

This Addendum forms part of the contract documents for the above noted project, and the revisions and additions noted herein and any attachments shall read in conjunction with all other documents. This Addendum shall take precedence over all previously issued tender documents where differences occur.

RESPONSE BIDDER QUESTIONS

Q1: *As per spec.(Section 32 93 10, pg 2 of 8) plant material listed on itemized plant list to include 24 months warranty period from the time of acceptance whereas planting notes#6 in drawing L200 states that warranty period for all plants is one year from substantial completion. Please clarify.*

A1: Plant material is to include warranty for a period of one year from *acceptance of plant installation*. Refer to Revised L200 Site Planting Plan, note 6, and Section 32 93 10 Trees, Shrubs and Groundcover Planting.

Q2: *Please confirm the planting list provided in drawing L220 is part of this project or not as I couldn't see the location marked on Overall Planting Plan L200.*

A2: Yes, L220 is part of the scope of work. The Land Based Ecological Offsetting is located on the east side of campus, east of Parking Lot P8 and south of the Soccer field.

TENDER DOCUMENTS

SPECIFICATIONS

- .1 Revise Section 32 93 10 Trees, Shrubs and Ground Cover Planting.
 - .1 Revise Part 1.8.1 and 1.8.2 Warranty per below
 - .1 Plant material as itemized on plant list to include the *12 months* warranty period from time of acceptance. Plant material that is planted after leaf drop will be reviewed for acceptance the following spring, after leaf-out.
 - .2 Contractor hereby warrants that plant material as itemized on plant list will remain free of defects, in healthy and vigorous growing condition, for *1 full growing season*, providing adequate maintenance has been provided.
 - .2 Revise Part 3.10.2. Maintenance during Warranty Period per below.
 - .2 Provide written warranty for *1 year* from date of acceptance. Replace any exterior plants which in the opinion of the Consultant, are not in acceptable condition at the end of the warranty period.

DRAWINGS

L200 Site Planting Plan

- .2 Revise Planting Notes, #6 to read;
 - .1 Warranty period for all planting is one year from acceptance of planting installation. Warranty replacements of all plant material deemed not to be in healthy, vigorous growing condition will be undertaken by the contractor as requested by the landscape architect at any time during the warranty period.

ATTACHMENTS TO THIS ADDENDUM

SPECIFICATIONS

Section 32 93 10

Trees, Shrubs and Groundcover Planting

DRAWINGS

L200

Site Planting Plan

END OF LANDSCAPE ADDENDUM 2

Part 1 General

1.1 RELATED REQUIREMENTS

- .1 Section 32 91 19 Topsoil and Finish Grading

1.2 REFERENCE STANDARDS

- .1 Agriculture and Agri-Food Canada (AAFC).
 - .1 Plant Hardiness Zones in Canada-[2000] .
- .2 Canadian Nursery Landscape Association (CNLA)
 - .1 Canadian Standards for Nursery Stock-[2006] .

1.3 DEFINITIONS

- .1 Mycorrhiza: association between fungus and roots of plants. This symbiosis, enhances plant establishment in newly landscaped and imported soils.

1.4 ADMINISTRATIVE REQUIREMENTS

- .1 Scheduling: obtain approval from Consultant of schedule 7 days in advance of shipment of plant material.
- .2 Schedule to include:
 - .1 Quantity and type of plant material.
 - .2 Shipping dates.
 - .3 Arrival dates on site.
 - .4 Planting Dates.

1.5 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Product Data:
 - .1 Submit manufacturer's instructions, printed product literature and data sheets for [trees, shrubs, ground cover, fertilizer, mycorrhiza, anti-desiccant, anchoring equipment, and mulch] and include product characteristics, performance criteria, physical size, finish and limitations.
- .2 Samples:
 - .1 Submit samples of mulch.

1.6 QUALITY ASSURANCE

- .1 Qualifications:
 - .1 Landscape Contractor: to be a Member in Good Standing of Landscape Ontario.
 - .2 Landscape Planting Supervisor: Landscape Industry Certified Technician with Softscape Installation designation.
 - .3 Landscape Maintenance Supervisor: Landscape Industry Certified Technician with Ornamental Maintenance designation.

