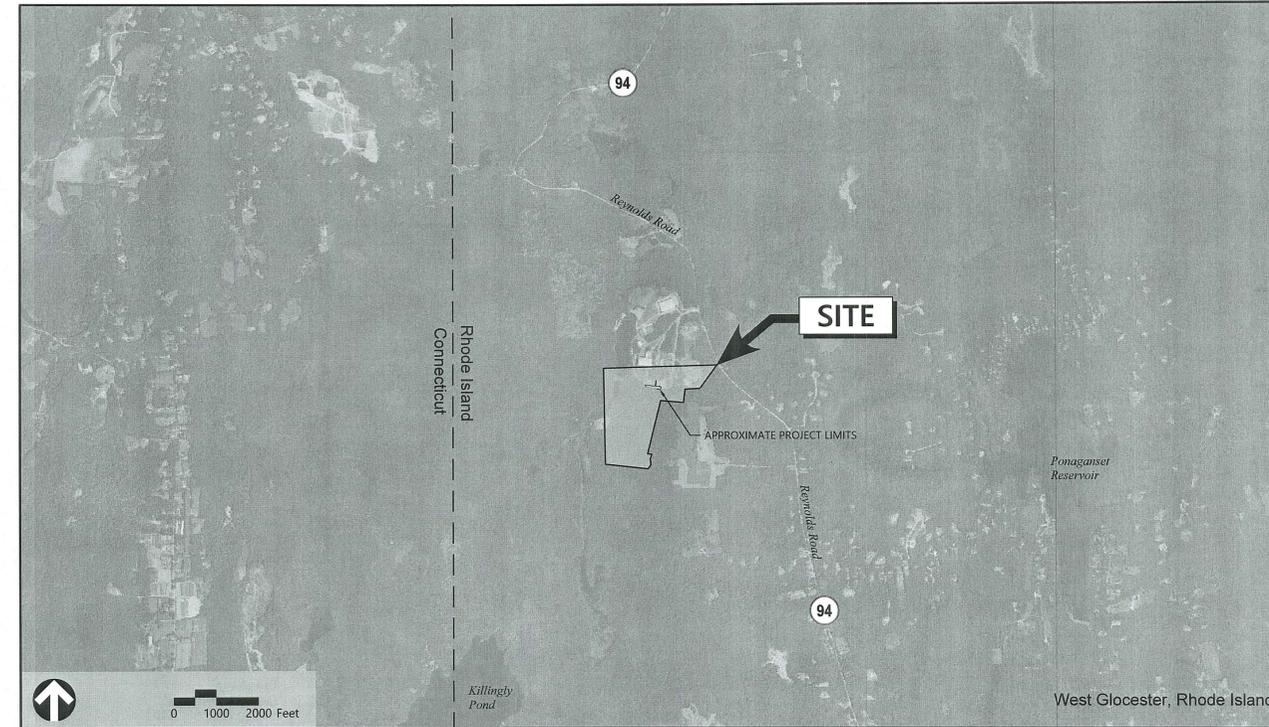


Site Plans

Issued for	Permits
Date Issued	July 21, 2023
Latest Issue	July 21, 2023

FM Global WESP Road Relocation

Research Campus
743 Reynolds Road
West Glocester, Rhode Island
02814



1 Cedar Street
Suite 400
Providence, RI 02903
401.272.8100

Owner/Applicant

Factory Mutual Insurance Company
d/b/a FM Global Research Campus

743 Reynolds Road
West Glocester, RI 02814

Assessor's Map: Plat 5
Lot: 77

Sheet Index

No.	Drawing Title	Latest Issue
C1.01	Legend and General Notes	July 21, 2023
C2.01	Layout and Materials Plan	July 21, 2023
C3.01	Grading and Drainage Plan and Profile	July 21, 2023
C4.01	Utility Plan	July 21, 2023
C5.01	Site Details 1	July 21, 2023
SESC-1	Soil Erosion and Sediment Control Plan	July 21, 2023
SESC-2	Soil Erosion and Sediment Control - General Notes and Details	July 21, 2023

Reference Drawings

No.	Drawing Title	Latest Issue
1 & 2	Existing Conditions Plan	August 24, 2022

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM

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

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM

APPROVED WITH CONDITIONS AS
SPECIFIED IN THE LETTER OF APPROVAL
DATED: SEP 07 2023 FILE # 23-0160

NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

RI Environmental Management
JUL 27 2023
Office of Water Resources

REGISTERED PROFESSIONAL ENGINEER
No. 6517
7/21/2023



1 Cedar Street
Suite 400
Providence, RI 02903
401.272.8100

Legend

Table with columns: Exist., Prop., Exist., Prop. containing various symbols and descriptions for property lines, easements, curbs, and utilities.

Abbreviations

Table with columns: General, Utility containing abbreviations for items like ABAN (ABANDON), ACR (ACCESSIBLE CURB RAMP), and CB (CATCH BASIN).

Notes

- 1. CONTRACTOR SHALL NOTIFY "DIG-SAFE" (1-888-344-7233) AT LEAST 72 HOURS BEFORE EXCAVATING.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY.
3. ACCESSIBLE ROUTES, PARKING SPACES, RAMPS, SIDEWALKS AND WALKWAYS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE FEDERAL AMERICANS WITH DISABILITIES ACT AND WITH STATE AND LOCAL LAWS AND REGULATIONS (WHICHEVER ARE MORE STRINGENT).

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 3 FEET UNLESS OTHERWISE NOTED.
3. CURBING SHALL BE PORTLAND CEMENT CONCRETE (PCC) WITHIN THE SITE UNLESS OTHERWISE INDICATED ON THE PLANS.

Demolition

- 1. CONTRACTOR SHALL REMOVE AND DISPOSE OF EXISTING MANMADE SURFACE FEATURES WITHIN THE LIMIT OF WORK INCLUDING STRUCTURES, PAVEMENTS, SLABS, CURBING, FENCES, UTILITY POLES, SIGNS, ETC. UNLESS INDICATED OTHERWISE ON THE DRAWINGS.
2. EXISTING UTILITIES SHALL REMAIN, UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL COORDINATE UTILITY SERVICE DISCONNECTS WITH THE UTILITY REPRESENTATIVES.

Erosion Control

- 1. SEE SOIL EROSION AND SEDIMENT CONTROL PLANS AND DETAILS.

Existing Conditions Information

- 1. BASE PLAN: THE PROPERTY LINES SHOWN WERE DETERMINED BY AN ACTUAL FIELD SURVEY CONDUCTED BY PRINCEPI COMPANY, INC. THE TOPOGRAPHY AND PHYSICAL FEATURES ARE BASED ON AN ACTUAL FIELD SURVEY PERFORMED ON THE GROUND BY PRINCEPI COMPANY, INC. ON AUGUST 31, 2022.
A. DELINEATION OF THE WETLANDS AND PLACEMENT OF THE FLAGS WAS PERFORMED BY: VHB, INC.
B. FLAGS MARKING THE WETLANDS WERE LOCATED BY: PRINCEPI COMPANY, INC.

Document Use

- 1. THESE PLANS AND CORRESPONDING CADD DOCUMENTS ARE INSTRUMENTS OF PROFESSIONAL SERVICE AND SHALL NOT BE USED, IN WHOLE OR IN PART, FOR ANY PURPOSE OTHER THAN FOR WHICH IT WAS CREATED WITHOUT THE EXPRESSED, WRITTEN CONSENT OF VHB.
2. 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.

Seeding

- 1. USE NATIVE STEEP SLOPE MIX ON SLOPES 2:1 OR GREATER.
2. USE A RESIDENTIAL SEED MIX ON ALL OTHER SEEDED AREAS.

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
DATED: SEP 07 2023 FILE # 23-0110
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

FM Global
Road Relocation
743 Reynolds Road
West Glocester, Rhode Island

Table with columns: No., Revision, Date, Apprd. for tracking revisions.

