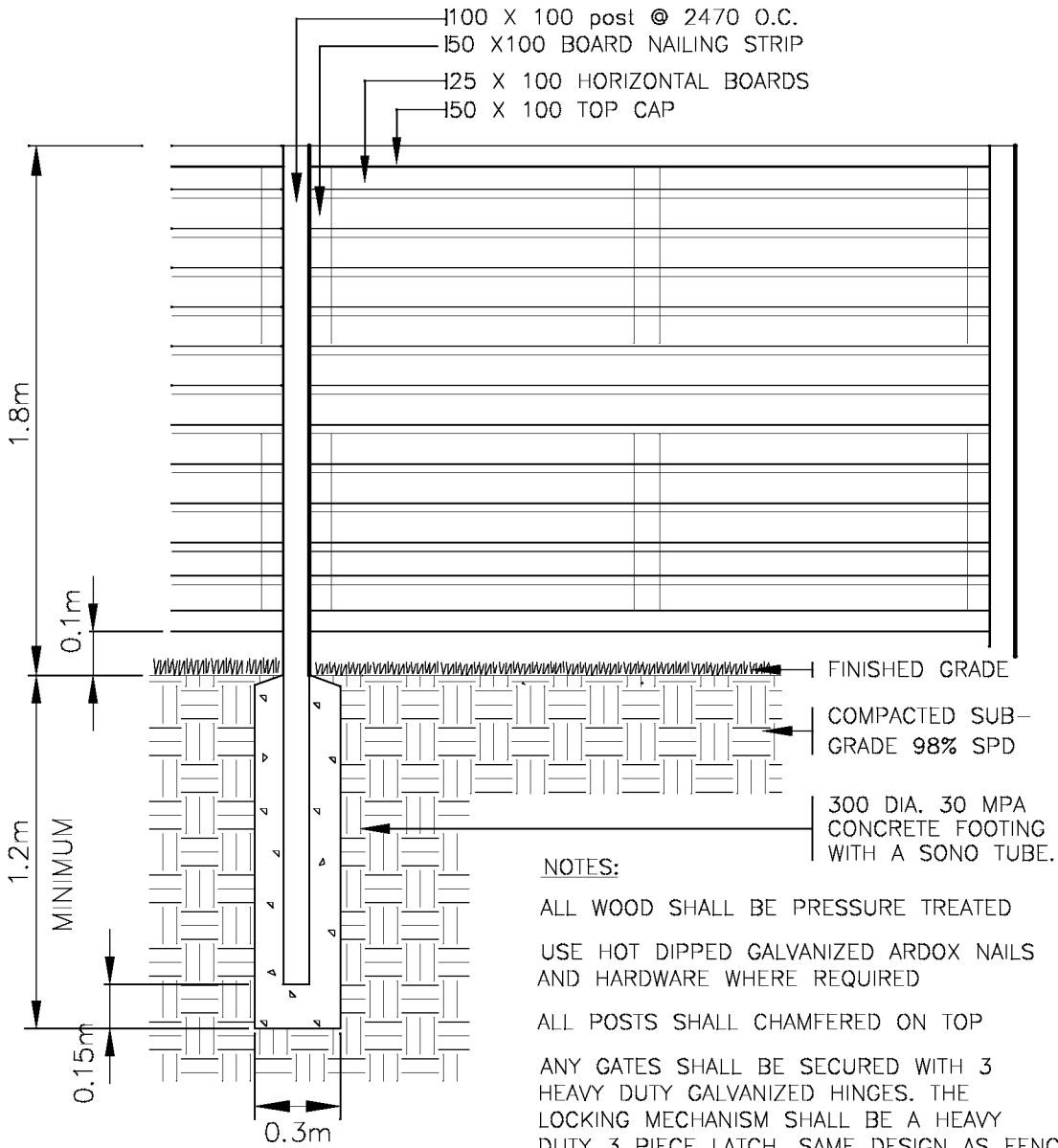
Sediment control barriers for use over tree root zone



