

LOCUS MAP
NOT TO SCALE

BEING A.P. 5E, LOT 5.1
AREA OF LOT = 11.21 AC.

FEMA DETERMINATION ZONE "X" - AREA OF MINIMAL CHANCE ANNUAL FLOODING
PANEL NO. - 4400C0090 J
EFFECTIVE - APRIL 3, 2020

PROPERTY OWNER/APPLICANT
PUNCHBOWL DEVELOPMENT CORP.
118 JANE STREET
NORTH PROVIDENCE, RI 02904

PARCEL ZONING: R-2

MINIMUM LOT AREA = 2.0 AC.
MINIMUM FRONTAGE = 200'
FRONT SETBACK = 50'
SIDE SETBACK = 35'
REAR SETBACK = 100'

NOTES:

- SUBJECT PARCEL IS ENTIRELY WOODS CONSISTING OF MATURE DECIDUOUS TREES, PRIMARILY OAK TREES, WITH MANY STANDING DEAD TREES THAT WERE DAMAGED DURING THE RECENT GYPSY MOTH INFESTATION. THE UNDERGROWTH IS SPORADIC WITH SMALL CLUSTERS OF INVASIVE AND NATIVE SPECIES.
- NO GEOLOGICAL FORMATIONS WERE FOUND ON OR ADJACENT TO THE PROPERTY.
- NO CEMETERIES WERE FOUND WITHIN 500' OF THE SUBJECT PARCEL.
- NO CRITICAL RESOURCE AREAS ARE LOCATED ON OR NEAR THE SITE.
- NO EXISTING OR PROPOSED PUBLIC WATER SUPPLY ARE ON THE SITE.
- NO EXISTING DRAINS WITHIN 100 FEET OF THE PROPERTY.
- THERE ARE NO KNOWN EASEMENTS ON OR ADJACENT TO THE PROPERTY.
- NO NOTEWORTHY NATURAL, CULTURAL, HISTORIC AND SCENIC FEATURES WERE FOUND ON OR ADJACENT TO THE PROPERTY.

REFERENCES:

- REFERENCE IS HEREBY MADE TO THAT PLAN ENTITLED "SURVEY PLAN PREPARED FOR RICHMOND RURAL PRESERVATION LAND TRUST ANDY WEBB, TRUSTEE AM 5F LOT 23 & AP 7-1 LOT 1 SITUATED IN THE TOWNS OF RICHMOND & SOUTH KINGSTOWN RHODE ISLAND, SCALE: 1" = 100' DATE: JAN. 21, 2005 BY DOWDELL ENGINEERING INC". SAID PLAN BEING RECORDED IN THE TOWN OF SOUTH KINGSTOWN AS C2003-7.
- REFERENCE IS HEREBY MADE TO THAT PLAN ENTITLED "PROPERTY SURVEY OF LAND OWNED BY WALTER C. PECKHAM GLEN ROCK RD., WEST KINGSTON, RI LOCATED IN THE TOWN OF RICHMOND, RI WASHINGTON COUNTY FEBRUARY, 1983 REVISED MARCH 1983 SCALE 1" = 100' BY ENVIRONMENTAL CONSULTANTS, INC.". SAID PLAN BEING RECORDED IN THE TOWN OF RICHMOND IN PLAN BOOK 3, PAGE 40, AS WELL AS MAP #37.
- REFERENCE IS HEREBY MADE TO THAT PLAN ENTITLED "RESIDENTIAL COMPOUND OWNED BY GILBERT & BLACKWELL, LTD. IN THE TOWN OF RICHMOND, R.I. ASSESSOR'S PLAT 5E, LOT 7-2 MAY 1986 SCALE 1" = 50' BY RICHARD GREENE, PLS". SAID PLAN BEING RECORDED IN THE TOWN OF RICHMOND ON SLIDE R48.
- REFERENCE IS HEREBY MADE TO THAT PLAN ENTITLED "PLAN OF LAND PREPARED FOR MICHAEL & CAROL VECCHIONE ASSESSOR'S PLAT 5E, LOT 1, RICHMOND ASSESSOR'S PLAT 7-4, LOT 18, SOUTH KINGSTOWN PUNCH BOWL TRAIL & GLEN ROCK ROAD RHODE ISLAND SCALE: 1" = 80' DATE: SEPTEMBER 22, 1996 REVISED: SEPT. 5, 1998 RICHARD GREENE & ASSOCIATES, INC.". SAID PLAN BEING RECORDED IN THE TOWN OF RICHMOND ON SLIDE 173A, AS WELL AS MAP #237.
- REFERENCE IS HEREBY MADE TO THAT PLAN ENTITLED "MINOR SUBDIVISION PLAN 'PUNCHBOWL CORNER' PREPARED FOR CAROL VECCHIONE- LOCATION A.P. 05F / LOT 001 3 PUNCHBOWL TRAIL RICHMOND, R.I. SCALE: 1" = 80' DATE: 1-5-2021 BY E. GREENWICH SURVEYORS, LLC". SAID PLAN BEING RECORDED IN THE TOWN OF RICHMOND AS MAP #621.
- REFERENCE IS HEREBY MADE TO THAT PLAN ENTITLED "RECORD PLAN FOR PUNCHBOWL HILLS LOCATED AT ASSESSOR'S PLAT 5E, LOT 5 POLE #15 - PUNCH BOWL TRAIL RICHMOND, R.I. SCALE 1" = 100' DATE: 08/23/2023 BY AMERICAN ENGINEERING, INC.

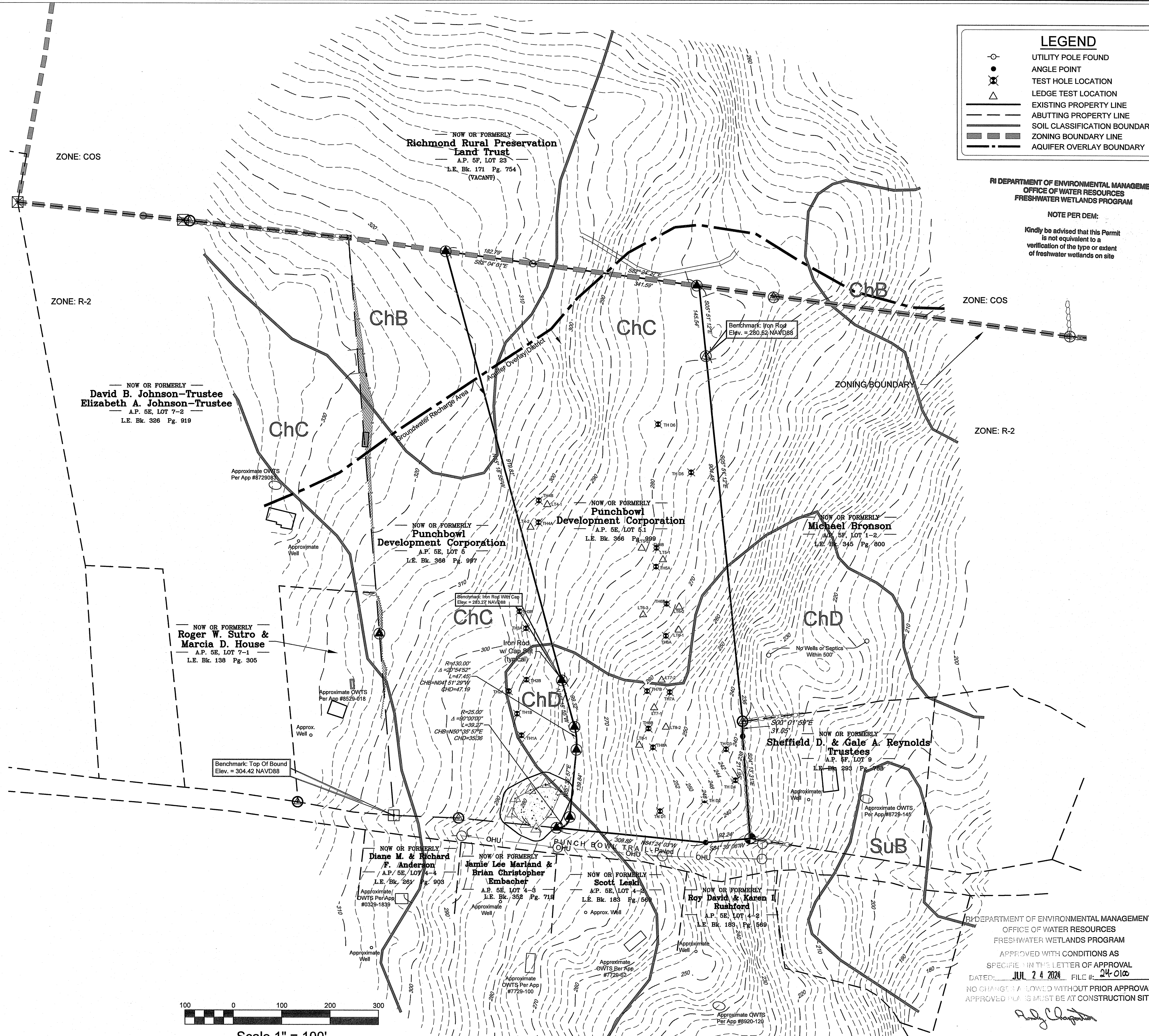
CERTIFICATION:

THIS SURVEY HAS BEEN CONDUCTED AND THE PLAN HAS BEEN PREPARED PURSUANT TO 435-RICR-00-00-1.9 OF THE RULES AND REGULATIONS ADOPTED BY THE RHODE ISLAND STATE BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS ON NOVEMBER 25, 2015, AS FOLLOWS:

| TYPE OF SURVEY: | MEASUREMENT SPECIFICATION: |
|---|----------------------------|
| PERIMETER: COMPREHENSIVE BOUNDARY SURVEY | CLASS 1 |
| TOPOGRAPHY: TOPOGRAPHIC SURVEY (LIDAR) | CLASS T-4 |

- THE PURPOSE FOR THE CONDUCT OF THE SURVEY AND FOR THE PREPARATION OF THE PLAN IS TO DEFINE THE BOUNDARY OF ASSESSOR'S PLAT 5E, LOT 5.1. ALSO DEPICTED IS EXISTING TOPOGRAPHY AND ALL MONUMENTS FOUND OR SET.

BY: *Matthew J. Cotta* 6/25/24
MATTHEW J. COTTA PLS-1977
LS.000453 COA

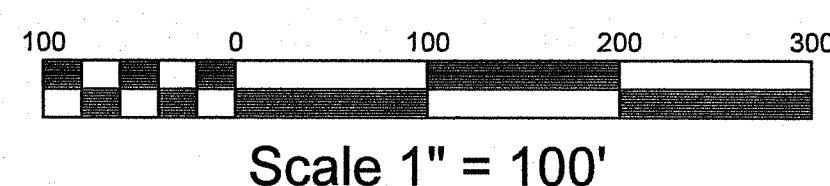


LEGEND

- UTILITY POLE FOUND
- ANGLE POINT
- ⊗ TEST HOLE LOCATION
- △ LEDGE TEST LOCATION
- EXISTING PROPERTY LINE
- - - ABUTTING PROPERTY LINE
- - - SOIL CLASSIFICATION BOUNDARY
- - - ZONING BOUNDARY LINE
- - - AQUIFER OVERLAY BOUNDARY

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

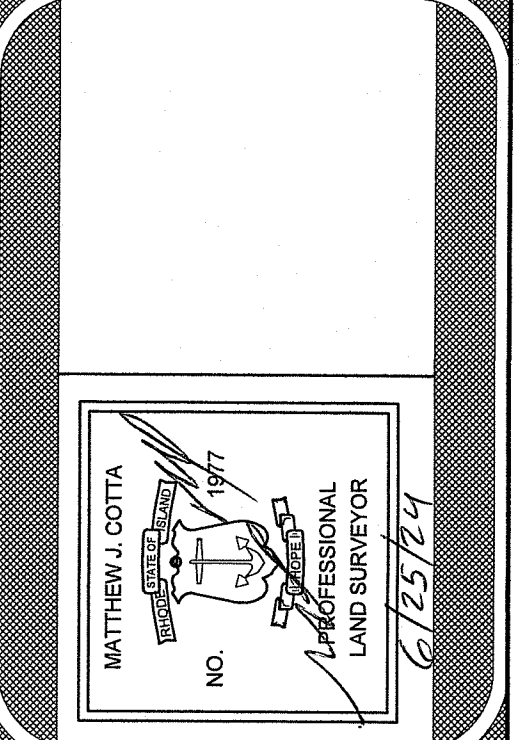
NOTE PER DEM:
Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site



EXISTING CONDITIONS PLAN FOR
PERRY HILL
LOCATED AT
ASSESSOR'S PLAT 5E, LOT 5.1
POLE #15 - PUNCHBOWL TRAIL
RICHMOND, R.I.

Checked By: MJC
Date: 3/14/2024

| NO. | REVISION | BY | DATE |
|-----|--------------------|-----|---------|
| 1. | PER RIDEM COMMENTS | PJF | 6/12/24 |



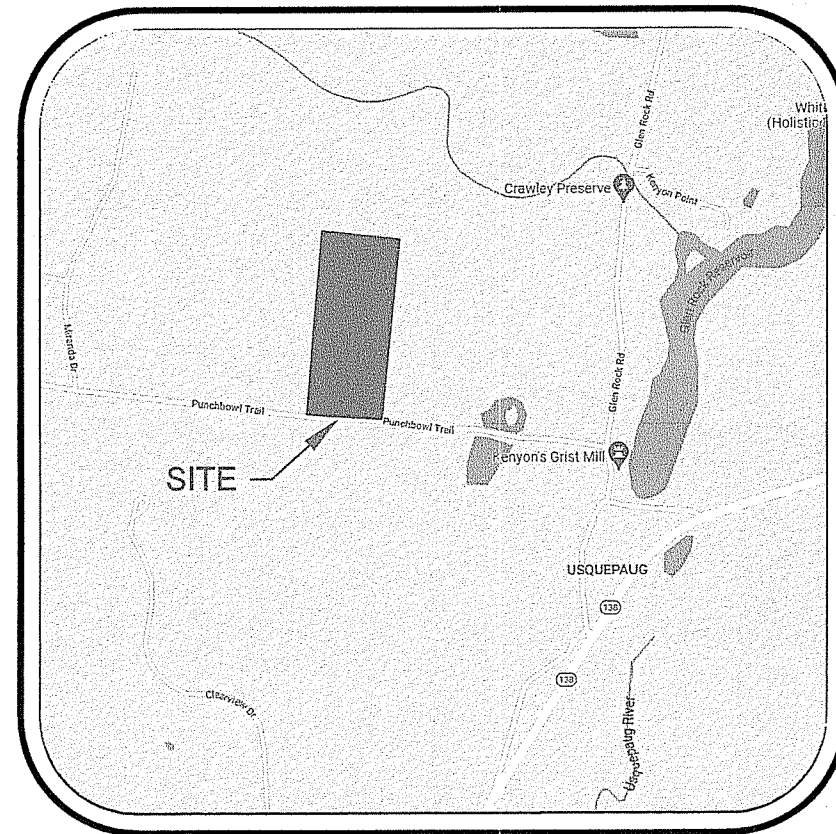
AMERICAN ENGINEERING, INC.
Professional Engineering & Land Surveying
400 South County Trail - Suite A 201
Exeter, Rhode Island 02822
DCotta@AmericanEngineeringRI.com
Phone (401) 294-4090 / Fax (401) 294-3625

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

APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
DATED: JUL 24 2024 FILE #: 24-0102
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED FOR CONSTRUCTION SITE

THIS PLAN IS TO BE INDEXED UNDER THE FOLLOWING ROAD:
1. PUNCH BOWL TRAIL

Sheet
JUN 26 2024
Office of Water Resources
of 8 sheets
Drawing No. 122122



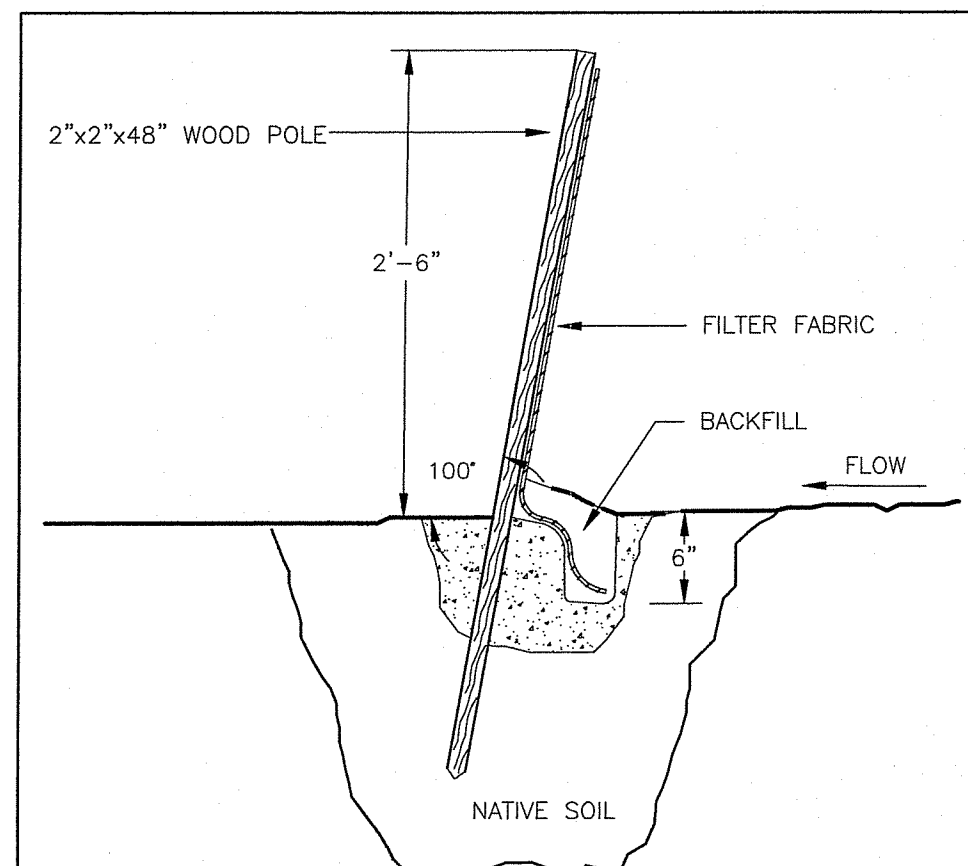
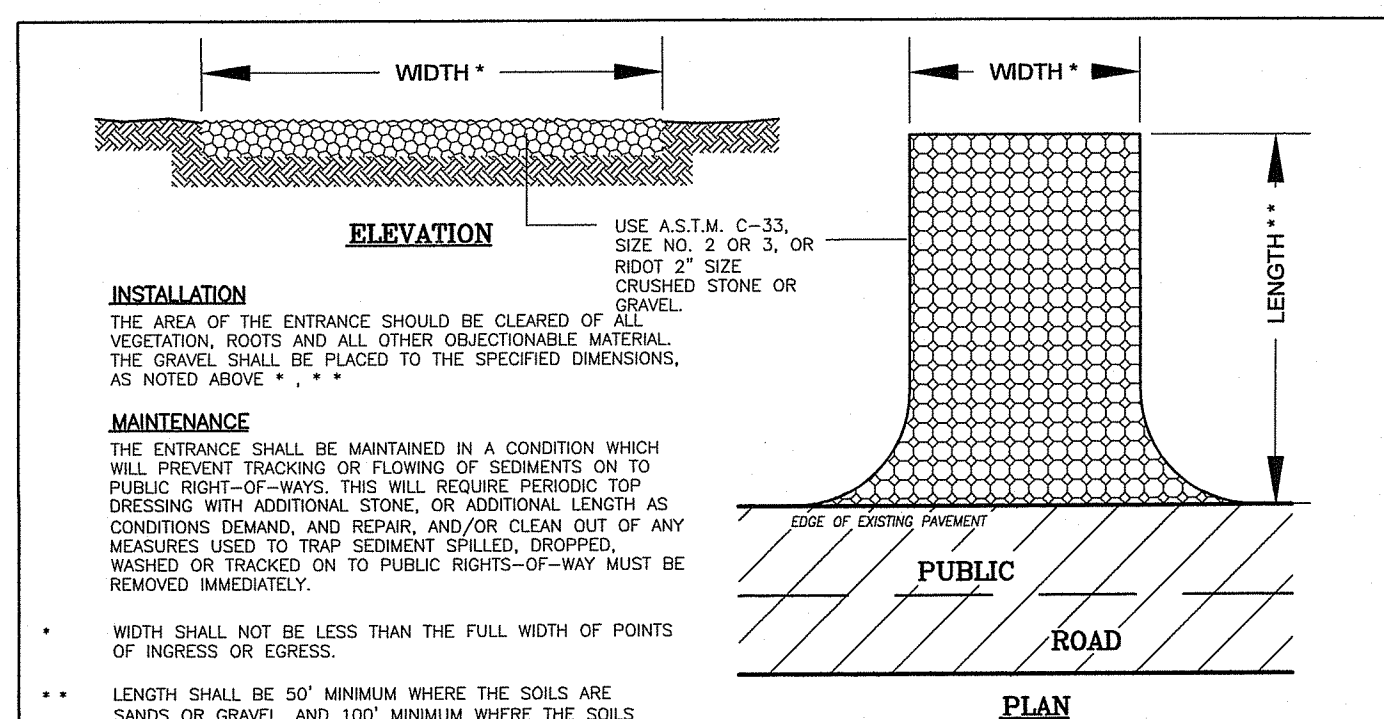
LOCUS MAP

NOT TO SCALE

BEING A.P. 5E, LOT 5.1
AREA OF LOT = 11.21 AC.

