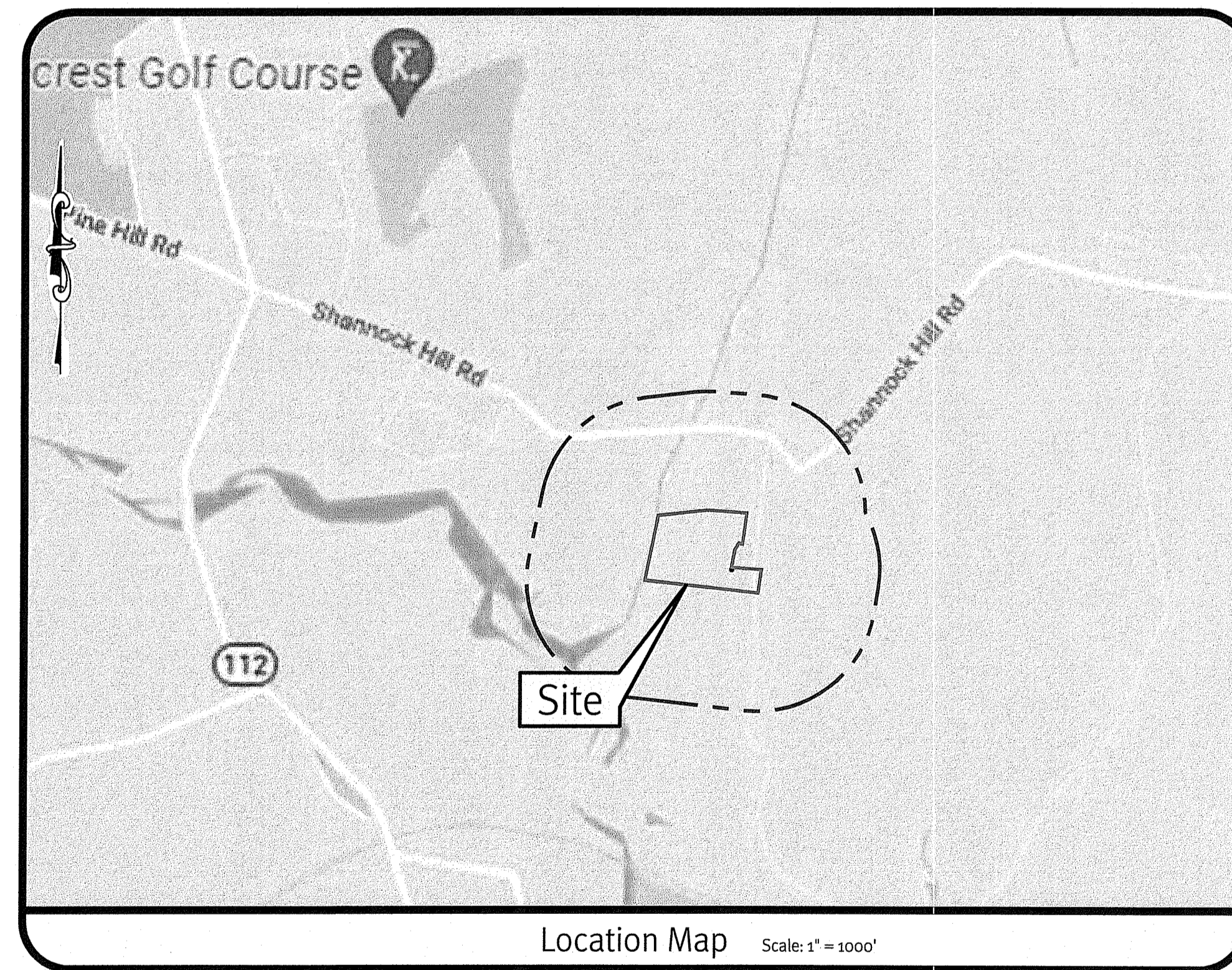


# RIDEM Preliminary Determination

# West Shannock Road

West Shannock Road  
 Richmond, Rhode Island 02875  
 Assessor's Map 9D Lot 36



## Sheet Index

- 1 Cover Sheet
- 2 Aerial Half-Mile Radius & USGS Map
- 3 Existing Analysis Plan
- 4 Soil Erosion and Sediment Control Plan
- 5 Site Layout Plan
- 6 Detail Sheet

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: MAY 31 2022 FILE # 21-0233  
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE  
*Martin D. Wemek*

RI Environmental Management  
 MAY 03 2022  
 Office of Water Resources

Cover Sheet  
 West Shannock Road  
 Richmond, Rhode Island 02875  
 Prepared by:  
**WS Richmond Partners, LLC**

NO.	DATE	DESCRIPTION	BY	CHKD.
3	05-02-2022	RIDEM Response to Comments	S.O.M.	
1	03-02-2022	RIDEM Preliminary Determination	J.S.	
0	03-31-2020	Development Plan Review Submission	J.A.E.	

DAVID A. RUSSO  
 No. REGISTERED PROFESSIONAL ENGINEER CIVIL

**DiPrete Engineering**  
 Two Stafford Court, Cranston, RI 02920  
 tel 401-943-1000 fax 401-664-6006 www.diprete-eng.com

z:\dmah\Project\2521-002 west shannock road\autocad drawings\2521-002-dem-upperfield.dwg Plotdate: 5/2/2022

\\storage1\domain\projects\2521-002-west-shannock-road\autoCAD drawings\2521-002-dein-upperfield.dwg Plotted: 1/10/2022

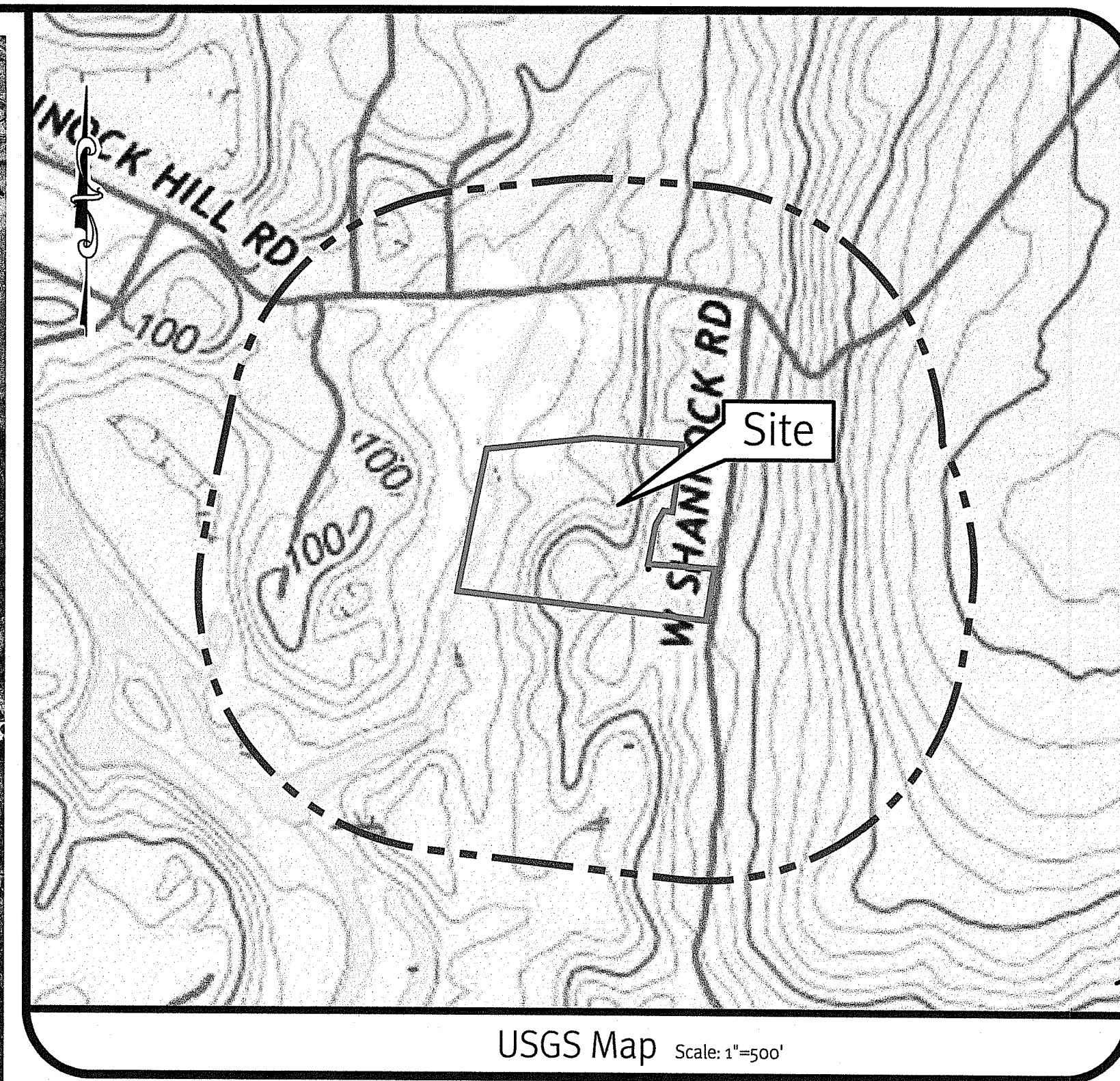
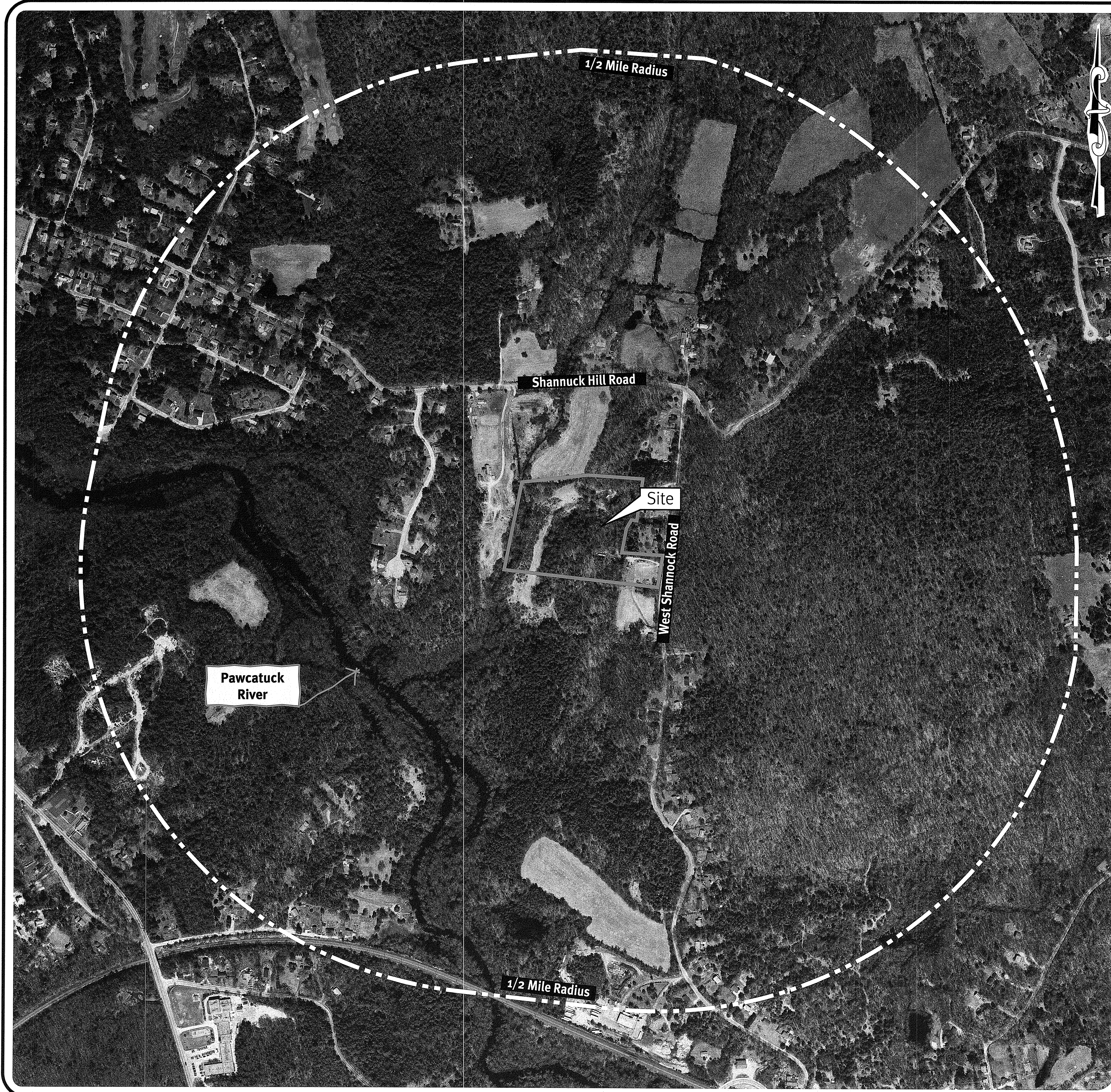
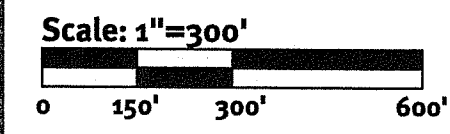


