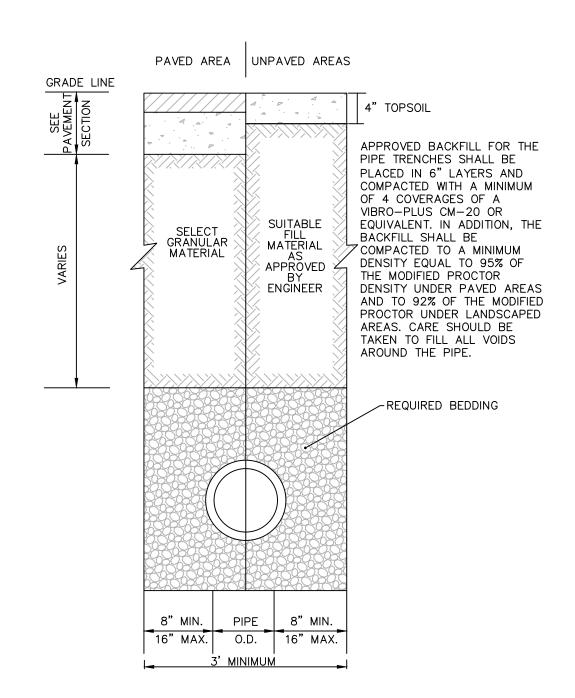


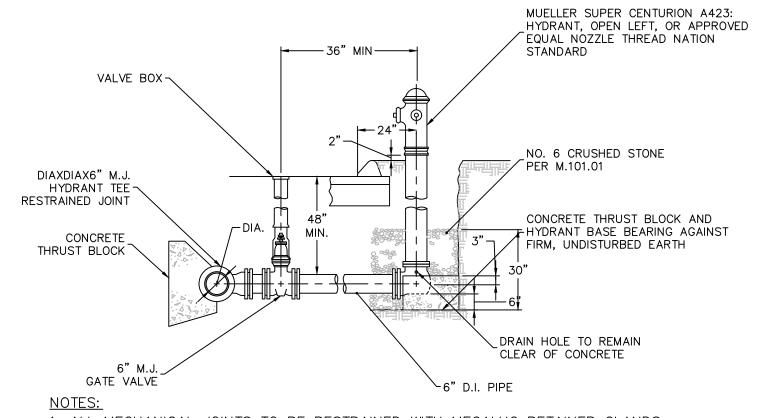
1. ALL DIRECT-BURIED CABLES SHALL BE INSTALLED AT A DEPTH OF AT LEAST 30 INCHES IN THE FOLLOWING ORDER: A. ENSURE THAT THE BOTTOM OF THE TRENCH IS WELL—TAMPED AND FREE OF ROCKS.
B. INSTALL THE CONDUIT, GLUING ALL COUPLINGS.
C. INSTALL SECONDARIES AND OTHER UTILITY CABLES OR CONDUITS LARGER THAN 2

- INCHES IN MAXIMUM DIAMETER. D. BACKFILL WITH 12 INCHES CLEAN FILL NOT TO CONTAIN STONES LARGER THAN 2 INCHES IN MAXIMUM DIAMETER.
- E. INSTALL CABLE WARNING TAPE 12 INCHES OVER THE CONDUIT. F. FILL IN THE REMAINDER OF THE TRENCH WITH NATIVE BACKFILL. 2. THE TRENCH SHALL BE BACKFILLED IMMEDIATELY FOLLOWING PLACEMENT OF THE CONDUIT. 3. 1/4-INCH NYLON ROPE AND PLASTIC CONDUIT PLUG TO BE SUPPLIED AND INSTALLED BY CONTRACTOR.

**ELECTRICAL UTILITY TRENCH** 

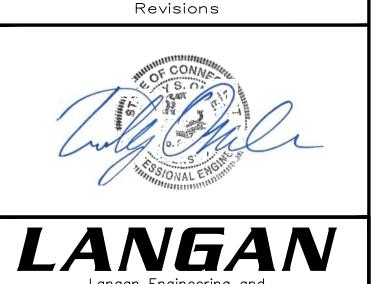


**UTILITY PIPE BACKFILL** 



1. ALL MECHANICAL JOINTS TO BE RESTRAINED WITH MEGALUG RETAINER GLANDS. 2. FIRE HYDRANTS SHALL HAVE 5-1/4" MAIN VALVE OPENING, 2 - 2-1/2" HOSE NOZZLES, 1 - 4-1/2" PUMPER NOZZLE AND A 6" M.J. INLET SHOE.

FIRE HYDRANT ASSEMBLY



Description

Environmental Services, Inc.

555 Long Wharf Drive New Haven, CT 06511

Date

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RECONNECTING THE RIVERFRONT: PARKER HARDING PLAZA

CONNECTICU

FAIRFIELD COUNTY

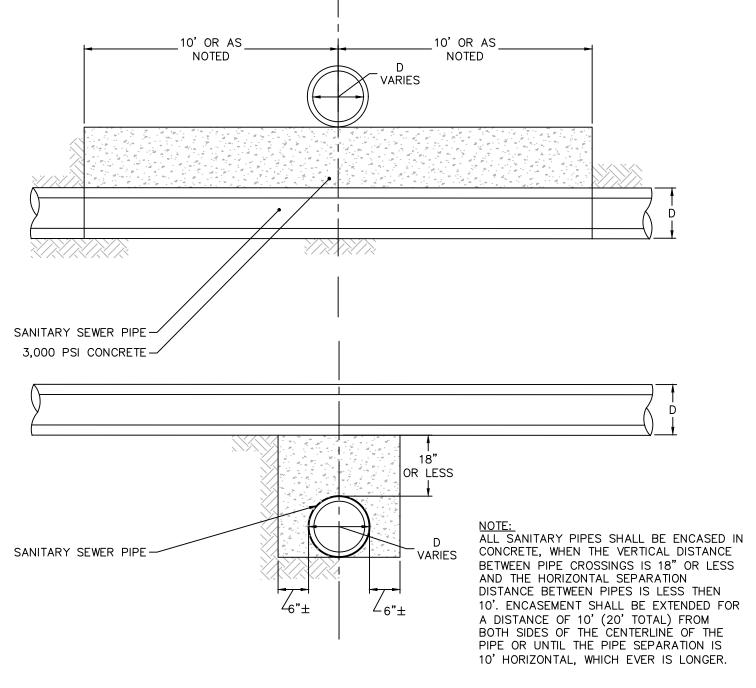
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UTILITY DETAILS I

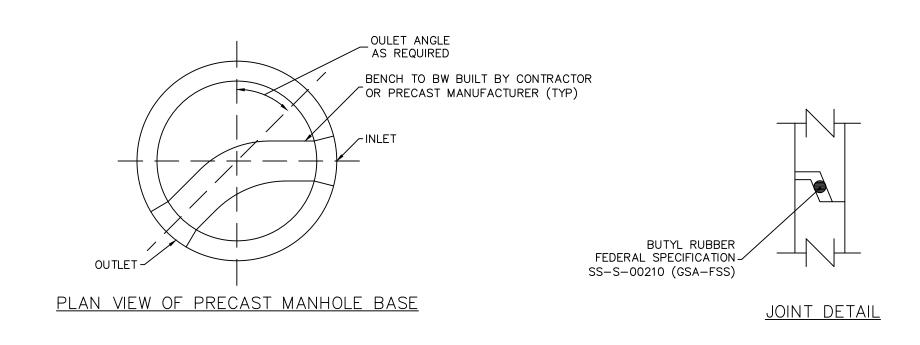
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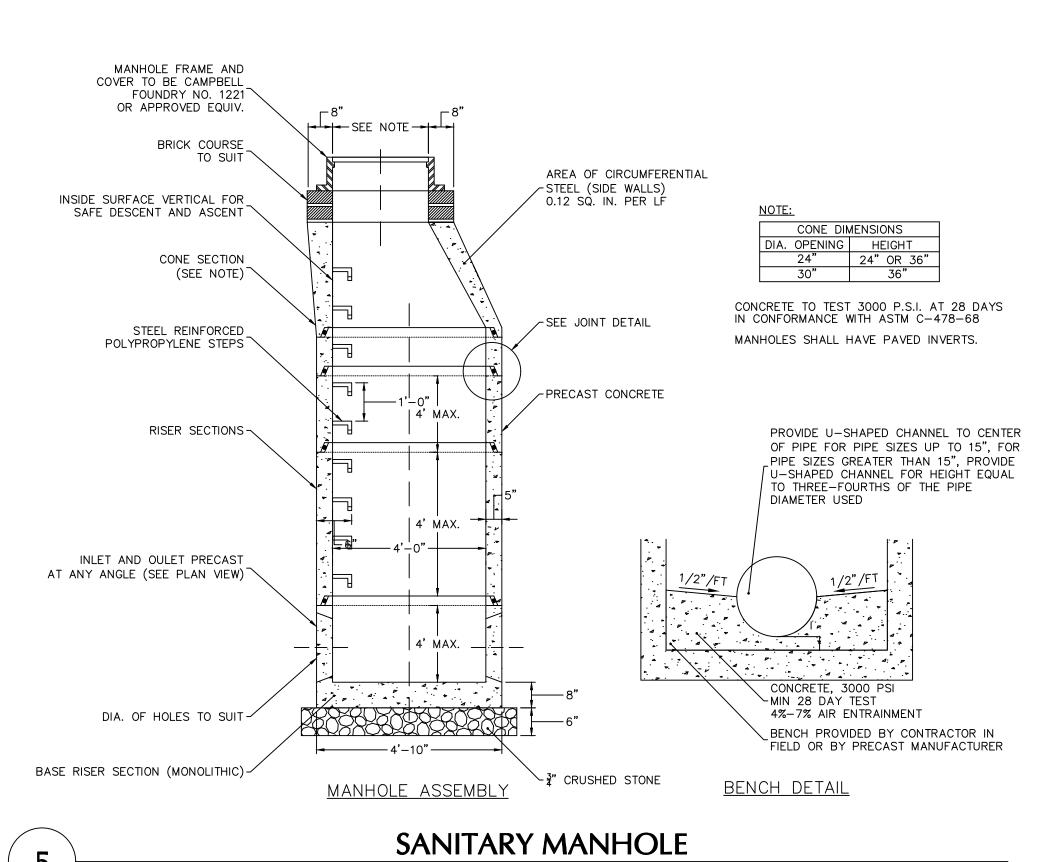
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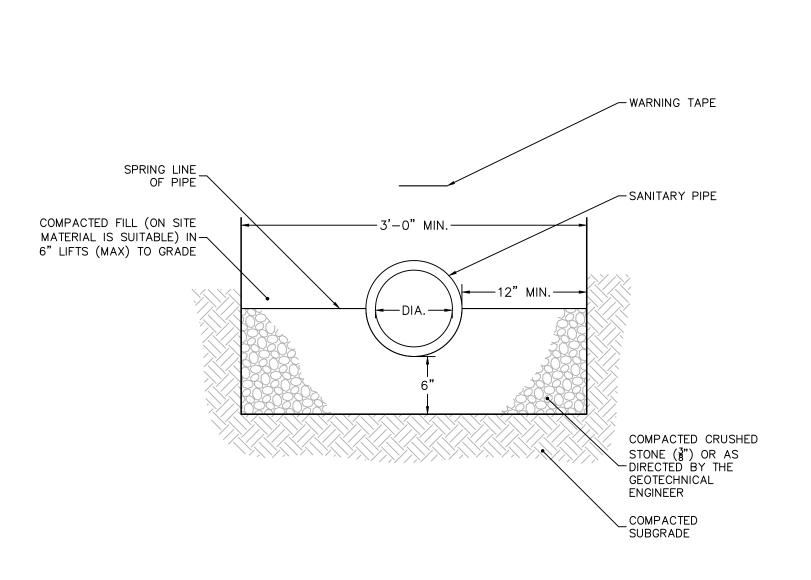
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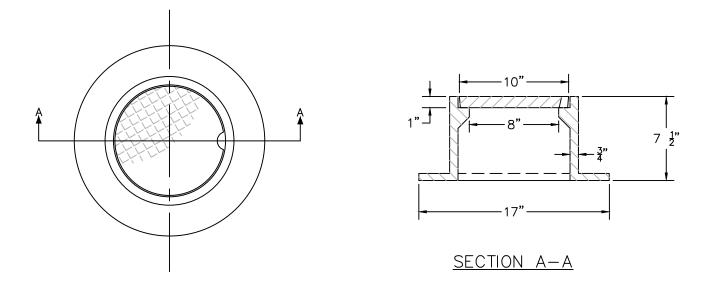
## CONCRETE ENCASEMENT FOR SANITARY SEWER





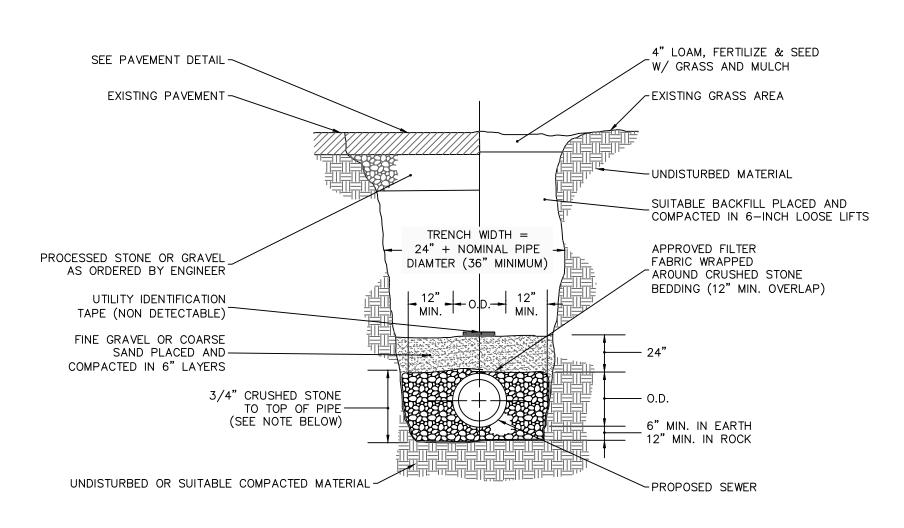


### SANITARY PIPE BEDDING N.T.S.

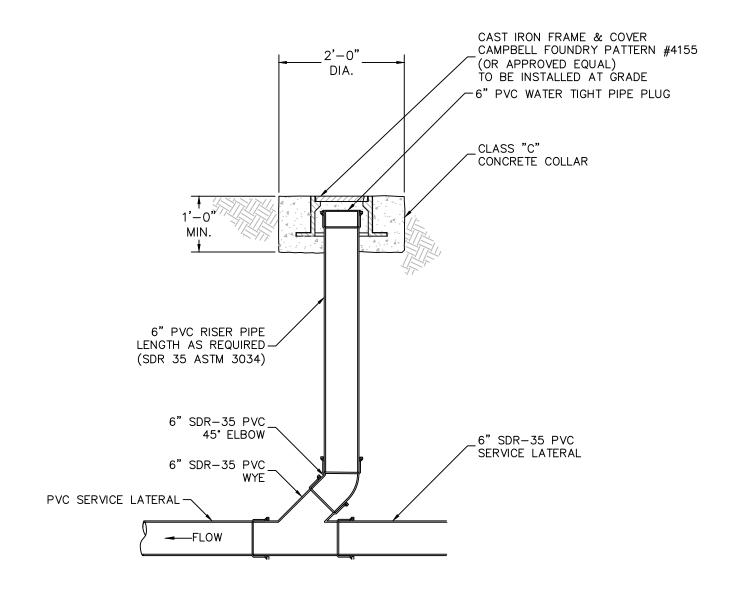


NOTE: CLEAN OUT FRAMES & COVERS SHALL BE PATTERN #4155 AS MANUFACTURED BY THE "CAMPBELL FOUNDRY COMPANY" OF NORTH HAVEN, CONNECTICUT, OR APPROVED EQUAL.

## SANITARY CLEANOUT FRAME AND COVER



SEWER TRENCH SECTION - GRAVITY LINE



**SANITARY CLEANOUT** 

Date Description Revisions

Environmental Services, Inc.

