

SPECIFICATION: CUSTOM MIX
 DESCRIPTION: GRASSES AND FORBS
 HEIGHT: UP TO 2.0m
 NURSE CROP: APPLY NURSE CROP AT 11kg/ha
 APPLICATION RATE: 15kg/ha HYDRO SEED, INCREASE TO 3.0kg/ha WHEN BROADCAST

| UPLAND SEED MIX | | |
|--|---------------------------------|--------|
| GRASSES (TOTAL 60%) (MUST INCLUDE ALL SPECIES) | | |
| BIG BLUE STEM | <i>Andropogon gerardii</i> | 10-25% |
| CANADA WILD RYE | <i>Elymus canadensis</i> | 10-25% |
| SWITCH GRASS | <i>Panicum virgatum</i> | 10-25% |
| LITTLE BLUE STEM | <i>Schizachyrium scoparium</i> | 10-25% |
| INDIAN GRASS | <i>Sorghastrum nutans</i> | 10-25% |
| SAND DROPSEED | <i>Sporobolus cryptandrus</i> | 5-10% |
| SUPPLEMENTARY GRASSES (OPTIONAL UP TO 5%) | | |
| JUNE GRASS | <i>Koeleria macrantha</i> | 1-5% |
| ROUGH DROPSEED | <i>Sporobolus asper</i> | 1-5% |
| BROOM SEDGE | <i>Andropogon virginicus</i> | 1-5% |
| FORBES (TOTAL 25%) (MUST INCLUDE ALL SPECIES) | | |
| BUTTERFLY MILKWEED | <i>Asclepias tuberosa</i> | 2-10% |
| SHOWY TICK TREFOLI | <i>Desmodium canadense</i> | 2-10% |
| ROUND-HEADED BUSH-CLOVER | <i>Lespedeza capitata</i> | 2-10% |
| WILD BERGAMOT | <i>Monarda fistulosa</i> | 2-10% |
| FOXGLOVE BEARDTONGUE | <i>Penstemon digitalis</i> | 2-10% |
| HAIRY BEARDTONGUE | <i>Penstemon hirsutus</i> | 2-10% |
| VIRGINIA MOUNTAIN MINT | <i>Pycnanthemum virginianum</i> | 2-10% |
| GREY-HEADED CONEFLOWER | <i>Ratibida pinnata</i> | 2-10% |
| BLACK EYED SUSAN | <i>Rudbeckia hiata</i> | 2-10% |
| STIFF GOLDENROD | <i>Solidago rigida</i> | 1-2% |
| COMMON EVENING PRIMROSE | <i>Oenothera biennis</i> | 1-2% |
| SUPPLEMENTARY FORBES (OPTIONAL UP TO 8% OF FORBES) | | |
| HOG-PEANUT | <i>Amphicarpa bracteata</i> | 1-8% |
| FIELD PUSSYTOES | <i>Antennaria neglecta</i> | 1-8% |
| WILD COLUMBINE | <i>Aquilegia canadensis</i> | 1-8% |
| SULLIVANTS MILKWEED | <i>Asclepias sulivantii</i> | 1-8% |
| HEATH ASTER | <i>Aster ericoides</i> | 1-8% |
| SMOOTH ASTER | <i>Aster laevis</i> | 1-8% |
| CALICO ASTER | <i>Aster lateriflorus</i> | 1-8% |
| NEW ENGLAND ASTER | <i>Aster novae-angliae</i> | 1-8% |
| SKY-BLUE ASTER | <i>Aster oolentangiensis</i> | 1-8% |
| TALL COREOPSIS | <i>Coreopsis tripteris</i> | 1-8% |
| FLOWERING SPURGE | <i>Euphorbia corollata</i> | 1-8% |
| WOODLAND SUNFLOWER | <i>Helianthus divaricatus</i> | 1-8% |
| TALL SUNFLOWER | <i>Helianthus giganteus</i> | 1-8% |
| TALL BLUE LETTUCE | <i>Lactuca biennis</i> | 1-8% |
| HAIRY BUSH-CLOVER | <i>Lespedeza hirta</i> | 1-8% |
| WAND-LIKE BUSHCLOVER | <i>Lespedeza intermedia</i> | 1-8% |
| ROUGH BLAZING STAR | <i>Liatris aspera</i> | 1-8% |
| HOARY PUCCOON | <i>Lithospermum canescens</i> | 1-8% |
| GRAY GOLDENROD | <i>Solidago nemoralis</i> | 1-8% |
| RIDDEL'S GOLDENROD | <i>Solidago riddellii</i> | 1-8% |
| WRINKLE L-LEAVED GOLDENROD | <i>Solidago rugosa</i> | 1-8% |
| YELLOW PIMPEL | <i>Taenidia integemima</i> | 1-8% |
| HOARY VERVAIN | <i>Verbena stricta</i> | 1-8% |