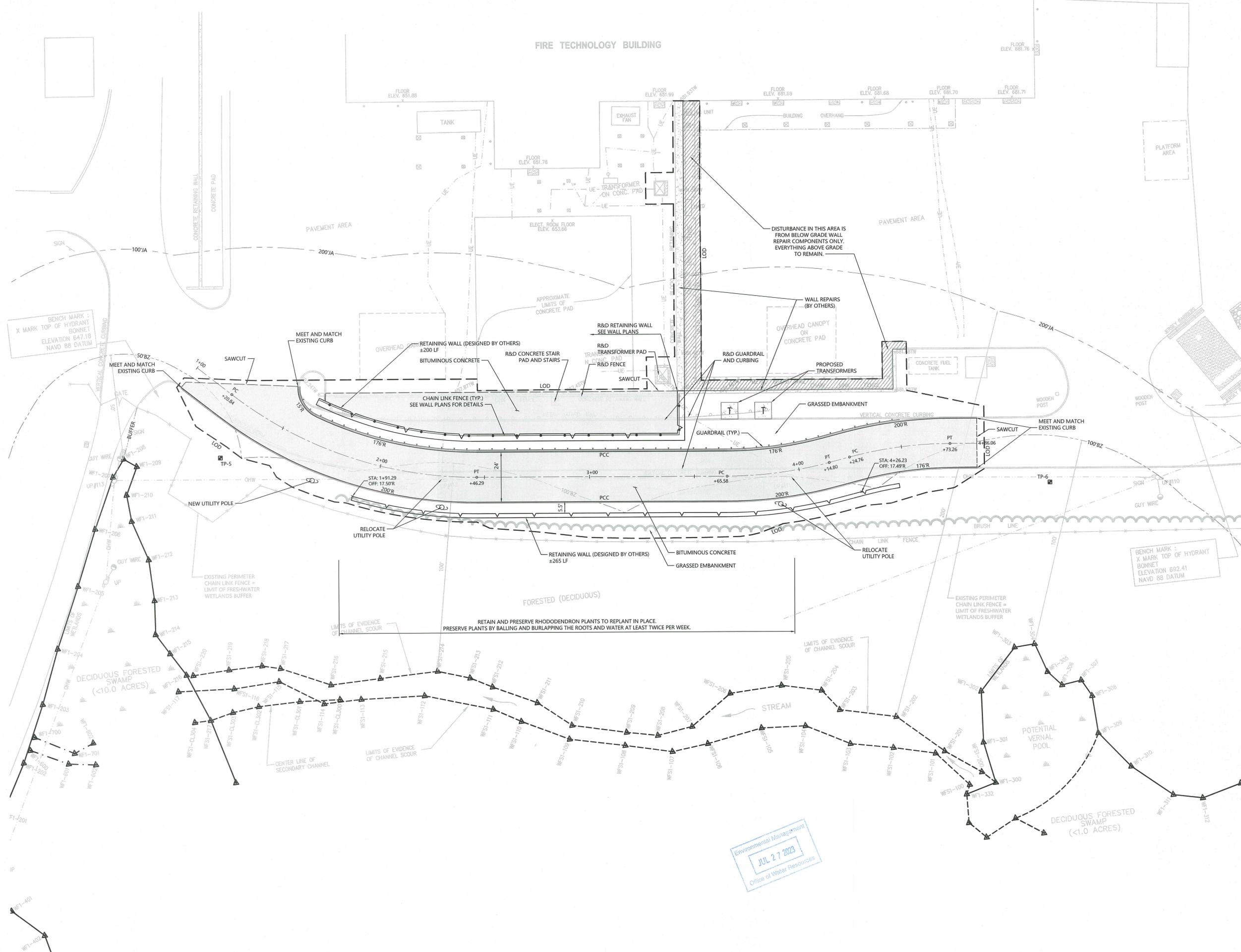
Designed by: SAP, Checked by: RLC
Issued for: Permits, Date: July 21, 2023

Not Approved for Construction
Legend and General Notes

Professional Engineer seal for BENJIE L. CODEGA, No. 6517, dated 7/21/2023. Drawing Number C1.01, Sheet 1 of 5, Project Number 73281.01.



1 Cedar Street
Suite 400
Providence, RI 02903
401.272.8100



RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
DATED: SEP 07 2023 FILE # 23-D160
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE



FM Global
Road Relocation
743 Reynolds Road
West Gloucester, Rhode Island

No.	Revision	Date	Appr.

Designed by: SAP Checked by: RLC
Issued for: Date: July 21, 2023
Permits

Not Approved for Construction
Drawing Title: **Layout and Materials Plan**
Drawing Number: **C2.01**



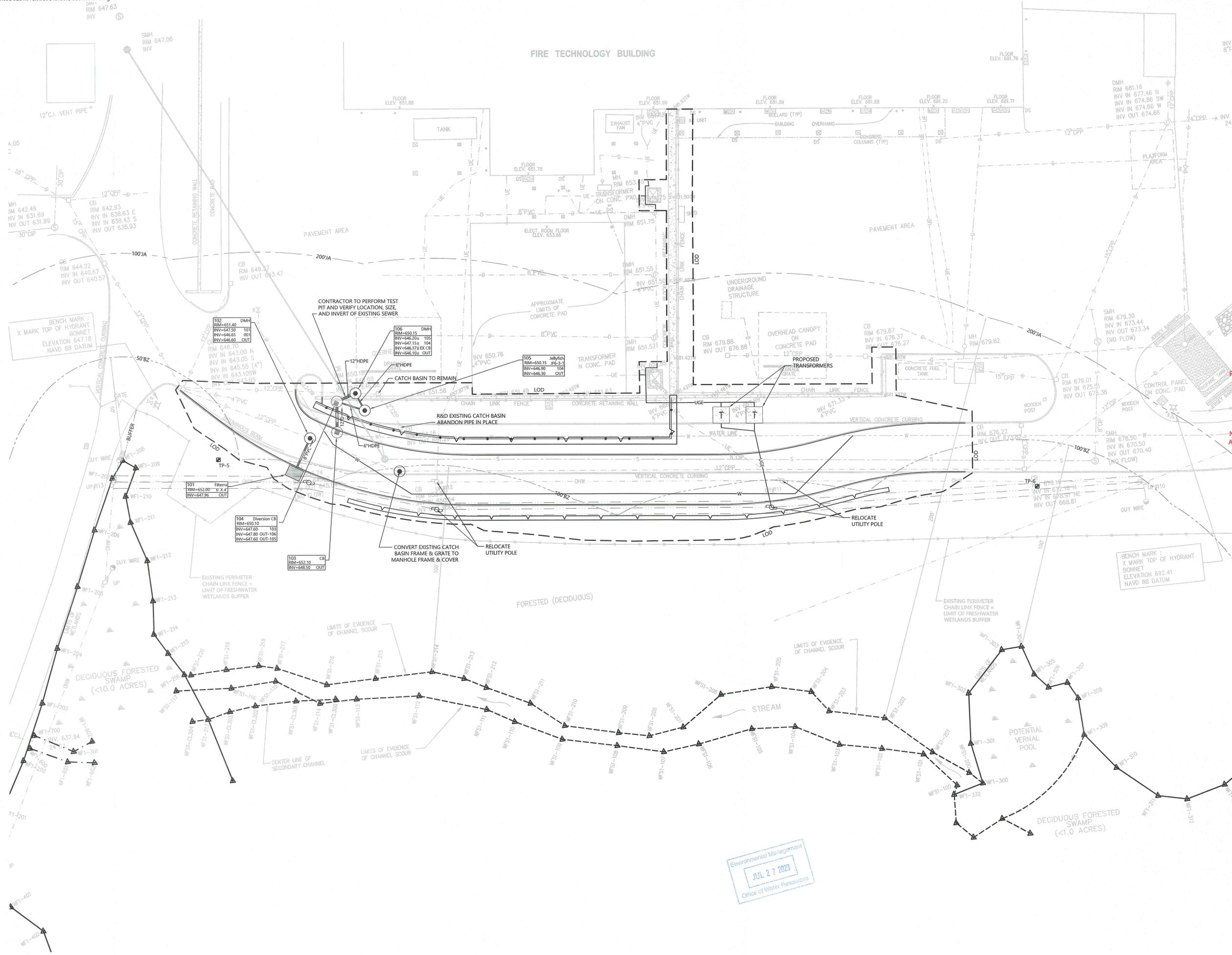
Sheet 2 of 5
Project Number 73281.01

Environmental Management
JUL 27 2023
Office of Water Resources

Saved: Friday, July 14, 2023 3:55:01 PM SPERERA, P. Plotted: Thursday, July 27, 2023 10:21:28 AM Stephen Pereira



1 Cedar Street
Suite 400
Providence, RI 02903
401.272.8100



RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS
SPECIFIED IN THE LETTER OF APPROVAL
DATED: SEP 07 2023 FILE # 3-D16
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLAN MUST BE AT CONSTRUCTION SITE

- CATCH BASINS TO MANHOLES
1. FILL BASIN SUMP WITH 3,000 PSI CONCRETE AND CREATE NEW INVERTS AT THE ELEVATIONS AND SIZES OF THE EXISTING PIPES AND IN ACCORDANCE WITH SPECIFICATIONS AND DETAILS FOR NEW DRAIN MANHOLES.
 2. PROVIDE AND ADJUST TO GRADE NEW DRAIN MANHOLE FRAME AND COVER.
 3. REFER TO OWNER FOR FINAL ELECTRIC DESIGN.



FM Global
Road Relocation
743 Reynolds Road
West Gloucester, Rhode Island

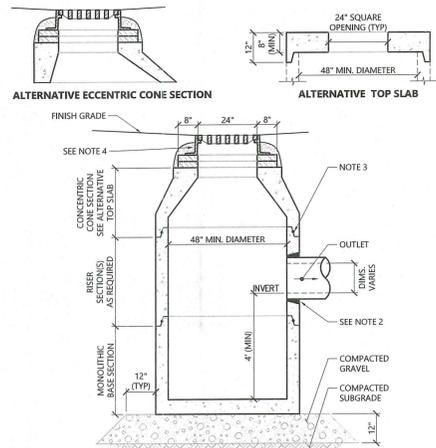
No.	Revision	Date	Appr.