555 Long Wharf Drive New Haven, CT 06511

T: 203.562.5771 F: 203.789.6142 www.langan.com

RECONNECTING THE RIVERFRONT: PARKER HARDING PLAZA

FAIRFIELD COUNTY CONNECTICU

UTILITY DETAILS II

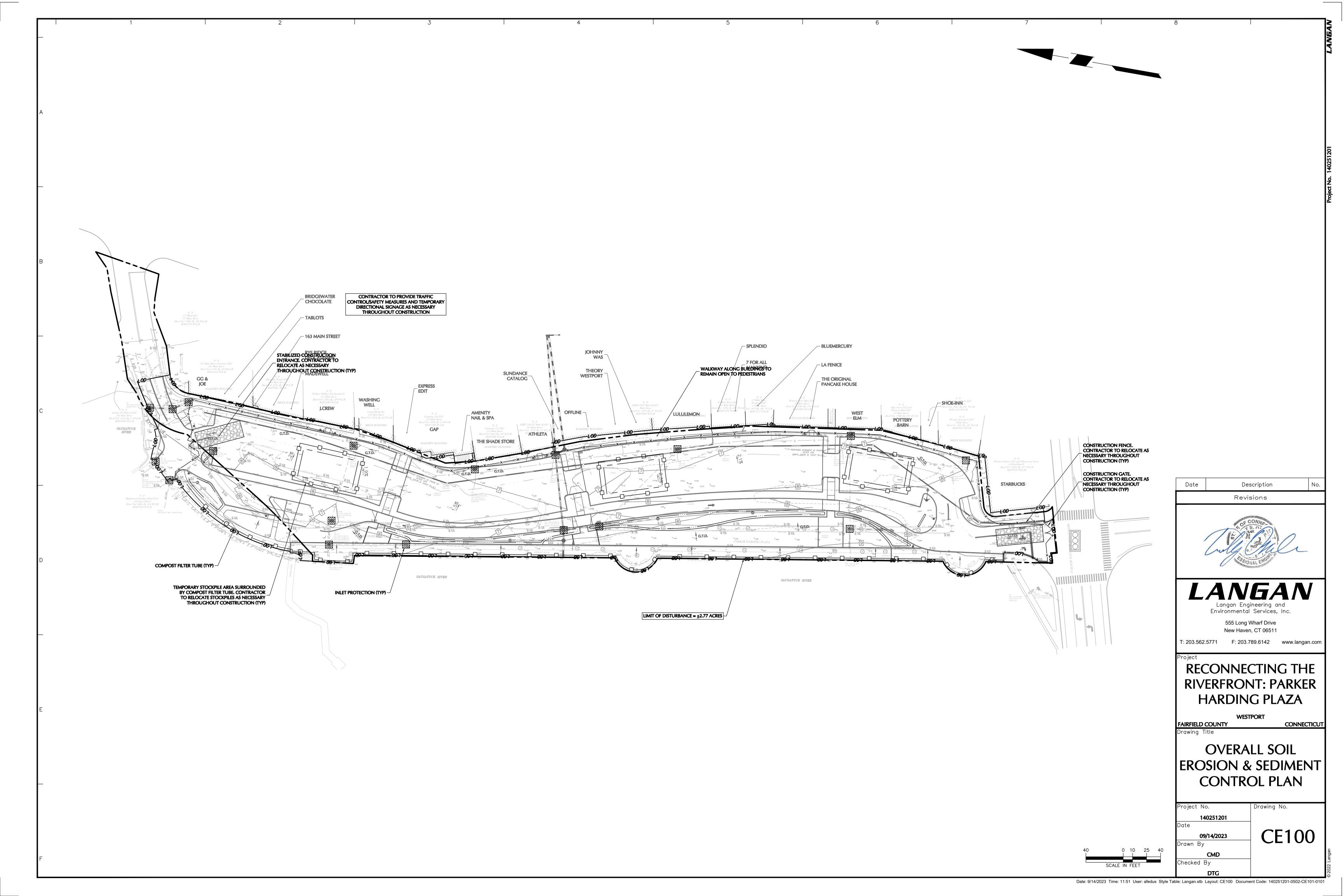
Project No. Drawing No. 140251201 CU502 09/14/2023

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Date: 9/14/2023 Time: 11:39 User: afedus Style Table: Langan.stb Layout: CU501 Document Code: 140251201-0502-CU501-0102

Drawn By

Drawing Title



#### SOIL EROSION-SEDIMENT CONTROL NOTES

#### PROPOSED DEVELOPMENT

- . CONSTRUCTION WILL INCLUDE EARTHWORK, CURBING, PAVING, UTILITY INSTALLATION, AND LANDSCAPING. ALL DEMOLITION DEBRIS AND SOIL REMOVAL RELATED TO CONSTRUCTION SHALL BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH APPLICABLE STATE AND LOCAL LAWS GOVERNING SUCH
- THE DETAILED EROSION AND SEDIMENT CONTROL MEASURES ARE SHOWN ON CE SERIES DRAWINGS. THE PROPOSED MEASURES HAVE BEEN DESIGNED TO PREVENT THE MIGRATION OF SOIL SEDIMENT FROM THE SITE.
- OIL EROSION AND SEDIMENT CONTROL NOTES
- THE SOIL AND SEDIMENT CONTROL PRACTICES MUST BE INSTALLED IN ACCORDANCE WITH THE LOCAL GOVERNING AUTHORITY AND THE CONNECTICUT COUNCIL ON SOIL AND WATER CONSERVATION AND THE 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL.
- EROSION AND SEDIMENT CONTROL DEVICES MUST BE INSTALLED PRIOR TO START OF DEMOLITION AND CONSTRUCTION AND DISTURBANCE OF SITE CONTRIBUTORY DRAINAGE AREAS. THE OWNER OR ITS CONTRACTOR SHALL INSPECT, REPAIR AND REMOVE ALL SEDIMENT AND EROSION CONTROL DEVICES, AS INDICATED HEREIN. ALL EARTH CHANGES SHALL BE DESIGNED, CONSTRUCTED, AND COMPLETED IN SUCH A MANNER SO THAT THE EXPOSED AREA OF ANY DISTURBED LAND SHALL BE LIMITED TO THE SHORTEST POSSIBLE
- DISPOSAL OF COLLECTED SEDIMENT SHALL BE MADE TO AREA DESIGNATED BY THE OWNER'S SOIL ENGINEER.
- H. COMPOST FILTER TUBE BERMS/SILT FENCE WILL BE INSTALLED ALONG THE TOE OF ALL CRITICAL CUT AND FILL SLOPES.
- 5. ALL TOPSOIL NOT TO BE USED FOR FINAL GRADING/LANDSCAPED AREAS SHALL BE REMOVED FROM THE SITE IMMEDIATELY, IN ACCORDANCE WITH APPLICABLE STATE AND LOCAL LAW. ALL TOPSOIL TO BE USED IN LANDSCAPED AREAS SHALL BE STORED/STOCKPILED IN ACCORDANCE WITH APPLICABLE STATE AND LOCAL LAW STANDARDS.
- 6. ALL DISTURBED AREAS SHALL BE WETTED AS NECESSARY TO PROVIDE DUST
- PAVEMENT BASE COURSE MUST BE PLACED IN ALL NEW ROADWAY AREAS UPON COMPLETION OF FINE GRADING.
- 8. THE CONTRACTOR IS RESPONSIBLE FOR ALL PAVED ROADWAYS. ON AND OFF-SITE, WHICH MUST BE KEPT FREE OF SITE GENERATED SEDIMENT AT ALL TIMES. DUST SHALL BE CONTROLLED BY SPRINKLING OR OTHER APPROVED
- 9. ALL STORM DRAINAGE OUTLETS MUST BE STABILIZED, AS REQUIRED, BEFORE THE DISCHARGE POINTS BECOME OPERATIONAL.
- 10. SILT FENCES AND BARRIERS MUST BE CLEANED OR REPLACED PERIODICALLY TO REMOVE BUILT-UP SILT.
- 1. SEDIMENT TRAPS AND BASINS MUST BE CLEANED WHEN CAPACITY HAS BEEN REDUCED BY AN AVERAGE OF 2'-0" OVER ITS TOTAL AREA OR TO 70% OF ITS DESIGN VOLUMES, WHICHEVER OCCURS FIRST.
- 12. ALL EROSION AND SEDIMENT CONTROL DEVICES MUST BE INSPECTED ON A DAILY BASIS AND CLEANED IMMEDIATELY AFTER EACH RAINFALL EVENT OF 1
- 13. ANY TEMPORARY OR PERMANENT FACILITY DESIGNED FOR THE CONVEYANCE OF WATER AROUND, THROUGH, OR FROM THE EARTH CHANGE AREA SHALL BE DESIGNED TO LIMIT THE WATER FLOW TO A NON-EROSIVE VELOCITY.
- 14. THE CONTRACTOR SHALL CORRECT ANY OMISSIONS, ERRORS, OR FIELD OPERATIONS IMMEDIATELY AND IN ACCORDANCE WITH THE GUIDELINES FOR SOIL
- 15. ANY CONVEYANCE OF THIS PROJECT PRIOR TO ITS COMPLETION WILL TRANSFER FULL RESPONSIBILITY FOR COMPLIANCE WITH THE CERTIFIED PLAN TO ANY
- 16. SOIL EROSION AND SEDIMENT CONTROLS MUST BE INSPECTED BY THE TOWN ENGINEER OR IWWC AGENT BEFORE WORK MAY COMMENCE.

10' MIN. RADIUS-

ROAD

17. THE PROPERTY OWNER AND/OR HIS/HER AGENTS MUST MAINTAIN (REPAIR/REPLACE), WHEN NECESSARY, THE SILTATION CONTROL UNTIL ALL DEVELOPMENT ACTIVITY IS COMPLETED AND ALL DISTURBED AREAS ARE PERMANENTLY STABILIZED.

ACCESS ROAD

TO WORK AREA

- 18. ANY LITTER AND/OR TRASH LEFT ON SITE MUST BE PICKED UP AND PROPERLY DISPOSED OF AT THE END OF EACH WORK DAY.
- 19. SOIL STABILIZATION SHALL BE COMPLETED WITHIN FIVE (5) DAYS OF CLEARING OR INACTIVITY IN CONSTRUCTION.
- 20. THE DEVELOPER SHALL PRACTICE EFFECTIVE DUST CONTROL PER THE SOIL CONSERVATION SERVICE HANDBOOK DURING CONSTRUCTION AND UNTIL AREAS ARE STABILIZED OR SURFACE TREATED. THE DEVELOPER SHALL BE RESPONSIBLE FOR THE CLEANING OF NEARBY STREETS, AS ORDERED BY THE TOWN, OF ANY DEBRIS FROM THESE CONSTRUCTION ACTIVITIES.
- 21. THE CONTRACTOR SHALL HAVE MULTIPLE WATERING TRUCKS ON SITE TO PROVIDE NECESSARY DUST CONTROL.
- 22. THE CONTRACTOR SHALL REGULARLY INSPECT THE SITE FOR SOIL EROSION AND SEDIMENT CONTROL MEASURES BEFORE AND AFTER RAINFALL EVENTS. INSPECTIONS SHOULD BE PERFORMED WEEKLY AT A MINIMUM.
- 23. SOIL STOCKPILE SHALL BE MANAGED IN ACCORDANCE WITH SECTION 4-9 OF THE 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT
- 24. SEDIMENT DEPOSITED IN THE PROPOSED INFILTRATION BASINS WILL BE REMOVED AFTER CONSTRUCTION. SEDIMENT REMOVED FROM POND SHALL BE DISPOSED OF IN ACCORDANCE WITH THE OPERATION AND MAINTENANCE PLAN ASSOCIATED WITH THIS PROJECT
- 25. THE CONTRACTOR/DEVELOPER SHALL NOTIFY THE TOWN ENGINEER AND/OR IWWC AGENT AT LEAST TWO WORKING DAYS BEFORE THE FOLLOWING:
- 25.1. START OF CONSTRUCTION
- 25.2. COMPLETION OF CLEARING LIMIT DEMARCATION 25.3. INSTALLATION OF E&S MEASURES
- 25.4. COMPLETION OF SITE CLEARING 25.5. COMPLETION OF ROUGH GRADING
- 25.6. COMPLETION OF FINAL GRADING
- 25.7. CLOSE OF CONSTRUCTION SEASON
- 25.8. COMPLETION OF FINAL LANDSCAPING 25.9. PRIOR TO THE REMOVAL OF CONSTRUCTION E&S CONTROL SYSTEMS.

#### TEMPORARY STABILIZATION

SEDIMENT DISPOSAL AREAS AND TOPSOIL STOCKPILES NOT SCHEDULED FOR CONSTRUCTION ACTIVITIES WITHIN THIRTY (30) DAYS OF DISTURBANCE SHALL BE

- STABILIZED AS FOLLOWS: A. SOIL AMENDMENTS AS NECESSARY.
  - B. ANNUAL RYE GRASS SEEDING APPLIED AT A RATE OF NOT LESS THAN 1 LB. PER 1,000 SF.
- C. MULCH ALL NEWLY SEEDED AREAS WITHIN 80 LBS. OF STRAW OR SMALL GRAIN STRAW PER 1,000 SF.
- D. BETWEEN OCTOBER 15 AND MARCH 15, WHEN DISTURBED AREAS ARE SCHEDULED FOR IMMEDIATE LANDSCAPING THEY MAY BE MULCHED AND SEEDED PER ITEM C ABOVE.

#### PERMANENT STABILIZATION

REFER TO LANDSCAPE PLANS FOR PERMANENT STABILIZATION METHODS + PROPOSED

- A. PERMANENT VEGETATION IS TO BE SEEDED OR SODDED ON ALL DISTURBED LAND AREAS WITHIN SEVEN (7) DAYS AFTER FINAL GRADING. MULCH AS NECESSARY FOR SEED PROTÈCTION AND ESTABLISHMENT. AMEND SOIL AS NEEDED PRIOR TO PERMANENT SEEDING. WHEN IT IS NOT POSSIBLE TO PERMANENTLY STABILIZE A DISTURBED AREA AFTER COMPLETION OF AN EARTH CHANGE OR WHEN SIGNIFICANT EARTH CHANGE ACTIVITY CEASES, TEMPORARY SOIL FROSION CONTROL MEASURES SHALL BE IMPLEMENTED ALL TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES SHALL BE IMPLEMENTED. ALL DISTURBED AREAS, STOCKPILES OF FILL OR EXCAVATED MATERIAL SHALL BE STABILIZED IN SUCH A MANNER AS NOT TO CAUSE UNREASONABLE HAZARD TO PERSONS OR PROPERTY.
- B. MATERIALS SPECIFICATION: LAWN + MEADOW AREAS
- (i) SOIL ANY SOIL HAVING A pH OF 4 OR LESS CONTAINING IRON SÚLFIDES SHALL BE COVERED WITH A MINIMUM OF TWELVE INCHES OF SOIL

WELL COMPACTED SUB-GRADE-

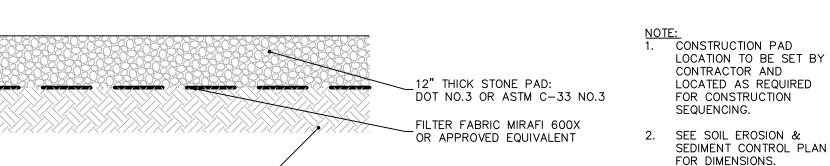
- HAVING A pH OF FIVE OR MORE PRIOR TO SEED BED PREPARATION.
- C. MULCHING SHALL BE DONE AT THE RATE OF SEVENTY TO NINETY POUNDS (70-90 LBS) PER 1,000 SQUARE FEET WITH UNROTTED STRAW. D. LIQUID MULCH BINDERS MUST BE USED TO ANCHOR STRAW OR STRAY MULCHES.
- (i) APPLICATIONS SHOULD BE HEAVIER AT EDGES WHERE WIND CATCHES THE MULCH IN VALLEYS AND AT CREATED BANKS, REMAINDER OF AREA SHOULD BE UNIFORM IN APPEARANCE.
- (ii) USE ONE OF THE FOLLOWING: SYNTHETIC OR ORGANIC BINDERS, BINDERS SUCH AS CURASOL DCA-70, PETRO SET, TERRA TACH, HYDRO MULCH AND AEROSPRAY MAY BE USED AT RATES RECOMMENDED BY THE MANUFACTURER OF ANCHOR MULCH MATERIALS. BINDERS CONTAINING PETROLEUM PRODUCTS SHALL NOT
- NOTE: ALL NAMES GIVEN ABOVE ARE REGISTERED TRADE NAMES. THIS DOES NOT CONSTITUTE A RECOMMENDATION OF THESE TO THE

EXCLUSION OF OTHER PRODUCTS.

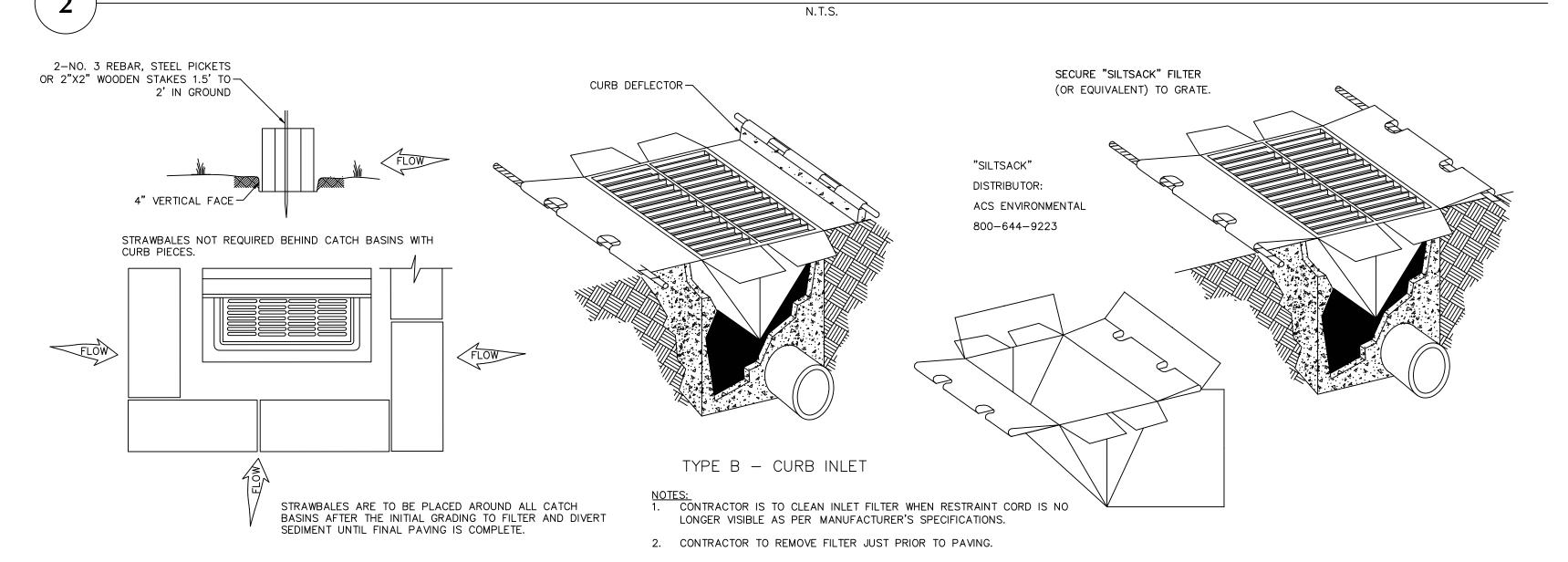
- D. FILL MATERIAL SHALL BE FREE FROM DEBRIS, PERISHABLE OR COMBUSTIBLE MATERIAL AND FROZEN OR WET EARTH OR STONES LARGER THAN THREE INCHES IN MAXIMUM DIMENSION.
- E. CONSTRUCTION AREAS SHALL BE PERIODICALLY SPRAYED WITH WATER UNTIL THE SURFACE IS WET TO CONTROL THE GENERATION OF DUST. F. ALL REVISIONS AFTER APPROVAL HAS BEEN GRANTED SHALL BE
- FORWARDED TO THE APPROPRIATE DISTRICT FOR REVIEW. G. THE LOCAL GOVERNING AUTHORITY SHALL RECEIVE WRITTEN NOTIFICATION
- SEVENTY TWO HOURS BEFORE THE START OF ANY CONSTRUCTION. H. SEEDBED PREPARATION:
- (i) TOPSOIL SHOULD BE A MINIMUM OF SIX INCHES DEEP (LIGHTLY COMPACTED) BEFORE SEEDING.
- (ii) TOPSOIL SHALL BE TESTED PER LANDSCAPE PLAN PRIOR TO SEEDING. (iii) WORK SOIL AMENDMENTS INTO SOIL AS NECESSARY AS NEARLY AS PRACTICAL TO A DEPTH OF FOUR INCHES WITH A DISC, SPRINGTOOTH HARROW OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISCING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE ALL CLAY OR SILTY SOIL AND COARSE SANDS SHOULD BE ROLLED TO
- (iv) REMOVE FROM THE SURFACE ALL STONES ONE INCH OR LARGER IN ANY DIMENSION. REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, PIECES OF CONCRETE, CLODS, LUMPS, OR OTHER
- (v) INSPECT SEED BED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT SOIL COMPACT, THE AREA MUST BE RETILLED AND FIRMED AS ABOVE.
- CONTINGENCY SOIL EROSION AND SEDIMENT CONTROL NARRATIVE
- 26. THE GENERAL CONTRACTOR WILL DESIGNATE PERSONNEL FOR 24 HOUR EMERGENCY RESPONSE IN THE EVENT OF SEVERE WEATHER AND INCREASED POTENTIAL FOR SEVERE EROSION.