SEEDING NOTES:

TIMING:

- APPLICATION TO BE MADE AS SOON AS POSSIBLE FOLLOWING COMPLETION OF WORK, INCLUDING PLANTING OF BUFFER TREES AND SHRUBS.
- IDEAL RECOMMENDED APPLICATION TIME TO BE IN MID-FALL, ALLOWING FOR STRATIFICATION OF THE SEED.
- EARLY SPRING SOWING IS NOT RECOMMENDED, AS SEEDS MAY GO DORMANT AND NOT GERMINATE UNTIL FOLLOWING YEAR, IF IDEAL GROWING CONDITIONS ARE UNAVAILABLE, MAKING IT MUCH LESS EFFECTIVE COMPARED TO FALL.
- SEEDS SHOULD NOT BE SOWN DURING DROUGHT PRONE SEASON (JUNE THROUGH AUGUST)
- SEEDS SHOULD NOT BE SOWN DURING LATE FALL, AS CROP COVER WILL NOT HAVE AN OPPORTUNITY TO GERMINATE PRIOR TO WINTER FREEZE.

APPROACH:

- APPLY 200-300mm MINIMUM OF FINELY PREPARED TOPSOIL SEEDBED TO ALL AREAS DISTURBED AS A RESULT OF CONSTRUCTION/DEVELOPMENT. ENSURE THAT TOPSOIL SEEDBED IS FREE OF SEEDS AND TUBERS OF INVASIVE EXOTICS, PRIOR TO APPLICATION.
- SEED APPLICATION TO BE SOWN AT A DEPTH OF 15mm INTO FINELY PREPARED TOPSOIL SEEDBED.
- ALTERNATIVE APPLICATION APPROACHES TO BE APPROVED BY TRCA.
- MINIMIZE USE OF HEAVY EQUIPMENT WHERE POSSIBLE AND AT ALL TIMES WHEN GROUND IS SATURATED TO AVOID UNNECESSARY SOIL COMPACTION.

FIRST GROWING SEASON MAINTENANCE:

- WHENEVER OVERALL VEGETATION REACHES A HEIGHT OF 18" TRIM THE MEADOW TO A HEIGHT OF 8". (A LAWN MOWER IS NOT RECOMMENDED AS THE MOWER HEIGHT WILL BE TOO LOW AND NATIVE SEEDLINGS WILL BE KILLED). CEASE MOWING BY MID-SEPTEMBER.
- HAND PULL PROBLEM WEEDS OR SPOT SPRAY WITH AN APPROVED HERBICIDE.

SECOND GROWING SEASON MAINTENANCE:

- PRIOR TO NEW SPRING GROWTH REACHING A HEIGHT OF 2", TRIM ANY MATERIAL STANDING FROM THE PREVIOUS YEAR TO CLOSE TO THE GROUND.
- PROBLEM WEEDS SHOULD BE HAND PULLED OR SPOT SPRAYED WITH AN APPROVED HERBICIDE.

SPECIAL CIRCUMSTANCES:

- IF A HEAVY INFESTATION OF RAGWEED IS NOTED, TRIM THE MEADOW TO A HEIGHT OF 8", CEASING TRIMMING BY MID-SEPTEMBER

APPLICATION:

HYDRO SEED UPLAND NATIVE MEADOW SEED MIX COMPLETE SLURRY TO BE APPLIED PER HECTARE

- SEED MIXTURE AS SPECIFIED - 26kg
- MULCH - 1000kg
- WATER (MINIMUM) - 10,000 litres
- FERTILIZER - 450 kg

SOD & TOPSOIL NOTES:

TOPSOIL (SOD AREAS)

