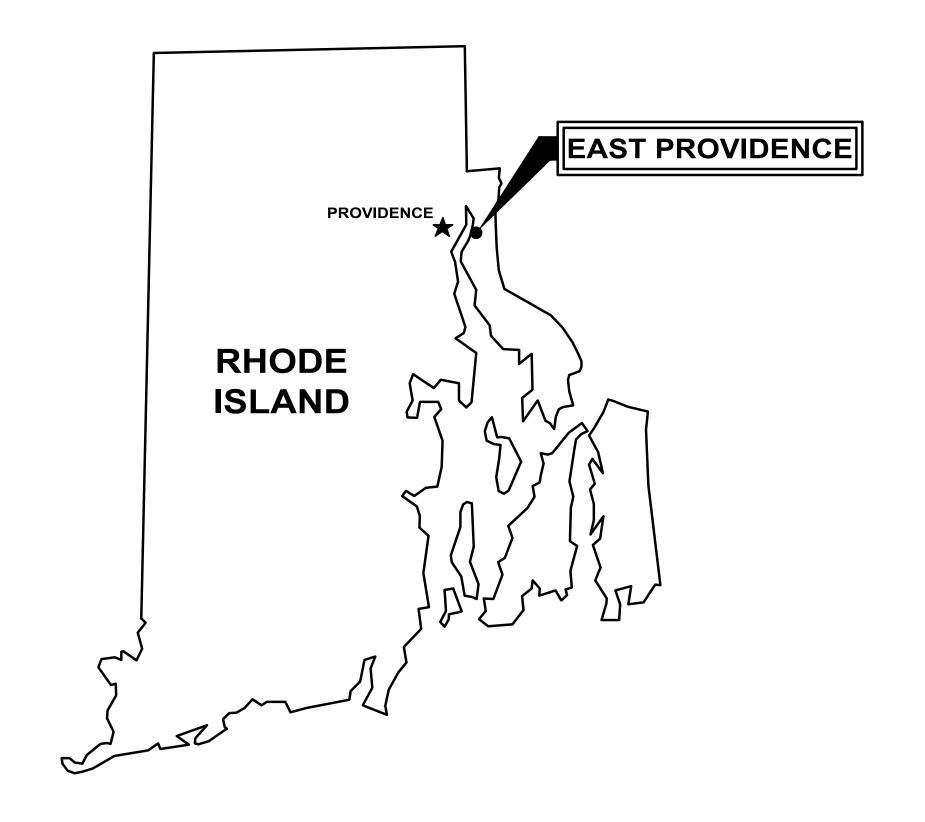
BID SET No.

# CITY OF EAST PROVIDENCE, RHODE ISLAND

**CONTRACT DRAWINGS FOR** 

## BOOTH AVENUE SLOPE STABILIZATION

JUNE 2024 FOR BIDDING



#### **DRAWING INDEX**

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LOCATION PLAN
SCALE: NTS



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FOR REVIEW

FOR BIDDING June 2023

WP PROJECT No. 13981

- THE CITY OF EAST PROVIDENCE SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY RIGHTS OF WAY AND EASEMENTS. THE CONTRACTOR SHALL VERIFY THAT THE NECESSARY EASEMENTS HAVE BEEN SECURED BY THE CITY OF EAST PROVIDENCE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BE FAMILIAR WITH THE APPLICABLE PROVISIONS OF EACH EASEMENT AS THEY APPLY TO THE WORK PRIOR TO BIDDING AND ABIDE BY THOSE PROVISIONS DURING CONSTRUCTION. COPIES OF ALL RIGHTS OF WAY AND EASEMENTS ARE AVAILABLE FOR REVIEW FROM THE CITY OF EAST PROVIDENCE.
- THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING TRAFFIC FLOW AT ALL TIMES. CONTRACTOR SHALL INSTALL AND MAINTAIN TRAFFIC CONTROL SIGNS IN ACCORDANCE WITH THE MUTCD AND ALL STATE AND LOCAL REGULATIONS. THE CONTRACTOR IS REQUIRED TO SUBMIT AN APPROVED TRAFFIC CONTROL PLAN PRIOR TO COMMENCING CONSTRUCTION. THE POLICE DEPARTMENT AND FIRE DEPARTMENT ARE TO BE NOTIFIED AT LEAST 24-HOURS IN ADVANCE OF ANY STREET CLOSING OR DETOUR. REFER TO SPECIFICATION SECTION 01570.
- 4. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA).
- 5. CONTRACTOR SHALL COMPLY WITH THE COORDINATION REQUIREMENTS AND RELATED COSTS, IF ANY, AS SPECIFIED IN SPECIFICATION SECTION 01050.
- 6. CONTRACTOR SHALL NOTE THAT, IN GENERAL, ALL EXISTING CONDITION INFORMATION ON THE DRAWINGS ARE SHOWN WITH A LIGHTER LINE WEIGHT AND WITH A SLANTED TYPE TEXT.
- 7. ALL EXISTING SEWER AND STORM DRAIN LINES ENCOUNTERED DURING CONSTRUCTION ARE TO REMAIN IN SERVICE. ANY EXISTING SEWERS, STORM DRAIN LINES OR CULVERTS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CITY OF EAST PROVIDENCE, EXCEPT WHEN IN DIRECT CONFLICT WITH THE NEW WORK OR WHEN NOT SHOWN OR INDICATED.
- 8. ALL STRUCTURES AND PIPELINES LOCATED ADJACENT TO EXCAVATION SHALL BE PROTECTED AND FIRMLY SUPPORTED BY THE CONTRACTOR UNTIL THE EXCAVATION IS BACKFILLED. INJURY TO ANY SUCH STRUCTURES CAUSED BY OR RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. ALL UTILITIES REQUIRING REPAIR. RELOCATION OR ADJUSTMENT AS A RESULT OF THE PROJECT SHALL BE COORDINATED THROUGH THE RESPECTIVE UTILITY.
- P. IN THOSE INSTANCES WHERE POWER OR TELEPHONE POLE SUPPORT IS REQUIRED, THE CONTRACTOR SHALL PROVIDE A MINIMUM 48-HOUR NOTICE TO THE RESPECTIVE UTILITY POLE OWNER. NO ADDITIONAL PAYMENT WILL BE PROVIDED FOR TEMPORARY BRACING OF UTILITIES
- 10. ALL TEST PITS SHALL BE EXCAVATED PRIOR TO CONSTRUCTION LAYOUT AND RESULTS REPORTED TO THE ENGINEER FOR REVIEW FOR CONFORMANCE WITH THE PLANS. TEST PITS ARE REQUIRED WHERE SHOWN ON THE DRAWINGS AND AS DIRECTED BY THE ENGINEER. TEST PITS WILL BE DUG AT LEAST 10 CALENDAR DAYS PRIOR TO CONNECTING PROPOSED SEWERS TO EXISTING SEWERS.