Photo obtained from the RI-GIS.



USGS Map Scale: 1"=500'

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

**Legend:**

PROPERTY LINE

1000' RADIUS LINE

HALF MILE RADIUS LINE

**Diprete Engineering**  
Two Stafford Court Cranston, RI 02920  
tel. 401-943-1000 fax 401-664-6006 www.diprete-eng.com

DAVID A. RUSSO  
No. 4335  
REGISTERED PROFESSIONAL ENGINEER  
CIVIL

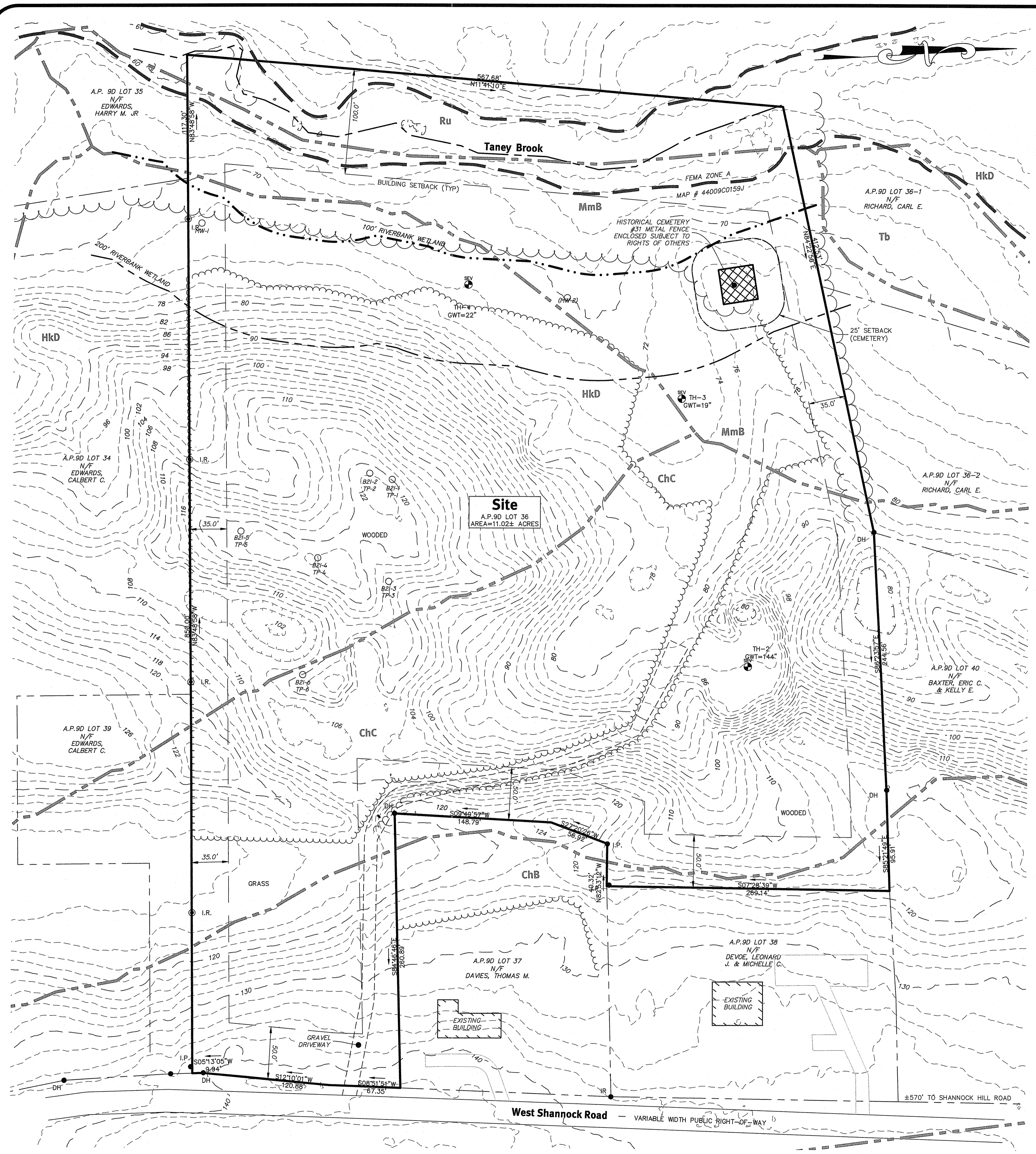
Environmental Management  
MAY 03 2022  
Office of Water Resources

The plan set must not be used for construction purposes unless approved by a registered Professional Engineer of Diprete Engineering.  
Diprete Engineering only warrants plans on a Diprete Engineering title block stamped by 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 and performance in the implementation of this plan and design.  
Existing utilities shown on this plan are approximate only. Diprete Engineering assumes no responsibility for damages incurred due to locations of existing utilities.

No.	Date	Description	By	Design By: D.A.R.
1	01-02-2022	000-HI Response to Comments	S.F.B.	
2	03-15-2022	000-HI Preliminary Determination	A.S.C.	
3	03-15-2022	000-HI Final Report Submission	A.S.C.	
4				
5				
6				

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED: MAY 31 2022 FILE #: 21-0233  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE  
*Martin D. Waneck*

**Aerial Half-Mile Radius & USGS Map**  
**West Shannock Road**  
Richmond, Rhode Island 02875  
Prepared for:  
**WS Richmond Partners, LLC**  
72 Essex Manor Lane  
Saunderstown, Rhode Island 02874



**General Notes:**

1. THE SITE IS LOCATED ON THE TOWN OF RICHMOND, RI, ASSESSOR'S MAP 9D LOT 36.
2. THE SITE IS APPROXIMATELY 11.02± ACRES AND IS ZONED R-2.
3. THE OWNER OF RECORD IS:  
WS RICHMOND PARTNERS LLC  
72 ESSEX MANOR LANE  
SAUNDERSTOWN, RI 02875
4. HISTORIC CEMETERY #31 WAS FOUND TO BE WITHIN THE SITE LIMITS.
5. SURVEY PLAN REFERENCE "SURVEY PLAN SHOWING ASSESSORS PLAT 9D LOT 36, WEST SHANNOCK HILL ROAD, RICHMOND, RHODE ISLAND, FLYNN SURVEYS INC., JUNE 20, 2017.
6. THE EXISTING CONDITIONS SHOWN ON THIS PLAN ARE SUBSTANTIALLY CORRECT IN ACCORDANCE WITH A CLASS IV STANDARD AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS.
7. TOPOGRAPHY WAS OBTAINED FROM LIDAR MAPS. ELEVATIONS ARE APPROXIMATE AND REFERENCED TO THE NAD '83 US FEET DATUM.
8. SOIL MAPPING OBTAINED FROM SOIL SURVEY OF RHODE ISLAND, PREPARED BY U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE.
9. BORING SAMPLES PERFORMED BY RMA ENVIRONMENTAL LLC, APRIL 2021.
10. THE SITE IS NOT WITHIN A:  
GROUNDWATER PROTECTION AREA (RIDEM)  
NATURAL HERITAGE AREAS (RIDEM)  
GROUNDWATER PROTECTION OVERLAY DISTRICT (TOWN)
11. THE SITE IS BOUNDED BY TANEY BROOK DEPICTED AS A COLD WATER FISHERY.

**Plan Reference:**

CLASS I COMPREHENSIVE BOUNDARY SURVEY FROM SURVEY AND PLAN BY FLYNN SURVEYS INC., TITLED "SURVEY PLAN SHOWING ASSESSORS PLAT 9D LOT 36, WEST SHANNOCK HILL ROAD, RICHMOND, RHODE ISLAND", DATED JUNE 20, 2017.

**Abbreviations:**

EXISTING	EX
ASSESSOR'S PLAT	AP
NOW OR FORMERLY	N/F
MINIMUM BUILDABLE AREA	M.B.A.