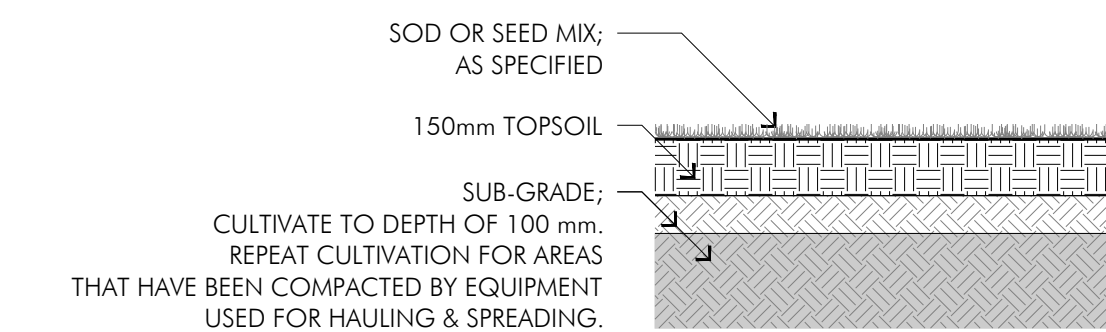
- IMPORTED TOPSOIL: FRIABLE, NEITHER HEAVY CLAY NOR OF VERY LIGHT SANDY NATURE, CONTAINING A MINIMUM OF 4% ORGANIC MATTER FOR CLAY LOAM AND 2% SANDY LOAMS TO A MAXIMUM OF 10% BY VOLUME. FREE FROM SUBSOIL, ROOTS, GRASS, WEEDS, TOXIC MATERIALS, STONES, FOREIGN OBJECTS AND WITH AN ACIDITY RANGE (pH) OF 5.5 TO 7.5. TOPSOIL CONTAINING CRABGRASS, COUCH GRASS OR NOXIOUS WEEDS IS NOT ACCEPTABLE.
- TOPSOIL FROM SITE: MATERIAL SUBJECT TO SOIL ANALYSIS FOR SUITABILITY AS A GROWING MEDIUM FOR SEEDING OR SODDING AND APPROVAL BY ARCHITECT/LANDSCAPE ARCHITECT/OWNER PRIOR TO USE. COSTS BORNE BY CONTRACTOR.

FINISHED GRADING

- DO NOT SPREAD TOPSOIL UNTIL CONSULTANT HAS INSPECTED AND APPROVED SUBGRADE.
- SPREAD TOPSOIL WITH ADEQUATE MOISTURE IN UNIFORM LAYERS DURING DRY WEATHER OVER APPROVED, DRY, UNFROZEN SUBGRADE, WHERE SODDING OR SEEDING.
- FOR AREAS NOT TO BE SODDED, BRING TOPSOIL UP TO FINISHED GRADE.
- DISPOSE OF SURPLUS TOPSOIL NOT REQUIRED FOR FINE GRADING AND LANDSCAPING, OFF SITE.

