

Plot time: Apr 24, 2023 - 4:55pm
Drawing name: N:\Projects\2022\22633-03-Great Parks 06 Sidewalk Entrance\BIM_CAD_GIS\CAD\Sheets\22633-LP-06 Sidewalk - Layout Tab: 41-Landscape Notes

SEEDING MISC.:
ITEM 659 - SEEDED FESCUE LAWN, AS PER PLAN

ITEM 659 - REPAIR SEEDING & MULCHING, AS PER PLAN

PART 1 - GENERAL

1.1 SUMMARY

A. SECTION INCLUDES:

1. TURF AREA PREPARATION.
2. SODDING.
3. EROSION-CONTROL MATERIAL(S).
4. TURF RESTORATION
5. MAINTENANCE.

1.2 DEFINITIONS

- A. FINISH GRADE: ELEVATION OF FINISHED SURFACE OF PLANTING SOIL.
- B. MANUFACTURED TOPSOIL: SOIL PRODUCED OFF-SITE BY HOMOGENEOUSLY BLENDING MINERAL SOILS OR SAND WITH STABILIZED ORGANIC SOIL AMENDMENTS TO PRODUCE TOPSOIL OR PLANTING SOIL.
- C. PESTICIDE: A SUBSTANCE OR MIXTURE INTENDED FOR PREVENTING, DESTROYING, REPELLING, OR MITIGATING A PEST. THIS INCLUDES INSECTICIDES, MITICIDES, HERBICIDES, FUNGICIDES, RODENTICIDES, AND MOLLUSCICIDES. IT ALSO INCLUDES SUBSTANCES OR MIXTURES INTENDED FOR USE AS A PLANT REGULATOR, DEFOLIANT, OR DESICCANT.
- D. PESTS: LIVING ORGANISMS THAT OCCUR WHERE THEY ARE NOT DESIRED OR THAT CAUSE DAMAGE TO PLANTS, ANIMALS, OR PEOPLE. THESE INCLUDE INSECTS, MITES, GRUBS, MOLLUSKS (SNAILS AND SLUGS), RODENTS (GOPHERS, MOLES, AND MICE), UNWANTED PLANTS (WEEDS), FUNGI, BACTERIA, AND VIRUSES.
- E. PLANTING SOIL: STANDARDIZED TOPSOIL; EXISTING, NATIVE SURFACE TOPSOIL; EXISTING, IN-PLACE SURFACE SOIL; IMPORTED TOPSOIL; OR MANUFACTURED TOPSOIL THAT IS MODIFIED WITH SOIL AMENDMENTS AND PERHAPS FERTILIZERS TO PRODUCE A SOIL MIXTURE BEST FOR PLANT GROWTH.
- F. SUBGRADE: SURFACE OR ELEVATION OF SUBSOIL REMAINING AFTER EXCAVATION IS COMPLETE, OR TOP SURFACE OF A FILL OR BACKFILL BEFORE PLANTING SOIL IS PLACED.
- G. SUBSOIL: ALL SOIL BENEATH THE TOPSOIL LAYER OF THE SOIL PROFILE, AND TYPIFIED BY THE LACK OF ORGANIC MATTER AND SOIL ORGANISMS.

1.3 SUBMITTALS

- A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED.
1. PESTICIDES AND HERBICIDES: INCLUDE PRODUCT LABEL AND MANUFACTURER'S APPLICATION INSTRUCTIONS SPECIFIC TO THIS PROJECT.
- B. CERTIFICATION OF GRASS SEED: FROM SEED VENDOR FOR EACH GRASS-SEED MIXTURE STATING THE BOTANICAL AND COMMON NAME, PERCENTAGE BY WEIGHT OF EACH SPECIES AND VARIETY, AND PERCENTAGE OF PURITY, GERMINATION, AND WEED SEED. INCLUDE THE YEAR OF PRODUCTION AND DATE OF PACKAGING.
1. SUPPLY NATIONAL TURFGRASS EVALUATION PROGRAM (NTEP) DATA FOR EACH SPECIES TO BE USED.
- C. QUALIFICATION DATA: FOR QUALIFIED TURF AND GRASS INSTALLER.
- D. PRODUCT CERTIFICATES: FOR FERTILIZERS FROM MANUFACTURER.
- E. MAINTENANCE INSTRUCTIONS: RECOMMENDED PROCEDURES TO BE ESTABLISHED BY GREAT PARKS OF HAMILTON COUNTY FOR MAINTENANCE OF TURFGRASS DURING A CALENDAR YEAR. SUBMIT BEFORE EXPIRATION OF REQUIRED INITIAL MAINTENANCE PERIODS.

1.4 QUALITY ASSURANCE

- A. INSTALLER QUALIFICATIONS: A QUALIFIED TURFGRASS INSTALLER WHOSE WORK HAS RESULTED IN SUCCESSFUL TURFGRASS ESTABLISHMENT.
1. PROFESSIONAL MEMBERSHIP: INSTALLER SHALL BE A MEMBER IN GOOD STANDING OF EITHER THE PROFESSIONAL LANDSCAPE NETWORK, THE OHIO OR NATIONAL NURSERY AND LANDSCAPE ASSOCIATION, OR THE OHIO TURFGRASS FOUNDATION.
 2. EXPERIENCE: FIVE YEARS' EXPERIENCE IN TURF INSTALLATION IN ADDITION TO REQUIREMENTS IN SECTION "QUALITY REQUIREMENTS."
 3. INSTALLER'S FIELD SUPERVISION: REQUIRE INSTALLER TO MAINTAIN AN EXPERIENCED FULL-TIME SUPERVISOR ON PROJECT SITE WHEN WORK IS IN PROGRESS.
 4. MAINTENANCE PROXIMITY: NOT MORE THAN TWO HOURS' NORMAL TRAVEL TIME FROM INSTALLER'S PLACE OF BUSINESS TO PROJECT SITE.
 5. PESTICIDE APPLICATOR: STATE OF OHIO LICENSED, COMMERCIAL.
- B. PREINSTALLATION CONFERENCE: CONDUCT CONFERENCE AT PROJECT SITE.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. SOD: HARVEST, DELIVER, STORE, AND HANDLE SOD ACCORDING TO REQUIREMENTS IN "SPECIFICATIONS FOR TURFGRASS SOD MATERIALS" AND

"SPECIFICATIONS FOR TURFGRASS SOD TRANSPLANTING AND INSTALLATION" SECTIONS IN TPI'S "GUIDELINE SPECIFICATIONS TO TURFGRASS SODDING." DELIVER SOD WITHIN 24 HOURS OF HARVESTING AND IN TIME FOR PLANTING PROMPTLY. PROTECT SOD FROM BREAKAGE AND DRYING.

