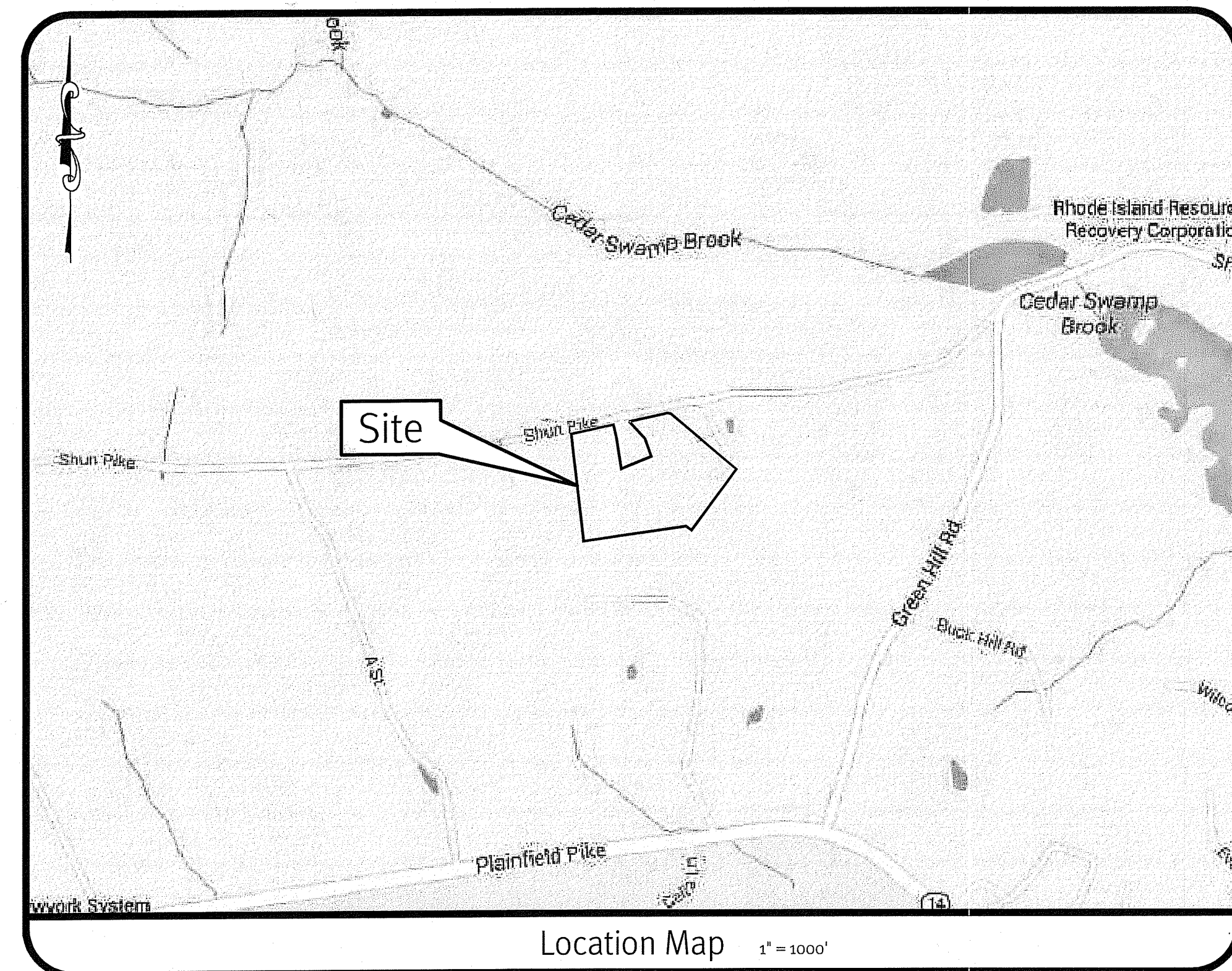


RIDEM Permit Modification

C&D Expansion - 116 Shun Pike

Johnston, Rhode Island

Assessor's Map 32 Lot 17



Sheet Index

1. Cover Sheet
2. Half Mile Aerial & USGS Map
3. Site Layout Plan
4. Grading & Utility Plan
5. Detail Sheet - 1
6. Detail Sheet - 2

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED **MAY 17 2021** FILE # **15-0098**
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Robert D. Wenzel

Environmental Management
 DEC 18 2020
 Office of Water Resources

RIDEM Approval
 The Site has an approved drainage design under RIDEM Application No. 15-0098. Stormwater will maintain the existing flow patterns under the post development condition.

Diprete Engineering

Two Stafford Court, Cranston, RI 02920
 tel 401-943-1000 fax 401-464-6006 www.diprete-eng.com

Boston • Providence • Newport

JASON P. CLOUGH
 No. 021010000
 REGISTERED PROFESSIONAL ENGINEER
 CIVIL

This plan and must not be used for construction purposes unless stamped, issued for construction, and stamped by a registered Professional Engineer of Diprete Engineering.
 Diprete Engineering only warrants plans on a Diprete Engineering stamp. Diprete Engineering does not warrant plans by any other party.
 The contractor is responsible for all of the means, methods, safety precautions and requirements, and OSHA compliance in the implementation of this plan and design.
 Existing utilities shown on this plan are approximate only. Diprete Engineering does not warrant the accuracy of these utilities or the locations of existing utilities. See "Utility Note" on sheet 2.

No.	Date	Description	Design By: J.A.D.
1	12-15-2020	RIDEM Permit Modification	

Cover Sheet
C&D Expansion - 116 Shun Pike
 Assessor's Map 32, Lot 17
 Johnston, Rhode Island

Prepared for:
Shun Properties, LLC
 2208 Plainfield Pike, Johnston, Rhode Island 02919
 tel 401-943-7100

DE Job No. 1579-008-008 Copyright 2020 by Diprete Engineering Associates, Inc.

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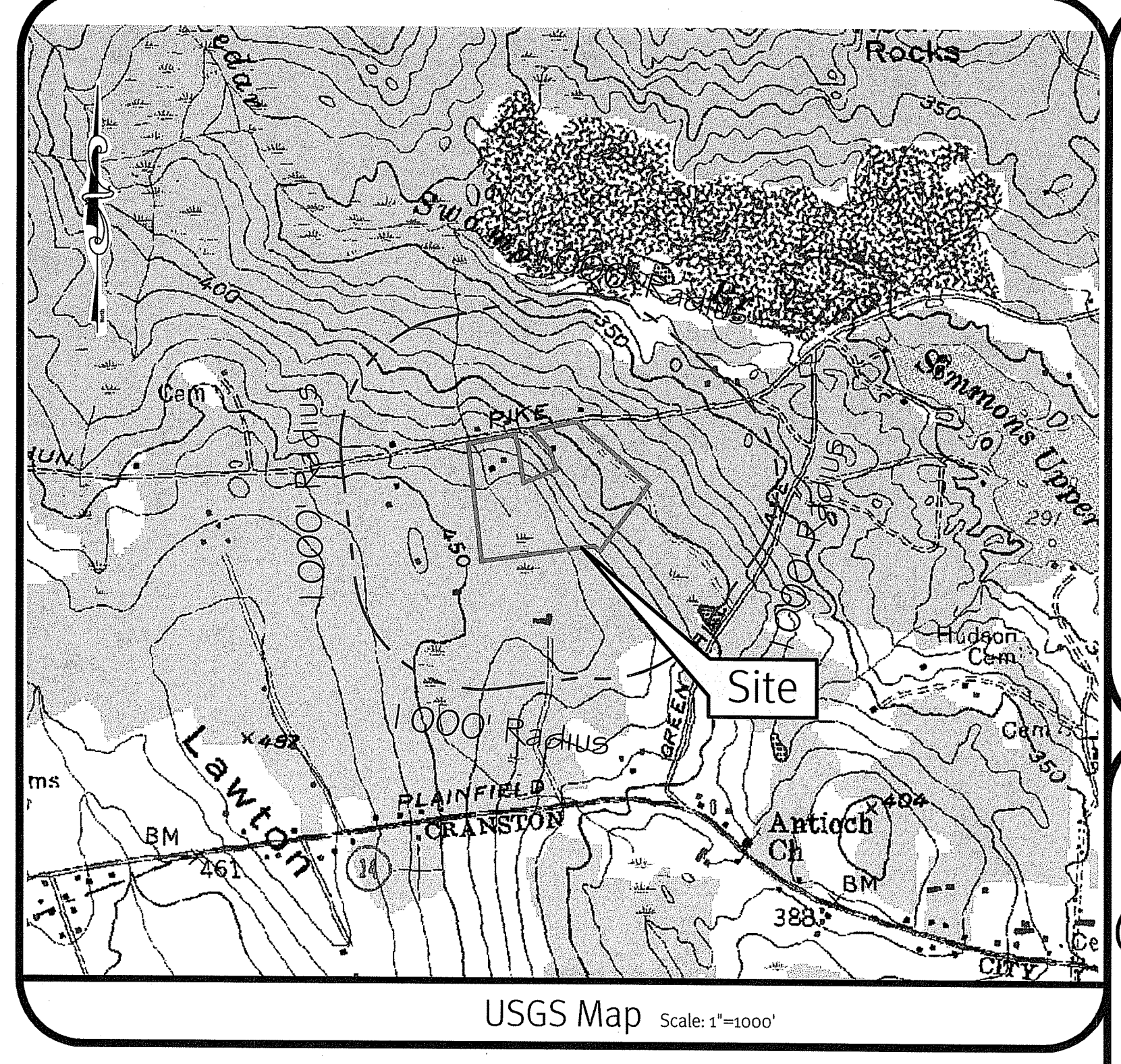
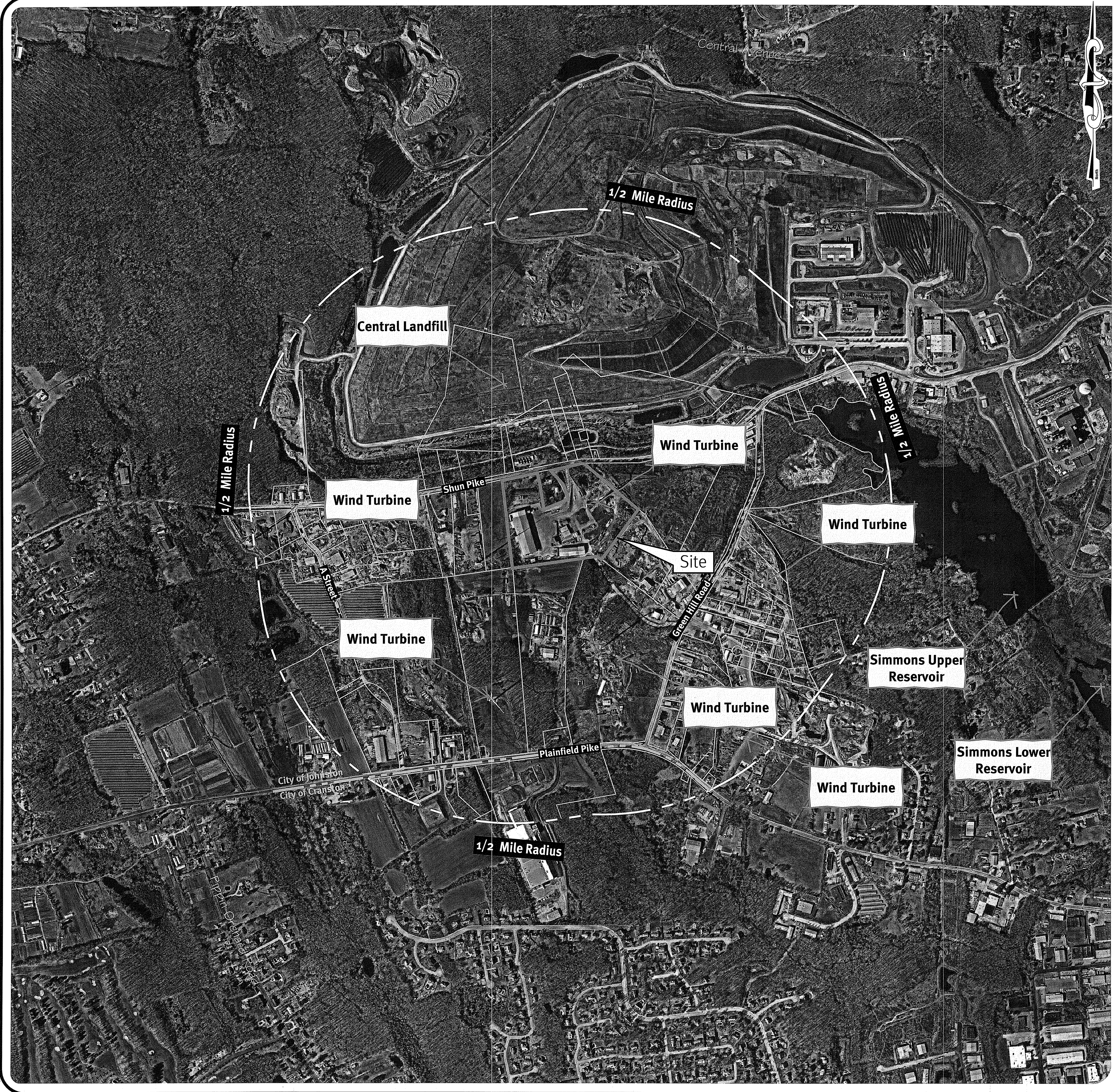


Photo dated 3/21/2020 obtained from Nearmap.com.

Environmental Assessment
DEC 18 2020
Map of Shun Pike

Legend
 ———— PROPERTY LINE
 ———— ASSESSORS LINE

Scale: 1"=500'
 0 250' 500' 1000'

MAY 17 2021
 15-0098
Martin D. Wensck

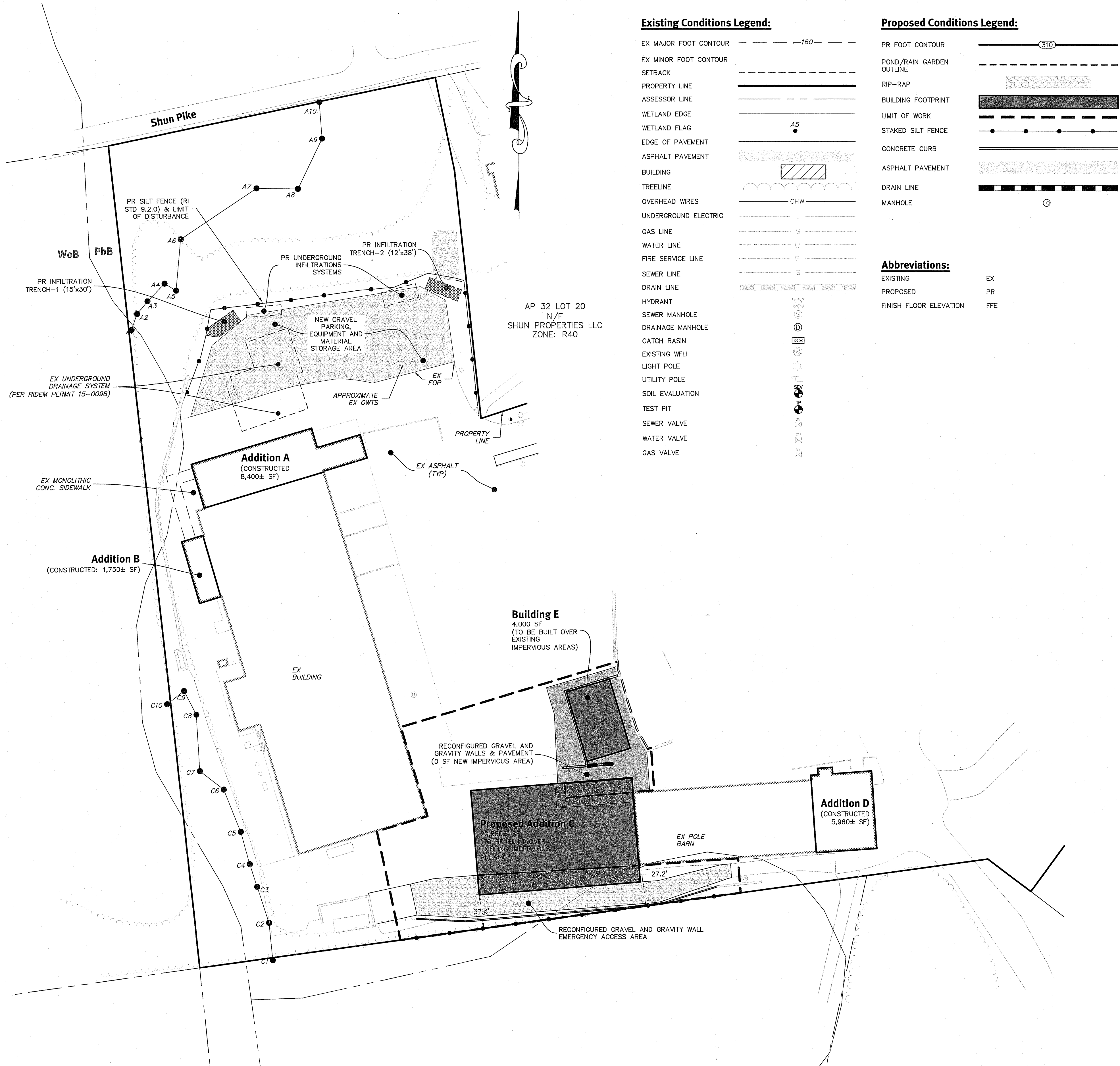
Diprete Engineering
 Two Stafford Court, Cranston, RI 02920
 tel: 401-943-1000 fax: 401-464-6006 www.diprete-eng.com
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JASON P. CLOUGH
 No. 06100
 REGISTERED PROFESSIONAL ENGINEER
 CIVIL

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 The contractor is responsible for all of the means, methods, safety precautions and equipment, and OSHA compliance in the field of work. Diprete Engineering shall not be held responsible for any errors or omissions. See "Utility Note" on sheet 5.

No.	Date	REVISION Description	Drawn By: J.D.	Design By: J.A.D.
1	12-15-2020			

**Half Mile Aerial & USGS Map
 C&D Expansion - 116 Shun Pike**
 Assessor's Map 34-1017
 Johnston, Rhode Island
 Prepared for:
Shun Properties, LLC
 2208 Plainfield Pike, Johnston, Rhode Island 02919
 tel: 401-943-7700
 DE Job No: 1579-003-008 Copyright 2020 by Diprete Engineering Associates, Inc.



Existing Conditions Legend:

- EX MAJOR FOOT CONTOUR ——— 160 ———
- EX MINOR FOOT CONTOUR ——— 160 ———
- SETBACK ———
- PROPERTY LINE ———
- ASSESSOR LINE ———
- WETLAND EDGE ———
- WETLAND FLAG ———
- EDGE OF PAVEMENT ———
- ASPHALT PAVEMENT ———
- BUILDING ———
- TREELINE ———
- OVERHEAD WIRES ———
- UNDERGROUND ELECTRIC ———
- GAS LINE ———
- WATER LINE ———
- FIRE SERVICE LINE ———
- SEWER LINE ———
- DRAIN LINE ———
- HYDRANT ———
- SEWER MANHOLE ———
- DRAINAGE MANHOLE ———
- CATCH BASIN ———
- EXISTING WELL ———
- LIGHT POLE ———
- UTILITY POLE ———
- SOIL EVALUATION ———
- TEST PIT ———
- SEWER VALVE ———
- WATER VALVE ———
- GAS VALVE ———

Proposed Conditions Legend:

- PR FOOT CONTOUR ——— 310 ———
- POND/RAIN GARDEN OUTLINE ———
- RIP-RAP ———
- BUILDING FOOTPRINT ———
- LIMIT OF WORK ———
- STAKED SILT FENCE ———
- CONCRETE CURB ———
- ASPHALT PAVEMENT ———
- DRAIN LINE ———
- MANHOLE ———

Abbreviations:

- EXISTING EX
- PROPOSED PR
- FINISH FLOOR ELEVATION FFE

General Notes:

1. THE SITE IS LOCATED ON THE TOWN OF JOHNSTON ASSESSOR'S MAP 32 LOT 17.
2. THE SITE IS APPROXIMATELY 23.22± ACRES AND IS ZONED IL.
3. THE OWNER OF AP 32 LOT 17 IS: SHUN PROPERTIES LLC, 2208 PLAINFIELD PIKE, JOHNSTON, RI 02919.
4. THIS SITE IS LOCATED IN FEMA FLOOD ZONE X. REFERENCE FEMA FLOOD INSURANCE RATE MAP 4400702285G MAP REVISED MARCH 2, 2009.
5. THIS PLAN IS SUBSTANTIALLY CORRECT IN ACCORDANCE WITH A CLASS IV STANDARD AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS. THIS PLAN IS NOT TO BE CONSTRUED AS AN ACCURATE BOUNDARY SURVEY AND MAY BE SUBJECT TO SUCH CHANGES AS AN ACCURATE BOUNDARY SURVEY MAY DISCLOSE.
6. SOIL MAPPING OBTAINED FROM SOIL SURVEY OF RHODE ISLAND, PREPARED BY U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE.
7. THE SITE IS NOT WITHIN A: GROUNDWATER PROTECTION AREA (RIDEM), NATURAL HERITAGE AREAS (RIDEM), NARROW RIVER SPECIAL AREA MANAGEMENT PLAN (CRMC), SALT PONDS SPECIAL AREA MANAGEMENT PLAN (CRMC), GROUNDWATER PROTECTION OVERLAY DISTRICT (TOWN).
8. THE FOLLOWING DOCUMENTS ARE CONSIDERED PART OF THE PROJECT PLANS AND THE CONTRACTOR/ OWNER MUST MAINTAIN THESE DOCUMENTS AS PART OF A FULL PLAN SET: OPERATIONS AND MAINTENANCE PLAN (O&M). THE O&M CONTAINS THE: LONG TERM MAINTENANCE, LONG TERM POLLUTION PREVENTION.
9. THIS PLAN SET REFERENCES RIDOT STANDARD DETAILS (DESIGNATED AS RIDOT STD X.X.X.). RIDOT STANDARD DETAILS ARE AVAILABLE FROM RIDOT AND ONLINE AT: WWW.DOT.STATE.RI.US/ENGINEERING/STANDARDS/INDEX.ASP.
10. DETAILED SOIL EROSION AND SEDIMENT CONTROL MEASURES TO BE INCORPORATED AT THE PRELIMINARY DESIGN STAGE AND WILL CONFORM TO RIDEM BEST MANAGEMENT PRACTICES.
11. THE SITE IS SERVICED BY PUBLIC WATER AND PRIVATE OWTs.
12. THE DRAINAGE SYSTEM IS DESIGNED TO MEET THE TOWN OF JOHNSTON SUBDIVISION AND LAND DEVELOPMENT REGULATIONS. THE STORMWATER MANAGEMENT SYSTEM WILL MEET THE RIDEM BEST MANAGEMENT PRACTICES.
13. THE PROJECT IS PROPOSED TO BE BUILT IN 1 PHASE.

Development Data

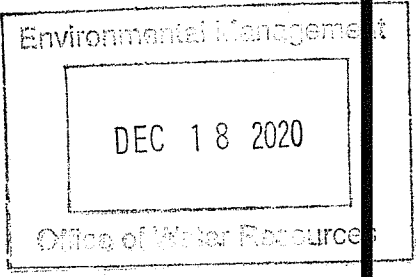
	REQUIRED
CURRENT ZONING:	I
MINIMUM LOT SIZE:	N/A
MINIMUM DISTANCE FROM RESIDENTIAL ZONE:	100'
MINIMUM LOT WIDTH:	N/A
MINIMUM FRONT YARD:	50'
MINIMUM SIDE YARD:	50'
MINIMUM REAR YARD:	50'
MAXIMUM STRUCTURE HEIGHT:	40'
MAXIMUM BUILDING COVERAGE:	40%
TOTAL SITE AREA:	23.22± ACRES
TOTAL NUMBER OF NEW BUILDINGS:	2 (BUILDING C AND E)
TOTAL SQUARE FOOTAGE:	24,880±
PARKING SPACES PROVIDED:	N/A
PAVEMENT WIDTH:	VARIES

*PROPOSED ADDITION D IS LOCATED ON AN EXISTING FOUNDATION PREVIOUSLY APPROVED. THE PREVIOUS STRUCTURE WAS LOST TO A FIRE.

NOTE: ALL BUILDING ADDITIONS ARE PROPOSED TO MATCH THE HEIGHT OF THE CORRESPONDING EXISTING STRUCTURE.