SODDING

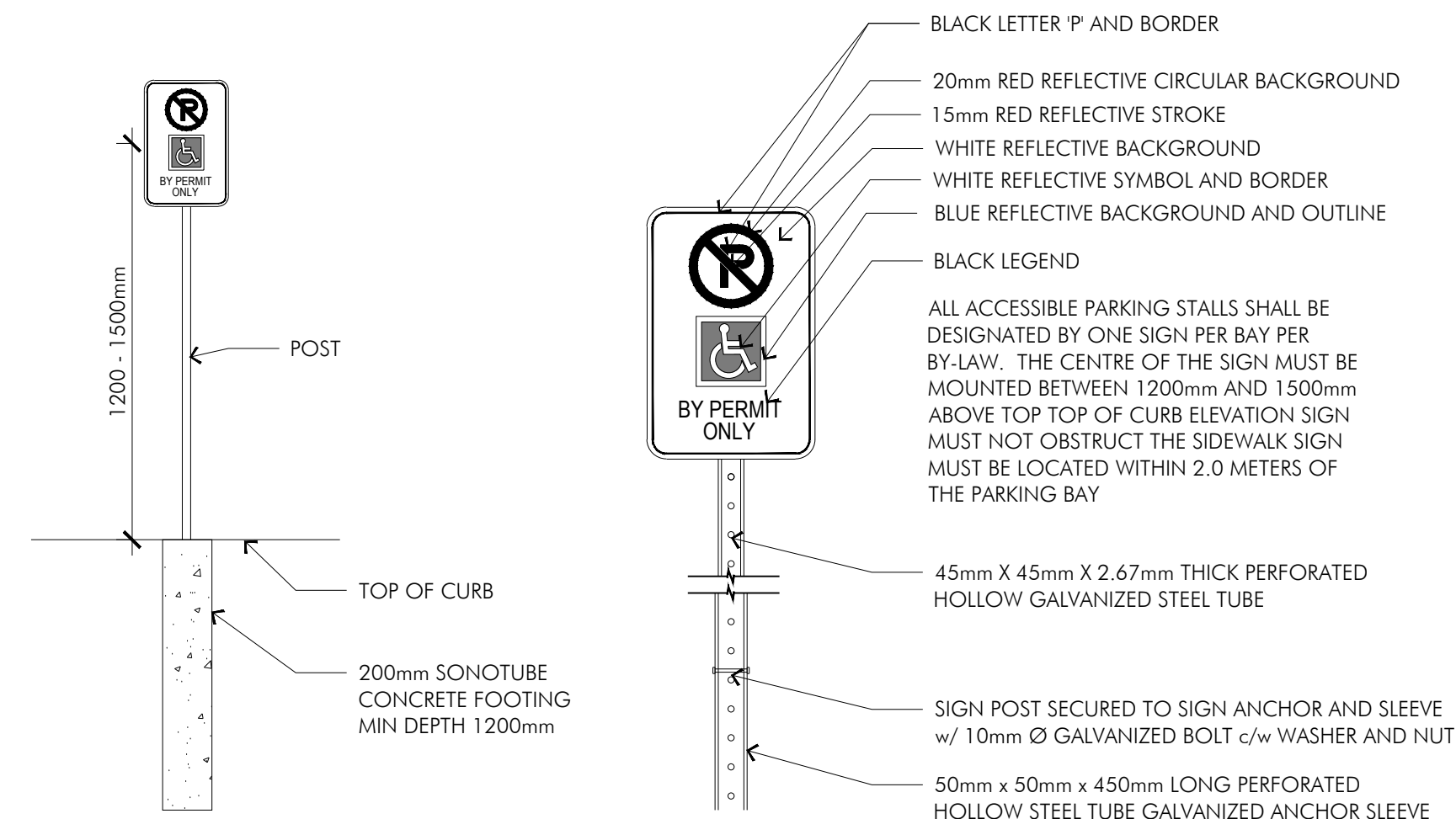
- SCHEDULE DELIVERIES IN ORDER TO KEEP STORAGE AT JOB SITE TO A MINIMUM WITHOUT CAUSING DELAYS.
- DELIVER, UNLOAD, AND STORE ON PALLETS.
- DURING WET WEATHER, ALLOW SOD TO DRY SUFFICIENTLY TO PREVENT TEARING DURING LIFTING AND HANDLING.
- DURING DRY WEATHER, PROTECT SOD FROM DRYING AND WATER SOD AS NECESSARY TO ENSURE ITS VITALITY AND PREVENT DROPPING OF SOIL IN HANDLING. DRY SOD WILL BE REJECTED.
- NURSERY SOD: QUALITY AND SOURCE TO COMPLY WITH STANDARDS OUTLINED IN THE METRIC GUIDE SPECIFICATION FOR NURSERY STOCK, SECTION 17, 1984 EDITION, PUBLISHED BY THE CANADIAN NURSERY TRADES ASSOCIATION. NUMBER ONE KENTUCKY BLUEGRASS SOD: GROWN FROM MINIMUM MIXTURE OF THREE KENTUCKY BLUEGRASS CULTIVARS.
- OBTAIN APPROVAL OF TOPSOIL, GRADE AND DEPTH PRIOR TO LAYING SOD.
- LAY SOD DURING GROWING SEASON. SODDING DURING FREEZING TEMPERATURES OR OVER FROZEN SOIL IS NOT ACCEPTABLE. IF LAYING SOD DURING DRY SUMMER PERIOD, ENSURE SURVIVAL WITH IMMEDIATE DAILY WATERING UNTIL TIME OF FINAL INSPECTION.
- LAY SOD IN ROWS, PERPENDICULAR TO SLOPE, AND WITH JOINTS STAGGERED. BUTT SECTIONS CLOSELY WITHOUT OVER-LAPPING OR LEAVING GAPS BETWEEN SECTIONS. CUT OUT IRREGULAR OR THIN SECTIONS WITH A SHARP KNIFE.
- STAKE ALL SOD ON SLOPES GREATER THAN 5:1 (20%) 10. PROVIDE CLOSE CONTACT BETWEEN SOD AND SOIL BY MEANS OF LIGHT ROLLING. HEAVY ROLLING TO CORRECT IRREGULARITIES IN GRADE IS NOT PERMITTED.
- WATER IMMEDIATELY AFTER SOD IS LAID TO OBTAIN MOISTURE PENETRATION THROUGH SOD INTO TOP 100mm (4") OF TOPSOIL.
- PROVIDE ADEQUATE PROTECTION OF NEW SODDED AREAS AGAINST EROSION, FOOT TRAFFIC, AND MECHANICAL DAMAGE. REMOVE PROTECTION AFTER LAWN AREAS HAVE BEEN ESTABLISHED OR ACCEPTED.
- CLEAN UP IMMEDIATELY SOIL OR DEBRIS SPILLED ONTO PAVEMENT AND DISPOSE OF DELETERIOUS MATERIALS.
- SODDED AREAS WILL BE ACCEPTED AT FINAL INSPECTION AND WARRANTY PERIOD BEGINS PROVIDED THAT:
 - SODDED AREAS ARE PROPERLY ESTABLISHED
 - SOD IS FREE OF BARE AND DEAD SPOTS AND WITHOUT WEEDS
 - NO SURFACE SOIL IS VISIBLE WHEN GRASS HAS BEEN CUT TO A HEIGHT OF 40mm (1.5")
 - SODDED AREAS HAVE BEEN CUT A MINIMUM OF TWO TIMES
 - SOD JOINTS BETWEEN ROLLS ARE NEAT AND TIGHT WITH NO VISIBLE DIRT AREAS
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN SOD UNTIL TIME OF FINAL ACCEPTANCE. MAINTENANCE OF SOD DURING WARRANTY PERIOD IS THE RESPONSIBILITY OF THE OWNER.
- MAINTENANCE TASKS INCLUDE ALL OF THE FOLLOWING:
 - WATERING
 - FERTILIZING
 - WEED CONTROL
 - CUTTING AND MOWING
- SUBMIT SEPARATE MAINTENANCE COST FOR COORDINATION BY OWNER DURING WARRANTY PERIOD ONLY.