PARCEL ZONING: R-2 (MODIFIED 18.41.050)

MINIMUM LOT AREA = 10,000 SF
MINIMUM FRONTAGE = 80'
FRONT SETBACK = 25'
SIDE SETBACK = 10'
REAR SETBACK = 30'
MAX BUILDING COVERAGE = 20%



TESTHOLE DATA

| TH ID | EG | SHWT | LEDGE |
|-------|--------|------|-------|
| 1A | 288.75 | 36" | NONE* |
| 1B | 290.00 | 36" | NONE* |
| 2A | 292.30 | 36" | NONE* |
| 2B | 289.25 | 36" | 8'-6" |
| 3A | 292.30 | 48" | NONE* |
| 3B | 295.25 | 60" | 8'-0" |
| 4A | 294.50 | 48" | 8'-6" |
| 4B | 299.00 | 48" | 8'-0" |
| 5A | 277.00 | 48" | 8'-0" |
| 5B | 278.25 | 36" | 7'-0" |
| 6A | 267.00 | 60" | 7'-0" |
| 6B | 272.00 | 60" | 8'-2" |
| 7A | 254.25 | 48" | 8'-0" |
| 7B | 258.75 | 48" | 9'-0" |
| 8A | 253.25 | 36" | NONE* |
| 8B | 255.50 | 24" | 7'-0" |
| D1 | 255.50 | 60" | NONE* |
| D2 | 248.00 | 48" | 6'-0" |
| D3 | 241.50 | 60" | 9'-0" |
| D4 | 241.00 | 48" | 7'-6" |
| D5 | 274.50 | 72" | NONE* |
| D6 | 281.00 | 72" | NONE* |

*LEDGE NOT ENCOUNTERED

ONSITE WASTEWATER TREATMENT SYSTEM SCHEDULES

| LOT ID | EXISTING GRADE | GST | TEST HOLE ID/ SOIL CATEGORY/ WT DEPTH | WATER TABLE EL. | LEDGE EL. | SAND BASE | GST SIZE | INVERT EL. | PROPOSED GRADE (MIN-MAX) |
|--------|----------------|------|---|-----------------|-----------|-----------|-------------------|------------|--------------------------|
| 1* | 253.00 | 6206 | TH 8B / 5 / 2' | 261.00 | 7'-0" | 253.00 | 1 x 16 (32" Priv) | 253.67 | 254.50-255.00 |
| 2* | 257.00 | 6206 | TH 7A / 5 / 4' | 253.00 | 8'-0" | 255.00 | 1 x 16 (32" Priv) | 255.67 | 256.50-257.00 |
| 3 | 268.00 | 6212 | TH 6A / 8 / 5' | 263.00 | 7'-0" | 266.00 | 2 x 28" | 267.167 | 268.00-268.50 |
| 4 | 274.00 | 6206 | TH 5B / 8 / 3' | 271.00 | 7'-0" | 274.00 | 2 x 48" | 274.67 | 275.50-275.65 |
| 5 | 284.50 | 6206 | TH 4B / 8 / 3' | 281.50 | 7'-0" | 284.5 | 2 x 48" | 285.34 | 286.00-286.50 |

* Lots 1 & 2 will utilize advanced treatment septic systems



RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS
SPECIFIED IN THE LETTER OF APPROVAL
DATED: **JUL 24 2024** FILE #: **04-010**
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

PROPOSED CONDITIONS PLAN
FOR
PERRY HILL
LOCATED AT
POLE #15 - PUNCHBOWL TRAIL
RICHMOND, R.I.

Checked By: P.JF
Date: 3/14/2024

Drawn By: ADM
Scale: 1" = 50'

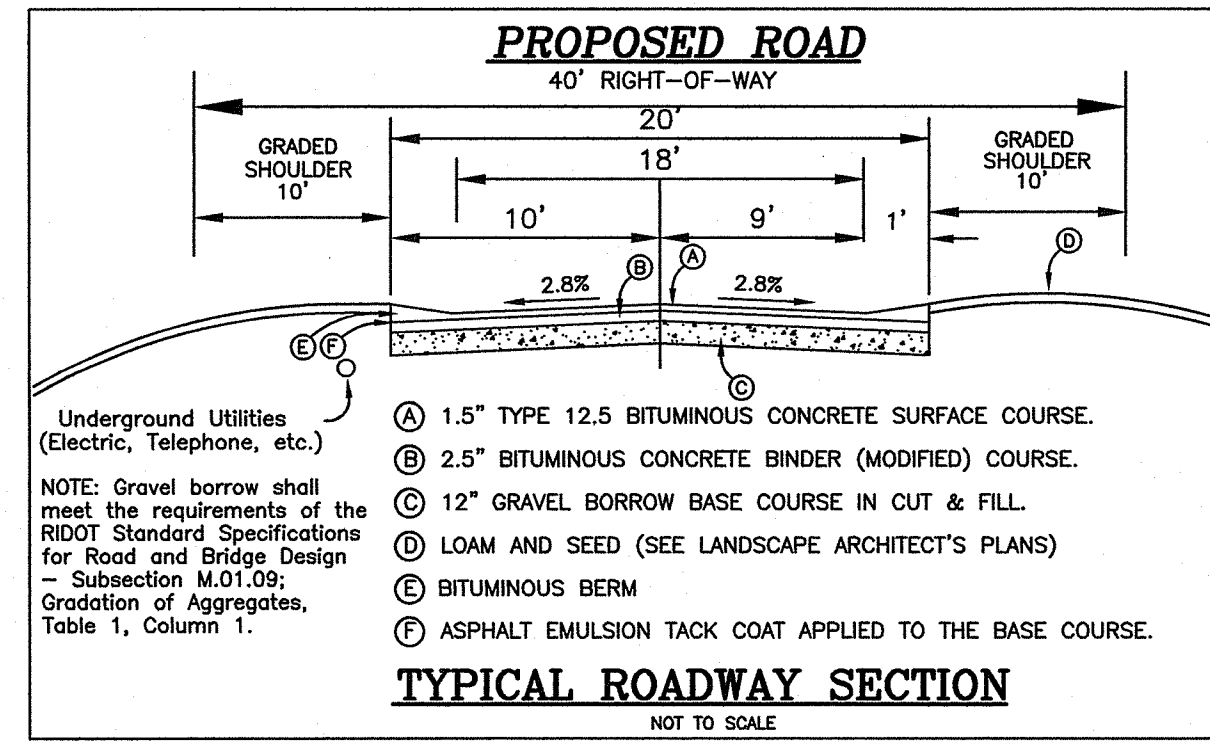
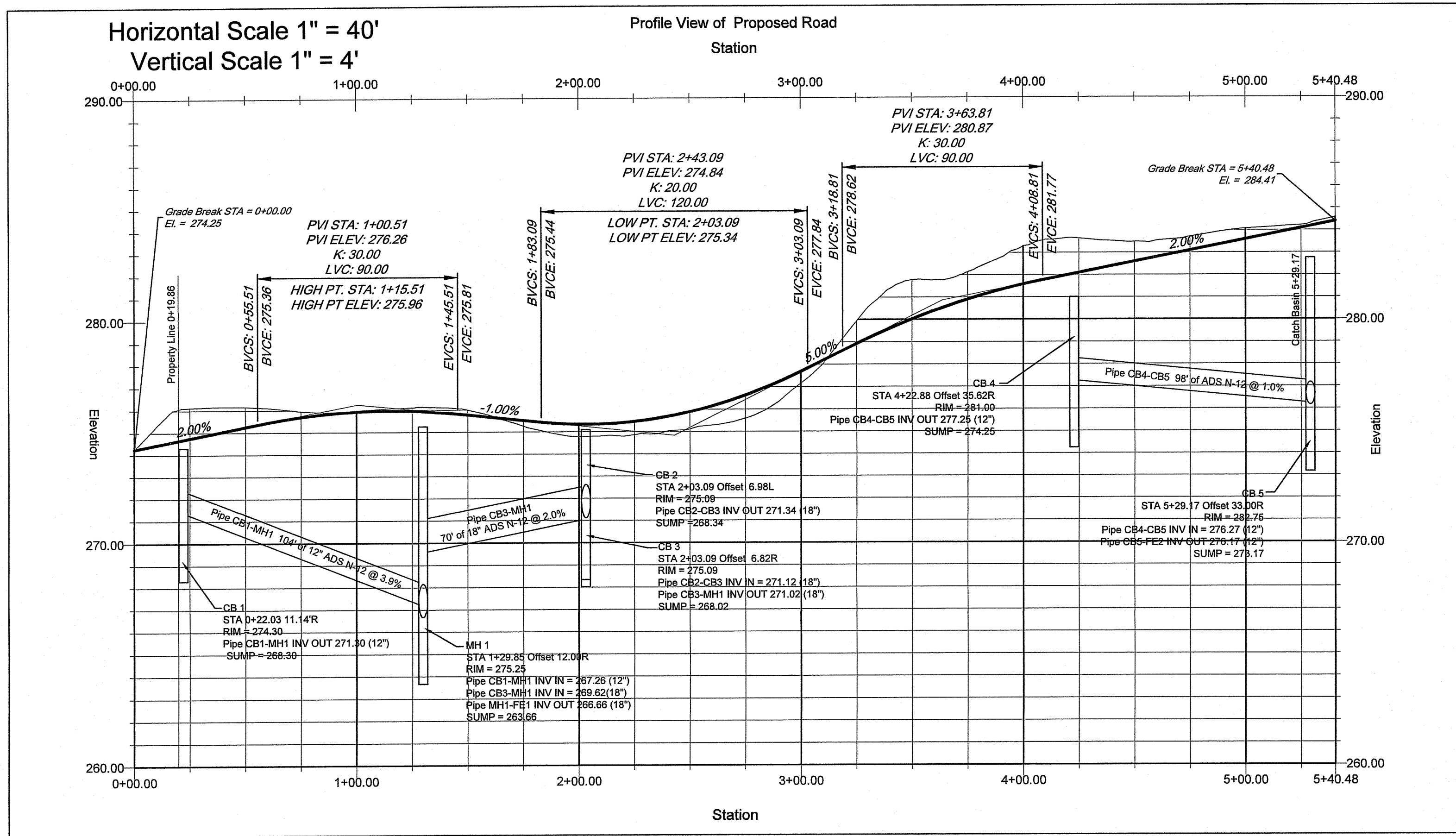
| NO. | REVISION | BY | DATE |
|-----|-------------------|------|----------|
| 1. | PER RIEM COMMENTS | P.JF | 6/1/2024 |

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NO. 13125
REGISTERED PROFESSIONAL ENGINEER
6/25/24

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Phone (401) 294-4090 / Fax (401) 294-3625

Sheet
of 8 sheets
Drawing No. 122122



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

APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL

DATED: JUL 24 2024 FILE # 24-010

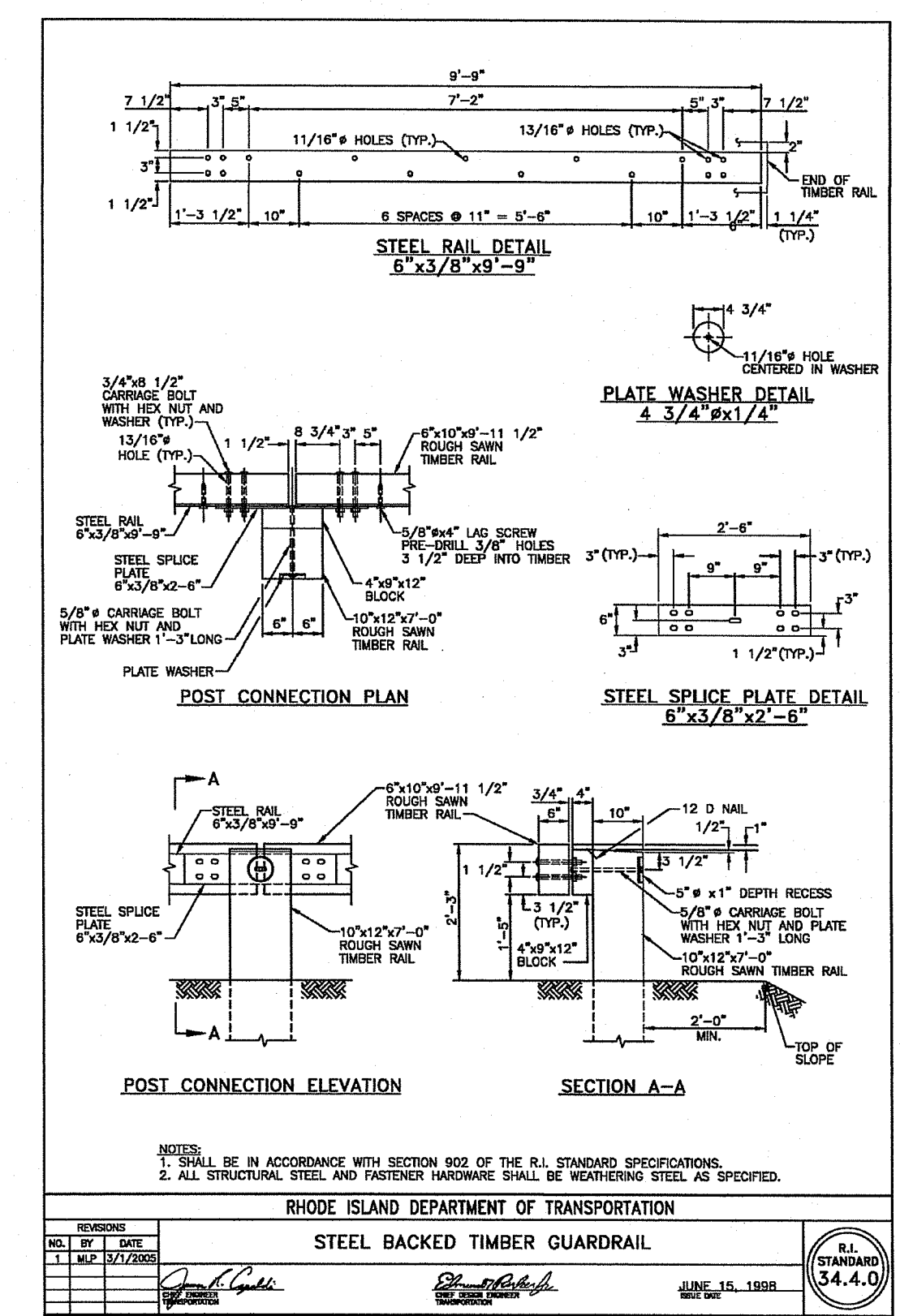
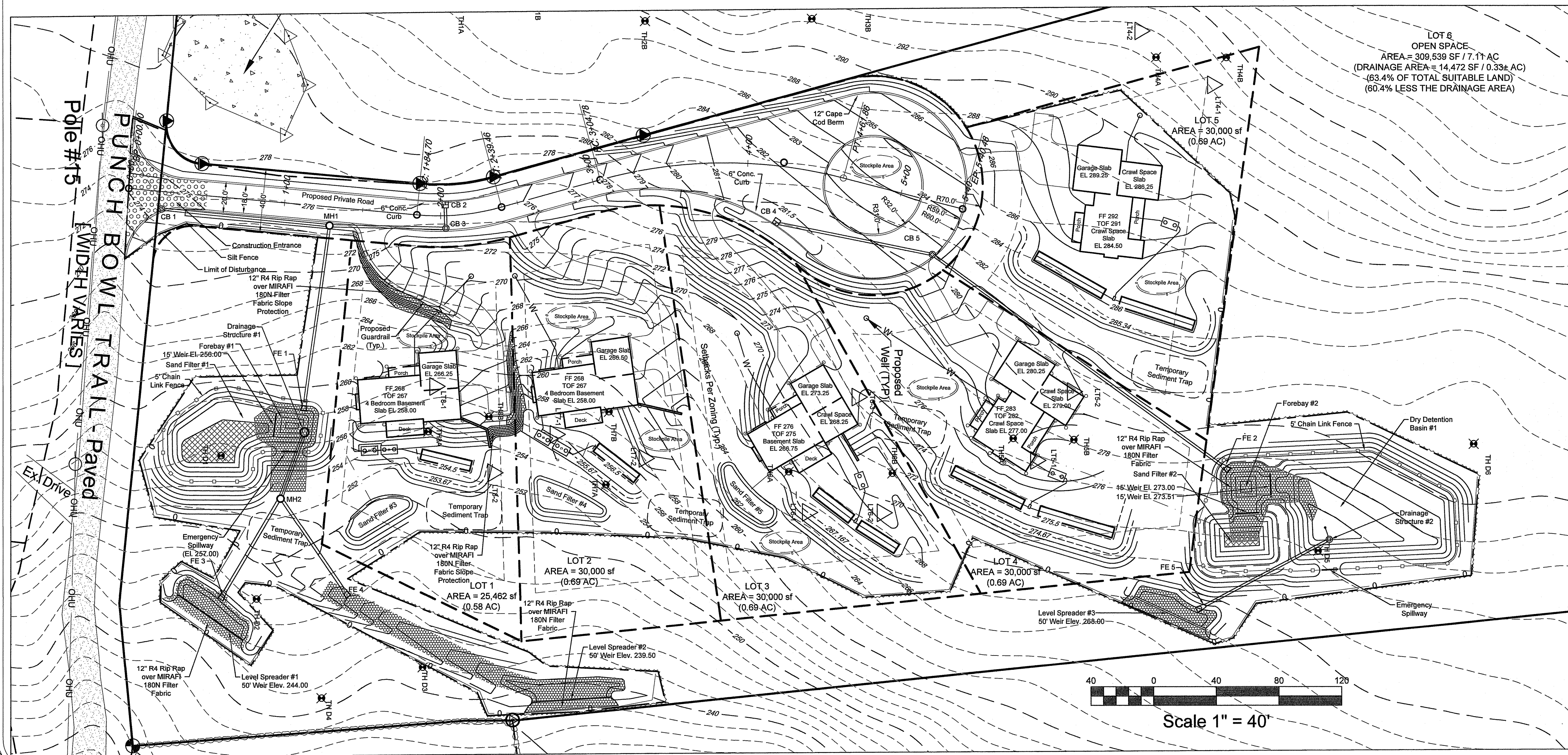
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Andy Chapman

| Structure Name | Structure Details |
|----------------|--|
| CB 1 | RIM = 274.30 Pipe CB1-MH1 INV OUT 271.30 (12") SUMP = 268.30 |
| CB 2 | RIM = 275.09 Pipe CB2-CB3 INV OUT 271.34 (18") SUMP = 268.34 |
| CB 3 | RIM = 275.09 Pipe CB2-CB3 INV IN = 271.12 (18") Pipe CB3-MH1 INV OUT 271.02 (18") SUMP = 268.02 |
| CB 4 | RIM = 281.00 Pipe CB4-CB5 INV OUT 277.25 (12") SUMP = 274.25 |
| CB 5 | RIM = 282.75 Pipe CB4-CB5 INV IN = 276.27 (12") Pipe CB5-FE2 INV OUT 276.17 (12") SUMP = 273.17 |
| MH 1 | RIM = 275.25 Pipe CB1-MH1 INV IN = 267.26 (12") Pipe CB3-MH1 INV IN = 269.62 (18") Pipe MH1-FE1 INV OUT 266.66 (18") SUMP = 263.66 |
| MH 2 | RIM = 253.00 Pipe DS1-MH2 INV IN = 248.80 (30") Pipe MH2-FE3 INV IN = 248.70 (21") Pipe MH2-FE4 INV OUT 248.70 (21") SUMP = 245.70 |

| Pipe Name | Size | Length | Slope | Inv. In | Inv. Out |
|-----------|------|--------|-------|---------|----------|
| CB1-MH1 | 12" | 104' | 3.9% | 271.30 | 267.26 |
| CB2-CB3 | 18" | 11' | 2.0% | 271.34 | 271.12 |
| CB3-MH1 | 18" | 70' | 2.0% | 271.02 | 269.62 |
| MH1-FE1 | 18" | 117' | 7.8% | 266.66 | 257.80 |
| CB4-CB5 | 12" | 98' | 1.0% | 277.25 | 276.27 |
| CB5-FE2 | 12" | 229' | 1.0% | 276.17 | 273.88 |
| DS1-MH2 | 30" | 40' | 8.0% | 252.00 | 248.80 |
| MH2-FE3 | 21" | 73' | 6.4% | 248.70 | 244.00 |
| MH2-FE4 | 21" | 74' | 3.7% | 248.70 | 246.00 |
| DS2-FE5 | 18" | 40' | 2.5% | 269.00 | 268.00 |

| FLARED END ID | INVERT ELEVATION | PIPE SIZE |
|---------------|------------------|-----------|
| 1 | 257.80 | 18" |
| 2 | 273.88 | 12" |
| 3 | 244.00 | 21" |
| 4 | 246.00 | 21" |
| 5 | 269.00 | 18" |



ROAD PLAN & PROFILE VIEW
FOR
PERRY HILL
LOCATED AT
POLE #15 PUNCHBOWL TRAIL
RICHMOND, R.I.