Layout and Materials:

1. DIMENSIONS ARE FROM THE FACE OF CURB, FACE OF BUILDING, FACE OF WALL, AND CENTER LINE OF PAVEMENT MARKINGS, UNLESS OTHERWISE NOTED.
2. CURB RADII ARE 5 FEET UNLESS OTHERWISE NOTED.
3. CURBING SHALL BE MONOLITHIC CONCRETE OR AS LABELED ON THE PLANS.
4. SIDEWALK SHALL BE CONCRETE OR AS LABELED ON THE PLANS.
5. SYMBOLS AND LEGENDS OF PROJECT FEATURES ARE GRAPHIC REPRESENTATIONS AND ARE NOT NECESSARILY SCALED TO THEIR ACTUAL DIMENSIONS OR LOCATIONS ON THE DRAWINGS. THE CONTRACTOR SHALL REFER TO THE DETAIL SHEET DIMENSIONS, MANUFACTURERS' LITERATURE, SHOP DRAWINGS AND FIELD MEASUREMENTS OF SUPPLIED PRODUCTS FOR LAYOUT OF THE PROJECT FEATURES.
6. SEE ARCHITECTURAL DRAWINGS FOR EXACT BUILDING DIMENSIONS AND DETAILS CONTIGUOUS TO THE BUILDING, INCLUDING SIDEWALKS, RAMPS, BUILDING ENTRANCES, STAIRWAYS, UTILITY PENETRATIONS, CONCRETE DOOR PADS, COMPACTOR PAD, LOADING DOCKS, BOLLARDS, ETC.
7. PROPOSED BOUNDS AND ANY EXISTING PROPERTY LINE MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE SET OR RESET BY A PROFESSIONAL LICENSED SURVEYOR.
8. CONTRACTOR SHALL NOT RELY SOLELY ON ELECTRONIC VERSIONS OF PLANS, SPECIFICATIONS, AND DATA FILES THAT ARE OBTAINED FROM THE DESIGNERS, BUT SHALL VERIFY LOCATION OF PROJECT FEATURES IN ACCORDANCE WITH THE PAPER COPIES OF THE PLANS AND SPECIFICATIONS THAT ARE SUPPLIED AS PART OF THE CONTRACT DOCUMENTS.



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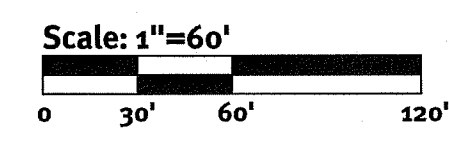
The contractor is responsible for all of the means, methods, safety precautions and requirements, and OSHA compliance in the implementation of this plan and design.

Existing utilities shown on this plan are approximate only. DiPrete Engineering is not responsible for the accuracy of the utility locations of existing utilities. See 'Utility Note' on sheet 5.

No.	Date	Description	Drawn By: J.D.	Design By: J.A.D.
0	12-15-2020	RIDOT Permit Modification		

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED **MAY 17 2021** FILE # **15-0088**
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Martin D. Wensack

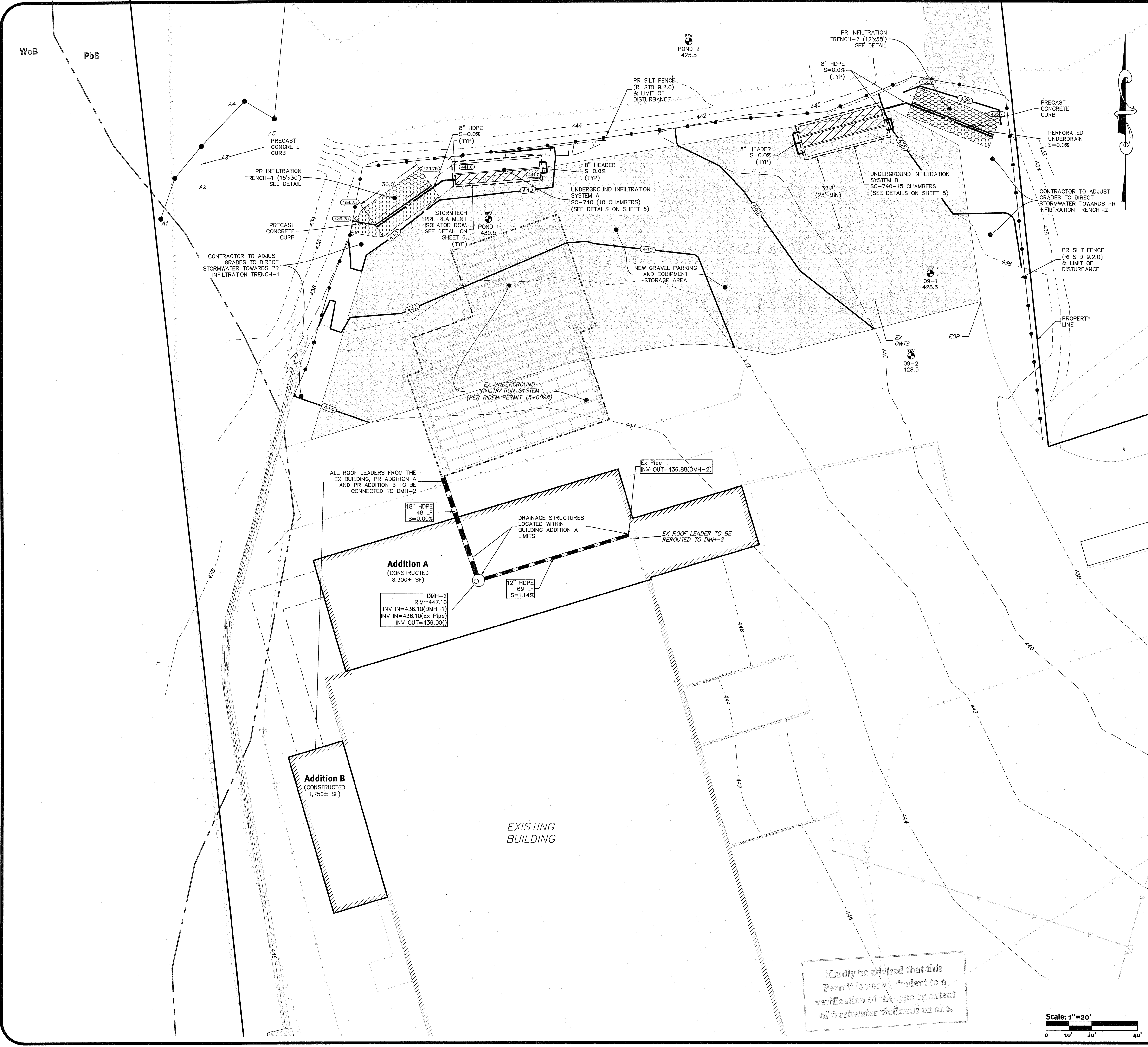
Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.



z:\delmain\projects\1579-003 shun pike.dwg\autocad\drawings\1579-003-dm-en-rst-cdwg.plotted: 12/15/2020

Site Layout
C&D Expansion - 116 Shun Pike
Assessor's Map 32, Lot 17
Johnston, Rhode Island
Shun Properties, LLC
2208 Plainfield Pike, Johnston, Rhode Island 02919
tel: 401-943-7200

z:\deman\project\1579-003 Shun Pike c&d\outcad.dwg Plotter: 12/15/2020



Grading and Utility Notes:

1. THE CONTRACTOR IS RESPONSIBLE FOR ALL SOIL EROSION AND SEDIMENT CONTROL ON SITE. THE CONTRACTOR IS TO NOTIFY THE DESIGN ENGINEER, THE DIRECTOR OF PUBLIC WORKS, THE TOWN ENGINEER, AND RI DEPT. OF ENVIRONMENTAL MANAGEMENT AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION.
2. CONTRACTOR TO OBTAIN ALL FEDERAL, STATE, AND MUNICIPAL APPROVALS PRIOR TO THE START OF CONSTRUCTION.
3. CONSTRUCTION TO COMMENCE WINTER 2020 OR UPON RECEIPT OF ALL NECESSARY APPROVALS.
4. ALL WORK PERFORMED HEREIN SHALL BE GOVERNED BY THE RHODE ISLAND STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION AND TOWN OF JOHNSTON STANDARD SPECIFICATIONS AND DETAILS.
5. SEQUENCE OF CONSTRUCTION PROVIDED MAY BE MODIFIED AS FIELD CONDITIONS WARRANT WITH PRIOR APPROVAL FROM THE OWNER OR OWNER'S REPRESENTATIVE.
6. THE CONTRACTOR SHALL COORDINATE WITH ALL OF THE APPROPRIATE UTILITY COMPANIES FOR AGREEMENTS TO SERVICE THE PROPOSED BUILDING. THIS SHALL BE DONE PRIOR TO CONSTRUCTION. NO REPRESENTATIONS ARE MADE BY DIPRETE ENGINEERING THAT UTILITY SERVICE IS AVAILABLE.
7. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING FINISH GRADING AND DRAINAGE AROUND THE BUILDING TO ENSURE SURFACE WATER AND/OR GROUND WATER ARE DIRECTED AWAY FROM THE STRUCTURE.
8. PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL VERIFY EXISTING PAVEMENT ELEVATIONS AT INTERFACE WITH PROPOSED PAVEMENTS, AND EXISTING GROUND ELEVATIONS ADJACENT TO DRAINAGE OUTLETS TO ASSURE PROPER TRANSITIONS BETWEEN EXISTING AND PROPOSED FACILITIES.
9. ALL PROPOSED UNDERGROUND UTILITIES SERVING THE SITE AND BUILDINGS TO BE COORDINATED WITH APPLICANT, ARCHITECT, AND ENGINEER PRIOR TO INSTALLATION.
10. ALL TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION INCLUDING ALL REVISIONS.
11. ALL RETAINING WALLS AND STEEP SLOPES ARE SHOWN SCHEMATICALLY ONLY AND DIPRETE ENGINEERING IS NOT PROVIDING THE DESIGN OF THESE ITEMS. THE ACTUAL WALLS AND SLOPES ARE TO BE BUILT UNDER THE DIRECTION OF A GEOTECHNICAL ENGINEER AND CERTIFIED TO THE OWNER PRIOR TO THE COMPLETION OF THE PROJECT. SHOP DRAWINGS TO BE SUBMITTED PRIOR TO CONSTRUCTION.
12. ALL CUT AND FILL AREAS ARE TO BE DONE UNDER THE DIRECTION OF A GEOTECHNICAL ENGINEER WITH TESTING AND CERTIFICATION TO BE PROVIDED TO THE APPLICANT AT THE COMPLETION OF THE PROJECT. DIPRETE ENGINEERING ASSOCIATES, INC. IS NOT PROVIDING THE FILL SPECIFICATION, GEOTECHNICAL ENGINEERING, STRUCTURAL ENGINEERING SERVICES, OR SUPERVISION AS PART OF THESE DRAWINGS.
13. NO STOCKPILING OF MATERIAL TO BE LOCATED IN THE RIGHT OF WAY AND NO OPEN TRENCHES ARE TO BE LEFT OVERNIGHT.
14. ALL LOAM IN DISTURBED AREAS TO BE STOCKPILED FOR FUTURE USE.
15. ALL EXCESS SOIL, TREES, ROCKS, BOULDERS, AND OTHER REFUSE, SHALL BE DISCARDED OFF SITE IN AN ACCEPTABLE MANNER AT AN APPROVED LOCATION. STUMPS SHALL BE GROUND ON SITE OR REMOVED.
16. NO STUMP DUMPS ARE PROPOSED ON SITE.
17. ALL EXISTING UTILITIES SHOWN ARE FROM VISIBLE INFORMATION, DRAWINGS FROM OTHERS, OR INFORMATION PROVIDED TO DIPRETE ENGINEERING AND ARE SUBJECT TO CHANGE. THE LOCATIONS OF UNDERGROUND PIPES AND CONDUITS HAVE BEEN DETERMINED FROM AFOREMENTIONED PLANS OF RECORD AND ARE APPROXIMATE ONLY. PRIOR TO CONSTRUCTION, THE PROPER UTILITY ENGINEERING DEPARTMENTS SHALL BE CONTACTED AND THE ACTUAL LOCATION OF SUBSURFACE STRUCTURES SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR. CALL THE DIG SAFE CENTER TOLL FREE AT 1-888-344-7233 IN MA, ME, NH, RI & VT, CALL 1-800-922-4455 IN CT 72 HOURS (48 HOURS IN VT AND CT) PRIOR TO EXCAVATION. NOTIFY DESIGN ENGINEER OF ANY DISCREPANCIES PRIOR TO EXCAVATION. ANY DAMAGE TO UTILITIES WHICH ARE SHOWN ON THE PLANS OR DETAILED BY DIG SAFE SHALL BE THE SITE CONTRACTORS RESPONSIBILITY.
18. IF CONCRETE TRUCKS ARE WASHED OUT ON SITE, ALL WASHOUT MUST BE COMPLETED IN A DESIGNATED CONCRETE WASHOUT AREA.

Traffic Notes:

1. DURING CONSTRUCTION TRAFFIC CONES ARE TO BE USED FOR SEPARATION OF ACTIVE TRAFFIC FROM WORK ZONE.
2. DURING CONSTRUCTION FLAGGERS SHALL BE EMPLOYED TO ENSURE SAFETY FOR INTERACTION OF CONSTRUCTION VEHICLES AND ACTIVE TRAFFIC.
3. ALL SIGNS, FLAGGERS, TRAFFIC CONTROL DEVICES, AND TEMPORARY TRAFFIC ZONE ACTIVITIES SHALL MEET THE REQUIREMENTS OF THE MUTCD LATEST EDITION AND SUBSEQUENT ADDENDA.
4. TEMPORARY CONSTRUCTION SIGNS SHALL BE MOUNTED ON RIDOT APPROVED SUPPORTS AND SHALL BE REMOVED OR COVERED WHEN NOT APPLICABLE.
5. ALL TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES CURRENT EDITION.

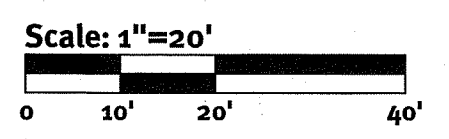
As-Built Notes:

1. IF AS-BUILTS ARE REQUIRED THE ENGINEER WILL NOT ACCEPT FIELD MEASUREMENTS FROM THE SITE CONTRACTOR AND SURVEY AS-BUILT LOCATIONS WILL BE REQUIRED.

UIC Notes:

- PROPOSED UNDERGROUND DRAINAGE SYSTEM MEETS ALL THE FOLLOWING UIC MINIMUM SETBACK REQUIREMENTS:
1. 400 FEET FROM ALL PUBLIC WATER WELLS (SAND & GRAVEL)
 2. 200 FEET FROM ALL PUBLIC WATER WELLS (BEDROCK)
 3. 100 FEET FROM ALL SURFACE DRINKING WATER SUPPLY IMPOUNDMENTS
 4. 100 FEET FROM ALL PRIVATE DRINKING WATER WELLS
 5. 100 FEET FROM ALL OTHER SURFACE WATERS
 6. 25 FEET FROM ALL OWTS & OTHER GROUNDWATER DISCHARGE SYSTEMS
 7. 25 FEET FROM ALL BUILDING FOUNDATIONS IF SYSTEM IS ABOVE SLAB ELEVATION.
 8. 10 FEET FROM ALL PROPERTY LINES
 9. 10 FEET FROM ALL BUILDING FOOTINGS

Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.



Robert D. Ingham
 DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
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 Two Stafford Court Cranston, RI 02900
 Tel: 401-943-1000 Fax: 401-464-6006 www.diprete-eng.com

Boston • Providence • Newport

JASON P. CLOUGH
 No. 09-1010-0000
 REGISTERED PROFESSIONAL ENGINEER
 CIVIL

Environmental Management
 DEC 18 2020
 Office of Water Resources

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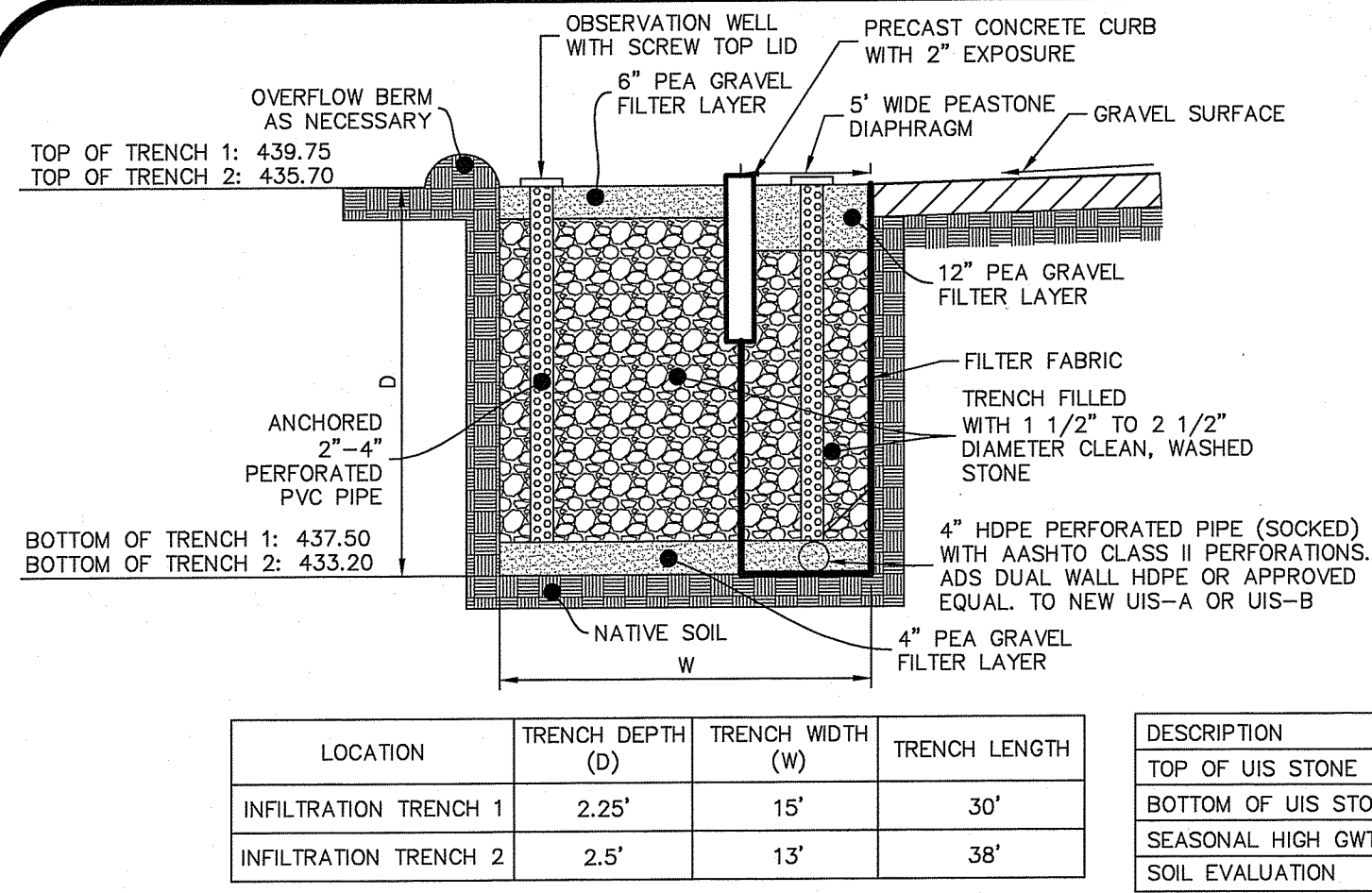
No.	Date	Revised/Permit Modification	Design By: J.A.D.
1	12-15-2020		Drawn By: J.D.

Grading & Utility Plan
C&D Expansion - 116 Shun Pike
 Assessor's Map 34, Lot 17
 Johnston, Rhode Island

Prepared for:
Shun Properties, LLC
 2208 Plainfield Pike, Johnston, Rhode Island 02919
 Tel: 401-943-7200

DE Job No: 1579-003-008 Copyright: 2020 by Diprete Engineering Associates, Inc.

SHEET 4 OF 6



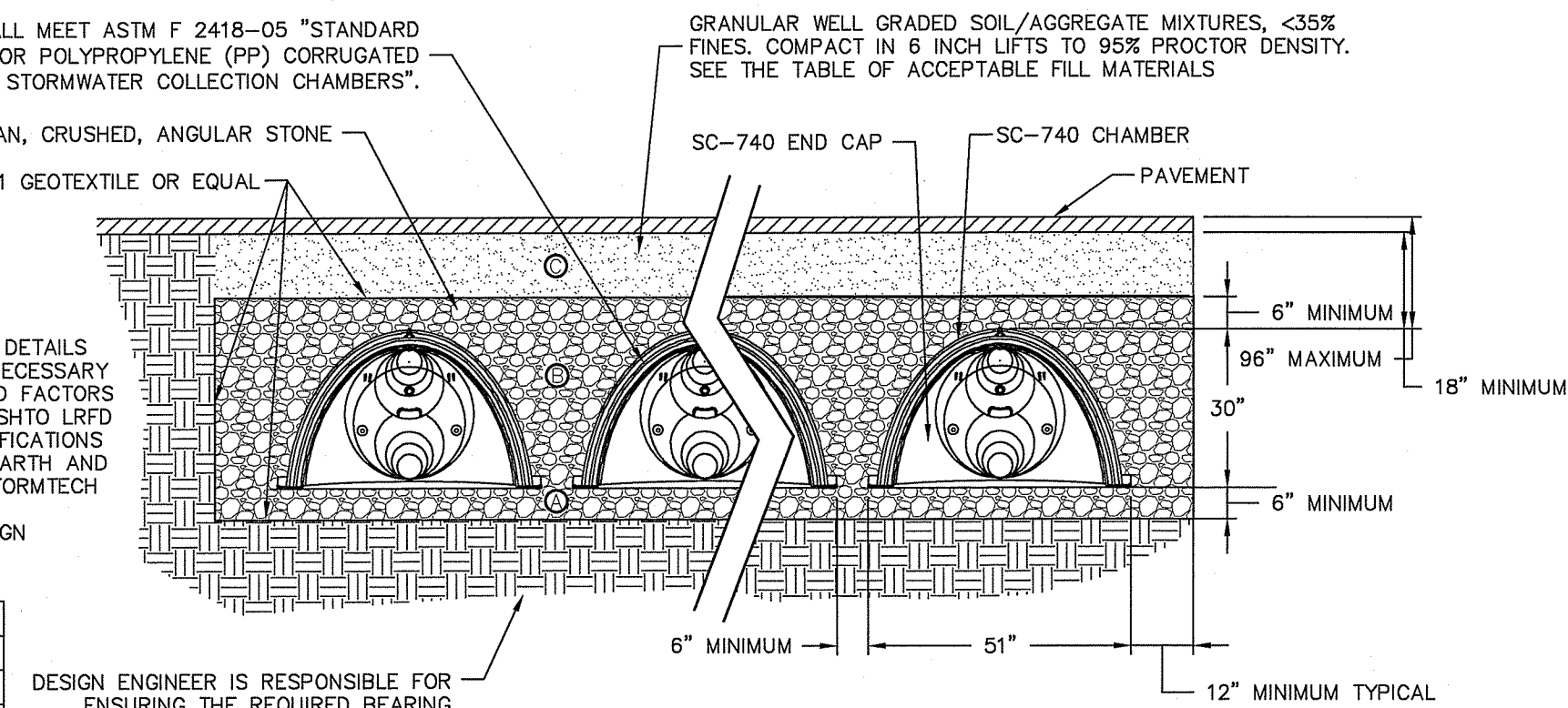
LOCATION	TRENCH DEPTH (D)	TRENCH WIDTH (W)	TRENCH LENGTH
INFILTRATION TRENCH 1	2.25'	15'	30'
INFILTRATION TRENCH 2	2.5'	13'	38'

Stone Infiltration Trench
NOT TO SCALE

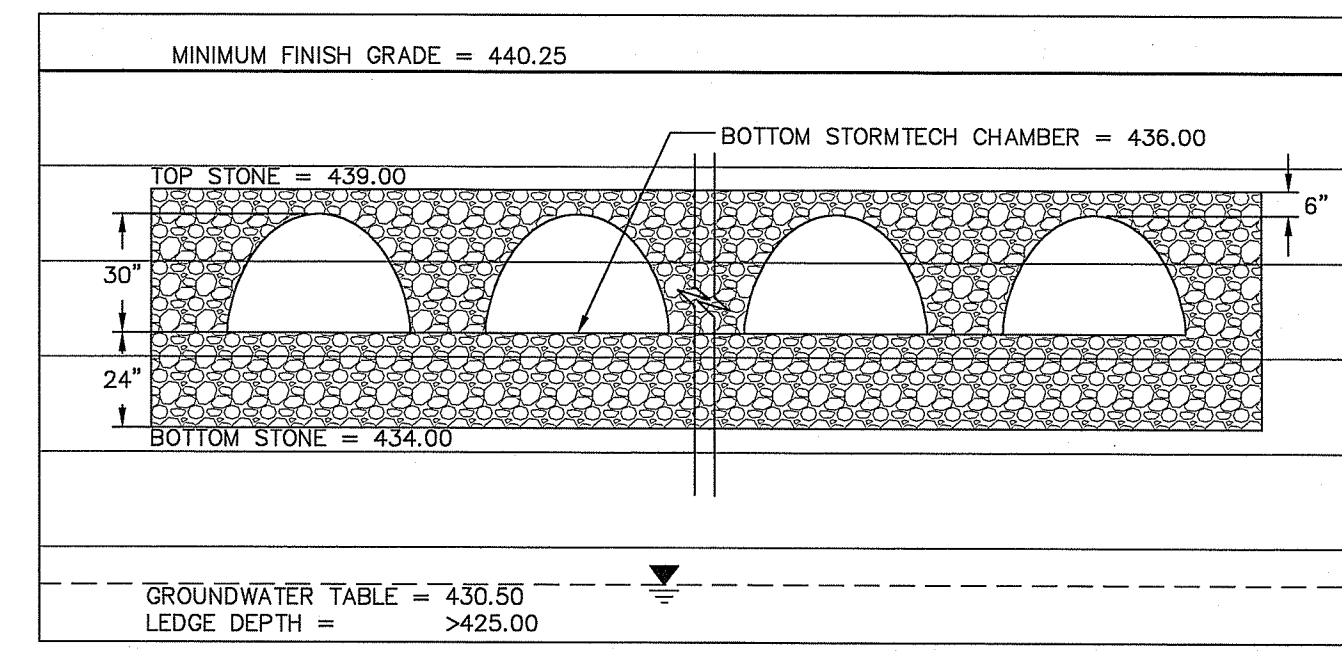
DESCRIPTION	UIS-A	UIS-B
TOP OF UIS STONE ELEVATION	439.50	436.70
BOTTOM OF UIS STONE ELEVATION	436.00	433.2
SEASONAL HIGH GWT ELEVATION	430.5	428.5
SOIL EVALUATION	POND 1	09-1

NOTES:

- THIS CROSS SECTION DETAILS THE REQUIREMENTS NECESSARY TO SATISFY THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12 FOR EARTH AND LIVE LOADS USING STORMTECH CHAMBERS.
- SEE STORMTECH DESIGN MANUAL.