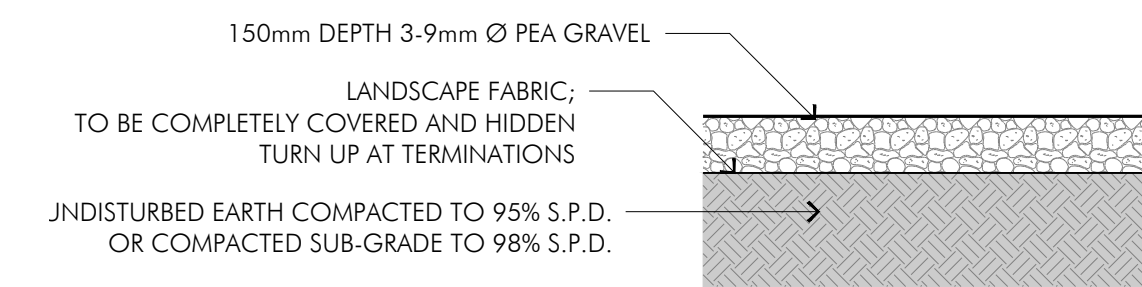
GENERAL NOTES:

- ALL WORK SHALL BE IN STRICT CONFORMANCE WITH ALL CURRENT APPLICABLE CODES AND REGULATIONS.
- TOPSOIL MUST BE CAPABLE OF SUSTAINING VIGOROUS PLANT GROWTH AND TO BE FREE FROM SUBSOIL, ROOTS, VEGETATION, DEBRIS, TOXIC MATERIALS AND STONE OVER 50mm DIAMETER.
- FOR AREAS TO RECEIVE SOD, SET TOPSOIL 15mm BELOW FINISHED GRADE.
- ENSURE THAT GRADES AND CROSS SLOPE PROVIDE POSITIVE DRAINAGE AND ADHERE TO GRADING PLAN (WHERE APPLICABLE).