Drawn By: **ADM** Checked By: **PJF**
Scale: As Shown Date: 3/14/2024

REVISIONS

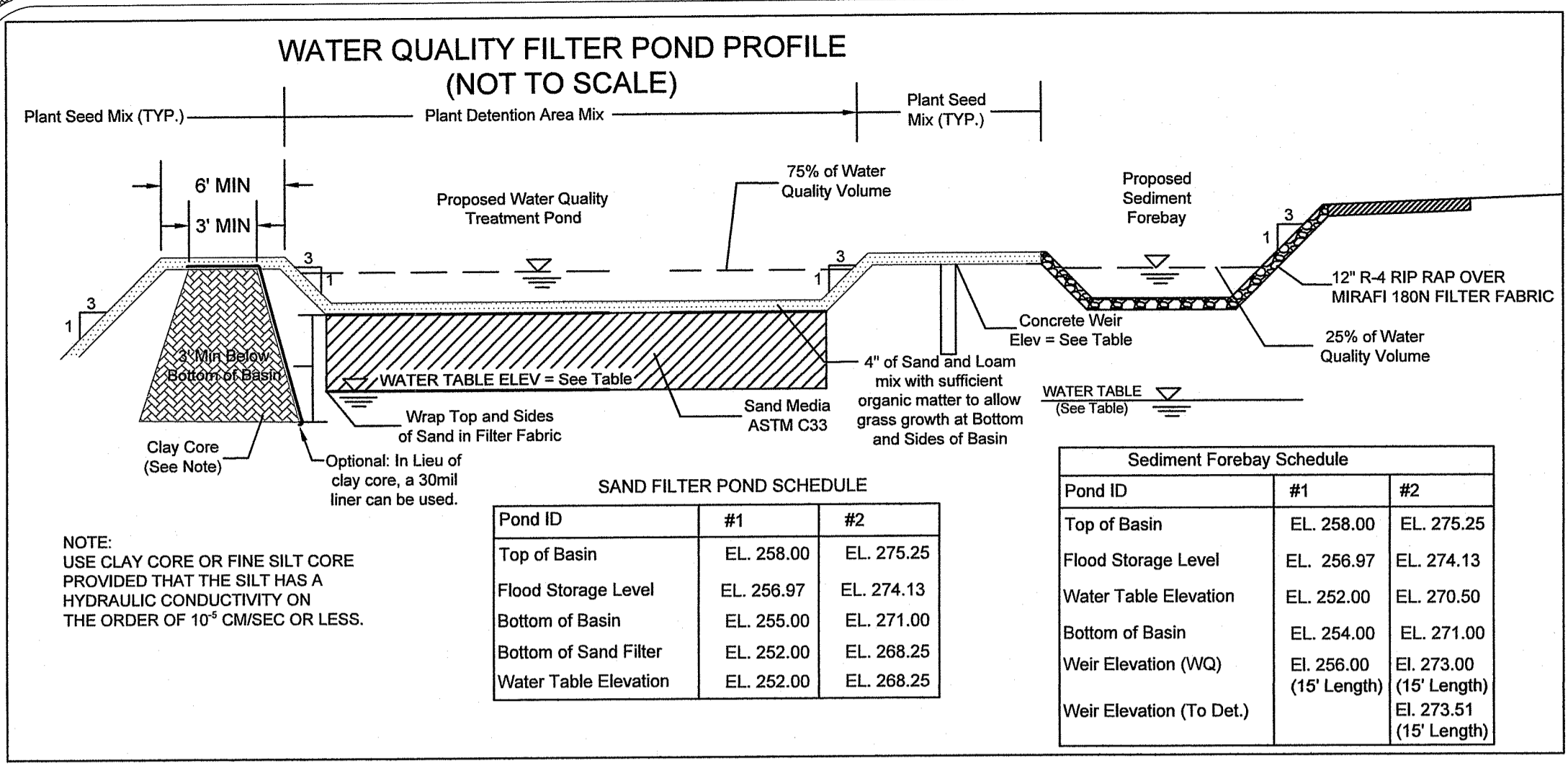
| NO. | REVISION | DATE | BY |
|-----|--------------------|------|-----|
| 1. | PER RISEM COMMENTS | | PJF |

PATRICK FREEMAN
NO. 6125
PROFESSIONAL ENGINEER
6/25/24

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Sheet
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Drawing No. 122122

Environmental Department
Office of Water Resources
JUN 28 2024
3
R.I. STANDARD 34.A.

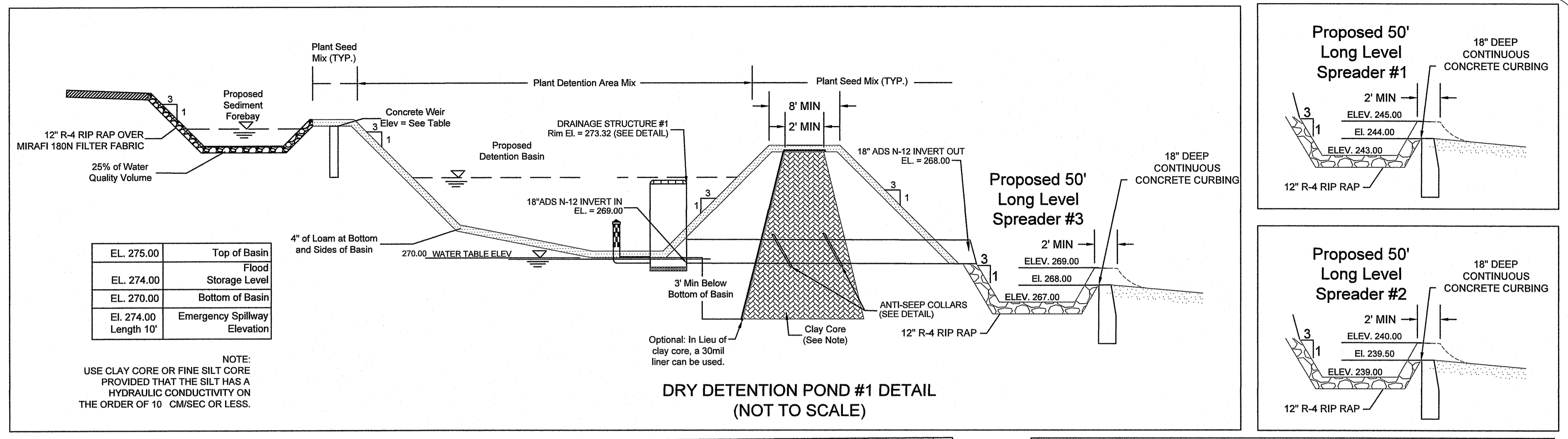


SAND FILTER POND SCHEDULE

| Pond ID | #1 | #2 |
|-----------------------|------------|------------|
| Top of Basin | EL. 258.00 | EL. 275.25 |
| Flood Storage Level | EL. 256.97 | EL. 274.13 |
| Bottom of Basin | EL. 255.00 | EL. 271.00 |
| Bottom of Sand Filter | EL. 252.00 | EL. 268.25 |
| Water Table Elevation | EL. 252.00 | EL. 268.25 |

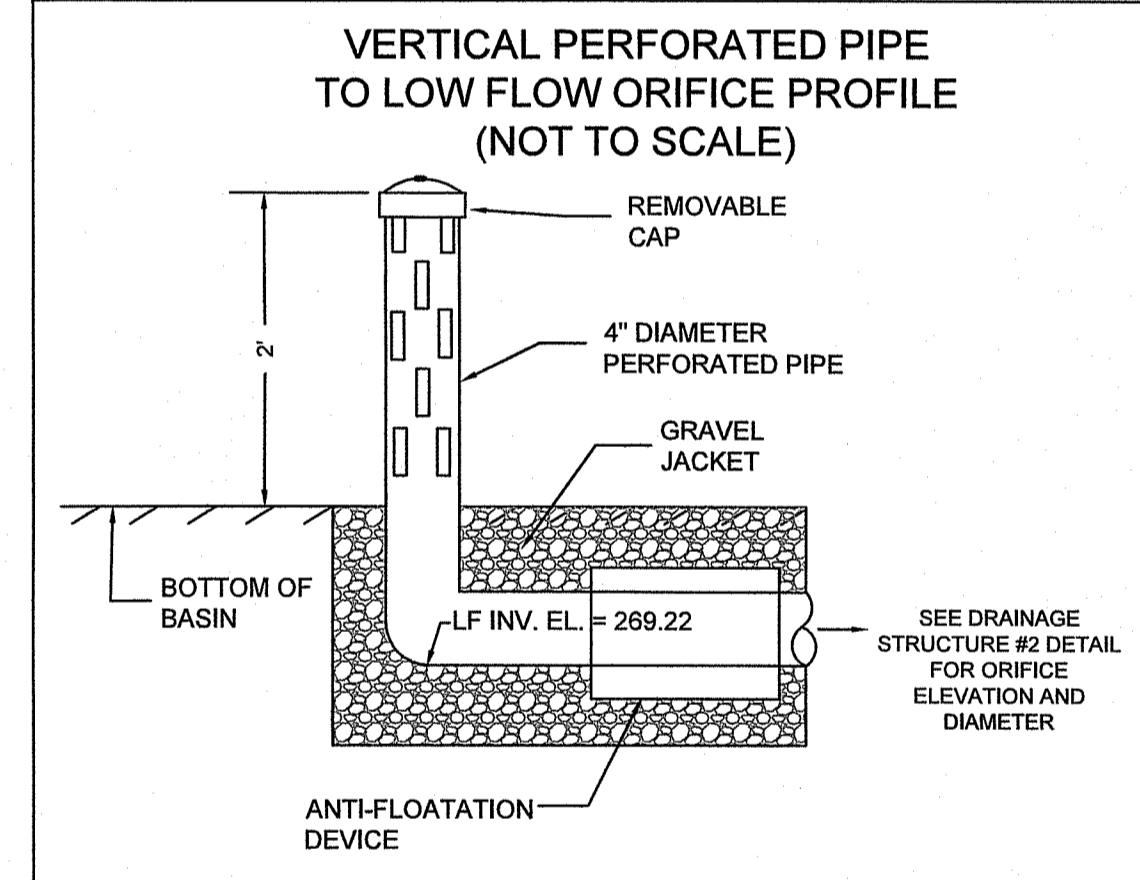
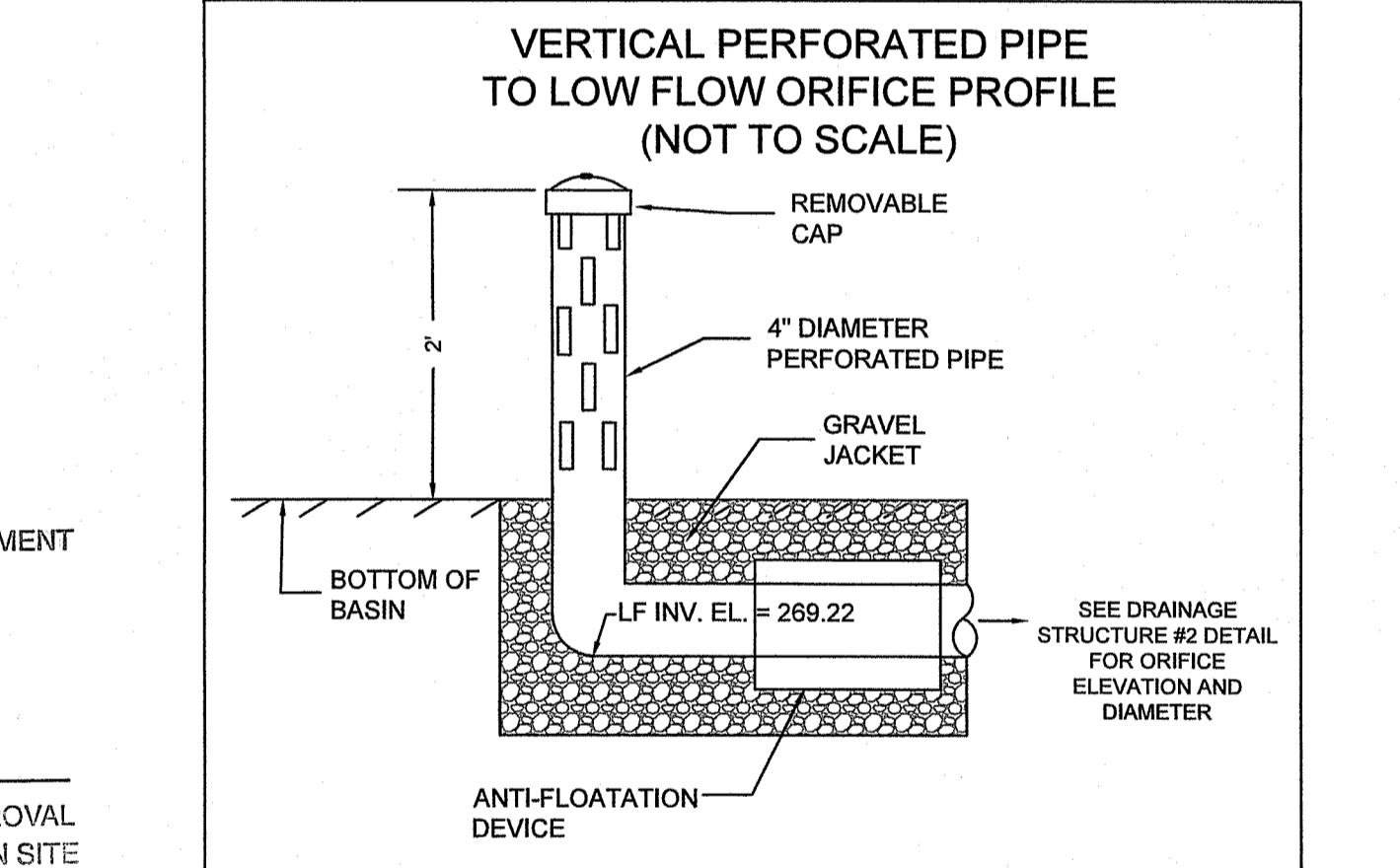
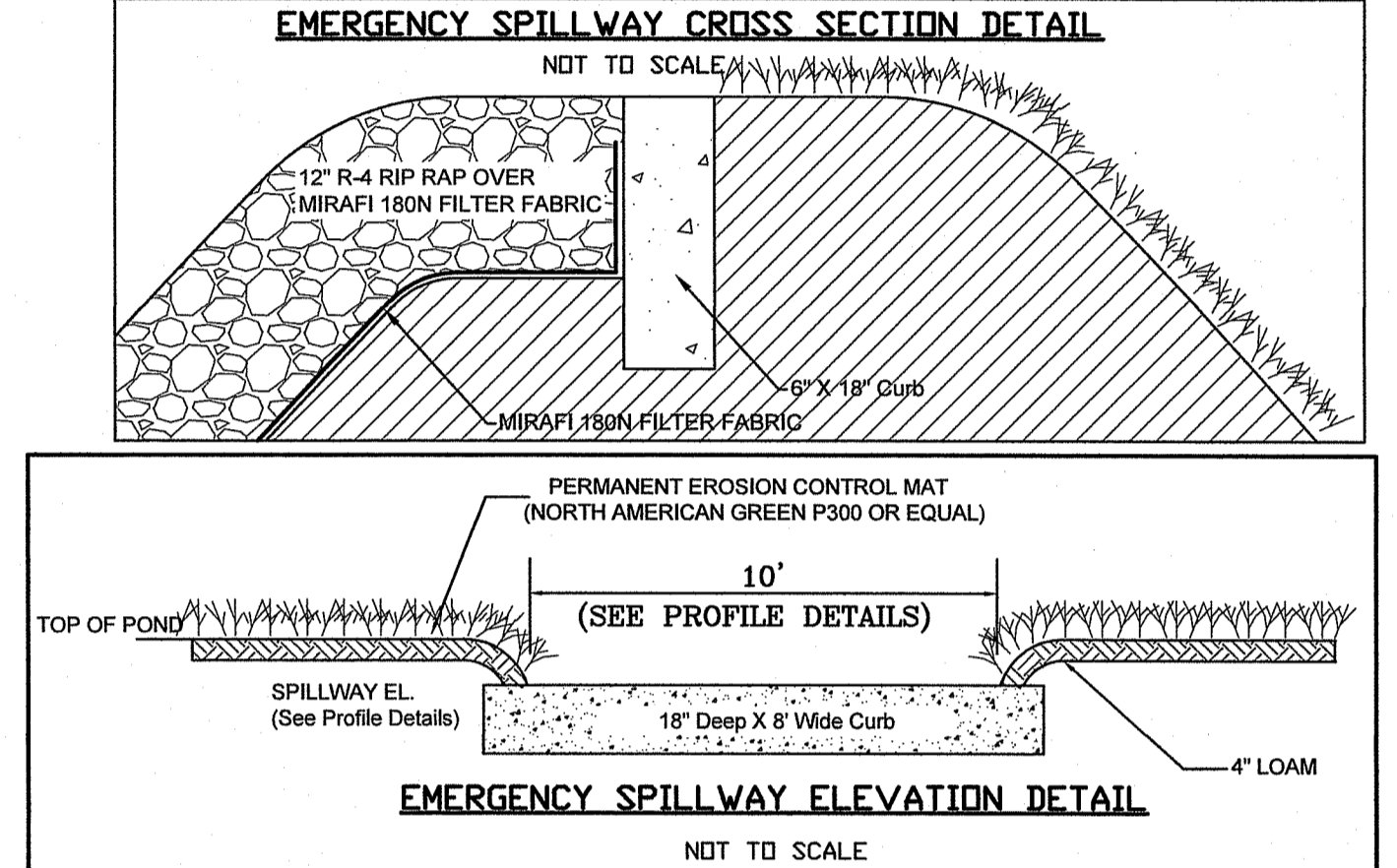
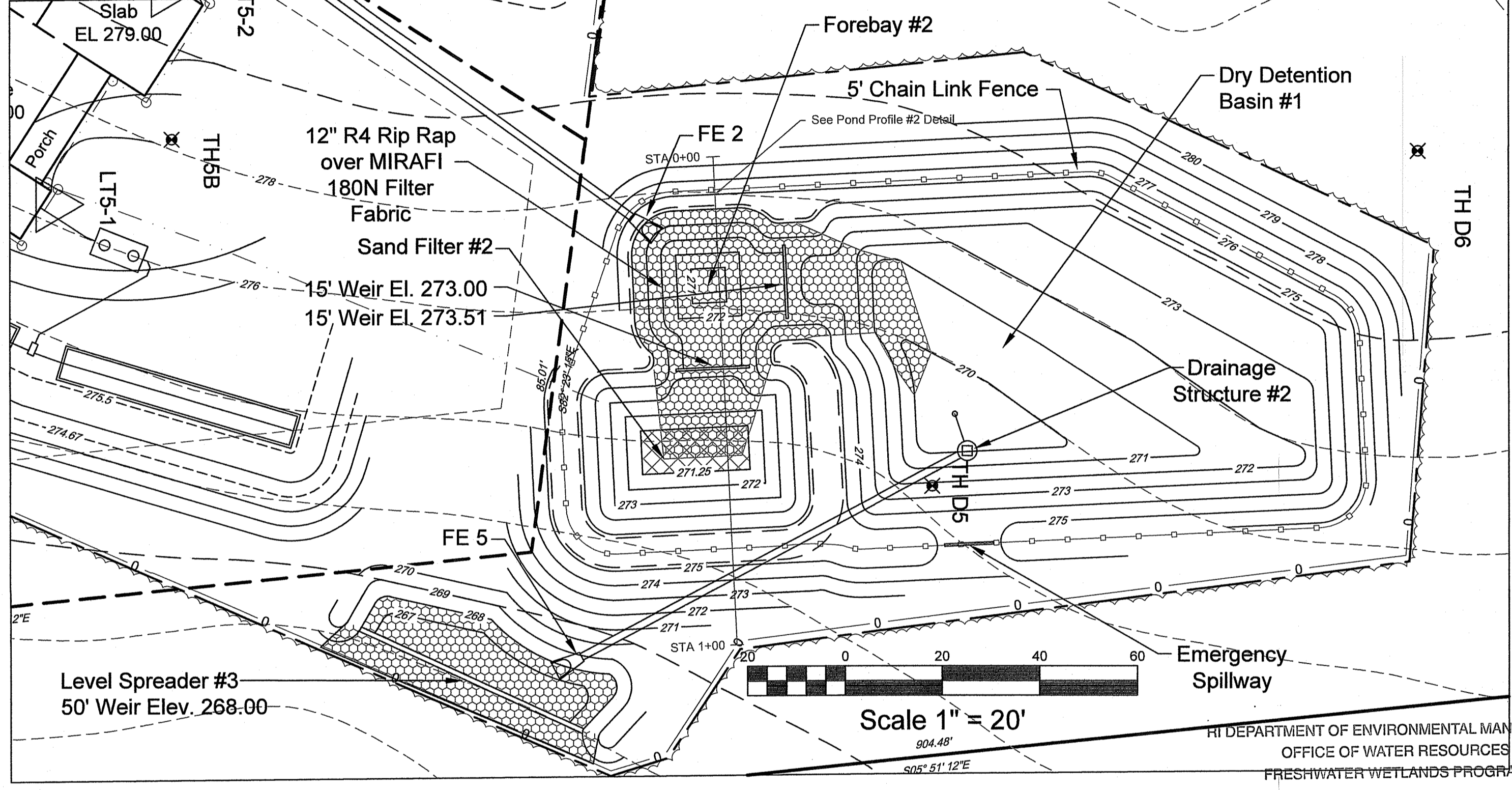
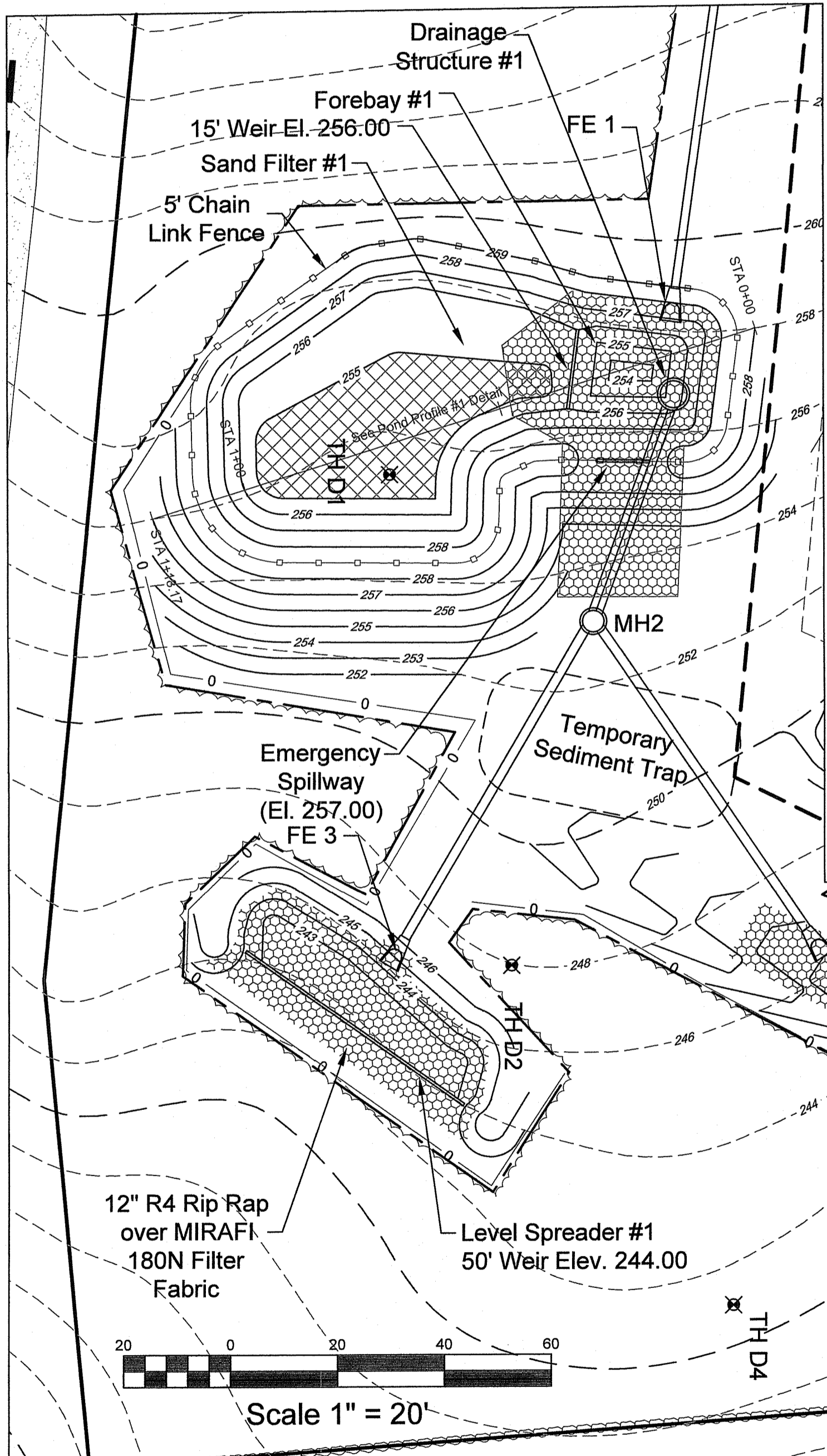
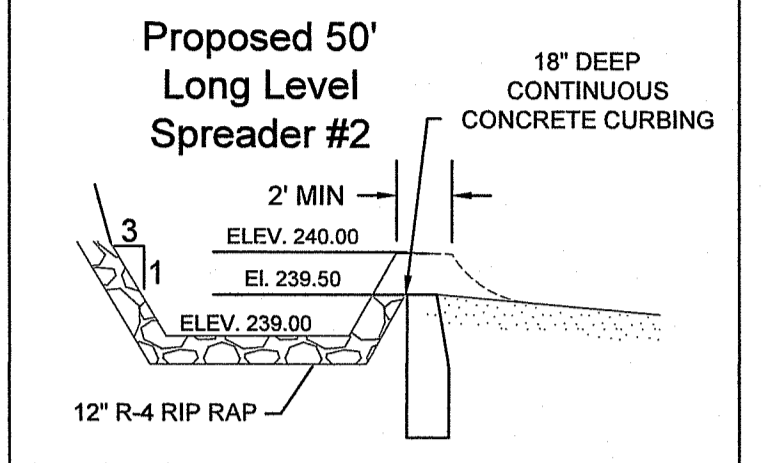
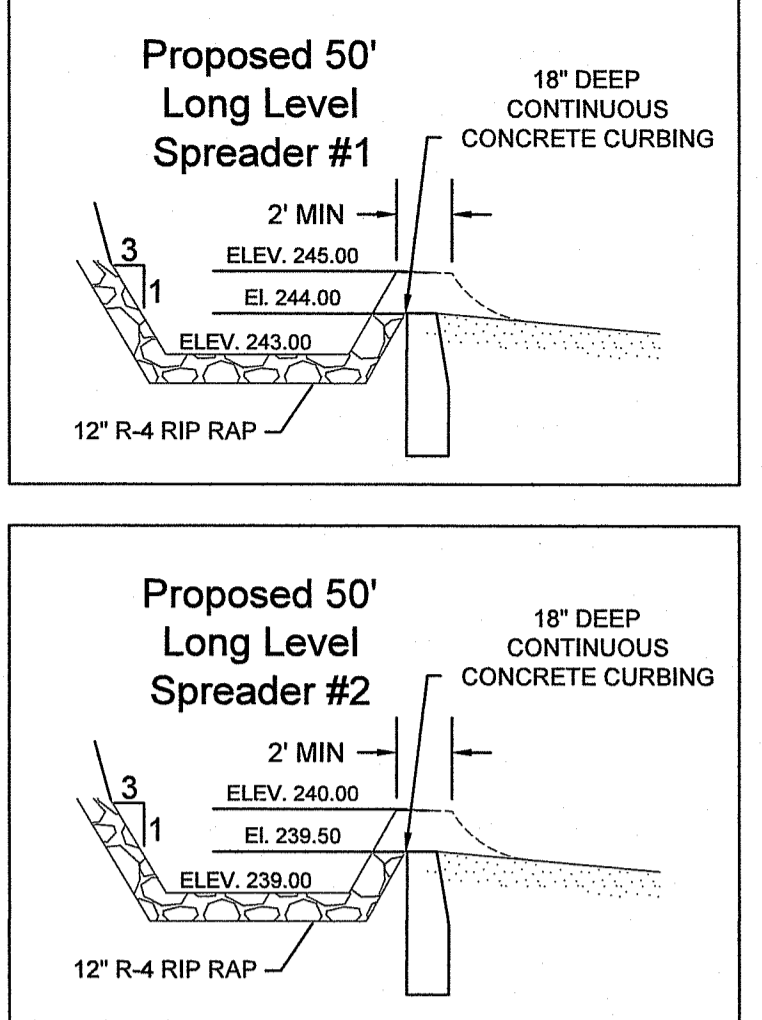
Sediment Forebay Schedule