**Dimensional Regulations:**

CURRENT ZONING:	R-2
MINIMUM LOT AREA:	87,120 SF
MINIMUM FRONTAGE AND LOT WIDTH:	200'
MINIMUM FRONT YARD:	50'
MINIMUM SIDE YARD:	35'
MINIMUM REAR YARD:	100'
MAXIMUM STRUCTURE HEIGHT:	35'
MAXIMUM BUILDING COVERAGE:	10%

\* MINIMUM BUILDABLE AREA: THE AMOUNT OF LAND REQUIRED BY ZONE TO CONSTITUTE THE BUILDING ENVELOPE FOR EACH LOT. THE MINIMUM BUILDABLE AREA IS DEFINED BY TAKING THE MINIMUM LOT SIZE FOR A ZONE AND SUBTRACTING THE REQUIRED SETBACKS. THE M.B.A. SHALL BE FREE OF ALL WETLANDS, DRAINAGE STRUCTURES OR OTHER FEATURES, WHICH WOULD IMPAIR ITS USE FOR PURPOSES ALLOWED UNDER THE ZONING ORDINANCE. THE M.B.A. MUST BE CONTIGUOUS.

**Existing Conditions Legend:**

NOT ALL ITEMS SHOWN WILL APPEAR ON PLAN

EX MAJOR FOOT CONTOUR	160	50' PERIMETER WETLAND	50' PERIMETER WETLAND
EX MINOR FOOT CONTOUR	158	100' RIVERBANK WETLAND	100' RIVERBANK WETLAND
SOIL LINE AND DESIGNATION	HkC CaD	EDGE OF PAVEMENT	EDGE OF PAVEMENT w/CURBING
PROPERTY LINE	---	STONE WALL	---
ASSESSOR LINE	---	BUILDING	---
WETLAND FLAG	▲ AS	TREELINE	---
FEMA BOUNDARY	FEMA ZONE X FEMA ZONE X		
BORING EXPLORATION LOCATION	○ B21-4 TP-4		

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

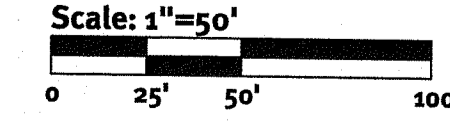
**DiPrete Engineering**  
Two Stafford Court Cranston, RI 02920  
Tel 401-943-1000 Fax 401-646-5005 www.diprete-eng.com

DAVID A. RU  
No. REGISTERED PROFESSIONAL ENGINEER  
CIVIL

Environmental Management  
MAY 03 2022  
Office of Water Resources

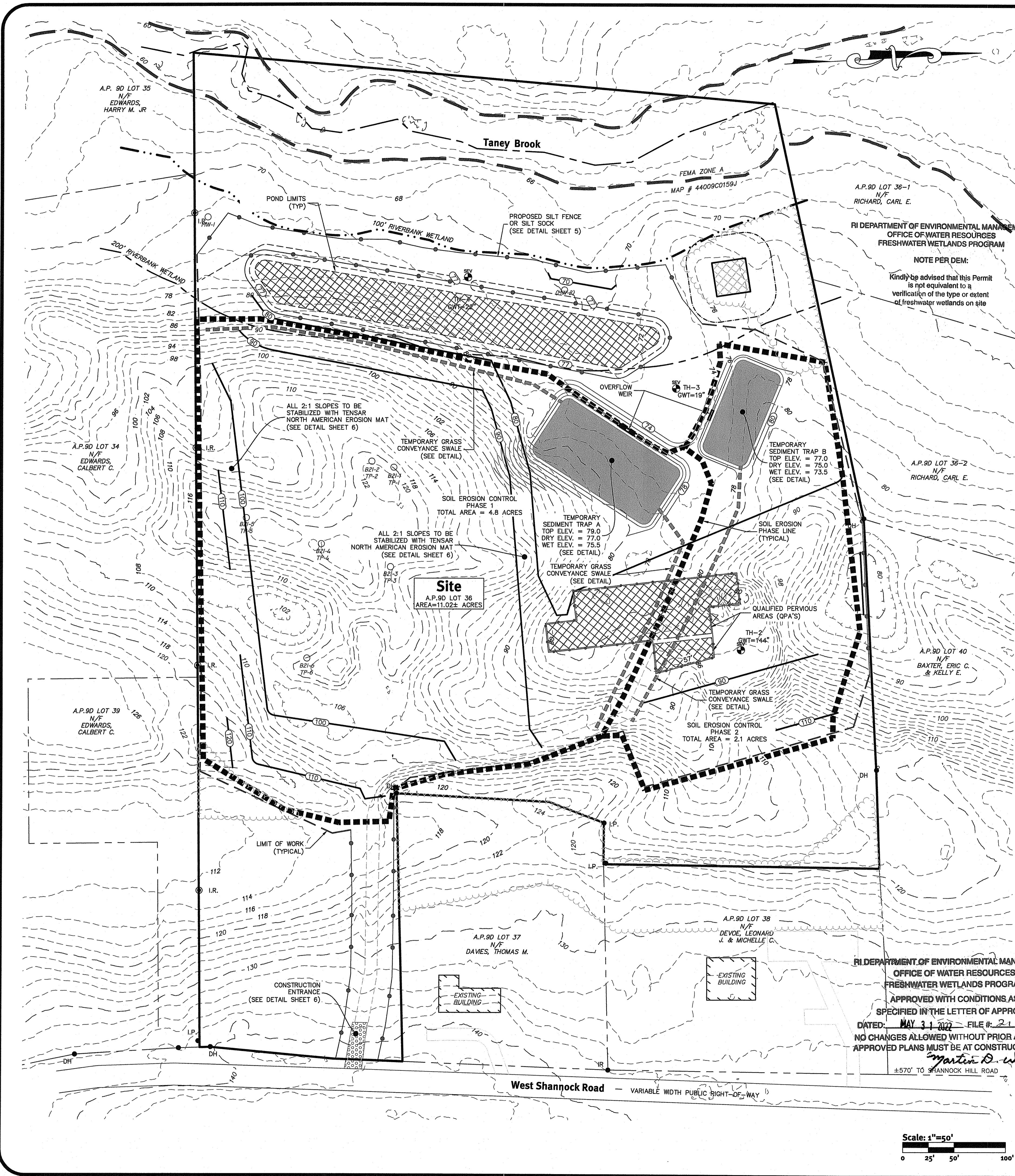
This plan set must not be used for construction purposes unless approved by a registered Professional Engineer of DiPrete Engineering.  
DiPrete Engineering only warrants plans on a DiPrete Engineering title block stamped by registered Professional Engineer of DiPrete Engineering. DiPrete Engineering does not warrant plans by any other means.  
The architect is responsible for all applicable safety regulations and requirements, and OSHA performance plans.

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED: MAY 31 2022 FILE #: 21-0233  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE  
*Antonia D. Wensack*

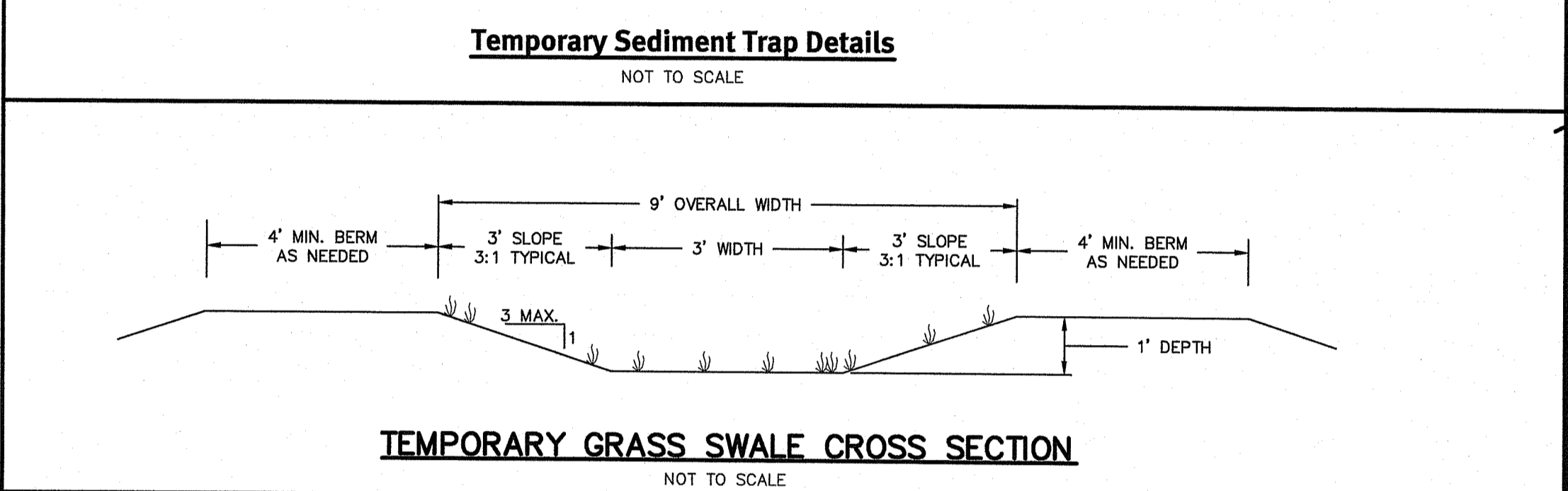
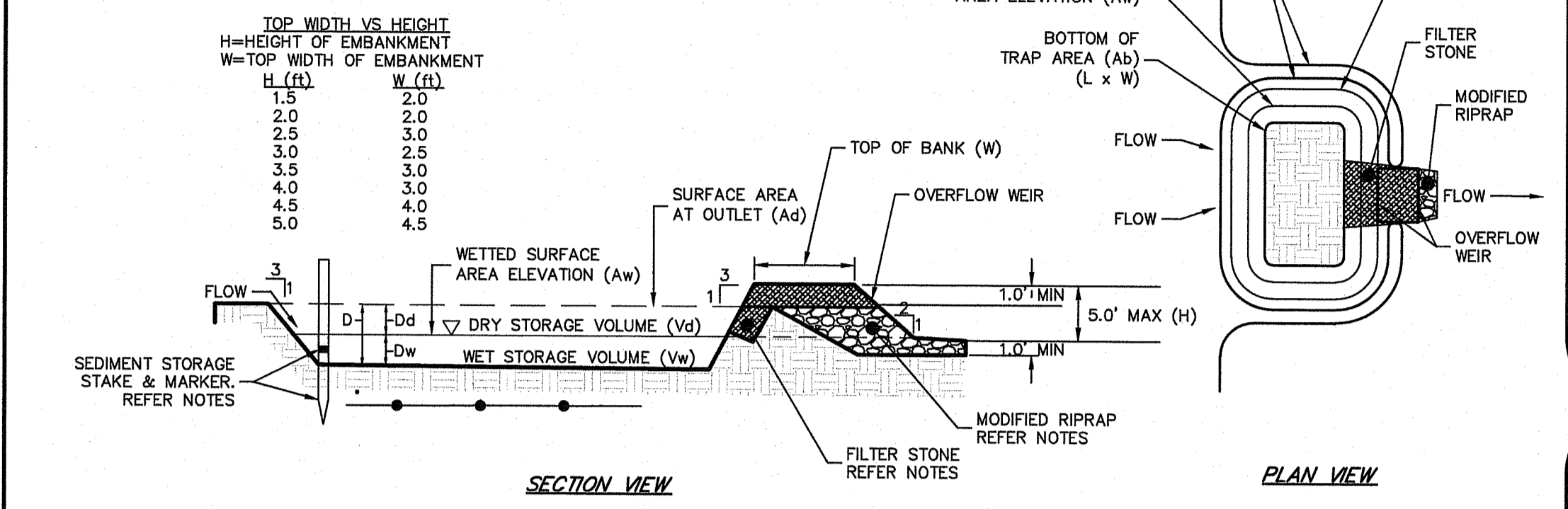