STORMTECH SC-740 TYPICAL CROSS SECTION
NOT TO SCALE



DESCRIPTION	UIS-1
TOP OF STONE	439.00
BOTTOM OF STONE	434.00
100 YEAR STORM ELEVATION	438.10
25 YEAR STORM ELEVATION	436.78
10 YEAR STORM ELEVATION	436.33
1 YEAR STORM ELEVATION	435.16
SEASONAL HIGH GWT ELEVATION	430.50
EXISTING EMERGENCY OVERFLOW	438.50

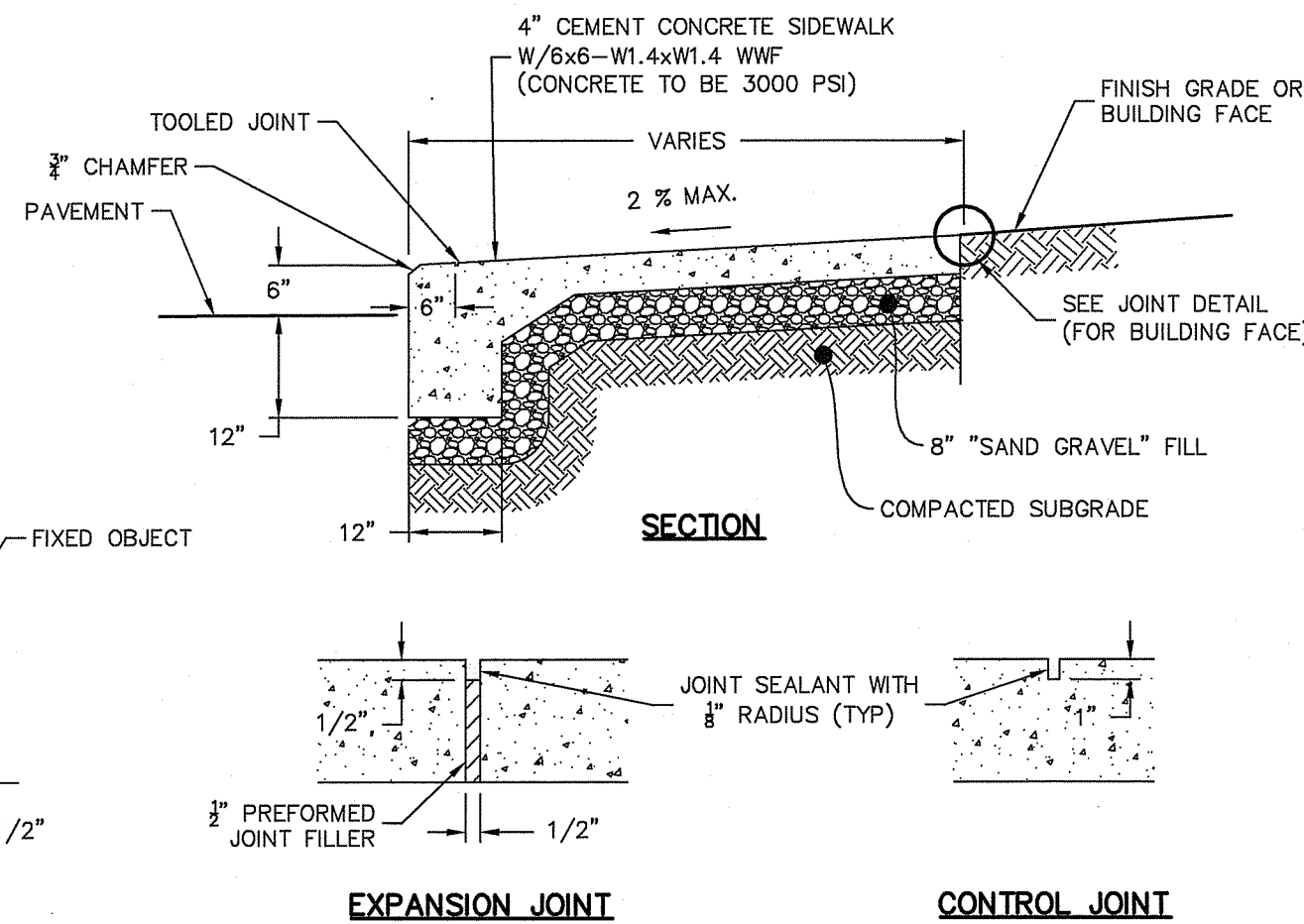
NOTES:

- A PORTION OF THE SYSTEM IS SHOWN. A TOTAL OF 6 ROWS WITH 6 CHAMBERS PER ROW OF STORMTECH CHAMBERS ARE PROPOSED.

PROPOSED STORMTECH SYSTEM CROSS SECTION
NOT TO SCALE

NOTE:

- SEE SITE PLAN FOR SIDEWALK WIDTH AND GRADES.
- SURFACE TEXTURE SHALL BE A LIGHT BROOMING, TRANSVERSE TO THE LENGTH OF THE WALK. CARE SHALL BE TAKEN TO ASSURE A UNIFORM GRADE, FREE OF SAGS AND SHORT GRADE CHANGES.
- ALL IMPROVEMENTS SHALL COMPLY WITH THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG)" BY THE DEPARTMENT OF JUSTICE.
- PROVIDE EXPANSION JOINTS AT MIN. 16 FT. O.C. WITH PREFORMED JOINT FILLER AND SEALANT.
- PROVIDE CONTROL JOINTS AT 5' O.C.
- SHALL BE IN ACCORDANCE WITH THE R.I. STANDARD SPECIFICATIONS.

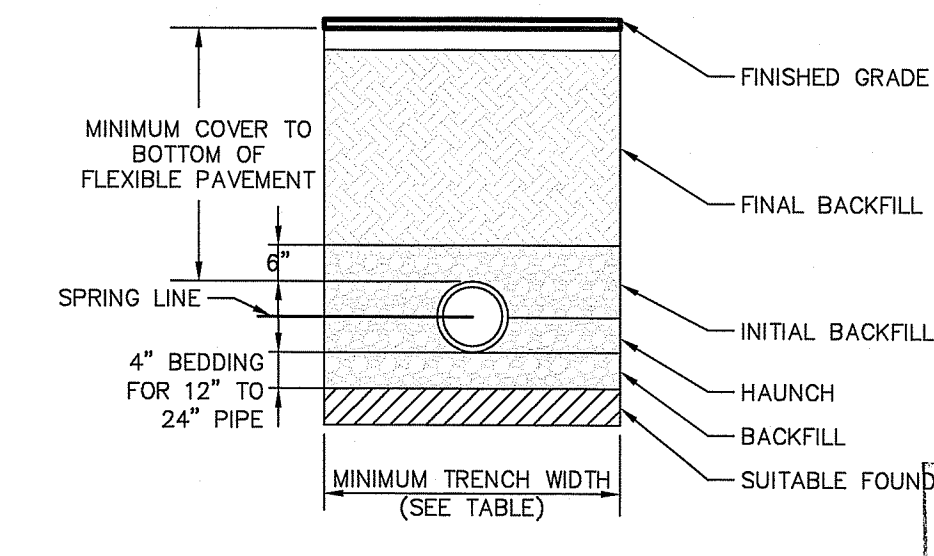


Monolithic Concrete Sidewalk
NOT TO SCALE

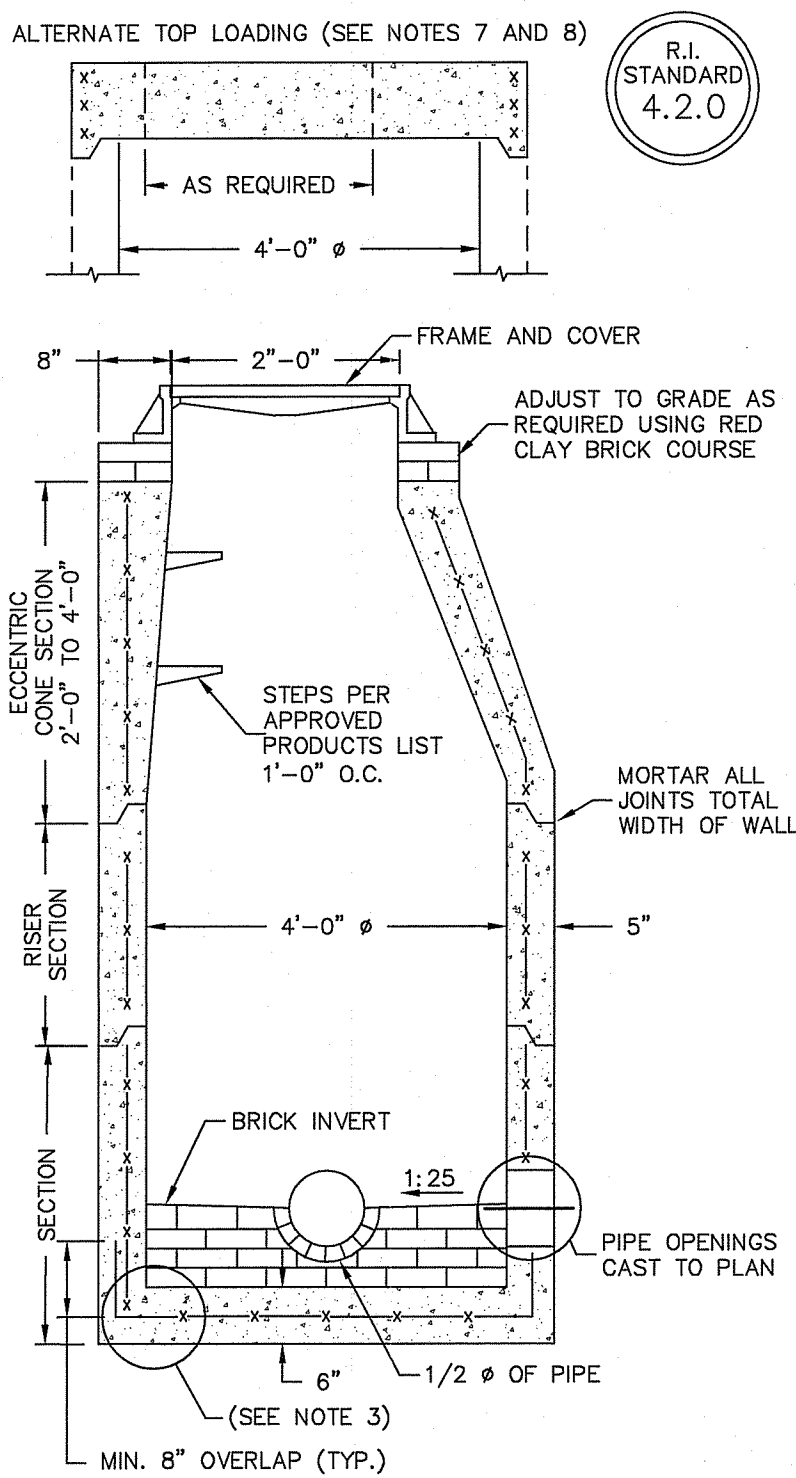
INSTALLATION NOTES:

- ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS, LATEST EDITION.
- MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
- FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
- BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER, UNLESS OTHERWISE NOTED BY THE ENGINEER. MINIMUM BEDDING THICKNESS SHALL BE 4" (100MM) FOR 4"-24" (100MM-600MM); 6" (150MM) FOR 30"-60" (750MM-900MM).
- INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
- MINIMUM COVER: MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOTATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" PIPE AND 24" OF COVER FOR 54"-60" PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.

PIPE Ø	MINIMUM TRENCH WIDTH
6"	23"
8"	26"
12"	30"
15"	34"
24"	39"



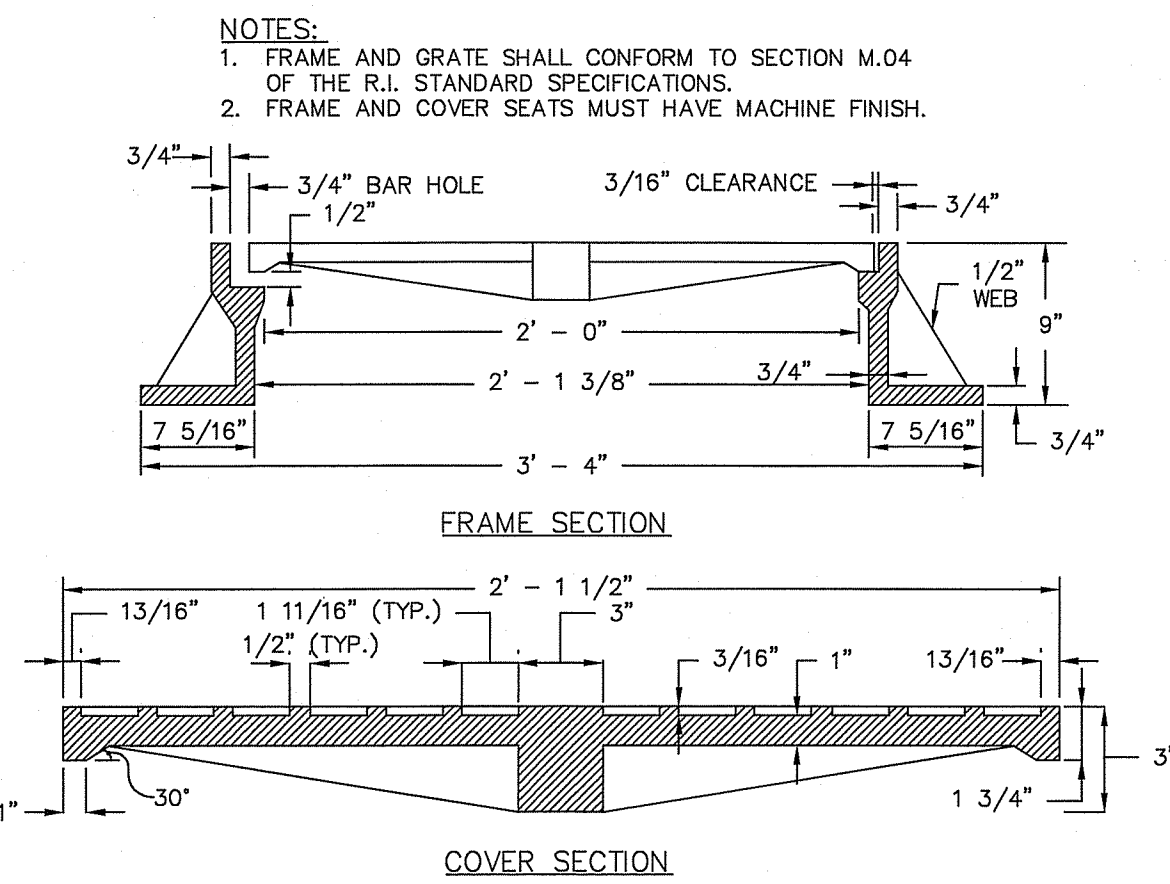
HDPE Trench Detail
NOT TO SCALE



NOTES:

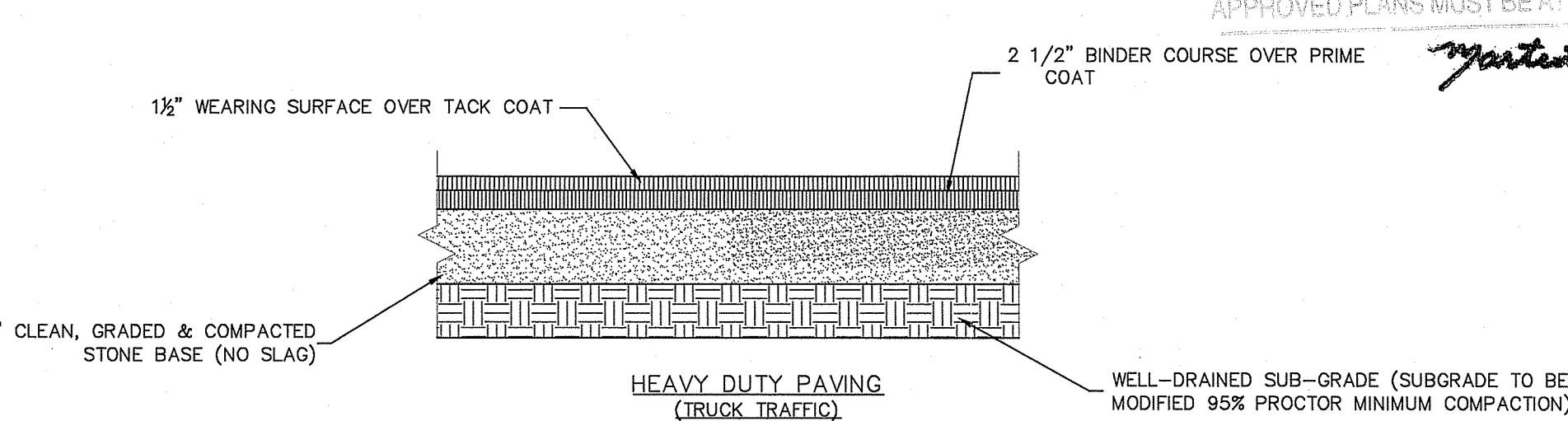
- SHALL BE IN ACCORDANCE WITH SECTION 702 OF THE R.I. STANDARD SPECIFICATIONS.
- CIRCUMFERENTIAL STEEL REINFORCEMENT REQUIRED = 0.12 SQ. IN./LIN. FT. MINIMUM.
- STEEL REINFORCEMENT FOR BASE SECTION BOTTOM SHALL BE A MINIMUM OF 0.12 SQ. IN. / LIN. FT. (BOTH WAYS).
- ONE POUR MONOLITHIC BASE SECTION.
- ANY NECESSARY ADJUSTMENTS DURING CONSTRUCTION WILL BE DONE BY SAW-CUTTING AND/OR CORING ONLY. NO JACKHAMMERS, HAMMERS AND CHISELS OR PNEUMATIC TOOLS WILL BE ALLOWED.
- STEPS SHALL CONFORM TO STD. 5.3.0 AND SHALL BE INSTALLED AT THE CASTING PLAN.
- ALTERNATE TOP SLAB IS STEEL REINFORCED TO MEET OR EXCEED H-25 LOADING (SEE STD. 4.7.2).
- ALTERNATE TOP SLAB IS ONLY FOR USE WHEN REDUCING SECTION DOES NOT FIT BECAUSE OF STRUCTURE DEPTH.
- REFER TO STD. 5.2.0 FOR MAXIMUM PIPE SIZES.

PRECAST 4'-0" ROUND MANHOLE
NOT TO SCALE



HEAVY-DUTY ROUND FRAME AND COVER
NOT TO SCALE

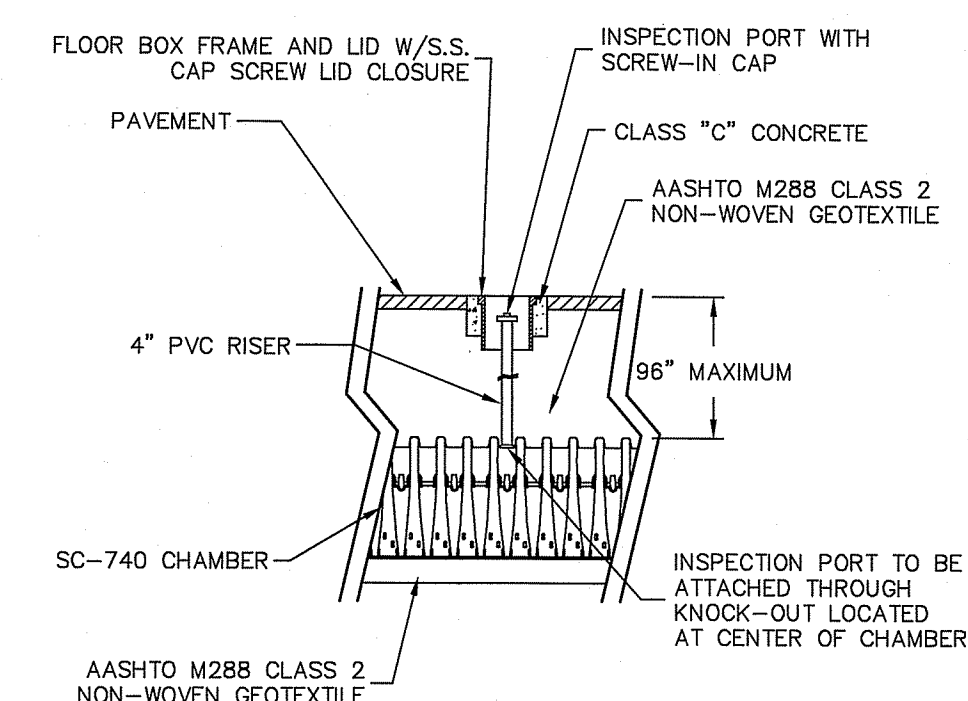
NOTE: THIS PAVEMENT SECTION DETAIL REFLECTS MINIMUM REQUIREMENTS. ENGINEER TO DETERMINE DESIGN BASED ON GEO-TECHNICAL DATA OF SPECIFIC PROJECT AND DAILY TRAFFIC DESIGN REQUIREMENT.



