

SUMMERSIDE WEST SWM POND

PLANTING NOTES:

- CONTRACTOR TO VERIFY LOCATION OF ALL SERVICES PRIOR TO ANY EXCAVATION.
- ALL PLANT MATERIAL SHALL BE NURSERY GROWN STOCK UNLESS OTHERWISE NOTED.
- ALL PLANT MATERIAL SHALL BE WARRANTIED FOR TWO YEARS FROM THE DATE OF SUBSTANTIAL PERFORMANCE.
- CONTRACTOR TO REINSTATE ALL EXISTING AREAS DAMAGED BY HIS WORK TO THE SATISFACTION OF THE CONTRACT ADMINISTRATOR. PERIODIC REVIEWS OF PLANTING SHALL BE CARRIED OUT BY THE
- SPRING DUG SPECIMENS AND PLANTED IN THE SPRING ONLY.
- LOCATION OF ALL PLANT MATERIALS TO BE STAKED BY THE CONTRACTOR AND VERIFIED IN THE FIELD BY LANDSCAPE ARCHITECT
- PLANTING SHALL BE SUPERVISED BY AN ECOLOGIST TO ENSURE AN APPROPRIATE NATURALIZED AREA IS ESTABLISHED.
- PLACE SPECIES ACCORDING TO INDICATED QUANTITIES AND SPACING. MULCH THE SOIL SURFACE IN ACCORDANCE WITH PLANTING DETAILS. WATER PLANTS THOROUGHLY IMMEDIATELY FOLLOWING PLANTING.
- SEEDED AREAS SHALL HAVE A MINIMUM 100mm TOPSOIL AND SCARIFIED PRIOR TO SEEDING.
- ALL SEED MUST BE FROM A RECOGNIZED SEED FIRM, MEETING THE REQUIREMENTS FOR THE SEEDS ACT FOR CANADA NO. 1 SEED. SEED SHALL BE CERTIFIED NO. 1 GRADE. A GERMINATION TEST MAY BE REQUESTED AND ALL LAWN SEED MUST COMPLY WITH FEDERAL AND PROVINCIAL SEED LAWS.
- INSTALL SPECIFIED MIXES USING TERRASEEDING EXCEPT FOR PS CUSTOM AQUATIC SEED MIX WHICH IS TO BE BROADCAST SEEDED. USE BIODEGRADABLE EROSION CONTROL MAT AS DIRECTED BY CONTRACT ADMINISTRATOR TO RETAIN SEED ON STEEP SLOPES OVER 3:1 UNTIL ESTABLISHED.
- WET MEADOW SEED MIX SHALL BE INSTALLED BELOW 100YEAR W.I AND THE TALLGRASS PRAIRIE SEED MIX SHALL BE INSTALLED ABOVE
- SURVEY THE PLANTING SITE FOR INVASIVE WEEDS AND REMOVE ALL OR AS MUCH UNDESIRABLE VEGETATION AS POSSIBLE.
- SEED. GENERALLY THIS IS 6 MM (1/4") OR LESS. FIRM THE SOIL. GENTLY TAMP OR ROLL THE SEEDBED. DO NOT COMPACT THE SOIL. EXCESSIVE FORCE WILL DESTROY THE SOIL
- STRUCTURE AND INHIBIT GERMINATION. MOW AND WEED ALL SEEDED AREAS IN ACCORDANCE WITH OSC
- UNIFORM COVER OVER SEEDED AREAS SHOULD BE ACHIEVED AND
- FACILITY BY THE CITY OF OTTAWA. SEEDING OPERATIONS SHALL BE CARRIED OUT WHERE SOIL HUMIDITY IS OPTIMAL FOR GERMINATION AND GROWTH AND THIS OCCURS WITHIN THE FOLLOWING PERIODS
- CONTRACTOR TO INCLUDE DEWATERING AND WATER LEVEL MANAGEMENT TO ENSURE THE ACCEPTABLE GERMINATION AND GROWTH OF THE AQUATIC SEED MIX DURING THE 2-3 MONTHS

PLANTING RATES FOR SEED MIXES ARE AS PER BELOW, ALONG WITH 22 (G/HA (20LBS/ACRE) OF ANNUAL RYEGRASS TO ACT AS A NURSE CROP. APPLICATION RATES FOR OTHER MIXES:

- TALL GRASS PRAIRIE: 22-25 KG/HA (21-23 LBS/ACRE)
- OSC LOW MAINTENANCE LAWN: 180 KG/HA (165 LBS/ACRE)
- PS CUSTOM AQUATIC SEED MIX: 45KG/HA RYEGRASS NURSE CROP APPLICATION: 34KG / HA

2% RATTLESNAKE GRASS

10% PENNSYLVANIA SMARTWEED

2% BEGGARTICK

3% SWEETFLAG

3% MUD PLANTAIN

13% ARROW ARUM

10% LURID SEDGE

8% PICKERELWEED

1% DUCK POTATO

2% WOOL GRASS

12% WILD RICE

2% GREEN BULRUSH

2% SOFT STEM BULRUSH

3% EASTERN BUR REED 6% GIANT BUR REED

10% HOP SEDGE

6% SOFT RUSH

'PICKSEED' - PS CUSTOM AQUATIC SEED MIX

2% FLAT TOPPED ASTER 5% FRINGE SEDGE 10% GREEN BULRUSH 2% NEW ENGLAND ASTER 2% RICE CUTGRASS 1% SPOTTED JOE PYE WEED 1% SQUARE STEMMED MONKEY FLOWER 10% SWAMP MILKWEED

25% VIRGINIA WILD RYE 5% WOOLGRASS

TALLGRASS PRAIRIE SEED MIX 5% BROADLEAF CATTAIL (ABOVE 100YR WL)

25% BIG BLUE STEM 25% LITTLE BLUE STEM 25% CANADIAN WILD RYE 15% SWITCH GRASS

'8340 OSC' - LOW MAINTENANCE 'ECO LAWN' MIX (1.0M EITHER SIDE OF ACCESS ROAD)

CREEPING RED FESCUE **ECOSTAR HARD FESCUE** CHEWING FESCUE PERENNIAL RYE

TREE PLANTING IN MARINE CLAY SOILS

- 1. THIS LANDSCAPE PLAN CONFORMS WITH THE TREE-TO-FOUNDATION SETBACK, SOIL VOLUME, AND SURFACE-GRADING REQUIREMENTS OUTLINED IN THE CITY OF OTTAWA'S GUIDELINES FOR TREE PLANTING IN SENSITIVE MARINE CLAY SOILS (2017), BASED ON THE FINDINGS OUTLINED IN THE PROJECT GEOTECHNICAL REPORT.
- 2. ADDITIONAL REQUIREMENTS OUTLINED IN THE CITY OF OTTAWA'S GUIDELINES FOR TREE PLANTING IN SENSITIVE MARINE CLAY SOILS (2017), INCLUDING USF DEPTH, UNDATION WALL REINFORCEMENT, AND SUBDIVISION GRADING, SHOULD BE CONFIRMED BY THE PROJECT ENGINEER(S).
- 3. THE CONTRACTOR SHOULD REPORT ANY DISCREPANCIES TO THE CONTRACT ADMINISTRATOR BEFORE PLANTING TREES.
- 4. <u>CITY OF OTTAWA: GUIDELINES FOR TREE PLANTING IN SENSITIVE MARINE CLAY SOILS</u> : THE FOLLOWING GUIDELINES ARE PRIMARILY FOCUSED ON SMALL AND MEDIUM E STREET TREES. HOWEVER, LARGE TREES (MATURE HEIGHT OVER 14M) CAN STILL BE PLANTED IN AREAS OF SMC SOILS PROVIDED A TREE TO FOUNDATION SETBACK EQUAL TO THE FULL MATURE HEIGHT OF THE TREE CAN BE PROVIDED (E.G. IN A PARK OR OTHER GREEN SPACE). FOR STREET TREES IN THE ROAD RIGHT-OF-WAY WHERE SMC SOILS HAVE BEEN IDENTIFIED, THE TREE TO FOUNDATION SETBACKS MAY BE REDUCED TO 4.5M FOR SMALL (MATURE TREE HEIGHT UP TO 7.5M) AND MEDIUM SIZE TREES (MATURE TREE HEIGHT 7.5M-14M) PROVIDED ALL OF THE FOLLOWING SIX CONDITIONS ARE MET:
- 1. THE MODIFIED PLASTICITY INDEX OF THE SOIL BETWEEN THE UNDERSIDE OF FOOTING (USF) AND A DEPTH OF 3.5M GENERALLY DOES NOT EXCEED 40%. THIS CORRESPONDS TO SOILS WITH LOW/MEDIUM POTENTIAL FOR SOIL VOLUME CHANGE. CLAY SOILS THAT EXCEED THE 40% PLASTICITY INDEX ARE CONSIDERED TO HAVE HIGH POTENTIAL FOR SOIL VOLUME CHANGE. FOR THESE WORST-CASE SOILS, THE SETBACKS AND TREE PLANTING RESTRICTIONS REMAIN UNCHANGED FROM THE 2005 CLAY SOILS POLICY (TREE SETBACK MUST EQUAL THE MATURE HEIGHT OF THE TREE - I.E. 7.5M SETBACK FOR SMALL TREES)

