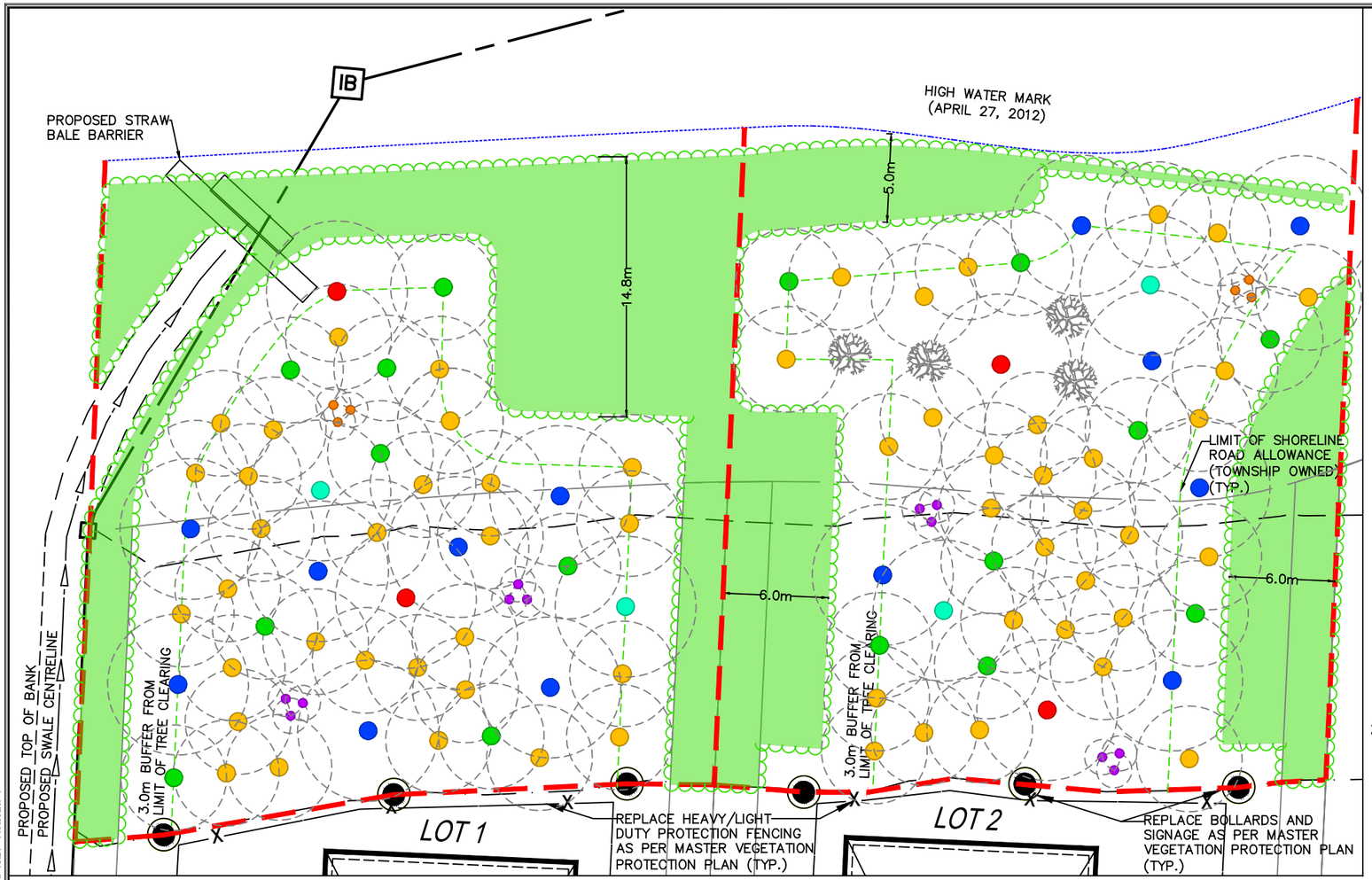

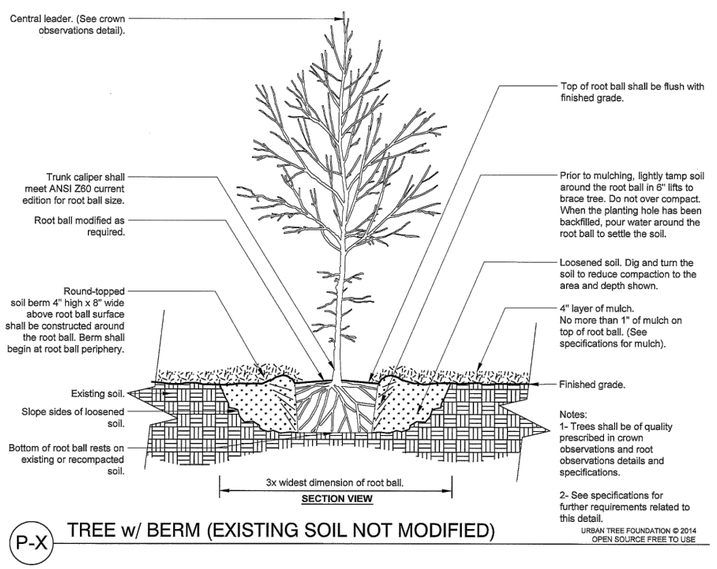

P-X TREE w/ BERM (EXISTING SOIL NOT MODIFIED)

GENERAL PLANTING SUMMARY

1.0. SITE PREPARATION

1.1. The ground surface of the cleared areas consist of a thick cedar mulch layer from trees previously chipped after clearing activities. The existing cedar mulch layer should be distributed and spread evenly by way of machinery to ensure a mulch layer of approximately 2-3 inches in thickness across the ground surface of the cleared areas for Lot 1, 2 & 7.

1.2. Any excess mulch should be removed from the site. The existing cedar mulch should be used around the bases of planted tree/shrubs for soil moisture retention and to discourage competing vegetation to grow in proximity. Again, mulch should not be spread more than 2-3 inches thick around the base of planted trees/shrubs.

1.3. No machinery shall operate within the existing vegetated areas in a manner that would damage existing trees. Care must be taken when spreading the existing mulch layer by machinery to not excavate the underlying soils and expose/damage existing live tree roots. All machine operators shall be made aware of the requirement to protect existing trees on the site.

2.0. TREE/SHRUB PLANTING

2.1. Source Material - Eastern White Cedar should be nursery stock and be container grown for a minimum of three months. Minimum of #3 container size is recommended for all tree species. Minimum of #2 container size is recommended for all shrub species (Red Osier Dogwood). Eastern White Cedar trees must be at least 250cm tall and should not exceed 300cm. Deciduous trees (Silver Maple) should be restoration size (>20mm caliper) and be at least 180cm in height.

All plant material is to be sourced from a local nursery. Nursery stock is ideally sourced from Ontario Seed Zone 32; if stock is currently limited or unavailable from Zone 32, then alternatively Zone 33 or 34 only. Bush dug plant material is not acceptable. All plant tags must be removed upon planting of trees and shrubs. Any vegetation damaged during restoration works shall be restored to the satisfaction of the NEC.

2.2. Planting - The following steps outline the planting process:

- Container-grown stock are best planted from early October (coincident with leaf colour change) until freeze-up; or in the spring after frost is out of the soil until new foliage is partly unfurled (early to mid May).
- The planting hole should be dug at least twice as wide as the widest part of the root ball and to the depth of the root ball. Holes should be dug immediately prior to planting to avoid drying out of the backfill soil. The sides of the hole should be roughened to allow root penetration and ensure water flow.
- Remove the pot enclosing the root ball before installing the tree. Roots encircling and matted on the bottom of the root ball should be clipped. Once the tree is in place, backfill the hole two-thirds of the way with gently tamped soil. The remaining space should be filled with water to settle the soil around the root ball. Once the water is drained from the hole the remaining space should be filled to the soil line (*i.e.* the region of the plant where root and shoot meet - the "collar").

2.3. Protective Measures - The following measures should be implemented to facilitate the successful establishment of planted stock:

- Plant material that has been delivered to the work site in a damaged or poor quality state (*i.e.* dry root mass) should not be planted and should be replaced.
- Immediately following tree installation, place tree mulch around the base of each stem to prevent loss of soil moisture and reduce competition from weedy vegetation.
- Mulch should be applied to the general specifications outlined in the planting diagrams contained on this figure.
- Mulch shall be coarse, ground, from tree and brush sources. The minimum range of fine particles shall be 3/8 inch or less in size and a maximum size of individual pieces shall be approximately 1 to 1-1/2 inch in diameter and maximum length of approximately 4 to 8 inches. No more that 25% of the total volume shall be fine particles and no more than 20% of total volume be large pieces.
- Deciduous trees (Silver Maple) require protective trunk materials to be installed following planting to protect against deer and rodent damage during the first two years of establishment. The mesh should be removed from the trees following the second growing season following planting.