Designed by: SAP
Checked by: RLC
Issued for: Permits
Date: July 21, 2023

Not Approved for Construction
Utility Plan
Drawing Number: C4.01
Sheet 4 of 5
Project Number: 73281.01

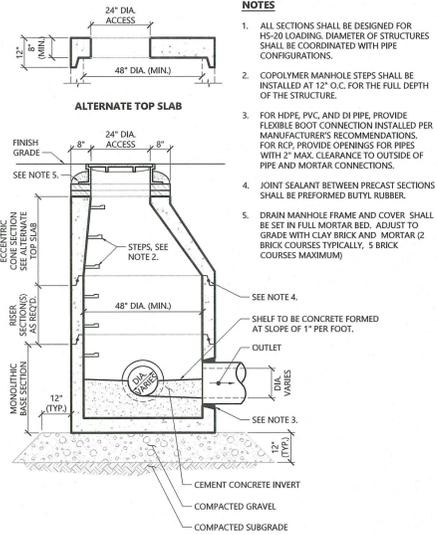


Environmental Management
JUL 27 2023
Office of Water Resources



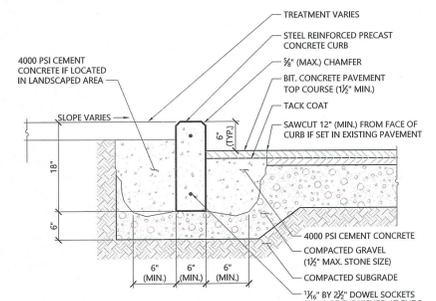
- NOTES**
1. ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING.
 2. FOR HDPE, PVC, AND DI PIPE, PROVIDE FLEXIBLE BOOT CONNECTION INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. FOR RCP, PROVIDE OPENINGS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE AND MORTAR CONNECTIONS.
 3. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PERFORMED BUTYL RUBBER.
 4. CATCH BASIN FRAME AND GRATE SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM).

Catch Basin (CB) 11/19
 N.T.S. Source: VHB LD_100

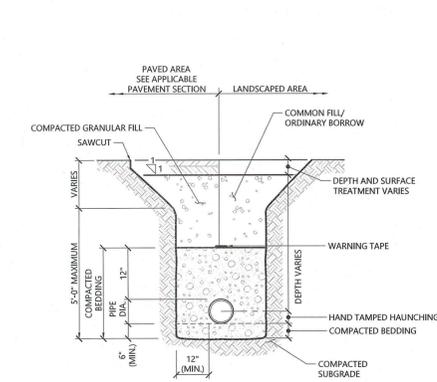


- NOTES**
1. ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING. DIAMETER OF STRUCTURES SHALL BE COORDINATED WITH PIPE CONFIGURATIONS.
 2. COPOLYMER MANHOLE STEPS SHALL BE INSTALLED AT 12" O.C. FOR THE FULL DEPTH OF THE STRUCTURE.
 3. FOR HDPE, PVC, AND DI PIPE, PROVIDE FLEXIBLE BOOT CONNECTION INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. FOR RCP, PROVIDE OPENINGS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE AND MORTAR CONNECTIONS.
 4. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PERFORMED BUTYL RUBBER.
 5. DRAIN MANHOLE FRAME AND COVER SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM).

Drain Manhole (DMH) 11/19
 N.T.S. Source: VHB LD_115

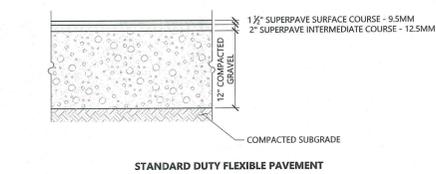


Precast Concrete Curb (PCC) 3/20
 N.T.S. Source: VHB LD_404

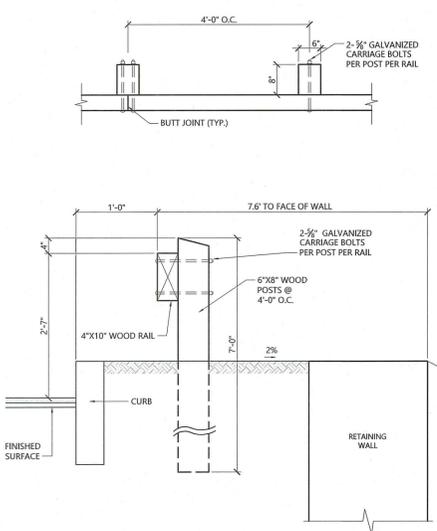


- NOTES**
1. WHERE UTILITY TRENCHES ARE CONSTRUCTED THROUGH DETENTION BASIN BERMS OR OTHER SUCH SPECIAL SECTIONS, PLACE TRENCH BACKFILL WITH MATERIALS SIMILAR TO THE SPECIAL SECTION REQUIREMENTS.
 2. USE METALLIC TRACING/WARNING TAPE OVER ALL PIPES.
 3. COMPACTED GRANULAR FILL MAY CONSIST OF GRAVEL, CRUSHED STONE, SAND, OR OTHER MATERIAL AS APPROVED BY ENGINEER.

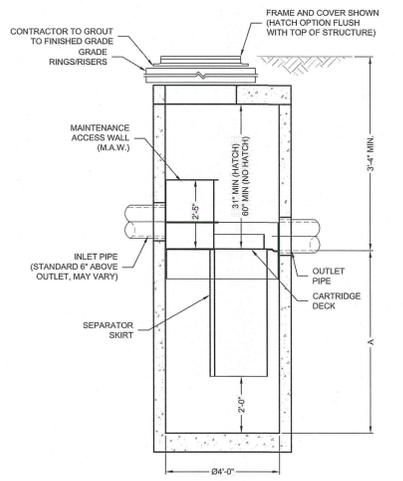
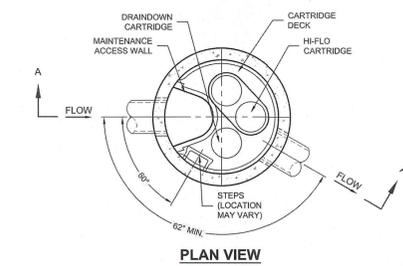
Utility Trench 11/19
 N.T.S. Source: VHB LD_300



Bituminous Concrete Pavement Sections 7/22
 N.T.S. Source: VHB LD_430



Wood Guardrail 10/20
 N.T.S. Source: VHB LD_450



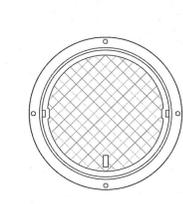
Jellyfish Filter
 THIS PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING U.S. PATENT NOS. 8,298,726; 8,273,814; 8,118,123; 8,002,000. OTHER INTERNATIONAL PATENTS PENDING.

JELLYFISH DESIGN NOTES

JELLYFISH TREATMENT CAPACITY IS A FUNCTION OF THE CARTRIDGE SELECTION AND THE NUMBER OF CARTRIDGES. THE STANDARD MANHOLE STYLE IS SHOWN. 24" MANHOLE JELLYFISH PEAK TREATMENT CAPACITY IS 0.45 CFS. IF THE SITE CONDITIONS EXCEED 0.45 CFS AN UPSTREAM BYPASS STRUCTURE IS REQUIRED.

CARTRIDGE SELECTION	54"	40"	27"	15"
CARTRIDGE DEPTH	54"	40"	27"	15"
OUTLET INVERT TO STRUCTURE INVERT (A)	6'-5"	5'-2"	4'-2"	3'-2"
FLOW RATE HIGH FLO / DRAINDOWN (cfs) (per cart)	0.18 / 0.09	0.13 / 0.055	0.09 / 0.045	0.05 / 0.025
MAX. CARTS HIGH FLO / DRAINDOWN	2 / 1			

54" CARTRIDGE TO BE USED FOR THIS SITE



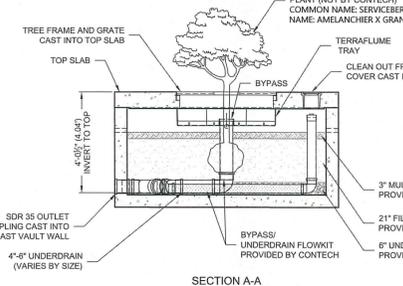
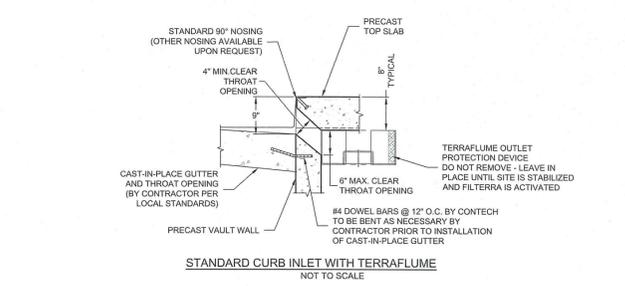
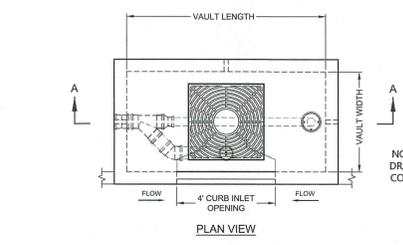
SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID		*
WATER QUALITY FLOW RATE (cfs)		*
PEAK FLOW RATE (cfs)		*
RETURN PERIOD OF PEAK FLOW (yrs)		*
# OF CARTRIDGES REQUIRED (HF / DD)		* / *
CARTRIDGE SIZE		*
PIPE DATA		*
INLET PIPE #1		*
INLET PIPE #2		*
OUTLET PIPE		*
RIM ELEVATION		*
ANTI-FLOTATION BALLAST		WIDTH HEIGHT
NOTES/SPECIAL REQUIREMENTS:		
* PER ENGINEER OF RECORD		

- GENERAL NOTES**
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
 2. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS REPRESENTATIVE. www.conteches.com
 3. JELLYFISH WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
 4. STRUCTURE SHALL MEET AASHTO HS-20 OR PER APPROVING JURISDICTION REQUIREMENTS, WHICHEVER IS MORE STRINGENT, ASSUMING EARTH COVER OF 0'-3" AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 LOAD RATINGS AND BE CAST WITH THE CONTECH LOGO.
 5. STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.
 6. NO PRODUCT SUBSTITUTIONS SHALL BE ACCEPTED UNLESS SUBMITTED 10 DAYS PRIOR TO PROJECT BID DATE, OR AS DIRECTED BY THE ENGINEER OF RECORD.
- INSTALLATION NOTES**
- A. ANY SUB-BASE, BACKFILL, DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
 - B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STRUCTURE (LIFTING CLUTCHES PROVIDED).
 - C. CONTRACTOR WILL INSTALL AND LEVEL THE STRUCTURE, SEALING THE JOINTS, LINE ENTRY AND EXIT POINTS (NON-SHRINK GROUT WITH APPROVED WATERTIGHT-OR-FLEXIBLE BOOT).
 - D. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT CARTRIDGES FROM CONSTRUCTION-RELATED EROSION RUNOFF.
 - E. CARTRIDGE INSTALLATION, BY CONTECH, SHALL OCCUR ONLY AFTER SITE HAS BEEN STABILIZED AND THE JELLYFISH UNIT IS CLEAN AND FREE OF DEBRIS. CONTACT CONTECH TO COORDINATE CARTRIDGE INSTALLATION WITH SITE STABILIZATION AT (866) 740-3316.