#### **EXISTING SITE CONDITIONS**

- THE LOCATIONS OF UNDERGROUND UTILITIES AND STRUCTURES, AS SHOWN ON THE DRAWINGS, ARE APPROXIMATE AND MAY NOT BE COMPLETE. NO GUARANTEE IS MADE THAT UTILITIES OR STRUCTURES WILL BE ENCOUNTERED WHERE SHOWN, OR THAT ALL UNDERGROUND UTILITIES AND STRUCTURES ARE SHOWN. ALL LOCATIONS AND SIZES OF EXISTING UTILITIES AND STRUCTURES SHALL BE VERIFIED IN THE FIELD WITH TEST PITS AS REQUIRED PRIOR TO BEGINNING CONSTRUCTION OF NEW FACILITIES OR PIPING THAT MAY BE AFFECTED
- 11. BELOW GRADE UTILITY INFORMATION IS BASED ON INFORMATION PROVIDED BY EACH UTILITY. LOCATION OF PUBLIC UTILITIES SHOWN IS ONLY APPROXIMATE AND MAY NOT BE COMPLETE. PRIVATE UNDERGROUND UTILITIES SUCH AS, BUT NOT LIMITED TO, SEWER LINES, WATER LINES AND BURIED ELECTRICAL SERVICE ENTRANCES ARE NOT SHOWN. THE CONTRACTOR SHALL ASCERTAIN THE LOCATION AND SIZE OF EXISTING UTILITIES IN THE FIELD WITH THE RESPECTIVE UTILITY COMPANY REPRESENTATIVE PRIOR TO COMMENCING WORK. REFER TO SPECIFICATION SECTION 01050. TEST PITS, MAY BE REQUIRED. UTILITY CONTACTS ARE AS FOLLOWS:

ELECTRIC:	WATER/SEWER/DRAIN:	TELEPHONE:
RI ENERGY	CITY OF EAST PROVIDENCE PUBLIC WORKS	VERIZON NEW ENGLAND
280 MELROSE STREET	60 COMMERCIAL WAY	6 BOWDOIN SQURE
PROVIDENCE RI 02907	EAST PROVIDENCE, RI	BOSTON, MA 02114
(401)-784-7331	(401)-435-7701	(857)-415-5161
DIC SVEE:	CVC.	

DIG SAFE: RI ENERGY DIG SAFE SYSTEM, INC. 280 MELROSE STREET 11 UPTON DRIVE WILMINGTON, MA 0188 PROVIDENCE, RI 811 OR 1-(888)-344-7233 1-800-870-1664

12. THERE ARE NO KNOWN HAZARDOUS ENVIRONMENTAL CONDITIONS WITHIN THE AREA OF WORK, REFER TO SPECIFICATION SECTION 00800-SC-5.306. IF THE PRESENCE OF HAZARDOUS ENVIRONMENTAL CONDITIONS ARE DISCOVERED, THE CONTRACTOR SHALL NOTIFY THE CITY OF EAST PROVIDENCE AND THE ENGINEER IMMEDIATELY. ALL ACTIVITIES, HANDLING AND DISPOSAL OF HAZARDOUS ENVIRONMENTAL CONDITIONS AND MATERIALS SHALL BE IN ACCORDANCE WITH OSHA FEDERAL, STATE, AND LOCAL REGULATIONS.

## SITE DEMOLITION

- . REFER TO THE EXISTING SITE PLAN, FOR ADDITIONAL INFORMATION REGARDING EXISTING SITE. REFER TO THE LAYOUT DRAWING FOR LIMITS OF WORK.
- REFER TO SPECIFICATION SECTION 01010B, WHICH CONTAINS INFORMATION ON CONSTRAINTS OF CONSTRUCTION SEQUENCING.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND DISPOSING OF ALL DEMOLISHED PIPING, EQUIPMENT AND MATERIALS. DISPOSAL SHALL BE IN ACCORDANCE WITH ALL STATE AND LOCAL REGULATIONS. THE CITY OF EAST PROVIDENCE RESERVES THE RIGHT TO RETAIN ANY SUCH PIPING, EQUIPMENT AND MATERIALS DESIGNATED FOR DEMOLITION. SUCH MATERIALS TO BE RETAINED SHALL BE PROPERLY STORED IN AN ON-SITE LOCATION. COORDINATE LOCATION AND MATERIALS TO BE SALVAGED WITH THE TOWN OF CITY OF EAST PROVIDENCE/ENGINEER. REFER TO SPECIFICATION SECTION 02050A
- THE CONTRACTOR SHALL KEEP A RECORD OF DEMOLITION AS PART OF THE PROJECT RECORD DOCUMENTS IN ACCORDANCE WITH SPECIFICATION SECTION 01720.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE APPROPRIATE DISPOSAL OF FLOWS RESULTING FROM PRECIPITATION AND GROUNDWATER DEWATERING