B. BULK MATERIALS:

1. DO NOT DUMP OR STORE BULK MATERIALS NEAR STRUCTURES, UTILITIES, WALKWAYS AND PAVEMENTS, OR ON EXISTING TURF AREAS OR PLANTS.
 2. PROVIDE EROSION-CONTROL MEASURES TO PREVENT EROSION OR DISPLACEMENT OF BULK MATERIALS, DISCHARGE OF SOIL-BEARING WATER RUNOFF, AND AIRBORNE DUST REACHING ADJACENT PROPERTIES, WATER CONVEYANCE SYSTEMS, OR WALKWAYS.
 3. ACCOMPANY EACH DELIVERY OF BULK FERTILIZERS AND SOIL AMENDMENTS WITH APPROPRIATE CERTIFICATES.
- 1.6 PROJECT CONDITIONS
- A. PLANTING RESTRICTIONS: PLANT DURING ONE OF THE FOLLOWING PERIODS. COORDINATE PLANTING PERIODS WITH INITIAL MAINTENANCE PERIODS TO PROVIDE REQUIRED MAINTENANCE FROM DATE OF SUBSTANTIAL COMPLETION.
1. SPRING PLANTING: FEBRUARY 15 - APRIL 15.
 - a. A PRE-EMERGENT HERBICIDE APPROPRIATE FOR GRASS SEEDING MUST ALSO BE USED.
 2. FALL PLANTING: AUGUST 15 - SEPTEMBER 15.
- B. WEATHER LIMITATIONS: PROCEED WITH PLANTING ONLY WHEN EXISTING AND FORECASTED WEATHER CONDITIONS PERMIT PLANTING TO BE PERFORMED WHEN BENEFICIAL AND OPTIMUM RESULTS MAY BE OBTAINED. APPLY PRODUCTS DURING FAVORABLE WEATHER CONDITIONS ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.
- 1.7 MAINTENANCE SERVICE
- A. INITIAL TURF MAINTENANCE SERVICE: PROVIDE FULL MAINTENANCE BY SKILLED EMPLOYEES OF LANDSCAPE INSTALLER. MAINTAIN AS REQUIRED IN PART 3. BEGIN MAINTENANCE IMMEDIATELY AFTER EACH AREA IS PLANTED AND CONTINUE UNTIL ACCEPTABLE TURF IS ESTABLISHED BUT FOR NOT LESS THAN THE FOLLOWING PERIODS:
1. SEEDED TURF: 60 DAYS FROM DATE OF SUBSTANTIAL COMPLETION.
 - a. WHEN INITIAL MAINTENANCE PERIOD HAS NOT ELAPSED BEFORE END OF PLANTING SEASON, OR IF TURF IS NOT FULLY ESTABLISHED, CONTINUE MAINTENANCE DURING NEXT PLANTING SEASON.

1.8 WARRANTY

- A. WARRANTY PERIOD: WARRANT THAT GRASSES SHALL BE IN A HEALTHY AND FLOURISHING CONDITION OF ACTIVE GROWTH AT THE END OF THE GROWING SEASON AFTER THE DATE OF FINAL COMPLETION.
- B. CONDITIONS: ESTABLISHED TURF THAT IS FREE OF DEAD OR DYING PATCHES AND SHOWS VIGOROUS GROWTH OF FOLIAGE OF NORMAL DENSITY, SIZE, AND COLOR.
- C. DELAYS: DELAYS IN COMPLETION OF PLANTING OPERATIONS WHICH EXTEND THE PLANTING AND/OR ACCEPTANCE OF SUBSTANTIAL COMPLETION INTO THE NEXT PLANTING SEASON SHALL EXTEND THE WARRANTY PERIOD ACCORDINGLY.

PART 2 - PRODUCTS

2.1 SEED

- A. GRASS SEED: FRESH, CLEAN, DRY, NEW-CROP SEED COMPLYING WITH AOSA'S "RULES FOR TESTING SEEDS" FOR PURITY AND GERMINATION TOLERANCES
- B. SEED SPECIES:
1. 40%-45% ULTIMATE TALL FESCUES - 92% MIN. PCT. GERMINATION
 2. 40%-45% FIRENZA TALL FESCUE - 93% MIN. PCT. GERMINATION
 3. 10%-20% BROOKLAND KENTUCKY BLUEGRASS - 85% MIN. PCT. GERMINATION
- C. SEED OF GRASS SPECIES SHOULD EXHIBIT NOT MORE THAN 0.5 PERCENT WEED SEED.

2.2 FERTILIZERS

- A. SLOW-RELEASE FERTILIZER: GRANULAR OR PELLETTED FERTILIZER CONSISTING OF 50 PERCENT WATER-INSOLUBLE NITROGEN, PHOSPHOROUS, AND POTASSIUM IN THE FOLLOWING COMPOSITION:
1. COMPOSITION: 1 PART NITROGEN, 2 PARTS PHOSPHOROUS, AND 1 PART POTASSIUM (NPK OF 1:2:1).

2.3 MULCHES

- A. FIBER MULCH: BIODEGRADABLE, DYED-WOOD, CELLULOSE-FIBER MULCH; NONTOXIC AND FREE OF PLANT-GROWTH OR GERMINATION INHIBITORS; WITH A MAXIMUM MOISTURE CONTENT OF 15 PERCENT AND A PH RANGE OF 4.5 TO 6.5.
- B. NONASPHALTIC TACKIFIER: COLLOIDAL TACKIFIER RECOMMENDED BY FIBER-MULCH MANUFACTURER FOR SLURRY APPLICATION; NONTOXIC AND FREE OF PLANT-GROWTH OR GERMINATION INHIBITORS.