3.0 MONITORING AND MAINTENANCE

3.1. Monitoring of tree/shrub plantings should continue for two years after installation to ensure successful establishment of all species. Planted species should be watered regularly during the first year of establishment. At minimum, weekly watering should be done during times of drought and a Certified Arborist should be consulted if more frequent watering should be required. It should be left up to the discretion of the Certified Arborist to dictate the regular watering schedule, depending on weather conditions during the first year of plant material establishment.

3.2. All purchasing, monitoring and maintenance of plantings outside of the Township owned shoreline road allowance will be the responsibility of the vendor company, Boulter Estates Ltd. (assuming the Township will be monitoring/maintaining these areas) and inspected three times over the course of those two years:

3.2.1. Approximately one month after installation;
3.2.2. in the spring following the first growing season and winter.; and
3.2.3. a full two years after installation.

3.3. A success rate of 80% of the original abundance is the recommended target. Tree/shrub material should be replaced if the success rate falls short of the target. The purchase, installation and monitoring of the replacement plantings will be the responsibility of the vendor company, Boulter Estates Ltd.

3.4. The dry swale area should be mowed for at least two seasons following application. Mowing should occur in the spring (early - mid June) once fast-growing exotic grasses and weeds reach a height of approximately 12" - mow to a height of approximately 6".

4.0. PROTECTION FENCING & SIGNAGE

4.1. All sediment and erosion control measures, tree protection fencing and signage must be reinstalled as per the Master Vegetation Protection Plan completed by Azimuth Environmental Consulting, Inc. (2016). These measures should be reinstalled immediately following planting completion and are intended to limit access to both existing/remaining vegetated areas and restored areas.

LEGEND:

- PROPERTY BOUNDARY
- PROPERTY LOT LINE
- VEGETATION PROTECTION LOT BOUNDARY
- EXISTING UNCLEARED FOREST / LIMIT OF TREE CLEARING
- EXISTING TREE (TO BE RETAINED)
- BOLLARD LOCATION (APPROX.)
- HEAVY/LIGHT DUTY PROTECTION FENCING
- PLANTING BUFFER RADIUS: EASTERN WHITE CEDAR–3.0m RED OSIER DOGWOOD–2.0m

Tree Inventory Table for Lot 1 and 2

Symbol	Species Name	Lot 1 #	Lot 2 #
	Eastern White Cedar *Thuja accidentalis*	30	30
	White Spruce *Picea glauca*	8	8
	Silver Maple *Acer saccharinum*	7	6
	Balsam Poplar *Populus balsamifera*	2	2
	White Birch *Betula papyrifera*	2	2
	Red Osier Dogwood *Cornus sericea*	6	6
	Staghorn Sumac *Rhus typhina*	3	3

NOTES:
1. SUBSEQUENT TO THE COMPLETION OF THE PLANTING WORKS, A LETTER CERTIFYING THAT PLANTING WORK HAS BEEN COMPLETED IN ACCORDANCE WITH THE APPROVED RESTORATION PLAN SHALL BE PROVIDED TO THE NEC.

5m 0 10m
HORIZONTAL SCALE 1:300

AZIMUTH ENVIRONMENTAL CONSULTING, INC.

Restoration Plan
Lots 1 & 2

Boulter Estates
Township of Georgian Bluffs, ON

DATE ISSUED:	*AUGUST 2021*	Figure No. 1
CREATED BY:	*JLM, AL*	
PROJECT NO.:	*19-247*	
REFERENCE:	---	

DAYSTAMP: Q:\19 Projects\19-247 Boulter Estates Tree Marking\04.0 - Drafting\19-247.dwg

Plotted by: ALU on August 26, 2021 at 6:24pm
File: \\Azimuthsrv\data3\Projects3\19 Projects\19-247 Boulter Estates Tree Marking\04.0 - Drafting\19-247 R3.dwg Layout: AR81 Plotscale: 1