2. THE USF IS 2.1M OR GREATER BELOW THE LOWEST FINISHED GRADE. NOTE: THIS

- FOOTING LEVEL MUST BE SATISFIED FOR FOOTINGS WITHIN 10M OF THE TREE, AS MEASURED FROM THE CENTRE OF THE TREE TRUNK, AND VERIFIED BY MEANS OF THE GRADING PLAN AS INDICATED IN THE PROCEDURAL CHANGES BELOW. 3. A SMALL SIZE TREE MUST BE PROVIDED WITH A MINIMUM OF 25M3 OF AVAILABLE SOIL VOLUME, AS DETERMINED BY A LANDSCAPE ARCHITECT. A MEDIUM SIZE TREE MUST BE PROVIDED WITH A MINIMUM OF 30M3 OF AVAILABLE SOIL VOLUME, AS DETERMINED BY A LANDSCAPE ARCHITECT. THE DEVELOPER WILL ENSURE THE SOIL IS GENERALLY UNCOMPACTED WHEN BACKFILLING IN STREET TREE PLANTING
- NOTE: THE SOIL VOLUME CALCULATION MUST BE BASED ON A DEPTH OF 1.5M BELOW FINISHED GRADE (E.G. 5M LENGTH X 4M WIDTH AT SURFACE X 1.5M DEPTH = 30M3). IT MAY INCLUDE LANDS IN THE RIGHT-OF-WAY AND ON PRIVATE PROPERTY, BUT MUST SUBTRACT THE VOLUME OF SHALLOW UTILITY TRENCHES (I.E. VOLUME OF SHALLOW UTILITY TRENCHES CANNOT COUNT TOWARDS MINIMUM SOIL VOLUME).
- 4. THE TREE SPECIES MUST BE SMALL TO MEDIUM SIZE, AS CONFIRMED BY A LANDSCAPE ARCHITECT IN THE LANDSCAPE PLAN.
- 5. THE FOUNDATION WALLS ARE TO BE REINFORCED AT LEAST NOMINALLY (MINIMUM OF TWO UPPER AND TWO LOWER 15M BARS IN THE FOUNDATION WALL) TO PROVIDE DUCTILITY AS DESCRIBED IN THE GEOTECHNICAL REPORT.
- 6. GRADING SURROUNDING THE TREE MUST PROMOTE DRAINING TO THE TREE ROOT ZONE (IN SUCH A MANNER AS NOT TO BE DETRIMENTAL TO THE TREE), AS NOTED ON THE SUBDIVISION GRADING PLAN.