### SITE CLEARING, GRUBBING AND GRADING

- STRIPPING OF TOPSOIL (LOAM) SHALL BE IN ACCORDANCE WITH SPECIFICATION SECTION 02115. REFER TO THE LAYOUT AND GRADING DRAWINGS FOR LIMIT OF WORK AND STRIPPING.
- CONTRACTOR SHALL MINIMIZE CLEARING OPERATIONS. CLEARING AND GRUBBING SHALL BE IN ACCORDANCE WITH SPECIFICATION SECTION 02110. CLEARING LIMITS SHALL BE AS INDICATED ON THE DRAWINGS, BUT AT ALL TIMES WITHIN EXISTING ROAD RIGHTS OF WAY AND PROPERTY LINES. ALL CLEARING AND GRUBBING MATERIAL SHALL BE THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF AT A SITE PROVIDED BY THE CONTRACTOR IN COMPLIANCE WITH ALL STATE AND LOCAL LAWS.
- CONTRACTOR SHALL PROVIDE PROPER EROSION CONTROL AND DRAINAGE MEASURES IN ALL AREAS OF WORK, AND CONFINE SOIL SEDIMENT TO WITHIN THE LIMITS OF EXCAVATION AND GRADING. PRIOR TO BEGINNING EXCAVATION WORK, EROSION CONTROL FENCE SHALL BE INSTALLED AT THE DOWN GRADIENT PERIMETER OF THE ACTUAL LIMITS OF GRUBBING AND/OR GRADING, AND AS SHOWN ON THE DRAWINGS. PRIOR TO THE START OF ANY WORK THE CONTRACTOR SHALL INSTALL AN TURBIDITY CURTAIN, IN THE WATER, A THE BASE OF ANY DISTURBED SLOPES. EROSION CONTROL MEASURES SHOWN ON THE DRAWINGS ARE A MINIMUM, CONTRACTOR SHALL TAKE ALL OTHER NECESSARY MEASURES. EROSION CONTROL FENCE SHALL ALSO BE INSTALLED AT THE DOWN GRADIENT PERIMETER OF THE TOPSOIL STOCKPILES. ALL DISTURBED EARTH SURFACES SHALL BE STABILIZED IN THE SHORTEST PRACTICAL TIME AND TEMPORARY EROSION CONTROL DEVICES SHALL BE EMPLOYED UNTIL SUCH TIME AS ADEQUATE SOIL STABILIZATION HAS BEEN ACHIEVED. TEMPORARY STORAGE OF EXCAVATED MATERIAL SHALL BE STABILIZED IN A MANNER THAT WILL MINIMIZE EROSION. ALL INSTALLED EROSION CONTROL FACILITIES SHALL BE REMOVED AT THE END OF THE PROJECT. REFER TO SPECIFICATION SECTION 02270.
- BORING LOGS FOR THE PROJECT SITE ARE INCLUDED IN APPENDIX A OF THE SPECIFICATIONS. THESE ARE PROVIDED FOR INFORMATION PURPOSES ONLY. PLEASE NOTE THAT THE SOIL DESCRIPTIONS PROVIDED ON THE BORING LOGS DO NOT REPRESENT FIELD CONDITIONS OTHER THAN AT THE SPECIFIC TEST BORING LOCATION. THE CONDITIONS BETWEEN BORING LOCATIONS MAY VARY FROM THOSE SHOWN ON THE TEST BORING LOGS.
- CONTRACTOR SHALL CONTROL DUST ON THE CONSTRUCTION SITE TO A REASONABLE LIMIT, AS DETERMINED BY THE ENGINEER, AND AS OUTLINED IN
- CONTRACTOR SHALL NOT TRACK OR SPILL EARTH, DEBRIS OR OTHER CONSTRUCTION MATERIAL ON PUBLIC OR PRIVATE STREETS AND PLANT DRIVES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE IMMEDIATE ASSOCIATED CLEAN UP.
- THE CONTRACTOR SHALL NOT HAVE ANY RIGHT OF PROPERTY IN ANY MATERIALS TAKEN FROM ANY EXCAVATION. SUITABLE EXCAVATED MATERIAL MAY BE INCORPORATED IN THE PROJECT, WITH EXCESS MATERIAL DISPOSED OF AT A LOCATION PROVIDED BY THE CONTRACTOR. THESE PROVISIONS SHALL IN NO WAY RELIEVE THE CONTRACTOR OF OBLIGATIONS TO PROPERLY DISPOSE OF AND REPLACE ANY MATERIAL DETERMINED BY THE ENGINEER TO BE UNSUITABLE FOR BACKFILLING. THE CONTRACTOR SHALL DISPOSE OF UNSUITABLE AND EXCESS MATERIAL IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE CONTRACT DOCUMENTS.
- CONTRACTOR SHALL REMOVE AND REPLACE, OR REPAIR, ALL CURBS, SIDEWALKS, PAVEMENT AND OTHER ITEMS DAMAGED BY CONSTRUCTION ACTIVITIES TO AT

LEAST THEIR ORIGINAL CONDITION, TO THE SATISFACTION OF THE CITY OF EAST PROVIDENCE AND ENGINEER.

- 9. WHERE EXISTING PAVEMENT IS REMOVED AND REPLACED, MATCH EXISTING GRADES TO THE EXTENT POSSIBLE. COORDINATE FINE GRADING WITH THE ENGINEER
- 10. ALL NON-ROADWAY AREAS THAT ARE EXCAVATED, FILLED, OR OTHERWISE DISTURBED BY THE CONTRACTOR SHALL BE LOAMED, GRADED, LIMED, FERTILIZED SEEDED AND MULCHED, UNLESS OTHERWISE NOTED. THE TOP 4-INCHES OF SOIL SHALL BE LOAM. REFER TO SPECIFICATION SECTION 02485, LANDSCAPING/LOAM. AND SEED.

#### CIVIL SITE LAYOUT

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THIS PROVIDED LAYOUT INFORMATION THROUGHOUT THE COURSE OF CONSTRUCTION. REPORT ANY LAYOUT DISCREPANCIES IMMEDIATELY TO THE ENGINEER.
- 2. REFER TO CIVIL PLAN SHEETS FOR ADDITIONAL LAYOUT INFORMATION.
- 3. THE LOCATIONS AND LIMITS OF ALL ON-SITE WORK AND STORAGE AREAS SHALL BE REVIEWED/COORDINATED WITH, AND ACCEPTABLE TO, THE CITY OF EAST PROVIDENCE AND ENGINEER. THE CONTRACTOR SHALL LIMIT ACTIVITIES TO THESE AREAS.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RE-ESTABLISHING AND RESETTING ALL EXISTING PROPERTY MONUMENTATION DISTURBED BY CONSTRUCTION. THIS WORK SHALL BE DONE BY A LAND SURVEYOR REGISTERED IN THE STATE OR RHODE ISLAND AT NO ADDITIONAL COST TO THE CITY OF EAST PROVIDENCE.
- 5. WRITTEN DIMENSIONS SHALL PREVAIL. DO NOT SCALE DISTANCES FROM THE DRAWINGS. REPORT ANY DISCREPANCIES IMMEDIATELY TO THE ENGINEER.
- 6. ALL ELEVATIONS REFER TO THE NAVD88 DATUM. ORIENTATION IS GRID NORTH ON THE RHODE ISLAND STATE PLANE COORDINATE SYSTEM. CONTRACTOR SHALL VERIFY ELEVATIONS PRIOR TO USING IN CONSTRUCTION.
- 7. EXISTING CONDITIONS SITE PLAN DEVELOPED FROM SURVEY PERFORMED BY WATERMAN ENGINEERING COMPANY, DATED 09/18/2018, AND EXISTING RECORD DRAWING INFORMATION. ELEVATIONS AND LOCATIONS ARE APPROXIMATE AND SHALL BE CONFIRMED IN THE FIELD