\\stor01g1\domain\project\3531-002-west-shannock-road\dwg\3531-002-dm-upperfield.dwg Plotted: 1/10/2022

Existing Analysis Plan  
West Shannock Road  
AP 9D Lot 36  
Richmond, Rhode Island 02875  
Prepared for:



SEDIMENT TRAP DIMENSIONS	TRAP A TYP.	TRAP B TYP.
TRIBUTARY DRAINAGE AREA	4.23 AC	1.52 AC
WET STORAGE DEPTH (Dw)	1.50 FT	1.50 FT
DRY STORAGE DEPTH (Dd)	2.00 FT	2.00 FT
TOTAL DEPTH (D)	3.50 FT	3.50 FT
BOTTOM OF TRAP AREA (Ab)	6,000 SQFT	2,541 SQFT
WETTED SURFACE AREA (Aw)	7,228 SQFT	3,372 SQFT
SURFACE AREA AT OUTLET (Ad)	8,726 SQFT	4,417 SQFT
BOTTOM OF TRAP LENGTH	120.00 FT	82.50 FT
BOTTOM OF TRAP WIDTH	50.00 FT	30.80 FT



- Erosion Control Notes:**
- ALL EROSION CONTROL, TEMPORARY SWALES, TEMPORARY SEDIMENT TRAPS, ETC. SHALL BE INSTALLED PER THE RHODE ISLAND SOIL EROSION AND SEDIMENTATION CONTROL LATEST EDITION AND THE SOIL EROSION SEDIMENTATION CONTROL (SESC) PLAN BY DIPRETE ENGINEERING, LATEST REVISION.
  - SEE SECTION 2.2 OF THE SESC PLAN BY DIPRETE ENGINEERING, LATEST REVISION, FOR PROJECT PHASING & SEQUENCE OF CONSTRUCTION ACTIVITY.
  - CONSTRUCTION STORAGE AREAS MAY BE RELOCATED WITH APPROVAL FROM THE ENGINEER OF RECORD AND THE GENERAL CONTRACTOR.
  - CONTRACTOR SHALL STABILIZE AREAS PER THE SESC PLAN. AREAS MAY BE STABILIZED WITH SEEDING, STONE, JUTE MESH, SOLTAC, OR APPROVED EQUAL.
  - CLEARING AND GRUBBING IS NOT TO EXTEND BEYOND THE LIMIT OF DISTURBANCE.
  - THE SITE CONTRACTOR IS RESPONSIBLE FOR ALL SOIL EROSION (SILT FENCE, STRAW WATTLE, RIDOT STD 9.2.0, OR APPROVED EQUAL) AND SEDIMENT CONTROL ON SITE. THE SITE CONTRACTOR IS TO NOTIFY THE CIVIL ENGINEER, TOWN OF HOPKINTON, AND RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT AT LEAST 72 HOURS PRIOR TO THE START OF CONSTRUCTION.
  - STOCKPILE AND CONCRETE WASHOUT LOCATIONS TO BE DETERMINED BY CIVIL ENGINEER, AND SITE CONTRACTOR PRIOR TO CONSTRUCTION. NO STOCKPILING OF MATERIAL TO BE LOCATED IN RIGHT OF WAY AND NO OPEN TRENCHES ARE TO BE LEFT OVERNIGHT. ALL EXCESS SOIL, TREES, ROCKS, BOULDERS, AND OTHER REFUSE, SHALL BE DISCARDED OFF SITE AS DIRECTED BY THE OWNER. IF CONCRETE TRUCKS ARE WASHED OUT ON SITE, ALL WASHOUT MUST BE COMPLETED IN THE DESIGNATED CONCRETE WASHOUT AREA.
  - SITE CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL. DUST CONTROL TREATMENTS SHALL BE APPLIED AS NECESSARY TO CONTROL AND REDUCE THE AMOUNT OF DUST THAT MAY CAUSE OFF SITE DAMAGE, BE A HEALTH HAZARD TO HUMANS, WILDLIFE, AND PLANT LIFE, OR POSE A HAZARD TO TRAFFIC SAFETY. DUST CONTROL TREATMENTS SHALL BE CONSISTENT WITH RIDEM BEST MANAGEMENT PRACTICES.
  - SITE CONTRACTOR TO MAINTAIN SESC PLAN DOCUMENTATION ON THE SITE THROUGHOUT THE DURATION OF THE PROJECT.
  - SITE CONTRACTOR SHALL STAKEOUT AND PROTECT ALL PROPOSED INFILTRATION AREAS PRIOR TO CONSTRUCTION. CONSTRUCTION TRAFFIC SHALL BE AVOIDED WITHIN INFILTRATION AREAS. THIS INCLUDES WQ INFILTRATION BASIN A AND QPA'S. AREAS SHALL BE PROTECTED FROM RUNOFF DURING CONSTRUCTION AND SHALL BE AVOIDED AS TEMPORARY SEDIMENTATION AREAS DURING CONSTRUCTION TO THE EXTENT PRACTICABLE. SILT FENCE OR EQUAL SHALL BE USED TO PROTECT INFILTRATION AREAS FROM RUNOFF. CONSTRUCTION FENCING CAN BE USED TO PROTECT AREAS FROM CONSTRUCTION TRAFFIC.
  - IN ADDITION TO THOSE AREAS SPECIFICALLY DESIGNATED ON THE PLANS, ALL DISTURBED AREAS INCLUDING THE CONTRACTOR'S STOCKPILE AND STAGING AREAS SHALL BE RESTORED TO MATCH THE DESIGN PLANS OR PRE-CONSTRUCTION CONDITIONS.
  - SEQUENCE OF CONSTRUCTION PROVIDED IN SESC PLAN SHALL BE MODIFIED AS FIELD CONDITIONS WARRANT WITH PRIOR APPROVAL FROM THE OWNER OR OWNER'S REPRESENTATIVE AND THE ENGINEER OF RECORD.
  - ALL LOAM IN DISTURBED AREAS IS TO BE STOCKPILED FOR FUTURE USE.
  - STUMPS SHALL BE GROUND AND USED ONSITE OR REMOVED. NO STUMP DUMPS ARE ALLOWED ONSITE.
  - APPROXIMATE PHASE LINES AND SEDIMENT TRAP LOCATIONS ARE SHOWN. IT IS THE CONTRACTORS RESPONSIBILITY TO FIELD FIT AND DETERMINE ACTUAL SEDIMENT TRAP SIZES ALONG WITH ALL NECESSARY DIVERSION BERMS, SWALES, SILT FENCES OR OTHER APPROPRIATE SEDIMENT CONTROL MEASURES.
  - STONES AND BOULDERS FOUND ON SITE ARE PROPOSED TO BE UTILIZED ALONG STEEP SLOPE AREAS TO ASSIST WITH STABILIZATION.
  - REMOVAL OF BEDROCK SHALL BE KEPT TO A MINIMUM, AND SHOULD ONLY OCCUR ALONG THE INTERFACE BETWEEN THE PROPOSED UPPER AND LOWER TERRACE TO FACILITATE A SMOOTH TRANSITION. NO BLASTING IS PERMITTED ON SITE.
  - IN THE EVENT THAT LOCAL GROUNDWATER BEGINS TO DRAIN FROM THE HILLSLOPE TO THE WORK AREA, FLOW SHALL BE CONTROLLED WITH SHALLOW DITCH DRAIN WATER CONTROL TECHNIQUES SUCH AS A SUMP PUMP. DEWATERING WELLS SHALL NOT BE PERMITTED ON SITE.
  - ANY TURBID WATER GENERATED DURING CONSTRUCTION SHALL BE PUMPED TO THE PROPOSED TEMPORARY SEDIMENT TRAPS ON SITE TO BE FILTERED AND RE-INFILTRATED INTO THE SUBSURFACE.

**Legend:**

- TEMPORARY SWALE
- SILT FENCE
- LIMIT OF WORK
- TEMPORARY SEDIMENT TRAPS
- INFILTRATING AREA (TO BE PROTECTED BY COMPOST SOCK OR SILT FENCE)
- SOIL EROSION PHASE LINE
- TEMPORARY SEDIMENT TRAP CONTOURS

**Diprete Engineering**  
 Two Stafford Court, Cranston, RI 02920  
 Tel: 401-943-1000 Fax: 401-464-6006 www.diprete-eng.com

**DAVID A. RUSSO**  
 No. 11355  
 REGISTERED PROFESSIONAL ENGINEER  
 CIVIL

Environmental Management  
 MAY 03 2022  
 Office of Water Resources

**Soil Erosion and Sediment Control Plan**  
 West Shannock Road  
 West Shannock Road 02975  
 WS Richmond Partners, LLC  
 72 Essex Manor Lane  
 Saunderstown, Rhode Island 02874

DESIGN BY: D.A.R.  
 DRAWN BY: D.A.R.