- NOTES:**
1. ALL POST AND RAILS SHALL BE GALVANIZED STEEL PIPE SCHEDULE 40 WEIGHT, WITH A BLACK POLYETHYLENE COATING.
 2. ALL REQUIRED FITTINGS AND HARDWARE SHALL BE OF ALUMINUM ALLOY WITH ELECTROSTATIC POWDER-COATED POLYESTER AND A BLACK BAKED-ON FINISH.
 3. LENGTH OF CORNER AND STRAINING POSTS 2.6m. LENGTH OF LINE POSTS 2.5m.
 4. RUNS MORE THAN 150m ARE TO HAVE AN 89mm O.D. INTERMEDIATE STRAINING POST WITH A 42.9mm O.D. BRACES IN BOTH DIRECTIONS.
 5. THE BARBED TOPS AND BOTTOM OF ALL FENCING TO BE KNUCKLED OVER SUCH THAT NO SHARP PROJECTIONS ARE VISIBLE OVER THE TOP AND BOTTOM PIPE RAIL.
 6. FOR GATE DETAIL SEE OPSD 900.03 WITH FOOTING, HEIGHT AND MATERIAL DETAIL AS SHOWN ABOVE.
 7. ALL POST AND MESH TO LIE ON PRIVATE PROPERTY;
- NO ABOVE GROUND FENCE ELEMENTS SHALL INTRUDE ONTO PUBLIC PROPERTY, INCLUDING THE ROAD RESERVE.

TOWN OF CALEDON		APRD	C.C.	DATE
3		STANDARD No. 900 NOW 600	JUNE 08	JAN 00
2		PIPE WEIGHT	CC	NOV. 06
1		BOTTOM BRACE	CC	JULY 03
NO.		REVISION	APRD	DATE
				SCALE N.T.S.
				STANDARD No. 600

CHAIN LINK FENCE



1.8m ht WOOD FENCE
 N.T.S.

HOMELAND VINYL FENCING MODEL F202 (or approved equal)

MATERIAL SPECIFICATIONS

Vinyl Covers

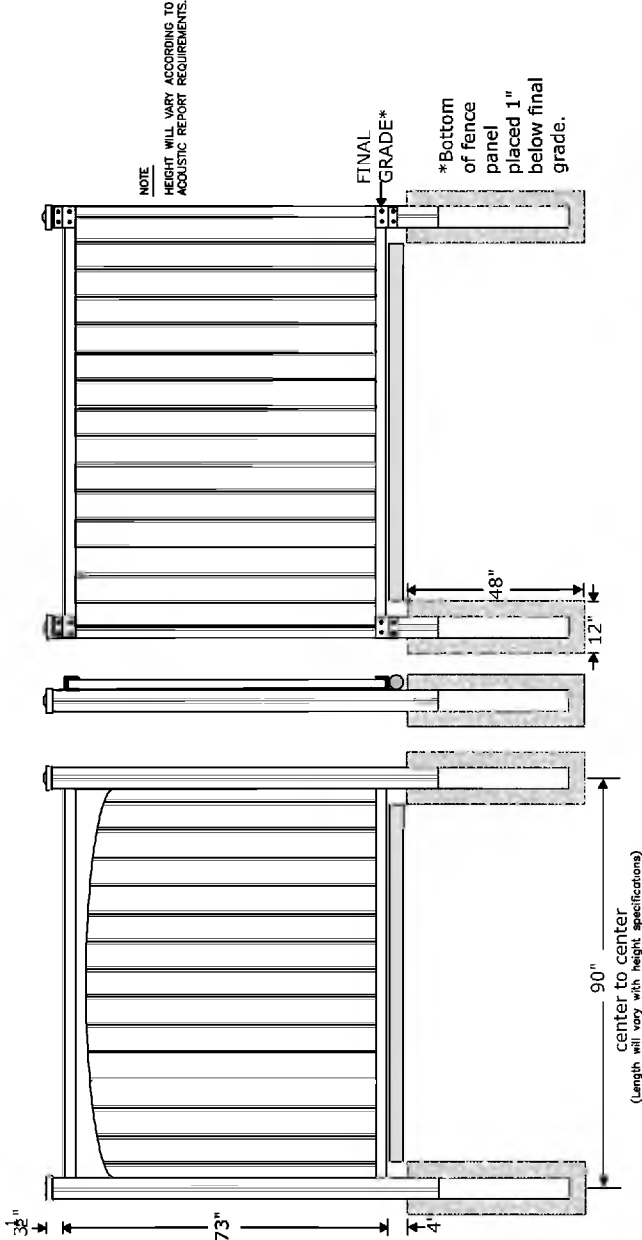
1. EXTERIOR GRADE RIGID VIRGIN PVC IS USED FOR ALL COVERS.
2. ASTM C872-92 SALT SCALING RESISTANCE (100% RESISTANT)
3. ASTM D4216 CELL CLASSIFICATION.
4. ASTM D792 SPECIFIC GRAVITY.
5. ASTM D2240 DUROMETER.
6. ASTM D698 TENSILE STRENGTH AND TENSILE MODULUS.
7. ASTM D790 FLEXURAL STRENGTH AND FLEXURAL MODULUS.
8. ASTM D4228 DROP WEIGHT IMPACT.
9. ASTM D256 NOTCHED IZOD IMPACT.
10. ASTM D648 HEAT DEFLECTION TEMPERATURE
11. ASTM D698 COEFFICIENT OF LINEAR EXPANSION
12. CSA-A440-M90 COLOUR HOLD.
13. UL94 FLAMMABILITY