2.4 WATER

- A. POTABLE WATER

PART 3 - EXECUTION

3.1 EXAMINATION

- A. EXAMINE AREAS TO BE PLANTED FOR COMPLIANCE WITH REQUIREMENTS AND OTHER CONDITIONS AFFECTING PERFORMANCE.
1. VERIFY THAT NO FOREIGN OR DELETERIOUS MATERIAL OR LIQUID SUCH AS PAINT, PAINT WASHOUT, CONCRETE SLURRY, CONCRETE LAYERS OR CHUNKS, CEMENT, PLASTER, OILS, GASOLINE, DIESEL FUEL, PAINT THINNER, TURPENTINE, TAR, ROOFING COMPOUND, OR ACID HAS BEEN DEPOSITED IN SOIL WITHIN A PLANTING AREA.
 2. DO NOT MIX OR PLACE SOILS AND SOIL AMENDMENTS IN FROZEN, WET, OR MUDDY CONDITIONS.
 3. SUSPEND SOIL SPREADING, GRADING, AND TILLING OPERATIONS DURING PERIODS OF EXCESSIVE SOIL MOISTURE UNTIL THE MOISTURE CONTENT REACHES ACCEPTABLE LEVELS TO ATTAIN THE REQUIRED RESULTS.
 4. UNIFORMLY MOISTEN EXCESSIVELY DRY SOIL THAT IS NOT WORKABLE AND WHICH IS TOO DUSTY.
- B. PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.
- C. IF CONTAMINATION BY FOREIGN OR DELETERIOUS MATERIAL OR LIQUID IS PRESENT IN SOIL WITHIN A PLANTING AREA, REMOVE THE SOIL AND CONTAMINATION AS DIRECTED BY ARCHITECT AND REPLACE WITH NEW PLANTING SOIL.
- 3.2 PREPARATION
- A. PROTECT STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, AND OTHER FACILITIES, TREES, SHRUBS, AND PLANTINGS FROM DAMAGE CAUSED BY PLANTING OPERATIONS.
1. PROTECT ADJACENT AND ADJOINING AREAS FROM HYDROSEEDING AND HYDROMULCHING OVERSPRAY.
 2. PROTECT GRADE STAKES SET BY OTHERS UNTIL DIRECTED TO REMOVE THEM.
- B. INSTALL EROSION-CONTROL MEASURES TO PREVENT EROSION OR DISPLACEMENT OF SOILS AND DISCHARGE OF SOIL-BEARING WATER RUNOFF OR AIRBORNE DUST TO ADJACENT PROPERTIES AND WALKWAYS.

3.3 TURF AREA PREPARATION

- A. LIMIT TURF SUBGRADE PREPARATION TO AREAS TO BE PLANTED.
- B. NEWLY GRADED SUBGRADES: LOOSEN SUBGRADE TO A MINIMUM DEPTH OF 8 INCHES. REMOVE STONES LARGER THAN 1 INCH IN ANY DIMENSION AND STICKS, ROOTS, RUBBISH, AND OTHER EXTRANEIOUS MATTER AND LEGALLY DISPOSE OF THEM OFF PROPERTY.
1. SPREAD TOPSOIL, APPLY FERTILIZER ON SURFACE, AND THOROUGHLY BLEND PLANTING SOIL.
 - a. DELAY MIXING FERTILIZER WITH PLANTING SOIL IF PLANTING WILL NOT PROCEED WITHIN A FEW DAYS.
 2. SPREAD PLANTING SOIL TO DEPTH INDICATED ON PLANS BUT NOT LESS THAN REQUIRED TO MEET FINISH GRADES AFTER LIGHT ROLLING AND NATURAL SETTLEMENT. DO NOT SPREAD IF PLANTING SOIL OR SUBGRADE IS FROZEN, MUDDY, OR EXCESSIVELY WET.
 - a. SPREAD APPROXIMATELY 1/2 THE THICKNESS OF PLANTING SOIL OVER LOOSENED SUBGRADE. MIX THOROUGHLY INTO TOP 4 INCHES. SPREAD REMAINDER OF PLANTING SOIL.
 3. FINISH GRADING: GRADE PLANTING AREAS TO A SMOOTH, UNIFORM SURFACE PLANE WITH LOOSE, UNIFORMLY FINE TEXTURE. GRADE TO WITHIN PLUS OR MINUS 1/2 INCH OF FINISH ELEVATION. ROLL AND RAKE, REMOVE RIDGES, AND FILL DEPRESSIONS TO MEET FINISH GRADES. LIMIT FINISH GRADING TO AREAS THAT CAN BE PLANTED IN THE IMMEDIATE FUTURE.
 4. MOISTEN PREPARED AREA BEFORE PLANTING IF SOIL IS DRY. WATER THOROUGHLY AND ALLOW SURFACE TO DRY BEFORE PLANTING. DO NOT CREATE MUDDY SOIL.
 5. BEFORE PLANTING, OBTAIN ARCHITECT'S ACCEPTANCE OF FINISH GRADING; RESTORE PLANTING AREAS IF ERODED OR OTHERWISE DISTURBED AFTER FINISH GRADING.

3.6 TURF MAINTENANCE

- A. MAINTAIN AND ESTABLISH TURF BY WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING, REPLANTING, AND PERFORMING OTHER OPERATIONS AS REQUIRED TO ESTABLISH HEALTHY, VIABLE TURF. ROLL, REGRADE, AND REPLANT BARE OR ERODED AREAS AND REMULCH TO PRODUCE A UNIFORMLY SMOOTH TURF. PROVIDE MATERIALS AND INSTALLATION THE SAME AS THOSE USED IN THE ORIGINAL INSTALLATION.
1. FILL IN AS NECESSARY SOIL SUBSIDENCE THAT MAY OCCUR BECAUSE OF SETTLING OR OTHER PROCESSES. REPLACE MATERIALS AND TURF DAMAGED OR LOST IN AREAS OF SUBSIDENCE.
 2. IN AREAS WHERE MULCH HAS BEEN DISTURBED BY WIND OR MAINTENANCE OPERATIONS, ADD NEW MULCH AND ANCHOR AS REQUIRED TO PREVENT

DISPLACEMENT.