TERRESTRIAL PLANTS

- ALL PLANT MATERIAL SHALL BE MAINTAINED AND WARRANTED FOR A PERIOD OF TWO YEARS TO ENSURE GOOD PLANT ESTABLISHMENT AND HEALTH. EXPIRY OF THE MAINTENANCE AND WARRANTY CLAUSE SHALL BE TWO YEARS UPON COMPLETION OF PLANTING. REFER TO SPECIFICATION FOR ADDITIONAL
- 3. THE CONTRACTOR SHALL REMOVE DEAD, BROKEN OR HAZARDOUS BRANCHES FROM PLANT MATERIAL
- THE CONTRACTOR SHALL REMOVE WEEDS WITHIN 1m OF ALL NEW PLANTS MONTHLY BETWEEN MAY 15 AND OCTOBER 15, WITH THE FIRST OPERATION OCCURRING ONE MONTH FOLLOWING PLANTING. ALL WEEDS SHALL BE REMOVED BY HAND AND DISPOSED OF OFF SITE.
- THE CONTRACTOR SHALL REPLACE OR RESPREAD DAMAGED, MISSING OR
- THE CONTRACTOR SHALL MONITOR AND PROTECT PLANTS FROM PREDATION.
- ADMINISTRATOR IDENTIFYING: .1 MAINTENANCE WORK CARRIED OUT.
- CONTRACTOR'S RESPONSIBILITY. 8. THE ACCEPTANCE SHALL BE AT THE DISCRETION OF THE CONTRACT
- ABSENT OF WEEDS AND INVASIVE PLANTS. PLANTED AREAS HAVE SUFFICIENT COVERAGE WITH NO GAP LARGER THAN REPRESENTATION OF ALL PLANT SPECIES IN THE CONTRACT. LESS THAN A VISUAL ASSESSMENT AND ACCEPTANCE LETTER BY AN ECOLOGIST CERTIFYING THAT THE PLANT MATERIAL IS HEALTHY AND ESTABLISHED.
- CONTRACT ADMINISTRATOR AS OUTLINED BELOW: YEAR 1 SITE INSPECTION

YEAR 2 SITE INSPECTION

EMERGENT PLANTS

ZONE ZONE ZONE (MAX. 0.3m-1.2m ABOVE PWL) (MAX. 0.3m BELOW PWL) (MIN. 0.3m BELOW PWL)

SHALLOW WATER DEEP WATER POOL

100 YEAR WATER LEVEL

5 YEAR WATER LEVEL

YEAR WATER LEVEL

PERMANENT WATER LEVEL

Clarify limits of soil, mulch, mats, and plants

FIGURE 8.1

N.T.S.

CATTAILS/SEDGES/LILY PADS

SHORELINE FRINGE

HIGH MARSH ZONE

(MAX. 0.3m ABOVE PWL)

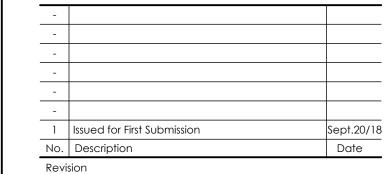
TOPSOIL HYDRIC SOIL

STORMWATER MANAGEMENT FACILITY DESIGN GUIDELINES

PLANTING ZONES

MAINTENANCE NOTES:

- 2. THE CONTRACTOR SHALL WATER PLANTS DURING THE WARRANTY PERIOD, BETWEEN MAY 15 AND OCTOBER 15 EACH YEAR. ALL PLANTS SHALL BE WATERED EVERY 2 WEEKS (12 TIMES PER YEAR).
- DISTURBED MULCH.
- 7. THE CONTRACTOR SHALL SUBMIT MONTHLY WRITTEN REPORTS TO CONTRACT
- .2 DEVELOPMENT AND CONDITION OF PLANT MATERIAL. 3 PREVENTATIVE OR CORRECTIVE MEASURES REQUIRED WHICH ARE OUTSIDE THE
- ADMINISTRATOR BASED ON THE FOLLOWING CONDITIONS BEING MET; ESTABLISHMENT OF 90% OF PLANT MATERIAL.
- MAINTENANCE MILESTONE INSPECTIONS SHALL BE COORDINATED BY THE YEAR 1.5 SITE INSPECTION

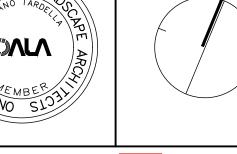


Contractor shall check all dimensions on the work and report any discrepancy to the Landscape Architect before proceeding. All drawings and specifications are the property of the Landscape Architect and must be returned at the completion of the work. This drawing is not to be used for construction until signed by the

Landscape Architect.

City Approval Stamp





design strategies

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> MATTAMY HOMES SWM POND

SUMMERSIDE WEST PHASE 4

CONCEPT PLAN

Date SEPTEMBER 2018 Scale N.T.S. Drawn YL

Checked SL/AC

Job No. 17-188