FIRM THE SEED BED WHEREVER FEASIBLE.

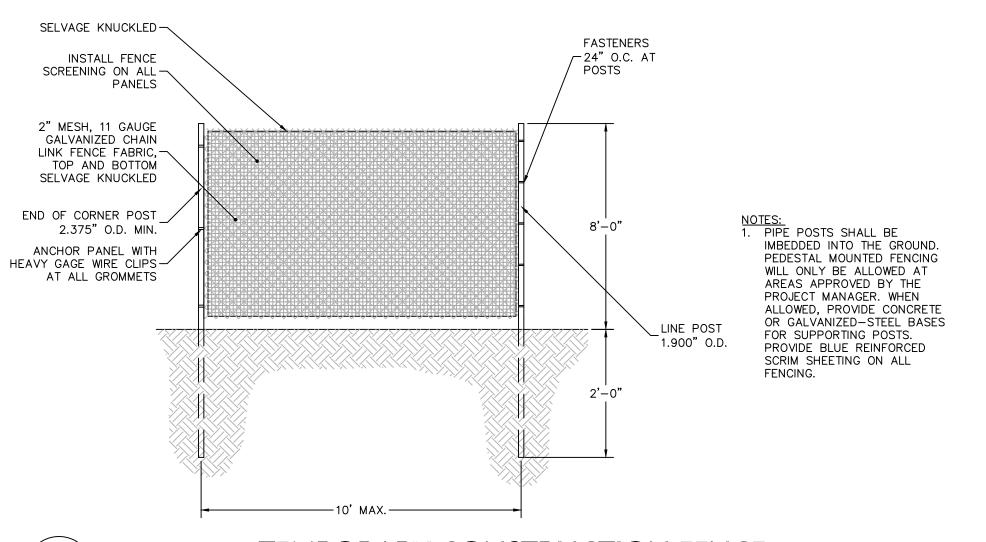
- 27. THE GENERAL CONTRACTOR IS REQUIRED TO MAINTAIN ON SITE OR HAVE THE ABILITY TO RETRIEVE WITHIN 12 HOURS THE FOLLOWING MATERIALS IN THE EVENT THAT THERE ARE DEFICIENCIES IN THE SESC MEASURES:
- A. 25% OF THE INSTALLED LENGTH OF SILT FENCE
- B. EQUIVALENT TONNAGE OF STONE FOR STABILIZATION OF 2 STABILIZATION ENTRANCES. STONE COULD BE USED FOR SLOPE REPAIRS, ENERGY DISSIPATER ENHANCEMENTS, ETC.
- C. HEAVY EQUIPMENT CAPABLE OF TRENCHING/EXCAVATING LARGE AREAS TO DIVERT AND CONTROL RUNOFF IN A CONTROLLED MANNER.
- D. HAVE DESIGNATED A HYDRO-SEED CONTRACTOR CAPABLE OF RESPONDING TO THE SITE WITHIN 12 HOURS
- 28. ANY STUMP GRINDINGS OR WOOD CHIPS GENERATED ON-SITE SHOULD BE RETAINED FOR USE TO BACK UP SILT FENCES.



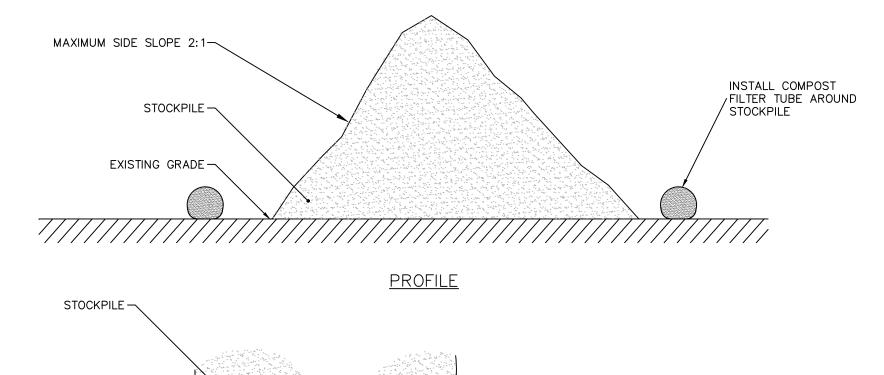
### CONSTRUCTION ENTRANCE / ANTI-TRACK PAD

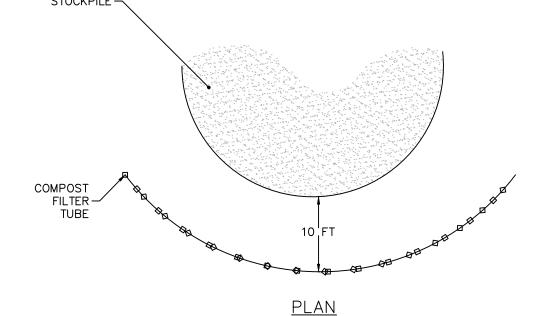


**INLET PROTECTION** 



TEMPORARY CONSTRUCTION FENCE



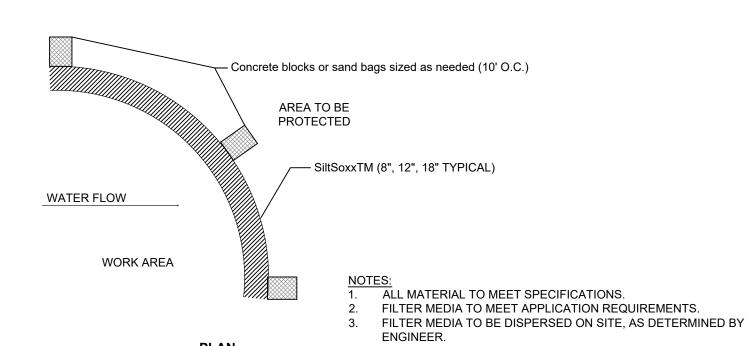


1. SEE SOIL EROSION & SEDIMENT CONTROL PLAN FOR LOCATION. SIDE SLOPES SHALL BE SEEDED OR STABILIZED WITH EROSION CONTROL MATS IF NOT DISTURBED FOR THIRTY DAYS.

<u>PLAN</u>

### TEMPORARY SOIL STOCKPILE

 SiltSoxxTM (8", 12", or 18" TYPICAL) Pavement or Impervious Surface — Concrete blocks or sand bags sized as needed (10' O.C.) AREA TO BE PROTECTED **WORK AREA** SECTION NTS



**SiltSoxxTM for Sediment Control on Pavement** 

COMPOST FILTER TUBE

Date Description Revisions

Environmental Services, Inc.

555 Long Wharf Drive New Haven, CT 06511 F: 203.789.6142 www.langan.com T: 203.562.5771

**RECONNECTING THE RIVERFRONT: PARKER** HARDING PLAZA

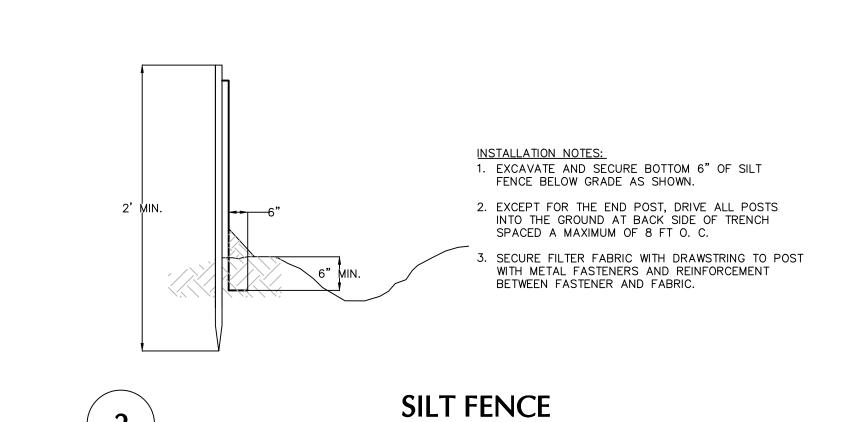
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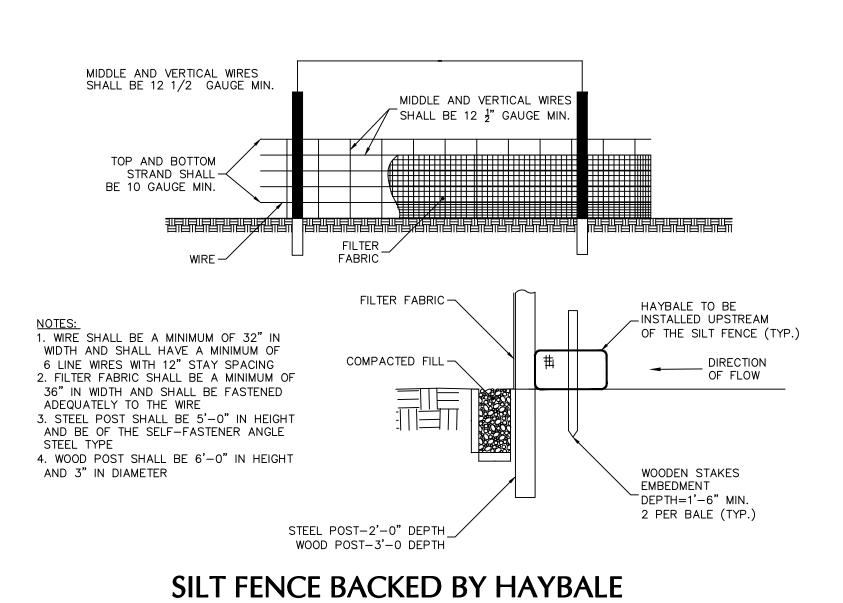
SOIL EROSION &

**SEDIMENT CONTROL DETAILS I** 

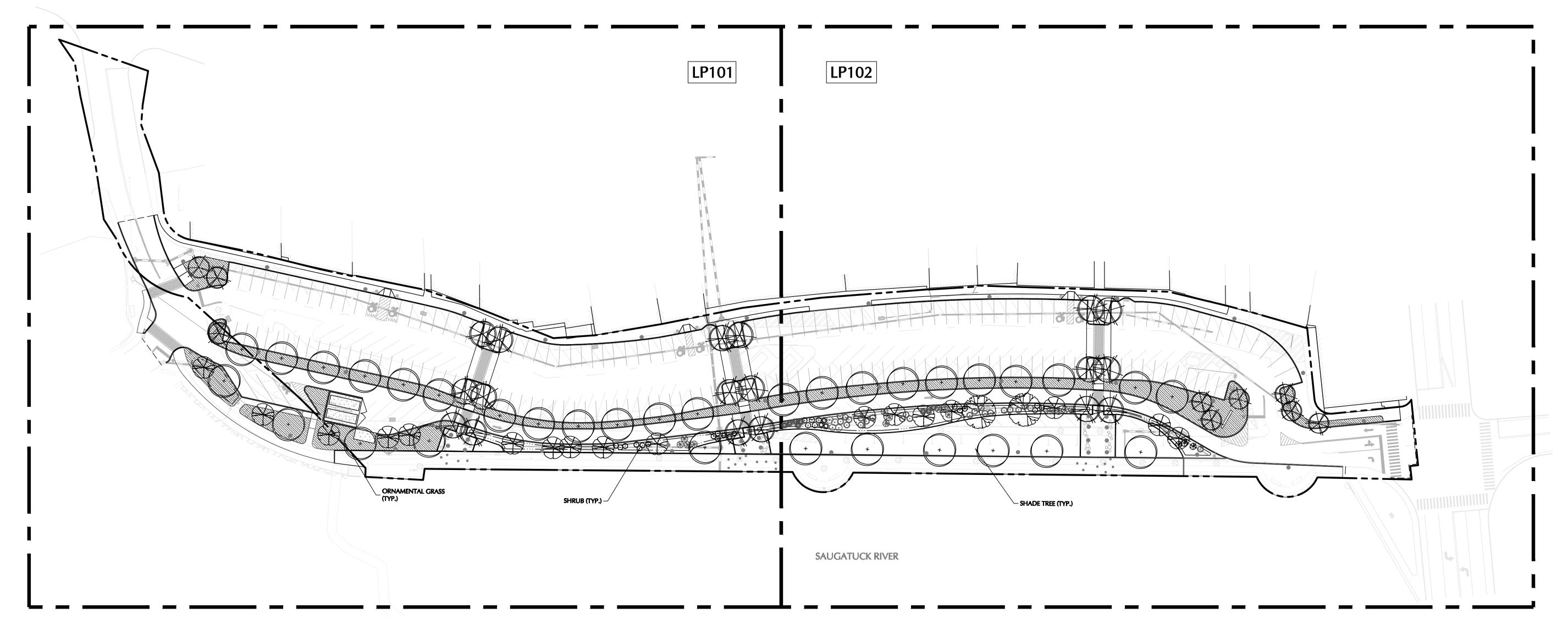
⊃roject No. Drawing No. 140251201 **CE501** 09/14/2023 rawn By CMD hecked By

**FAIRFIELD COUNTY** 









PLANT SCHEDULE													
KEY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	REMARKS								
SHADE	SHADE TREE(S)												
AR	ACER RUBRUM 'ARMSTRONG'	RED MAPLE	2 1/2-3" CAL.	B+B	-								
PLO	PLATANUS OCCIDENTALIS	AMERICAN SYCAMORE	2 1/2-3" CAL.	B+B	-								
UA	ULMUS AMERICANA 'DELAWARE'	DELAWARE AMERICAN ELM	2 1/2-3" CAL.	B+B	_								
ORNAM	ENTAL TREE(S)												
BND	BETULA NIGRA 'DURA HEAT'	DURA HEAT RIVER BIRCH	10-12'	B+B	_								
EVERG	REEN SHRUB(S)												
IGS	ILEX GLABRA 'SHAMROCK'	SHAMROCK INKBERRY HOLLY	24-30"	#5 CAN	_								
IVJ	ILEX VERTICILLATA ?JIM DANDY?	JIM DANDY WINTERBERRY	24-30"	CONTAINER	_								
IVLH	ITEA VIRGINICA ?LITTLE HENRY?	LITTLE HENRY SWEETSPIRE	24-30"	CONTAINER	_								
DECIDU	OUS SHRUB(S)												
AME	ARONIA MELANOCARPA	BLACK CHOKEBERRY	2-3' HT	CONTAINER	-								
IVRS	ILEX VERTICILLATA 'RED SPRITE'	RED SPRITE WINTERBERRY HOLLY	3 GAL.	CONTAINER	_								
ORNAM	ENTAL GRASS(ES)												
AGE	ANDROPOGON GERADII	BIG BLUESTEM	1 GAL.	CONTAINER	_								
DCE	DESCHAMPSIA CESPITOSA	TUFTED HAIRGRASS	1 GAL.	CONTAINER	_								
DCS	DESCHAMPSIA CESPITOSA 'SCHOTTLAND'	SCOTTISH TUFTED HAIR GRASS	1 GAL.	CONTIANER	spaced @ 18" o.c.								
JE	JUNCUS EFFUSUS	COMMON RUSH	1 GAL.	CONTAINER	-								
PVS	PANICUM VIRGATUM 'SHENANDOAH'	SHENANDOAH SWITCH GRASS	2 GAL.	CONTAINER	_								
ssco	SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM	2 GAL.	CONTAINER	_								

NOTE: IF ANY DISCREPANCIES OCCUR BETWEEN AMOUNTS SHOWN IN THE PLAN AND THE PLANT LIST, THE PLAN SHALL DICTATE.