3. APPLY TREATMENTS AS REQUIRED TO KEEP TURF AND SOIL FREE OF PESTS AND PATHOGENS OR DISEASE. USE INTEGRATED PEST MANAGEMENT PRACTICES WHENEVER POSSIBLE TO MINIMIZE THE USE OF PESTICIDES AND REDUCE HAZARDS.
- B. WATERING: KEEP TURF UNIFORMLY MOIST TO A DEPTH OF 4 INCHES (100 MM).
1. SCHEDULE WATERING TO PREVENT WILTING, PUDDLING, EROSION, AND DISPLACEMENT OF SEED OR MULCH.
 2. WATER TURF WITH FINE SPRAY AT A MINIMUM RATE OF 1 INCH PER WEEK UNLESS RAINFALL PRECIPITATION IS ADEQUATE.
- C. TURF POSTFERTILIZATION: APPLY FERTILIZER AFTER INITIAL MOWING AND WHEN GRASS IS DRY.
1. USE FERTILIZER THAT WILL PROVIDE ACTUAL NITROGEN OF AT LEAST 1 LB/1000 SQ. FT. TO TURF AREA.
 - a. DO NOT APPLY POSTFERTILIZATION IF SPRING SEEDING WAS CONDUCTED.
 - b. ONLY APPLY POSTFERTILIZATION IF SEEDING WAS CONDUCTED IN FALL.
- 3.7 SATISFACTORY TURF
- A. TURF INSTALLATIONS SHALL MEET THE FOLLOWING CRITERIA AS DETERMINED BY ARCHITECT:
1. SATISFACTORY SEEDED TURF: AT END OF MAINTENANCE PERIOD, A HEALTHY, UNIFORM, CLOSE STAND OF GRASS HAS BEEN ESTABLISHED, FREE OF WEEDS AND SURFACE IRREGULARITIES, WITH COVERAGE EXCEEDING 90 PERCENT OVER ANY 10 SQ. FT. AND BARE SPOTS NOT EXCEEDING 5 BY 5 INCHES.
- B. USE SPECIFIED MATERIALS TO REESTABLISH TURF THAT DOES NOT COMPLY WITH REQUIREMENTS AND CONTINUE MAINTENANCE UNTIL TURF IS SATISFACTORY.
- 3.8 EXISTING TURF RESTORATION
- A. EXISTING LAWNS MUST BE RESTORED WHEN COMPACTED DURING CONSTRUCTION.
1. REPAIR ANY RUTS OR DEPRESSIONS LEFT BY EQUIPMENT OR STORAGE OF MATERIAL.
 2. REMOVE TOPSOIL CONTAINING FOREIGN MATERIALS RESULTING FROM CONTRACTOR'S OPERATIONS, INCLUDING OIL DRIPPINGS, FUEL SPILLS, STONE, GRAVEL AND OTHER CONSTRUCTION MATERIALS.
 3. REPLACE WITH NEW PLANTING SOIL AS SPECIFIED IN THESE DOCUMENTS.
 4. MOW, DETHATCH, CORE AERATE AT A RATE OF 9 HOLES PER SQUARE FOOT AND RAKE EXISTING LAWN.
 5. REMOVE WEEDS BEFORE SEEDING. WHERE WEEDS ARE EXTENSIVE, APPLY SELECTIVE HERBICIDES AS REQUIRED. DO NOT USE PRE-EMERGENT HERBICIDES.
 6. TILL STRIPPED, BARE AND COMPACTED AREAS TO A SOIL DEPTH OF 6 INCHES.
 7. APPLY 1 INCH OF COMPOST OVER ENTIRE SURFACE TO BE REPAIRED.
 8. SLIT SEED USING SEED MIX AND RATE AS DESCRIBED IN THIS SPECIFICATION.
 9. APPLY FIBER MULCH AS DESCRIBED IN THIS SPECIFICATION.
 10. MAINTAIN UNTIL ACCEPTANCE AS DESCRIBED IN THIS SPECIFICATION.
- 3.9 CLEANUP AND PROTECTION
- B. PROMPTLY REMOVE SOIL AND DEBRIS CREATED BY TURF WORK FROM PAVED AREAS. CLEAN WHEELS OF VEHICLES BEFORE LEAVING SITE TO AVOID TRACKING SOIL ONTO ROADS, WALKS, OR OTHER PAVED AREAS.
- C. ERECT TEMPORARY FENCING OR BARRICADES AND WARNING SIGNS AS REQUIRED TO PROTECT NEWLY PLANTED AREAS FROM TRAFFIC. MAINTAIN FENCING AND BARRICADES THROUGHOUT INITIAL MAINTENANCE PERIOD AND REMOVE AFTER PLANTINGS ARE ESTABLISHED.
- 3.10 BASIS OF PAYMENT
- PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, AND TOOLS FOR INTER-SEEDING, COMMERCIAL FERTILIZER, LIME, WATER, MAINTENANCE AND MOWING AS PER PLAN: ITEM 659- SEEDED FESCUE LAWN, AS PER PLAN UNIT: SQUARE YARD



CALCULATED
JAM
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LANDSCAPE GENERAL NOTES

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ITEM 659 - 6" DEPTH TOP SOIL FURNISHED & PLACED

PART 1 - GENERAL

1.1 SUMMARY

A. SECTION INCLUDES:

- 1. PLANTING SOIL

1.2 DEFINITIONS

- A. BACKFILL: THE EARTH USED TO REPLACE OR THE ACT OF REPLACING EARTH IN AN EXCAVATION.
- B. FINISH GRADE: ELEVATION OF FINISHED SURFACE OF TOPSOIL.
- C. SUBGRADE: SURFACE OR ELEVATION OF SUBSOIL REMAINING AFTER EXCAVATION IS COMPLETE, OR THE TOP SURFACE OF A FILL OR BACKFILL BEFORE TOPSOIL IS PLACED.

1.3 SUBMITTALS

- A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED, INCLUDING SOILS.
 - 1. PRECONSTRUCTION TESTING: IMPORTED TOPSOIL & ORGANIC AMENDMENT
 - a. FOR IMPORTED AND SITE-SALVAGED TOPSOIL, SUBMIT SUPPLIER NAME AND CONTACT INFORMATION, LOCATION OF MATERIALS SOURCES, AND TEST REPORTS FOR THE FOLLOWING:
 - 1) PARTICLE SIZE ANALYSIS (% SAND, SILT AND CLAY)
 - 2) USDA TEXTURE CLASS
 - 3) PH
 - 4) SOLUBLE SALTS CONTENT
 - 5) ORGANIC MATTER CONTENT (ASTM D2974-87 METHOD C)
 - 6) NUTRIENT ANALYSIS (PLANT AVAILABLE PHOSPHORUS, POTASSIUM, CALCIUM, MAGNESIUM, IRON, MANGANESE, ZINC, COPPER AND BORON)
 - b. FOR ORGANIC AMENDMENT, SUBMIT MATERIAL TEST REPORTS FOR THE FOLLOWING (IN CONFORMANCE WITH US COMPOST COUNCIL'S TEST METHODS FOR THE EXAMINATION OF COMPOSTING AND COMPOST TMECC UNLESS OTHERWISE INDICATED):
 - 1) PH
 - 2) SOLUBLE SALTS CONTENT
 - 3) ORGANIC MATTER CONTENT (ASTM D2974-87 METHOD C)
 - 4) CARBON TO NITROGEN RATION
 - 5) SOLVITA MATURITY INDEX
 - 6) MOISTURE CONTENT
 - 7) NUTRIENT ANALYSIS (NITRATE-NITROGEN, PHOSPHOROUS, POTASSIUM, CALCIUM, MAGNESIUM, IRON, MANGANESE, ZINC, COPPER, BORON AND SODIUM (EXTRACTED PER NER493 OR NCR-221 FOR SOIL-LESS MEDIA))
 - 8) HEAVY METAL CONTENT / OEPA COMPOST QUALITY TABLE 1 (TMECC 04.06)
 - c. PRODUCT CERTIFICATES FOR EACH CHEMICAL SOIL AMENDMENT AND FERTILIZER MATERIAL
 - d. WRITTEN PLAN FOR EXCAVATING, TRANSPORTING, STORING, PLACING, AMENDING AND SETTLING INSTALLED MATERIALS INCLUDING WHEEL LOAD DATA FOR EARTHWORK EQUIPMENT. PLAN TO BE SUBMITTED TWO WEEKS IN ADVANCE OF SOIL DELIVERY AND INSTALLATION.