1.7 DELIVERY, STORAGE AND HANDLING

- .1 Delivery and Acceptance Requirements: deliver materials to site in original factory packaging, labelled with manufacturer's name and address.
 - .1 Protect plant material from frost, excessive heat, wind and sun during delivery.
 - .2 Protect plant material from damage during transportation:
 - .1 Delivery distance is less than 30 km and vehicle travels at speeds under 80 km/h, tie tarpaulins around plants or over vehicle box.
 - .2 Delivery distance exceeds 30 km or vehicle travels at speeds over 80 km/h, use enclosed vehicle where practical.
 - .3 Protect foliage and root balls using anti-desiccants and tarpaulins, where use of enclosed vehicle is impractical due to size and weight of plant material.
- .2 Storage and Handling Requirements:
 - .1 Immediately store and protect plant material which will not be installed within on working day in accordance with supplier's written recommendations and after arrival at site.
 - .2 Protect stored plant material from frost, wind and sun and as follows:
 - .1 For bare root plant material, preserve moisture around roots by heeling-in or burying roots in topsoil and watering to full depth of root zone.
 - .2 For pots and containers, maintain moisture level in containers.
 - .3 For balled and burlapped and wire basket root balls, place to protect branches from damage. Maintain moisture level in root zones.
 - .3 Store and manage hazardous materials in accordance with manufacturer's written instructions.

1.8 WARRANTY

- .1 Plant material as itemized on plant list to include the 12 months warranty period from time of acceptance. Plant material that is planted after leaf drop will be reviewed for acceptance the following spring, after leaf-out.
- .2 Contractor hereby warrants that plant material as itemized on plant list will remain free of defects, in healthy and vigorous growing condition, for 1 full growing season, providing adequate maintenance has been provided.
- .3 End-of-warranty inspection will be conducted by Consultant.
- .4 Consultant reserves the right to extend Contractor's warranty responsibilities for an additional one year if, at end of initial warranty period, leaf development and growth is not sufficient to ensure future survival.

Part 2 Products

2.1 PLANT MATERIAL

- .1 Type of root preparation, sizing, grading and quality: comply to Canadian Standards for Nursery Stock.
 - .1 Source of plant material: grown in Zone 5
 - .2 Plant material must be planted in zone specified as appropriate for its species.

- .3 Plant material in location appropriate for its species.
- .2 Plant material: free of disease, insects, defects or injuries and structurally sound with strong fibrous root system.
- .3 Trees: with straight trunks, well and characteristically branched for species.
- .4 Bare root stock: nursery grown, in dormant stage, not balled and burlapped or container grown.
- 2.2 WATER**
 - .1 Potable and free of impurities that would inhibit plant growth.
- 2.3 STAKES**
 - .1 T-bar, steel, 40 x 40 x 5 x 2440 mm.
- 2.4 GUYING WIRE**
 - .1 Type 2: Green Arbortie or equivalent, secured to stake.
- 2.5 TRUNK PROTECTION**
 - .1 Plastic: Flexi-pipe plastic guard, 500mm high, 100mm dia. side split vertically
- 2.6 MULCH**
 - .1 Shredded wood: varying in size from 25 to 125mm in length, from pine trees.
- 2.7 FERTILIZER**
 - .1 Synthetic commercial type as recommended by manufacturer or soil test report.
 - .1 Ensure new root growth is in contact with mycorrhiza.
 - .2 Use mycorrhiza as recommended by manufacturer's written recommendations.
- 2.8 ANTI-DESICCANT**
 - .1 Wax-like emulsion to provide film over plant surfaces reducing evaporation but permeable enough to permit transpiration.
- 2.9 FLAGGING TAPE**
 - .1 Fluorescent, orange
- 2.10 SOURCE QUALITY CONTROL**
 - .1 Obtain approval from Consultant of plant material prior to planting.
- 2.11 ADDITIONAL PLANT MATERIAL QUALIFICATIONS**
 - .1 Plant material obtained from areas with milder climatic conditions from those of site acceptable only when moved to site prior to the breaking of buds in their original location and heeled-in, in a protected area until conditions suitable for planting.
 - .2 Use trees and shrubs must have been root pruned regularly, but not later than one growing season prior to arrival on site.