#### CIVIL SITE PIPING

- 1. ALL BURIED CONNECTIONS TO STRUCTURES SHALL HAVE SLEEVE TYPE FLEXIBLE CONNECTIONS APPROXIMATELY 4-FEET FROM THE STRUCTURES. ALL SLEEVE TYPE COUPLINGS ON PRESSURE LINES SHALL BE RESTRAINED (SOLID SLEEVE). REFER TO SPECIFICATION SECTION 02655.
- 2. MANHOLES ARE 4-FEET IN DIAMETER UNLESS OTHERWISE NOTED. THE TOP OF MANHOLE FRAMES SHALL BE SET FLUSH WITH FINISH GRADE, UNLESS OTHERWISE NOTED ON DRAWINGS. SEWER MANHOLE INVERTS SHOWN ON THE DRAWINGS ARE TO THE INSIDE FACE OF THE MANHOLE.
- 3. CONTRACTOR SHALL RE-SHAPE INVERTS AS REQUIRED WHEN CONNECTING INTO EXISTING MANHOLES
- REFER TO SPECIFICATION SECTION 02200 FOR PIPE AND STRUCTURE BEDDING AND BACKFILL REQUIREMENTS.
- 5. COMPACTION TESTS WILL BE PERFORMED IN ACCORDANCE WITH SPECIFICATION SECTION 02200. ANY SETTLEMENT OCCURRING WITHIN ONE-YEAR OF FINAL COMPLETION OF THE WORK SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST.
- 6. ALL EXISTING UTILITIES ENCOUNTERED DURING CONSTRUCTION ARE TO REMAIN IN SERVICE UNLESS OTHERWISE NOTED ON THE CIVIL EXISTING CONDITIONS AND DEMOLITION PLAN. ANY EXISTING UTILITIES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CITY OF EAST PROVIDENCE
- 7. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND DISPOSAL OF ALL DEMOLITION MATERIALS IN ACCORDANCE WITH SPECIFICATION SECTION 02050.