- B. QUALIFICATION DATA: INCLUDE LIST OF SIMILAR PROJECTS COMPLETED BY INSTALLER DEMONSTRATING INSTALLER'S CAPABILITIES AND EXPERIENCE. INCLUDE PROJECT NAMES, ADDRESSES, AND YEAR COMPLETED, AND INCLUDE NAMES AND ADDRESSES OF OWNERS' CONTACT PERSONS.

1.4 QUALITY ASSURANCE

- A. SOIL-TESTING LABORATORY QUALIFICATIONS: AN INDEPENDENT OR UNIVERSITY LABORATORY, RECOGNIZED BY THE STATE DEPARTMENT OF AGRICULTURE, WITH THE EXPERIENCE AND CAPABILITY TO CONDUCT THE TESTING INDICATED AND THAT SPECIALIZES IN TYPES OF TESTS TO BE PERFORMED.
- B. PREINSTALLATION CONFERENCE: CONDUCT CONFERENCE AT PROJECT SITE PRIOR TO INSTALLATION OF SOIL.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. PACKAGED MATERIALS: DELIVER PACKAGED MATERIALS IN ORIGINAL, UNOPENED CONTAINERS SHOWING WEIGHT, CERTIFIED ANALYSIS, NAME AND ADDRESS OF MANUFACTURER, AND INDICATION OF CONFORMANCE WITH STATE AND FEDERAL LAWS IF APPLICABLE.
- B. BULK MATERIALS:
 - 1. HANDLE SOIL ONLY WHEN SOIL MOISTURE IS SUCH THAT THE SOIL IS FRIABLE. SOIL SHOULD HOLD TOGETHER IN CLOUDS AS IT IS BEING HANDLED.
 - a. DO NOT STORE TOPSOIL MATERIAL IN STOCKPILES GREATER THAN FOUR FEET IN HEIGHT.
 - b. DO NOT COVER TOPSOIL STOCKPILES WITH AN IMPERVIOUS COVER.
 - 2. DO NOT DUMP OR STORE BULK MATERIALS NEAR STRUCTURES, UTILITIES, WALKWAYS AND PAVEMENTS, OR ON EXISTING TURF AREAS OR PLANTS.
 - 3. PROVIDE EROSION-CONTROL MEASURES TO PREVENT EROSION OR DISPLACEMENT OF BULK MATERIALS, DISCHARGE OF SOIL-BEARING WATER RUNOFF, AND AIRBORNE DUST REACHING ADJACENT PROPERTIES, WATER

CONVEYANCE SYSTEMS, OR WALKWAYS.

- 4. ACCOMPANY EACH DELIVERY OF BULK FERTILIZERS AND SOIL AMENDMENTS WITH APPROPRIATE CERTIFICATES.

1.6 FIELD CONDITIONS

- A. FIELD MEASUREMENTS: VERIFY ACTUAL GRADE ELEVATIONS, SERVICE AND UTILITY LOCATIONS, AND DIMENSIONS OF CONTIGUOUS CONSTRUCTION BY FIELD MEASUREMENTS BEFORE PROCEEDING WITH WORK.
- B. INTERRUPTION OF EXISTING SERVICES OR UTILITIES: DO NOT INTERRUPT SERVICES OR UTILITIES TO FACILITIES OCCUPIED BY OWNER OR OTHERS UNLESS PERMITTED UNDER THE FOLLOWING CONDITIONS AND THEN ONLY AFTER ARRANGING TO PROVIDE TEMPORARY SERVICES OR UTILITIES ACCORDING TO REQUIREMENTS INDICATED:
 - 1. DO NOT PROCEED WITH INTERRUPTION OF SERVICES OR UTILITIES WITHOUT OWNER'S WRITTEN PERMISSION.
- C. WEATHER LIMITATIONS: PROCEED WITH SOIL OPERATIONS ONLY WHEN EXISTING AND FORECASTED WEATHER CONDITIONS PERMIT OPERATIONS TO BE PERFORMED WHEN BENEFICIAL AND OPTIMUM RESULTS MAY BE OBTAINED. APPLY PRODUCTS DURING FAVORABLE WEATHER CONDITIONS ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS AND WARRANTY REQUIREMENTS.

PART 2 - PRODUCTS

2.1 PLANTING SOIL

A. TOPSOIL COMPONENT

- 1. A LOAMY, FRIABLE MINERAL SOIL ESSENTIALLY FREE FROM HEAVY OR STIFF CLAY LUMPS, STONES, CINDERS, CONCRETE, BRICK, ROOTS, STICKS, BRUSH, TRASH, PLASTICS, METALS, REFUSE OR OTHER DELETERIOUS MATERIALS IN ACCORDANCE WITH ASTM D 5286-92. THE SOIL SHALL BE FREE OF HERBICIDES, PETROLEUM-BASED MATERIALS OR OTHER SUBSTANCES OF A HAZARDOUS OR TOXIC NATURE WHICH MAY INHIBIT PLANT GROWTH. THE SOIL SHALL BE FREE OF NOXIOUS WEEDS, SEEDS OR VEGETATIVE PARTS OF WEEDY PLANTS THAT CANNOT BE SELECTIVELY CONTROLLED IN THE PLANTING.
- 2. THE SOIL SHALL BE TAKEN FROM THE HORIZON OF A WELL-DRAINED SITE AND HAVE A USDA SOIL TEXTURE CLASSIFICATION OF A CLAY LOAM OR LOAM.
- 3. THE TOPSOIL COMPONENT SHALL MEET THE FOLLOWING REQUIREMENTS:
 - a. THE PARTICLE SIZE ANALYSIS AS DEFINED ABOVE.
 - b. THE PH SHALL BE 6.5 TO 8.0
 - c. THE SOLUBLE SALTS TEST SHALL BE LESS THAN 1.5 MMOH/CM
 - d. THE ORGANIC MATTER CONTENT SHALL BE 4.0 TO 6.0% FOR SOIL PLACEMENT WITHIN 12" OF FINISH GRADE. TOPSOIL PLACEMENT DEEPER THAN 12" FROM FINISH GRADE SHALL HAVE AN ORGANIC MATTER CONTENT OF 1.5% - 3.5%
 - e. TOPSOIL SHALL BE PASSED THROUGH A ONE INCH SCREEN. TOPSOIL SHALL NOT BE PULVERIZED.
- 4. PROVIDE CERTIFICATION FROM THE SUPPLIER THAT THE TOPSOIL DOES NOT CONTAIN ANY TOXIC SUBSTANCES HARMFUL TO PLANT GROWTH.