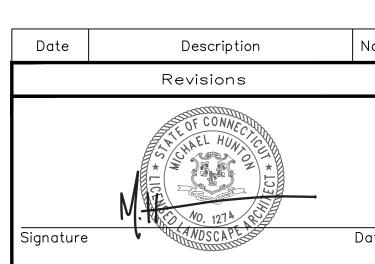
### **IRRIGATION NOTES:**

- ALL PLANTING BEDS TO RECEIVE IRRIGATION.
- THE IRRIGATION CONTRACTOR SHALL PROVIDE SHOP DRAWINGS OF THE IRRIGATION INSTALLATION PLAN AND CUT-SHEETS FOR ALL COMPONENTS FOR REVIEW AND APPROVAL BY THE PROJECT PLAN AND CUT—SHEETS FOR ALL COMPONENTS FOR REVIEW AND APPROVAL BY THE PROJECT LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION. THE IRRIGATION INSTALLATION PLAN SHALL BE COMPLETE WITH ZONE DESIGNATIONS AND WATER USAGE IN GALLONS PER MINUTE PER ZONE, RUN TIME SCHEDULE, LEGEND OF COMPONENTS AND PLAN GRAPHICS WITH QUANTITIES, MINIMUM SYSTEM REQUIREMENTS INCLUDING STATIC PRESSURE AT THE WATER CONNECTION POINT, ESTIMATED WATER BUDGET, CONSTRUCTION DETAILS AND IRRIGATION NOTES. THE PLAN SHALL ALSO INCLUDE LOCATIONS OF ALL PROPOSED SLEEVES AND THEIR SIZES, LOCATIONS OF ALL LATERAL LINE SIZE STEP—DOWNS WITH SIZE INDICATIONS, LOCATION OF ALL SOIL MOISTURE SENSORS, CONTROLLER, VALVES AND ALL OTHER COMPONENTS NECESSARY FOR THE SYSTEMS OPERATION
- THE SYSTEMS OPERATION. 3. LANDSCAPE AREAS SHALL BE IRRIGATED WITH DRIP IRRIGATION, POP-UP SPRAY, AND ROTARY IRRIGATION HEADS IN SUFFICIENT DENSITY TO COVER THE ENTIRE AREA.
- CONTRACTOR TO AVOID DISTURBANCE OF EXISTING PLANT MATERIAL WHEN LOCATING VALVES AND PIPE LINES. ANY PLANT MATERIAL DAMAGED AS A RESULT OF IRRIGATION INSTALLATION SHALL BE REPLACED AT NO ADDITIONAL COST TO THE OWNER.

  5. ALL EXCAVATION MATERIAL SHALL BE PLACED BACK IN TRENCHES.
- 6. ALL DISTURBED LANDSCAPE AND PAVED AREAS SHALL BE RESTORED TO THE CONDITION FOUND PRIOR TO START OF INSTALLATION.
- 7. DEPTH OF TRENCHES SHALL BE SUFFICIENT OR PROVIDE A MINIMUM COVER ABOVE THE TOP OF PIPE AS FOLLOWS:
  - 12" OVER NON-PRESSURE LATERAL LINES - 18" OVER NON-PRESSURE LATERAL LINES UNDER PAVING - 18" OVER CONTROL WIRES
  - 18" OVER MAIN LINE
  - 24" OVER MAIN LINE UNDER PAVING
- 8. THE IRRIGATION CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE LOCATION OF THE PLUMBING
- TIE-INS, SLEEVES UNDER PAVEMENTS (AS NECESSARY), AND CONTROL DEVICES WITH THE GENERAL CONTRACTOR, OWNER, AND OWNER'S REPRESENTATIVE.

  9. CONTRACTOR TO COORDINATE INSTALLATION OF IRRIGATION SYSTEM WITH EXISTING AND PROPOSED
- UTILITIES, SITE DRAINAGE SYSTEMS, AND PAVING.
- 10. CONTRACTOR SHALL PROMPTLY NOTIFY THE OWNER'S REPRESENTATIVE SHOULD ANY UTILITIES, NOT SHOWN ON THE PLANS, BE FOUND DURING INSTALLATION WORK.
- 11. WATERPROOF ALL WIRE CONNECTORS USING 3M 'DBY' WATERPROOF CONNECTORS OR EQUIVALENT.

  12. DRAIN VALVES ARE TO BE PROVIDED AT SUFFICIENT INTERVALS TO PROVIDE COMPLETE DRAINAGE
- 13. COORDINATE THE LOCATION OF CONTROLS, IRRIGATION CONTROLLER, AND SOIL MOISTURE SENSORS
- WITH THE PROJECT MEP AND OWNER PRIOR TO INSTALLATION. 14. IRRIGATION CONTRACTOR SHALL MAKE FIELD ADJUSTMENTS TO IRRIGATION DESIGN WHERE REQUIRED
- TO PROVIDE 100% COVERAGE OF ALL LANDSCAPE AREAS, AS DESIGNATED ON THIS PLAN. 15. INSTALLATION MUST COMPLY WITH ALL LOCAL CODES AND CONDITIONS.
- 16. ALL IRRIGATION WORK SHALL BE GUARANTEED FOR 1 YEAR AFTER COMPLETION OF ALL WORK. 17. CONTRACTOR TO PROVIDE THREE (3) COPIES OF AS-BUILTS, SERVICE MANUALS AND INSTRUCTIONS TO THE OWNER OR OWNERS REPRÈSENTATIVE.
- 18. ALL SPRINKLER HEADS SHALL BE SET BACK 4" MINIMUM FROM BACK OF ALL CURBS. 19. CONTRACTOR MAY SUBMIT ALTERNATE EQUIVALENT MATERIALS FOR REVIEW AND APPROVAL BY
- OWNER'S REPRESENTATIVE OR PROJECT LANDSCAPE ARCHITECT.



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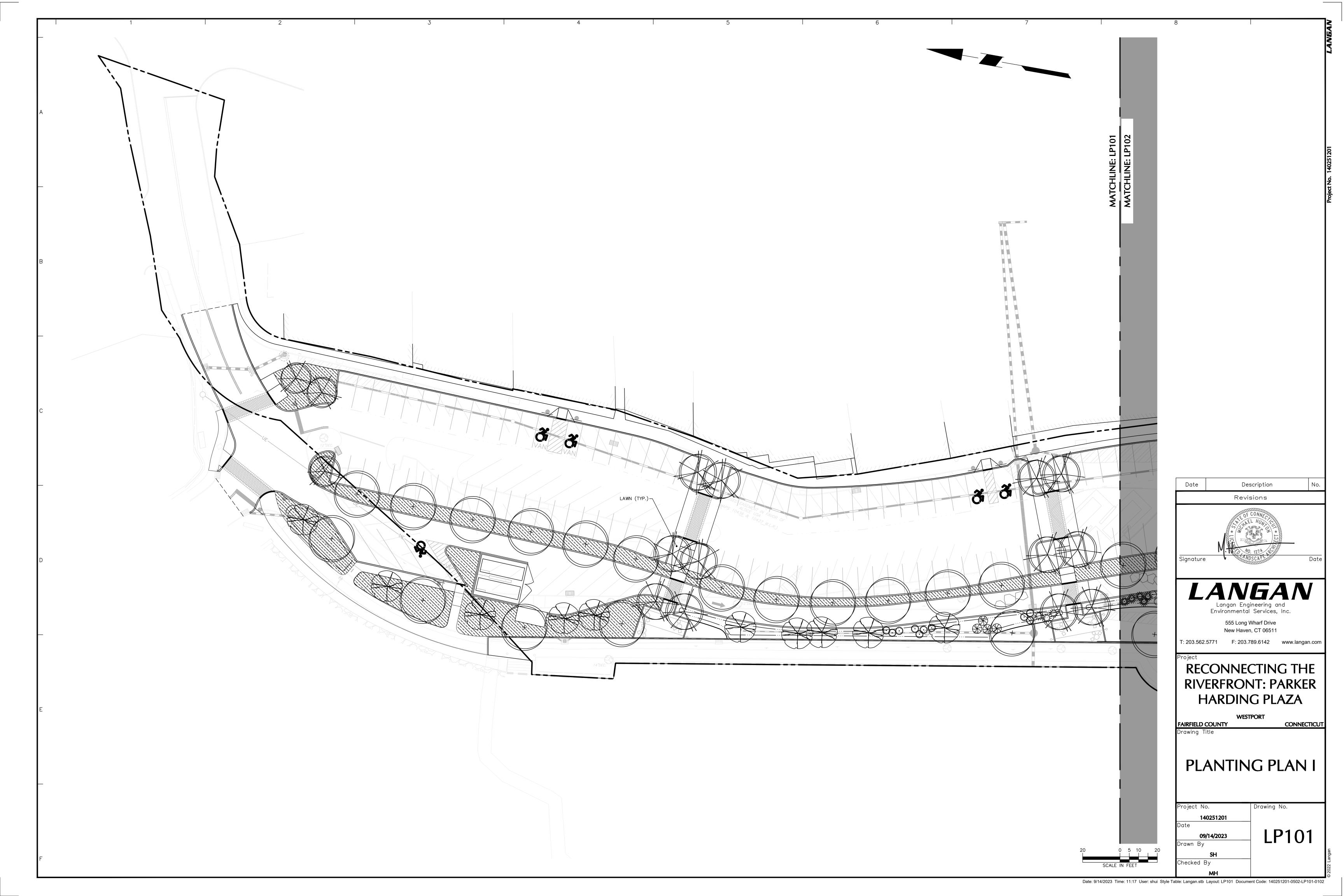
RECONNECTING THE RIVERFRONT: PARKER HARDING PLAZA

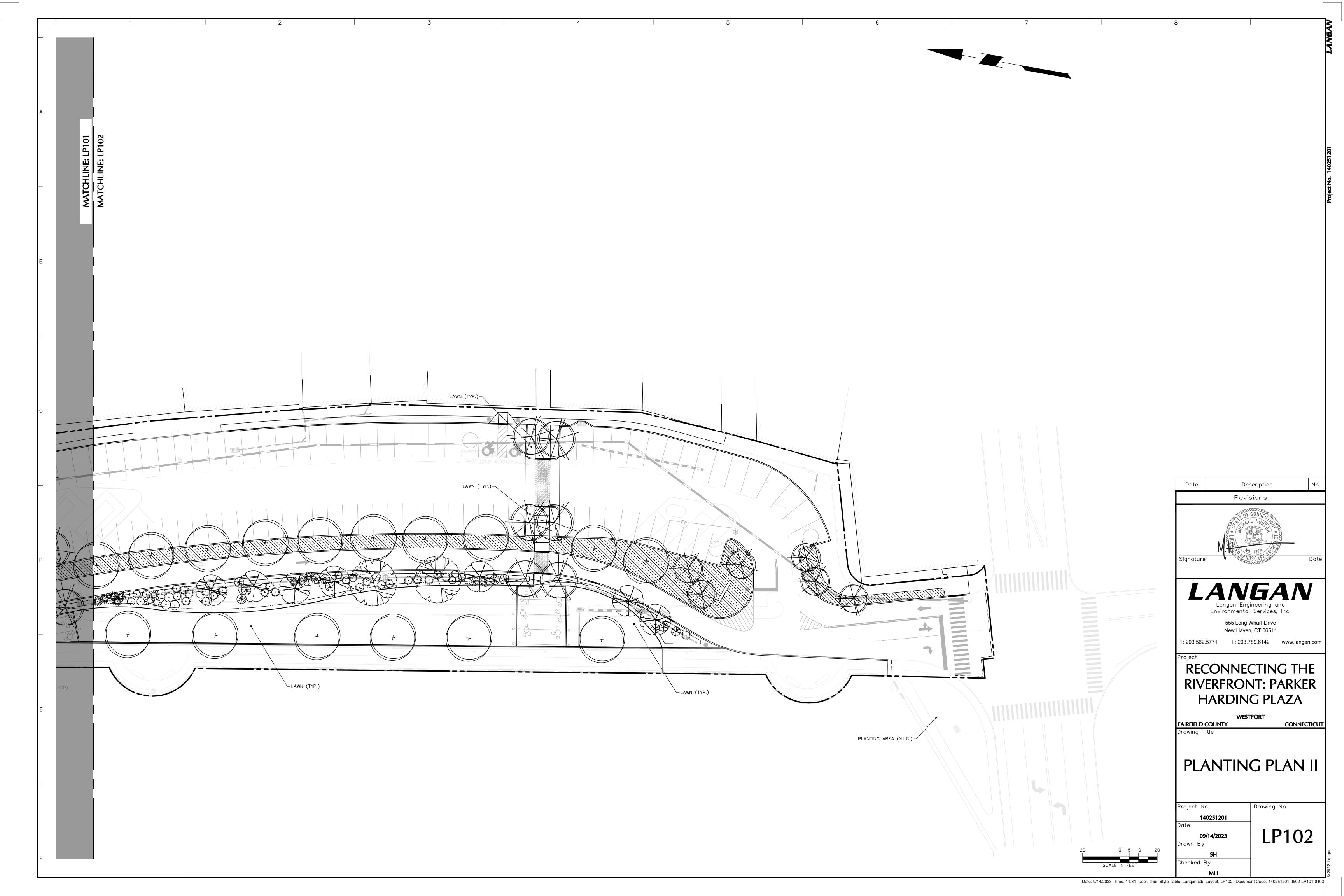
FAIRFIELD COUNTY

Drawing Title

**OVERALL** PLANTING PLAN

Project No. Drawing No. 140251201 09/14/2023 rawn By hecked By





#### GENERAL LANDSCAPE PLANTING NOTES

- 1. NAMES OF PLANTS AS DESCRIBED ON THIS PLAN CONFORM TO THOSE GIVEN IN "STANDARDIZED PLANT NAMES", 1942 EDITION, PREPARED BY THE AMERICAN JOINT COMMITTEE ON HORTICULTURAL NOMENCLATURE. NAMES OF PLANT VARIETIES NOT INCLUDED THEREIN CONFORM TO NAMES GENERALLY ACCEPTED IN
- 2. ALL EXPOSED GROUND SURFACES THAT ARE NOT PAVED WITHIN THE CONTRACT LIMIT LINE. AND THAT ARE NOT COVERED BY LANDSCAPE PLANTING OR SEEDING AS SPECIFIED, SHALL BE COVERED BY A NATURAL MULCH THAT WILL PREVENT SOIL EROSION AND THE EMANATION OF DUST.
- NO PLANT SHALL BE PUT INTO THE GROUND BEFORE ROUGH GRADING HAS BEEN COMPLETED AND APPROVED BY THE PROJECT LANDSCAPE ARCHITECT OR PROJECT ENGINEER.
- 4. STANDARDS FOR TYPE, SPREAD, HEIGHT, ROOT BALL AND QUALITY OF NEW PLANT MATERIAL SHALL BE IN ACCORDANCE WITH GUIDELINES AS SET FORTH IN THE "AMERICAN STANDARD FOR NURSERY STOCK OF GROWTH AND BE HEALTHY, VIGOROUS, AND FREE FROM DISEASES AND INSECT INFESTATION.
- 5. NEW PLANT MATERIAL SHALL BE NURSERY GROWN UNLESS SPECIFIED OTHERWISE. ALL PLANTS SHALL BE SET PLUMB AND SHALL BEAR THE SAME RELATIONSHIP TO FINISHED GRADE AS THE PLANT'S ORIGINAL GRADE BEFORE DIGGING. PLANT MATERIAL OF THE SAME SPECIES AND SPECIFIED AS THE SAME SIZE SHOULD BE SIMILAR IN SHAPE, COLOR AND HABIT. THE LANDSCAPE ARCHITECT HAS THE RIGHT TO REJECT PLANT MATERIAL THAT DOES NOT CONFORM TO THE TYPICAL OR SPECIFIED HABIT OF THAT SPECIES.
- 6. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UNDERGROUND UTILITY AND SEWER LINES PRIOR TO THE START OF EXCAVATION ACTIVITIES. NOTIFY THE PROJECT ENGINEER AND OWNER IMMEDIATEL' OF ANY CONFLICTS WITH PROPOSED PLANTING LOCATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR
- 7. THE CONTRACTOR SHALL NOT MAKE SUBSTITUTIONS. IF THE SPECIFIED LANDSCAPE MATERIAL IS NOT OBTAINABLE, THE CONTRACTOR SHALL SUBMIT PROOF OF NON-AVAILABILITY TO THE LANDSCAPE ARCHITECT AND OWNER, TOGETHER WITH A WRITTEN PROPOSAL FOR USE OF AN EQUIVALENT MATERIAL.
- 8. LANDSCAPE CONTRACTOR TO STAKE OUT PLANTING LOCATIONS, FOR REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT AND OR OWNER BEFORE PLANTING WORK BEGINS. THE LANDSCAPE ARCHITECT AND/OR OWNER SHALL DIRECT THE CONTRACTOR IN THE FINAL PLACEMENT OF ALL PLANT MATERIAL AND LOCATION OF PLANTING BEDS TO ENSURE COMPLIANCE WITH DESIGN INTENT UNLESS OTHERWISE INSTRUCTED.
- 9. THE LANDSCAPE ARCHITECT MAY REVIEW PLANT MATERIALS AT THE SITE, BEFORE PLANTING, FOR COMPLIANCE WITH REQUIREMENTS FOR GENUS, SPECIES, VARIETY, SIZE, AND QUALITY. THE LANDSCAPE ARCHITECT RETAINS THE RIGHT TO FURTHER REVIEW PLANT MATERIALS FOR SIZE AND CONDITION OF BALLS AND ROOT SYSTEM, INSECTS, INJURIES, AND LATENT DEFECTS, AND TO REJECT UNSATISFACTORY OR DEFECTIVE MATERIAL AT ANY TIME DURING PROGRESS OF WORK. THE CONTRACTOR SHALL REMOVE REJECTED PLANT MATERIALS IMMEDIATELY FROM PROJECT SITE AS DIRECTED BY THE LANDSCAPE ARCHITECT
- 10. DELIVERY, STORAGE, AND HANDLING
  A. PACKAGED MATERIALS: PACKAGED MATERIALS SHALL BE DELIVERED IN CONTAINERS SHOWING WEIGHT, ANALYSIS, AND NAME OF MANUFACTURER. MATERIALS SHALL BE PROTECTED FROM DETERIORATION ANALTSIS, AND NAME OF MANUFACTURER. MATERIALS SHALL BE PROTECTED FROM DETERIORATION DURING DELIVERY, AND WHILE STORED AT SITE.