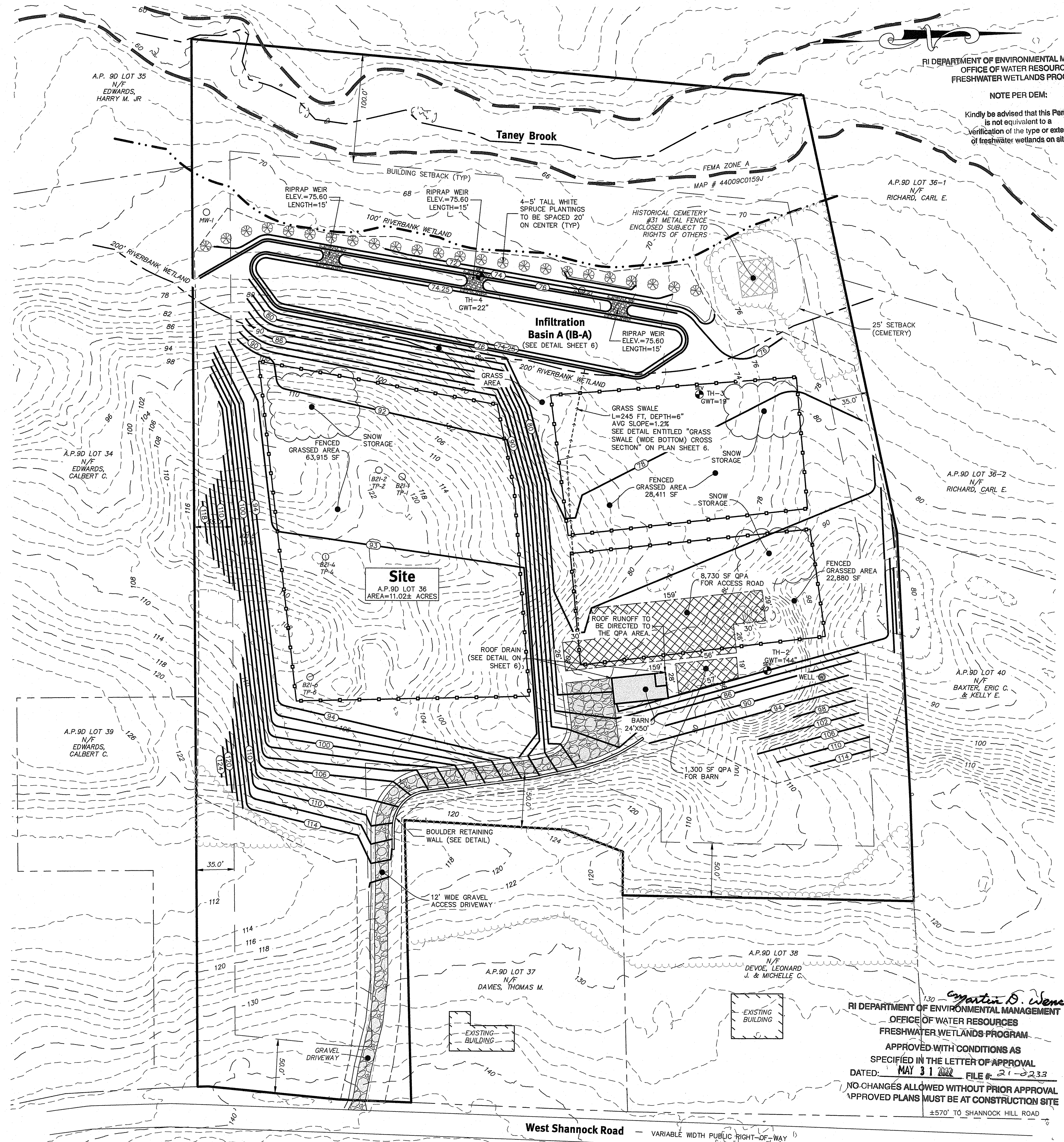
SHEET 4 OF 6

**Grading and Utility Notes:**

- THE CONTRACTOR IS RESPONSIBLE FOR ALL SOIL EROSION AND SEDIMENT CONTROL ONSITE. THE CONTRACTOR IS TO NOTIFY THE DESIGN ENGINEER, THE TOWN, AND RI DEPT. OF ENVIRONMENTAL MANAGEMENT AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION.
- CONTRACTOR TO OBTAIN ALL FEDERAL, STATE, AND MUNICIPAL APPROVALS PRIOR TO THE START OF CONSTRUCTION.
- CONSTRUCTION TO COMMENCE SUMMER 2022 OR UPON RECEIPT OF ALL NECESSARY APPROVALS.
- ALL WORK PERFORMED HEREIN SHALL BE GOVERNED BY THE RHODE ISLAND STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION AND TOWN OF RICHMOND STANDARD SPECIFICATIONS AND DETAILS.
- SEQUENCE OF CONSTRUCTION PROVIDED/SHOWN IN SESC MAY BE MODIFIED AS FIELD CONDITIONS WARRANT WITH PRIOR APPROVAL FROM THE OWNER OR OWNER'S REPRESENTATIVE.
- ALL TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION INCLUDING ALL REVISIONS.
- 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.
- ALL COMPONENTS OF THE DRAINAGE SYSTEMS MUST BE ASBUILT PRIOR TO COVERING. ENGINEER TO BE NOTIFIED PRIOR TO COVERING TO SURVEY ASBUILT LOCATIONS. ENGINEER WILL NOT ACCEPT FIELD MEASUREMENTS FROM THE SITE CONTRACTOR.
- NO STOCKPIILING OF MATERIAL TO BE LOCATED IN THE RIGHT OF WAY AND NO OPEN TRENCHES ARE TO BE LEFT OVERNIGHT.
- LOAM IN DISTURBED AREAS TO BE STOCKPILED FOR FUTURE USE.
- 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 ONSITE OR REMOVED.
- NO STUMP DUMPS ARE PROPOSED ONSITE.
- DIPRETE ENGINEERING HAS NOT LOCATED ANY ONSITE OR OFFSITE UTILITIES. PRIOR TO CONSTRUCTION, THE PROPER UTILITY ENGINEERING DEPARTMENTS SHALL BE CONTACTED AND THE LOCATIONS OF SUBSURFACE STRUCTURES SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR. CALL THE DIG SAFE CENTER TOLL FREE AT 1-888-344-7233 72 HOURS PRIOR TO EXCAVATION. ANY DAMAGE TO UTILITIES WHICH ARE SHOWN OR NOT SHOWN ON THE PLANS OR DETAILED BY DIG SAFE SHALL BE THE SITE CONTRACTOR'S RESPONSIBILITY.
- THIS PLAN SET REFERENCES RIDOT STANDARD DETAILS (DESIGNATED AS RIDOT STD X.X.X.), RIDOT STANDARD DETAILS ARE AVAILABLE FROM RIDOT AND ONLINE AT: [HTTP://WWW.DOT.RI.GOV/BUSINESS/CONTRACTORSANDCONSULTANTS.PHP](http://www.dot.ri.gov/business/contractorsandconsultants.php).
- BEDROCK ASSOCIATED WITH SUBSURFACE DRAINAGE PATTERNS SHALL NOT BE ALTERED, CONSISTENT WITH THE PROPOSED GRADING DESIGN.

**Site Legend:**

- EX MAJOR FOOT CONTOUR  160
- EX MINOR FOOT CONTOUR  158
- PR FOOT CONTOUR  310
- PROPERTY LINE
- ASSESSOR LINE
- LIMIT OF WORK
- BOULDER RETAINING WALL
- PR SWALE
- PR FENCE



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

*Martin D. Wenczek*  
RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED: MAY 31 2022 FILE # 21-0233  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE  
±570' TO SHANNOCK HILL ROAD

Scale: 1"=50'  
0 25' 50' 100'

**Diprete Engineering**  
Two Stafford Court, Cranston, RI 02920  
Tel: 401-943-1000 Fax: 401-946-6006 www.diprete-eng.com

DAVID A. RUSSO  
No. 4385  
REGISTERED PROFESSIONAL ENGINEER  
CIVIL

Environmental Management  
MAY 03 2022  
Office of Water Resources

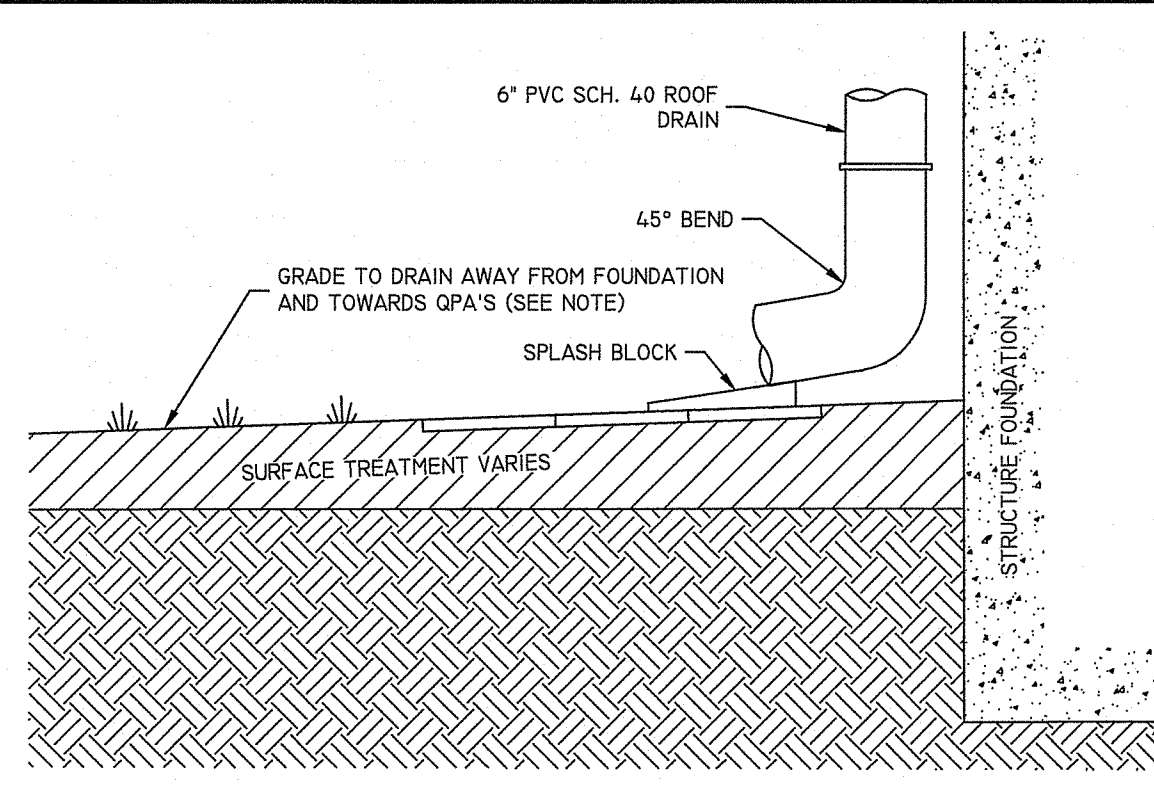
This plan set must not be used for construction purposes unless stamped "based for Construction" and stamped by a registered Professional Engineer or Diprete Engineering.  
Diprete Engineering only warrants plans on a Diprete Engineering Professional Engineer's seal. Diprete Engineering does not warrant plans by any other party.  
The contractor is responsible for all of the means, methods, materials, and safety precautions and requirements, and OSHA compliance in the implementation of this plan and design.  
Existing utility easements on this plan are approximate only. Diprete Engineering assumes no liability for damage to existing utilities or locations of existing utilities.