2.2 ORGANIC AMENDMENT

- A. THE ORGANIC AMENDMENT SHALL BE A STABLE, MATURE AEROBICALLY COMPOSTED, WOOD-CHIP BULKED BIOSOLID SUCH AS COMTIL® PRODUCED BY THE CITY OF COLUMBUS, OH. (COMTIL-PLUS® SHALL NOT BE USED.) OR A COMPOST DERIVED FROM MIXED GREENWASTE/YARDWASTE FEEDSTOCKS. THE COMPOST SHALL MEET THE APPLICABLE OHIO EPA COMPOST QUALITY STANDARDS.
 - 1. THE COMPOST SHALL BE A HOMOGENEOUS MATERIAL ESSENTIALLY FREE OF SOIL CLOUDS, LUMPS, ROOTS AND STONES.
 - 2. THE COMPOST SHALL HAVE A MAN-MADE FOREIGN MATERIAL (HARD PLASTICS, METAL, GLASS, ETC.) CONTENT LESS THAN 1.5% FOR MATERIAL RETAINED ON A U.S. STD.NO.5 (4 MM) SIEVE (TMECC 03.06)
 - 3. THE COMPOST SHALL BE SCREENED SUCH THAT A MINIMUM OF 90% PASSES A U.S.STD. 3/4" SIEVE AND THAT NO MORE THAN 20% PASSES A U.S. STD. NO.10 SIEVE ON A DRY WEIGHT BASIS.
 - 4. THE COMPOST SHALL HAVE A PH OF 7.0 TO 8.3 WHEN DETERMINED ON A 1:5 COMPOST/WATER SLURRY
 - 5. THE COMPOST SHALL HAVE A SOLUBLE SALTS CONTENT LESS THAN 6.0 MILLIMHOS PER CM. WHEN DETERMINED ON A 1:5 COMPOST/WATER SLURRY
 - 6. THE COMPOST SHALL HAVE AN ORGANIC MATTER CONTENT OF NOT LESS THAN 35% BY WEIGHT DETERMINED BY ASTM D2974-87 METHOD C ON MATERIAL PASSING A U.S. STD.1/4" SIEVE
 - 7. THE COMPOST SHALL HAVE A CARBON TO NITROGEN (C:N) RATIO LESS THAN 36:1.
 - 8. THE COMPOST SHALL HAVE A SOLVITA® MATURITY INDEX BETWEEN 6 AND 7.
 - 9. THE COMPOST SHALL HAVE A MOISTURE CONTENT IN THE RANGE OF 35% TO 65%.
 - 10. THE HEAVY METAL CONTENT AS DETERMINED BY TMECC 04.06 SHALL NOT EXCEED USEPA 40 CFR 503 (2010) LIMITS.
- B. TOPSOIL TESTING: TAKE ONE (1) COMPOSITE SAMPLE UPON ARRIVAL TO THE SITE FROM EACH 500 CUBIC YARDS OR AS REQUIRED BY THE LANDSCAPE ARCHITECT FOR TESTING.
- C. SITE SALVAGED TOPSOIL TESTING: TAKE ONE (1) COMPOSITE SAMPLE UPON PLACING FOR EACH 500 CUBIC YARDS, OR AS REQUIRED BY THE LANDSCAPE ARCHITECT, OF UN-AMENDED SITE SALVAGED TOPSOIL TO DETERMINE THE ORGANIC MATTER CONTENT (ONLY) AND AMENDMENT VOLUME REQUIREMENT.
- D. SITE SALVAGED AMENDED TOPSOIL TESTING: TAKE ONE (1) COMPOSITE SAMPLE UPON PLACING FOR EACH 500 CUBIC YARDS, OR AS REQUIRED BY THE LANDSCAPE ARCHITECT, OF SITE SALVAGED TOPSOIL AFTER THE ORGANIC AMENDMENT HAS BEEN

DISCED IN. TEST IN ACCORDANCE TO PART 1 OF THIS SECTION.

2.3 STOCKPILING

- A. GENERAL: STOCKPILING ON-SITE, OFF-SITE AND AT THE SOURCE SHOULD BE RESTRICTED TO NO MORE THAN THE NEEDS OF WHAT CAN BE USED IN A 72 HOUR PERIOD.
- B. UNDER NO CIRCUMSTANCES SHALL ON-SITE OR OFF-SITE STORED MATERIAL EXCEED 500 CUBIC YARDS. STOCKPILES SHOULD BE NO MORE THAN 4 FEET IN HEIGHT TO PREVENT ANAEROBIC CONDITIONS WITHIN THE PILE. STOCKPILED COMPOSTS SHOULD BE TURNED EVERY OTHER WEEK (UNLESS OTHERWISE INSTRUCTED BY THE LANDSCAPE ARCHITECT) TO PREVENT ANAEROBIC CONDITIONS OR EXCESSIVE WATER ABSORPTION.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. EXAMINE AREAS TO RECEIVE TOPSOIL FOR COMPLIANCE WITH REQUIREMENTS AND CONDITIONS AFFECTING INSTALLATION AND PERFORMANCE.
 - 1. VERIFY THAT NO FOREIGN OR DELETERIOUS MATERIAL OR LIQUID SUCH AS PAINT, PAINT WASHOUT, CONCRETE SLURRY, CONCRETE LAYERS OR CHUNKS, CEMENT, PLASTER, OILS, GASOLINE, DIESEL FUEL, PAINT THINNER, TURPENTINE, TAR, ROOFING COMPOUND, OR ACID HAS BEEN DEPOSITED IN SOIL WITHIN A PLANTING AREA.
 - 2. DO NOT MIX OR PLACE SOILS AND SOIL AMENDMENTS IN FROZEN, WET, OR MUDDY CONDITIONS.
 - 3. SUSPEND SOIL SPREADING, GRADING, AND TILLING OPERATIONS DURING PERIODS OF EXCESSIVE SOIL MOISTURE. WORK ONLY DURING PERIODS WHEN SOIL AND SUBGRADE ARE FRIABLE.
 - 4. UNIFORMLY MOISTEN EXCESSIVELY DRY SOIL THAT IS NOT WORKABLE AND WHICH IS TOO DUSTY.
- B. PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.
- C. IF CONTAMINATION BY FOREIGN OR DELETERIOUS MATERIAL OR LIQUID IS PRESENT IN SOIL WITHIN A PLANTING AREA, REMOVE THE SOIL AND CONTAMINATION AS DIRECTED BY LANDSCAPE ARCHITECT AND REPLACE WITH NEW PLANTING SOIL.