  TREES AND SHRUBS: THE CONTRACTOR SHALL PROVIDE TREES AND SHRUBS DUG FOR THE GROWING SEASON FOR WHICH THEY WILL BE PLANTED. DO NOT PRUE PRIOR TO DELIVERY UNLESS OTHERWISE DIRECTED BY THE LANDSCAPE ARCHITECT. DO NOT BEND OR BIND—TIE TREES OR SHRUBS IN SUCH A MANNER AS TO DAMAGE BARK, BREAK BRANCHES, OR DESTROY NATURAL SHAPE. PROVIDE PROTECTIVE
- COVERING DURING TRANSIT. DO NOT DROP BALLED AND BURLAPPED STOCK DURING DELIVERY OR
- HANDLING.
  C. ALL PLANTS SHALL BE BALLED AND BURLAPPED OR CONTAINER GROWN AS SPECIFIED. NO CONTAINER GROWN STOCK WILL BE ACCEPTED IF IT IS ROOT BOUND. ALL ROOTBALL WRAPPING AND BINDING MATERIAL MADE OF SYNTHETICS OR PLASTICS SHALL BE REMOVED FROM THE TOP OF THE BALL. AT THE TIME OF PLANTING. IF THE PLANT IS SHIPPED WITH A WIRE BASKET AROUND THE ROOT BALL, THE WIRE BASKET SHALL BE CUT AND FOLDED DOWN 8 INCHES INTO THE PLANTING HOLE. WITH CONTAINER GROWN STOCK, THE CONTAINER SHALL BE REMOVED AND THE ROOT BALL SHALL BE CUT THROUGH THE SURFACE IN TWO LOCATIONS. THE CONTRACTOR SHALL HAVE TREES AND SHRUBS DELIVERED TO SITE AFTER PREPARATIONS FOR
- PLANTING HAVE BEEN COMPLETED AND PLANT IMMEDIATELY. IF PLANTING IS DELAYED MORE THAN 6 HOURS AFTER DELIVERY, THE CONTRACTOR SHALL SET TREES AND SHRUBS IN SHADE, PROTECT FROM WEATHER AND MECHANICAL DAMAGE AND KEEP ROOTS MOIST BY COVERING WITH MULCH, BURLAP OR 11. ALL LANDSCAPED AREAS TO BE CLEARED OF ROCKS, STUMPS, TRASH AND OTHER UNSIGHTLY DEBRIS. ALL
- FINE GRADED AREAS SHOULD BE HAND RAKED SMOOTH ELIMINATING ANY CLUMPS AND AND UNEVEN SURFACES PRIOR TO PLANTING OR MULCHING. 12. ALL PLANT MATERIAL SHALL BE INSTALLED AS PER DETAILS, NOTES AND CONTRACT SPECIFICATIONS. THE
- LANDSCAPE ARCHITECT MAY REVIEW INSTALLATION AND MAINTENANCE PROCEDURES 13. NEW PLANT MATERIAL SHALL BE GUARANTEED TO BE ALIVE AND IN VIGOROUS GROWING CONDITION FOR A PERIOD OF ONE YEAR FOLLOWING ACCEPTANCE BY THE OWNER. PLANT MATERIAL FOUND TO BE UNHEALTHY, DYING OR DEAD DURING THIS PERIOD, SHALL BE REMOVED AND REPLACED IN KIND BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.
- 14. THE CONTRACTOR SHALL KEEP AREA CLEAN DURING DELIVERY AND INSTALLATION OF PLANT MATERIALS. REMOVE AND DISPOSE OF OFF-SITE ANY ACCUMULATED DEBRIS OR UNUSED MATERIALS. REPAIR DAMAGE TO ADJACENT AREAS CAUSED BY LANDSCAPE INSTALLATION OPERATIONS.
- 15. ALL PLANTS SHALL BE WATERED THOROUGHLY TWICE DURING THE FIRST 24-HOUR PERIOD AFTER PLANTING. ALL PLANTS SHALL THEN BE WATERED WEEKLY OR AS REQUIRED BY SITE AND WEATHER CONDITIONS TO MAINTAIN VIGOROUS AND HEALTHY PLANT GROWTH.
- 16. THE BACKFILL MIXTURE AND SOIL MIXES TO BE INSTALLED PER THE SPECIFICATIONS. 17. AFTER PLANT IS PLACED IN TREE PIT LOCATION, ALL TWINE HOLDING ROOT BALL TOGETHER SHOULD BE
- COMPLETELY REMOVED AND THE BURLAP SHOULD BE PULLED DOWN SO 1/3 OF THE ROOT BALL IS EXPOSED. SYNTHETIC BURLAP SHOULD BE COMPLETELY REMOVED AFTER INSTALLATION. 18. MULCH SHOULD NOT BE PILED UP AROUND THE TRUNK OF ANY PLANT MATERIAL. NO MULCH OR TOPSOIL
- SHOULD BE TOUCHING THE BASE OF THE TRUNK ABOVE THE ROOT COLLAR. 19. ALL FENCE INSTALLATION SHALL BE COMPLETED PRIOR TO COMMENCEMENT OF ANY LANDSCAPE PLANTING,
- 20. FOR ANY DISCREPANCIES BETWEEN THE PLANT SCHEDULE AND PLANTING PLAN THE GRAPHIC QUANTITY
- 21. PLANT MATERIALS SHALL NOT BE PLANTED UNTIL THE FINISHED GRADING HAS BEEN COMPLETED.
- 22. ALL PLANT INSTALLATIONS SHALL BE COMPLETED EITHER BETWEEN APRIL 1 JUNE 15 OR AUGUST 15 -DATES IN SEEDING NOTES.

#### LAWN WATERING SCHEDULE

- THE FOLLOWING WATERING SCHEDULE COVERS ROUGHLY 8 WEEKS TO ESTABLISH A HEALTHY STAND OF GRASS FROM SEED. THE CONTRACTOR SHALL BE OBLIGATED TO ENSURE A HEALTHY STAND OF GRASS AT THE END OF THE MAINTENANCE/BOND PERIOD. ANY BARE OR DEAD AREAS IN THE LAWN SHALL BE PREPARED, RESEEDED AND REESTABLISHED PRIOR TO THE END OF THE MAINTENANCE/BOND PERIOD AND TO THE SATISFACTION OF THE PROJECT LANDSCAPE ARCHITECT AND THE OWNER
- IMPORTANT ASPECTS TO ATTAINING AND SUSTAINING A HEALTHY STAND OF GRASS ARE THE INSTALLATION OF TOPSOIL, SEED BED PREPARATION, ATTAINING OPTIMAL pH FOR THE INTENDED PLANT SPECIES, FERTILIZING, MULCH COVERING, AND SUFFICIENT WATERING PER THESE NOTES AND/OR PROJECT SPECIFICATIONS. SEEDING SHALL BE DONE DURING THE SEASONS SPECIFIED IN THE LAWN SEED MIX NOTES AND/OR PROJECT SPECIFICATIONS.
- AFTER THE SEEDBED IS PREPARED, SEED IS INSTALLED, AND MULCH IS APPLIED, WATER LIGHTLY TO KEEP THE TOP 2 INCHES OF SOIL CONSISTENTLY MOIST, NOT SATURATED. AT NO TIME SHOULD WATER BE
- 3. DEPENDING ON SOIL TEMPERATURES, IT MAY TAKE SEVERAL WEEKS FOR GERMINATION TO OCCUR. DIFFERENT SPECIES WITHIN THE MIX GERMINATE AT DIFFERENT TIMES AND THEREFORE CONTRACTO SHOULD CONTINUE THE LIGHT WATERING, AS DESCRIBED ABOVE, UNTIL THERE IS AT LEAST 2 INCHES OF
- 4. AT THIS POINT, WATERING FREQUENCY MAY BE REDUCED TO EVERY 3 TO 5 DAYS. WATER SHALL BE APPLIED TO WET A 6 INCH MINIMUM SOIL DEPTH TO PROMOTE HEALTHY DEEP ROOTS. 5. BEGIN MOWING ONCE PER WEEK AFTER THE GRASS HAS REACHED 3 INCHES HEIGHT. MOW TO A HEIGHT OF NO LESS THAN 2-1/2 INCHES. AFTER 2 TO 3 WEEKS OF MOWING, CONTINUE TO WATER TO A 6 INCH MINIMUM SOIL DEPTH AS NECESSARY PER WEATHER CONDITIONS, AND SOIL MOISTURE SENSORS IF

#### LANDSCAPE MAINTENANCE NOTES

- 1. MAINTENANCE OPERATIONS BEFORE APPROVAL:
- A. PLANT CARE SHALL BEGIN IMMEDIATELY AFTER EACH PLANT IS SATISFACTORILY INSTALLED AND SHALL CONTINUE THROUGHOUT THE LIFE OF THE CONTRACT UNTIL FINAL ACCEPTANCE OF THE PROJECT. B. CARE SHALL INCLUDE, BUT NOT BE LIMITED TO, REPLACING MULCH THAT HAS BEEN DISPLACED BY EROSION OR OTHER MEANS, REPAIRING AND RESHAPING WATER RINGS OR SAUCERS, MAINTAINING STAKES AND GUYS AS ORIGINALLY INSTALLED, WATERING WHEN NEEDED OR DIRECTED, AND PERFORMING ANY
- OTHER WORK REQUIRED TO KEEP THE PLANTS IN A HEALTHY CONDITION. C. CONTRACTOR SHALL REMOVE AND REPLACE ALL DEAD, DEFECTIVE AND/OR REJECTED PLANTS AS REQUIRED BEFORE FINAL ACCEPTANCE.
- 2. MAINTENANCE DURING CONSTRUCTION:
- A. MAINTENANCE SHALL BEGIN IMMEDIATELY AFTER PLANTING. PLANTS SHALL BE WATERED, MULCHED, WEEDED, PRUNED, SPRAYED, FERTILIZED, CULTIVATED, AND OTHERWISE MAINTAINED AND PROTECTED UNTIL PROVISIONAL ACCEPTANCE. SETTLED PLANTS SHALL BE RESET TO PROPER GRADE AND POSITION, PLANTING SAUCER RESTORED AND DEAD MATERIAL REMOVED. STAKES AND WIRES SHALL BE TIGHTENED AND REPAIRED. DEFECTIVE WORK SHALL BE CORRECTED AS SOON AS POSSIBLE AFTER IT BECOMES APPARENT AND WEATHER AND SEASON PERMIT.
- B. IF A SUBSTANTIAL NUMBER OF PLANTS ARE SICKLY OR DEAD AT THE TIME OF INSPECTION, ACCEPTANCE SHALL NOT BE GRANTED AND THE CONTRACTOR'S RESPONSIBILITY FOR MAINTENANCE OF ALL PLANTS SHALL BE EXTENDED FROM THE TIME REPLACEMENTS ARE MADE OR EXISTING PLANTS ARE DEEMED
- C. ALL REPLACEMENTS SHALL BE PLANTS OF THE SAME KIND AND SIZE SPECIFIED ON THE PLANT LIST OR THAT WHICH WAS TO REMAIN OR BE RELOCATED. THEY SHALL BE FURNISHED AND PLANTED AS SPECIFIED. THE COST SHALL BE BORNE BY THE CONTRACTOR. REPLACEMENTS RESULTING FROM REMOVAL, LOSS, OR DAMAGE DUE TO OCCUPANCY OF THE PROJECT IN ANY PART, VANDALISM, PHYSICAL DAMAGE BY ANIMALS, VEHICLES, ETC., AND LOSSES DUE TO CURTAILMENT OF WATER BY LOCAL AUTHORITIES SHALL BE APPROVED AND PAID FOR BY THE OWNER.
- D. PLANTS SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR AFTER INSPECTION AND PROVISIONAL
- E. AT THE END OF THE ESTABLISHMENT PERIOD, INSPECTION SHALL BE MADE AGAIN. ANY PLANT REQUIRED UNDER THIS CONTRACT THAT IS DEAD OR UNSATISFACTORY TO THE LANDSCAPE ARCHITECT OR OWNER SHALL BE REMOVED FROM THE SITE AND REPLACED DURING THE NORMAL PLANTING SEASON. 3. LAWN MAINTENANCE:
- A. BEGIN MAINTENANCE IMMEDIATELY AFTER EACH PORTION OF LAWN IS PLANTED AND CONTINUE FOR 8 WEEKS AFTER ALL LAWN PLANTING IS COMPLETED.
- B. WATER TO KEEP SURFACE SOIL MOIST, REPAIR WASHED OUT AREAS BY FILLING WITH TOPSOIL, LIMING, FERTILIZING AND RE-SEEDING: MOW TO 2 1/2 - 3 INCHES AFTER GRASS REACHES 3 1/2 INCHES IN HEIGHT, AND MOW FREQUENTLY ENOUGH TO KEEP GRASS FROM EXCEEDING 3 1/2 INCHES. WEED BY LOCAL SPOT APPLICATION OF SELECTIVE HERBICIDE ONLY AFTER GRASS IS WELL-ESTABLISHED

#### PLANTING SOIL SPECIFICATIONS

- 1. PLANTING SOIL. ALTERNATELY MAY BE REFERRED TO AS TOPSOIL. SHOULD BE FRIABLE. FERTILE. WELL DRAINED, FREE OF DEBRIS, TOXINS, TRASH AND STONES OVER 1/2" DIA., IT SHOULD HAVE A HIGH ORGANIC CONTENT SUITABLE TO SUSTAIN HEALTHY PLANT GROWTH AND SHOULD LOOK AESTHETICALLY PLEASING
- 2. PLANTING SOIL: REUSE SURFACE SOILS STOCKPILED ON SITE, VERIFYING COMPLIANCE WITH PLANTING SOIL AND TOPSOIL CRITERIA IN THIS SPECIFICATION THROUGH TESTING. CLEAN SURFACE SOIL OF ALL ROOTS, PLANTS, SOD, AND GRAVEL OVER 1" IN DIAMETER AND DELETERIOUS MATERIALS. IF ON-SITE SOILS ARE TO BE USED FOR PROPOSED PLANTING, THE CONTRACTOR SHALL DEMONSTRATE, THROUGH SOIL TESTING, THAT ON-SITE SOILS
- SUPPLEMENT WITH IMPORTED OR MANUFACTURED TOPSOIL FROM OFF SITE SOURCES WHEN TOPSOIL AND PLANTING SOIL QUANTITIES ARE INSUFFICIENT. OBTAIN SOIL DISPLACED FROM NATURALLY WELL-DRAINED SITES WHERE TOPSOIL OCCURS AT LEAST 4" DEEP. DO NOT OBTAIN FROM AGRICULTURAL LAND, BOGS, CONTRACTOR SHALL TEST SOILS AND FURNISH SAMPLES UPON REQUEST, PACKAGED MATERIALS SHALL BE UNOPENED BAGS OR CONTAINERS, EACH BEARING A NAME, GUARANTEE, AND TRADEMARK OF THE PRODUCER MATERIAL COMPOSITION, MANUFACTURER'S CERTIFIED ANALYSIS, AND THE WEIGHT OF THE MATERIALS, SOIL OR
- AMENDMENT MATERIALS SHALL BE STORED ON SITE TEMPORARILY IN STOCKPILES PRIOR TO PLACEMENT AND SHALL BE PROTECTED FROM INTRUSION OF CONTAMINANTS AND EROSION. AFTER MIXING, SOIL MATERIALS SHALL BE COVERED WITH A TARPAULIN UNTIL TIME OF ACTUAL USE. ALL PLANTING SOILS SHALL BE SUBMITTED FOR TESTING TO THE STATE COOPERATIVE EXTENSION SERVICE, OR APPROVED EQUAL, PRIOR TO DELIVERY TO THE SITE. CONTRACTOR SHALL FURNISH SOIL SAMPLES AND SOIL TEST RESULTS TO LANDSCAPE ARCHITECT OR OWNER AT A RATE OF ONE SAMPLE PER 500 CUBIC YARDS TO ENSURE CONSISTENCY ACROSS THE TOTAL VOLUME OF PLANTING SOIL REQUIRED. TEST RESULTS SHALL

EVALUATE FOR ALL CRITERIA LISTED IN THIS SPECIFICATION. IF TESTING AGENCY DETERMINES THAT THE

- SOILS ARE DEFICIENT IN ANY MANNER AND MAY BE CORRECTED BY ADDING AMENDMENTS, THE CONTRACTOR SHALL FOLLOW STATED RECOMMENDATIONS FOR SOIL IMPROVEMENT AND FURNISH SUBMITTALS FOR ALL AMENDMENTS PRIOR TO DELIVERY OF SOIL TO THE PROJECT SITE A. THE FOLLOWING TESTING SHOULD BE PERFORMED AND RESULTS GIVEN TO THE LANDSCAPE ARCHITECT FOR APPROVAL BEFORE INSTALLATION:

  a. PARTICLE SIZE ANALYSIS – LOAMY SAND: 60–75% SAND, 25–40% SILT, AND 5–15% CLAY.