| Pond ID | #1 | #2 |
|--------------------------|------------|------------|
| Top of Basin | EL. 258.00 | EL. 275.25 |
| Flood Storage Level | EL. 256.97 | EL. 274.13 |
| Water Table Elevation | EL. 252.00 | EL. 270.50 |
| Bottom of Basin | EL. 254.00 | EL. 271.00 |
| Weir Elevation (WQ) | EL. 256.00 | EL. 273.00 |
| Weir Elevation (To Det.) | EL. 273.51 | EL. 273.51 |



| Elevation | Description |
|------------|------------------------------|
| EL. 275.00 | Top of Basin |
| EL. 274.00 | Flood Storage Level |
| EL. 270.00 | Bottom of Basin |
| EL. 274.00 | Emergency Spillway Elevation |

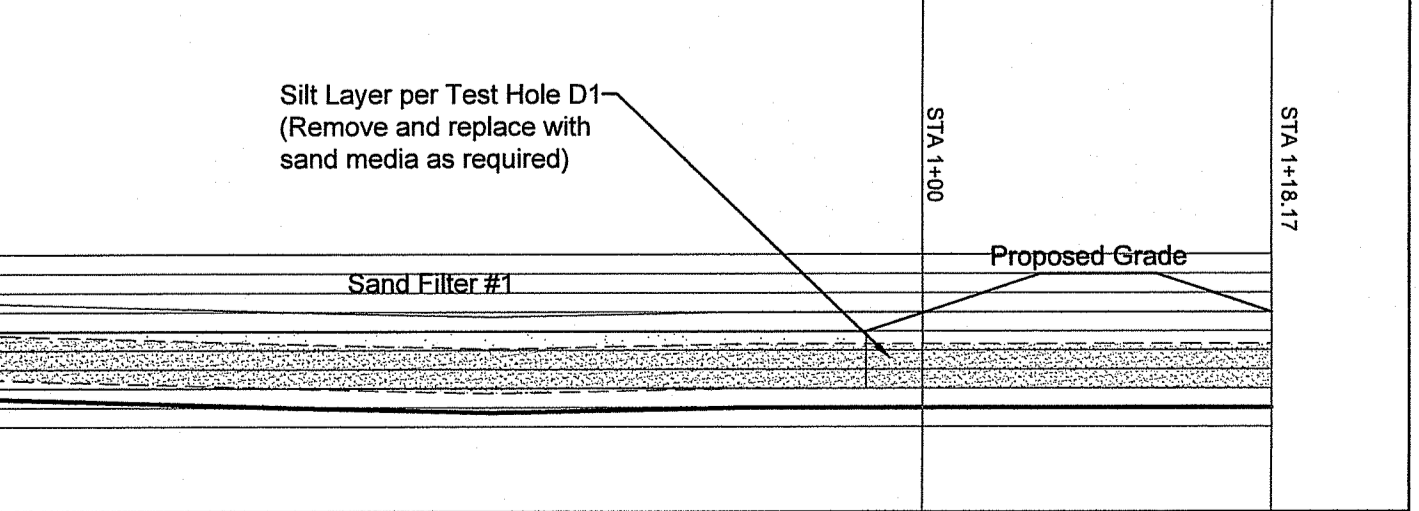
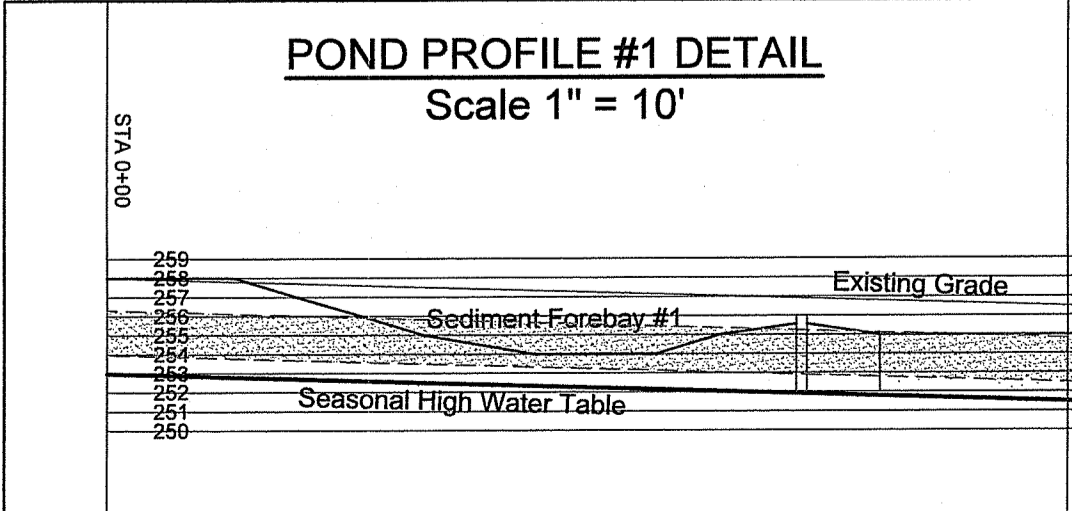
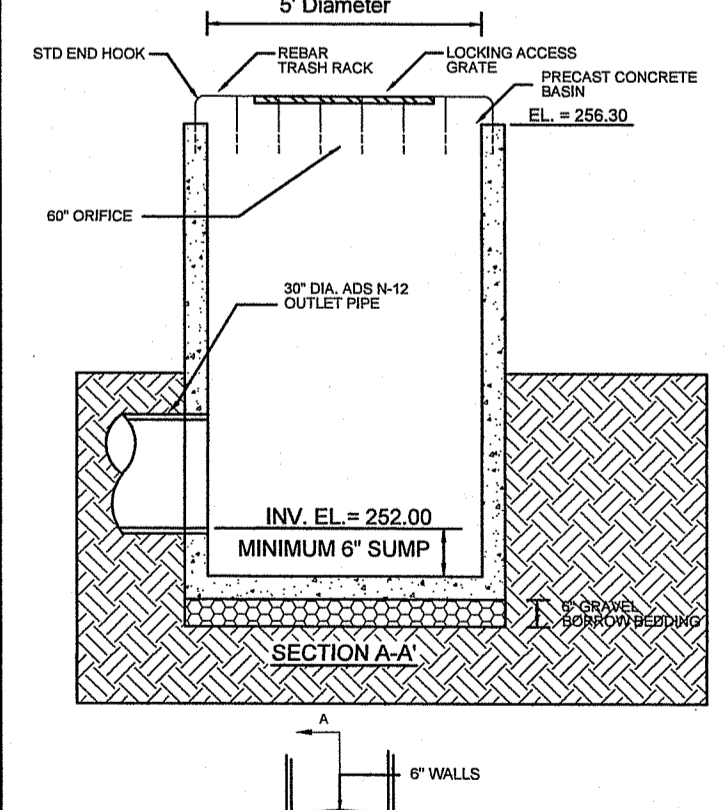
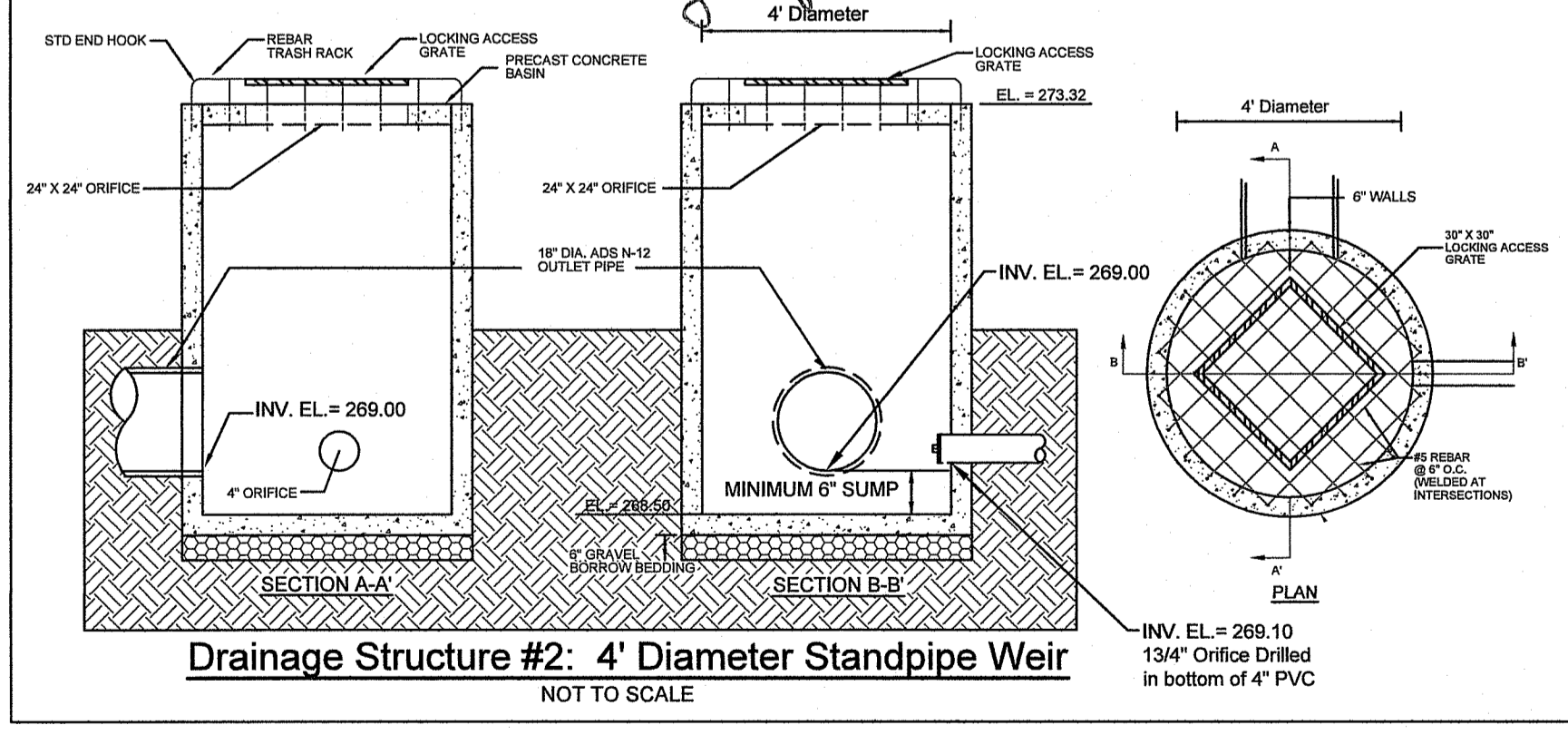
NOTE: USE CLAY CORE OR FINE SILT CORE PROVIDED THAT THE SILT HAS A HYDRAULIC CONDUCTIVITY ON THE ORDER OF 10⁻⁵ CM/SEC OR LESS.