CONTECH
 ENGINEERED SOLUTIONS LLC
www.conteches.com
 9100 Centre Pointe Dr., Suite 400, West Chester, OH 45399
 800-338-1122 513-645-7000 513-645-7993 FAX

JELLYFISH JF4 STANDARD DETAIL OFFLINE CONFIGURATION



FTIBC CONFIGURATION

VAULT SIZE (L x W)	MEDIA AREA (SF)	LONG SIDE INLET DESIG. / PART NO.	SHORT SIDE INLET DESIG. / PART NO.	AVAILABILITY	MAX. OUTLET / BYPASS FLOW PIPE DIA.	MAX. BYPASS FLOW (CFS)	UNDER-DRAIN PIPE DIA. (PERF)	TREE GRATE QTY. & SIZE
4 x 4	16	FTIBC0404	FTIBC0404	ALL	8" SDR 35	1.42	4" SDR 35	(1) 3' x 3'
6 x 4	24	FTIBC0604	FTIBC0406	ALL	8" SDR 35	1.89	4" SDR 35	(1) 3' x 3'
8 x 4	32	FTIBC0804	FTIBC0408	ALL (EXCEPT DE, MD, NJ, PA, VA, WV ONLY)	8" SDR 35	1.89	4" SDR 35	(1) 3' x 3'
7.83 x 4.5	35	FTBC078045	FTIBC045078	DE, MD, NJ, PA, VA, WV ONLY	8" SDR 35	1.89	4" SDR 35	(1) 3' x 3'
6 x 6	36	FTIBC0606	FTIBC0606	ALL (EXCEPT CA, TX)	8" SDR 35	1.89	4" SDR 35	(1) 3' x 3'
8 x 6	48	FTIBC0806	FTIBC0608	ALL	10" SDR 35	2.37	4" SDR 35	(1) 4' x 4'
10 x 6	60	FTIBC1006	FTIBC0610	ALL (EXCEPT CA, TX)	10" SDR 35	2.37	6" SDR 35	(1) 4' x 4'
8 x 8	64	FTIBC0808	FTIBC0808	CA, TX ONLY	10" SDR 35	2.37	6" SDR 35	(1) 4' x 4'
12 x 6	72	FTIBC1206	FTIBC0612	ALL (EXCEPT TX)	10" SDR 35	2.37	6" SDR 35	(2) 4' x 4'
10 x 8	80	FTIBC1008	FTIBC0810	CA, TX ONLY	10" SDR 35	2.37	6" SDR 35	(1) 4' x 4'
13 x 7	91	FTIBC1307	FTIBC0713	ALL (EXCEPT CA, TX)	10" SDR 35	2.37	6" SDR 35	(2) 4' x 4'
12 x 8	96	FTIBC1208	FTIBC0812	CA, TX ONLY	10" SDR 35	2.37	6" SDR 35	(2) 4' x 4'
14 x 8	112	FTIBC1408	N/A	ALL	10" SDR 35	2.37	6" SDR 35	(2) 4' x 4'

INTERNAL PIPE CONFIGURATION MAY VARY DEPENDING ON VAULT SIZE

CONTECH
 ENGINEERED SOLUTIONS LLC
www.conteches.com
 9100 Centre Pointe Dr., Suite 400, West Chester, OH 45399
 800-338-1122 513-645-7000 513-645-7993 FAX

FILTERRA INTERNAL BYPASS CURB (FTIBC) CONFIGURATION DETAIL

vhb
 1 Cedar Street
 Suite 400
 Providence, RI 02903
 401.272.8100
vhb.com

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED: SEP 07 2023 FILE # 23-0160
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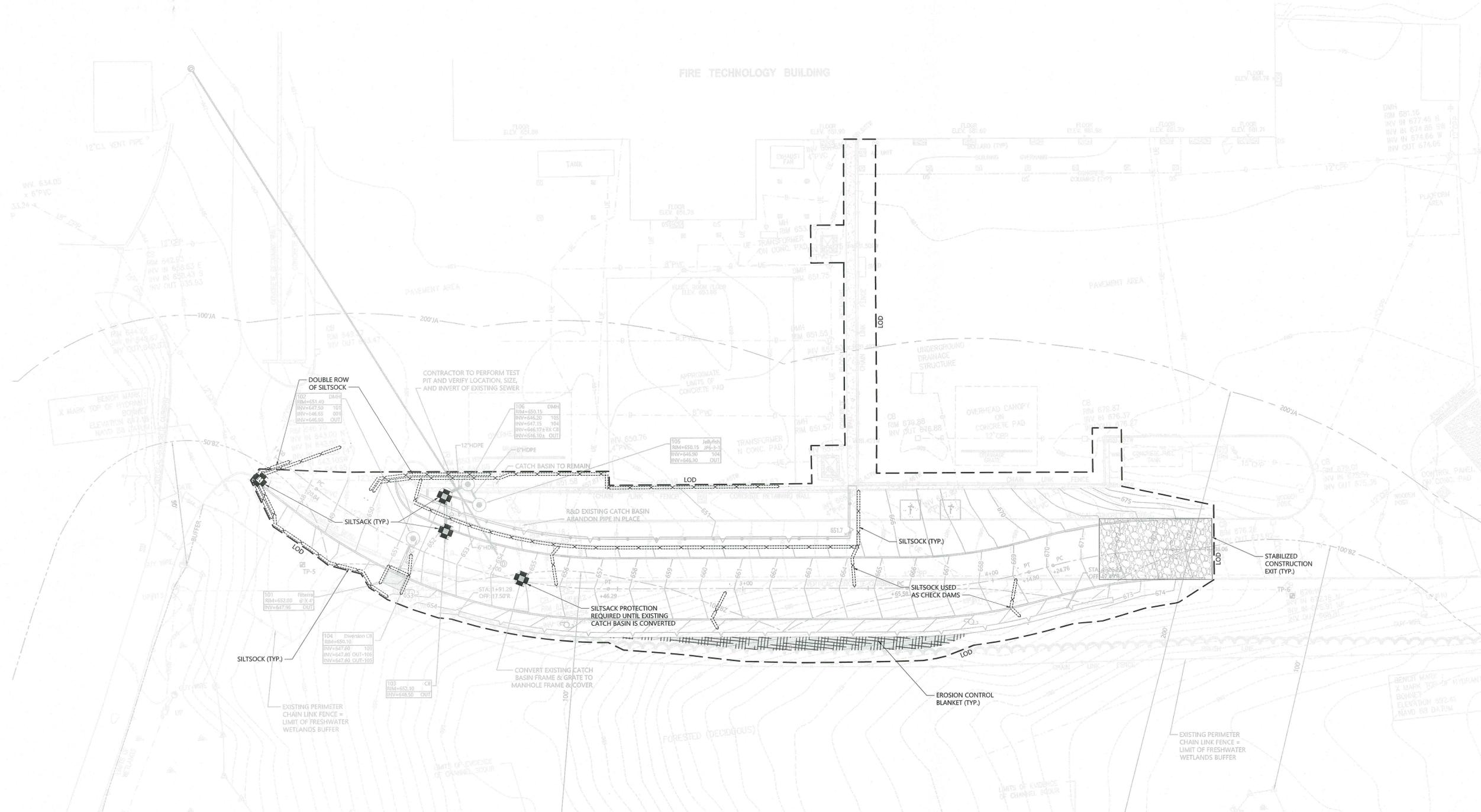
FM Global
 Road Relocation
 743 Reynolds Road
 West Gloucester, Rhode Island

No.	Revision	Date	Appr.

Designed by SAP Checked by RLC
 Issued for Permits Date July 21, 2023

Not Approved for Construction
 Site Details
 Drawing Number

REGISTERED PROFESSIONAL ENGINEER
 No. 6517
 7/21/2023
C5.01
 Sheet 5 of 5
 Project Number 73281.01



RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
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Handwritten signature



FM Global
Road Relocation
743 Reynolds Road
West Glocester, Rhode Island

No.	Revision	Date	Appr.