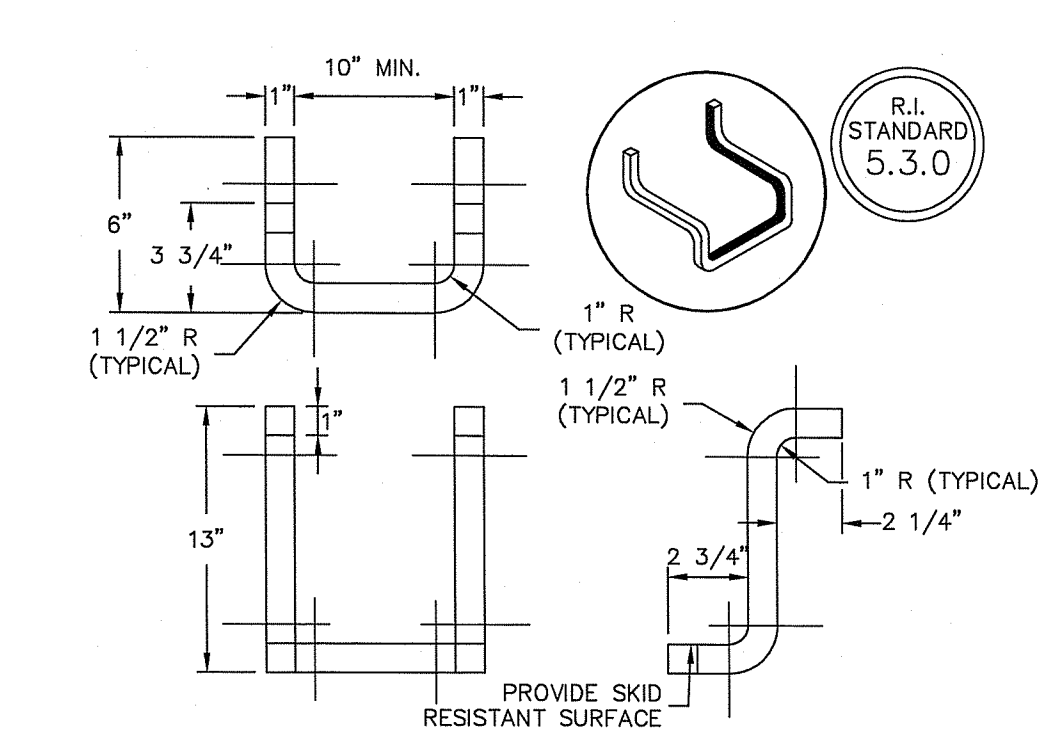
TYPICAL PAVEMENT SECTION
NOT TO SCALE

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED **MAY 17 2021** FILE # **15-0098**
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Martin R. Wenzel



STORMTECH INSPECTION PORT DETAIL
NOT TO SCALE



NOTES:

- STEPS SHALL CONFORM TO SECTION M.04 OF THE R.I. STANDARD SPECIFICATIONS.
- CROSS SECTION AREA MAY BE REDUCED UPON SUBMISSION OF CERTIFIED LOAD TESTS. STEPS MUST SUPPORT 300 LBS.
- STOCK SHOWN IS 1" SQUARE WHICH MAY BE REPLACED BY 1" DIAMETER.

CATCH BASIN AND MANHOLE STEP
NOT TO SCALE

- THE INSTALLED CHAMBER SYSTEM SHALL PROVIDE THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTION 12.12 FOR EARTH AND LIVE LOADS, WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
- ALL DESIGN SPECIFICATIONS FOR STORMTECH CHAMBERS SHALL BE IN ACCORDANCE WITH THE STORMTECH DESIGN MANUAL.
- THE INSTALLATION OF STORMTECH CHAMBERS SHALL BE IN ACCORDANCE WITH THE LATEST STORMTECH INSTALLATION INSTRUCTIONS.
- THE CONTRACTOR IS ADVISED TO REVIEW AND UNDERSTAND THE INSTALLATION INSTRUCTIONS PRIOR TO BEGINNING SYSTEM INSTALLATION. CALL 1-888-892-2694 OR VISIT WWW.STORMTECH.COM TO RECEIVE A COPY OF THE LATEST STORMTECH INSTALLATION INSTRUCTIONS.
- THE ISOLATOR ROW SHALL BE INSPECTED IMMEDIATELY AFTER COMPLETION OF CONSTRUCTION TO CHECK FOR SEDIMENTS AND DEBRIS.
- THE SYSTEM SHOULD BE INSPECTED BI-ANNUALLY FOR SEDIMENTS AND JETVAC MAINTENANCE IS RECOMMENDED IF SEDIMENT IS AT OR ABOVE THE LOWER ROW OF SIDEWALL HOLES (APPROXIMATELY 3") WITHIN THE INSIDE OF THE ISOLATOR ROW.
- IF SEDIMENT IS AT A DEPTH OF 25% OF THE HEADER PIPE VOLUME, VACUUM PUMP SEDIMENT. DO NOT FLUSH SEDIMENT OUT INLET PIPES. REPLACE GRATES AND COVERS, RECORD DEPTH AND DATE. SCHEDULE NEXT INSPECTION.

STORMTECH NOTES

JASON P. CLOUGH
No. [Signature]
REGISTERED PROFESSIONAL ENGINEER
CIVIL

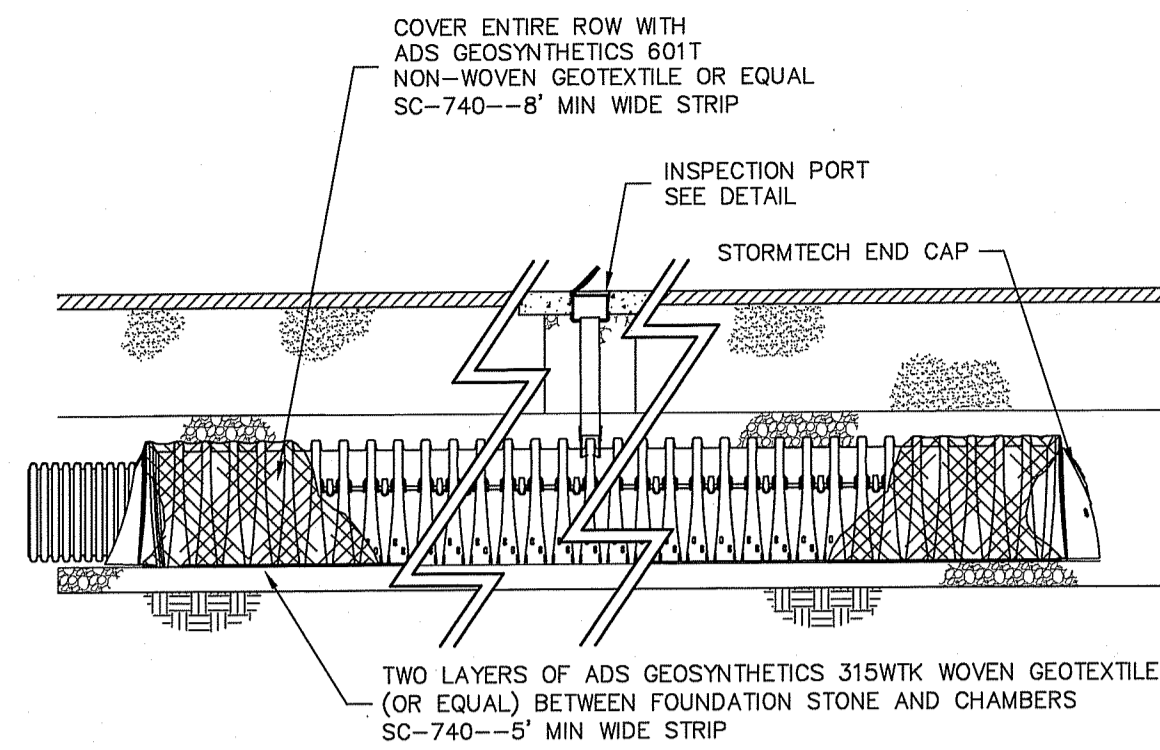
This plan set must not be used for construction purposes unless stamped, issued for construction and stamped by a registered Professional Engineer of Diprete Engineering.
Diprete Engineering only warrants plans on a Diprete Engineering registered Professional Engineer of Diprete Engineering. Diprete Engineering does not warrant plans by any other party.
The contractor is responsible for all of the means, methods, safety precautions and requirements, and OSHA compliance in the implementation of this plan and design.
Existing utilities shown on this plan are approximate only. Diprete Engineering does not warrant the accuracy of these utilities or locations of existing utilities. See Utility Note on sheet 5.

DEC 18 2020

No.	Date	Description	Drawn By:	J.D.
1	12-15-2020	REVISION: Permit Modification	J.D.	J.A.D.

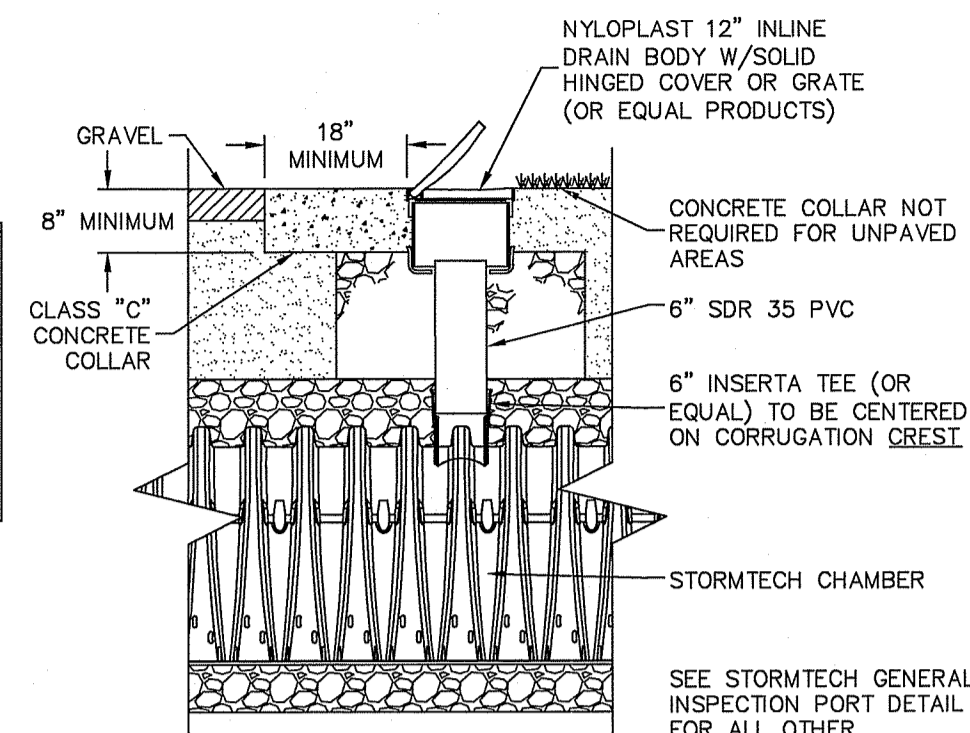
Detail Sheet - 1
C&D Expansion - 116 Shun Pike
Assessor's Map 34, Lot 17
Johnston, Rhode Island
Shun Properties, LLC
2208 Plainfield Pike, Johnston, Rhode Island 02919
Tel: 401-943-7100

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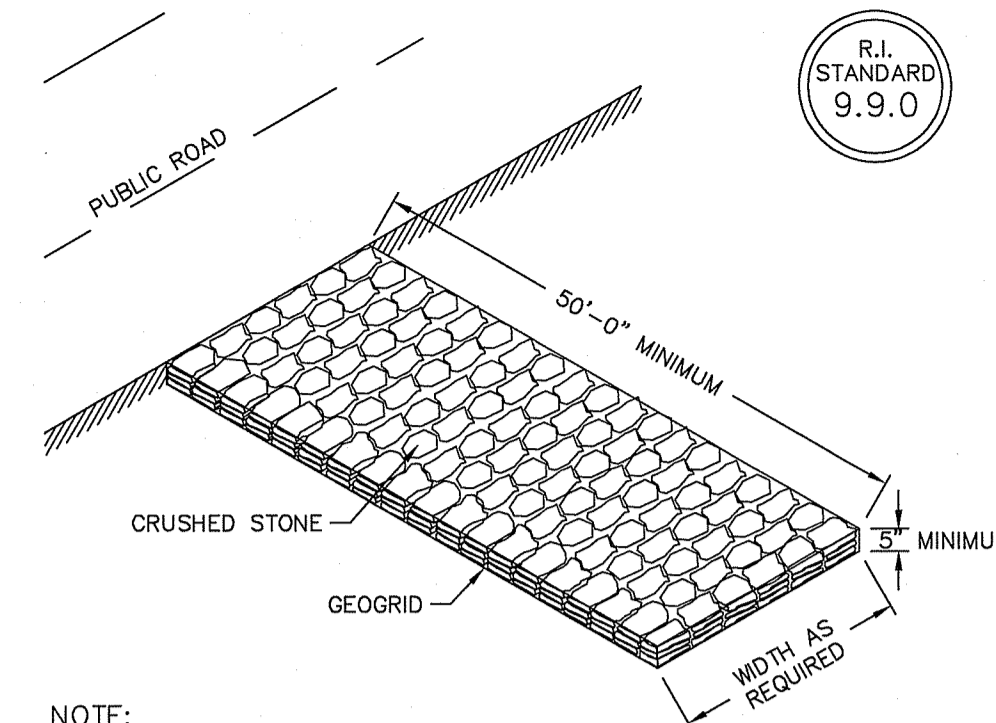
Stormtech Isolator Row Detail (SC-740)

NOT TO SCALE



ISOLATOR ROW INSPECTION PORT

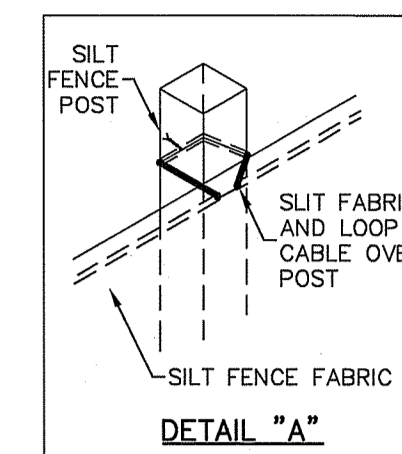
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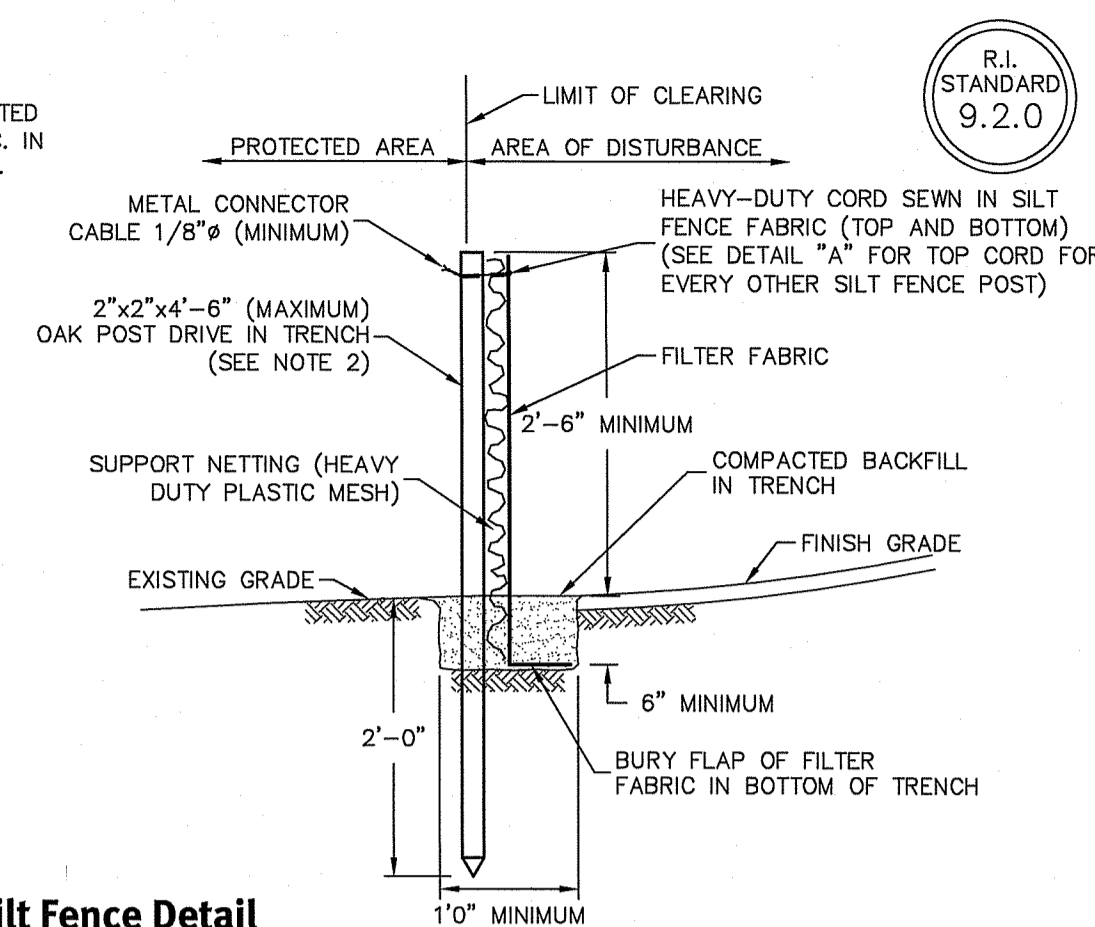
Construction Access

NOT TO SCALE

- NOTES:**
- SHALL BE IN ACCORDANCE WITH SECTION 206 OF THE R.I. STANDARD SPECIFICATIONS.
 - 2"x2"x4'-6" (MAXIMUM) OAK POSTS FOR SILT FENCE SHALL BE LOCATED 8'-0" (MAXIMUM) O.C. IN WETLAND AREAS AND 4'-0" (MAXIMUM) O.C. IN WETLAND RAVINE, GULLY OR DROP-OFF AREAS AS SHOWN ON PLANS.
 - 1"x1"x4'-0" (MINIMUM) POSTS PERMITTED FOR PRE-FABRICATED SILT FENCE.
 - SILT FENCE SHALL BE INSTALLED BEFORE ANY GRUBBING OR EARTH EXCAVATION TAKES PLACE.

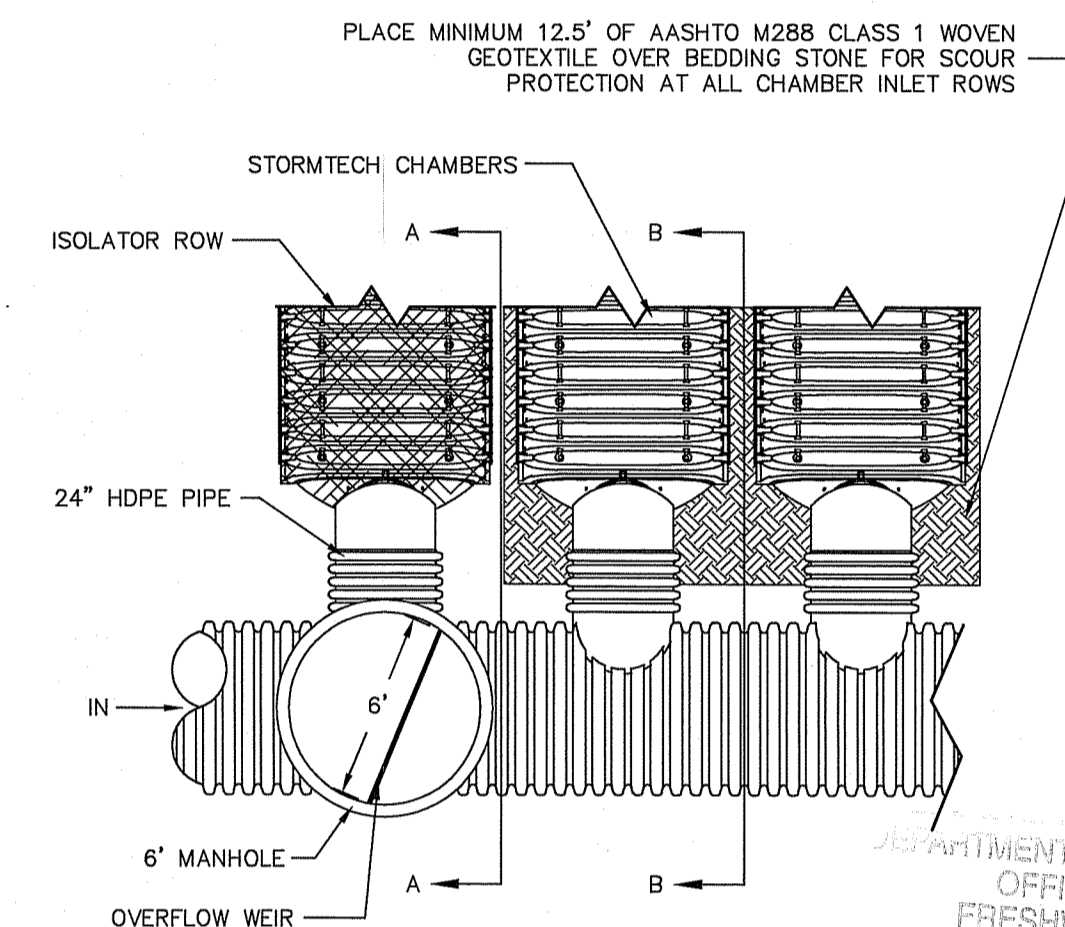


DETAIL "A"



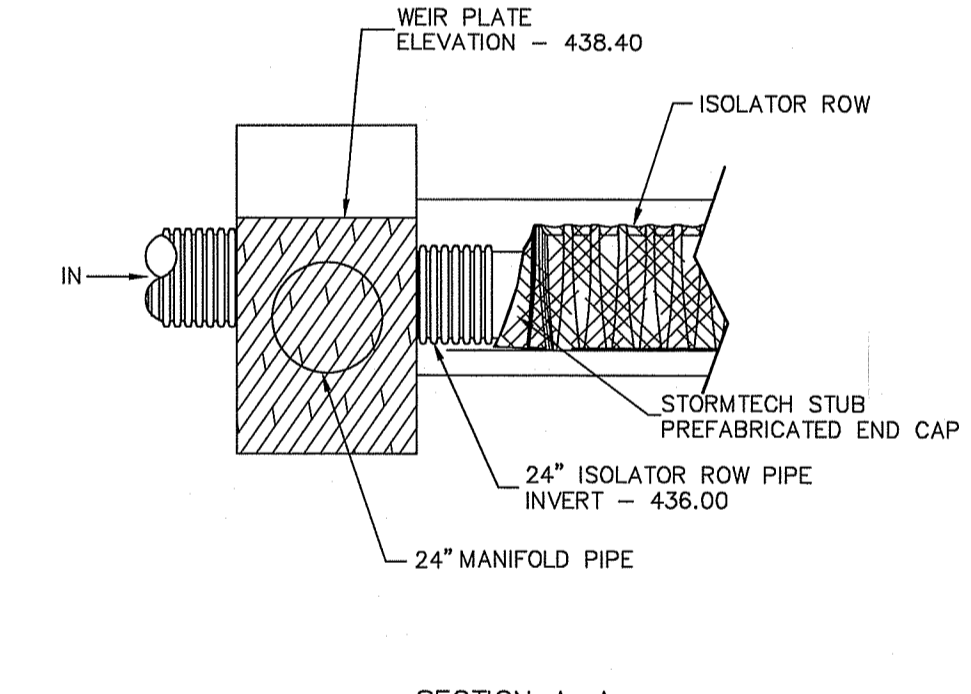
Silt Fence Detail

NOT TO SCALE

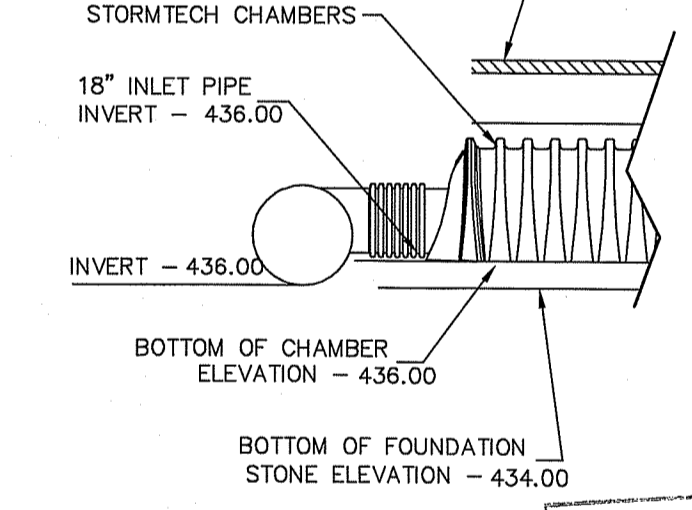


PLACE MINIMUM 12.5' OF AASHTO M288 CLASS 1 WOVEN GEOTEXTILE OVER BEDDING STONE FOR SCOUR PROTECTION AT ALL CHAMBER INLET ROWS

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED MAY 17 2021 FILE # 15-0298
NO CHANGES ALLOWED WITH FINISHED GRADE APPROVAL
APPROVED PLANS MUST BE ELEVATION PRODUCTION SITE