Steel Panel

1. G90 COMMERCIAL QUALITY GALVANIZED STEEL SHEET. 4 POUNDS PER SQUARE FOOT DENSITY WITH VINYL COVER.
2. ASTM A653/A653M STANDARD SPECIFICATION FOR STEEL SHEET ZINC COATED (GALVANIZED) BY THE HOT DIP PROCESS.

Steel Post

1. G164 HSS GALVANIZED STEEL TUBE 3.5"x3.5"x1/8", 1/4", OR 3/8" THICK BASED ON FENCE HEIGHT REQUIRED.
2. ASTM A500 GRADE C OR CSA G40.21 GRADE 50W STRUCTURAL QUALITY STEELS.
3. CSA G164-M92 HOT DIP GALVANIZING OF IRREGULARLY SHAPED ARTICLES.
4. CSA S16.1-94 LIMIT STATES DESIGN OF STEEL STRUCTURES



7. THE CONCRETE SHALL BE ALLOWED TO CURE FOR 7 DAYS BEFORE THE FENCE PANELS ARE INSTALLED.
8. THE FENCE SHALL BE CONSTRUCTED TO THE HEIGHT AND ALIGNMENT AS APPROVED BY THE TOWN OF CALEDON.
9. THE FENCE SHALL BE EVENLY SLOPED TO ACCOMMODATE GRADE CHANGES. WHERE STEPPING IS REQUIRED, THE STEPPING SHALL OCCUR AT THE POSTS. THE STEPS BETWEEN PANELS SHALL BE AT EVEN INCREMENTS NO LESS THAN 2'(60mm) NOR GREATER THAN 6'(150mm). AT EACH POST, EXCEPT AS AUTHORIZED BY THE TOWN OF CALEDON, THE TOP OF THE FOUNDATION SHALL BE ADJUSTED BY MITERING THE TOP OF THE SONOTUBE BEFORE CONCRETE IS POURED.
10. A DOUBLE POST IS REQUIRED FOR ALL DIRECTION CHANGES GREATER THAN 20°.
11. FENCE TO BE LOCATED ON PRIVATE PROPERTY.