Designed by: **SAP** Checked by: **RLC**
Issued for: **Permits** Date: **July 21, 2023**

Not Approved for Construction
Soil Erosion and
Sediment Control Plan

Environmental Management
JUL 27 2023
Office of Water Resources

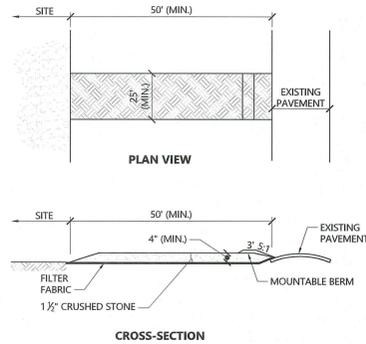
Professional Engineer Seal for **RENÉE L. CODEGA**, No. 6517, REGISTERED PROFESSIONAL ENGINEER.
SESC-1
Sheet 1 of 2
Project Number: 73281.01

General

- 1. CONTRACTOR SHALL NOTIFY "DIG-SAFE" (1-888-344-7233) AT LEAST 72 HOURS BEFORE EXCAVATING.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH OSHA STANDARDS AND LOCAL REQUIREMENTS.
3. AREAS DISTURBED DURING CONSTRUCTION AND NOT RESTORED WITH IMPERVIOUS SURFACES (BUILDINGS, PAVEMENTS, WALKS, ETC.) SHALL RECEIVE 6 INCHES LOAM AND SEED.
4. UPON AWARD OF CONTRACT, CONTRACTOR SHALL MAKE NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN NECESSARY PERMITS, PAY FEES, AND POST BONDS ASSOCIATED WITH THE WORK INDICATED ON THE DRAWINGS, IN THE SPECIFICATIONS, AND IN THE CONTRACT DOCUMENTS. DO NOT CLOSE OR OBSTRUCT ROADWAYS, SIDEWALKS, AND FIRE HYDRANTS, WITHOUT APPROPRIATE PERMITS.
5. AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
6. IN THE EVENT THAT SUSPECTED CONTAMINATED SOIL, GROUNDWATER, AND OTHER MEDIA ARE ENCOUNTERED DURING EXCAVATION AND CONSTRUCTION ACTIVITIES BASED ON VISUAL, OLFACTORY, OR OTHER EVIDENCE, THE CONTRACTOR SHALL STOP WORK IN THE VICINITY OF THE SUSPECT MATERIAL TO AVOID FURTHER SPREADING OF THE MATERIAL, AND SHALL NOTIFY THE OWNER IMMEDIATELY SO THAT THE APPROPRIATE TESTING AND SUBSEQUENT ACTION CAN BE TAKEN.
7. CONTRACTOR SHALL PREVENT DUST, SEDIMENT, AND DEBRIS FROM EXITING THE SITE AND SHALL BE RESPONSIBLE FOR CLEANUP, REPAIRS AND CORRECTIVE ACTION IF SUCH OCCURS.
8. CONTRACTOR SHALL CONTROL STORMWATER RUNOFF DURING CONSTRUCTION TO PREVENT ADVERSE IMPACTS TO OFF SITE AREAS, AND SHALL BE RESPONSIBLE TO REPAIR RESULTING DAMAGES, IF ANY, AT NO COST TO OWNER.
9. STAGING AND STOCKPILE AREAS SHALL NOT BE LOCATED WITHIN ANY WETLAND AND ADJUTING RESOURCE AREA AND SHALL BE LOCATED WITHIN THE LOD.
10. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND INSTALLING THE FOLLOWING ITEMS ON SITE AND REDLINING THE PLAN FOR RECORD KEEPING PURPOSES AS REQUIRED BY THE RIDGES PERMIT
a. BUILDING MATERIALS STAGING AREAS
b. STOCKPILE AREAS. EROSION CONTROLS SHALL BE PLACED AT THE BASE OF ALL STOCKPILES
c. DESIGNATED WASHOUT AND REFUELING AREAS.
d. TEMPORARY SEDIMENT BASIN AREAS.
11. THE FOLLOWING DISCHARGES ARE PROHIBITED AT THE CONSTRUCTION SITE:
- CONTAMINATED GROUNDWATER, UNLESS AUTHORIZED BY SEPARATE THE RIDEM RIDGES PERMIT.
- WASTEWATER FROM WASHOUT OF CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS, AND OTHER CONSTRUCTION MATERIALS.
- FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE. PROPER STORAGE AND SPILL PREVENTION PRACTICES MUST BE UTILIZED AT ALL CONSTRUCTION SITES.
- SOAPS OR SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING.
- TOXIC OR HAZARDOUS SUBSTANCES FROM A SPILL OR OTHER RELEASE.
12. BUILDING MATERIALS AND OTHER CONSTRUCTION SITE WASTES MUST BE PROPERLY MANAGED AND DISPOSED OF IN A MANNER CONSISTENT WITH STATE LAW AND/OR REGULATIONS.
13. ALL CHEMICALS AND/OR HAZARDOUS WASTE MATERIAL MUST BE STORED PROPERLY AND LEGALLY IN COVERED AREAS, WITH CONTAINMENT SYSTEMS CONSTRUCTED IN OR AROUND THE STORAGE AREAS. AREAS MUST BE DESIGNATED FOR MATERIALS DELIVERY AND STORAGE. ALL AREAS WHERE POTENTIAL SPILLS CAN OCCUR AND THEIR ACCOMPANYING DRAINAGE POINTS MUST BE DESCRIBED. THE OWNER AND OPERATOR MUST ESTABLISH SPILL PREVENTION AND CONTROL MEASURES TO REDUCE THE CHANCE OF SPILLS, STOP THE SOURCE OF SPILLS, CONTAIN AND CLEAN-UP SPILLS, AND DISPOSE OF MATERIALS CONTAMINATED BY SPILLS. THE OPERATOR MUST ESTABLISH AND MAKE HIGHLY VISIBLE LOCATION(S) FOR THE STORAGE OF SPILL PREVENTION AND CONTROL EQUIPMENT AND PROVIDE TRAINING FOR PERSONNEL RESPONSIBLE FOR SPILL PREVENTION AND CONTROL ON THE CONSTRUCTION SITE.

Erosion Control

- 1. PRIOR TO STARTING ANY OTHER WORK ON THE SITE, THE CONTRACTOR SHALL NOTIFY APPROPRIATE AGENCIES AND SHALL INSTALL EROSION CONTROL MEASURES AS SHOWN ON THE PLANS AND AS IDENTIFIED IN FEDERAL, STATE, AND LOCAL APPROVAL DOCUMENTS PERTAINING TO THIS PROJECT.
2. CONTRACTOR SHALL INSPECT AND MAINTAIN EROSION CONTROL MEASURES DAILY, AND REMOVE SEDIMENT THEREFROM ON A WEEKLY BASIS AND WITHIN TWELVE HOURS AFTER EACH STORM EVENT AND DISPOSE OF SEDIMENTS IN AN UPLAND AREA SUCH THAT THEY DO NOT ENCUMBER OTHER DRAINAGE STRUCTURES AND PROTECTED AREAS.
3. CONTRACTOR SHALL BE FULLY RESPONSIBLE TO CONTROL CONSTRUCTION SUCH THAT SEDIMENTATION SHALL NOT AFFECT REGULATORY PROTECTED AREAS, WHETHER SUCH SEDIMENTATION IS CAUSED BY WATER, WIND, OR DIRECT DEPOSIT.
4. CONTRACTOR SHALL PERFORM CONSTRUCTION SEQUENCING SUCH THAT EARTH MATERIALS ARE EXPOSED FOR A MINIMUM OF TIME BEFORE THEY ARE COVERED, SEEDDED, OR OTHERWISE STABILIZED TO PREVENT EROSION.
5. UPON COMPLETION OF CONSTRUCTION AND ESTABLISHMENT OF PERMANENT GROUND COVER, CONTRACTOR SHALL REMOVE AND DISPOSE OF EROSION CONTROL MEASURES AND CLEAN SEDIMENT AND DEBRIS FROM ENTIRE DRAINAGE AND SEWER SYSTEMS.
6. A CROSS SLOPE SHALL BE PLACED ON THE STABILIZED CONSTRUCTION EXIT TO DIRECT RUNOFF TO AN ONSITE SETTLING AREA. IF DEEMED NECESSARY AFTER CONSTRUCTION BEGINS, A WASH PAD MAY BE INCLUDED TO WASH OFF VEHICLE WHEELS BEFORE LEAVING THE PROJECT SITE.
7. TEMPORARY SEDIMENT BASINS WILL BE DESIGNED EITHER AS EXCAVATIONS OR BERMED STORMWATER DETENTION STRUCTURES THAT WILL RETAIN RUNOFF FOR A SUFFICIENT PERIOD OF TIME TO ALLOW SUSPENDED SOIL PARTICLES TO SETTLE OUT PRIOR TO DISCHARGE. BASINS WILL BE LOCATED AS DETERMINED BY THE CONTRACTOR BASED ON CONSTRUCTION NEEDS. POINT OF DISCHARGE FROM SEDIMENT BASINS WILL BE STABILIZED TO MINIMIZE EROSION.
8. VEGETATIVE SLOPE STABILIZATION WILL BE IMPLEMENTED WITHIN 14 DAYS AFTER GRADING OR CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. VEGETATIVE SLOPE STABILIZATION WILL BE USED TO MINIMIZE EROSION ON SLOPES OF 3:1 OR STEEPER. ESTABLISHMENT OF TEMPORARY AND PERMANENT VEGETATIVE COVER MAY BE ESTABLISHED BY HYDRO-SEEDING OR SODDING. A SUITABLE TOPSOIL, GOOD SEEDBED PREPARATION, AND ADEQUATE LIME, FERTILIZER AND WATER WILL BE PROVIDED FOR EFFECTIVE ESTABLISHMENT OF THESE VEGETATIVE STABILIZATION METHODS. MULCH WILL ALSO BE USED AFTER PERMANENT SEEDING TO PROTECT SOIL FROM THE IMPACT OF FALLING RAIN AND TO INCREASE THE CAPACITY OF THE SOIL TO ABSORB WATER.
9. STABILIZATION OF DISTURBED AREAS MUST BE INITIATED IMMEDIATELY WHENEVER CLEARING, GRADING, EXCAVATION OR OTHER EARTH DISTURBANCE ACTIVITIES ARE PERMANENTLY CEASED ON ANY PORTION OF THE SITE, OR TEMPORARILY CEASED ON ANY PORTION OF THE SITE AND WILL NOT BE RESUMED FOR A PERIOD EXCEEDING FOURTEEN (14) CALENDAR DAYS. STABILIZATION MUST BE COMPLETED USING VEGETATIVE STABILIZATION MEASURES WHERE POSSIBLE.
10. ALL DISTURBED SOILS EXPOSED PRIOR TO OCTOBER 15TH SHALL BE SEEDDED BY THAT DATE. ANY SUCH AREAS WHICH DO NOT HAVE ADEQUATE VEGETATIVE STABILIZATION BY NOVEMBER 15TH MUST BE STABILIZED THROUGH THE USE OF NON-VEGETATIVE EROSION CONTROL MEASURES. IF WORK CONTINUES WITHIN ANY OF THESE AREAS DURING THE PERIOD FROM OCTOBER 15TH TO APRIL 15TH CARE MUST BE TAKEN TO ENSURE THAT ONLY THE AREA REQUIRED FOR THE DAY'S WORK IS EXPOSED, AND ALL ERODIBLE SOIL MUST BE STABILIZED WITHIN FIVE (5) WORKING DAYS.
11. THE SOIL EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs) CONTAINED ON THE SITE DRAWINGS ARE THE MINIMUM REQUIRED BY THE RHODE ISLAND POLLUTION DISCHARGE ELIMINATION SYSTEM (RIDPES) PROGRAM. THE CONTRACTOR IS REQUIRED TO PROVIDE ADDITIONAL BMPs TO PREVENT POLLUTION FROM STORM WATER DISCHARGES LEAVING THE WORK SITE OR ENTERING WETLANDS IN COMPLIANCE WITH THE RIDPES GENERAL PERMIT AND ALL OTHER LOCAL, STATE AND FEDERAL REQUIREMENTS.