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

APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL DATED: **04/27/2024** FILE #: **24-0100**

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

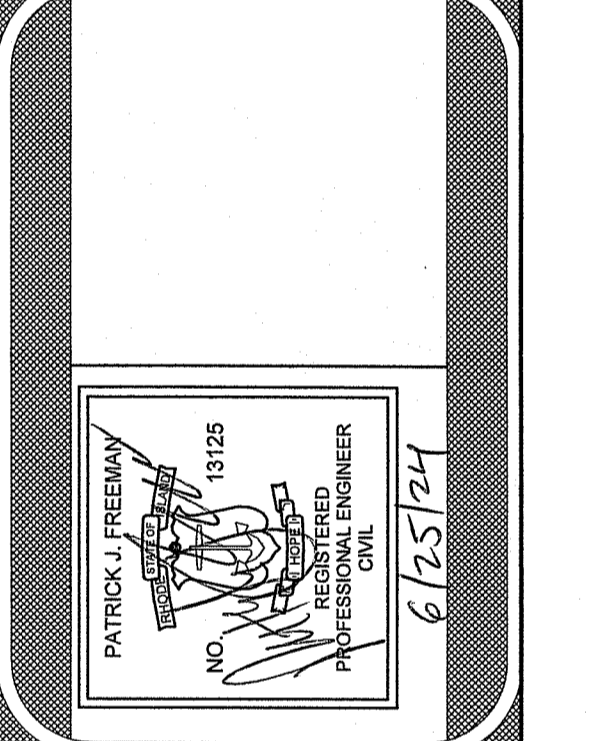


SITE PLAN
FOR
PERRY HILL
LOCATED AT
POLE #15 - PUNCHBOWL TRAIL
RICHMOND, R.I.