- .3 Cold storage: written request and approval required for plant material which has been held in cold storage.
- .4 Container-grown stock: acceptable if containers large enough for root development. Shrubs must have grown in container for minimum of one growing season but not longer than two. Root system must be able to "hold" soil when removed from container. Plants that have become root bound are not acceptable. Container stock must have been fertilized with slow releasing fertilizer.
- .5 Balled and burlapped: coniferous and broad-leaved evergreens over 500mm. tall must be dug with soil ball. Deciduous trees in excess of 3m height must have been dug with large ball. Root balls must include 75% of fibrous and feeder root system. This excludes use of native trees grown in light sandy or rocky soil. Secure root balls with burlap and heavy twine, rope or a wire basket.
- .6 Collected plant material: will not be permitted.
- .7 Substitutions to plant material as indicated on planting plan not permitted unless written approval has been obtained as to type, variety and size. Plant substitutions must be of similar species and of equal size as those originally specified.

Part 3 Execution

3.1 EXAMINATION

- .1 Verification of Conditions: verify conditions of substrate previously installed under other Sections or Contracts are acceptable for planting installation in accordance with manufacturer's written instructions.
 - .1 Visually inspect substrate.
 - .2 Inform Consultant of unacceptable conditions immediately upon discovery.
 - .3 Proceed with installation only after unacceptable conditions have been remedied.

3.2 PRE-PLANTING PREPARATION

- .1 Proceed only after receipt of written acceptability of plant material from Consultant.
- .2 Remove damaged roots and branches from plant material.
- .3 Apply anti-desiccant to conifers and deciduous trees in leaf in accordance with manufacturer's instructions.
- .4 Locate and protect utility lines.
- .5 Notify and acquire written acknowledgement from utility authorities before beginning excavation of planting pits for trees and shrubs.

3.3 EXCAVATION AND PREPARATION OF PLANTING BEDS

- .1 Preparation of planting beds in accordance with Section 32 91 19- Topsoil and Finish Grading.
- .2 For individual planting holes:
 - .1 Stake out location and obtain approval from Consultant prior to excavating.
 - .2 Excavate to depth and width as indicated. All pits and beds shall be shaped and prepared as to allow for free drainage from the excavation.

- .3 Scarify subgrade surfaces sides of planting hole to a depth of 75mm in areas where planting soil will be placed to produce an even, loose textured surface, free from line weeds, stones, roots, branches and similar materials larger than 50mm.
- .4 Dispose of surplus excavated materials off-site.
- .5 Remove water which enters excavations prior to planting. Notify Consultant if water source is ground water.
- .6 Prevent freezing of bottom of plant pits.
- .7 Excavate plant pits to receive frozen root balls while soil is unfrozen, and mulch with straw to protect from freezing until trees are planted.

3.4 PLANTING

- .1 Planting shall be done during periods suitable with respect to weather conditions and locally accepted practice.
- .2 Handle plants carefully, supporting entire plant while moving.
- .3 For bare root stock, place 75 mm backfill soil in bottom of hole.
 - .1 Plant trees and shrubs with roots placed straight out in hole.
- .4 For jute burlapped root balls, cut away top one third of wrapping and wire basket without damaging root ball.
 - .1 Do not pull burlap or rope from under root ball.
- .5 For container stock or root balls in non-degradable wrapping, remove entire container or wrapping without damaging root ball.
- .6 Plant vertically in locations as indicated.
 - .1 Orient plant material to give best appearance in relation to structure, roads and walks and to the approval of Consultant.
 - .2 Tag specimen trees (over 75mm caliper) in the nursery and install with same north-south orientation on site
- .7 For trees and shrubs:
 - .1 Backfill soil in 150 mm lifts.
 - .1 Tamp each lift to eliminate air pockets.
 - .2 When two thirds of depth of planting pit has been backfilled, fill remaining space with water.
 - .3 After water has penetrated into soil, backfill to finish grade.
 - .2 Form earth watering saucer at the base of each plant with a diameter as large as the excavated area.
- .8 For ground covers, backfill soil evenly to finish grade and tamp to eliminate air pockets.
- .9 Water plant material thoroughly.
- .10 After soil settlement has occurred, fill with soil to finish grade.
- .11 After plant installation, remove all labels attached by wire or cord.

3.5 TRUNK PROTECTION

- .1 Install trunk protection on deciduous trees as indicated.