DATUM MHHW MHW	2.37 2.12		DHQ	0.25	Τ	
NAVD 88 MLW	0.00 -0.22		DTL	-0.05	GT	4.84
MLW	-2.29 -2.47		DLQ	0.18		

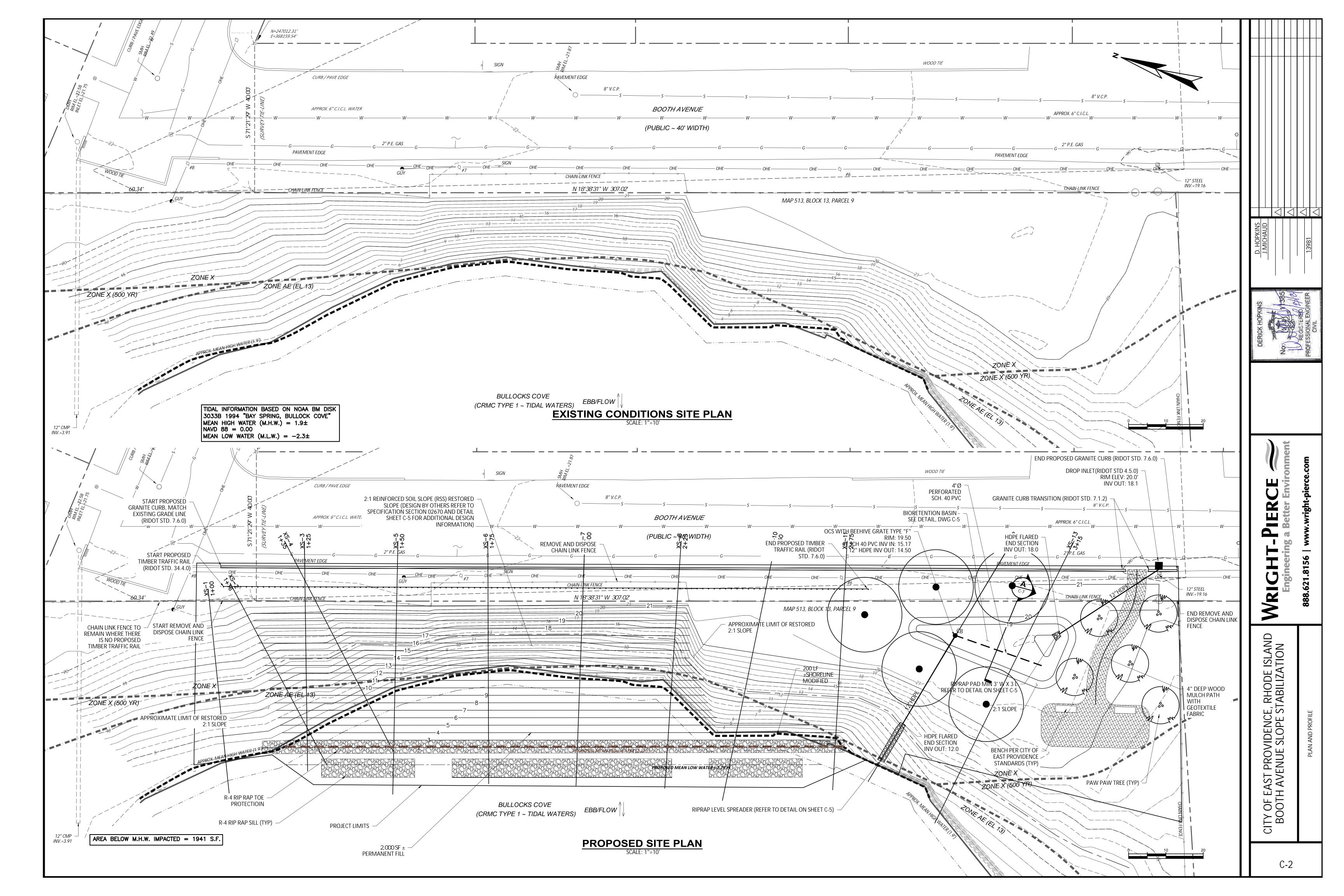
DATUMS FOR 8454000, PROVIDENCE, RI. ALL ELEVATIONS RELATIVE TO NAVD 88

**LEGEND CIVIL ABBREVIATIONS PROPOSED EXISTING** AND PROPERTY/ROW LINE DIAMETER Ø, DIA SETBACK LINE #, NO NUMBER **EASEMENT LINE** \_\_\_ · \_\_ · \_\_\_ APPROVED CENTERLINE **APPROX APPROXIMATE** BRICK EDGE OF PAVEMENT \_\_\_\_\_\_ BLDG BUILDING CURBING CB **CATCH BASIN** EDGE OF GRAVEL CEN CENTER CFS **CUBIC FEET PER SECOND EDGE OF CONCRETE** CAST IRON CONTOUR CENTERLINE BUILDING CORRUGATED METAL PIPE CO CLEANOUT STONEWALL  $\infty$ CONC CONCRETE TREELINE  $\bigcirc$  $\sim\sim\sim$ COR CORNER CHAIN LINK FENCE CY **CUBIC YARD** DEMO DEMOLITION STOCKADE FENCE \_\_\_\_ DMH DRAIN MANHOLE BARB WIRE FENCE \_\_\_\_X DUCTILE IRON RETAINING WALL DRAIN DRAWING **GUARDRAIL ELEVATION** SEWER FMH **ELECTRIC MANHOLE** 4"FM SEWER FORCE MAIN FΜ **FORCE MAIN** GAS FEET 8"W GAS WATER HDPE HIGH DENSITY POLYETHYLENE 15"SD STORM DRAIN HYDRANT RELINED PIPE INCH INVERT CULVERT **POUNDS** LINEAR FOOT -----OHE-------OVERHEAD ELECTRIC MAXIMUM MH MANHOLE MINIMUM —— CATV —— CAT NORTH IRON PIPE/REBAR NATIONAL GEODETIC VERTICAL DATUM N/A NOT AVAILABLE/APPLICABLE DRILLHOLE NTS NOT TO SCALE MONUMENT **OUTSIDE DIAMETER** SURVEY CONTROL POINT PSF POUNDS PER SQUARE FOOT 134.5 PSI POUNDS PER SQUARE INCH SPOT ELEVATION POINT OF TANGENCY SMH SEWER MANHOLE PVC POLYVINYL CHLORIDE DMH DRAINAGE MANHOLE RCP REINFORCED CONCRETE PIPE REQ'D REQUIRED CATCH BASIN ●CB ■CB REINFORCED SOIL SLOPE **ELECTRIC MANHOLE** SLOPE, SEWER I TELEPHONE MANHOLE STORM DRAIN SHUTOFF VALVE M **SQUARE FEET** SANITARY SEWER MANHOLE WATER SERVICE SHUTOFF **SQUARE** YARD HYDRANT STA STATION HYDRANT TEMPORARY BENCH MARK TOP OF STRUCTURE GAS SERVICE SHUTOFF TYPICAL GAS GATE VALVE UNDERDRAIN UTILITY POLE UNDERGROUND UNDERGROUND ELECTRIC UTILITY POLE W/ GUY VITRIFIED CLAY UTILITY POLE W/ LIGHT LIGHT POLE POTABLE WATER BOLLARD FLAGPOLE CONIFEROUS TREE DECIDUOUS TREE SHRUB WETLAND FLAG EDGE OF WATER STREAM \_...\_.. EDGE OF WETLANDS -----FLOODPLAIN WETLANDS DRAINAGE FLOW DRAINAGE SWALE \_\_\_\_\_ PAVEMENT MARKINGS SIGN MAILBOX TEMPORARY BENCH MARK TEST PIT TEST BORING TEST PROBE MONITORING WELL LIMIT OF WORK SILT FENCE \_\_\_ x \_\_\_ x \_\_\_ RIPRAP RAILROAD MATCHLINE ROCK OUTCROP

> TIDAL INFORMATION BASED ON NOAA BM DISK 3033B 1994 "BAY SPRING, BULLOCK COVE" MEAN HIGH WATER (M.H.W.) = 1.9 ±

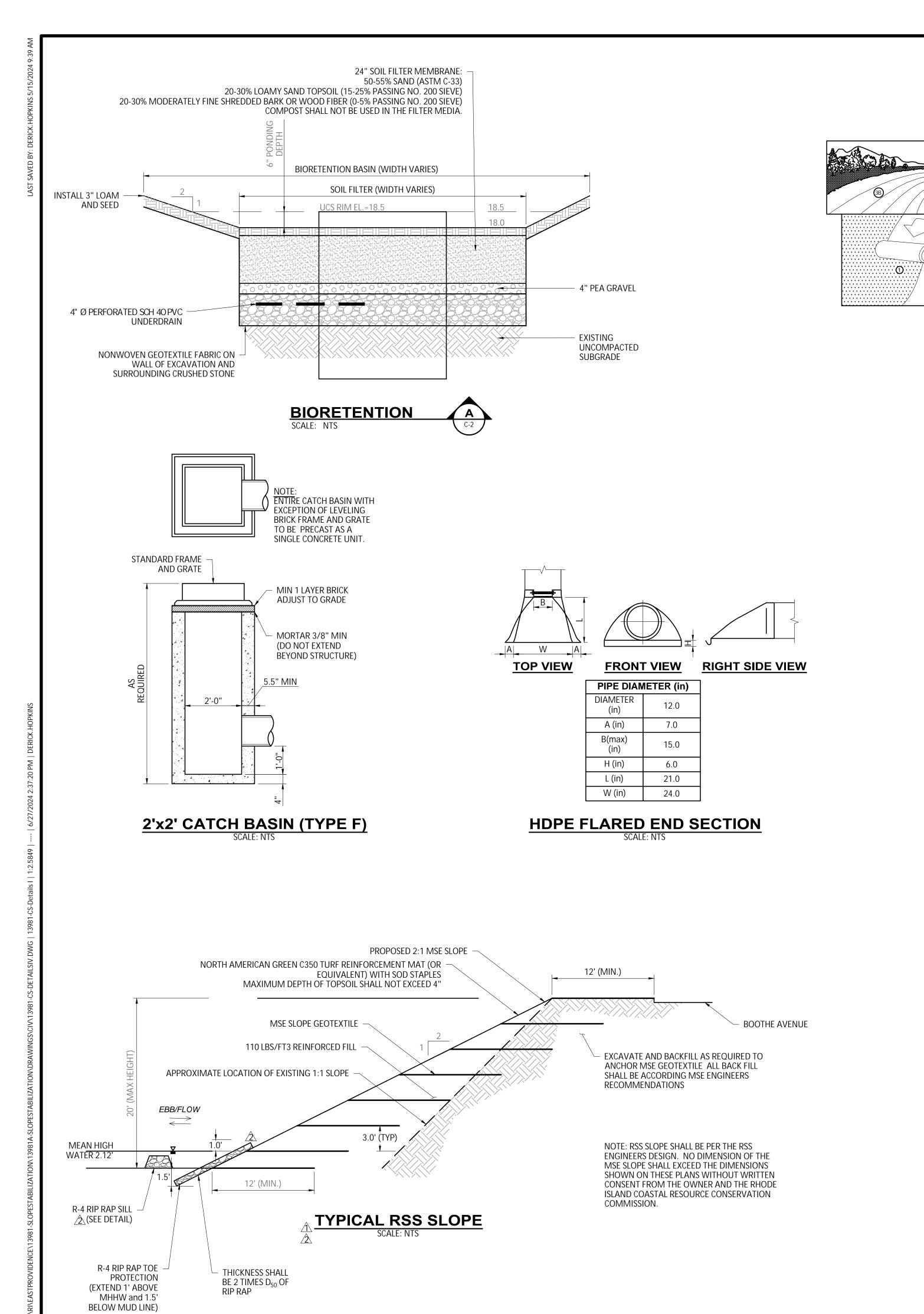
> > NAVD 88 = 0.00MEAN LOW WATER (M.L.W.) =  $-2.3 \pm$