1 L3 SEEDING & SODDING DETAIL



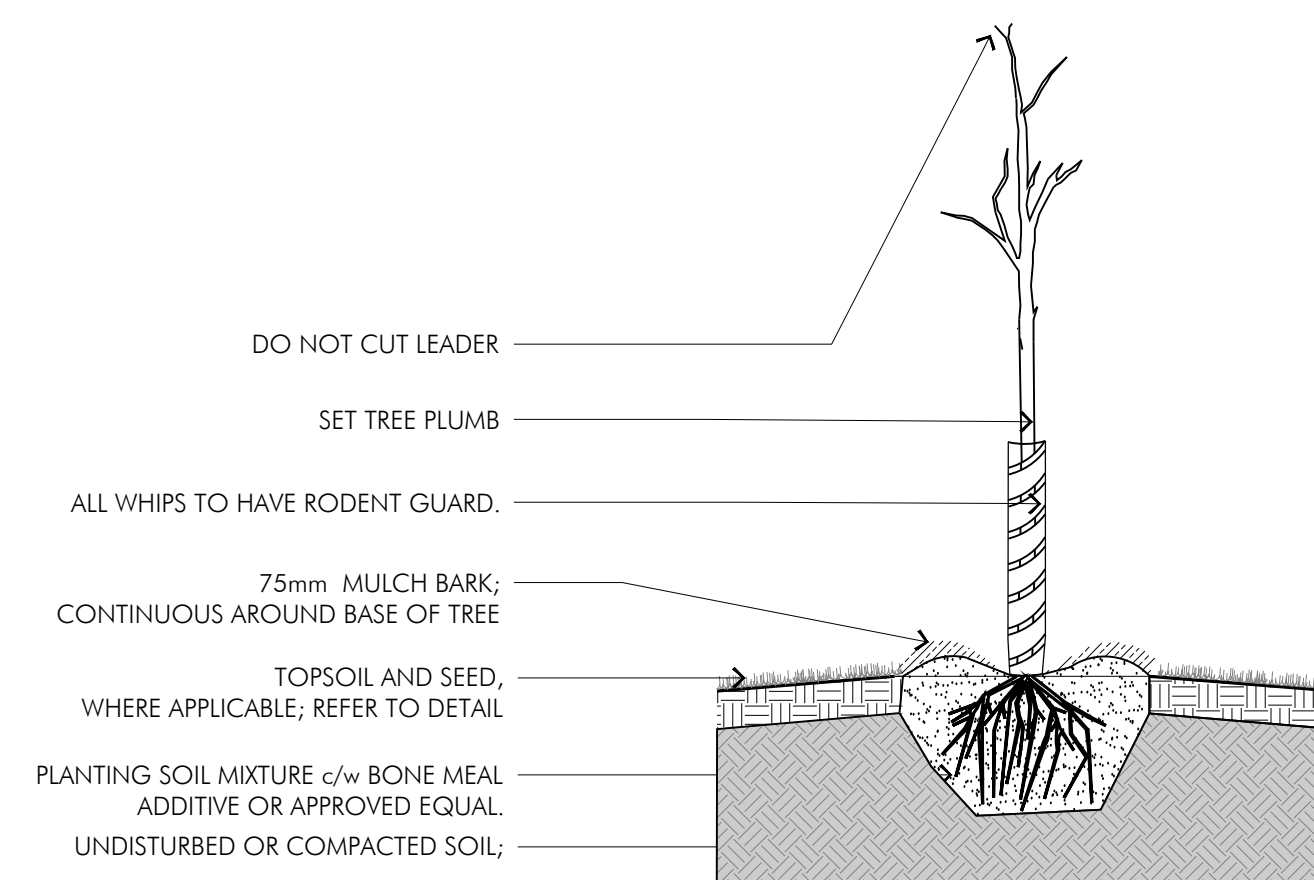
2 L3 TYPE 'A' BARRIER -FREE PARKING SIGN



GENERAL NOTES:

- ALL WORK SHALL BE IN STRICT CONFORMANCE WITH ALL CURRENT APPLICABLE CODES AND REGULATIONS.
- ENSURE A CLEAN, FLUSH TRANSITION BETWEEN ADJACENT PAVING & SURFACING.
- ENSURE THAT PATHWAY GRADES AND CROSS SLOPE PROVIDE POSITIVE DRAINAGE AND ADHERE TO GRADING PLAN (WHERE APPLICABLE).
- PROVIDE ALUMINUM BED EDGE TYPE SEPARATING PEA GRAVEL MULCH FROM ANY LOOSE ADJACENT MATERIAL