- .1 Wrap the main stem of each tree having caliper of 50mm or greater.
- .2 Apply wrapping in a spiral manner with one-half overlap, each time starting at grade and extending upwards to just above the second branches.
- .3 Make sure all wrapping is neat and snug and held in place by suitable cord. All areas of contact with support systems shall be double wrapped.

- .1 Install trunk protection before installation of tree supports.

3.6 TREE SUPPORTS

- .1 Stake or guy all plants as shown on drawings for individual materials with all supports, guys and fasteners snug and secure
- .2 Space stake equally around plant and drive into undisturbed soil beneath roots, 150 mm minimum. Ensure stake is secure, vertical and unsplit.
- .3 Ensure stakes are placed on prevailing wind side.
- .4 Install guying collars above branch to prevent slipping at approximately 2/3 height for evergreens and 1/2 height for deciduous trees. Collar mounting height not to exceed 2.5 m above grade.
- .5 Guying collars to be of sufficient length to encircle tree plus [50] mm space for trunk clearance. Thread guy wire through collar encircling tree trunk and secure to lead wire by clamp or multi-wraps; cut wire ends close to wrap.
- .6 Install flagging tape to guys as indicated.

3.7 PRUNING

- .1 After tree supports have been installed, remove broken branches with clean, sharp tools. Do not prune plants except to remove dead or injured branches.
- .2 Prune in such a manner as to preserve the natural character of the plants. Do not remove leaders.

3.8 MULCHING

- .1 Ensure soil settlement has been corrected prior to mulching.
- .2 Spread mulch as indicated.

3.9 MAINTENANCE DURING ESTABLISHMENT PERIOD

- .1 Perform following maintenance operations from time of planting to acceptance by Consultant.
 - .1 Water to maintain soil moisture conditions for optimum establishment, growth and health of plant material without causing erosion.
 - .2 For evergreen plant material, water thoroughly in late fall prior to freeze-up to saturate soil around root system.
 - .3 Remove weeds monthly.
 - .4 Replace or respread damaged, missing or disturbed mulch.
 - .5 For non-mulched areas, cultivate as required to keep top layer of soil friable.
 - .6 If required to control insects, fungus and disease, use appropriate control methods in accordance with Municipal regulations. Obtain product approval from Consultant prior to application.

- .7 Remove dead or broken branches from plant material.
- .8 Keep trunk protection and guy wires in proper repair and adjustment.
- .9 Remove and replace dead plants and plants not in healthy and vigorous growing condition. Make replacements in same manner as specified for original plantings.

3.10 MAINTENANCE DURING WARRANTY PERIOD

- .1 From time of acceptance by Consultant to end of warranty period, perform following maintenance operations.
 - .1 Water to maintain soil moisture conditions for optimum growth and health of plant material without causing erosion.
 - .2 Reform damaged watering saucers.
 - .3 Remove weeds monthly.
 - .4 Replace or respread damaged, missing or disturbed mulch.
 - .5 For non-mulched areas, cultivate monthly to keep top layer of soil friable.
 - .6 If required to control insects, fungus and disease, use appropriate control methods in accordance with Municipal regulations. Obtain product approval from Consultant prior to application.
 - .7 Apply fertilizer in early spring as indicated by soil test.
 - .8 Remove dead, broken or hazardous branches from plant material.
 - .9 Keep trunk protection and tree supports in proper repair and adjustment.
 - .10 Remove trunk protection, tree supports and level watering saucers at end of warranty period.
 - .11 Remove and replace dead plants and plants not in healthy and vigorous growing condition. Make replacements in same manner as specified for original plantings.
 - .12 Submit monthly written reports to Consultant identifying:
 - .1 Maintenance work carried out.
 - .2 Development and condition of plant material.
 - .3 Preventative or corrective measures required which are outside Contractor's responsibility.
- .2 Provide written warranty for 1 year from date of acceptance. Replace any exterior plants which in the opinion of the Consultant, are not in acceptable condition at the end of the warranty period.
- .3 Any damage to plant materials from any source whatsoever shall be reported in writing to the Consultant and Owner.

3.11 CLEANING

- .1 Leave Work area clean at end of each day.
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment.

3.12 CLOSEOUT ACTIVITIES

- .1 Submit maintenance reports for trees, shrubs, and other plantings.
- .2 Remove stakes and guys at the end of the warranty period.