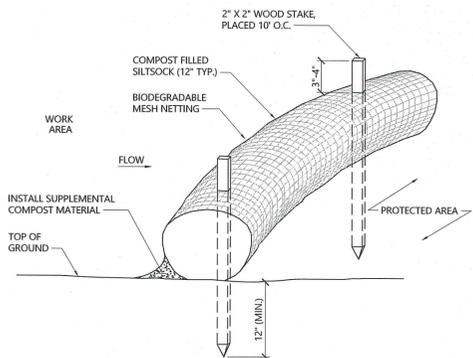


- NOTES
1. EXIT WIDTH SHALL BE A TWENTY-FIVE (25) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
2. THE EXIT SHALL BE MAINTAINED IN A CONDITION WHICH SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY. BERM SHALL BE PERMITTED. PERIODIC INSPECTION AND MAINTENANCE SHALL BE PROVIDED AS NEEDED.
3. STABILIZED CONSTRUCTION EXIT SHALL BE REMOVED PRIOR TO FINAL FINISH MATERIALS BEING INSTALLED.

Stabilized Construction Exit 1/16
N.T.S. Source: VHB LD_682

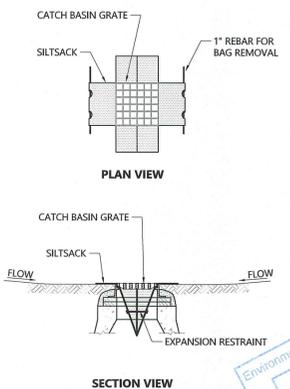
Erosion Control Maintenance Requirements

- SITE OWNERS AND OPERATORS MUST ENSURE THAT ALL EROSION, RUNOFF, SEDIMENT, AND POLLUTION PREVENTION CONTROLS REMAIN IN EFFECTIVE OPERATING CONDITION AND ARE PROTECTED FROM ACTIVITIES THAT WOULD REDUCE THEIR EFFECTIVENESS. SITE OWNERS AND OPERATORS MUST ALSO ENSURE THAT ALL EROSION, RUNOFF, SEDIMENT, AND POLLUTION PREVENTION CONTROLS ARE INSPECTED AT THE REQUIRED FREQUENCY REQUIREMENTS LISTED BELOW. IF THE DESIGNATED SITE INSPECTOR FINDS A PROBLEM (I.E. EROSION, RUNOFF, SEDIMENT OR POLLUTION PREVENTION CONTROLS REQUIRE REPLACEMENT, REPAIR, OR MAINTENANCE), THE OWNER AND OPERATOR MUST ENSURE THAT THE NECESSARY REPAIRS OR MODIFICATIONS ARE MADE IN ACCORDANCE WITH THE FOLLOWING:
1. INITIATE WORK TO FIX THE PROBLEM IMMEDIATELY AFTER DISCOVERING THE PROBLEM, AND COMPLETE SUCH WORK BY THE CLOSE OF THE NEXT WORK DAY, IF THE PROBLEM DOES NOT REQUIRE SIGNIFICANT REPAIR OR REPLACEMENT, OR IF THE PROBLEM CAN BE CORRECTED THROUGH ROUTINE MAINTENANCE.
2. WHEN INSTALLATION OF A NEW CONTROL OR A SIGNIFICANT REPAIR IS NEEDED, SITE OWNERS AND OPERATORS MUST ENSURE THAT THE NEW OR MODIFIED CONTROL PRACTICE IS INSTALLED AND MADE OPERATIONAL BY NO LATER THAN SEVEN (7) CALENDAR DAYS FROM THE TIME OF DISCOVERY WHERE FEASIBLE. IF IT IS INFEASIBLE TO COMPLETE THE INSTALLATION OR REPAIR WITHIN SEVEN (7) CALENDAR DAYS, THE REASONS WHY IT IS INFEASIBLE MUST BE DOCUMENTED IN THE SESC PLAN ALONG WITH THE SCHEDULE FOR INSTALLING THE STORMWATER CONTROL(S) AND MAKING IT OPERATIONAL AS SOON AS PRACTICABLE AFTER THE 7-DAY TIMEFRAME. WHERE THESE ACTIONS RESULT IN CHANGES TO ANY OF THE STORMWATER CONTROL MEASURES OUTLINED IN THE SESC PLAN, SITE OWNERS AND OPERATORS MUST MODIFY THE SESC PLAN ACCORDINGLY WITHIN SEVEN (7) CALENDAR DAYS OF COMPLETING THIS WORK IN ACCORDANCE WITH THE FOLLOWING:
a. THE OWNER AND OPERATOR SHALL AMEND THE SESC PLAN WITHIN SEVEN (7) DAYS WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, MAINTENANCE OR OTHER PROCEDURE WHICH HAS A SIGNIFICANT EFFECT ON THE POTENTIAL FOR THE DISCHARGE OF POLLUTANTS, OR IF THE SESC PLAN PROVES TO BE INEFFECTIVE IN ACHIEVING ITS OBJECTIVES. IN ADDITION, THE SESC PLAN SHALL BE AMENDED TO IDENTIFY ANY NEW OPERATOR THAT WILL IMPLEMENT A COMPONENT OF THE SESC PLAN. THE AMENDED SESC PLAN MUST BE KEPT ON FILE AT THE CONSTRUCTION SITE AND ANY SESC PLAN MODIFICATIONS MUST BE DOCUMENTED. ANY AMENDMENTS TO CONTROL MEASURES WHICH INVOLVED THE PRACTICE OF ENGINEERING, MUST FIRST BE REVIEWED, SIGNED, AND STAMPED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF RHODE ISLAND.
3. IF CORRECTIVE ACTIONS ARE REQUIRED, THE SITE OWNER AND OPERATOR MUST ENSURE THAT ALL CORRECTIVE ACTIONS ARE DOCUMENTED ON THE INSPECTION REPORT IN WHICH THE PROBLEM WAS FIRST DISCOVERED. THESE CORRECTIVE ACTIONS MUST BE DOCUMENTED, SIGNED, AND DATED BY THE SITE OPERATOR ONCE ALL NECESSARY REPAIRS HAVE BEEN COMPLETED.
4. SOIL EROSION AND SEDIMENT CONTROL INSPECTION REQUIREMENTS
MINIMUM FREQUENCY - EACH OF THE FOLLOWING AREAS MUST BE INSPECTED BY OR UNDER THE SUPERVISION OF THE OWNER AND OPERATOR AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN TWENTY FOUR (24) HOURS AFTER ANY STORM EVENT WHICH GENERATES AT LEAST 0.25 INCHES OF RAINFALL PER TWENTY-FOUR (24) HOUR PERIOD AND/OR AFTER A SIGNIFICANT AMOUNT OF RUNOFF:
a. ALL AREAS THAT HAVE BEEN CLEARED, GRADED, OR EXCAVATED AND THAT HAVE NOT YET COMPLETED STABILIZATION;
b. ALL STORMWATER EROSION, RUNOFF, AND SEDIMENT CONTROL MEASURES (INCLUDING POLLUTION PREVENTION PRACTICES) INSTALLED AT THE SITE TO COMPLY WITH THIS PERMIT;
c. CONSTRUCTION MATERIAL, UNSTABILIZED SOIL STOCKPILES, WASTE, BORROW, OR EQUIPMENT STORAGE, AND MAINTENANCE AREAS THAT ARE COVERED BY THIS PERMIT AND ARE EXPOSED TO PRECIPITATION;
d. ALL AREAS WHERE STORMWATER TYPICALLY FLOWS WITHIN THE SITE, INCLUDING TEMPORARY DRAINAGE WAYS DESIGNED TO DIVERT, CONVEY, AND/OR TREAT STORMWATER;
e. ALL POINTS OF DISCHARGE FROM THE SITE;
f. ALL LOCATIONS WHERE TEMPORARY OR PERMANENT SOIL STABILIZATION MEASURES HAVE BEEN IMPLEMENTED.
g. ALL LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE.