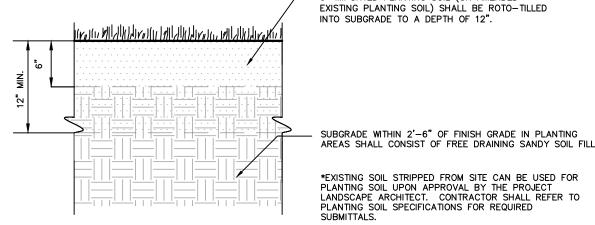
  b. FERTILITY ANALYSIS: pH (5.5–6.5), SOLUBLE SALTS (LESS THAN 2 MMHO/CM), NITRATE,
- PHOSPHATE, POTASSIUM, CALCIUM AND MACNESIUM

  c. ORGANIC MATTER CONTENT: 2.5-5% IN NATIVE SOILS; UP TO 10% IN AMENDED SOILS
  d. TOXIC SUBSTANCE ANALYSIS 6. MATERIAL DRAINAGE RATE: 60% PASSING IN 2 MINUTES, 40% RETAINED f. NOT MORE THAN 1% OF MATERIAL SHALL BE RETAINED BY A #4 SIEVE

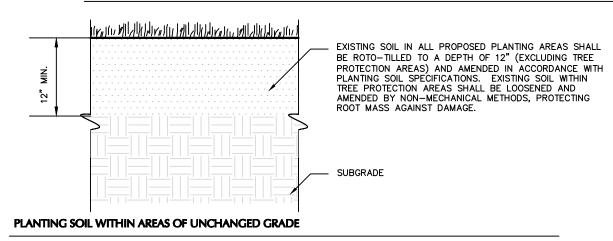
#### 3. RAIN GARDEN SOIL MIX

- A. PROVIDE THE FOLLOWING PLANTING SOIL MIX AT THE LOCATIONS INDICATED. PERCENTAGES OF COMPONENTS, UNLESS OTHERWISE NOTED, WILL BE ESTABLISHED UPON COMPLETION OF INDIVIDUAL TEST RESULTS FOR COMPONENTS OF THE MIX. THE CONTROLLING FACTOR WILL BE THE PERCENT OF ORGANIC MATTER AS SPECIFIED. NOTE THAT PERCENT BY VOLUME OF COMPONENTS WILL BE, IN LARGE PART, DETERMINED BY THE LEAF MOLD (COMPOSTED LEAF LITTER). SPECIFICALLY THE BULK DENSITY READING OF THE LEAF MOLD WILL DIRECTLY IMPACT THE ORGANIC MATTER READINGS WHICH HAVE BEEN SPECIFIED.
- B. RAIN GARDEN PLANTING MIX: SHALL BE A MIXTURE OF BASE COMPONENT MATERIAL, LEAF MOLD, SAND AND AMENDMENTS TO ACHIEVE THE FOLLOWING TEST RESULTS:
- a. PH RANGE: 5.2 7%.
- b. ORGANIC MATTER 1-2 % BY WEIGHT
- c. MAGNESIUM MIN 32 PPM d. PHOSPHORUS (PHOSPHATE) - MAX 69 PPM
- e. POTASSIUM MIN 78 PPM
- f. SOLUBLE SALTS MAX 500 PPM
- g. CLAY MAX. 5% h. SILT - 10-20%
- i.SAND 75-85%
- j.GRAVEL CONTENT LESS THAN 5%;
- k. FREE OF BROKEN GLASS, PAINT CHIPS, PLASTIC, AND OTHER DEBRIS I.OTHER AMENDMENTS AS REQUIRED BY TEST RESULTS AND AS APPROVED
- IF SOIL ORGANIC CONTENT IS INADEQUATE, SOIL SHALL BE AMENDED WITH COMPOST OR ACCEPTABLE, WEED FREE, ORGANIC MATTER. ORGANIC AMENDMENT SHALL BE WELL COMPOSTED, PH RANGE OF 6-8: MOISTURE CONTENT 35-55% BY WEIGHT 100% PASSING THROUGH 1" SIEVE: SOLUBLE SALT
- CONTENT LESS THAN 0.5 MM HOS/CM; MEETING ALL APPLICABLE ENVIRONMENTAL CRITERIA FOR A. ORGANIC MATTER AS A SOIL AMENDMENT: LEAF MOLD WITH 60-90% ORGANIC CONTENT BY WEIGHT. SHREDDED LEAF LITTER, COMPOSTED FOR A MINIMUM OF 1 YR. SHOULD BE FREE OF
- DEBRIS, STONES OVER 1/2", WOOD CHIPS OVER 1". B. SOIL IN BEDS AND PLANTING ISLANDS OTHER THAN BACKFILL MATERIAL AND TOPSOIL, SHOULD BE
- FRIABLE, WELL DRAINED, AND FREE OF DEBRIS, INCLUDING STONES AND TRASH. C. AMENDMENTS FOR BACK FILL IN TREE AND SHRUB PITS:
- a. GROUND LIMESTONE (WITH A MIN. OF 88% OF CALCIUM AND MAGNESIUM CARBONATES) USED PENDING RESULTS OF SOIL ANALYSIS. - BRING pH LEVELS TO 5.5 MIN. TO 6.5 FOR NON-ERICACEOUS PLANTS - BRING DH LEVELS TO 4.5 MIN. TO 5.5 FOR FRICACEOUS PLANTS
- b. TERRA-SORB BY 'PLANT HEALTH CARE' 800-421-9051 (SEE MANUFACTURER RECOMMENDATIONS) USED IN PLANTER BACKFILL MIXTURE WITH TREES AND SHRUBS. MYCOR-ROOT SAVER BY 'PLANT HEALTH CARE' 800-421-9051 (SEE MANUFACTUREF RECOMMENDATIONS) USED IN BACKFILL MIXTURE WITH TREES.
- 5 WHERE PLANTING AREAS ARE PROPOSED FOR FORMER PAVED OR GRAVEL AREAS BEDS SHALL BE EXCAVATED TO A MINIMUM 30" DEPTH AND, AT A MINIMUM, BE BACKFILLED WITH BOTTOM LAYER OF SANDY LOAM (ORGANIC CONTENT LESS THAN 2%) OVER WHICH TOPSOIL AND PLANTING SOILS WILL BE PLACED AT DEPTHS INDICATED IN PLANS, DETAILS AND NOTES.
- 6. <u>CLEAN SOIL FILL IN LANDSCAPE AREAS:</u>
  LANDSCAPE FILL MATERIAL, BELOW PLANTING SOILS, SHALL HAVE THE PHYSICAL PROPERTIES OF A SANDY LOAM WITH AN ORGANIC CONTENT OF LESS THAN 2% AND A PH BETWEEN 5 7. 7. SOIL PLACEMENT:
- A. CONTRACTOR TO PROVIDE SIX INCHES (6") MINIMUM DEPTH PLANTING SOIL LAYER IN LAWN AREAS, TWELVE INCHES (12") MINIMUM DEPTH PLANTING SOIL LAYER IN GROUNDCOVER AND PERENNIAL AREAS, EIGHTEEN INCHES (18") MINIMUM DEPTH PLANTING SOIL LAYER IN SHRUB AREAS, AND THIRTY-SIX INCHES (36") MINIMUM DEPTH PLANTING SOIL LAYER IN TREE PLANTING
- B. SCARIFY AND/OR TILL COMPACTED SUBSOILS TO A MINIMUM DEPTH OF 6 INCHES. THOROUGHLY MIX A 6 INCH DEPTH LAYER OF PLANTING SOIL INTO THE SUBSOIL PRIOR TO PLACING PLANTING SOIL AT THE DEPTHS INDICATED ABOVE. PLANTING SOIL SHALL BE PLACED IN 12–18" LIFTS AND WATER THOROUGHLY BEFORE INSTALLING NEXT LIFT. REPEAT UNTIL DEPTHS AND FINISH GRADES HAVE BEEN ACHIEVED. NO SOILS SHALL BE PLACED IN A FROZEN OR MUDDY CONDITION.
- C. PLANTING SOIL PRESENT AT THE SITE, IF ANY, MAY BE USED TO SUPPLEMENT TOTAL AMOUNT REQUIRED. CONTRACTOR TO FURNISH AN ANALYSIS OF ON-SITE PLANTING SOIL UTILIZED IN ALL
- A. ADJUST PH AND NUTRIENT LEVELS AS REQUIRED TO ENSURE AN ACCEPTABLE GROWING MEDIUM.
  LOWER PH USING ELEMENTAL SULFUR ONLY. PEAT MOSS OR COPPER SULFATE MAY NOT BE USED.
  GROUND LIMESTONE AS A SOIL AMENDMENT MATERIAL WILL ONLY BE USED PENDING RESULTS OF
  SOIL ANALYSIS. PROVIDE WITH MINIMUM 88% CALCIUM AND MOST RESULTS ON SHALL
  HAVE TOTAL 100% DESCRIPT THE 10 MEST CALCIUM AND MOST RESULTS ON MEST CALCIUM CARD STATES AND SHALL HAVE TOTAL 100% PASSING THE 10 MESH SIEVE, MINIMUM 90% PASSING 20 MESH SIEVE, AND MINIMUM 60% PASSING 100 MESH SIEVE.
- B. ALL DEBRIS EXPOSED FROM EXCAVATION AND CULTIVATION SHALL BE DISPOSED OF AT THE CONTRACTOR'S EXPENSE.
- C. SOIL MODIFICATIONS (PENDING RESULTS OF SOIL ANALYSIS): a. THOROUGHLY TILL ORGANIC MATTER (LEAF COMPOST) INTO THE TOP 6 TO 12 IN. OF MOST PLANTING SOILS TO IMPROVE THE SOIL'S ABILITY TO RETAIN WATER AND NUTRIENTS. ALL PRODUCTS SHOULD BE COMPOSTED TO A DARK COLOR AND BE FREE OF PIECES WITH IDENTIFIABLE LEAF OR WOOD STRUCTURE. AVOID MATERIAL WITH A PH HIGHER THAN 7.0. PEAT MOSS MAY NOT BE USED AS ORGANIC MATTER AMENDMENT
- b. MODIFY HEAVY CLAY OR SILT (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) AND/OR GYPSUM. COARSE SAND MAY BE USED IF ENOUGH IS ADDED TO BRING THE SAND CONTENT TO MORE THAN 60% OF THE TOTAL MIX. IMPROVE DRAINAGE IN HEAVY SOILS BY PLANTING ON RAISED MOUNDS OR BEDS AND INCLUDING
- c. MODIFY EXTREMELY SANDY SOILS (MORE THAN 85% SAND) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX.

DUE TO GENERAL CONSTRUCTION ACTIVITIES AND ADJACENT SITE COMPACTION REQUIREMENTS, SUBGRADE SOILS WITHIN PROPOSED PLANTING AREAS TEND TO BECOME HIGHLY COMPACTED. IN ORDER TO CREATE A HEALTHY GROWTH MEDIUM TO ALLOW PROPOSED PLANTINGS TO ESTABLISH A VIGOROUS ROOT MASS, THIS SUBGRADE SOIL MUST UNDERGO A RESTORATION PROCESS. IN ADDITION, IMPORTED OR AMENDED EXISTING SOILS SHALL BE MIXED WITH SUBGRADE SOILS WHERE THEY MEET IN ORDER TO CREATE A TRANSITIONAL GRADIENT TO ALLOW FOR PROPER DRAINAGE. 6" IMPORTED PLANTING SOIL (OR AMENDED



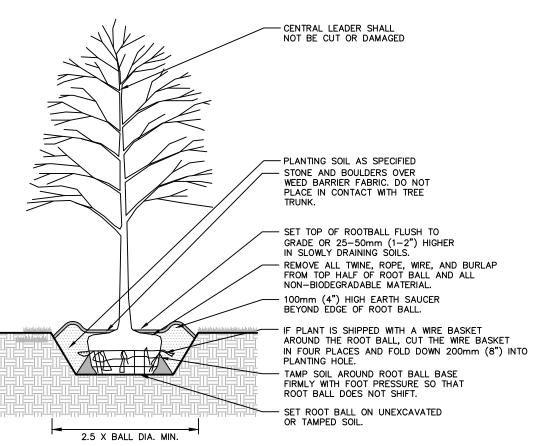
PLANTING SOIL WITHIN AREAS OF CUT OR RAISED GRADE



- NOTES: 1. CONTRACTOR IS RESPONSIBLE TO SEND SAMPLES OF EXISTING SOILS INTENDED FOR USE IN PLANTING AREAS (1 PER 500 CY.) TO TESTING LABORATORY OR UNIVERSITY COOPERATIVE EXTENSION FOR TESTING. ALL TESTING COSTS ARE AT THE
- 2. RECYCLED CRUSHED CONCRETE AND ASPHALT MILLINGS SHALL NOT BE PLACED WITHIN 2'-6" OF FINISH GRADE IN PROPOSED LANDSCAPE AREAS.
- 3. IMPORTED FILL SHALL CONTAIN NO CONTAMINATION IN EXCEEDENCE OF THE APPLICABLE STATE ENVIRONMENTAL STANDARDS AND MEET THE ENVIRONMENTAL REQUIREMENTS FOR THE PROJECT. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION OF COMPLIANCE PRIOR TO DELIVERY OF ANY FILL TO THE SITE.
- 4. CONTRACTOR TO LIGHTLY COMPACT ALL PLACED PLANTING SOILS AND RAISE GRADES ACCORDINGLY TO ALLOW FOR FUTURE SETTLEMENT OF PLANTING SOILS (TYP.)
- 5. NO STONES, WOOD CHIPS, OR DEBRIS LARGER THAN 1/2" SHALL BE ACCEPTABLE WITHIN PLANTING AREAS.

## **PLANTING SOI**

TREE PLANTING



1. PLANT STAKING SYSTEMS INDICATED ARE SHOWN DIAGRAMMATICALLY. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING STAKING SYSTEM AT THEIR DISCRETION TO MAINTAIN PLANTS IN A PLUMB CONDITION.

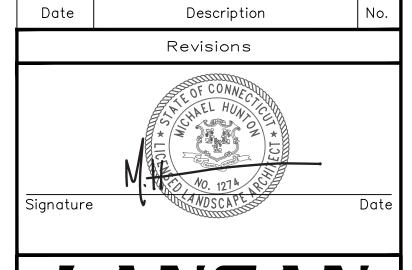
#### NTS LARGE SHRUB (B&B) SMALL SHRUB (CONTAINER) REMOVE ALL TWINE, ROPE AND WIRE, AND BURLAP FROM TOP HALF OF ROOT BALL AND ALL NON-BIODEGRADABLE MATERIAL -IF PLANT IS SHIPPED WITH A WIRE BASKET IN FOUR PLACES AND FOLD DOWN 8" INTO " STONE LAYER. KEEP MULCH AWAY FROM SHRUB BASE AND TOP OF ROOTBALL (TYP.). -4" HIGH EARTH SAUCER BEYOND EDGE OF ROOT BALL TO DIRECT WATER INTO ROOTBALL (TYP.). -REMOVE PLASTIC CONTAINER -PLANTING SOIL AS SPECIFIED TAMP SOIL AROUND ROOT BALL BASE FIRMLY WITH FOOT PRESSURE SO THAT ROOT BALL DOES NOT SHIFT (TYP.). - SET ROOT BALL ON UNEXCAVATED

SUBGRADE

NOTES: 1. ALL SHRUBS TO BE SET PLUMB. 2. REFER TO LANDSCAPE PLAN FOR SPACING OF INDIVIDUAL PLANTS.
3. REMOVE ALL WIRE, PLASTIC, TAGS OR SYNTHETIC MATERIAL FROM PLANTS PRIOR TO PLANTING.

3 TIMES ROOTBALL DIA3 TIMES ROOTBALL DIA.





Environmental Services, Inc.