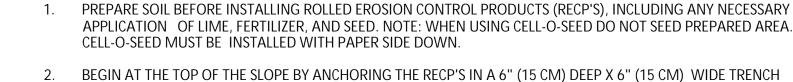
**DRAWING** 



CITY OF EAST PROVIDENCE, RHODE ISLAND BOOTH AVENUE SLOPE STABILIZATION

DRAWING





- WITH APPROXIMATELY 12" (30CM) OF RECP'S EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH.
  ANCHOR THE RECP'S WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF RECP'S BACK OVER SEED AND COMPACTED SOIL. SECURE RECP'S OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) APART ACROSS THE WIDTH OF THE RECP'S.
- 3. ROLL THE RECP'S (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. RECP'S WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP'S MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM<sup>TM</sup>, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
- 4. THE EDGES OF PARALLEL RECP'S MUST BE STAPLED WITH APPROXIMATELY 2" 5" (5 CM 12.5 CM) OVERLAP DEPENDING ON RECP'S TYPE.
- 5. CONSECUTIVE RECP'S SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5 CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30 CM) APART ACROSS ENTIRE RECP'S WIDTH.

NOTE:\*IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY SECURE THE RECP'S.

## **△ 2H:1V TURF REINFORCEMENT INSTALLATION**

3.4 STAPLES PER SQ. YD.

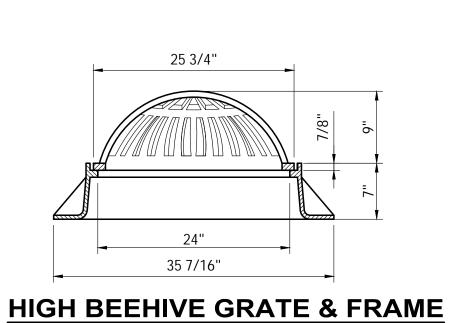
**PLAN VIEW** 

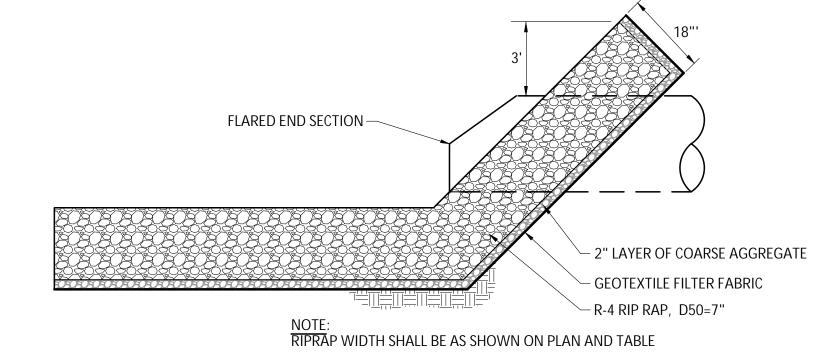
SCALE: NTS

RIPRAP STABILIZATION TABLE

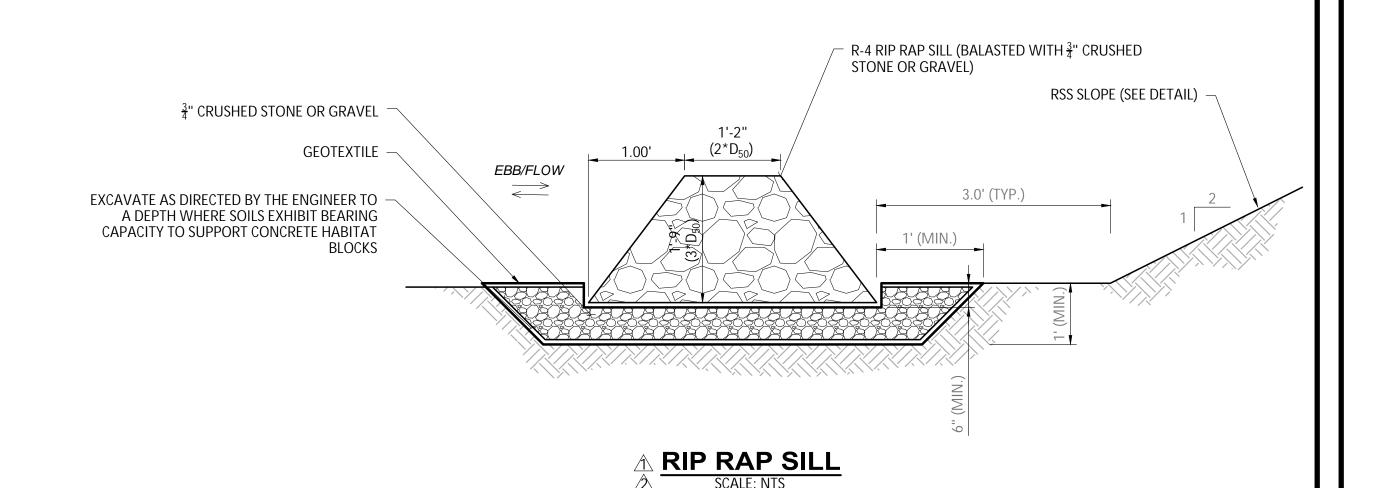
RIPRAP ID LOCATION WIDTH AT PIPE OUTLET (ft) WIDTH AT RIPRAP OUTLET (ft) LENGTH (ft) D50 (in)

1 12 INCH HDPE FLARED END SECTION 5 5 12 7





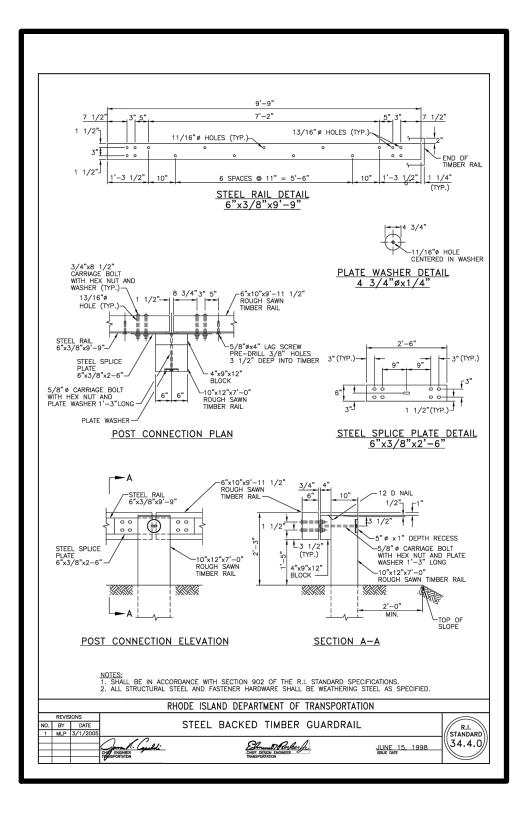
PIPE LEVEL SPREADER OUTLET w/FLARED END
SCALE: NTS