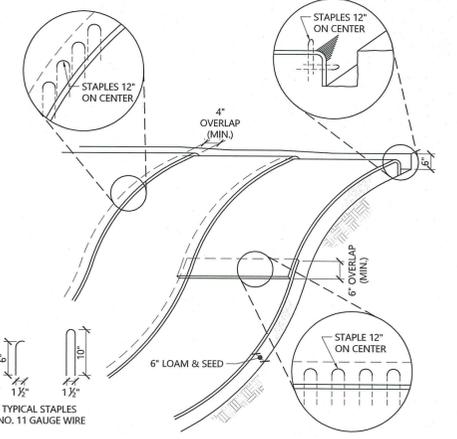
- NOTES
1. SILT SOCK SHALL BE FILTREXX SILT SOCK, OR APPROVED EQUAL.
2. SILT SOCKS SHALL OVERLAP A MINIMUM OF 12 INCHES.
3. SILT SOCK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS, AND REPAIR OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED.
4. IF NON BIODEGRADABLE NETTING IS USED, THE NETTING SHALL BE COLLECTED AND DISPOSED OF OFF SITE.
5. SILT SOCKS ON PAVED AREAS SHALL BE SECURED BY STONE OR BLOCK AS CONDITIONS WARRANT.

Siltsack - Erosion Control Barrier 1/16
N.T.S. Source: VHB LD_658



- NOTES
1. INSTALL SILT SACK IN ALL CATCH BASINS WHERE INDICATED ON THE PLAN BEFORE COMMENCING WORK OR IN PAVED AREAS AFTER BINDER COURSE IS PLACED AND HAY BALES HAVE BEEN REMOVED.
2. GRATE TO BE PLACED OVER SILT SACK.
3. SILT SACK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS AND CLEANING OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED. MAINTAIN UNTIL UPSTREAM AREAS HAVE BEEN PERMANENTLY STABILIZED.

Siltsack Sediment Trap 1/16
N.T.S. Source: VHB LD_674



- NOTES
1. BEGIN AT THE TOP OF BLANKET INSTALLATION AREA BY ANCHORING BLANKET IN A 6\"/>

Erosion Control Blanket Slope Installation 1/16
N.T.S. Source: VHB LD_680



1 Cedar Street
Suite 400
Providence, RI 02903
401.272.8100

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS
SPECIFIED IN THE LETTER OF APPROVAL
DATED: SEP 07 2023 FILE # 23-0160
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PERMITS MUST BE AT CONSTRUCTION SITE

Handwritten signature and date

Notes:

- 1. REFER TO SOIL EROSION AND SEDIMENT CONTROL PLAN REPORT FOR ADDITIONAL INFORMATION AND GUIDELINES.
2. TOTAL SITE AREA = 83.69 ACRES. TOTAL SITE DISTURBANCE = 0.49 ACRES.
3. LOCATION OF RECEIVING WATERS: SHADY OAK BROOK (RI0005047R-03)
4. NO PORTION OF THE SITE FALLS WITHIN OR DIRECTLY DISCHARGES TO A NATURAL HERITAGE AREA (NHA), OR OTHERWISE IMPACTS THREATENED SPECIES OR HABITATS.
5. STOCKPILING MUST BE WITHIN PROJECT LIMIT OF WORK BUT OUTSIDE THE BMP AREAS SHOWN ON THE PLANS AND SUCH THAT CONSTRUCTION VEHICLES DO NOT DRIVE OVER THESE AREAS TO ACCESS THE STOCKPILES.
6. WASHOUT AND REFUELING AREAS MUST BE WITHIN PROJECT LIMITS BUT OUTSIDE THE BMP AREAS LISTED BELOW AND SHOWN ON THE PLANS.

FM Global
Road Relocation
743 Reynolds Road
West Glocester, Rhode Island

Table with columns: No., Revision, Date, Appr. (empty rows)

Designed by: SAP Checked by: RLC
Issued for: Date:
Permits July 21, 2023

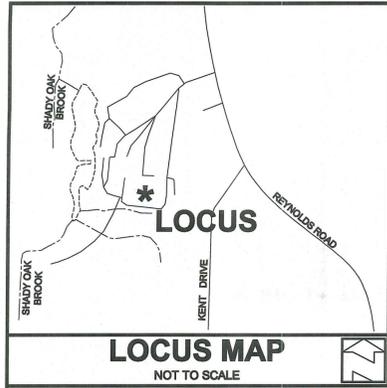
Not Approved for Construction
Soil Erosion and Sediment Control -
General Notes and details



SESC-2

Sheet 2 of 2

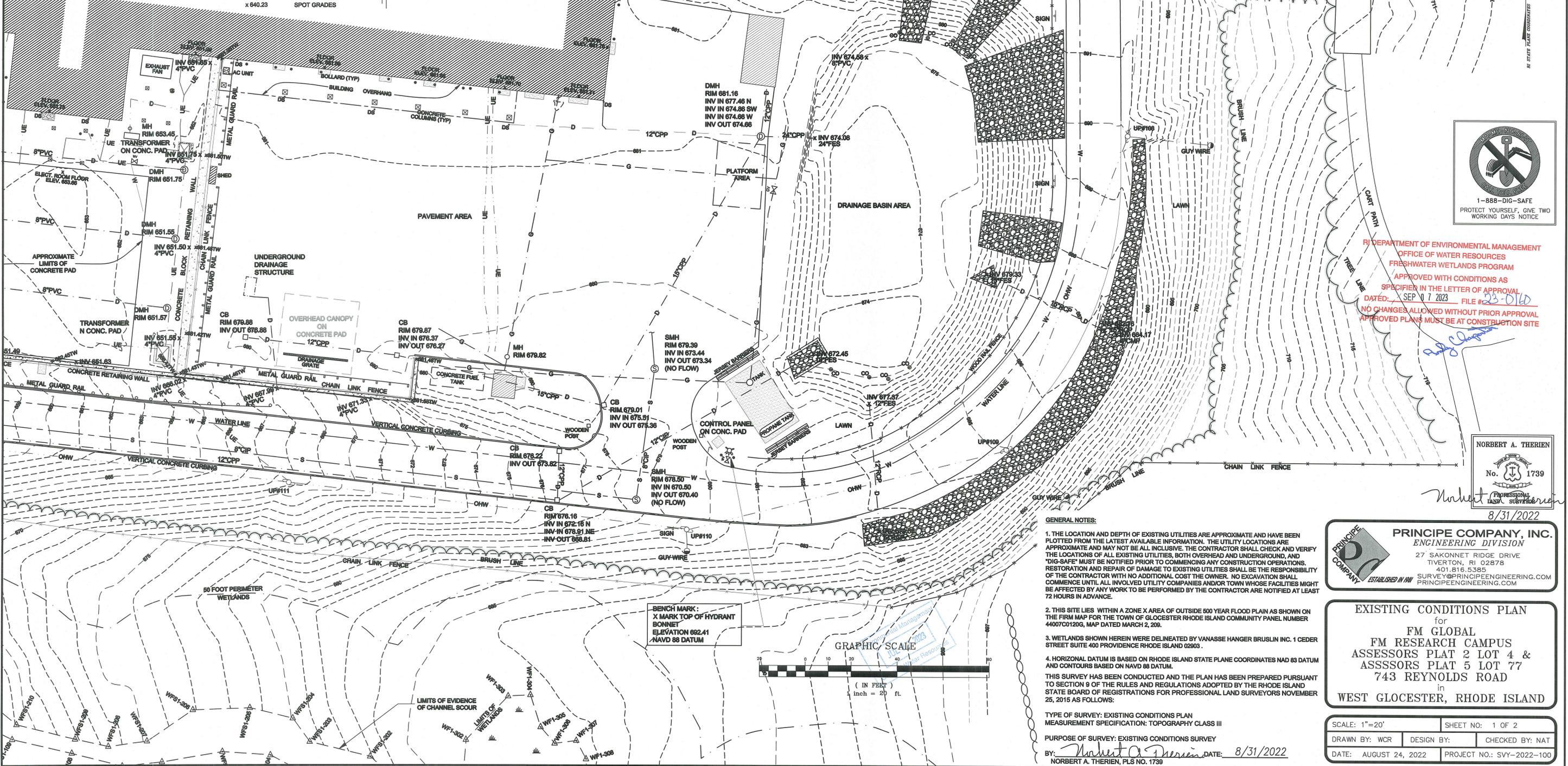
Project Number 73281.01



LEGEND
NOT TO SCALE

---	BOUNDARY
---	ADJUTER
---	MAJOR CONTOUR
---	MINOR CONTOUR
---	TREE LINE / BRUSH LINE
---	WETLANDS EDGE
---	50' PERIMETER WETLAND
---	TC TELECOMMUNICATION LINE
---	G GAS LINE
---	D DRAINAGE LINE
---	S SEWER LINE
---	W WATER LINE
---	OHW ELECTRIC LINE
---	UTILITY POLE
---	WATER VALVE
---	GAS VALVE
---	HYDRANT
---	PK NAIL
---	CATCH BASIN
---	DRAINAGE MANHOLE
---	DOWN SPOUT
---	CLEANOUT
---	BOLLARD
---	CONCRETE COLUMN
---	SIGN
---	LIGHT
---	SPOT GRADES