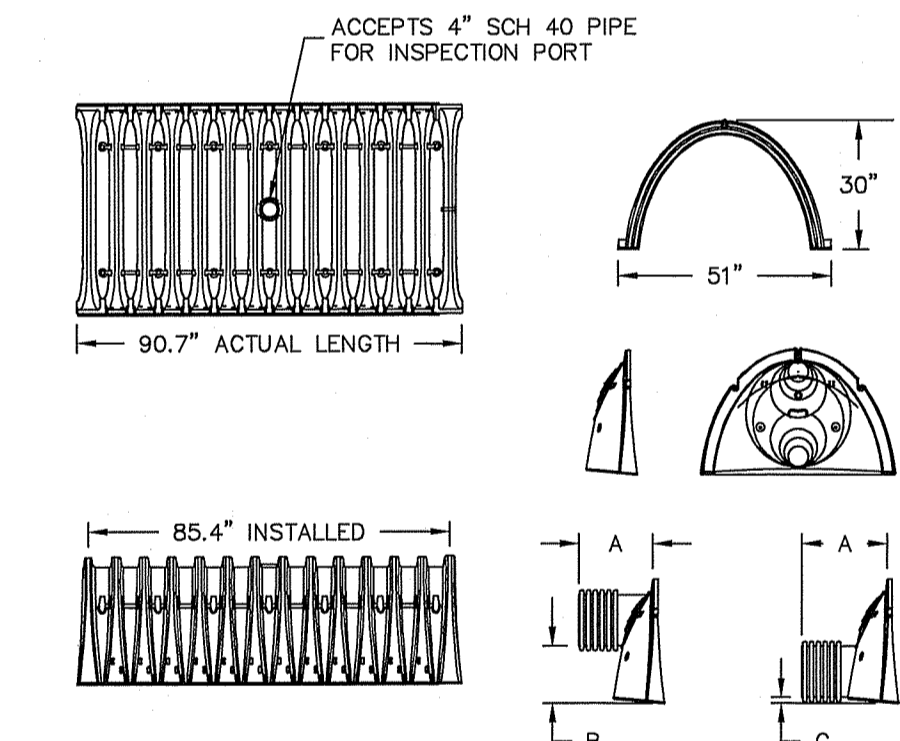
SECTION A-A



SECTION B-B

EXISTING STORMTECH ISOLATOR ROW TO BE RELOCATED

NOT TO SCALE



NOMINAL CHAMBER SPECIFICATIONS:

SIZE (W x H x INSTALLED LENGTH) 51.0"x30.0"x85.4"
CHAMBER STORAGE 45.9 CUBIC FEET
MINIMUM INSTALLED STORAGE 74.9 CUBIC FEET
WEIGHT 75 LBS

PART #	CHAMBER	PIPE SIZE	A	B	C
SC740EPE06T	SC-740	6" (150 mm)	10.9" (277 mm)	18.5" (470 mm)	N/A
SC740EPE08B	SC-740	6" (150 mm)	10.9" (277 mm)	N/A	0.5" (13 mm)
SC740EPE08T	SC-740	8" (200 mm)	12.2" (310 mm)	16.5" (419 mm)	N/A
SC740EPE08B	SC-740	8" (200 mm)	12.2" (310 mm)	N/A	0.6" (15 mm)
SC740EPE10T	SC-740	10" (250 mm)	13.4" (340 mm)	14.5" (368 mm)	N/A
SC740EPE10B	SC-740	10" (250 mm)	13.4" (340 mm)	N/A	0.7" (18 mm)
SC740EPE12T	SC-740	12" (300 mm)	14.7" (373 mm)	12.5" (318 mm)	N/A
SC740EPE12B	SC-740	12" (300 mm)	14.7" (373 mm)	N/A	1.2" (30 mm)
SC740EPE15T	SC-740	15" (375 mm)	18.4" (467 mm)	9.0" (229 mm)	N/A
SC740EPE15B	SC-740	15" (375 mm)	18.4" (467 mm)	N/A	1.3" (33 mm)
SC740EPE18T	SC-740	18" (450 mm)	19.7" (500 mm)	5.0" (127 mm)	N/A
SC740EPE18B	SC-740	18" (450 mm)	19.7" (500 mm)	N/A	1.6" (41 mm)
SC740EPE24B	SC-740	24" (600 mm)	18.5" (470 mm)	N/A	0.1" (3 mm)

- NOTES:**
- ALL DIMENSIONS ARE NOMINAL.
 - STUBS AT TOP OF END CAP FOR PARTS NUMBERS ENDING WITH "T"
 - STUBS AT BOTTOM OF END CAP FOR PARTS NUMBERS ENDING WITH "B"
 - FOR THE SC740EPE24B THE 24" STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 1.75". BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SETS LEVEL.
 - ALL STUBS, EXCEPT FOR THE SC740EPE24B ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

TECHNICAL DETAILS

NOT TO SCALE

MATERIAL LOCATION	DESCRIPTION	AASHTO M43 DESIGNATION	AASHTO M145 DESIGNATION	COMPACTION/DENSITY REQUIREMENT
FILL MATERIAL FROM 18" TO GRADE ABOVE CHAMBERS	ANY SOIL/ROCK MATERIALS, NATIVE SOILS OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	N/A	PREPARE PER ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
FILL MATERIAL FOR 6" TO 18" ELEVATION ABOVE CHAMBERS (24" FOR UNPAVED INSTALLATIONS)	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES.	3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	A-1 A-2 A-3	COMPACT IN 6" LIFTS TO A MINIMUM 95% STANDARD PROCTOR DENSITY. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 LBS. DYNAMIC FORCE NOT TO EXCEED 20,000 LBS.
EMBEDMENT STONE SURROUNDING AND TO A 6" ELEVATION ABOVE CHAMBERS	CLEAN ANGULAR STONE WITH THE MAJORITY OF PARTICLES BETWEEN 3/4" TO 2"	3, 357, 4, 467, 5, 56, 57	N/A	NO COMPACTION REQUIRED
FOUNDATION STONE BELOW CHAMBERS	CLEAN ANGULAR STONE WITH THE MAJORITY OF PARTICLES BETWEEN 3/4" TO 2"	3, 357, 4, 467, 5, 56, 57	N/A	PLATE COMPACT OR ROLL TO ACHIEVE A 95% STANDARD PROCTOR DENSITY

NOTE: THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN CRUSHED ANGULAR. FOR EXAMPLE, THE STONE MUST BE SPECIFIED AS CLEAN, CRUSHED, ANGULAR NO. 4 STONE.

ACCEPTABLE FILL MATERIALS FOR STORMTECH SC-740 CHAMBER SYSTEMS

NOT TO SCALE

JASON P. CLOUGH
No. 1110
REGISTERED PROFESSIONAL ENGINEER
CIVIL

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DESIGN BY: J.A.D.
DATE: 12-15-2020
REVISION: 01
DATE: 12-15-2020
DESCRIPTION: Design By: J.A.D.

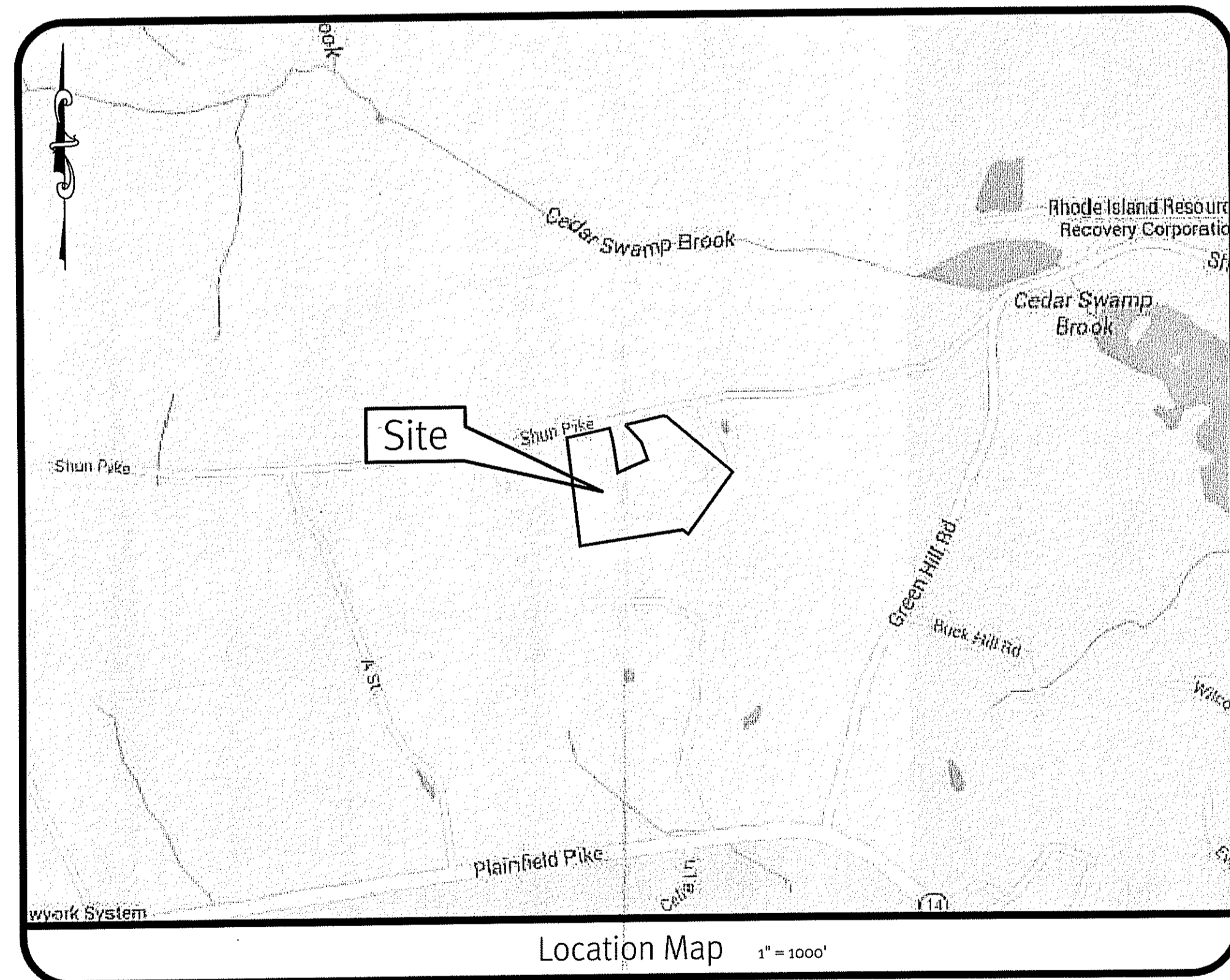
Detail Sheet - 2
C&D Expansion - 116 Shun Pike
Assessor's Map 34-Lot 17
Johnston, Rhode Island
Shun Properties, LLC
2208 Plainfield Pike, Johnston, Rhode Island 02919
tel 401-943-7200

Preliminary Determination

C&D Facility - Shun Pike

Johnston, Rhode Island

Assessor's Map 32 Lot 17



Sheet Index

1. Cover Sheet
2. Aerial & USGS Map
3. Site Layout
4. Grading & Utility Plan
5. Detail Sheet - 1
6. Detail Sheet - 2

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED NOV 6 2015 FILE # 15-0098
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

SESC / O&M
 The Soil Erosion and Sediment Control Plan (SESC) and Operations and Maintenance Plan (O&M) are required documents with this plan set and must be maintained by the contractor and owner onsite.

Diprete Engineering

Two Stafford Court Cranston, RI 02920
 tel 401-943-1000 fax 401-661-6006 www.diprete-eng.com

Boston • Providence • Newport

JASON P. CLOUGH
 No. 00000000
 REGISTERED PROFESSIONAL ENGINEER
 CIVIL

This regulatory submission set shall not be used for construction purposes unless stamped 'Issued for Construction' and signed by a Diprete Engineering representative.

The contractor is responsible for all of the means, methods, safety precautions and requirements, and OSHA compliance in the implementation of this plan and design.

No.	Date	Description	Drawn By: J.D.	Design By: J.P.C.
1	5-28-2015	REGAM Preliminary Determination		

Cover Sheet
C&D Facility - Shun Pike
 Assessor's Map 32, Lot 17
 Johnston, Rhode Island
 Applicant: **Shun Properties, LLC**
 2208 Plainfield Pike, Johnston, Rhode Island 02939
 tel 401-943-7100

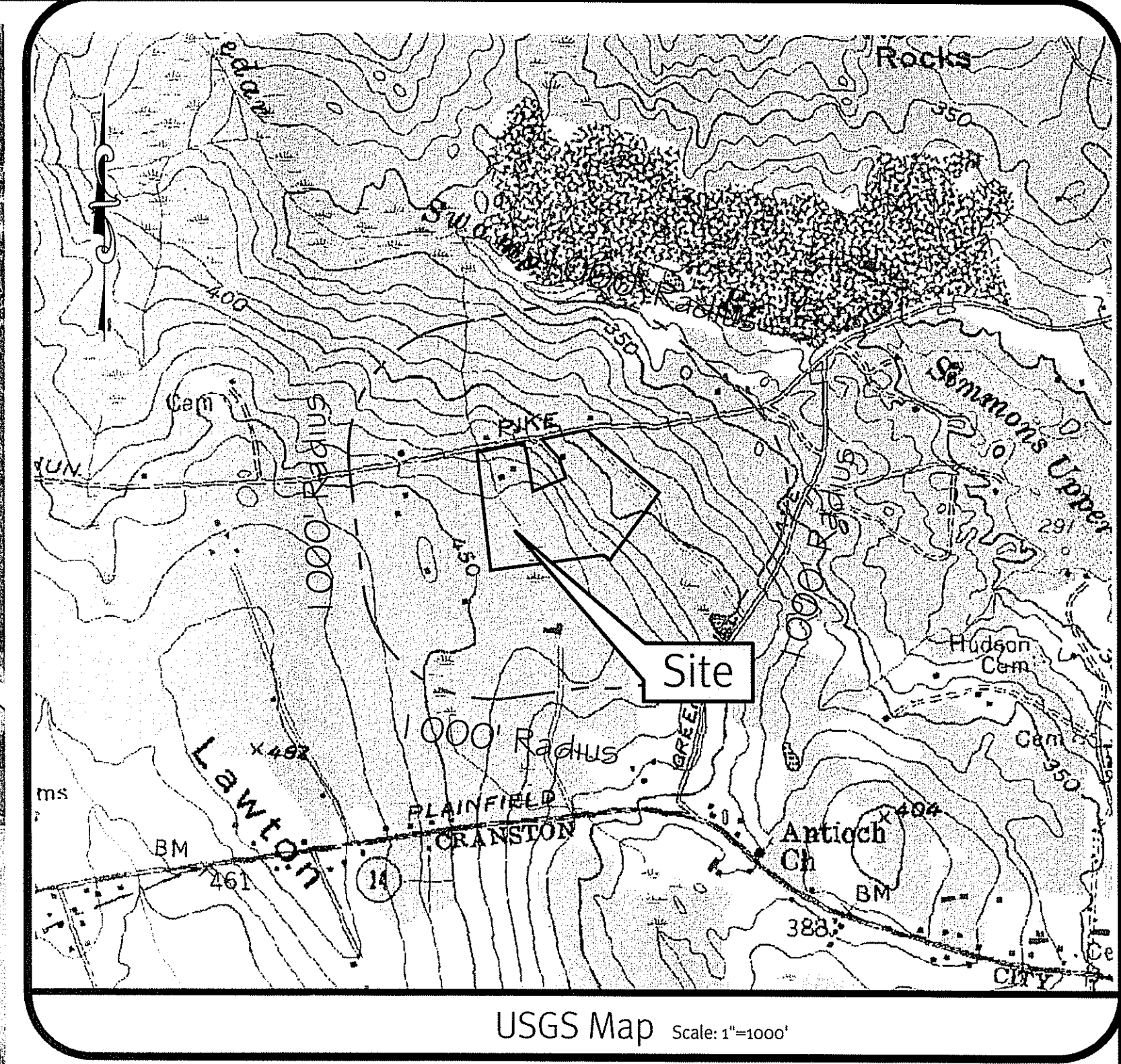
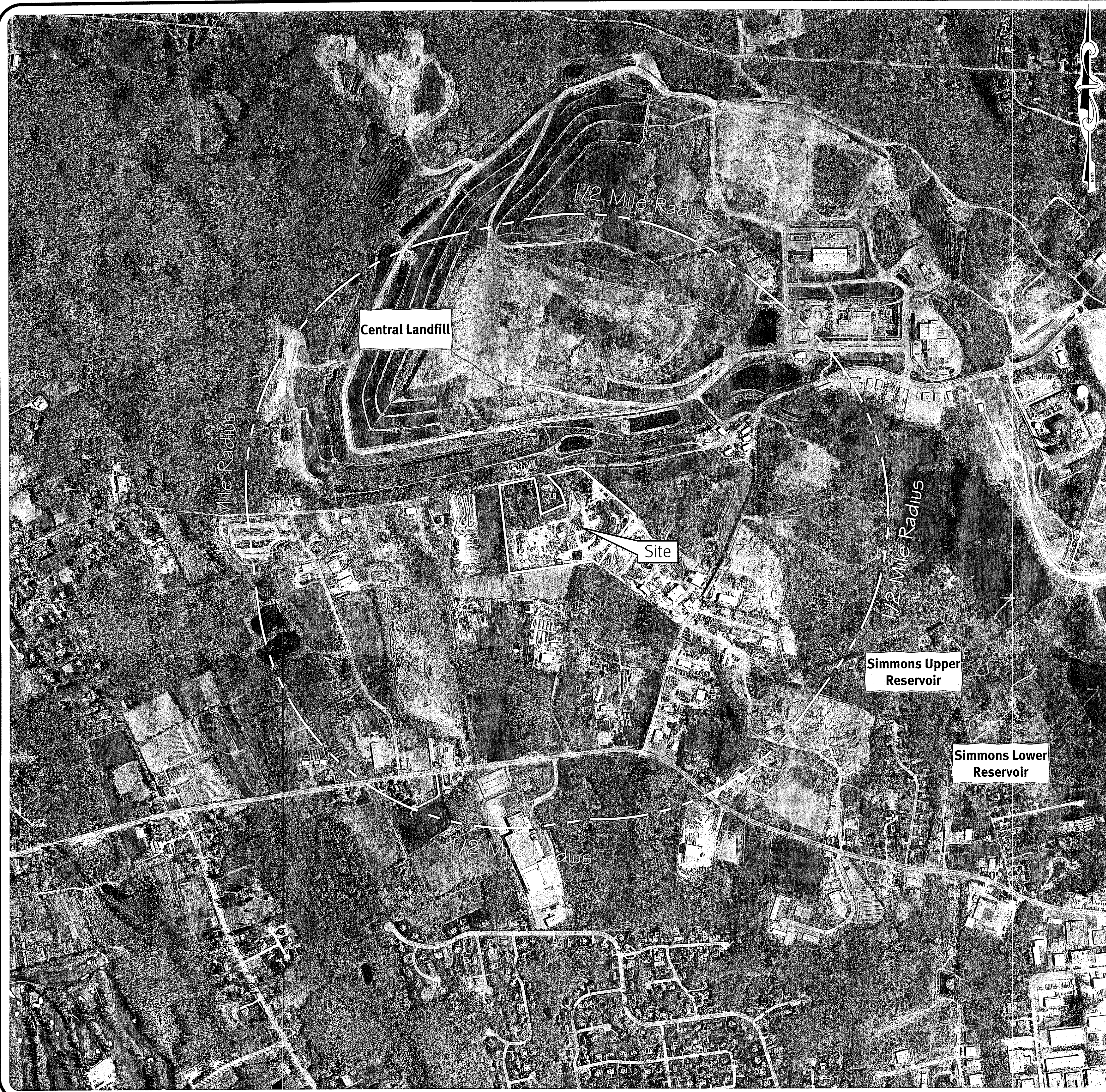
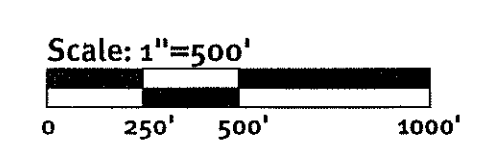


Photo Obtained from the ARCGIS 2008 Orthophotography.

Legend:

- PROPERTY LINE
- CITY/TOWN LIMIT LINE



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 PERMITTING AND COMPLIANCE PROGRAM
 AS SPECIFIED IN THE LETTER OF APPROVAL
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Environmental Management
 MAY 21 2015
 Environmental Resources

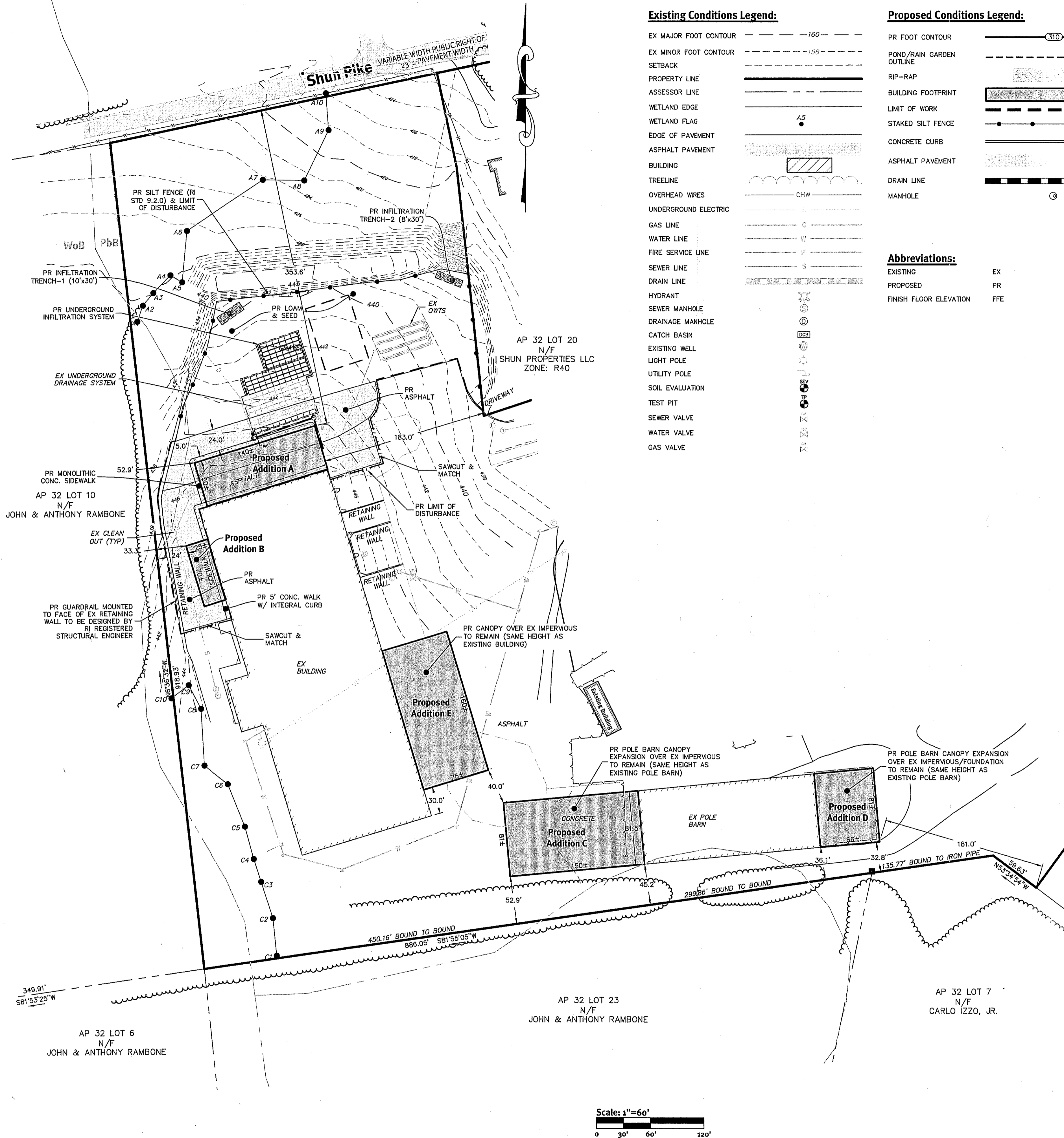
DiPrete Engineering
 Two Stafford Court Cranston, RI 02920
 tel. 401-943-1000 fax. 401-464-6006 www.diprete-eng.com
 Boston • Providence • Newport

JASON P. CLOUGH
 No. [Signature]
 REGISTERED PROFESSIONAL ENGINEER CIVIL

This regulatory submission set shall not be used for construction purposes unless stamped 'Issued for Construction' and signed by a DiPrete Engineering representative.
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No.	Date	Description	By
1	5-18-2015	BIBEM Preliminary Determination	J.P.C.
			Design By: J.P.C.

Aerial & USGS Map
C&D Facility - Shun Pike
 Applicant: Shun Properties, LLC
 2208 Plainfield Pike, Johnston, Rhode Island 02939
 tel. 401-943-7100
 DE Job No: 1579-008 Copyright: 2015 by DiPrete Engineering Associates, Inc.