Checked By: **PJF**
Date: **3/14/2024**

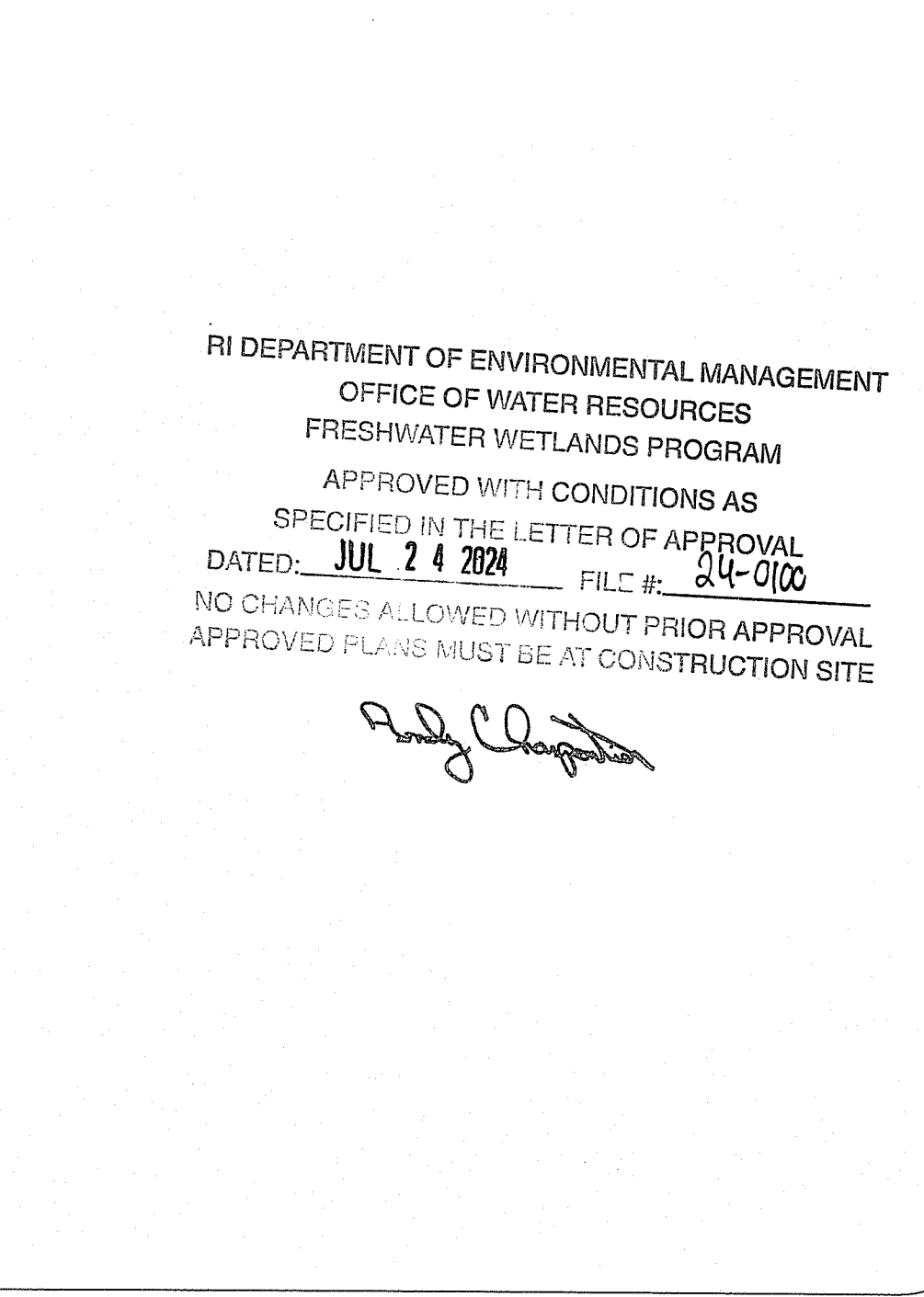
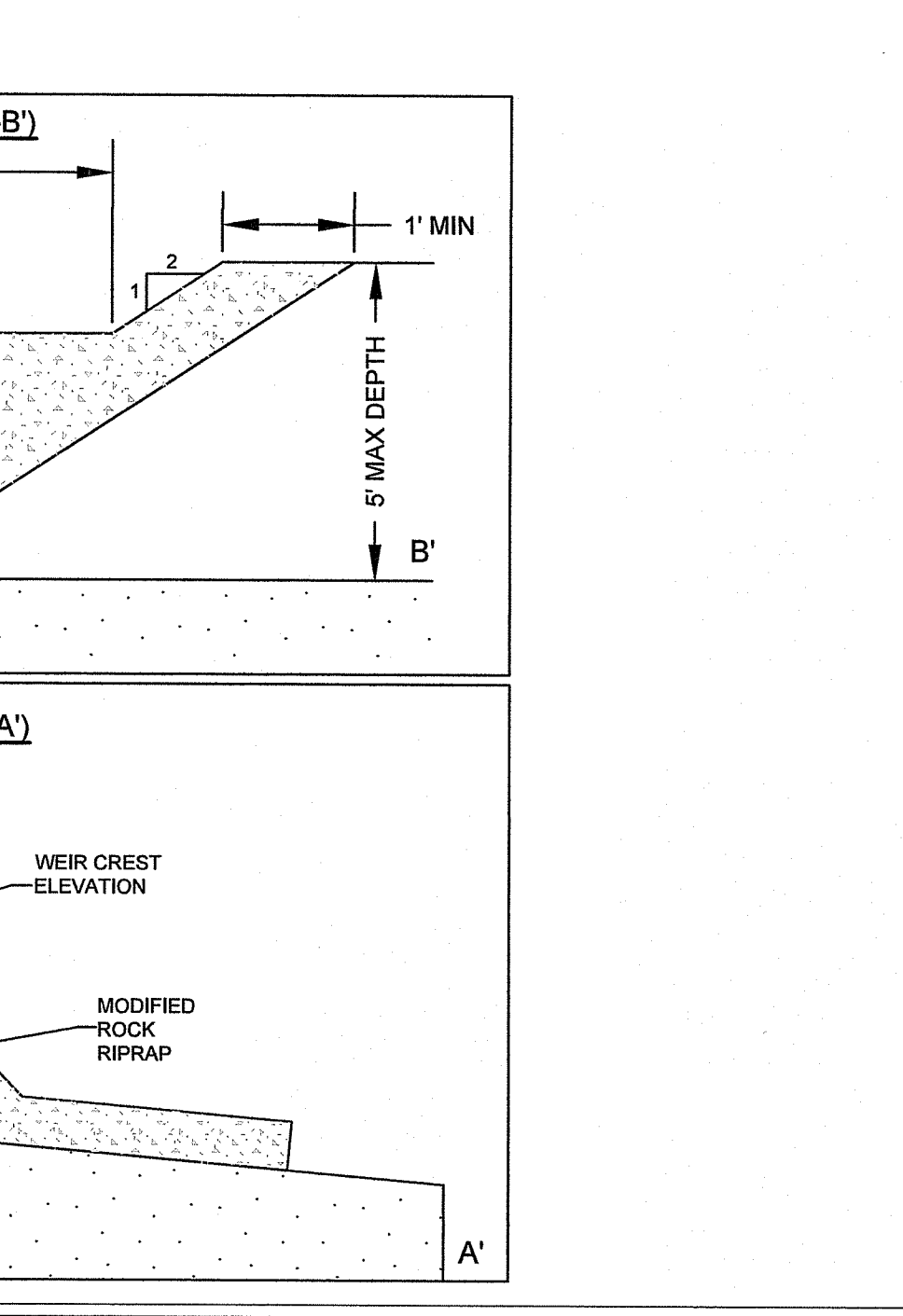
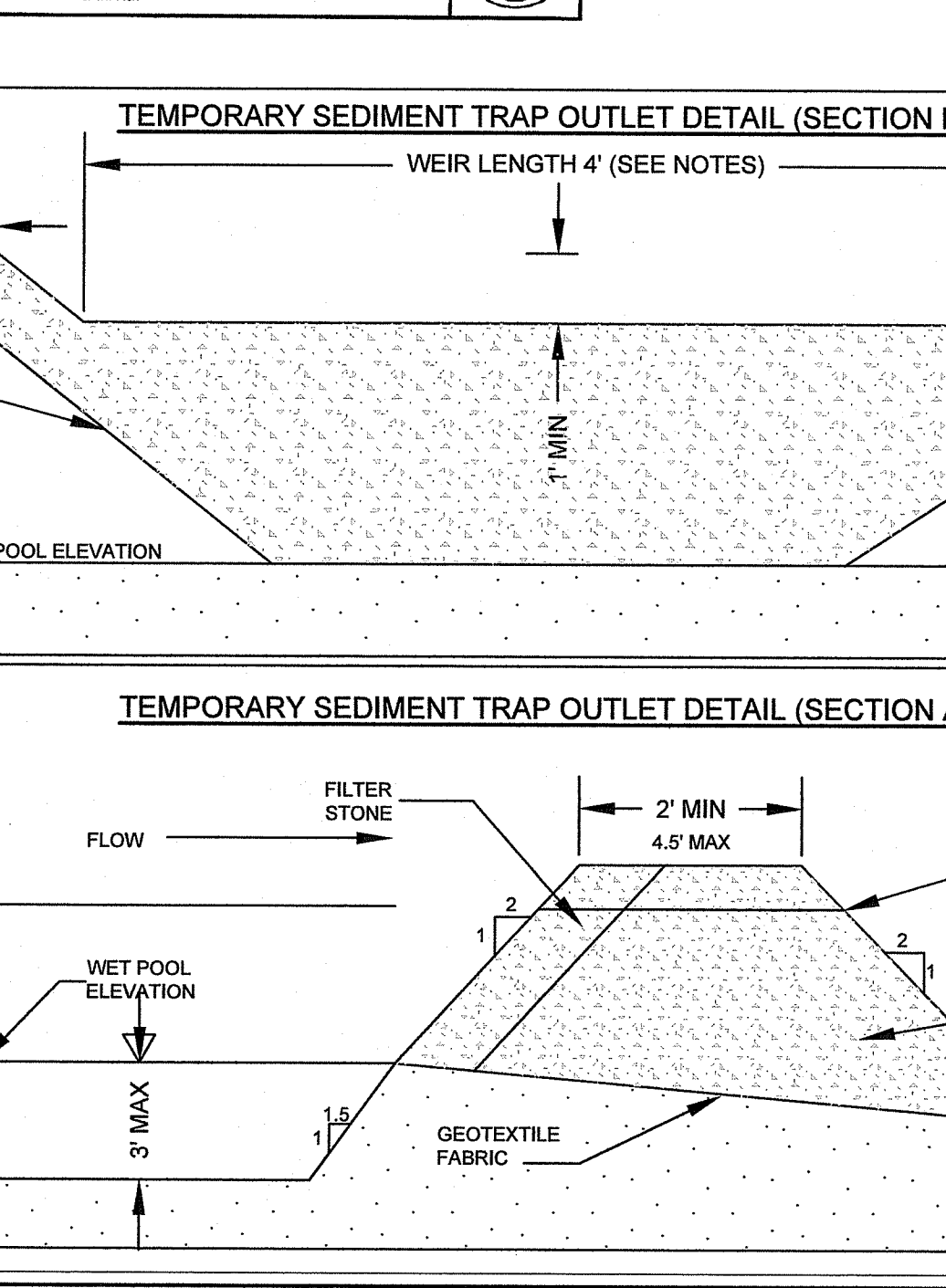
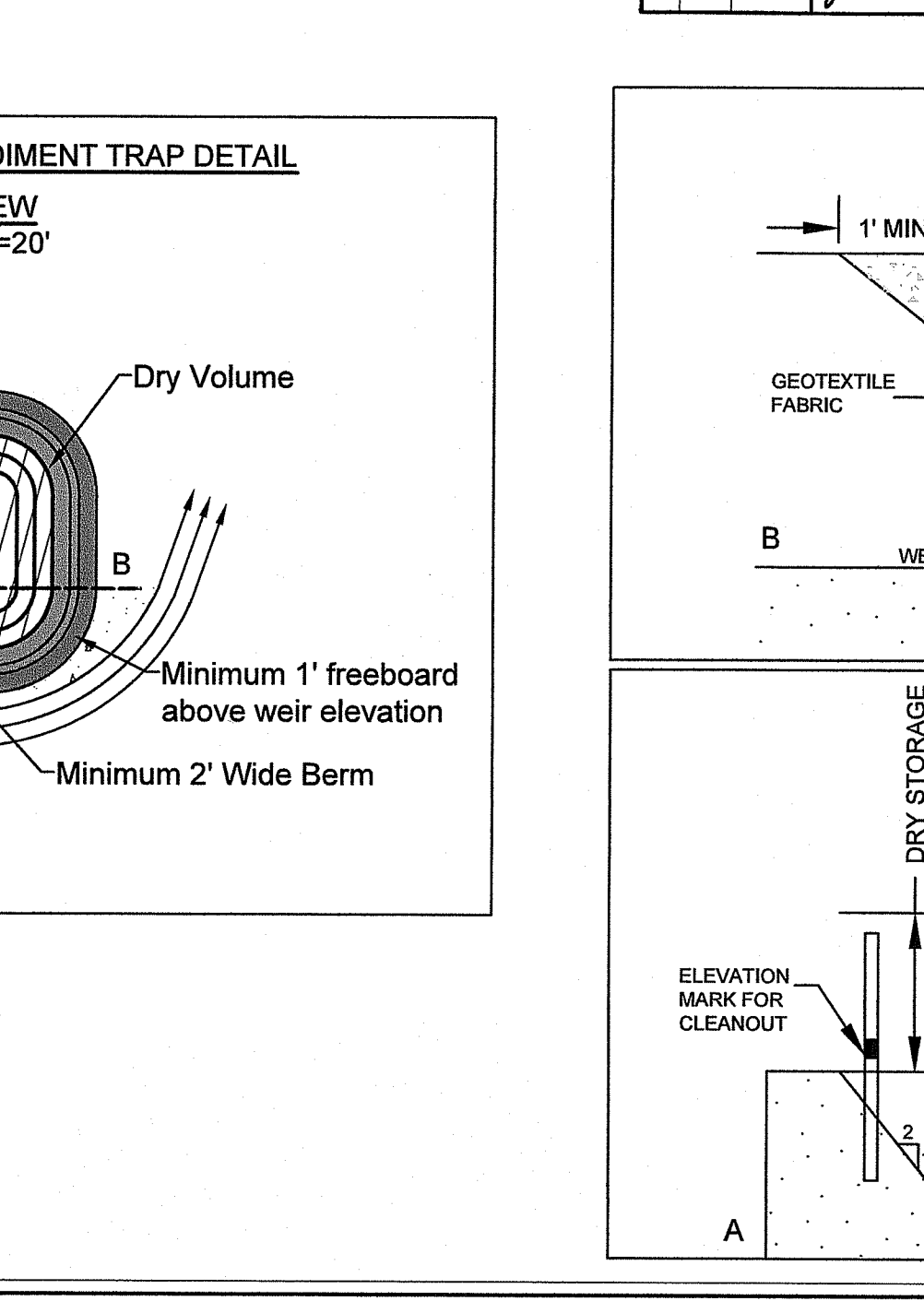
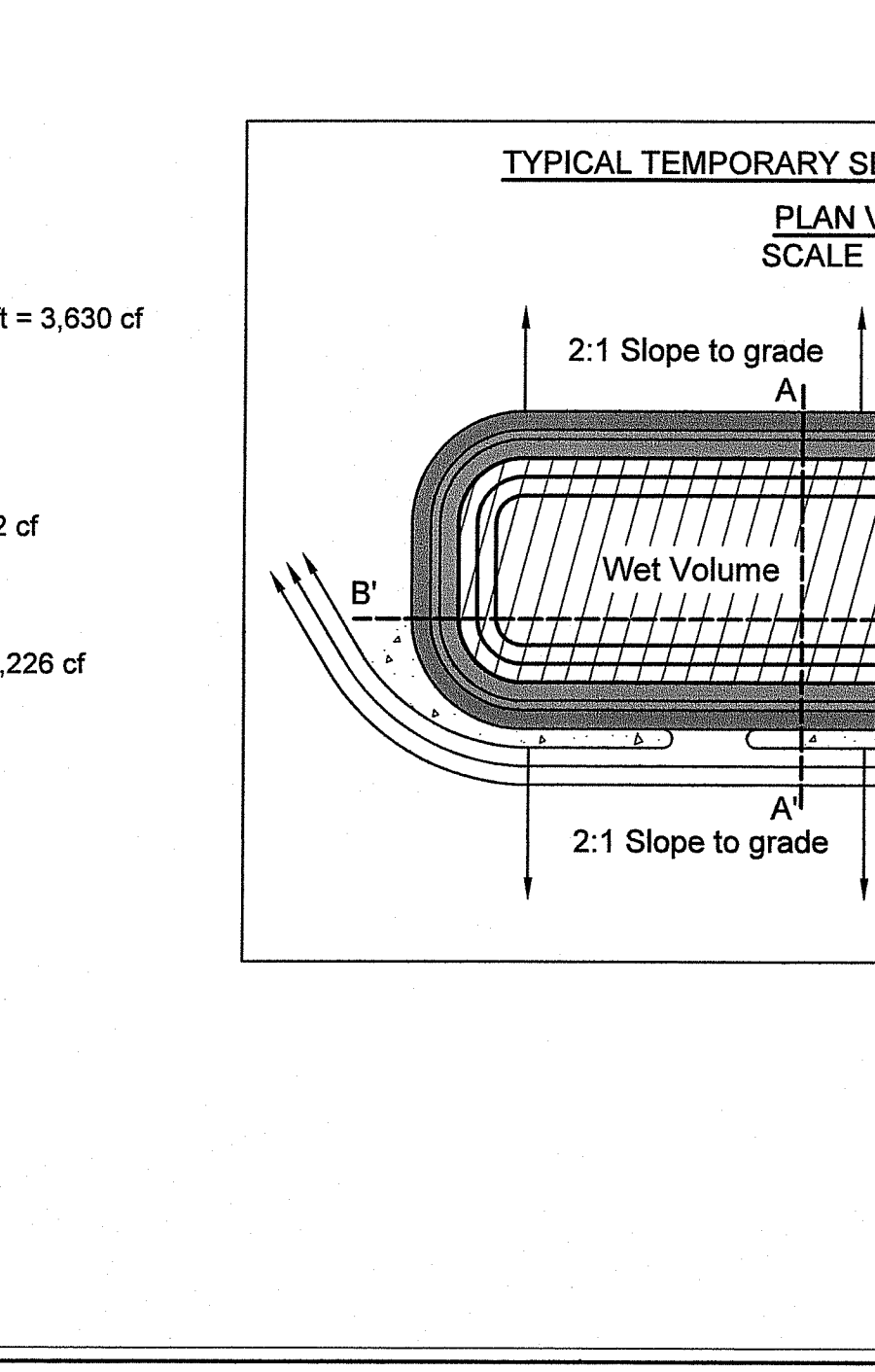
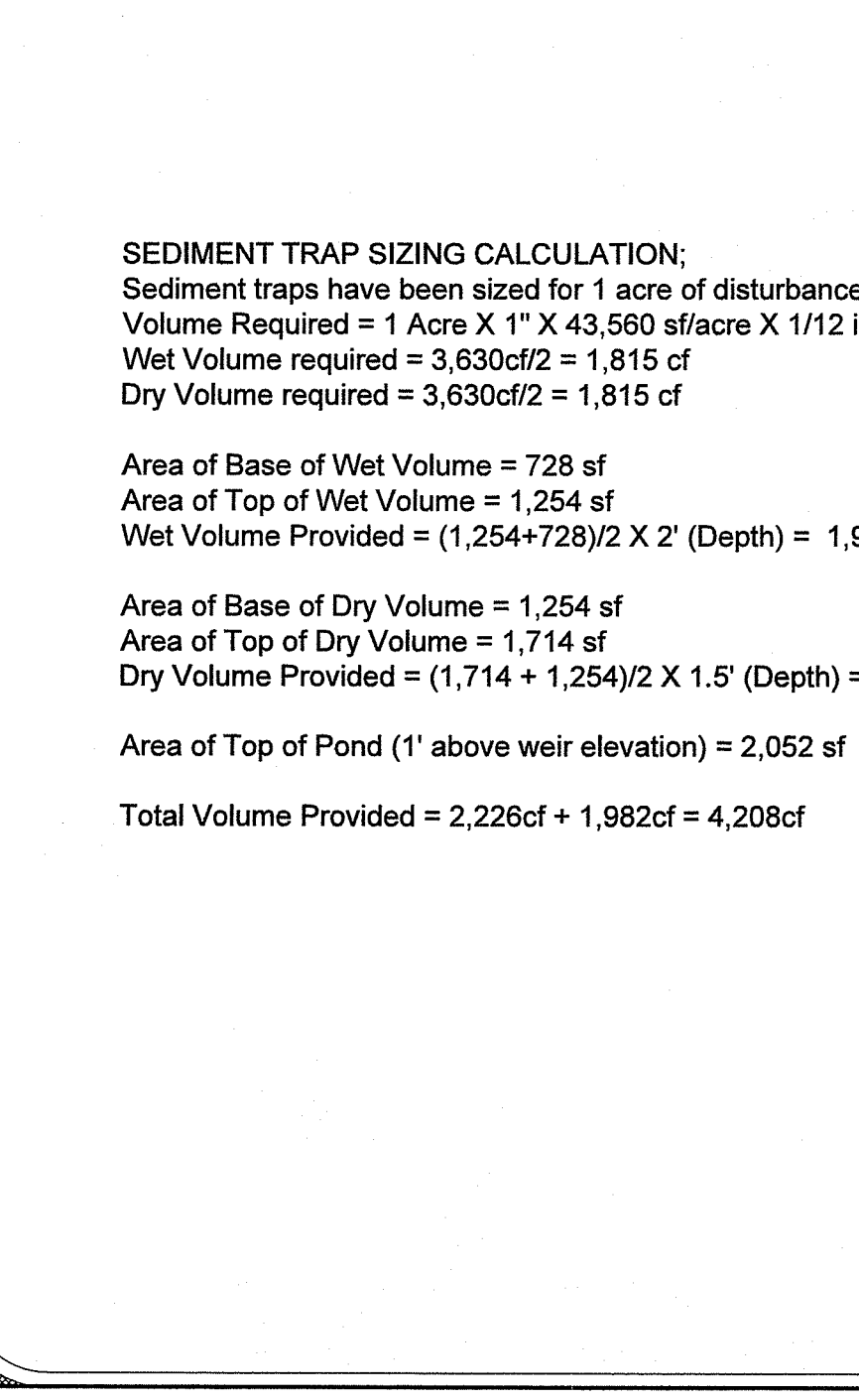
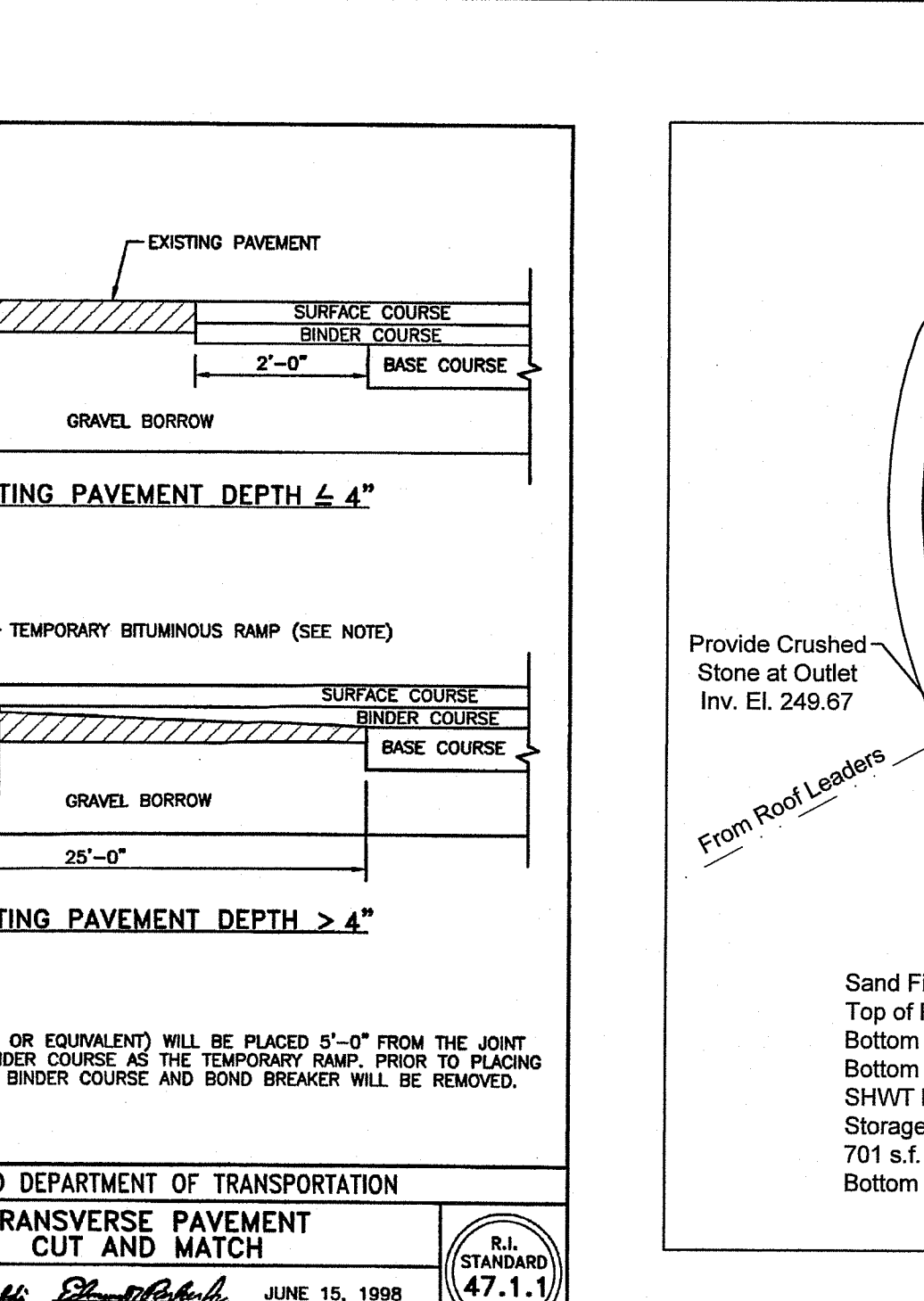
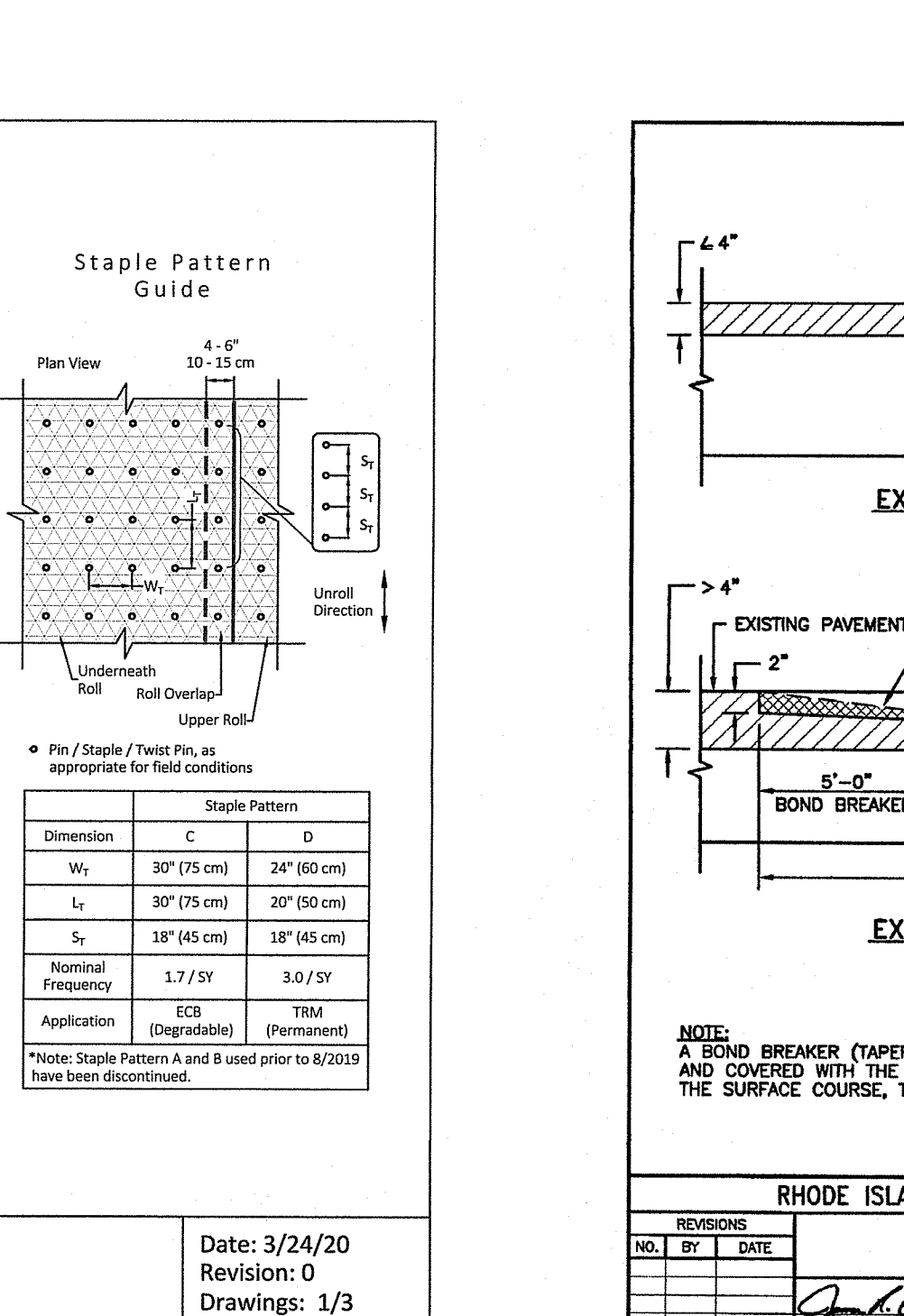
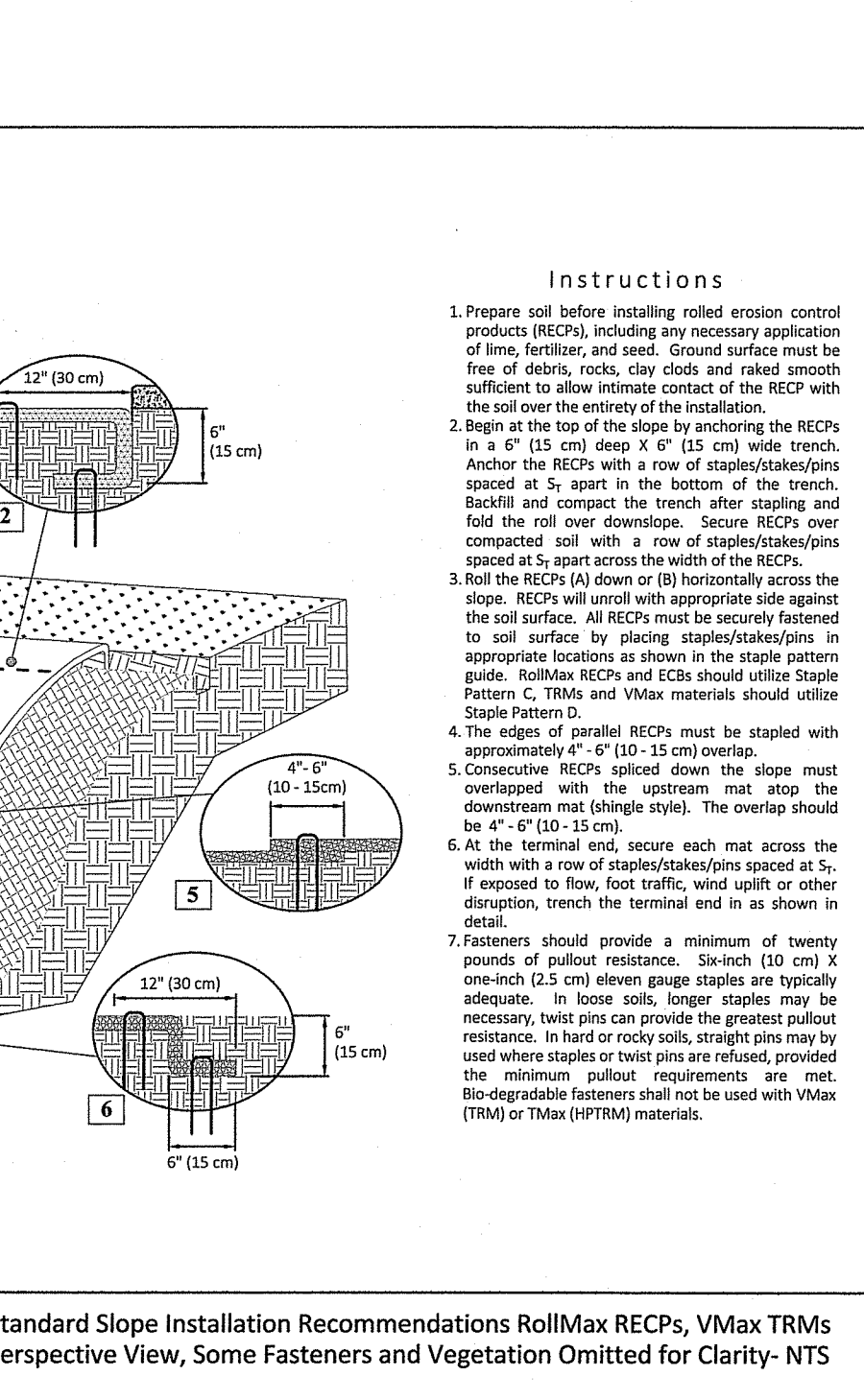