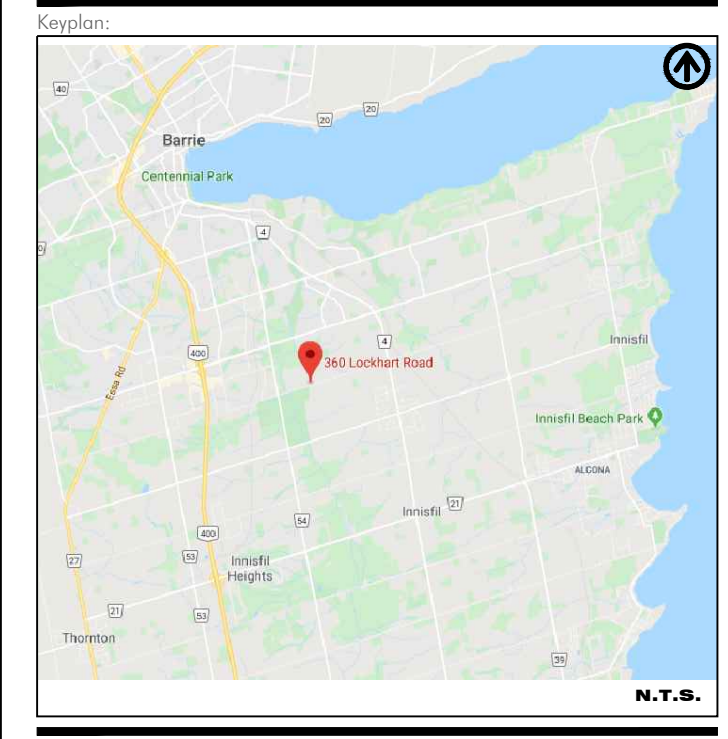
3 L3 PEA GRAVEL GARDEN



DESIGN NOTES:

- ALL WORK SHALL BE IN STRICT CONFORMANCE WITH ALL CURRENT APPLICABLE CODES AND REGULATIONS.
- HAND DIG PLANTING HOLE AND LOOSEN SURFACE SOIL.
- ALLOW FOR SETTLEMENT WHEN SETTING PLANTS, SET PLANTS 50mm HIGHER THAN ADJACENT FINISHED GRADE.
- BACKFILL SOIL IN 150mm LIFTS AND HAND TAMP TO PREVENT AIR POCKETS.
- CAREFULLY REMOVE ANY LOOSE SOIL FROM TOP OF ROOT BALL

4 L3 WHIP PLANTING DETAIL



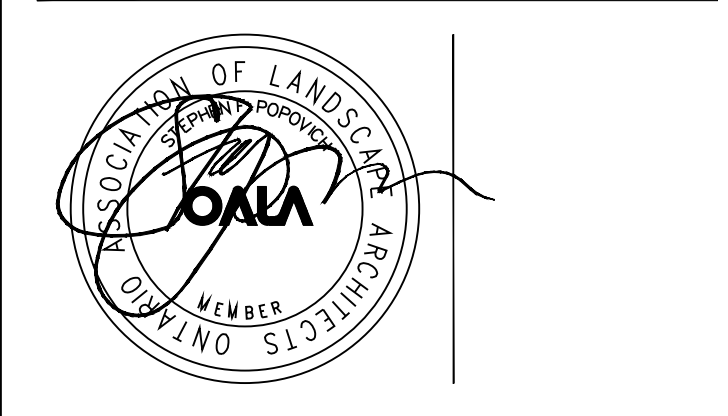
We have relied upon the accuracy and completeness of base & background information provided by the following Consultants in preparing this drawing and performing our professional services.

We are under no obligation or duty to verify the accuracy and/or completeness of this information and have not done so. We shall not be held responsible for any errors or omissions that may arise or be incorporated as a result of erroneous or incomplete information provided by the Client, Consultants and Contractors.

The contractor will check and verify all dimensions and job conditions on the site and report any discrepancies to the Landscape Architect prior to the commencement of construction.

| No. | Date (Y/M/D) | Issue / Revision | By |
|-----|--------------|------------------|----|
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Sheet Title:
Landscape Details

| | | | |
|-----------------|--------------|---------------|----|
| Project Number: | 1427 | Sheet Number: | L3 |
| Drawn By: | GB | | |
| Checked By: | SP | | |
| Date: | October 2019 | | |
| Scale: | AS NOTED | | |