No.	Date	Description	By
3	05-22-2022	08/154 Revisions to Comments	J.A.R.
1	08-10-2021	08/154 Preliminary Determination	J.A.R.
0	03-10-2020	Development Plan Review Submission	J.A.R.

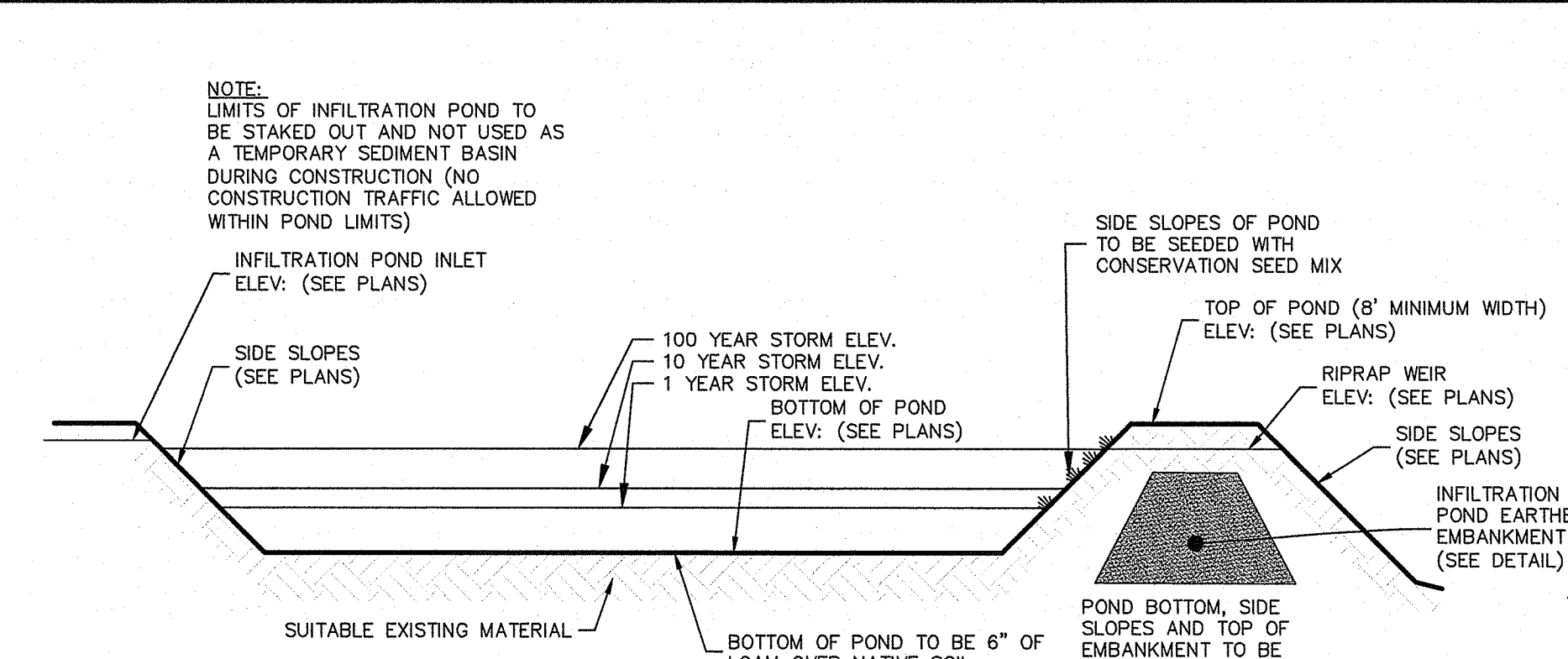
Drawn By: D.A.R. Design By: D.A.R.

**Site Layout Plan**  
West Shannock Road  
A.P. 9D Lot 36  
Richmond, Rhode Island 02875  
Prepared for:  
**WS Richmond Partners, LLC**  
72 Essex Manor Lane  
Saunderstown, Rhode Island 02874  
DE Job No: 2521-002 Copyright 2022 by Diprete Engineering Associates, Inc.

z:\Main\projects\2521-002 west shannock road\autocad drawings\2521-002-dsm-upperfield.dwg Plotseed: 5/2/2022



**ROOF LEADER DETAIL**  
NOT TO SCALE



**INFILTRATION BASIN-A**  
NOT TO SCALE

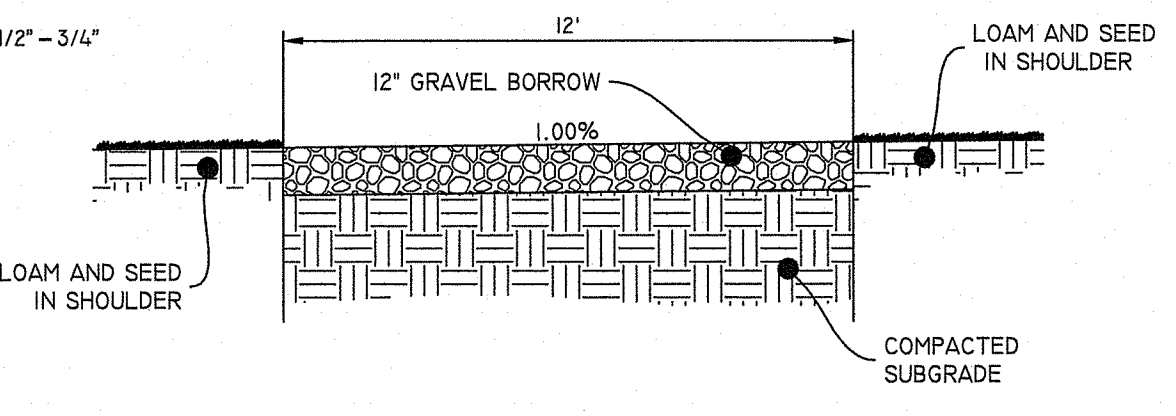
DESCRIPTION	IB-A
TOP OF POND ELEVATION	77.00
100 YEAR STORM ELEVATION	75.87
10 YEAR STORM ELEVATION	75.17
1 YEAR STORM ELEVATION	74.25
BOTTOM OF POND ELEVATION	74.25
SEASONAL HIGH GWT ELEVATION	70.16
SOIL EVALUATION	TH-4

*Martin D. Weneck*  
 DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
 APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL DATED **MAY 31 2022** FILE # **21-0233**  
 CHANGES ALLOWED WITHOUT PRIOR APPROVAL. APPROVED PLANS MUST BE AT CONSTRUCTION SITE.

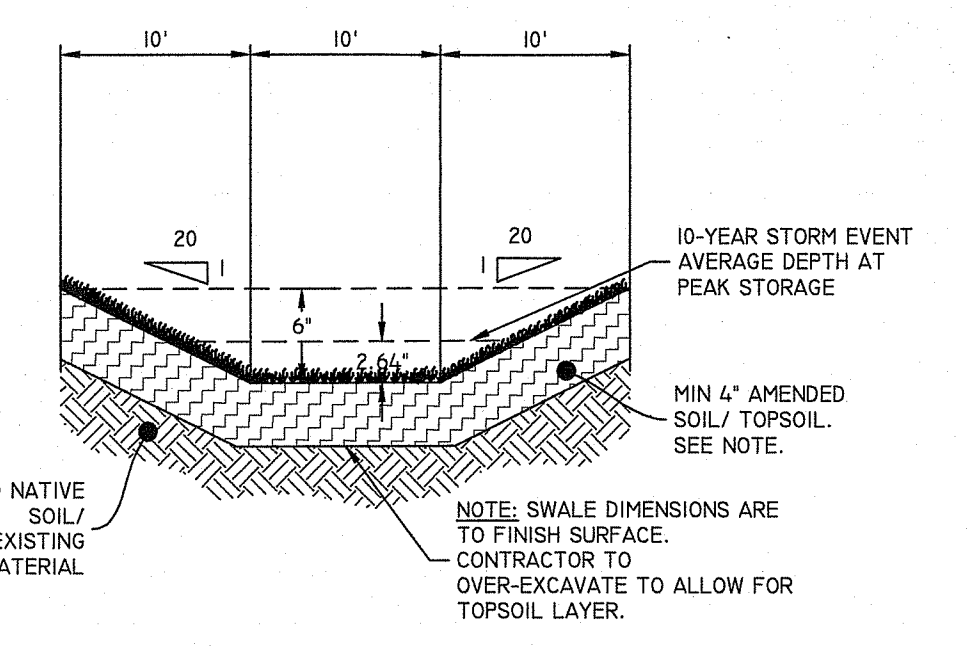
**AGGREGATE REQUIREMENTS:**

- BANK RUN OR PLANT-PROCESSED SAND AND GRAVEL PROPOSED FOR GRAVEL BORROW SHALL BE WELL-GRADED AND MEET THE GRADATION REQUIREMENTS. AGGREGATE SHALL BE THOROUGHLY WASHED SO THAT IT IS FREE OF DUST, DIRT, AND CLAY PARTICLES.
- ALL AGGREGATE SHALL BE FROM SAME SOURCE THROUGHOUT PROJECT.
- AGGREGATE - AGGREGATE SIZE SHALL BE 1/2" - 3/4" NOMINAL.
- GRADATION - PERCENT PASSING GRAVEL BORROW - BANK RUN