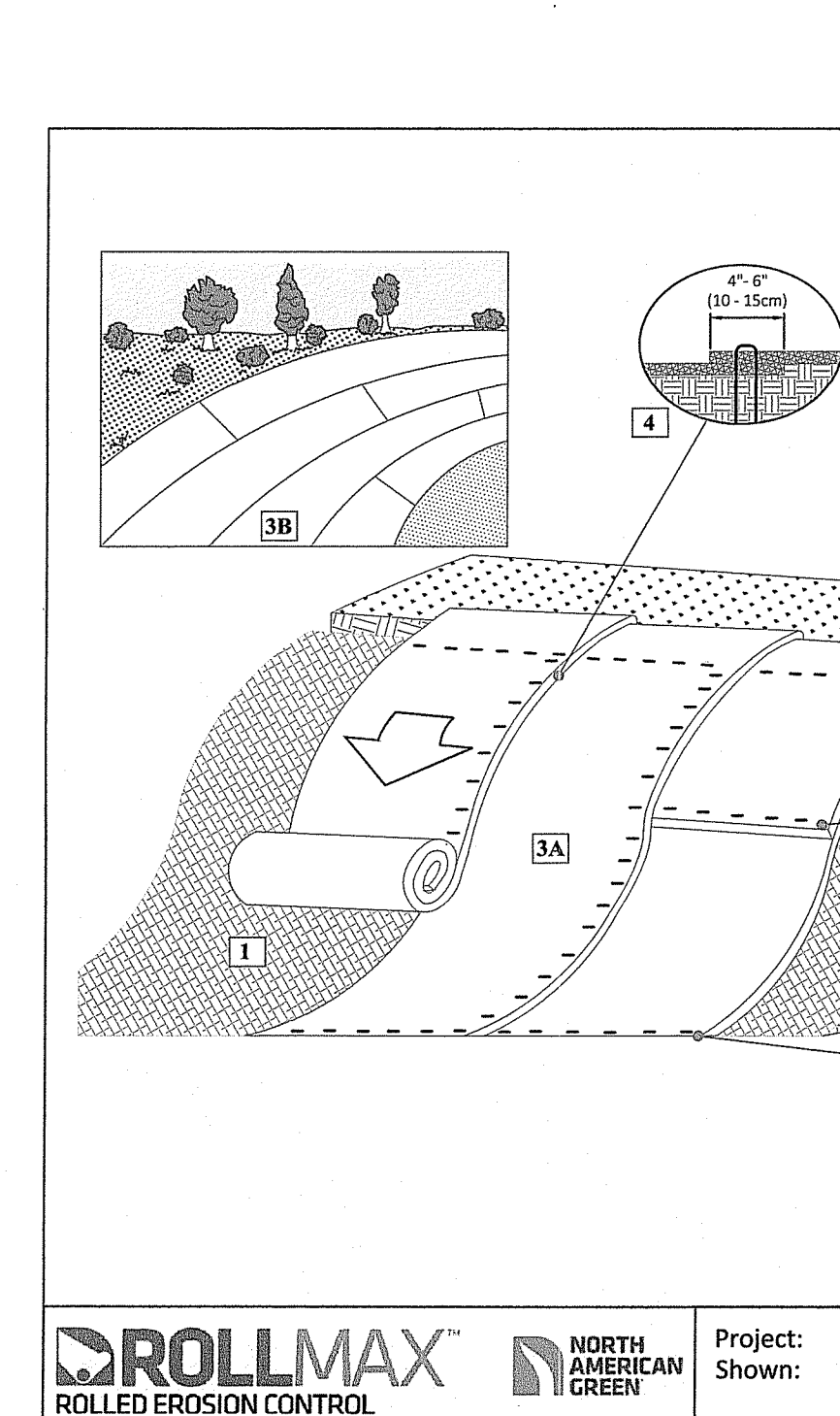
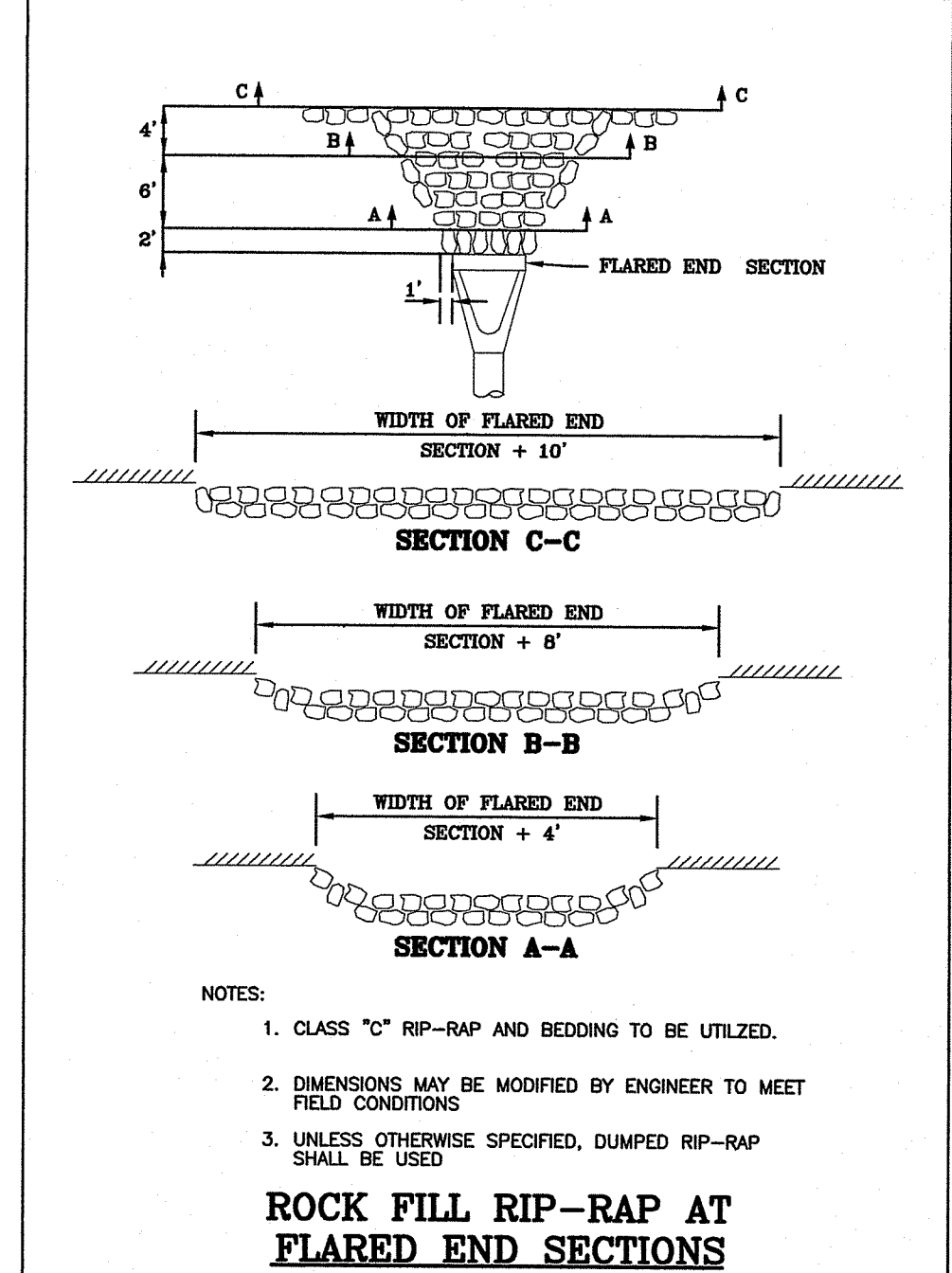
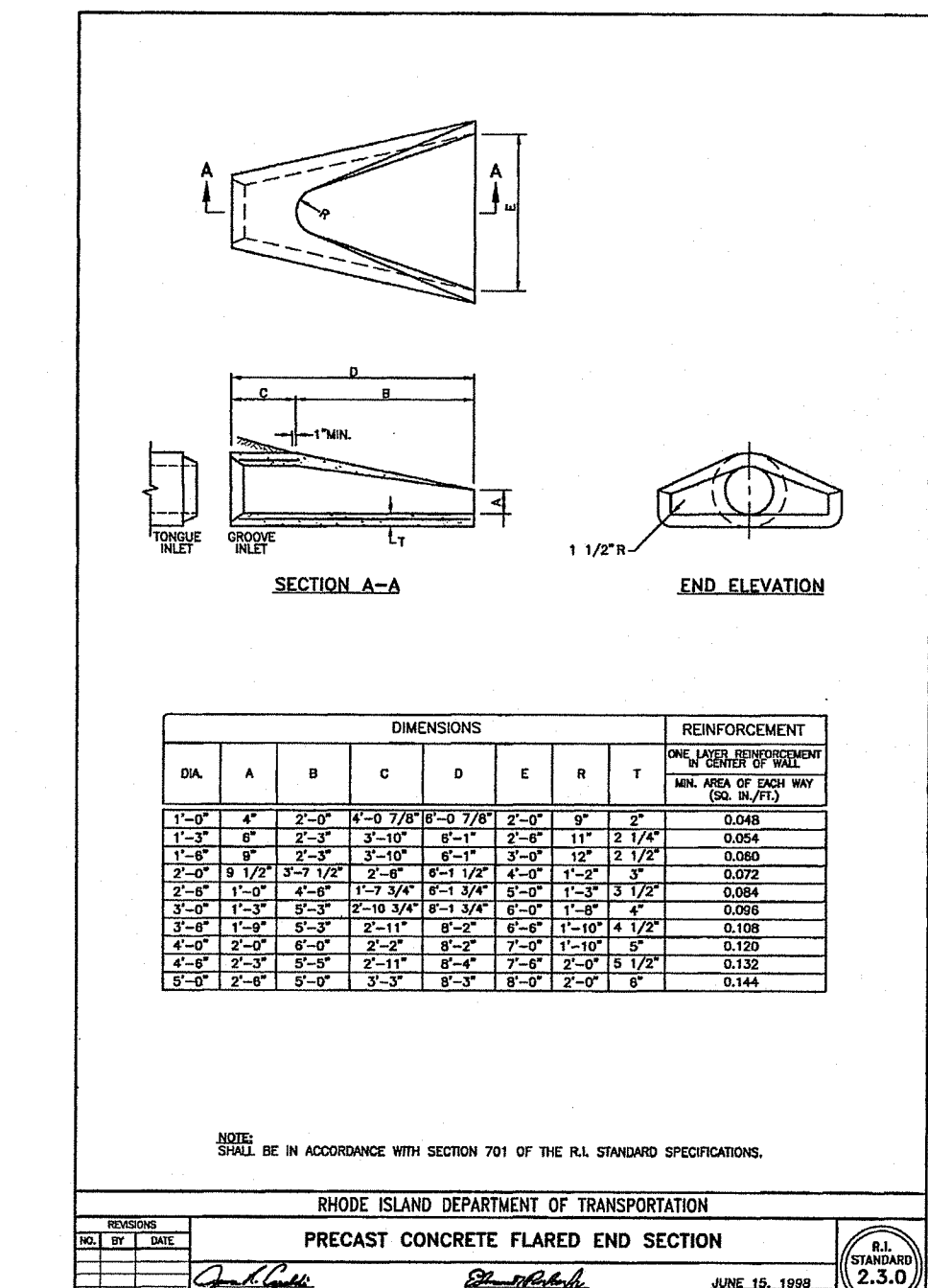
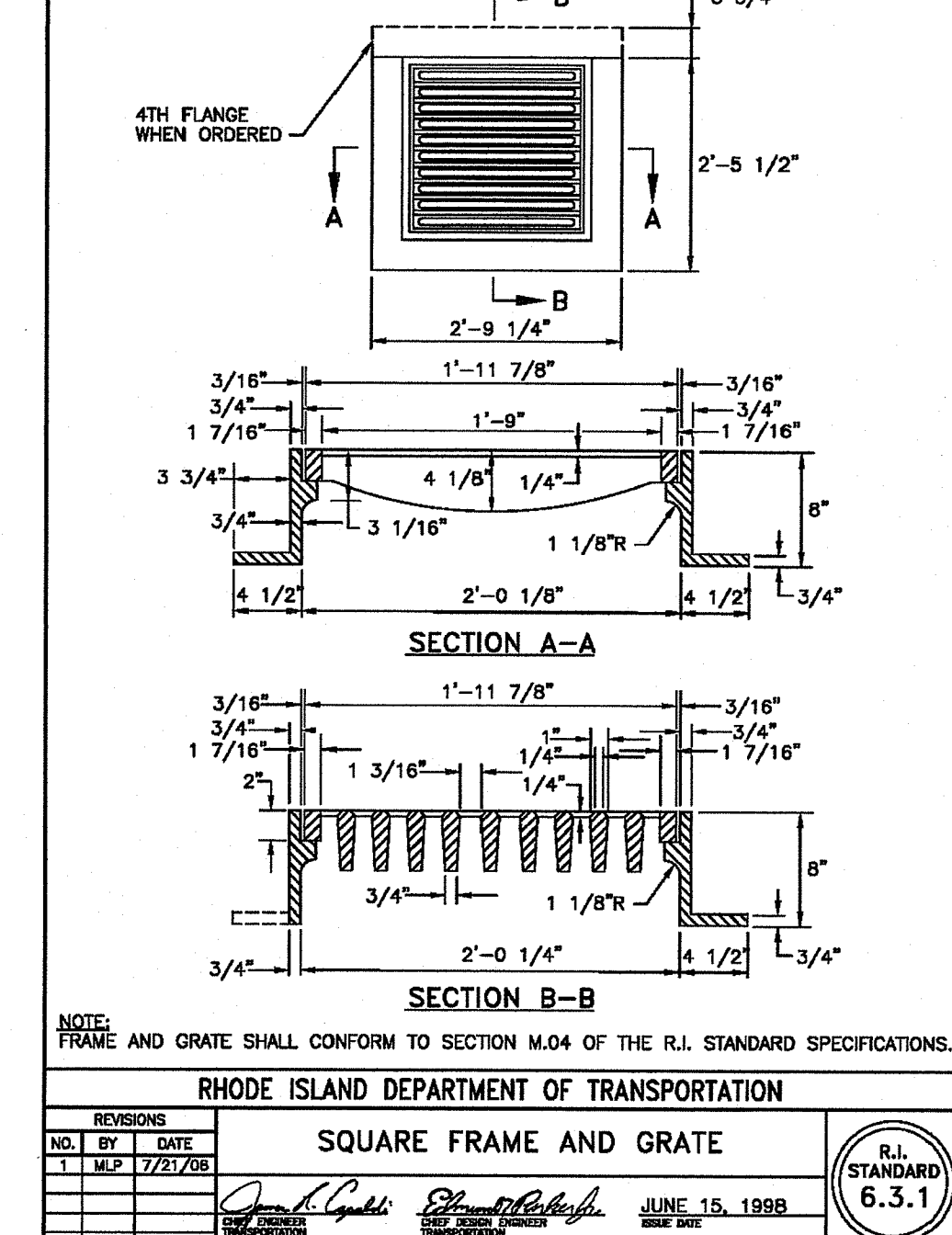
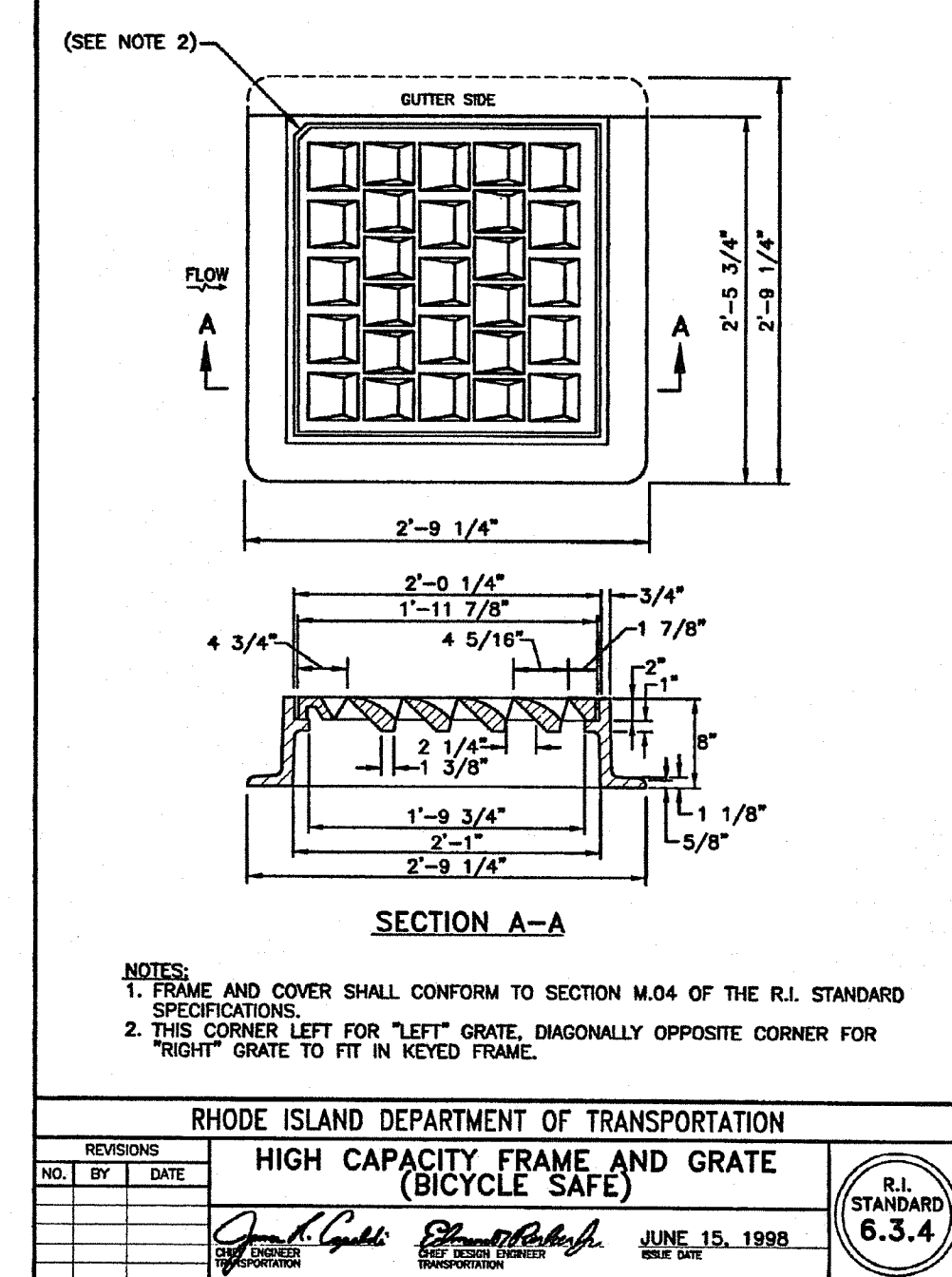
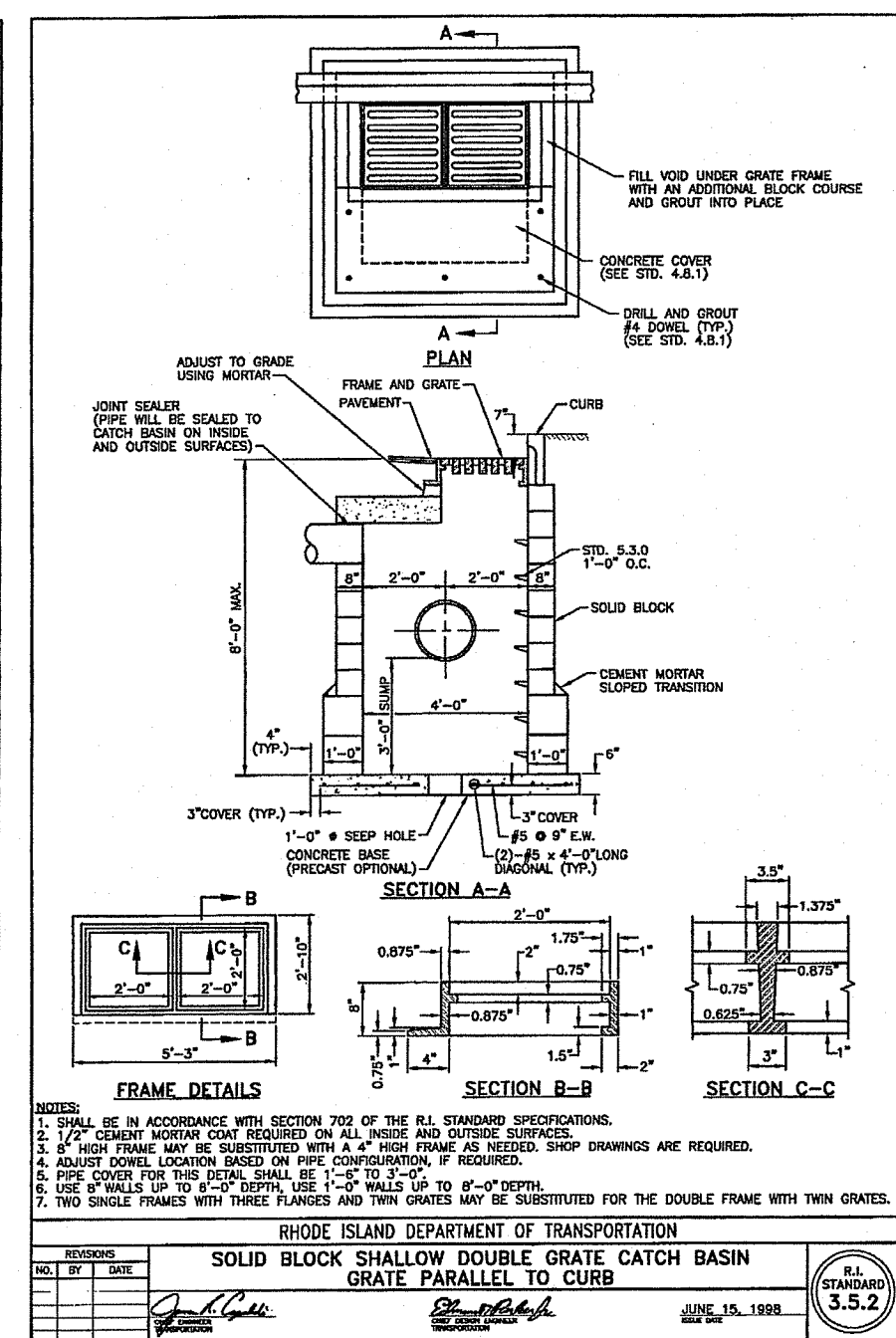
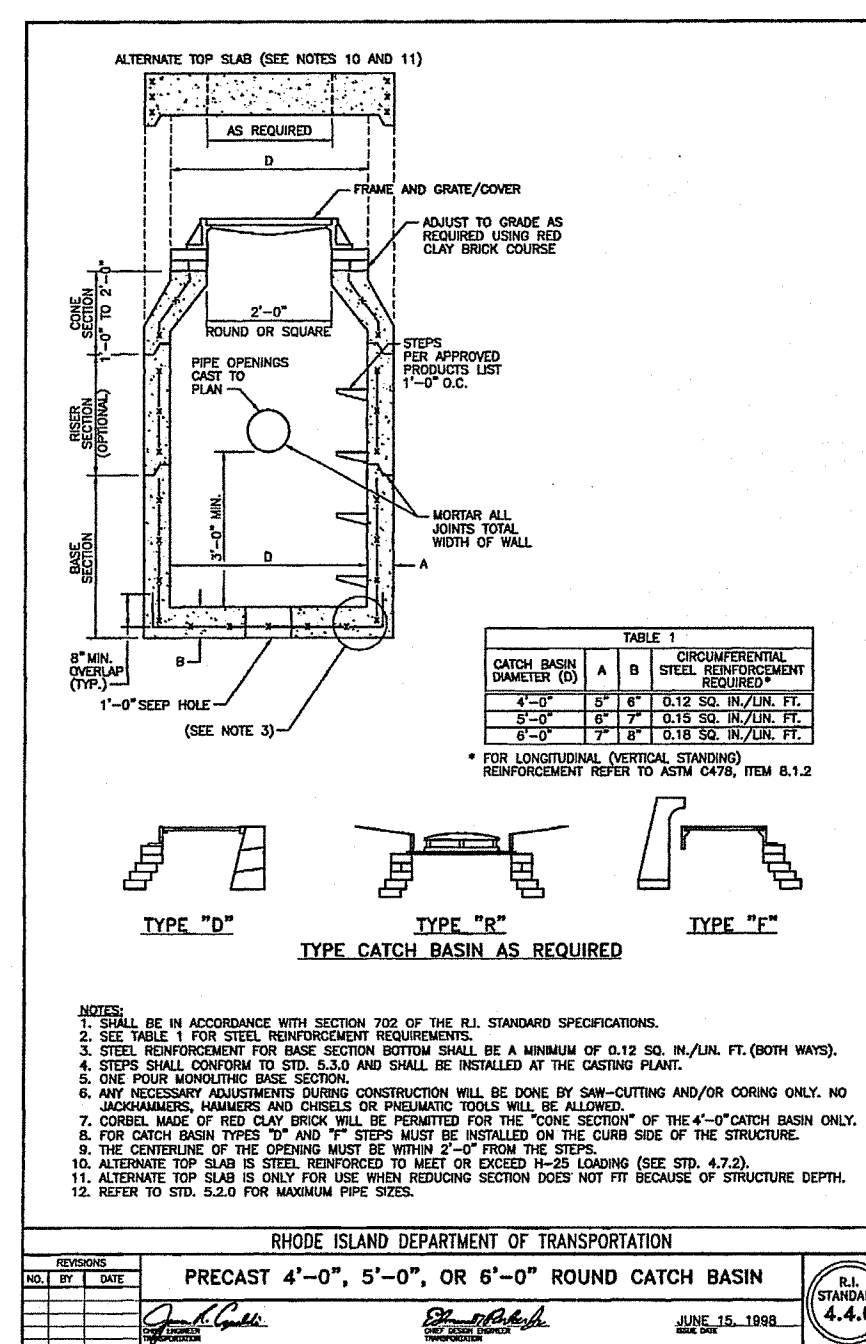
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| 1. | PER RIBBEN COMMENTS | PJF | 01/25/24 |