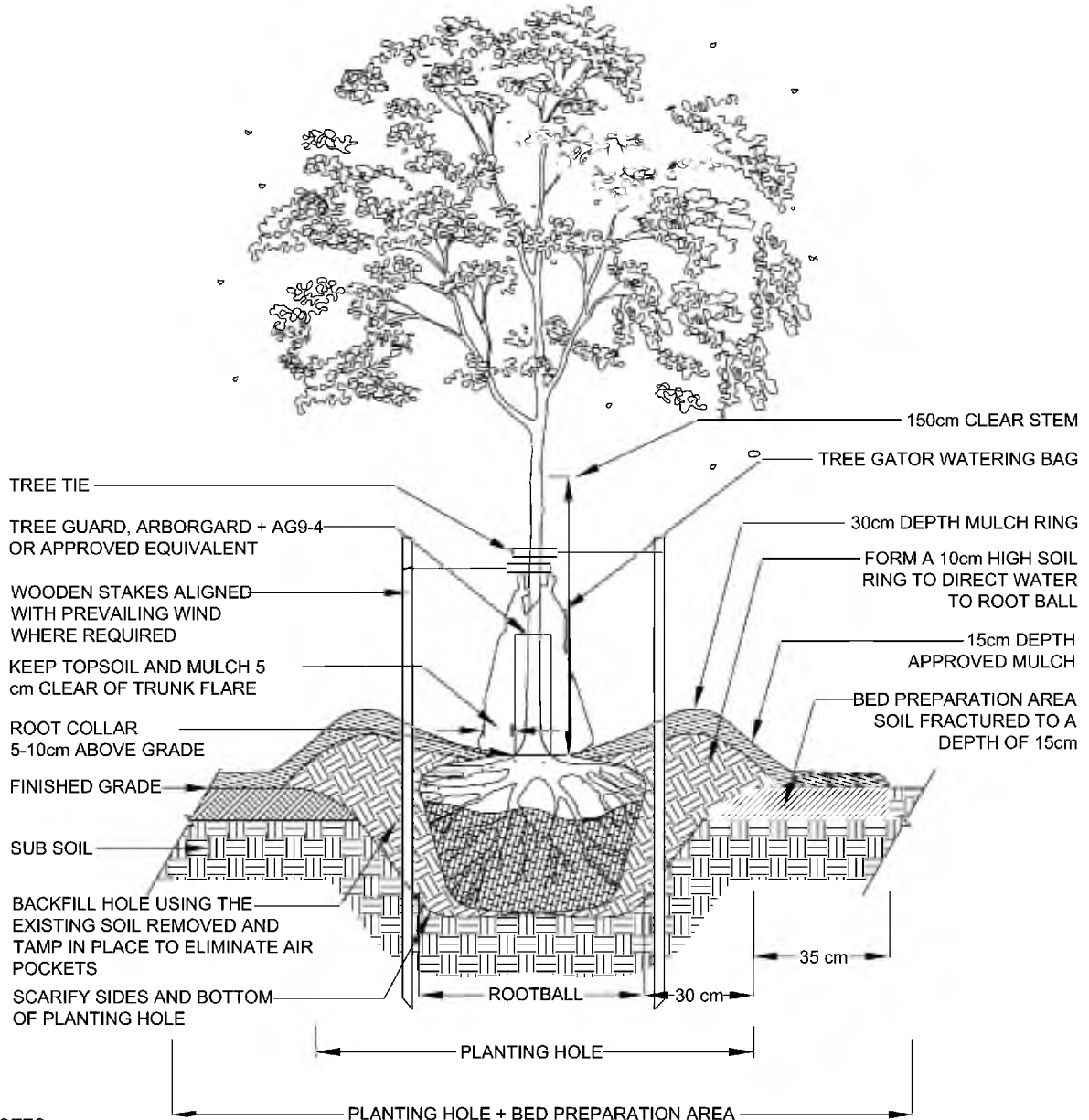
1. ALL MATERIALS, COMPONENTS AND WORKMANSHIP TO CONFORM TO LOCAL BY-LAWS.
2. THE SOIL BENEATH AND WITHIN AN 80'(24m) RADIUS OF ANY POST FOUNDATION SHALL BE CERTIFIED 95% S.P.D. PRIOR TO CONSTRUCTION.
3. CLASS OF CONCRETE SHALL BE 30 MPa AT 28 DAYS MINIMUM.
4. WATER CEMENT RATIO SHALL BE 0.5 MAXIMUM.
5. AIR CONTENT SHALL BE 5-8%.
6. CONCRETE FOR DRILLED FOUNDATIONS SHALL BE CAST AGAINST UNDISTURBED SOIL EXCEPT FOR THE TOP 24"(600mm) WHICH SHALL BE FORMED BY SONOTUBE.

NOTES:

TOWN OF CALEDON

ACOUSTIC FENCE

APRD.	C.C.	DATE:	JUNE 2004
DRAWN:		SCALE	NTS
2	STANDARD No. 906.02 NOW 601	JUNE 08	
1	NOTES EDIT	MAR. 08	
NO.	REVISION	APR'D	DATE
			STANDARD No. 601



NOTES

1. MYCORRHIZAL INOCULANTS:
- INSTALL MYKE PRO LANDSCAPE G.
2. WATERING:
- SOAK THE ROOTBALL AND BACKFILL AREA WITH 40 LITRES OF WATER AFTER PLANTING.
- INSTALL 75 LITRE TREE GATOR WATERING BAG.
3. ROOTBALL, BURLAP, TWINE:
- CUT AND REMOVE ALL WIRE, ROPE, BURLAP AND TWINE FROM THE TOP 1/3 OF THE ROOTBALL.
4. CROWN PRUNING:
- PRUNE AT PLANTING TO CAREFULLY REMOVE DEAD, BROKEN, DISEASED OR DAMAGED BRANCHES.



**PUBLIC WORKS
STANDARD DRAWING**

DATE: AUGUST 2016

APPROVED BY	DRAWN BY
G.K./B.N.	C.B.
STD. DWG. NUMBER	SCALE
5-4-1	N.T.S.

**CALIPER DECIDUOUS TREE
PLANTING DETAIL FOR SOFTSCAPE BOULEVARDS**