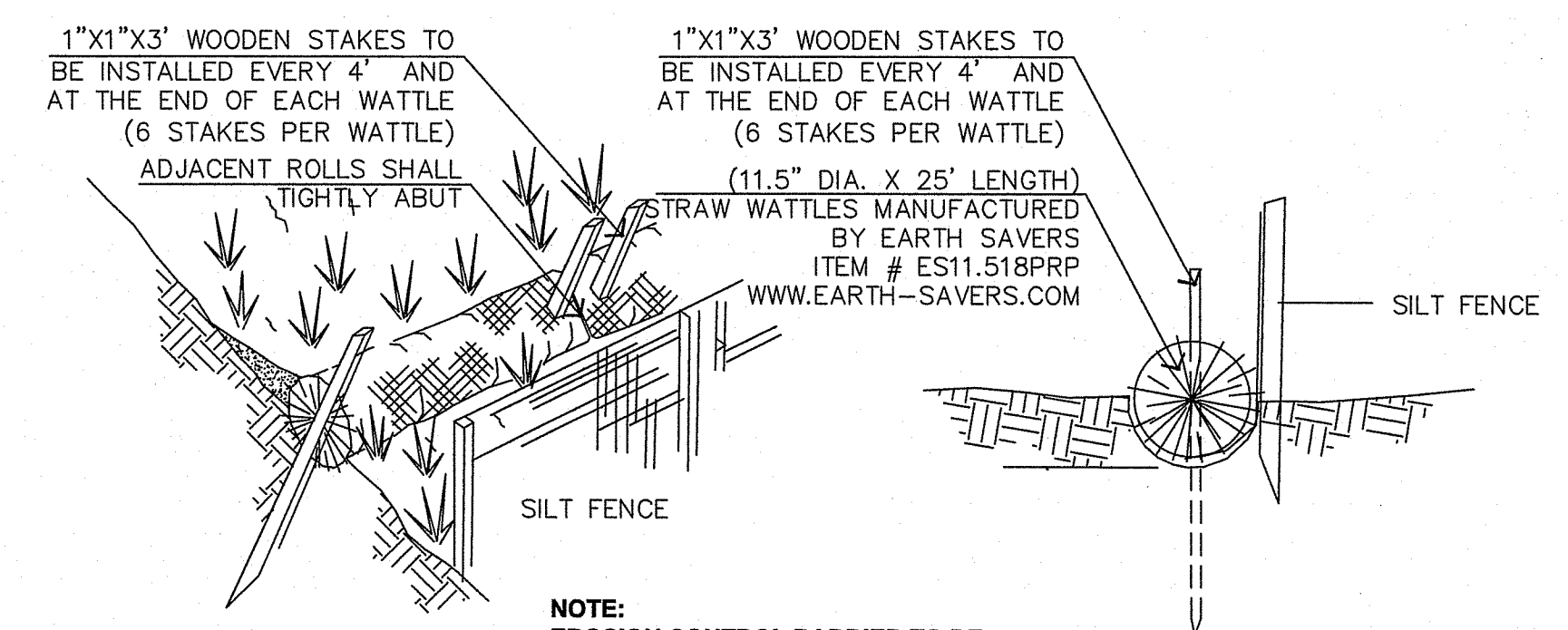
SIZE	GRAVEL
3"	60-100
1/2"	50-85
3/8"	45-80
#4	40-75
#40	0-45
#200	0-10



**GRAVEL DRIVEWAY DETAIL**  
SCALE: 1"=4'

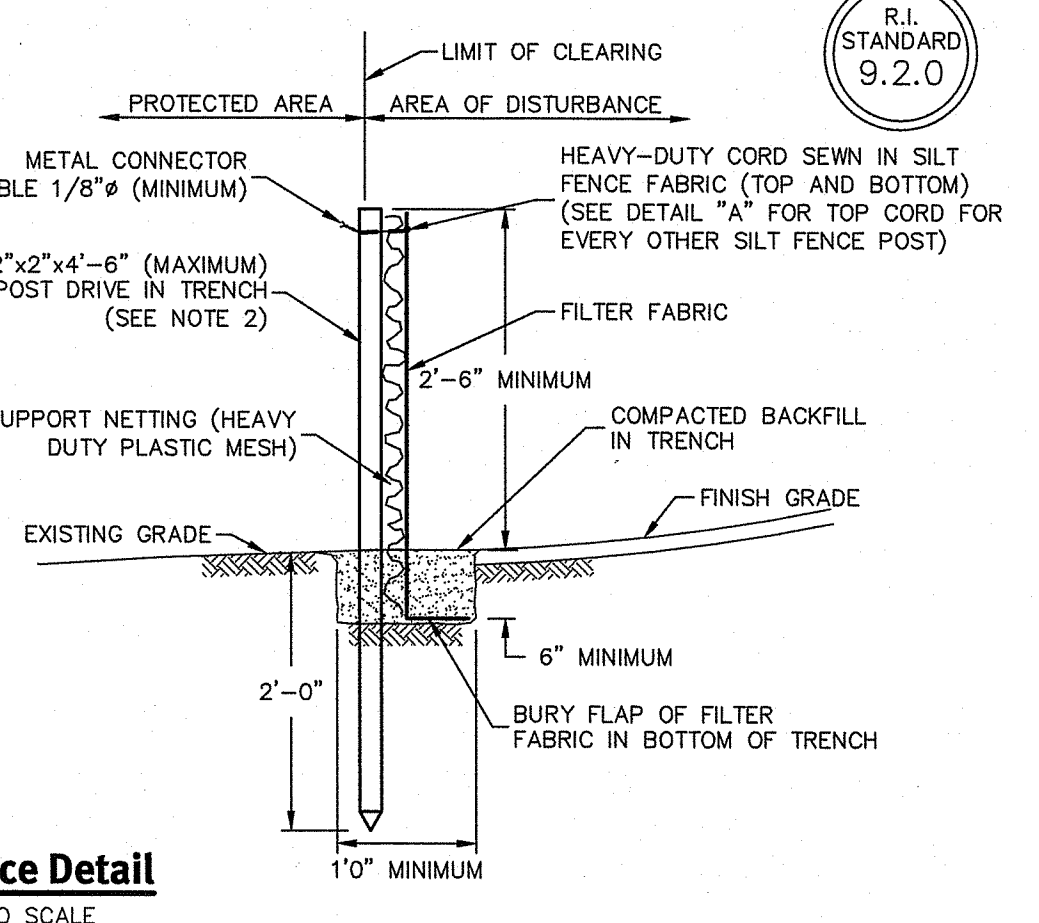


**GRASS SWALE (WIDE BOTTOM) CROSS SECTION**  
HORIZONTAL SCALE: 1"=10'  
VERTICAL SCALE: 1"=1'

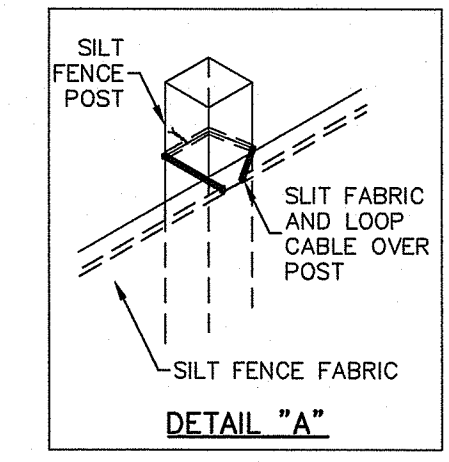


**SILT FENCE/STRAW WATTLE SEDIMENT BARRIER**  
NOT TO SCALE

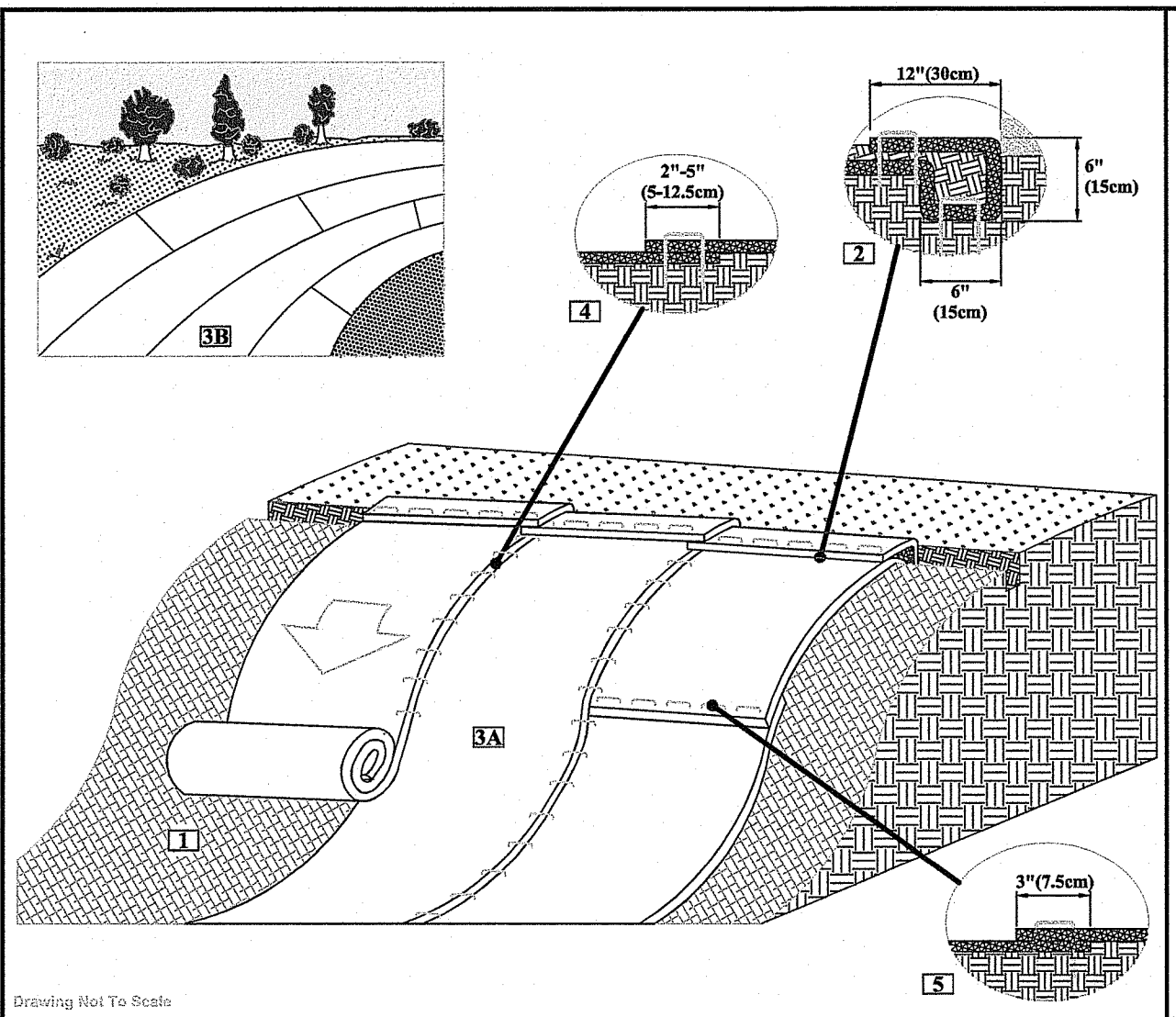
- NOTES:**
- SHALL BE IN ACCORDANCE WITH SECTION 206 OF THE R.I. STANDARD SPECIFICATIONS.
  - 2"x2"x4"-6" (MAXIMUM) OAK POSTS FOR SILT FENCE SHALL BE LOCATED 8'-0" (MAXIMUM) O.C. IN WETLAND AREAS AND 4'-0" (MAXIMUM) O.C. IN WETLAND RAVINE, GULLY OR DROP-OFF AREAS AS SHOWN ON PLANS.
  - 1"x1"x4"-6" (MINIMUM)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