555 Long Wharf Drive

New Haven, CT 06511 

CONNECTICL

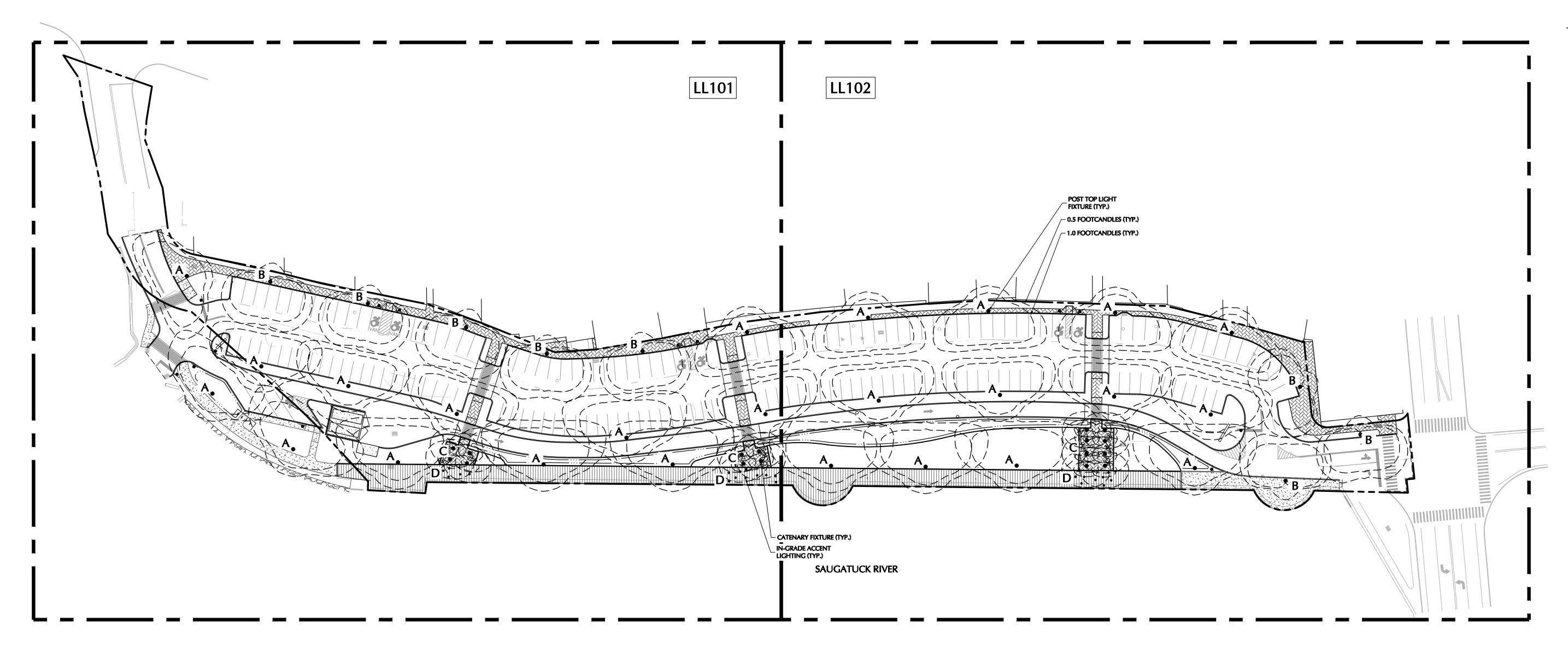
RECONNECTING THE **RIVERFRONT: PARKER** HARDING PLAZA

FAIRFIELD COUNTY Drawing Title

PLANTING NOTES & DETAILS

⊃roject No. Drawing No. 140251201 LP501 09/14/2023 rawn Bv hecked By

Date: 9/14/2023 Time: 11:18 User: shui Style Table: Langan.stb Layout: LP501 Document Code: 140251201-0502-LP501-0101



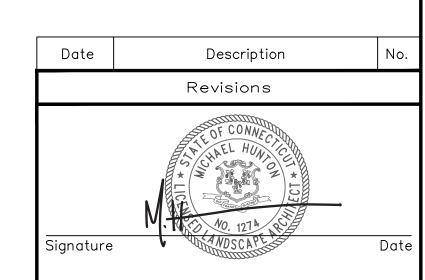
SITE	SITE LIGHTING SCHEDULE																
SYMBOL	KEY	QTY.	FIXTURE MANUFACTURER	FIXTURE MODEL	FIXTURE DESCRIPTION	FIXTURE MOUNTING HEIGHT	WATTS	LUMENS	LIGHT LOSS FACTOR	OPTICS	COLOR TEMPERATURE	FIXTURE CATALOG NO.	POLE MANUFACTURER	POLE DESCRIPTION	POLE LENGTH	POLE CATALOG NO.	NOTES/ REMARKS
•	Α	24	LUMEC (SIGNIFY)	L80	POLE MOUNTED POST TOP LIGHT; COLOR — BLACK	14'-0"	80	7,280	0.90	TYPE 3	3000 K	L80-80W48LED3K- G3-PC-CS-LE3-VOLTS- SF80-FN1-BKTX	LUMEC (SIGNIFY)	ROUND TAPERED ALUMINUM WITH DECORATIVE BASE; COLOR — BLACK	25'-0"	RTA608-N-26-BKTX	POLES TO BE FACTORY CUT TO 25'-0"
•	В	8	LUMEC (SIGNIFY)	L80	POLE MOUNTED POST TOP LIGHT; COLOR — BLACK	14'-0"	80	7,280	0.90	TYPE 4	3000 K	L80-80W48LED3K- G3-PC-CS-LE4-VOLTS- SF80-FN1-HS-BKTX	LUMEC (SIGNIFY)	ROUND TAPERED ALUMINUM WITH DECORATIVE BASE; COLOR — BLACK	25'-0"	RTA608-N-26-BKTX	POLES TO BE FACTORY CUT TO 25'-0"
•	С	16	LANDSCAPE FORMS	ARxP	CATENARY FIXTURE; COLOR - BLACK	18'-0"	21	2,114	0.90	TYPE 2	3000 K	ARxP18A1TII+IIO	LANDSCAPE FORMS				
•	D	27	MP LIGHTING	L01	IN-GRADE LIGHT; COLOR - MATTE CLEAR ANODIZED	0'-0"	1	85	0.90	TYPE 1	3000 K	L01-1-W30H-SN-C-0- 0-MA					

NOTES:

1. POLES SHALL BE FACTORY CUT TO SPECIFIED LENGTH BY MANUFACTURER.
2. CONTRACTOR TO CONFIRM AND COORDINATE FINAL LINE VOLTAGE WITH MEP PLANS PRIOR TO PURCHASING FIXTURES.
3. ALL LIGHTS ABOVE A MOUNTING HEIGHT OF 25–0' WILL HAVE FACTORY INSTALLED VIBRATION DAMPENERS.

STATISTICS											
DESCRIPTION	AVG.	MAX.	MIN.	MAX./MIN.	AVG./MIN.						
PARKING LOT	1.88fc	7.9fc	0.5fc	3.76	15.80						
NOTES:											

NOTES: LIGHT PHOTOMETRY AND CALCULATIONS FOR EXISTING AND ADJACENT LIGHTING TO REMAIN ARE NOT INCLUDED IN THE ABOVE STATISTICS.



Langan Engineering and Environmental Services, Inc.

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T: 203.562.5771 F: 203.789.6142 www.langan.com

RECONNECTING THE RIVERFRONT: PARKER HARDING PLAZA

WESTPORT CONNECTICUT

**FAIRFIELD COUNTY**Drawing Title

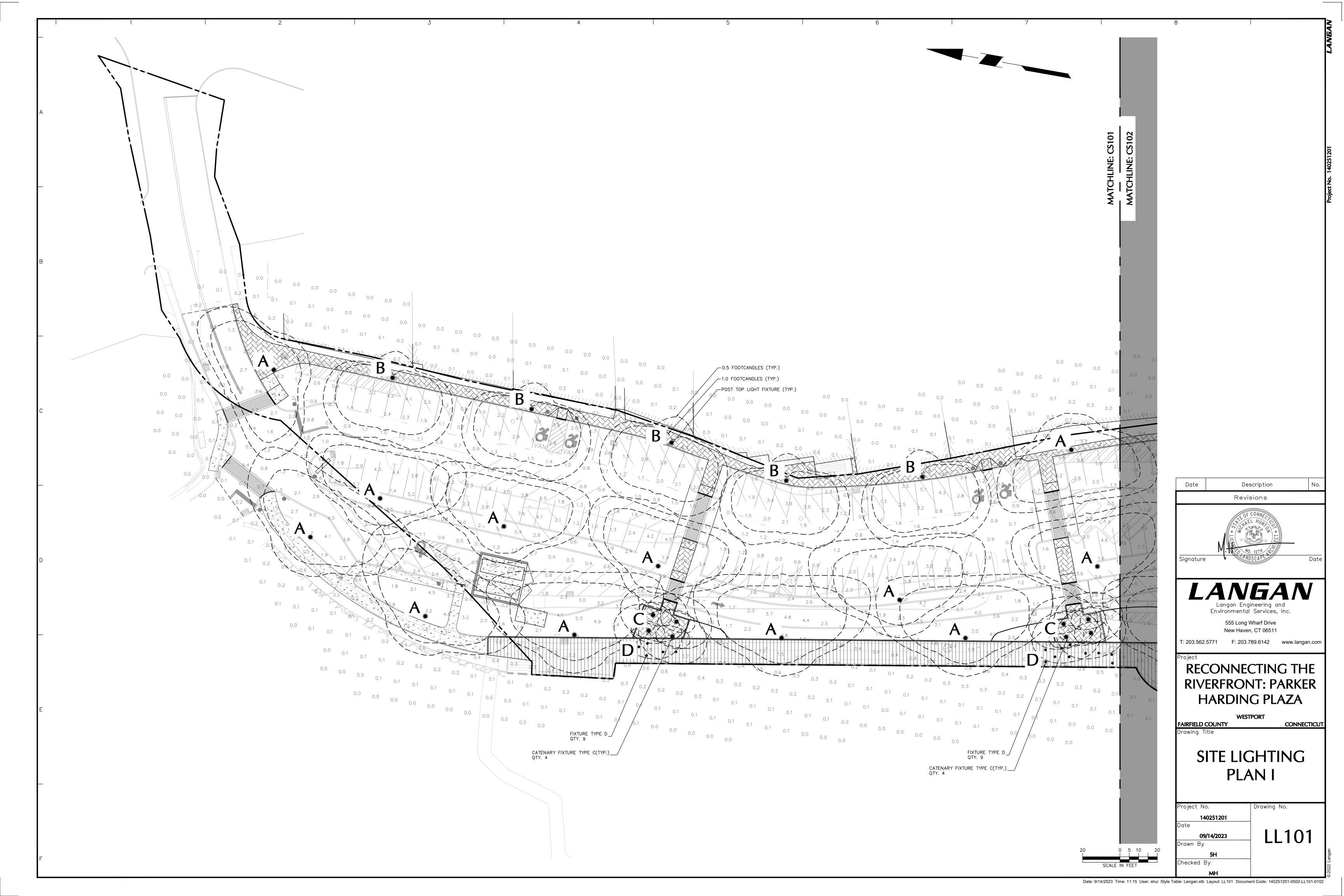
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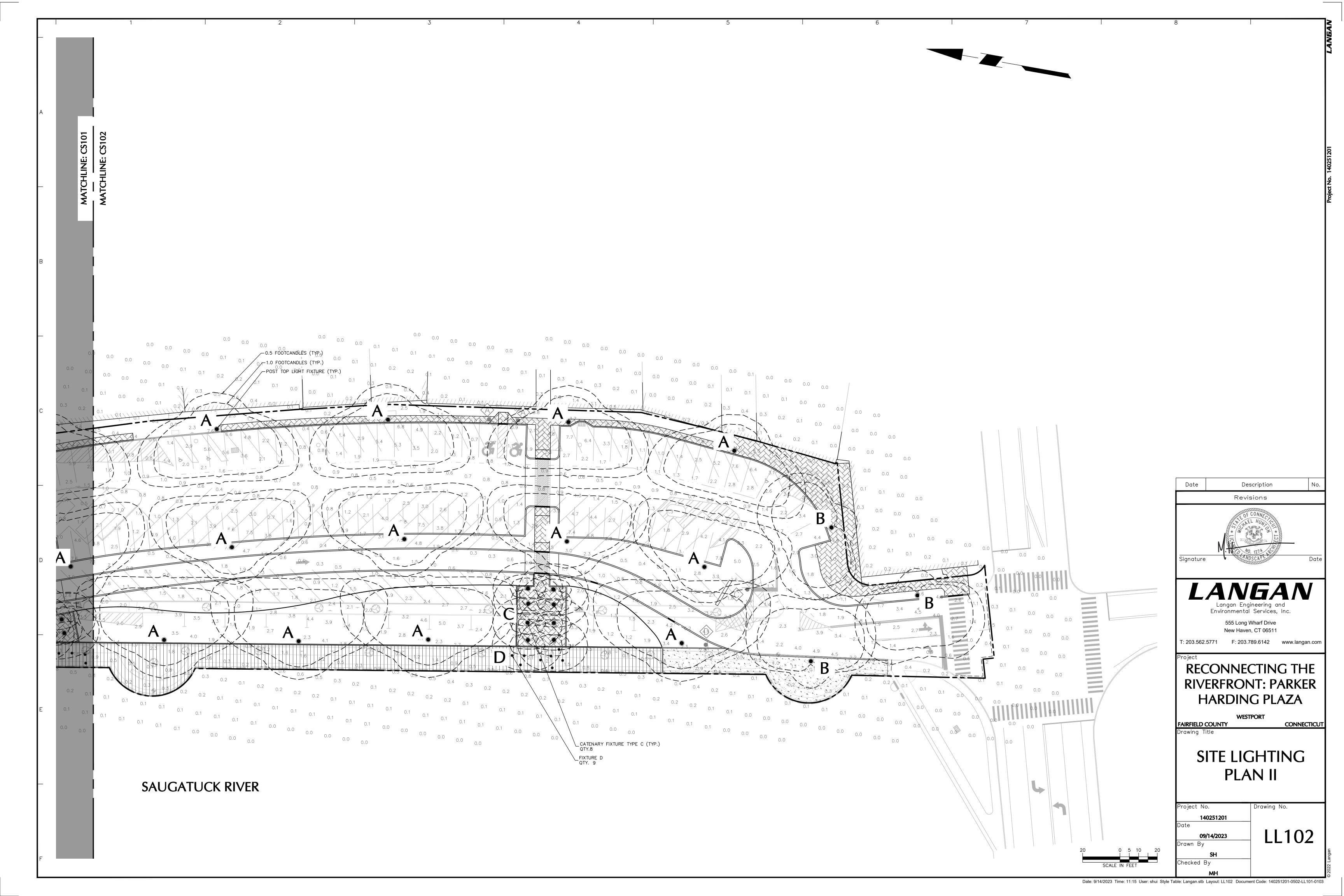
OVERALL SITE LIGHTING PLAN

140251201
Date

09/14/2023
Drawn By
SH
Checked By

40 0 10 25 40 SCALE IN EFET





### **SITE LIGHTING NOTES:**

- 1. POINT-BY-POINT CALCULATIONS PROVIDED WITHIN HAVE BEEN PREPARED IN ACCORDANCE TO IESNA STANDARDS AND IN CONSIDERATION OF THE VARIABLES WITHIN THESE NOTES AND SITE LIGHTING SCHEDULE. THE VALUES SHOWN ON THE PLANS ARE NOT AN INDICATION OF THE INITIAL LIGHT INTENSITIES OF THE LAMPS. THESE VALUES ARE AN APPROXIMATION OF THE MAINTAINED INTENSITIES DELIVERED TO THE GROUND PLANE USING INDUSTRY ACCEPTABLE LIGHT LOSS FACTORS (LLF) WHICH COVER LAMP DEGRADATION AND NATURAL BUILDUP ON THE FIXTURE LENS. THE LÍGHTING PLAN IS DESIGNED WITH AN INDUSTRY ACCEPTABLE LLF TO ENSURE ADEQUATE LIGHT INTENSITIES OVER YEARS OF USE AND WEAR. MINOR VARIATIONS IN TOPOGRAPHY, PHYSICAL OBSTRUCTIONS, AMBIENT OR ADJACENT LIGHT SOURCES AND/OR OTHER POTENTIAL IMPACTS HAVE NOT BEEN INCLUDED IN THESE CALCULATIONS. THEREFORE, AS-BUILT LIGHT INTENSITIES MAY VARY, IN EITHER DIRECTION, FROM WHAT IS EXPLICITLY PORTRAYED WITHIN THESE DRAWINGS.
- 2. PROVIDE A CONCRETE BASE FOR EACH LIGHT POLE AT THE LOCATIONS INDICATED ON THE CONSTRUCTION DRAWINGS AND IN ACCORDANCE WITH PROJECT PLANS AND SPECIFICATIONS RELATING DIRECTLY TO CAST-IN-PLACE CONCRETE.
- 3. CONTRACTOR TO COORDINATE INSTALLATION OF UNDERGROUND FEEDER CABLE FOR EXTERIOR LIGHTING WITH EXISTING AND PROPOSED UTILITIES, SITE DRAINAGE SYSTEMS, AND PAVING. CONTRACTOR SHALL PROMPTLY NOTIFY THE OWNER'S REPRESENTATIVE SHOULD ANY UTILITIES, NOT SHOWN ON THE PLANS, BE FOUND DURING EXCAVATIONS.
- 4. CONTRACTOR TO OPERATE EACH LUMINAIRE AFTER INSTALLATION AND CONNECTION. INSPECT FOR IMPROPER CONNECTIONS AND OPERATION.
- 5. AIM AND ADJUST ALL LUMINAIRES TO PROVIDE ILLUMINATION LEVELS AND DISTRIBUTION AS INDICATED ON THE CONSTRUCTION DRAWINGS OR AS DIRECTED BY THE LANDSCAPE ARCHITECT AND/OR OWNER.
- 6. CONTRACTOR TO COORDINATE INSTALLATION OF ALL THE WALL MOUNTED FIXTURES AND ELECTRICAL CONNECTIONS TO SITE STRUCTURE(S) WITH BUILDING MEP, ARCHITECT, AND/OR
- COORDINATED WITH ALL SITE WORK TRADES TO AVOID CONFLICT WITH FINISHED AND

8. POINT SPACING ON PLACE OF CALCULATION IS 10 FT. LEFT TO RIGHT AND 10 FT. TOP TO

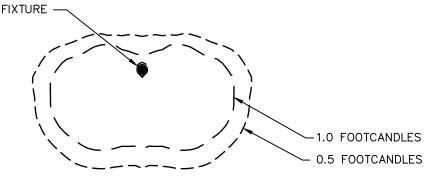
7. INSTALLATION OF ALL LIGHTING FIXTURES, POLES, FOOTINGS, AND FEEDER CABLE TO BE

- BOTTOM. POINT BY POINT CALCULATIONS ARE BASED ON A 0.90 MAINTENANCE FACTOR. 9. POINT-BY-POINT CALCULATIONS PROVIDED WITHIN HAVE BEEN PREPARED IN ACCORDANCE TO IESNA STANDARDS AND IN CONSIDERATION OF THE VARIABLES WITHIN THESE NOTES AND SITE LIGHTING SCHEDULE. THE VALUES REPRESENTED ON THE PLANS PRESENT AN APPROXIMATION OF THE MAINTAINED LIGHT LEVELS DELIVERED TO THE GROUND PLANE MINOR VARIATIONS IN TOPOGRAPHY, PHYSICAL OBSTRUCTIONS, LAMP DEGRADATION, AMBIENT OR ADJACENT LIGHT SOURCES AND OR OTHER POTENTIAL IMPACTS HAVE NOT BEEN
- 10. ALL SITE LIGHTING RELATED WORK AND MATERIALS SHALL COMPLY WITH CITY, COUNTY, AND OTHER APPLICABLE GOVERNING AUTHORITY REQUIREMENTS.