END OF SECTION

1. All plant material is to meet the standards as outlined in the Canadian Standards for Nursery Stock, current edition.
2. For all contractor purchased materials plant sizes will be as measured on site. Nursery waybills will not be acceptable for determination of plant sizes.
3. Protect plant material from frost, excessive heat, wind and sun during transportation.
4. All planting beds have subsoil scarified to a depth of 450mm.
5. All planting soil to be amended with leafmulch equivalent to 13% dry weight of the soil.
6. Warranty period for all planting is one year from acceptance of planting installation. Warranty replacements of all plant material deemed not to be in healthy, vigorous growing condition will be undertaken by the contractor as requested by the landscape architect at any time during the warranty period.
7. For burlapped root balls, cut away top one third of wrapping and wire basket without damaging root ball. Do not pull burlap or rope from under root ball. For potted plants remove entire container.
8. Backfill soil in 150mm lifts. Tamp each lift to eliminate air pockets. When two thirds of depth of planting pit has been backfilled, fill remaining space with water. After water has penetrated into soil, backfill to finish grade.
9. Shrubs shown in groups are to be planted in continuous plant beds as shown on planting detail.
10. Plant material installed following leaf drop in the fall will be accepted after the start of the next growing season provided that acceptance conditions are fulfilled.
11. Any planting or landscaping work that is rejected at the final inspection will be corrected in a timely manner at contractor's expense.
12. Rejected plant material must be removed from the site within one working day.

PLANT LIST

CONIFEROUS TREE

DECIDUOUS TREE

MULTI-STEM TREE

SHRUBS

EPHEMERAL PLANT GROUPINGS

PERENNIAL / GROUNDCOVER MASSING

SEED

MULCH

NHS WOODLAND BUFFER PLANTING
Refer to L200 / L210 Plans

NHS WOODLAND COMPENSATION PLANTING
Refer to L210 / L211 Plans

CVC WETLAND & NHS WOODLAND
COMPENSATION PLANTING
Refer to L211 Plan

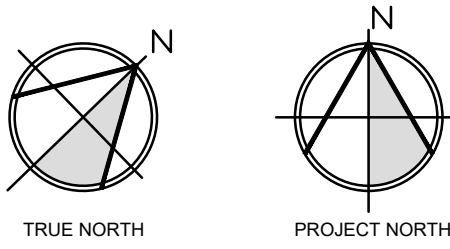
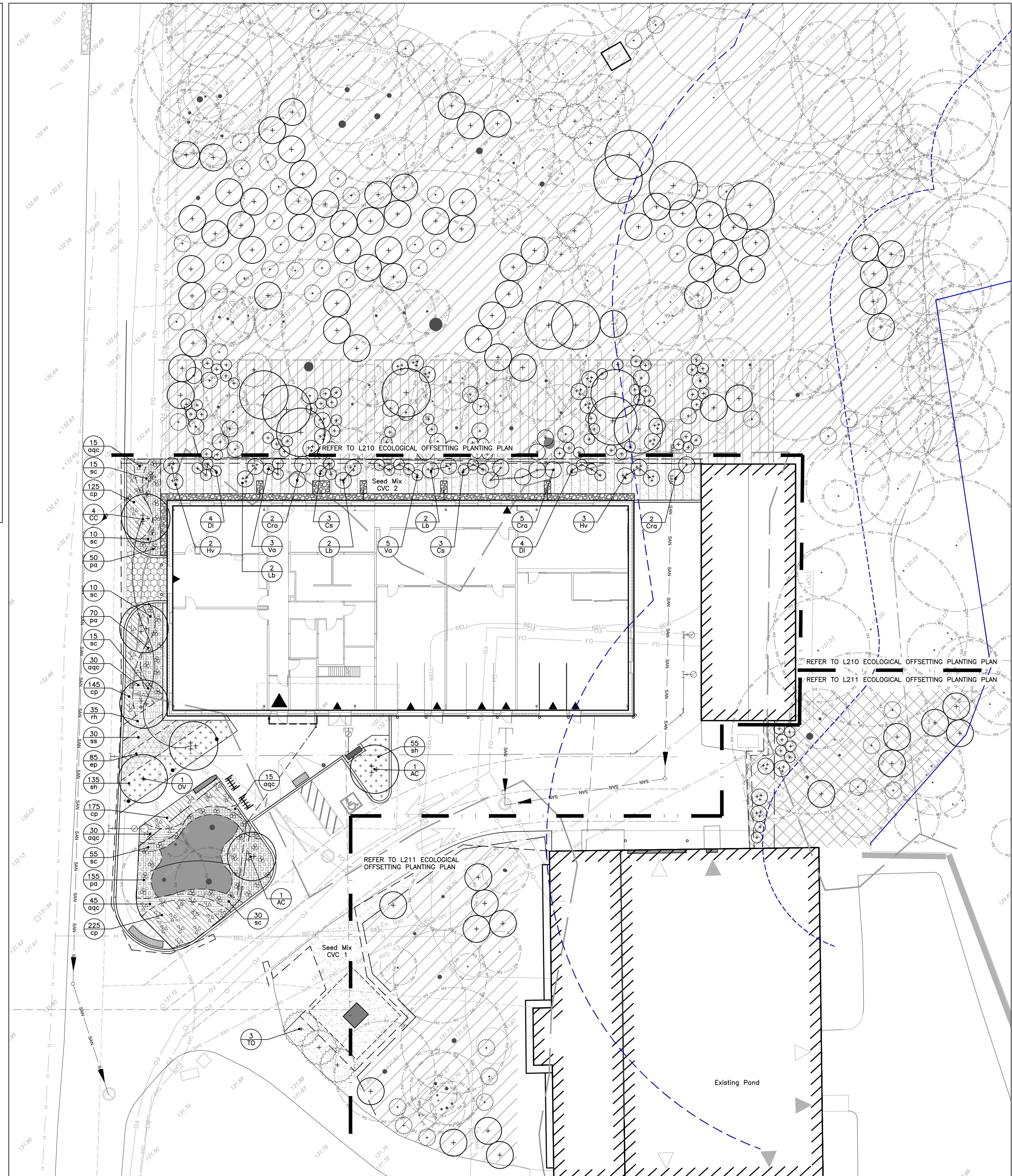
EXISTING TREE
PROTECTION ZONE