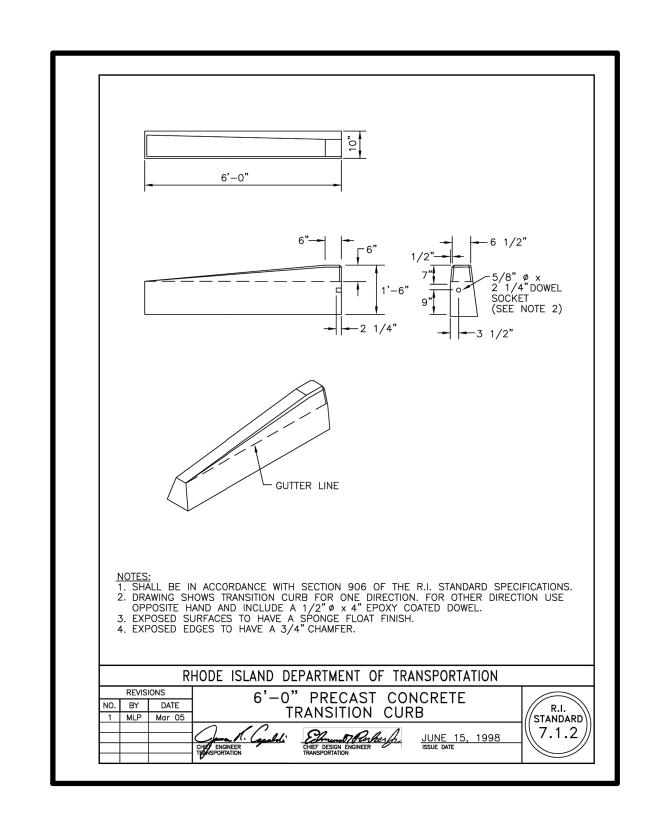


CITY OF EAST PROVIDENCE, RHODE ISLAND BOOTH AVENUE SLOPE STABILIZATION

9

DRAWING





3'-0" MIN.

CIRCULAR CURB

NOTES:

1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.

2. TOP SURFACE TO BE DRESSED BY SAW. REMAINDER MAY BE QUARRY SPLIT.

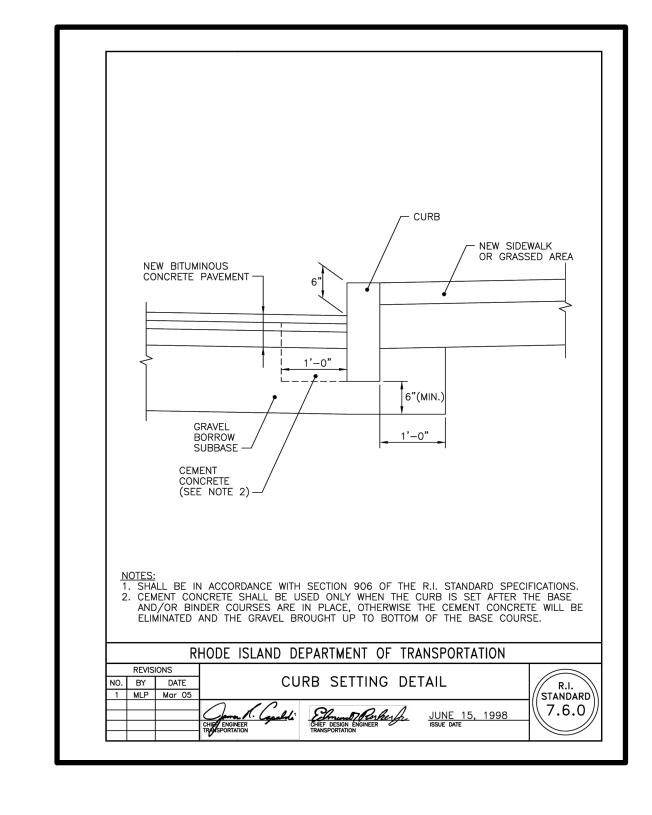
3. MINIMUM LENGTH OF STRAIGHT OR CIRCULAR PIECES TO BE 3'-0".

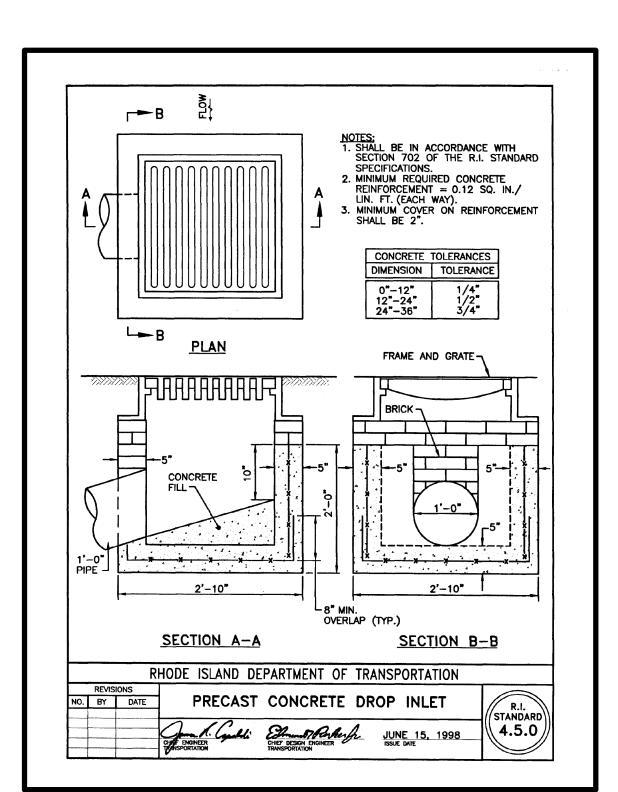
4. CIRCULAR CURB IS REQUIRED ON CURVES WITH RADII OF 160'-0" OR LESS. STRAIGHT CURB TO BE USED ON CURVES OF MORE THAN 160'-0" RADIUS.