**Silt Fence Detail**  
NOT TO SCALE



**DETAIL "A"**

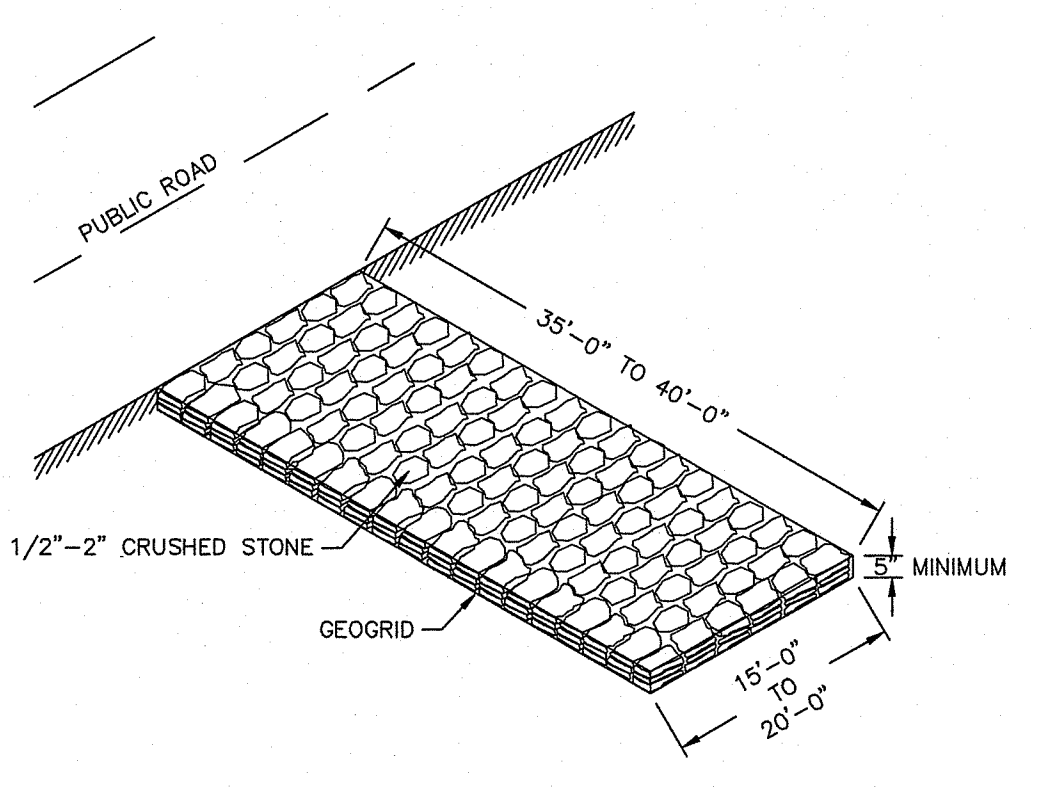


**SLOPE INSTALLATION DETAIL**

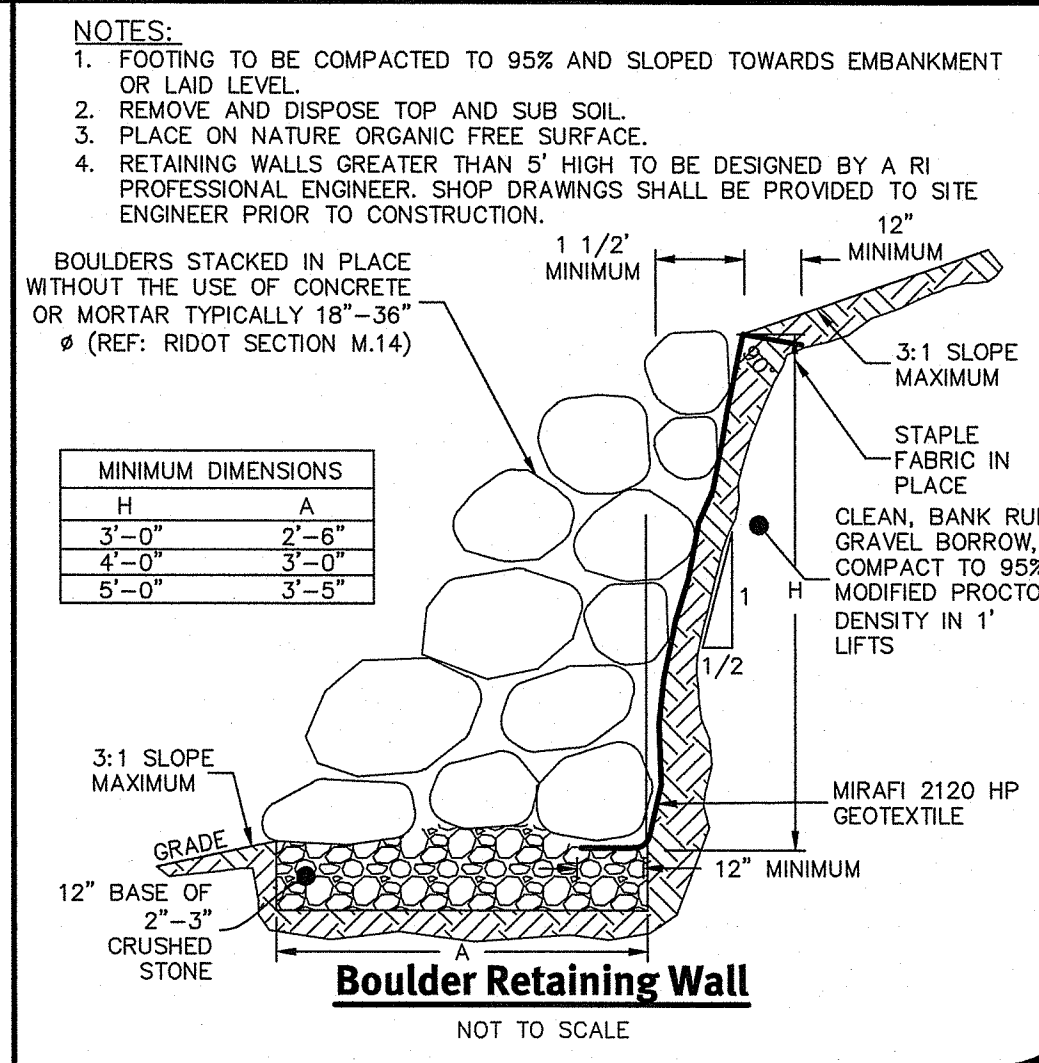
- Prepare soil before installing rolled erosion control products (RECPs), including any necessary application of lime, fertilizer, and seed.
- Step at the top of the slope by anchoring the RECPs in a 4"(10cm) deep x 4"(10cm) wide trench with approximately 12"(30cm) of RECPs extending beyond the up-slope portion of the trench. Anchor the RECPs with a row of staples/staples spaced approximately 12"(30cm) apart in the bottom of the trench. Backfill and compact the trench after stapling. Apply seed to the compacted soil and add the remaining 12"(30cm) portion of RECPs back over the seed and compacted soil. Secure RECPs over compacted soil with a row of staples/staples spaced approximately 12"(30cm) apart horizontally across the slope.
- Roll the RECPs (A) down or (B) horizontally across the slope. RECPs will unroll with appropriate force against the soil surface. All RECPs must be securely fastened to soil surface by placing staples/staples in appropriate locations as shown in the staple pattern guide.
- The edges of parallel RECPs must be stapled with approximately 2"-3" (5-7.5cm) overlap depending on the RECPs type.
- Staples/staples applied down the slope must be end over end (B) and overlap with an approximate 3"(7.5cm) overlap. Staple through overlapped areas approximately 12"(30cm) apart across entire RECPs width.

**Tensar**  
 5481 St. Wendel - Cranston Rd. P.O. Box 775-2848  
 Cranston, RI 02903 www.tensarusa.com

**TENSAR NORTH AMERICAN GREEN EROSION CONTROL PRODUCT**  
NOT TO SCALE



**Construction Entrance**  
NOT TO SCALE



**Boulder Retaining Wall**  
NOT TO SCALE

- NOTES:**
- FOOTING TO BE COMPACTED TO 95% AND SLOPED TOWARDS EMBANKMENT OR LAID LEVEL.
  - REMOVE AND DISPOSE TOP AND SUB SOIL.
  - PLACE ON NATURE ORGANIC FREE SURFACE.
  - RETAINING WALLS GREATER THAN 5' HIGH TO BE DESIGNED BY A R.I. PROFESSIONAL ENGINEER. SHOP DRAWINGS SHALL BE PROVIDED TO SITE ENGINEER PRIOR TO CONSTRUCTION.

BOULDERS STACKED IN PLACE WITHOUT THE USE OF CONCRETE OR MORTAR TYPICALLY 18"-36" Ø (REF: RIDOT SECTION M.14)

MINIMUM DIMENSIONS	A	B
3'-0"	2'-6"	3'-0"
4'-0"	3'-0"	3'-0"
5'-0"	3'-5"	3'-5"

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

**DAVID A. RUSSO**  
 No. 14355  
 REGISTERED PROFESSIONAL ENGINEER CIVIL  
 Environmental Management  
 MAY 03 2022  
 Office of Water Resources

This plan set was not 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 project. 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 is not responsible for damage incurred due to locations of existing utilities.

No.	Date	Description	By
1	05-02-2022	SOIL RESPONSE TO COMMENTS	J.A.R.
2	05-20-2022	R.I. STANDARD SPECIFICATIONS	J.A.R.
3	05-23-2022	Development Plan Review Submission	J.A.R.

Drawn By: D.A.R. Design By: D.A.R.

**Detail Sheet**  
**West Shannock Road**  
 AP 90 Lot 36  
 Richmond, Rhode Island 02875  
**WS Richmond Partners, LLC**  
 Prepared for:  
 72 Essex Manor Lane  
 Saunderstown, Rhode Island 02874