INCLUDED IN THESE CALCULATIONS. GIVEN THIS, AS-BUILT VALUES MAY VARY, GREATER THAN OR LESS THAN, WHAT IS EXPLICITLY PORTRAYED WITHIN THESE DRAWINGS

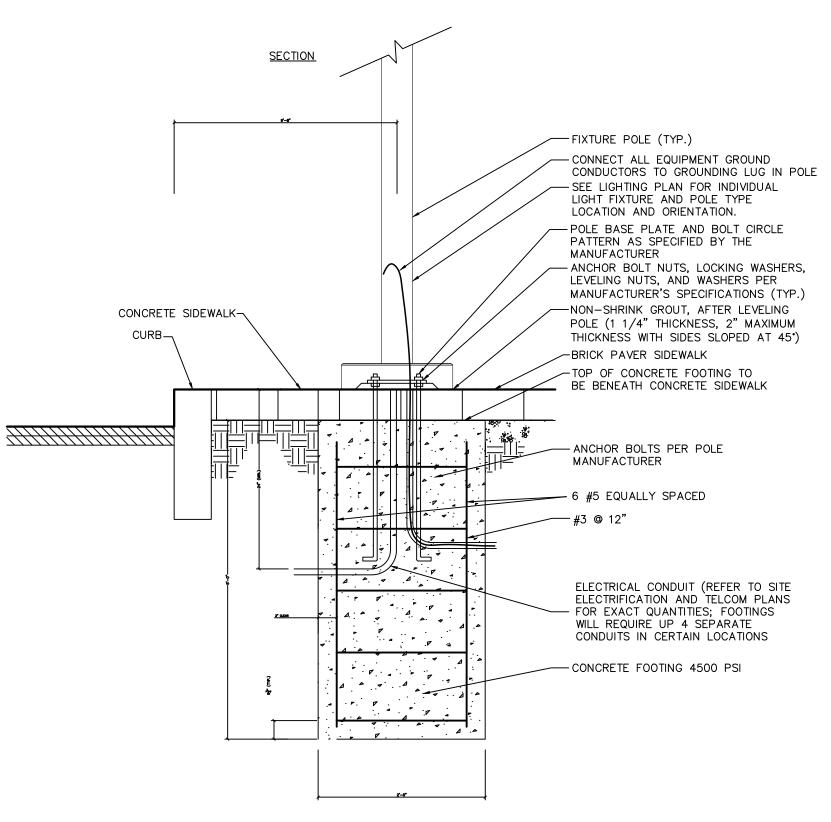
- 11. SITE ELECTRICAL CONTRACTOR TO COORDINATE LOCATION OF EASEMENTS, UNDERGROUND UTILITIES AND DRAINAGE BEFORE DRILLING POLE BASES.
- 12. SITE ELECTRICAL CONTRACTOR TO COORDINATE POWER SOURCE WITH LIGHT FIXTURES TO INSURE ALL SITE LIGHTING IS OPERATING EFFECTIVELY, EFFICIENTLY AND SAFELY.
- 13. SITE ELECTRICAL CONTRACTOR SHALL CONFIRM THAT LIGHT FIXTURES MATCH SPECIFICATIONS ON THE PLANS.
- 14. REFER TO ELECTRIFICATION PLAN FOR PROVIDING ADEQUATE POWER FOR SITE LIGHTING.
- 15. SITE ELECTRICAL CONTRACTOR SHALL EXAMINE AND VERIFY THAT SOIL CONDITIONS ARE SUITABLE TO SUPPORT LOADS EXERTED UPON THE FOUNDATIONS DURING EXCAVATION. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY UNSATISFACTORY CONDITIONS.
- 16. POLE FOUNDATIONS SHALL NOT BE POURED IF FREE STANDING WATER IS PRESENT IN EXCAVATED AREA.
- 17. ELECTRICIAN AND INSTALLATION OF WALL MOUNTED FIXTURES SHALL BE COORDINATED WITH THE ARCHITECTURAL, STRUCTURAL, AND SITE DRAWINGS FOR SAFETY AND TO PROVEN EXPOSED WIRING.
- 18. <u>LIGHTING SUBSTITUTION REQUIREMENTS:</u>
  ALL LIGHTING SUBSTITUTIONS MUST BE MADE WITHIN 14 DAYS PRIOR TO THE BID DATE TO PROVIDE AMPLE TIME FOR REVIEW AND TO ISSUE AN ADDENDUM INCORPORATING THE
- SUBSTITUTION WITH THE FOLLOWING REQUIREMENTS: A. ANY SUBSTITUTION TO LIGHTING FIXTURES, POLES, ETC. MUST BE APPROVED BY THE OWNER, ENGINEER AND TENANTS. ANY COST ASSOCIATED WITH REVIEW AND/OR
- APPROVAL OF THE SUBSTITUTIONS SHALL BE ENTIRELY BORNE BY THE CONTRACTOR B. COMPUTER PREPARED PHOTOMETRIC LAYOUT OF THE PROPOSED LIGHTED AREA WHICH INDICATES, BY ISOFOOTCANDLE, THE SYSTEM'S PERFORMANCE.
- C. A PHOTOMETRIC REPORT FROM A NATIONAL INDEPENDENT TESTING LABORATORY WITH REPORT NUMBER, DATE, FIXTURE CATALOG NUMBER, LUMINAIRE AND LAMP SPECIFICATIONS; IES CALCULATIONS, CANDLEPOWER TABULATIONS, ZONE LUMEN SUMMARY ISOLUX PLOT, AND CATALOGUE CUTS. CATALOGUE CUTS MUST IDENTIFY, BUT NOT LIMITED TO, OPTICS, LAMP TYPE, DISTRIBUTION TYPE, REFLECTOR, LENS, BALLASTS, WATTAGE, VOLTAGE, FINISH AND HOUSING DESCRIPTION.
- D. POLE MANUFACTURER AASHTO CALCULATIONS INDICATING THE POLE AND ANCHOR BOLTS BEING SUBMITTED ARE CAPABLE OF SUPPORTING THE POLE AND FIXTURE SYSTEMS BEING UTILIZED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- E. THE UNDERWRITERS LABORATORY LISTING AND FILE NUMBER FOR THE SPECIFIC FIXTURE(S) TO BE UTILIZED.
- F. A COLOR PHOTOGRAPH THAT CLEARLY SHOWS THE REPLACEMENT FIXTURE POLE MOUNTED, THE FIXTURE'S COLOR, FINISH, AND PHYSICAL CHARACTERISTICS.

#### 19. PHOTOMETRIC LIGHTING TEMPLATE:



FIXTURE. IT DOES NOT REPRESENT LIGHT COMING FROM OTHER SOURCES.

NOTE: THE PHOTOMETRIC TEMPLATE REPRESENTS LIGHT THROW FOR EACH INDIVIDUAL



- 1. SHAFT CAP, ARMS, BASE FLANGE, ANCHOR BOLTS, LEVELING NUTS, CONNECTION HARDWARE, BOLT COVERS, HANDHOLE COVER, AND BOLT CIRCLE TEMPLATE SHALL BE FURNISHED BY POLE MANUFACTURER. 2. EACH STANDARD TO BE PROTECTED AGAINST LIGHTNING WITH AN INTERCONNECTED GROUND ROD. THIS ROD SHALL
- BE BONDED PER SECTION NUMBER 250-86, N.E.C. 3. CONTRACTOR TO ENSURE CONCRETE POLE BASES ARE POURED / PLACED ABSOLUTELY VERTICAL & LEVEL. 4. POLE BASE SHALL BE ONE CONTINUOUS POUR. EXPOSED PORTÍON OF BASE SHALL BE HAND—RUBBED SMOOTH. 5. CONTRACTOR TO COMPACT SUBGRADE AROUND POLE BASE.

POLE MOUNTED FIXTURE FOOTING IN BRICK

6. THE INFORMATION ILLUSTRATED IN THE LIGHT POLE FOUNDATION DETAIL HAS BEEN PROVIDED FOR GENERAL REFERENCE AND PRELIMINARY COST ESTIMATE PURPOSES. LIGHT POLE FOUNDATIONS SHOULD BE DESIGNED AND DETAILED BY A LICENSED STRUCTURAL ENGINEER BASED ON EXISTING SOIL CONDITIONS, LOCAL DESIGN STANDARDS AND MANUFACTURERS RECOMMENDATIONS.

# POLE MOUNTED FIXTURE FOOTING IN LAWN

BE BONDED PER SECTION NUMBER 250-86, N.E.C.

AND MANUFACTURERS RECOMMENDATIONS.

5. CONTRACTOR TO COMPACT SUBGRADE AROUND POLE BASE.

1. SHAFT CAP, ARMS, BASE FLANGE, ANCHOR BOLTS, LEVELING NUTS, CONNECTION HARDWARE, BOLT COVERS,

3. CONTRACTOR TO ENSURE CONCRETE POLE BASES ARE POURED / PLACED ABSOLUTELY VERTICAL & LEVEL

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DETAILED BY A LICENSED STRUCTURAL ENGINEER BASED ON EXISTING SOIL CONDITIONS, LOCAL DESIGN STANDARDS

3. THE INFORMATION ILLUSTRATED IN THE LIGHT POLE FOUNDATION DETAIL HAS BEEN PROVIDED FOR GENERAL

FINISHED GRADE-

- FIXTURE POLE (TYP.)

MANUFACTURER

- CONNECT ALL EQUIPMENT GROUND

- SEE LIGHTING PLAN FOR INDIVIDUAL

- POLE BASE PLATE AND BOLT CIRCLE

LEVELING NUTS, AND WASHERS PER

- ANCHOR BOLT NUTS, LOCKING WASHERS,

MANUFACTURER'S SPECIFICATIONS (TYP.)

LIGHT FIXTURE AND POLE TYPE

PATTERN AS SPECIFIED BY THE

LOCATION AND ORIENTATION.

- ANCHOR BOLTS PER POLE

└── COMPACTED AGGREGATE BACKFILL

ELECTRICAL CONDUIT (REFER TO SITE

ELECTRIFICATION AND TELCOM PLANS

- FOR EXACT QUANTITIES; FOOTINGS

CONDUITS IN CERTAIN LOCATIONS

WILL REQUIRE UP 4 SEPARATE

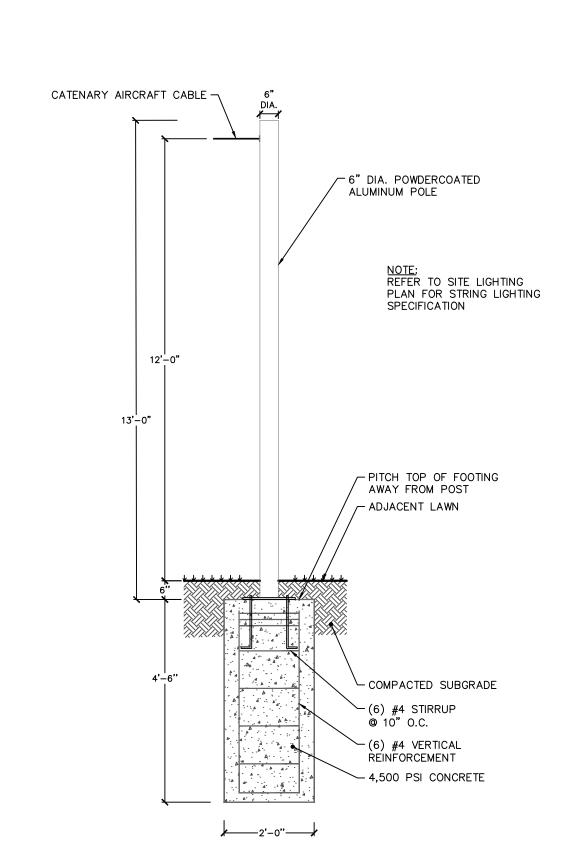
CONCRETE FOOTING 4500 PSI

- COMPACTED SUBGRADE

— 6 #5 EQUALLY SPACED

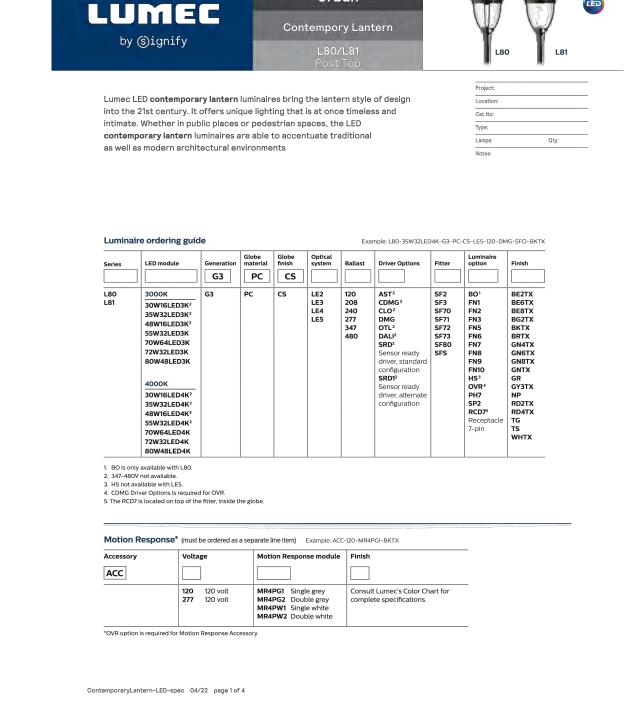
MANUFACTURER

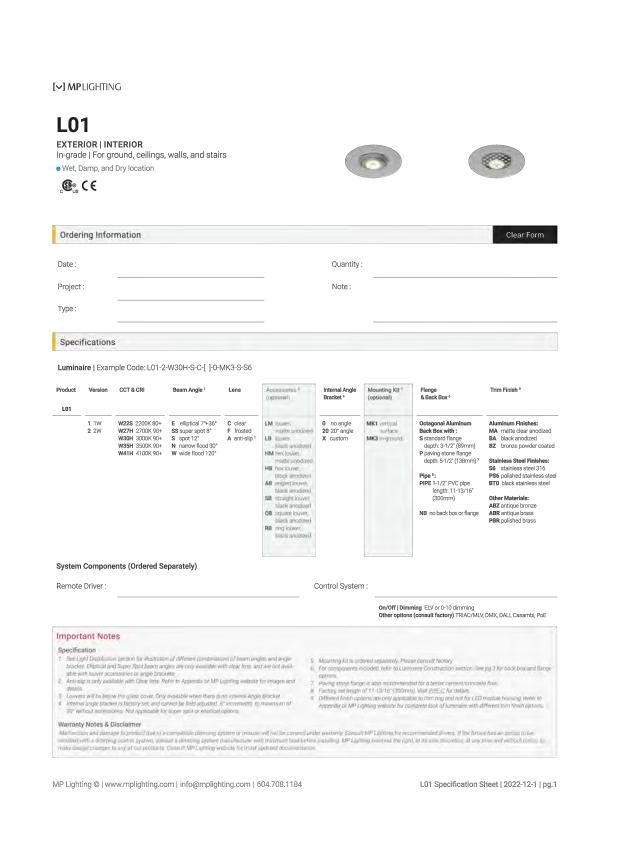
CONDUCTORS TO GROUNDING LUG IN POLE

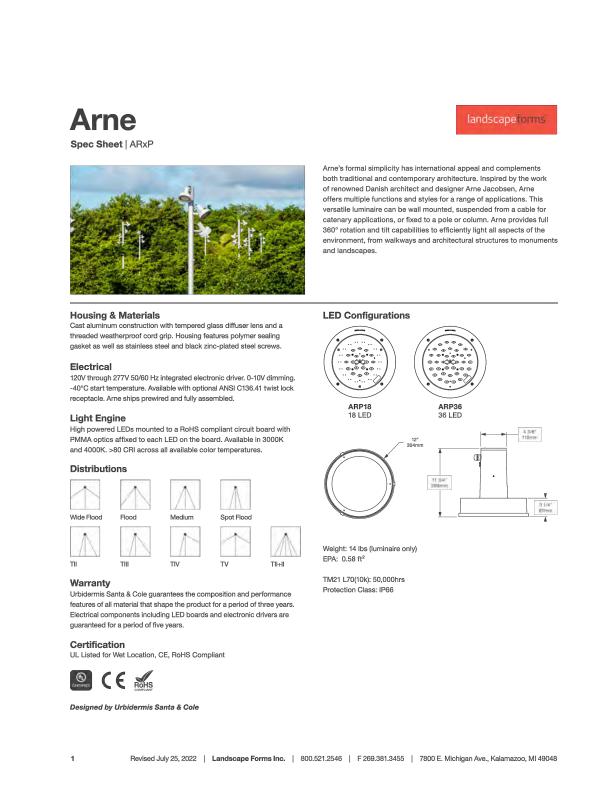


CONTRACTOR TO SUBMIT SHOP DRAWINGS AND PRODUCT DATA FOR REVIEW PRIOR TO INSTALLATION. 2. SHOP DRAWINGS ARE TO BE SIGNED AND SEALED BY A CONNECTICUT-LICENSED STRUCTURAL ENGINEER.

### **CATENARY FIXTURE POLE**









Description

Revisions

N.T.S.

Date

4 POLE MOUNTED FIXTURE

IN-GRADE ACCENT LIGHTING

N.T.S.

CATENARY FIXTURE

N.T.S.

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N.T.S.