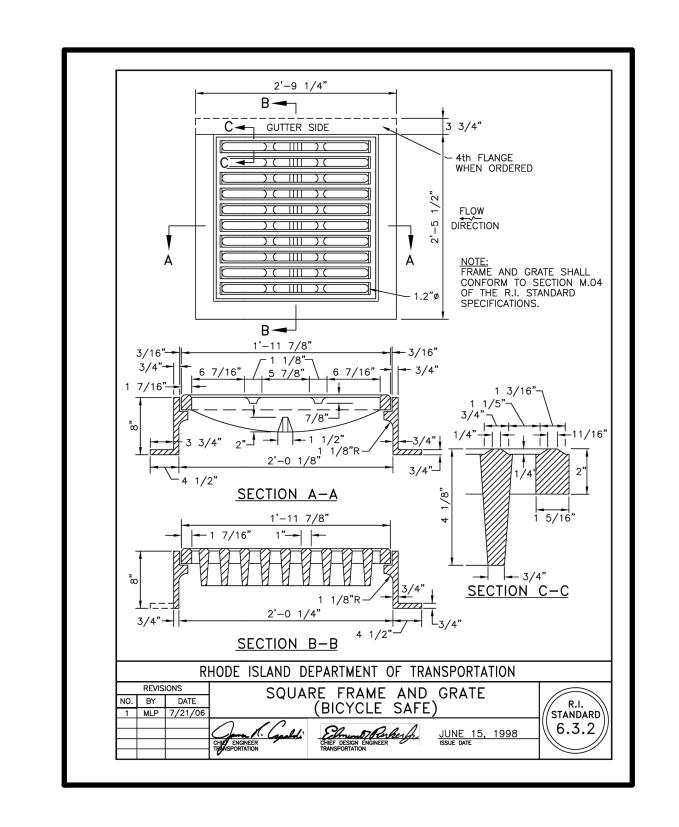
RHODE ISLAND DEPARTMENT OF TRANSPORTATION

GRANITE CURB

└ 6"±1"





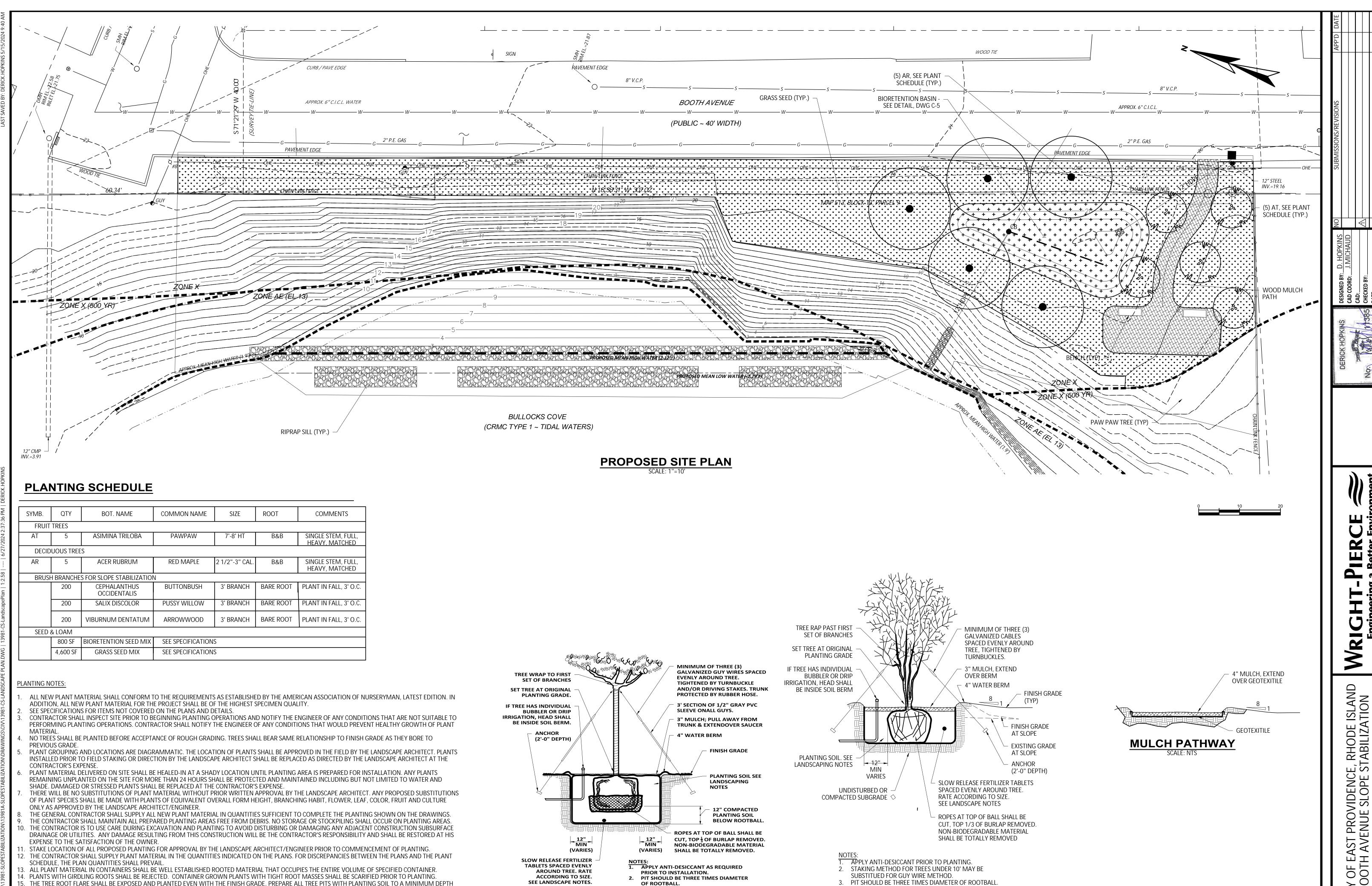






SE, RHODE ISLAND STABILIZATION

**DRAWING** 



TREE INSTALLATION: 10' AND TALLER

TREE INSTALLATION: MULTI-STEM

MATCHING THE DEPTH OF TREE ROOT BALLS.

PACKETS. PAID FOR UNDER PLANTING ITEMS.

16. ALL PLANT BEDS ARE TO RECEIVE THREE INCHES (3") OF SHREDDED BARK MULCH AS SPECIFIED. NO SEPARATE PAY ITEM FOR MULCH OR AND/OR FERTILIZER

18. ALL LAWN AREAS DISTURBED BY CONSTRUCTION OPERATIONS INSIDE AND OUTSIDE THE LIMIT OF WORK SHALL BE LOAMED AND SEEDED AS SPECIFIED. ALL

17. ALL EXISTING TREES TO REMAIN SHALL BE PROPERLY PROTECTED, PRUNED AND FERTILIZED PER THE SPECIFICATIONS.

19. ALL AREAS TO BE SEEDED WITH GRASS SEED MIX SHALL RECEIVE 6" TOPSOIL PRIOR TO SEEDING.

AREAS TO BE SEEDED SHALL RECEIVE SOIL PREPARATION AS SPECIFIED PRIOR TO SEEDING, UNLESS OTHERWISE NOTED ON PLAN.

CILY OF EAST PROBOOTH AVENU

DRAWING