LOCUS MAP
NOT TO SCALE



RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
DATED: SEP 07 2023 FILE # 23-010
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

NORBERT A. THERIEN
No. 1739
PROFESSIONAL LAND SURVEYOR
8/31/2022

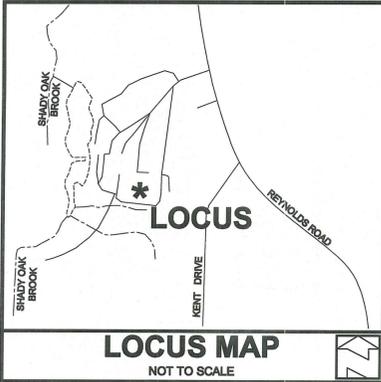
- GENERAL NOTES:**
1. THE LOCATION AND DEPTH OF EXISTING UTILITIES ARE APPROXIMATE AND HAVE BEEN PLOTTED FROM THE LATEST AVAILABLE INFORMATION. THE UTILITY LOCATIONS ARE APPROXIMATE AND MAY NOT BE ALL INCLUSIVE. THE CONTRACTOR SHALL CHECK AND VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES, BOTH OVERHEAD AND UNDERGROUND, AND "DIG-SAFE" MUST BE NOTIFIED PRIOR TO COMMENCING ANY CONSTRUCTION OPERATIONS. RESTORATION AND REPAIR OF DAMAGE TO EXISTING UTILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR WITH NO ADDITIONAL COST TO THE OWNER. NO EXCAVATION SHALL COMMENCE UNTIL ALL INVOLVED UTILITY COMPANIES AND/OR TOWN WHOSE FACILITIES MIGHT BE AFFECTED BY ANY WORK TO BE PERFORMED BY THE CONTRACTOR ARE NOTIFIED AT LEAST 72 HOURS IN ADVANCE.
 2. THIS SITE LIES WITHIN A ZONE X AREA OF OUTSIDE 500 YEAR FLOOD PLAIN AS SHOWN ON THE FIRM MAP FOR THE TOWN OF GLOUCESTER RHODE ISLAND COMMUNITY PANEL NUMBER 44007C0120G, MAP DATED MARCH 2, 2020.
 3. WETLANDS SHOWN HEREIN WERE DELINEATED BY VANASSE HANGER BRUSLIN INC. 1 CEDER STREET SUITE 400 PROVIDENCE RHODE ISLAND 02903.
 4. HORIZONTAL DATUM IS BASED ON RHODE ISLAND STATE PLANE COORDINATES NAD 83 DATUM AND CONTOURS BASED ON NAVD 88 DATUM.
- THIS SURVEY HAS BEEN CONDUCTED AND THE PLAN HAS BEEN PREPARED PURSUANT TO SECTION 9 OF THE RULES AND REGULATIONS ADOPTED BY THE RHODE ISLAND STATE BOARD OF REGISTRATIONS FOR PROFESSIONAL LAND SURVEYORS NOVEMBER 25, 2015 AS FOLLOWS:
- TYPE OF SURVEY: EXISTING CONDITIONS PLAN
MEASUREMENT SPECIFICATION: TOPOGRAPHIC CLASS III
- PURPOSE OF SURVEY: EXISTING CONDITIONS SURVEY
- BY: *Norbert A. Therien* DATE: 8/31/2022
NORBERT A. THERIEN, PLS NO. 1739



PRINCIPLE COMPANY, INC.
ENGINEERING DIVISION
27 SAKONNET RIDGE DRIVE
TIVERTON, RI 02878
401.816.5385
SURVEY@PRINCIPLEENGINEERING.COM
PRINCIPLEENGINEERING.COM

EXISTING CONDITIONS PLAN
for
FM GLOBAL
FM RESEARCH CAMPUS
ASSSORS PLAT 2 LOT 4 &
ASSSORS PLAT 5 LOT 77
743 REYNOLDS ROAD
in
WEST GLOUCESTER, RHODE ISLAND

SCALE: 1"=20'	SHEET NO: 1 OF 2
DRAWN BY: WCR	DESIGN BY: CHECKED BY: NAT
DATE: AUGUST 24, 2022	PROJECT NO.: SVY-2022-100



- LEGEND**
NOT TO SCALE
- BOUNDARY
 - ADULTER
 - MAJOR CONTOUR
 - MINOR CONTOUR
 - TREE LINE / BRUSH LINE
 - WETLANDS EDGE
 - 50' PERIMETER WETLAND
 - TC TELECOMMUNICATION LINE
 - G GAS LINE
 - D DRAINAGE LINE
 - S SEWER LINE
 - W WATER LINE
 - E ELECTRIC LINE
 - UTILITY POLE
 - WATER VALVE
 - GAS VALVE
 - HYDRANT
 - PK NAIL
 - CATCH BASIN
 - DRAINAGE MANHOLE
 - DOWN SPOUT
 - CLEANOUT
 - BOLLARD
 - CONCRETE COLUMN
 - SIGN
 - LIGHT
 - SPOT GRADES

BENCH MARK:
X MARK TOP OF HYDRANT
BONNET
ELEVATION 647.18
NAVD 88 DATUM

PRINCIPE COMPANY, INC.
ENGINEERING DIVISION
27 SAKONNET RIDGE DRIVE
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PRINCIPEENGINEERING.COM

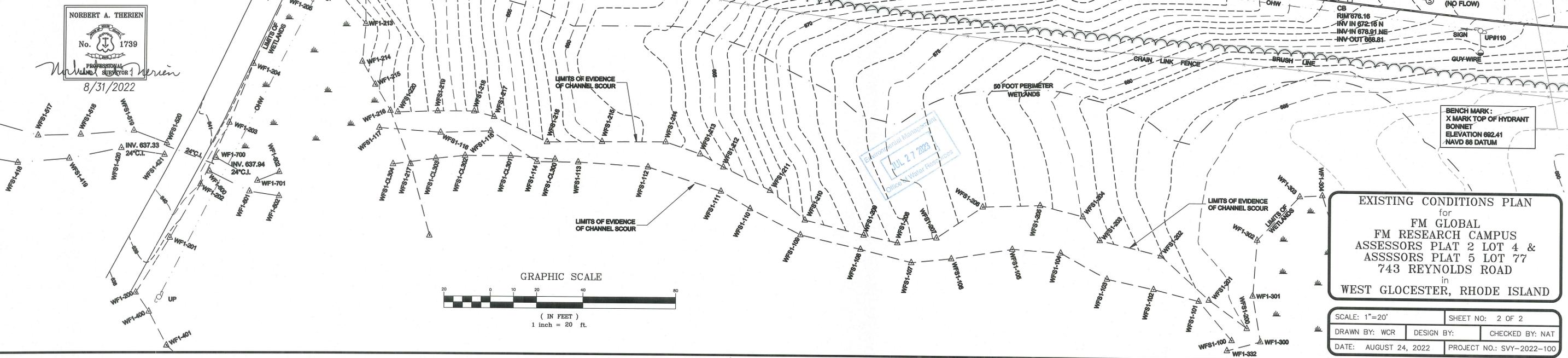
THIS SURVEY HAS BEEN CONDUCTED AND THE PLAN HAS BEEN PREPARED PURSUANT TO SECTION 9 OF THE RULES AND REGULATIONS ADOPTED BY THE RHODE ISLAND STATE BOARD OF REGISTRATIONS FOR PROFESSIONAL LAND SURVEYORS NOVEMBER 25, 2015 AS FOLLOWS:

TYPE OF SURVEY: EXISTING CONDITIONS PLAN
MEASUREMENT SPECIFICATION: TOPOGRAPHY CLASS III

PURPOSE OF SURVEY: EXISTING CONDITIONS SURVEY

BY: *Norbert A. Therien* DATE: 8/31/2022
NORBERT A. THERIEN, PLS NO. 1739

NORBERT A. THERIEN
No. 1739
PROFESSIONAL
SUBSCRIBER
8/31/2022



RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS
SPECIFIED IN THE LETTER OF APPROVAL
DATED: SEP 07 2023 PSE #23-D160
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

BENCH MARK:
X MARK TOP OF HYDRANT
BONNET
ELEVATION 602.41
NAVD 88 DATUM

EXISTING CONDITIONS PLAN
for
FM GLOBAL
FM RESEARCH CAMPUS
ASSESSORS PLAT 2 LOT 4 &
ASSESSORS PLAT 5 LOT 77
743 REYNOLDS ROAD
in
WEST GLOUCESTER, RHODE ISLAND

SCALE: 1"=20'	SHEET NO: 2 OF 2
DRAWN BY: WCR	DESIGN BY: CHECKED BY: NAT
DATE: AUGUST 24, 2022	PROJECT NO.: SVY-2022-100