- General Notes:**
- THE SITE IS LOCATED ON THE TOWN OF JOHNSTON ASSESSOR'S MAP 32 LOT 17.
 - THE SITE IS APPROXIMATELY 23.22± ACRES AND IS ZONED IL.
 - THE OWNER OF AP 32 LOT 17 IS: SHUN PROPERTIES LLC
2208 PLAINFIELD PIKE
JOHNSTON, RI 02919
 - THIS SITE IS LOCATED IN FEMA FLOOD ZONE X. REFERENCE FEMA FLOOD INSURANCE RATE MAP 44007C0295G MAP REVISED MARCH 2, 2009.
 - THIS PLAN IS SUBSTANTIALLY CORRECT IN ACCORDANCE WITH A CLASS IV STANDARD AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS. THIS PLAN IS NOT TO BE CONSTRUED AS AN ACCURATE BOUNDARY SURVEY AND MAY BE SUBJECT TO SUCH CHANGES AS AN ACCURATE BOUNDARY SURVEY MAY DISCLOSE.
 - SOIL MAPPING OBTAINED FROM SOIL SURVEY OF RHODE ISLAND, PREPARED BY U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE.
 - THE SITE IS NOT WITHIN A:
GROUNDWATER PROTECTION AREA (RIDEM)
NATURAL HERITAGE AREAS (RIDEM)
NARROW RIVER SPECIAL AREA MANAGEMENT PLAN (CRMC)
SALT PONDS SPECIAL AREA MANAGEMENT PLAN (CRMC)
GROUNDWATER PROTECTION OVERLAY DISTRICT (TOWN)
 - THE FOLLOWING DOCUMENTS ARE CONSIDERED PART OF THE PROJECT PLANS AND THE CONTRACTOR/ OWNER MUST MAINTAIN THESE DOCUMENTS AS PART OF A FULL PLAN SET:
• OPERATIONS AND MAINTENANCE PLAN (O&M). THE O&M CONTAINS THE FOLLOWING:
• LONG TERM MAINTENANCE
• LONG TERM POLLUTION PREVENTION
 - THIS PLAN SET REFERENCES RIDOT STANDARD DETAILS (DESIGNATED AS RIDOT STD X.X.X.). RIDOT STANDARD DETAILS ARE AVAILABLE FROM RIDOT AND ONLINE AT: WWW.DOT.STATE.RI.US/ENGINEERING/STANDARDS/INDEX.ASP.
 - DETAILED SOIL EROSION AND SEDIMENT CONTROL MEASURES TO BE INCORPORATED AT THE PRELIMINARY DESIGN STAGE AND WILL CONFORM TO RIDEM BEST MANAGEMENT PRACTICES.
 - THE SITE IS SERVICED BY PUBLIC WATER AND PRIVATE OWTS.
 - THE DRAINAGE SYSTEM IS DESIGNED TO MEET THE TOWN OF JOHNSTON SUBDIVISION AND LAND DEVELOPMENT DEPARTMENT'S STORMWATER MANAGEMENT SYSTEM WILL MEET THE RIDEM BEST MANAGEMENT PRACTICES.
 - THE PROJECT IS PROPOSED TO BE BUILT IN 1 PHASE.

Development Data

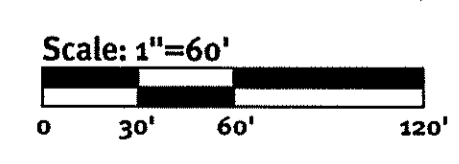
	REQUIRED	PROPOSED
CURRENT ZONING:	N/A	N/A
MINIMUM LOT SIZE:	100'	183'
MINIMUM DISTANCE FROM RESIDENTIAL ZONE:	N/A	N/A
MINIMUM LOT WIDTH:	50'	353.6'
MINIMUM FRONT YARD:	50'	33.3'(ADDITION B)
MINIMUM SIDE YARD:	50'	45.2'(ADDITION C) & 32.8'(ADDITION D*)
MINIMUM REAR YARD:	40'	52'(ADDITIONS A, B, C, D & E)
MAXIMUM STRUCTURE HEIGHT:	40%	<10%
MAXIMUM BUILDING COVERAGE:		
TOTAL SITE AREA:	23.22± ACRES	
TOTAL NUMBER OF NEW BUILDINGS:	0	
TOTAL SQUARE FOOTAGE:	8,750±	
PARKING SPACES PROVIDED:	N/A	
PAVEMENT WIDTH:	VARIES	

*PROPOSED ADDITION D IS LOCATED ON AN EXISTING FOUNDATION PREVIOUSLY APPROVED. THE PREVIOUS STRUCTURE WAS LOST TO A FIRE.

NOTE: ALL BUILDING ADDITIONS ARE PROPOSED TO MATCH THE HEIGHT OF THE CORRESPONDING EXISTING STRUCTURE.

- Layout and Materials:**
- DIMENSIONS ARE FROM THE FACE OF CURB, FACE OF BUILDING, FACE OF WALL, AND CENTER LINE OF PAVEMENT MARKINGS, UNLESS OTHERWISE NOTED.
 - CURB RADII ARE 5 FEET UNLESS OTHERWISE NOTED.
 - CURBING SHALL BE MONOLITHIC CONCRETE OR AS LABELED ON THE PLANS.
 - SIDEWALK SHALL BE CONCRETE OR AS LABELED ON THE PLANS.
 - SYMBOLS AND LEGENDS OF PROJECT FEATURES ARE GRAPHIC REPRESENTATIONS AND ARE NOT NECESSARILY SCALED TO THEIR ACTUAL DIMENSIONS OR LOCATIONS ON THE DRAWINGS. THE CONTRACTOR SHALL REFER TO THE DETAIL SHEET DIMENSIONS, MANUFACTURERS' LITERATURE, SHOP DRAWINGS AND FIELD MEASUREMENTS OF SUPPLIED PRODUCTS FOR LAYOUT OF THE PROJECT FEATURES.
 - SEE ARCHITECTURAL DRAWINGS FOR EXACT BUILDING DIMENSIONS AND DETAILS CONTIGUOUS TO THE BUILDINGS, INCLUDING SIDEWALKS, RAMPS, BUILDING ENTRANCES, STAIRWAYS, UTILITY PENETRATIONS, CONCRETE DOOR PADS, COMPACTOR PAD, LOADING DOCKS, BOLLARDS, ETC.
 - PROPOSED BOUNDS AND ANY EXISTING PROPERTY LINE MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE SET OR RESET BY A PROFESSIONAL LICENSED SURVEYOR.
 - CONTRACTOR SHALL NOT RELY SOLELY ON ELECTRONIC VERSIONS OF PLANS, SPECIFICATIONS, AND DATA FILES THAT ARE OBTAINED FROM THE DESIGNERS, BUT SHALL VERIFY LOCATION OF PROJECT FEATURES IN ACCORDANCE WITH THE PAPER COPIES OF THE PLANS AND SPECIFICATIONS THAT ARE SUPPLIED AS PART OF THE CONTRACT DOCUMENTS.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
NOV 6 2015 FILE # 15-0098
DATED
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE



DiPrete Engineering
Two Stafford Court Cranston, RI 02920
tel 401-943-1000 fax 401-464-6006 www.diprete-eng.com
Boston • Providence • Newport

JASON P. CLOUGH
No. 011006110
REGISTERED PROFESSIONAL ENGINEER CIVIL

This regulatory submission set shall not be used for construction purposes unless stamped 'Issued for Construction' and signed by a DiPrete Engineering representative.

The contractor is responsible for all of the means, methods, safety precautions and requirements, and OSHA compliance in the implementation of this plan and design.

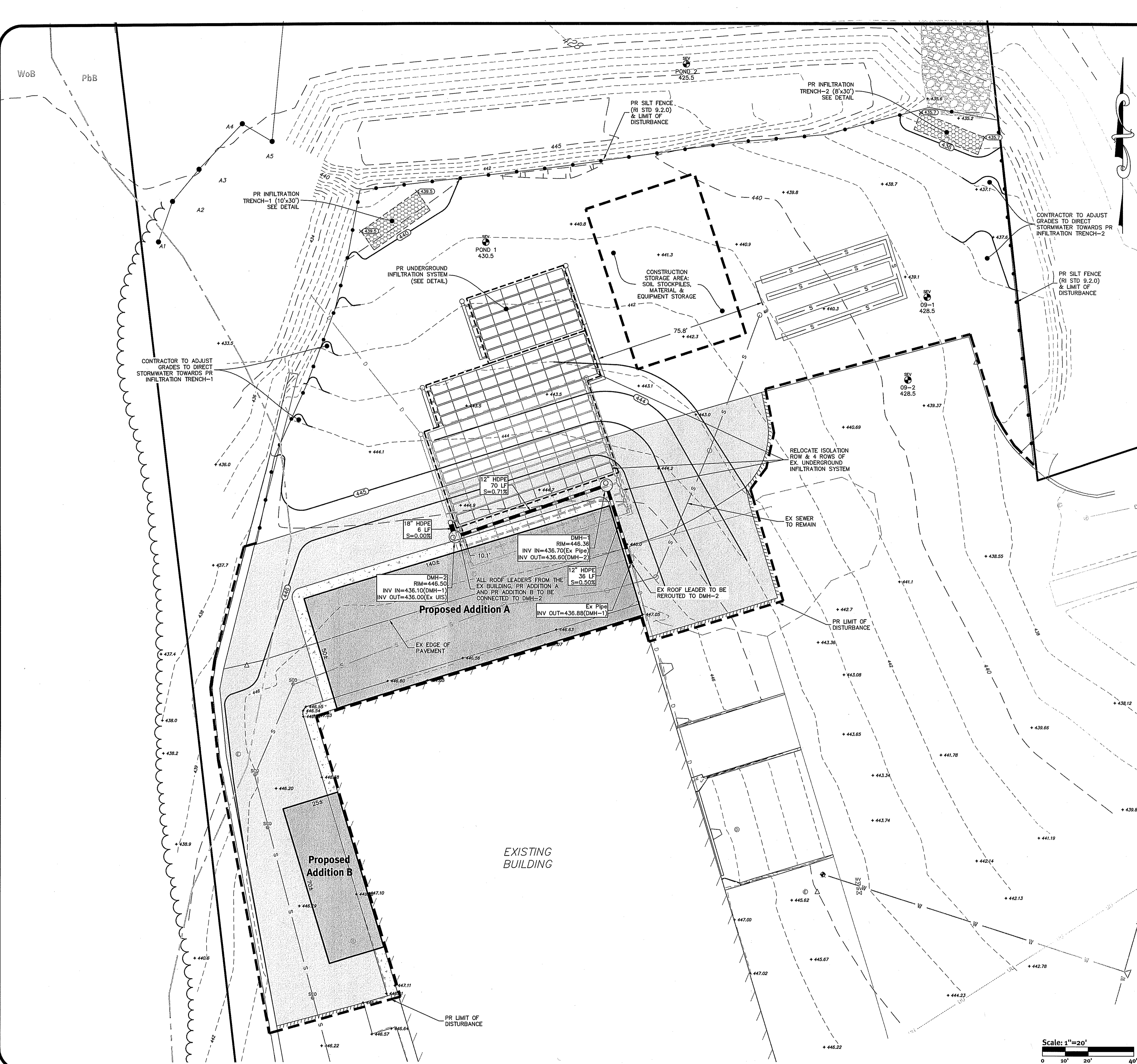
No.	Date	Description	By:
1	6-22-2015	RIDEM Response to Comments	J.P.C.
2	5-18-2015	RIDEM Preliminary Determination	J.P.C.

Design By: J.P.C.

Site Layout C&D Facility - Shun Pike
Assessor's Map 32, Lot 17
Johnston, Rhode Island
Applicant: **Shun Properties, LLC**
2208 Plainfield Pike, Johnston, Rhode Island 02919
tel 401-943-7100
DE Job No. 1575-008 Copyright © 2015 by DiPrete Engineering Associates, Inc.

APPROVED JUL 20 2015

SHEET 3 OF 6



- Grading and Utility Notes:**
1. THE CONTRACTOR IS RESPONSIBLE FOR ALL SOIL EROSION AND SEDIMENT CONTROL ON SITE. THE CONTRACTOR IS TO NOTIFY THE DESIGN ENGINEER, THE DIRECTOR OF PUBLIC WORKS, THE TOWN ENGINEER, AND RI DEPT. OF ENVIRONMENTAL MANAGEMENT AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION.
 2. CONTRACTOR TO OBTAIN ALL FEDERAL, STATE, AND MUNICIPAL APPROVALS PRIOR TO THE START OF CONSTRUCTION.
 3. CONSTRUCTION TO COMMENCE SUMMER 2015 OR UPON RECEIPT OF ALL NECESSARY APPROVALS.
 4. ALL WORK PERFORMED HEREIN SHALL BE GOVERNED BY THE RHODE ISLAND STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION AND TOWN OF JOHNSTON STANDARD SPECIFICATIONS AND DETAILS.
 5. SEQUENCE OF CONSTRUCTION PROVIDED MAY BE MODIFIED AS FIELD CONDITIONS WARRANT WITH PRIOR APPROVAL FROM THE OWNER OR OWNER'S REPRESENTATIVE.
 6. THE CONTRACTOR SHALL COORDINATE WITH ALL OF THE APPROPRIATE UTILITY COMPANIES FOR AGREEMENTS TO SERVICE THE PROPOSED BUILDING. THIS SHALL BE DONE PRIOR TO CONSTRUCTION. NO REPRESENTATIONS ARE MADE BY DIPRETE ENGINEERING THAT UTILITY SERVICE IS AVAILABLE.
 7. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING FINISH GRADING AND DRAINAGE AROUND THE BUILDING TO ENSURE SURFACE WATER AND/OR GROUND WATER ARE DIRECTED AWAY FROM THE STRUCTURE.
 8. PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL VERIFY EXISTING PAVEMENT ELEVATIONS AT INTERFACE WITH PROPOSED PAVEMENTS, AND EXISTING GROUND ELEVATIONS ADJACENT TO DRAINAGE OUTLETS TO ASSURE PROPER TRANSITIONS BETWEEN EXISTING AND PROPOSED FACILITIES.
 9. ALL PROPOSED UNDERGROUND UTILITIES SERVING THE SITE AND BUILDINGS TO BE COORDINATED WITH APPLICANT, ARCHITECT, AND ENGINEER PRIOR TO INSTALLATION.
 10. ALL TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION INCLUDING ALL REVISIONS.
 11. ALL RETAINING WALLS AND STEEP SLOPES ARE SHOWN SCHEMATICALLY ONLY AND DIPRETE ENGINEERING IS NOT PROVIDING THE DESIGN OF THESE ITEMS. THE ACTUAL WALLS AND SLOPES ARE TO BE BUILT UNDER THE DIRECTION OF A GEOTECHNICAL ENGINEER AND CERTIFIED TO THE OWNER PRIOR TO THE COMPLETION OF THE PROJECT. SHOP DRAWINGS TO BE SUBMITTED PRIOR TO CONSTRUCTION.
 12. ALL CUT AND FILL AREAS ARE TO BE DONE UNDER THE DIRECTION OF A GEOTECHNICAL ENGINEER WITH TESTING AND CERTIFICATION TO BE PROVIDED TO THE APPLICANT AT THE COMPLETION OF THE PROJECT. DIPRETE ENGINEERING ASSOCIATES, INC. IS NOT PROVIDING THE FILL SPECIFICATION, GEOTECHNICAL ENGINEERING, STRUCTURAL ENGINEERING SERVICES, OR SUPERVISION AS PART OF THESE DRAWINGS.
 13. NO STOCKPIILING OF MATERIAL TO BE LOCATED IN THE RIGHT OF WAY AND NO OPEN TRENCHES ARE TO BE LEFT OVERNIGHT.
 14. ALL LOAM IN DISTURBED AREAS TO BE STOCKPILED FOR FUTURE USE.
 15. ALL EXCESS SOIL, TREES, ROCKS, BOULDERS, AND OTHER REFUSE, SHALL BE DISCARDED OFF SITE IN AN ACCEPTABLE MANNER AT AN APPROVED LOCATION. STUMPS SHALL BE GROUND ON SITE OR REMOVED.
 16. NO STUMP DUMPS ARE PROPOSED ON SITE.
 17. ALL EXISTING UTILITIES SHOWN ARE FROM VISIBLE INFORMATION, DRAWINGS FROM OTHERS, OR INFORMATION PROVIDED TO DIPRETE ENGINEERING AND ARE SUBJECT TO CHANGE. THE LOCATIONS OF UNDERGROUND PIPES AND CONDUITS HAVE BEEN DETERMINED FROM AFOREMENTIONED PLANS OF RECORD AND ARE APPROXIMATE ONLY. PRIOR TO CONSTRUCTION, THE PROPER UTILITY ENGINEERING DEPARTMENTS SHALL BE CONTACTED AND THE ACTUAL LOCATION OF SUBSURFACE STRUCTURES SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR. CALL THE DIG SAFE CENTER TOLL FREE AT 1-888-344-7233 IN MA, ME, NH, RI & VT. CALL 1-800-922-4455 IN CT 72 HOURS (48 HOURS IN VT AND CT) PRIOR TO EXCAVATION. NOTIFY DESIGN ENGINEER OF ANY DISCREPANCIES PRIOR TO EXCAVATION. ANY DAMAGE TO UTILITIES WHICH ARE SHOWN ON THE PLANS OR DETAILED BY DIG SAFE SHALL BE THE SITE CONTRACTOR'S RESPONSIBILITY.
 18. IF CONCRETE TRUCKS ARE WASHED OUT ON SITE, ALL WASHOUT MUST BE COMPLETED IN A DESIGNATED CONCRETE WASHOUT AREA.

- Traffic Notes:**
1. DURING CONSTRUCTION TRAFFIC CONES ARE TO BE USED FOR SEPARATION OF ACTIVE TRAFFIC FROM WORK ZONE.
 2. DURING CONSTRUCTION FLAGGERS SHALL BE EMPLOYED TO ENSURE SAFETY FOR INTERACTION OF CONSTRUCTION VEHICLES AND ACTIVE TRAFFIC.
 3. ALL SIGNS, FLAGGERS, TRAFFIC CONTROL DEVICES, AND TEMPORARY TRAFFIC ZONE ACTIVITIES SHALL MEET THE REQUIREMENTS OF THE MUTCD LATEST EDITION AND SUBSEQUENT ADDENDA.
 4. TEMPORARY CONSTRUCTION SIGNS SHALL BE MOUNTED ON RIDOT APPROVED SUPPORTS AND SHALL BE REMOVED OR COVERED WHEN NOT APPLICABLE.
 5. ALL TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES CURRENT EDITION.

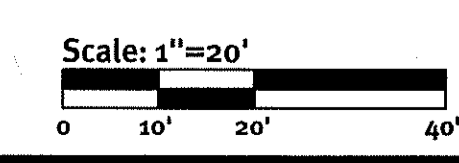
- As-Built Notes:**
1. IF AS-BUILTS ARE REQUIRED THE ENGINEER WILL NOT ACCEPT FIELD MEASUREMENTS FROM THE SITE CONTRACTOR AND SURVEY AS-BUILT LOCATIONS WILL BE REQUIRED.

- UIC Notes:**
- PROPOSED UNDERGROUND DRAINAGE SYSTEM MEETS ALL THE FOLLOWING UIC MINIMUM SETBACK REQUIREMENTS:
1. 400 FEET FROM ALL PUBLIC WATER WELLS (SAND & GRAVEL)
 2. 200 FEET FROM ALL PUBLIC WATER WELLS (BEDROCK)
 3. 200 FEET FROM ALL SURFACE DRINKING WATER SUPPLY IMPOUNDMENTS
 4. 100 FEET FROM ALL PRIVATE DRINKING WATER WELLS
 5. 100 FEET FROM ALL OTHER SURFACE WATERS
 6. 25 FEET FROM ALL OWTS & OTHER GROUNDWATER DISCHARGE SYSTEMS
 7. 25 FEET FROM ALL BUILDING FOUNDATIONS IF SYSTEM IS ABOVE FINISH GRADE ELEVATION
 8. 10 FEET FROM ALL PROPERTY LINES
 9. 10 FEET FROM ALL BUILDING FOOTINGS

APPLICANT: SHUN PROPERTIES, LLC
 2208 PLAINFIELD PIKE, JOHNSTON, RHODE ISLAND 02939
 TEL: 401-943-7100

NOV 6 2015 FILE # 15-0018
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED NOV 6 2015
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

JUL 20 2015



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Boston • Providence • Newport

JASON P. CLOUGH
 No. 11515
 REGISTERED PROFESSIONAL ENGINEER
 CIVIL

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The contractor is responsible for all of the means, methods, safety precautions and requirements, and OSHA compliance in the implementation of this plan and design.

No.	Date	Description	By
1	5-29-2015	RI/MA Response to Comments	J.P.C.
2	5-29-2015	RI/MA Preliminary Determination	J.P.C.
3			J.P.C.
4			J.P.C.
5			J.P.C.

Design By: J.P.C.

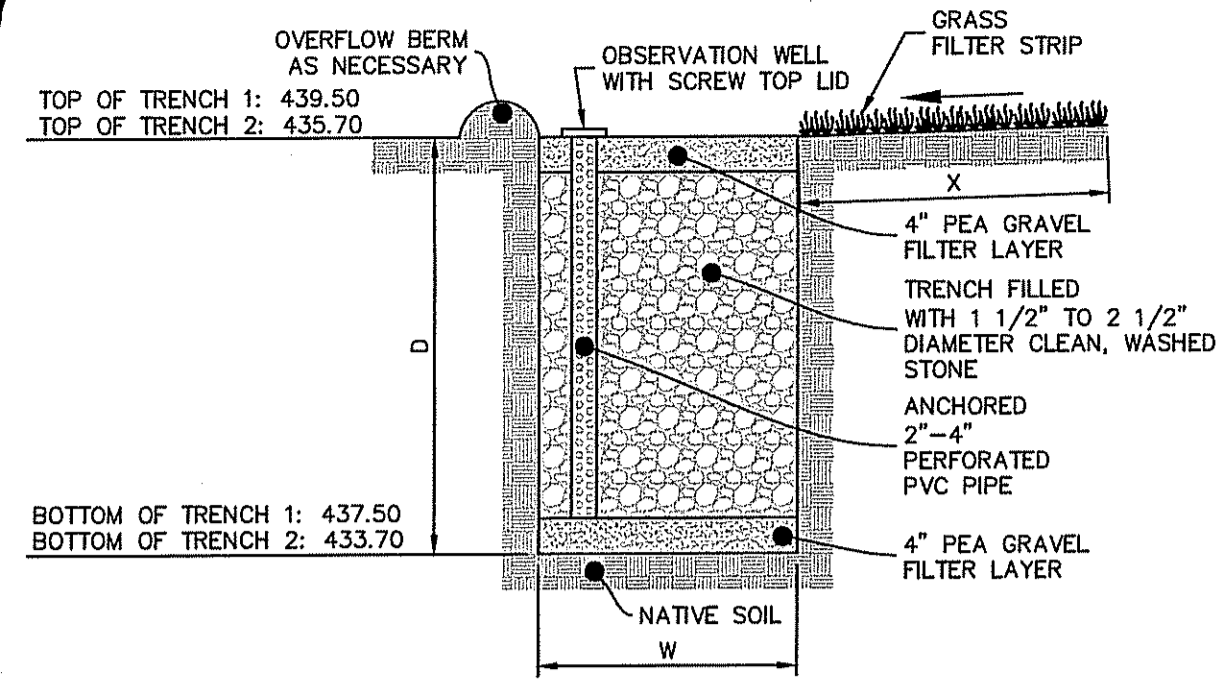
Grading & Utility Plan
C&D Facility - Shun Pike

Shun Properties, LLC
 2208 Plainfield Pike, Johnston, Rhode Island 02939
 tel: 401-943-7100