3.2 PREPARATION

- A. PROTECT STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, AND OTHER FACILITIES AND TURF AREAS AND EXISTING PLANTS FROM DAMAGE CAUSED BY PLANTING OPERATIONS.
- B. INSTALL EROSION-CONTROL MEASURES TO PREVENT EROSION OR DISPLACEMENT OF SOILS AND DISCHARGE OF SOIL-BEARING WATER RUNOFF OR AIRBORNE DUST TO ADJACENT PROPERTIES AND WALKWAYS.
- 3.3 PLACING TOPSOIL OVER EXPOSED SUBGRADE
 - A. SUBGRADE PREPARATION: LOOSEN SUBGRADE TO A MINIMUM DEPTH OF 6 INCHES. REMOVE STONES LARGER THAN 4 INCHES IN ANY DIMENSION AND STICKS, ROOTS, RUBBISH, AND OTHER EXTRANEIOUS MATTER AND LEGALLY DISPOSE OF THEM OFF OWNER'S PROPERTY.
 - B. APPLICATION: SPREAD PLANTING SOIL TO TOTAL DEPTH OF 6 INCHES, BUT NOT LESS THAN REQUIRED TO MEET FINISH GRADES AFTER NATURAL SETTLEMENT. DO NOT SPREAD IF SOIL OR SUBGRADE IS FROZEN, MUDDY, OR EXCESSIVELY WET.
 - C. FINISH GRADING: GRADE PLANTING SOIL TO A SMOOTH, UNIFORM SURFACE PLANE WITH LOOSE, UNIFORMLY FINE TEXTURE. ROLL AND RAKE, REMOVE RIDGES, AND FILL DEPRESSIONS TO MEET FINISH GRADES.
- 3.4 CLEANUP AND PROTECTION
 - A. DURING SOIL PLACEMENT, KEEP ADJACENT PAVING AND CONSTRUCTION CLEAN AND WORK AREA IN AN ORDERLY CONDITION.
- 3.5 DISPOSAL
 - A. REMOVE SURPLUS SOIL AND WASTE MATERIAL INCLUDING EXCESS SUBSOIL, UNSUITABLE SOIL, TRASH, AND DEBRIS AND LEGALLY DISPOSE OF THEM OFF OWNER'S PROPERTY.
- 3.6 METHOD OF MEASUREMENT
 - A. THE ODOT MEASUREMENT WILL BE BASED ON THE NUMBER OF SQUARE FEET OF MATERIAL FURNISHED AND COMPACTED ON SITE PER THE DIRECTED DEPTH, INCLUDED EXCAVATION AND DISPOSAL OF IN-SITU SOILS. ANY ADDITIONAL SOIL NEEDED FOR COMPACTION OR AS A RESULT OF OVER EXCAVATION SHALL BE INCLUDED IN THE SOIL COST. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE TRUCK HAULING CONVERSION RATES BETWEEN LOOSE VERSUS COMPACTED MATERIAL. THE EXCAVATION AND DISPOSAL OF IN-SITU SOILS AS NECESSARY FOR THE PLACEMENT OF THE PROPOSED TOPSOIL SHALL BE INCLUDED WITHIN THE UNIT BID COSTS OF THE SOILS AND HAS NOT BEEN SEPARATELY ITEMIZED.

3.8 BASIS OF PAYMENT:

- A. ITEM 659- 6" DEPTH TOP SOIL FURNISHED & PLACED

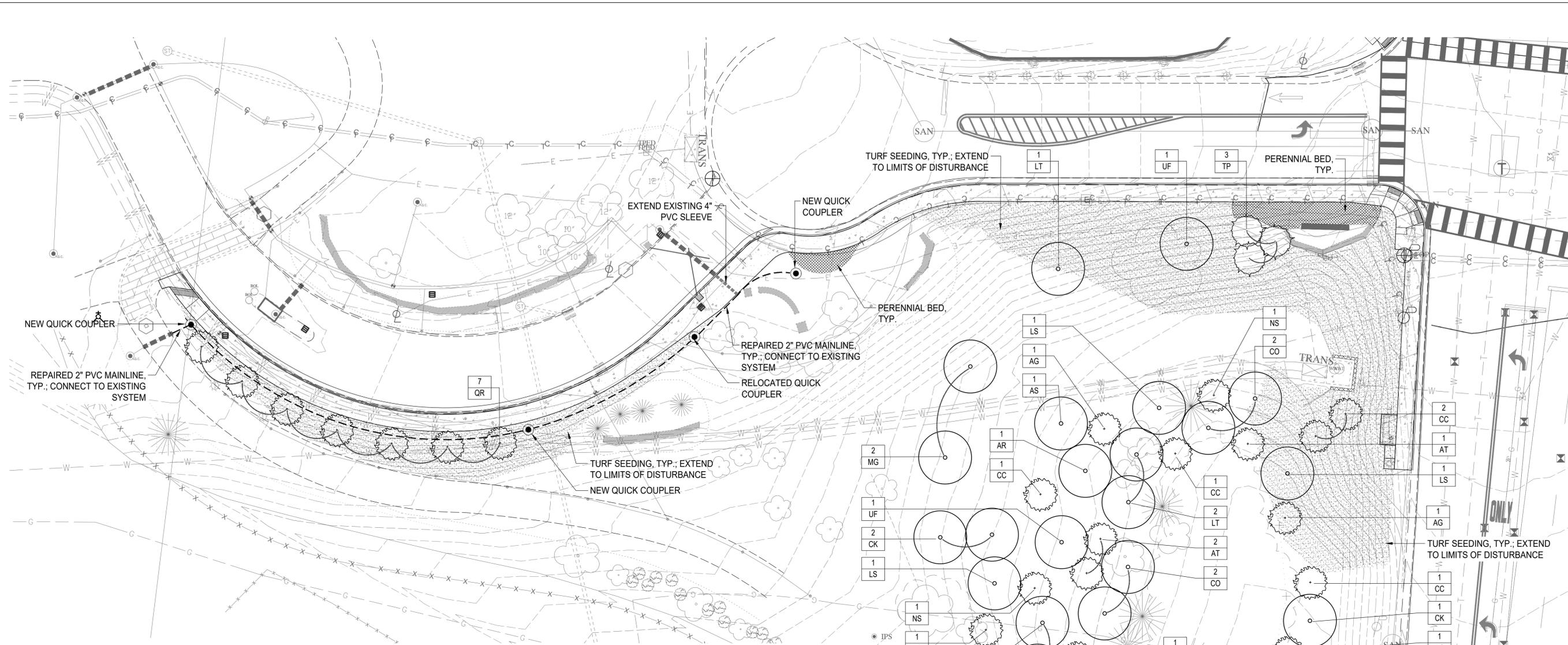
IS INCLUDED WITH ITEMS:

659 SEEDING MISC.: SEEDED FESCUE LAWN,
AS PER PLAN

661 PLANTING MISC.: TOPSOIL AND MULCH AT
PERENNIAL BEDS



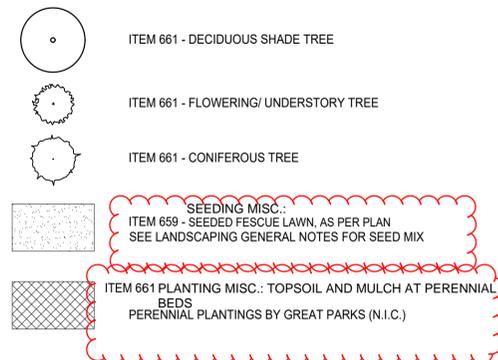
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 Drawing name: N:\Projects\2022\22633-Great Parks CG Sidewalk Entrance\BIM_CAD_GIS\CAD\Sheets\22633-LP-GG Sidewalk - Layout Tab: 46-Landscape Plan



LANDSCAPE PLAN

1 LANDSCAPE PLAN - SIDEWALK ENTRANCE

PLANTING LEGEND



KEY	QTY.	DESCRIPTION	COMMON NAME	SIZE	COND.	NOTES
DECIDUOUS SHADE TREES						
AS	2	ACER SACCHARUM 'GREEN MOUNTAIN'	SUGAR MAPLE	3"	B&B	SPECIMEN QUALITY, SINGLE TRUNK, CENTRAL LEADER, LIMB UP TO 6'
AR	3	ACER RUBRUM 'OCTOBER GLORY'	RED MAPLE	3"	B&B	SPECIMEN QUALITY, SINGLE TRUNK, CENTRAL LEADER, LIMB UP TO 6'
CO	4	CARYA OVATA	SHAGBARK HICKORY	2 1/2"	B&B	SPECIMEN QUALITY, SINGLE TRUNK, CENTRAL LEADER, LIMB UP TO 6'
CK	3	CLADRASTIS KENTUCKEA	YELLOWWOOD	3"	B&B	SPECIMEN QUALITY, SINGLE TRUNK, CENTRAL LEADER, LIMB UP TO 6'
LS	3	LIQUIDAMBAR STYRACIFLUA	SWEETGUM	2 1/2"	B&B	SPECIMEN QUALITY, SINGLE TRUNK, CENTRAL LEADER, LIMB UP TO 6'
LT	3	LIRIODENDRON TULIPIFERA 'EMERALD CITY'	TULIP POPLAR	3"	B&B	SPECIMEN QUALITY, SINGLE TRUNK, CENTRAL LEADER, LIMB UP TO 6'
MG	2	METASEQUOIA GLPYTOSTROBIDES	DAWN REDWOOD	3"	B&B	SPECIMEN QUALITY, SINGLE TRUNK, CENTRAL LEADER, LIMB UP TO 6'
UF	2	ULMUS X 'FRONTIER'	FRONTIER ELM	3"	B&B	SPECIMEN QUALITY, SINGLE TRUNK, CENTRAL LEADER, LIMB UP TO 6'
QR	7	QUERCUS ROBUR 'FASTIGIATA'	COLUMNAR ENGLISH OAK	3"	B&B	SPECIMEN QUALITY, SINGLE TRUNK, CENTRAL LEADER, LIMB UP TO 6'
FLOWERING/ UNDERSTORY TREES						
AG	4	AMELANCHIER X GRANDIFLORA 'AUTUMN BRILLIANCE'	SERVICEBERRY	2 1/2"	B&B	SPECIMEN QUALITY, CLUMP FORM, 5 CANES MIN.
AT	4	ASIMINA TRILOBA	PAWPAW	2 1/2"	B&B	SPECIMEN QUALITY, SINGLE TRUNK, CENTRAL LEADER, LIMB UP TO 6'
CC	7	CERCIS CANADENSIS	EASTERN REDBUD	2 1/2"	B&B	SPECIMEN QUALITY, SINGLE TRUNK, CENTRAL LEADER, LIMB UP TO 6'
NS	2	NYSSA SYLVATICA 'RED RAGE'	BLACKGUM	2 1/2"	B&B	SPECIMEN QUALITY, SINGLE TRUNK, CENTRAL LEADER, LIMB UP TO 6'
CONIFEROUS TREES						
TP	3	THUJA PLICATA 'GROVEPLI'	SPRING GROVE ARBORVITAE	8' HT.	B&B	SPECIMEN QUALITY, CENTRAL LEADER
SEEDED FESCUE LAWN, AS PER PLAN						
1,335 S.F. SEE LANDSCAPING GENERAL NOTES FOR SEED MIX						
TOPSOIL AND MULCH AT PERENNIAL BEDS						
605 S.F. SEE LANDSCAPING GENERAL NOTES						

* ALL SPECIES SELECTIONS TO BE CONFIRMED WITH GREAT PARKS REPRESENTATIVE PRIOR TO PLANTING

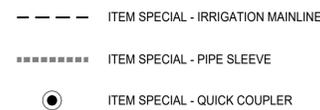
DECIDUOUS TREE, TYP.; SEE SCHEDULE FOR SELECTIONS

UNDERSTORY/ FLOWERING TREE, TYP.; SEE SCHEDULE FOR SELECTIONS

NOTE: GREAT PARKS REPRESENTATIVE TO APPROVE ALL TREE LAYOUTS BEFORE TREES ARE PLANTED

EXISTING TREES TO REMAIN (TYP.)

IRRIGATION LEGEND



IRRIGATION SCHEDULE

DESCRIPTION	QTY.	UNIT	SPECIFICATIONS
2" PVC IRRIGATION MAINLINE	260	L.F.	PVC CLASS 200 SDR 21; COUPLERS, CONNECTIONS & FITTINGS AS NEEDED
4" PVC PIPE SLEEVE	10	L.F.	SCHEDULE 40 PVC
RELOCATE EXISTING QUICK COUPLER	1	EACH	SEE PLAN FOR LOCATION
NEW QUICK COUPLER	3	EACH	RAIN BIRD 5-RC; OR APPROVED EQUAL