ELC / CVC
DRIPLINE BOUNDARY

30m WETLAND BOUNDARY OFFSET

10m WETLAND BOUNDARY OFFSET

SEED MIXTURE - CVC 1 - UPLAND MIX		Seed at a rate of 250g/90m2	
Scientific Name	Common Name	%	
Anemone canadensis	Canada Anemone	1%	
Asclepias syriaca	Common Milkweed	2%	
Carex granularis	Limestone Meadow Sedge	15%	
Elymus virginicus var. virginicus	Virginia Wildrye	40%	
Euthamia graminifolia	Grass Leaved Goldenrod	1%	
Monarda fistulosa var. fistulosa	Wild Bergamot	1%	
Oenothera biennis	Common Evening Primrose	25%	
Rudbeckia hirta	Black Eyed Susan	10%	
Solidago canadensis var. canadensis	Canada Goldenrod	1%	
Solidago serotina	Early Goldenrod	1%	
Solidago nemoralis ssp. Nemoralis	Gray-stemmed Goldenrod	1%	
Symphyotrichum novae-angliae	New England Aster	1%	
Verbena urticifolia	White Vervain	1%	
Cover Crop for Seed Mixture		Seed at a rate of 150g/100m2	
Avena sativa	Oats	40%	
Hordeum vulgare	Barley	45%	



No.	ISSUANCE	DATE
1	Issued for Class C Costing	2023-12-06
2	Issued for 100% Schematic Design Review	2023-12-22
3	Issued for Site Plan Approval	2024-02-02
4	Issued for Class B Contract	2024-03-01
5	Issued for Review	2024-07-11
6	Issued for Building Permit	2024-09-06
7	100% Construction Documentation	2024-11-05
8	Issued for Tender	2024-11-15
AD2	Issued for Landscape Addendum 2	2024-12-20

NOT FOR CONSTRUCTION



University of Toronto Mississauga

Pre-Engineered Building

3359 Mississauga Road

TITLE

SITE
PLANTING PLAN



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SCALE :	1:200	SHEET NO : L200
DATE :	November 2023	
PROJECT NO :	231533	
DRAWN BY :	JBKH	
CHECKED BY :	KHBF	

L200