APPLICANT: Shun Properties, LLC
 2208 PLAINFIELD PIKE, JOHNSTON, RHODE ISLAND 02939
 TEL: 401-943-7100

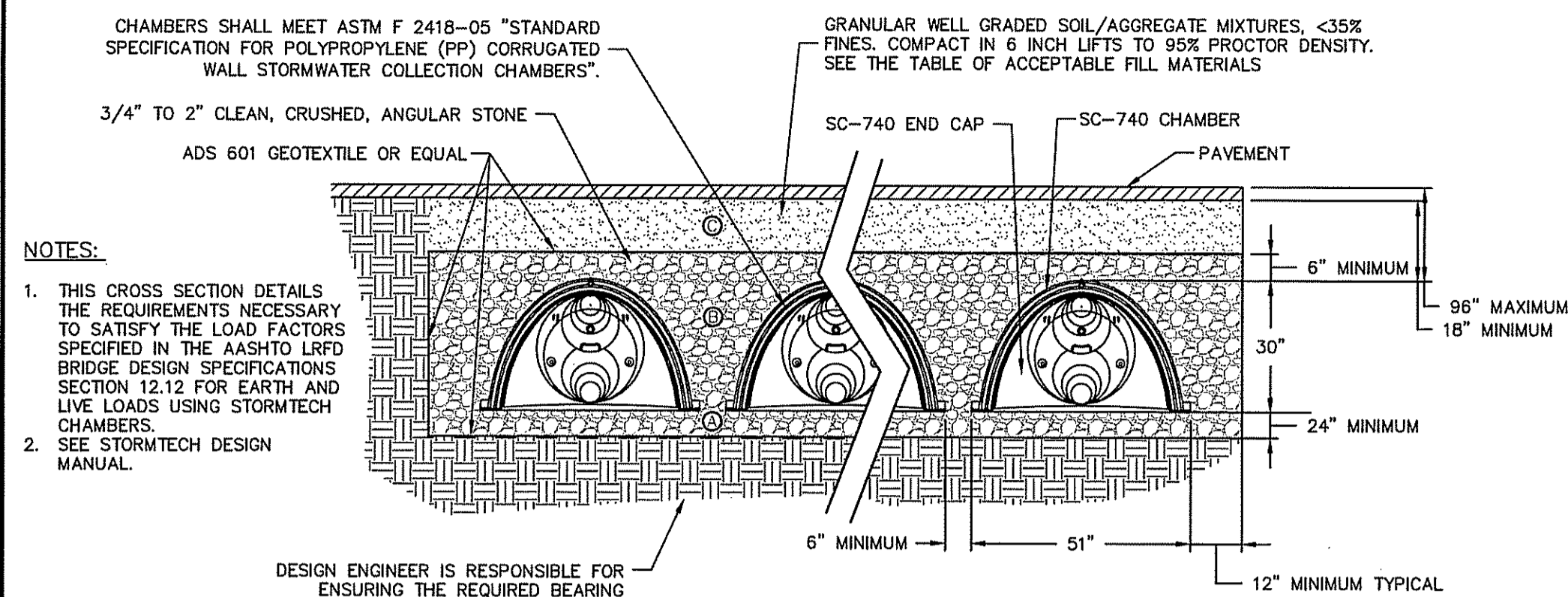
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SHEET 4 OF 6

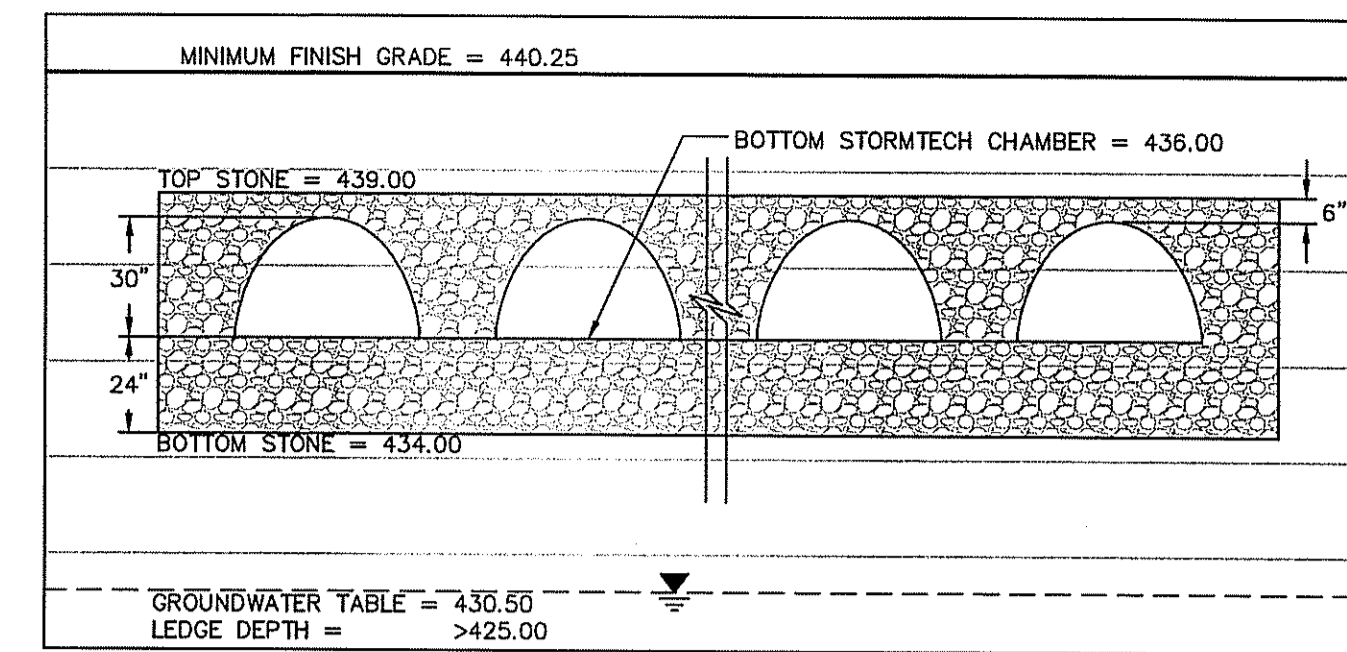


LOCATION	TRENCH DEPTH (D)	TRENCH WIDTH (W)	TRENCH LENGTH	GRASS FILTER STRIP WIDTH (X)
INFILTRATION TRENCH 1	24"	10"	30'	>15'
INFILTRATION TRENCH 2	24"	8"	30'	>15'

Stone Infiltration Trench
NOT TO SCALE



STORMTECH SC-740 TYPICAL CROSS SECTION
NOT TO SCALE

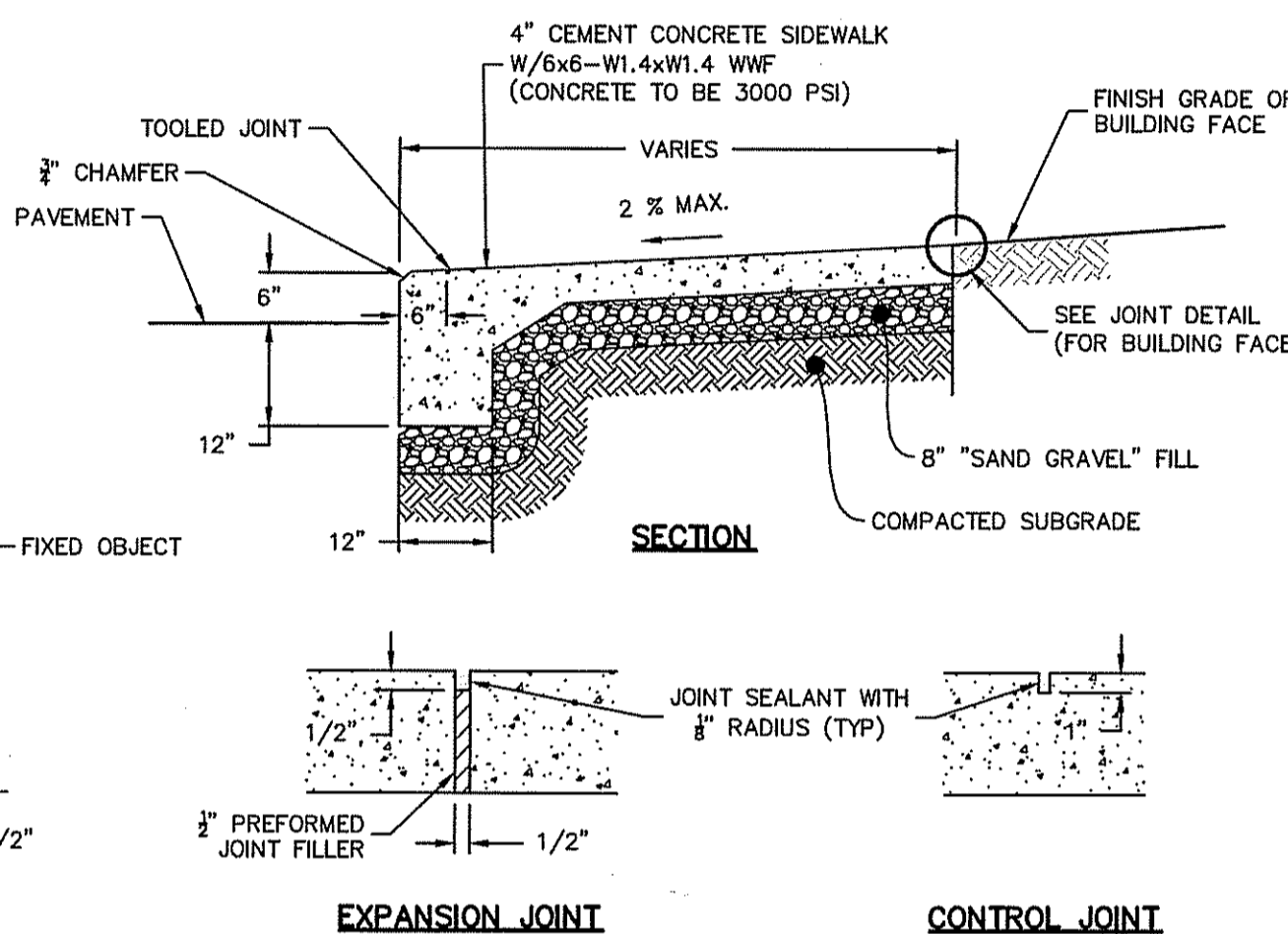


DESCRIPTION	UIB-1
TOP OF STONE	439.00
BOTTOM OF STONE	434.00
100 YEAR STORM ELEVATION	438.10
25 YEAR STORM ELEVATION	436.78
10 YEAR STORM ELEVATION	436.33
1 YEAR STORM ELEVATION	435.16
SEASONAL HIGH GW ELEVATION	430.50
EXISTING EMERGENCY OVERFLOW	438.50

PROPOSED STORMTECH SYSTEM CROSS SECTION
NOT TO SCALE

NOTE:

- SEE SITE PLAN FOR SIDEWALK WIDTH AND GRADES. SURFACE TEXTURE SHALL BE A LIGHT BROOMING, TRANSVERSE TO THE LENGTH OF THE WALK. CARE SHALL BE TAKEN TO ASSURE A UNIFORM GRADE, FREE OF SAGS AND SHORT GRADE CHANGES.
- ALL IMPROVEMENTS SHALL COMPLY WITH THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG)" BY THE DEPARTMENT OF JUSTICE.
- PROVIDE EXPANSION JOINTS AT MIN. 16 FT. O.C. WITH PREFORMED JOINT FILLER AND SEALANT.
- PROVIDE CONTROL JOINTS AT 5' O.C.
- SHALL BE IN ACCORDANCE WITH THE R.I. STANDARD SPECIFICATIONS.

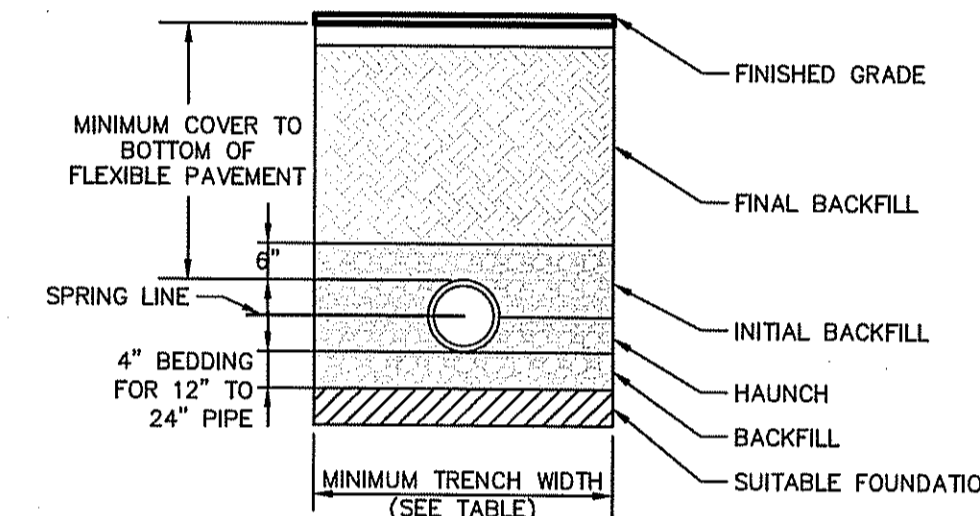


Monolithic Concrete Sidewalk
NOT TO SCALE

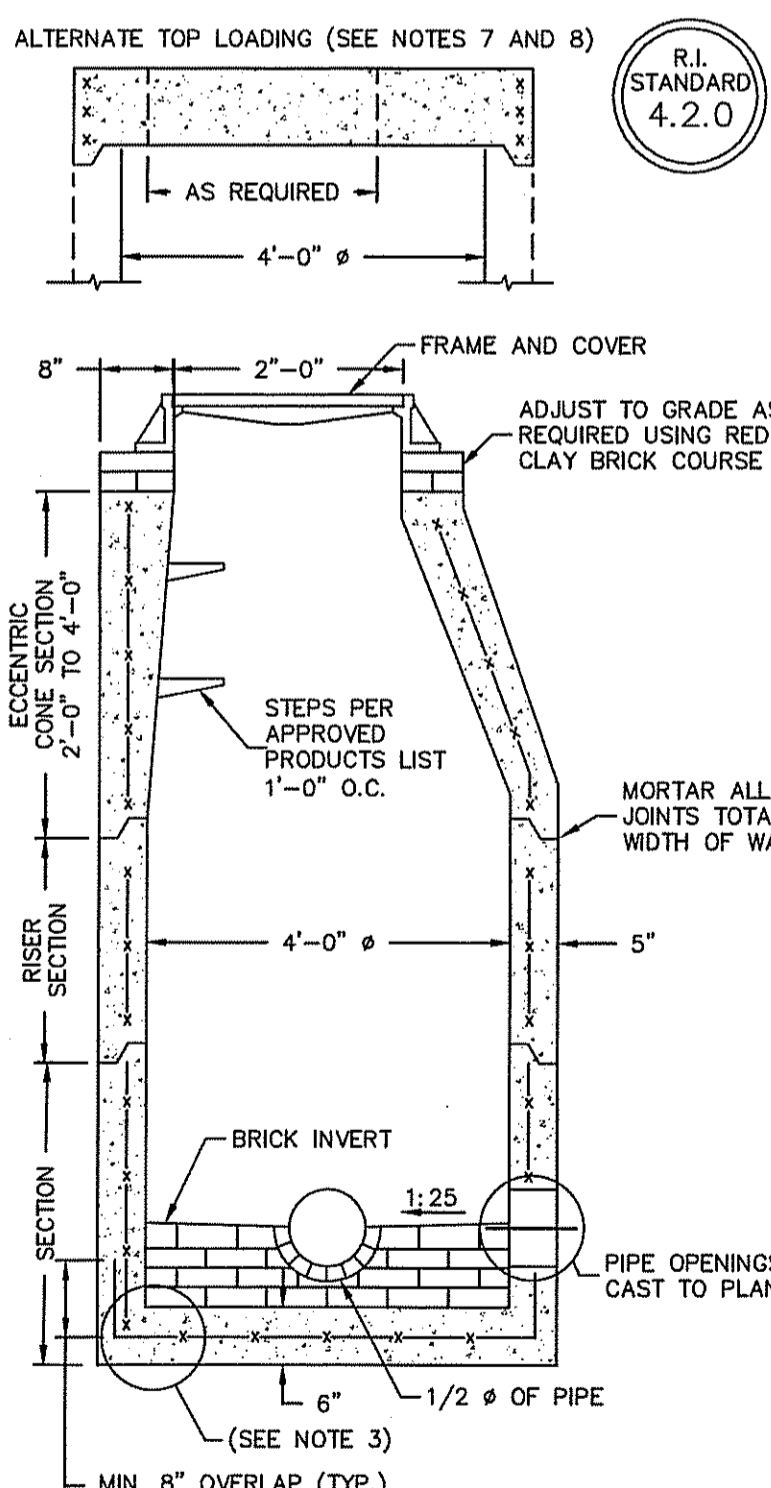
INSTALLATION NOTES:

- ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS, LATEST EDITION.
- MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
- FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
- BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER, UNLESS OTHERWISE NOTED BY THE ENGINEER. MINIMUM BEDDING THICKNESS SHALL BE 4" (100MM) FOR 4"-24" (100MM-600MM); 6" (150MM) FOR 30"-60" (750MM-900MM).
- INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
- MINIMUM COVER: MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOTATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" PIPE AND 24" OF COVER FOR 54"-60" PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.

PIPE Ø	MINIMUM TRENCH WIDTH
6"	23"
8"	26"
12"	30"
15"	34"
24"	39"

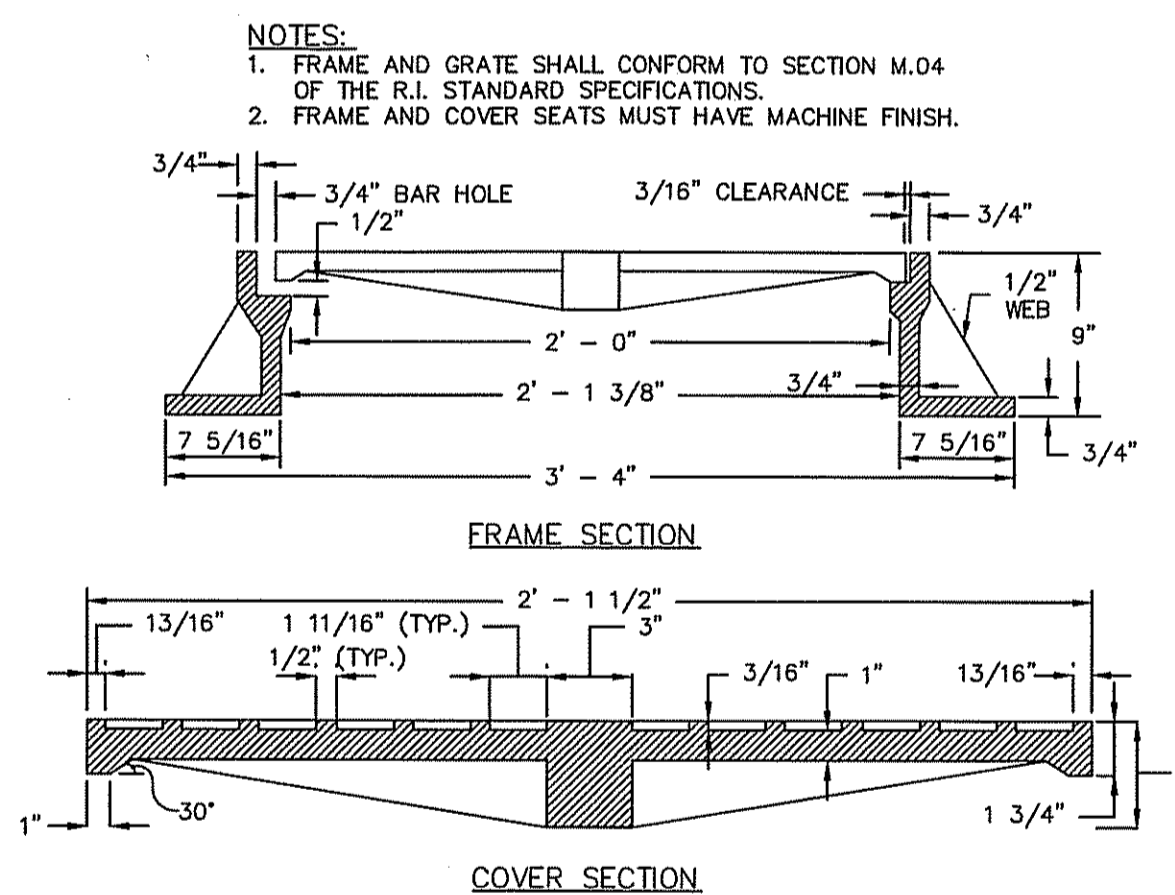


HDPE Trench Detail
NOT TO SCALE



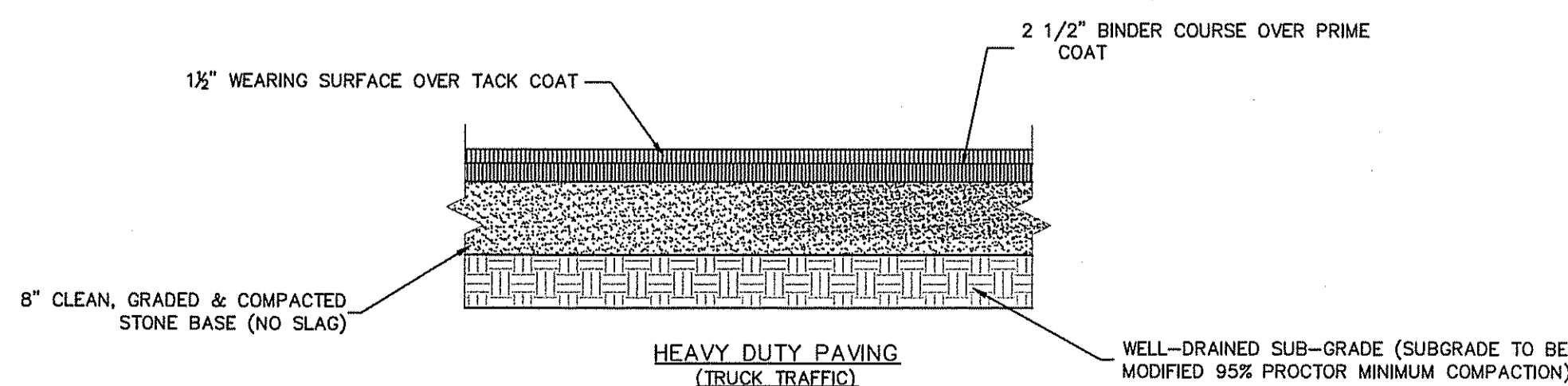
- NOTE:**
- SHALL BE IN ACCORDANCE WITH SECTION 702 OF THE R.I. STANDARD SPECIFICATIONS.
 - CIRCUMFERENTIAL STEEL REINFORCEMENT REQUIRED = 0.12 SQ. IN./LIN. FT. MINIMUM.
 - STEEL REINFORCEMENT FOR BASE SECTION BOTTOM SHALL BE A MINIMUM OF 0.12 SQ. IN. / LIN. FT. (BOTH WAYS).
 - ONE POUR MONOLITHIC BASE SECTION.
 - ANY NECESSARY ADJUSTMENTS DURING CONSTRUCTION WILL BE DONE BY SAW-CUTTING AND/OR CORING ONLY. NO JACKHAMMERS, HAMMERS AND CHISELS OR PNEUMATIC TOOLS WILL BE ALLOWED.
 - STEPS SHALL CONFORM TO STD. 5.3.0 AND SHALL BE INSTALLED AT THE CASTING PLANT.
 - ALTERNATE TOP SLAB IS STEEL REINFORCED TO MEET OR EXCEED H-25 LOADING (SEE STD. 4.7.2).
 - ALTERNATE TOP SLAB IS ONLY FOR USE WHEN REDUCING SECTION DOES NOT FIT BECAUSE OF STRUCTURE DEPTH.
 - REFER TO STD. 5.2.0 FOR MAXIMUM PIPE SIZES.

PRECAST 4'-0" ROUND MANHOLE
NOT TO SCALE

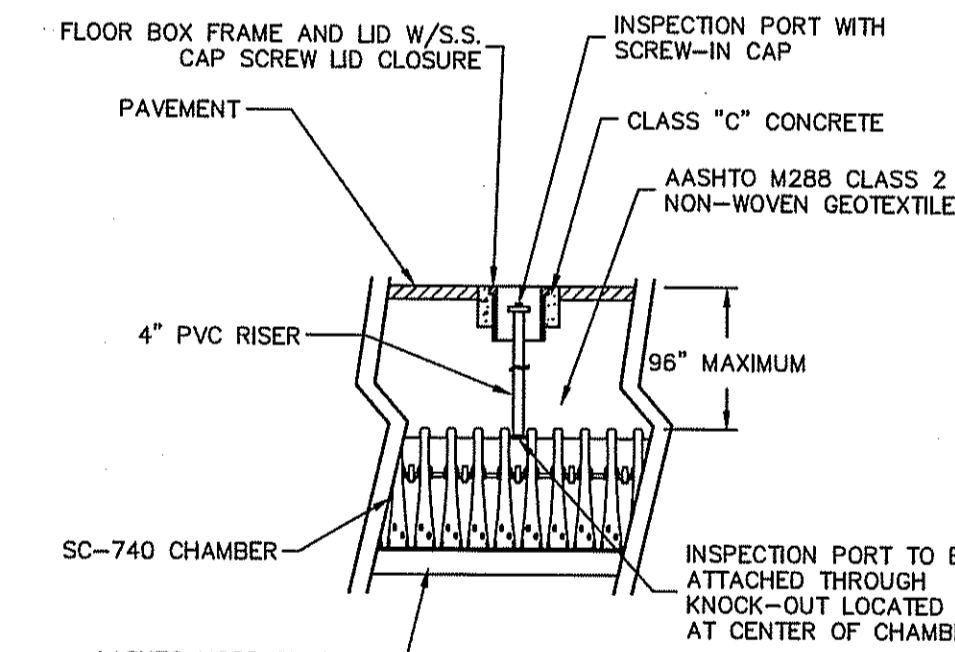


HEAVY-DUTY ROUND FRAME AND COVER
NOT TO SCALE

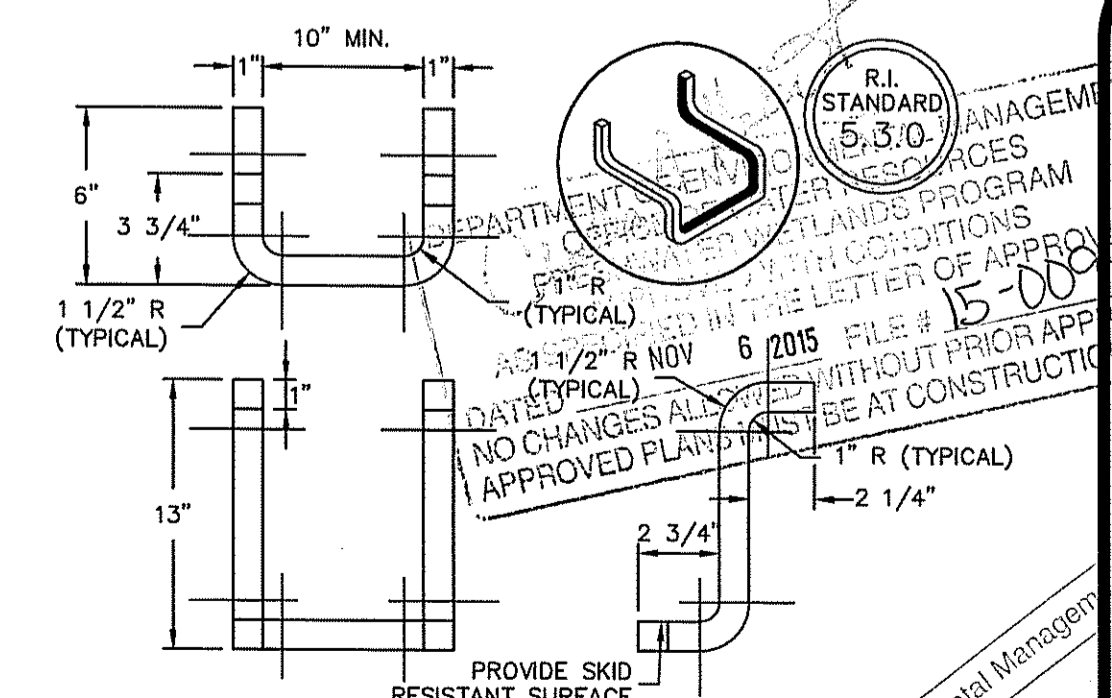
NOTE:
THIS PAVEMENT SECTION DETAIL REFLECTS MINIMUM REQUIREMENTS. ENGINEER TO DETERMINE DESIGN BASED ON GEO-TECHNICAL DATA OF SPECIFIC PROJECT AND DAILY TRAFFIC DESIGN REQUIREMENT.



TYPICAL PAVEMENT SECTION
NOT TO SCALE



STORMTECH INSPECTION PORT DETAIL
NOT TO SCALE



- NOTE:**
- STEPS SHALL CONFORM TO SECTION M.04 OF THE R.I. STANDARD SPECIFICATIONS.
 - CROSS SECTION AREA MAY BE REDUCED UPON SUBMISSION OF CERTIFIED LOAD TESTS. STEPS MUST SUPPORT 300 LBS.
 - STOCK SHOWN IS 1" SQUARE WHICH MAY BE REPLACED BY 1" DIAMETER.

CATCH BASIN AND MANHOLE STEP
NOT TO SCALE

- THE INSTALLED CHAMBER SYSTEM SHALL PROVIDE THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTION 12.12 FOR EARTH AND LIVE LOADS, WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
- ALL DESIGN SPECIFICATIONS FOR STORMTECH CHAMBERS SHALL BE IN ACCORDANCE WITH THE STORMTECH DESIGN MANUAL.
- THE INSTALLATION OF STORMTECH CHAMBERS SHALL BE IN ACCORDANCE WITH THE LATEST STORMTECH INSTALLATION INSTRUCTIONS.
- THE CONTRACTOR IS ADVISED TO REVIEW AND UNDERSTAND THE INSTALLATION INSTRUCTIONS PRIOR TO BEGINNING SYSTEM INSTALLATION. CALL 1-888-892-2694 OR VISIT WWW.STORMTECH.COM TO RECEIVE A COPY OF THE LATEST STORMTECH INSTALLATION INSTRUCTIONS.
- THE ISOLATOR ROW SHALL BE INSPECTED IMMEDIATELY AFTER COMPLETION OF CONSTRUCTION TO CHECK FOR SEDIMENTS AND DEBRIS.
- THE SYSTEM SHOULD BE INSPECTED BI-ANNUALLY FOR SEDIMENTS AND JETVAC MAINTENANCE IS RECOMMENDED IF SEDIMENT IS AT OR ABOVE THE LOWER ROW OF SIDEWALL HOLES (APPROXIMATELY 3") WITHIN THE INSIDE OF THE ISOLATOR ROW.
- IF SEDIMENT IS AT A DEPTH OF 25% OF THE HEADER PIPE VOLUME, VACUUM PUMP SEDIMENT. DO NOT FLUSH SEDIMENT OUT INLET PIPES. REPLACE GRATES AND COVERS. RECORD DEPTH AND DATE. SCHEDULE NEXT INSPECTION.

STORMTECH NOTES

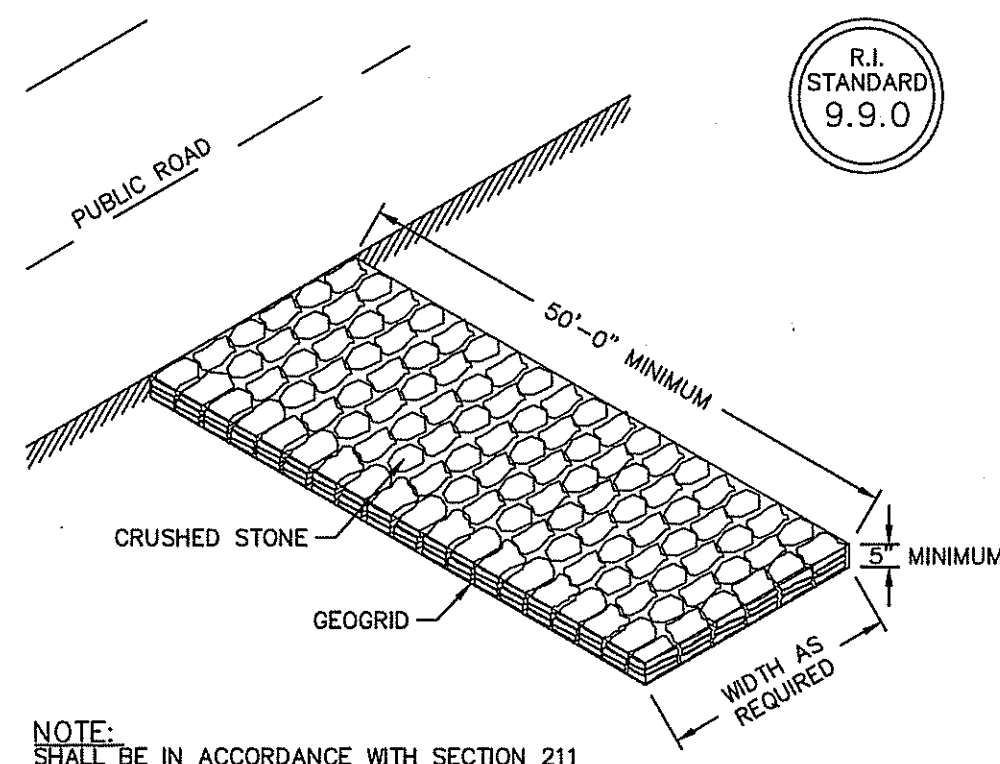
JASON P. CLOUD
REGISTERED PROFESSIONAL ENGINEER
CIVIL

This regulatory submission set shall not be used for construction purposes unless stamped, issued for Construction and signed by a Diprete Engineering representative.

The contractor is responsible for all of the means, methods, safety precautions and requirements, and OSHA conformance in the implementation of this plan and design.

Design By: J.P.C.
Drawn By: J.P.C.
Date: 5-28-2015
Description: Stormtech Installation

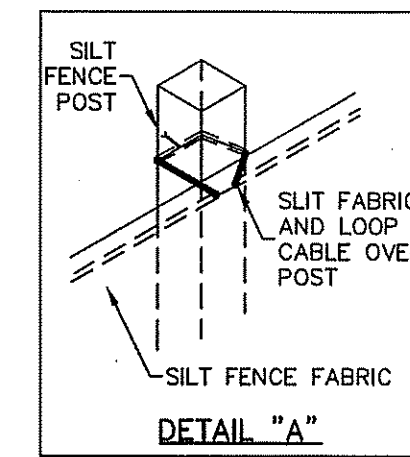
Detail Sheet - 1
C&D Facility - Shun Pike
Shun Properties, LLC
Assessors Map 32, Lot 17
2208 Plainfield Pike, Johnston, Rhode Island 02919
tel 401-943-7100



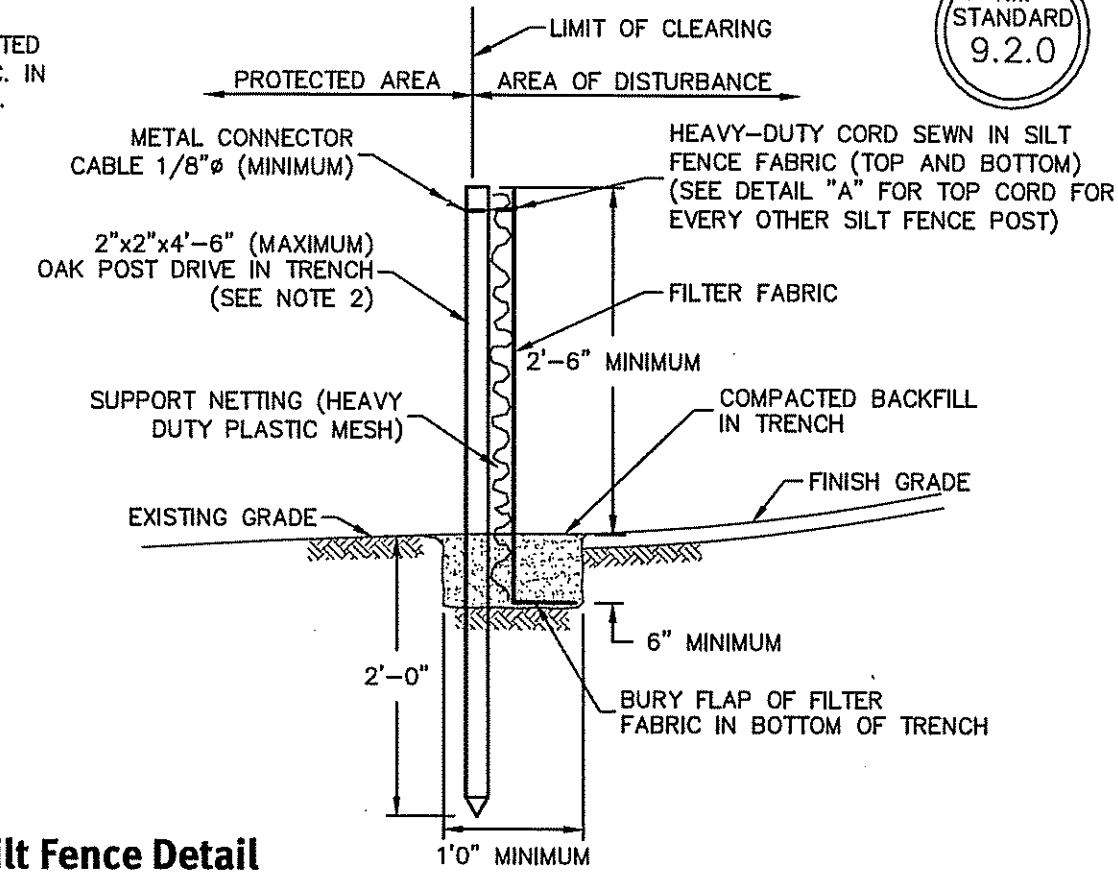
NOTE: SHALL BE IN ACCORDANCE WITH SECTION 211 OF THE R.I. STANDARD SPECIFICATIONS.

Construction Access
NOT TO SCALE

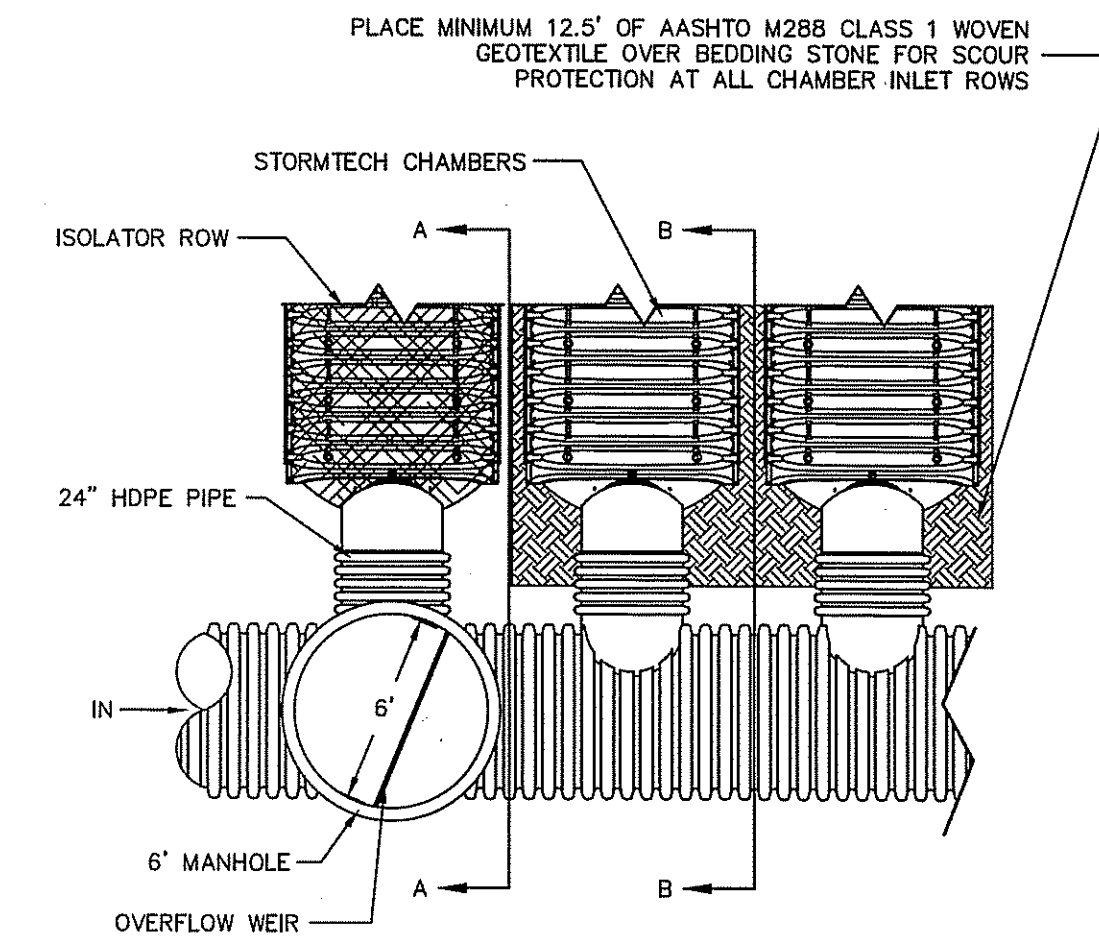
- NOTES:**
- SHALL BE IN ACCORDANCE WITH SECTION 206 OF THE R.I. STANDARD SPECIFICATIONS.
 - 2"x2"x4'-6" (MAXIMUM) OAK POSTS FOR SILT FENCE SHALL BE LOCATED 8'-0" (MAXIMUM) O.C. IN WETLAND AREAS AND 4'-0" (MAXIMUM) O.C. IN WETLAND RAVINE, GULLY OR DROP-OFF AREAS AS SHOWN ON PLANS.
 - 1"x1"x4'-6" (MINIMUM) POSTS PERMITTED FOR PRE-FABRICATED SILT FENCE.
 - SILT FENCE SHALL BE INSTALLED BEFORE ANY GRUBBING OR EARTH EXCAVATION TAKES PLACE.



DETAIL "A"



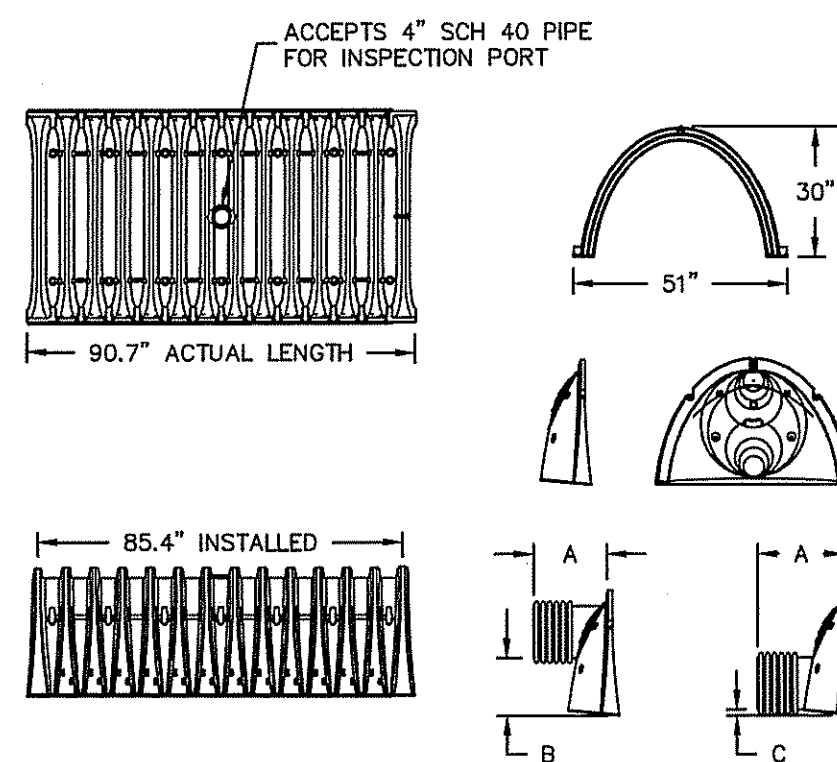
Silt Fence Detail
NOT TO SCALE



SECTION A-A

SECTION B-B

EXISTING STORMTECH ISOLATION ROW TO BE RELOCATED
NOT TO SCALE



NOMINAL CHAMBER SPECIFICATIONS:

SIZE (W x H x INSTALLED LENGTH) 51.0" x 30.0" x 85.4"
 CHAMBER STORAGE 45.9 CUBIC FEET
 MINIMUM INSTALLED STORAGE 74.9 CUBIC FEET
 WEIGHT 75 LBS

PART #	CHAMBER	PIPE SIZE	A	B	C
SC740EPE06T	SC-740	6" (150 mm)	10.9" (277 mm)	18.5" (470 mm)	N/A
SC740EPE06B	SC-740	6" (150 mm)	10.9" (277 mm)	N/A	0.5" (13 mm)
SC740EPE08T	SC-740	8" (200 mm)	12.2" (310 mm)	16.5" (419 mm)	N/A
SC740EPE08B	SC-740	8" (200 mm)	12.2" (310 mm)	N/A	0.6" (15 mm)
SC740EPE10T	SC-740	10" (250 mm)	13.4" (340 mm)	14.5" (368 mm)	N/A
SC740EPE10B	SC-740	10" (250 mm)	13.4" (340 mm)	N/A	0.7" (18 mm)
SC740EPE12T	SC-740	12" (300 mm)	14.7" (373 mm)	12.5" (318 mm)	N/A
SC740EPE12B	SC-740	12" (300 mm)	14.7" (373 mm)	N/A	1.2" (30 mm)
SC740EPE15T	SC-740	15" (375 mm)	18.4" (467 mm)	9.0" (229 mm)	N/A
SC740EPE15B	SC-740	15" (375 mm)	18.4" (467 mm)	N/A	1.3" (33 mm)
SC740EPE18T	SC-740	18" (450 mm)	19.7" (500 mm)	5.0" (127 mm)	N/A
SC740EPE18B	SC-740	18" (450 mm)	19.7" (500 mm)	N/A	1.6" (41 mm)
SC740EPE24B	SC-740	24" (600 mm)	18.5" (470 mm)	N/A	0.1" (3 mm)

- NOTES:**
- ALL DIMENSIONS ARE NOMINAL.
 - STUBS AT TOP OF END CAP FOR PARTS NUMBERS ENDING WITH "T".
 - STUBS AT BOTTOM OF END CAP FOR PARTS NUMBERS ENDING WITH "B".
 - FOR THE SC740EPE24B THE 24" STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 1.75". BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SETS LEVEL.
 - ALL STUBS, EXCEPT FOR THE SC740EPE24B ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

TECHNICAL DETAILS
NOT TO SCALE

MATERIAL LOCATION	DESCRIPTION	AASHTO M43 DESIGNATION	AASHTO M145 DESIGNATION	COMPACTION/DENSITY REQUIREMENTS
FILL MATERIAL FROM 18" TO GRADE ABOVE CHAMBERS	ANY SOIL/ROCK MATERIALS, NATIVE SOILS OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	N/A	PREPARE PER ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRONGER MATERIAL AND PREPARATION REQUIREMENTS.
FILL MATERIAL FOR 6" TO 18" ELEVATION ABOVE CHAMBERS (24" FOR UNPAVED INSTALLATIONS)	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES.	3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	A-1, A-2, A-3	COMPACT IN 3" LIFTS TO A MINIMUM 95% STANDARD PROCTOR DENSITY. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 LBS. DYNAMIC FORCE NOT TO EXCEED 20,000 LBS.
EMBEDMENT STONE SURROUNDING AND TO A 6" ELEVATION ABOVE CHAMBERS	CLEAN ANGULAR STONE WITH THE MAJORITY OF PARTICLES BETWEEN 3/4" TO 2"	3, 357, 4, 467, 5, 56, 57	N/A	NO COMPACTION REQUIRED
FOUNDATION STONE BELOW CHAMBERS	CLEAN ANGULAR STONE WITH THE MAJORITY OF PARTICLES BETWEEN 3/4" TO 2"	3, 357, 4, 467, 5, 56, 57	N/A	PLATE COMPACT OR ROLL TO ACHIEVE A 95% STANDARD PROCTOR DENSITY

NOTE: THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED ANGULAR. FOR EXAMPLE, THE STONE MUST BE SPECIFIED AS CLEAN, CRUSHED, ANGULAR NO. 4 STONE.

ACCEPTABLE FILL MATERIALS FOR STORMTECH SC-740 CHAMBER SYSTEMS
NOT TO SCALE

Diprete Engineering

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Boston • Providence • Newport

JASON P. CLOUGH
 No. 5110
 REGISTERED PROFESSIONAL ENGINEER CIVIL

This regulatory submission set shall not be used for construction purposes unless stamped 'Issued for Construction' and signed by a Diprete Engineering representative.

The contractor is responsible for all of the means, methods, safety, precautions and requirements and OSHA compliance in the implementation of this plan and design.

No.	Date	Description	By:
1	02/28/2015	REVISION DETERMINATION	J.P.C.
2	02/28/2015	DESIGN	J.P.C.

Detail Sheet - 2
C&D Facility - Shun Pike

Applicant: **Shun Properties, LLC**
 Assessor's Map 32, Lot 17
 2208 Plainfield Pike, Johnston, Rhode Island 02939
 Tel: 401-943-7100

Design By: J.P.C.
 Drawn By: J.D.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 DIVISION OF WATER RESOURCES
 PERMITTING AND CONSTRUCTION PROGRAM
 APPROVAL
 15-008
 PRIOR APPROVAL
 CONSTRUCTION SITE
 Environmental Management
 MAY 21 2015
 Office of Water Resources