AMERICAN ENGINEERING, INC.
Professional Engineering & Land Surveying
400 South County Trail - Suite A 201
Exeter, Rhode Island 02822
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Phone (401) 294-4090 / Fax (401) 294-3625

Sheet
JUN 3 3 2024
Office of Water Resources
4
of **8** sheets
Drawing No. 122122



GENERAL NOTES AND DETAILS

FOR

PERRY HILL

LOCATED AT

POLE #15 - PUNCHBOWL TRAIL

RICHMOND, R.I.

Checked By: P.J.F.

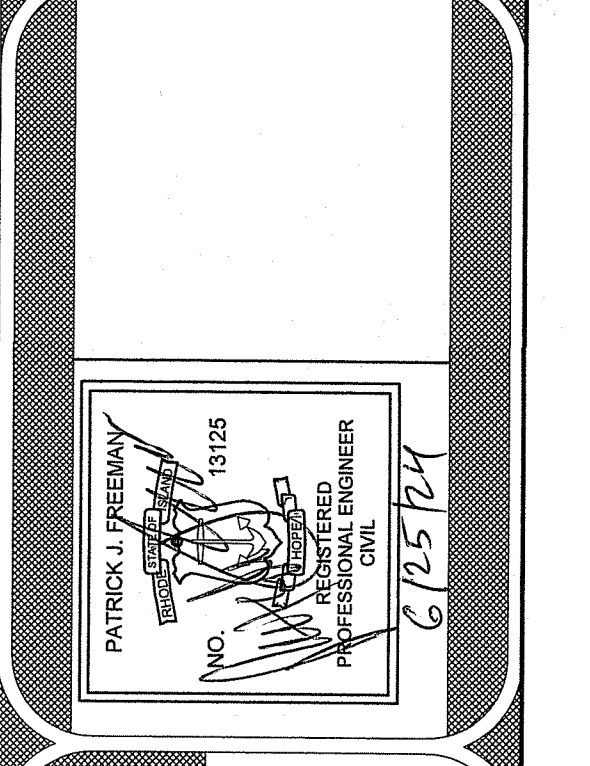
Date: 3/14/2024

Drawn By: ADM

Scale: As Shown

REVISIONS

| NO. | REVISION | DATE |
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| 1. | PER RIDER COMMENTS | |



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MAINTENANCE AND RESPONSIBILITY

- THE CONSTRUCTION SUPERINTENDENT SHALL HAVE THE SOLE RESPONSIBILITY FOR THE DESIGN IMPLEMENTATION. THEY SHALL ALSO BE RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION WORKERS AND SUB-CONTRACTORS ARE AWARE OF THE PROVISIONS OF THE PLAN AND THE ENGINEER'S REPORT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL ASPECTS OF THE DESIGN PRIOR TO FINAL APPROVAL BY THE TOWN. DURING THAT TIME, ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHOULD BE CHECKED ON A WEEKLY BASIS AS WELL AS AFTER EACH SIGNIFICANT RAINFALL. ALL SUCH MEASURES SHOULD BE CLEANED OR REPLACED AS NECESSARY.
- REPLANTING, REGRADING OR OTHER REPAIRS NEEDED AS A RESULT OF EROSION AND SEDIMENTATION SHOULD BE DONE PROMPTLY.
- ALL VEGETATION NOT SURVIVING AT LEAST ONE FULL GROWING SEASON SHALL BE REPLACED AT THE OWNERS EXPENSE.
- UPON PROJECT COMPLETION, THE TOWN OF SMITHFIELD SHALL ADHERE TO THE FOLLOWING MAINTENANCE RECOMMENDATIONS:

A. MOVING:
THE MOWING OF GRASS IN AND AROUND THE BASIN SHOULD BE DONE AT LEAST ONCE PER GROWING SEASON, PREFERABLY AFTER AUGUST 15 TO PROTECT GROUND NESTING BIRDS AND OTHER ANIMALS. MORE FREQUENT MOWINGS WILL BE REQUIRED FOR BASINS MAINTAINED AS RECREATIONAL OR OPEN SPACE FACILITIES. TRASH AND LITTER MUST BE REMOVED DURING MOWING OPERATIONS.

B. INSPECTIONS:
THE STRUCTURAL INTEGRITY OF THE BASIN, ESPECIALLY ANY IMPOUNDING STRUCTURES, SHOULD BE INSPECTED ON AN ANNUAL BASIS. IN ADDITION, THE INLETS FOR THE BASIN SHOULD ALSO BE INSPECTED ANNUALLY. ANY DEFICIENCIES MUST BE CORRECTED IMMEDIATELY AFTER OBSERVATION. THE BASIN AND ALL STRUCTURES SHOULD BE INSPECTED MORE OFTEN DURING THE FIRST YEAR OF OPERATION, ESPECIALLY AFTER LARGE STORMS, TO ENSURE PROPER OPERATION AND FUNCTION.

- EMBANKMENT SUBSIDENCE
- EROSION
- CRACKING
- TREE GROWTH
- OUTLET & SPILLWAY CONDITION
- SEDIMENT ACCUMULATION
- SLOPE STABILITY

ANY DEFICIENCY NOTED DURING THE INSPECTION WILL BE IMMEDIATELY REPAIRED OR REPLACED, IF ENCOUNTERED, TRASH, DEBRIS, ETC. SHOULD BE REMOVED FROM THE DRAINAGE SYSTEM AT LEAST TWICE A YEAR.

RESEEDING OF ANY ERODED OR BARE SPOTS IN OR AROUND THE BASIN MUST BE DONE IMMEDIATELY FOLLOWING EXAMINATIONS TO PREVENT SUBSEQUENT SOIL EROSION. MAINTAINING A FULLY VEGETATED BASIN WITH HEALTHY GRASS IS PARAMOUNT TO A SUCCESSFULLY OPERATING FACILITY.

C. SEDIMENT REMOVAL:
FOLLOWING CONSTRUCTION, THE PONDS, BASINS, AND DRAINAGE SYSTEMS ARE TO BE CLEANED OF ACCUMULATED SEDIMENT PRIOR TO ACCEPTANCE BY THE TOWN AND THEN ONCE EVERY TEN YEARS. THE RESULTING POND CONDITION AFTER SEDIMENT REMOVAL MUST BE THE ORIGINAL DESIGN CONDITIONS. ALL REVED SEDIMENT IS TO BE TESTED TO DETERMINE POLLUTANT CONTENT. THE SEDIMENT IS TO BE PROPERLY DISPOSED IN UPLAND AREAS BASED UPON THE TEST RESULTS AND LOCAL, STATE AND FEDERAL REGULATIONS.

D. CATCH BASINS, MANHOLES AND DRAIN LINES:
AN INSPECTION MUST OCCUR ON AN ANNUAL BASIS BY QUALIFIED PERSONNEL TO ENSURE PROPER OPERATION. THE INSPECTION SHOULD, AS A MINIMUM, CONCENTRATE ON THE FOLLOWING:

- REMOVAL TO GRATE/COVER
 - EVIDENCE OF STANDING WATER
 - DEBRIS REMOVAL
 - STRUCTURAL ALIGNMENT/INTEGRITY
- ANY DEFICIENCY NOTED DURING THE INSPECTION WILL BE IMMEDIATELY REPAIRED OR REPLACED.

GENERAL NOTES

- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ANY AND ALL PERMITS REQUIRED BY THE STATE OF RHODE ISLAND AND THE MUNICIPALITY PRIOR TO COMMENCING ANY WORK.
- IT SHALL ALSO BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE INTEGRITY OF ALL EXISTING UTILITIES, STRUCTURES, AND ADJUTING PROPERTIES. THE COST OF ANY REPAIR OR REPLACEMENT OF DAMAGED ITEMS SHALL BE BORNE BY THE CONTRACTOR.
- THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE MUNICIPAL ENGINEERING DEPARTMENT AND ALL UTILITY INSTALLATIONS AND INSPECTIONS WITH THE APPROPRIATE UTILITY CO. A 48 HOUR ADVANCE NOTICE IS REQUIRED BEFORE WORK COMMENCEMENT.
- ALL WORK WITHIN THE DISTURBED AREA SHALL BE IN ACCORDANCE WITH THE R.I. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2015 AMENDED AUGUST 2013 AND STANDARD DETAILS, JUNE 15, 1998 AS AMENDED BY REVISION.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR QUANTITY TAKE OFF IN COMPUTING ANY ESTIMATES.
- EMBANKMENT SLOPES AND ALL DISTURBED AREAS ARE TO RECEIVE 4" OF TOPSOIL AND SEED. SEE EROSION CONTROL PROGRAM DETAIL FOR ADDITIONAL GUIDANCE.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION INDICATED ON THESE PLANS, THAT INCLUDES ANY CONSTRUCTION TO BRING UTILITIES TO THE SITE, ANY REPAIRS, ANY TRENCHING REQUIRED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL TEMPORARY SEDIMENTATION AND SOIL EROSION CONTROL MEASURES.
- THE LOCATION OF EXISTING UTILITIES AS SHOWN ARE APPROXIMATE AND SHOULD BE VERIFIED BY THE CONTRACTOR WITH THE APPROPRIATE UTILITY COMPANIES. CALL DIG-SAFE 1(800)225-4977
- IN ALL EXCAVATION AND PLACEMENT OF FILL THE CONTRACTOR SHALL PERFORM THE WORK IN FULL COMPLIANCE WITH THE R.I. STANDARD SPECIFICATION SECTION 202.

GENERAL BASIN NOTES

- THE DETENTION BASIN SHALL BE MAINTAINED ACCORDING TO THE FOLLOWING SCHEDULE:
 - ALL TREES, SHRUBS AND STUMPS SHOULD BE REMOVED FROM THE SPILLWAY (BERM) SIDE OF THE BASIN.
 - TREES OR SHRUBS SHOULD NOT BE PLANTED ON ANY IMPOUNDING EMBANKMENTS (I.E., DIKES OR BERMS) OR WITHIN THE BASIN. SUCH PLANTINGS ARE GENERALLY DISCOURAGED IN ORDER TO REDUCE THE CHANCE OF FAILURE DUE TO ROOT DECAY AND SUBSURFACE DISTURBANCE. GRASSES ARE CONSIDERED THE ONLY ACCEPTABLE VEGETATION FOR PLANTING AND STABILIZING IMPOUNDING EMBANKMENTS.
 - THE ENTIRE BASIN MUST BE STABILIZED WITH A DENSE LAYER OF GRASS IMMEDIATELY FOLLOWING BASIN CONSTRUCTION. THIS MAY REQUIRE THE ADDITION OF 4-6 INCHES OF A LOAMY SOIL SUBSTRATE TO PROMOTE GOOD VEGETATIVE GROWTH AND INFILTRATION. THE ADDITION OF LOAMY SOIL TO THE BASIN MUST BE FACTORED INTO THE OVERALL VOLUME REQUIREMENT. THE BASIN SHALL BE SEED WITH TURF-TYPE TALL FESCUES OR SIMILAR.
 - THE DETENTION BASINS SHALL ALSO BE UTILIZED AS TEMPORARY BASINS DURING CONSTRUCTION. THESE BASINS SHALL THEN BE ENTIRELY CLEANED OF SEDIMENT AND THE BOTTOM SOILIFIED PRIOR TO SEEDING AND VEGETATION STABILIZATION. FAILURE TO DO SO WILL ALLOW EXCESSIVE QUANTITIES OF SEDIMENTS TO REMAIN IN THE BASINS AND WILL NECESSITATE MORE FREQUENT CLEANING OF THE DRAINAGE SYSTEM.
 - THE MAXIMUM ALLOWABLE SLOPE LEADING TO THE BASIN FLOOR SHALL BE 3:1 (3 HORIZONTAL TO 1 VERTICAL) TO FACILITATE MOWING AND OTHER MAINTENANCE OPERATIONS.
 - CONCRETE FOR OUTLET WEIR SHALL BE CLASS 'A' 3000 PSI. ALL EXPOSED EDGES SHALL HAVE 3/4" CHAMFERS. REINFORCING STEEL SHALL BE GRADE 60.

TEMPORARY SEDIMENT TRAP NOTES:

- THE TEMPORARY SEDIMENT TRAPS SHOWN ARE BASED ON CONSTRUCTION ON A LOT BY LOT BASIS.
- THE TEMPORARY SEDIMENT TRAPS HAVE BEEN SIZED FOR AN AREA OF DISTURBANCE OF ONE ACRE OR LESS. ANY SEDIMENT TRAP INSTALLED THAT WILL RECEIVE RUNOFF FROM A DISTURBED AREA GREATER THAN ONE ACRE WILL NEED TO BE DESIGNED BY A CERTIFIED CIVIL ENGINEER.
- NO TEMPORARY SEDIMENT TRAPS SHALL BE USED FOR A PERIOD LONGER THAN SIX MONTHS.
- LOCATION AND SHAPE OF THE PROPOSED TEMPORARY SEDIMENT TRAPS CAN BE MODIFIED PER THE NEEDS OF THE DEVELOPER AS LONG AS THE REQUIRED WET AND DRY VOLUMES ARE PROVIDED (AS SHOWN IN THE SEDIMENT TRAP SIZING CALCULATION) AND THE OUTLET IS INSTALLED PER THE TEMPORARY SEDIMENT TRAP OUTLET DETAIL.
- REFERENCE THE "RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HAND BOOK (REVISED AUGUST 2014, 2016 UPDATES)" AS A GUIDE.
- THE WEIR SIZING SHOWN IN THE TEMPORARY SEDIMENT TRAP OUTLET DETAIL HAS BEEN DESIGNED TO PASS THE 10 YEAR 24 HOUR TYPE III STORM FOR 1 ACRE OF DISTURBED AREA.
- RUNOFF FROM DISTURBED AREAS SHOULD BE DIRECTED TO TEMPORARY SEDIMENT TRAPS USING TEMPORARY SWALES.
- REFER TO THE ATTACHED SOIL EROSION AND SEDIMENT CONTROL PLAN SECTION 2.12 FOR ADDITIONAL GUIDANCE.

EROSION CONTROL & SOIL STABILIZATION PROGRAM

- DEMUDED SLOPES SHALL NOT BE UNATTENDED OR EXPOSED FOR EXCESSIVE PERIODS OF TIME SUCH AS THE INACTIVE WINTER SEASON.
- ALL DISTURBED SLOPES EITHER NEWLY CREATED OR EXPOSED PRIOR TO OCTOBER 15, SHALL BE SEED OR PROTECTED BY THAT DATE FOR ANY WORK COMPLETED DURING EACH CONSTRUCTION PERIOD.
- THE TOPSOIL SHALL HAVE A SANDY LOAM TEXTURE RELATIVELY FREE OF SUBSOIL MATERIAL, STONES, ROOTS, LIMPS OF SOIL, TREE LIMBS, TRASH OR CONSTRUCTION DEBRIS, AND SHALL CONFORM WITH R.I. STANDARD SPECIFICATION M. 20.
- THE SEED MIX SHALL BE INOCULATED WITHIN 24 HOURS, BEFORE MIXING AND PLANTING, WITH APPROPRIATE INOCULUM FOR EACH VARIETY.
- THE DESIGN MIX SHALL BE COMPRISED OF THE FOLLOWING PERMANENT SEEDING MIXTURES: A - MOVED AREA: ALL FLAT OR SLOPES LESS THAN 3:1

| MIXTURE | % BY WT. | SEEDING DATES |
|--------------------|----------|-------------------|
| RED FESCUE | 75 | APRIL 1 - JUNE 15 |
| KENTUCKY BLUEGRASS | 15 | AUG. 15 - OCT. 15 |
| COLONIAL BENTGRASS | 5 | |
| PERENNIAL RYEGRASS | 5 | |

TOTAL 100%/ACRE

PERMANENT SEEDING MIXTURES:

| MIXTURE | % BY WT. | SEEDING DATES |
|---------------------|----------|-------------------|
| RED FESCUE | 75 | APRIL 1 - JUNE 15 |
| PERENNIAL RYEGRASS | 5 | AUG. 15 - OCT. 15 |
| COLONIAL BENTGRASS | 5 | |
| BIRD'S-FOOT TREFOIL | 15 | |

| SPECIES | LBS/ACRE | LBS/1,000 SQ. FT. | SEEDING DATES |
|-------------------------|----------|-------------------|---------------------|
| ANNUAL RYEGRASS | 60 | 1.5 | MAR. 15 - JUNE 15 |
| PERENNIAL RUSSIAN GRASS | 40 | 1.0 | MAY 15 - AUGUST 15 |
| MILLET | 40 | 1.0 | MAY 15 - AUGUST 15 |
| WINTER RYE | 120 | 3.0 | AUGUST 15 - JUNE 15 |
| OATS | 20 | 0.5 | MAR. 15 - JUNE 15 |
| WHEEPING LOVEGRASS | 20 | 0.5 | MAY 1 - JUNE 30 |

- TEMPORARY TREATMENTS SHALL CONSIST OF A HAY, STRAW OR FIBER MULCH OR PROTECTIVE COVERS SUCH AS A MAT OR FIBER LINING (BURAP, JUTE, FIBERGLASS NETTING, EXCELOR OR BLANKETS). THEY SHALL BE INCORPORATED INTO THE WORK AS WARRANTED OR AS ORDERED BY THE ENGINEER.
- HAY OR STRAW APPLICATIONS SHOULD BE IN THE AMOUNT OF 3000-4000 LBS/AC.
- ALL HAYBALES OR TEMPORARY PROTECTION SHALL REMAIN IN PLACE UNTIL AN ACCEPTABLE STAND OF GRASS OR PROTECTED GROUND COVER IS ESTABLISHED. IF NEEDED, TEMPORARY SEEDING CAN BE USED TO HELP MINIMIZE EROSION. A TEMPORARY SEEDING GUIDE MUST BE INCLUDED AS A REFERENCE. THE FOLLOWING SPECIES ARE RECOMMENDED:

SEDIMENTATION CONTROL PROGRAM

- ALL DISTURBED AREAS SUBJECT TO EROSION TENDENCIES WHETHER THEY ARE NEWLY FILLED OR EXCAVATED SHALL RECEIVE SUITABLE SLOPE PROTECTION.
- DURING CONSTRUCTION, THE CONTRACTOR AND/OR DEVELOPER SHALL BE RESPONSIBLE FOR MAINTAINING DRAINAGE AND RUNOFF FLOW DURING STORMS AND PERIODS OF RAINFALL.
- CARE SHALL BE TAKEN SO AS TO PREVENT ANY UNSUITABLE MATERIAL FROM ENTERING EITHER EXISTING OR PROPOSED DRAINAGE OR SEWER STRUCTURES.
- SEDIMENTATION CONTROL DEVICES SHALL BE INSPECTED PERIODICALLY AND AFTER PERIODS OF RAINFALL. SUCH DEVICES SHALL BE REPAIRED OR REPLACED AS NEEDED.
- CARE SHALL BE TAKEN SO AS NOT TO PLACE "REMOVED SEDIMENTS" WITHIN THE PATH OF EXISTING, NEWLY CREATED (BOTH TEMPORARY AND PERMANENT) OR PROPOSED WATERCOURSES OR THOSE AREAS SUBJECT TO STORM WATER FLOW.
- ADDITIONAL HAYBALES, SILT FENCE OR SANDBAGS SHALL BE LOCATED AS CONDITIONS WARRANT OR AS DIRECTED BY THE ENGINEER.
- REFERENCE THE "RHODE ISLAND EROSION AND SEDIMENT CONTROL HANDBOOK" PREPARED BY THE U.S. DEPT. OF AGRICULTURE, SOIL CONSERVATION SERVICE, 1989, WITH ANY AMENDMENTS, AS A GUIDE.

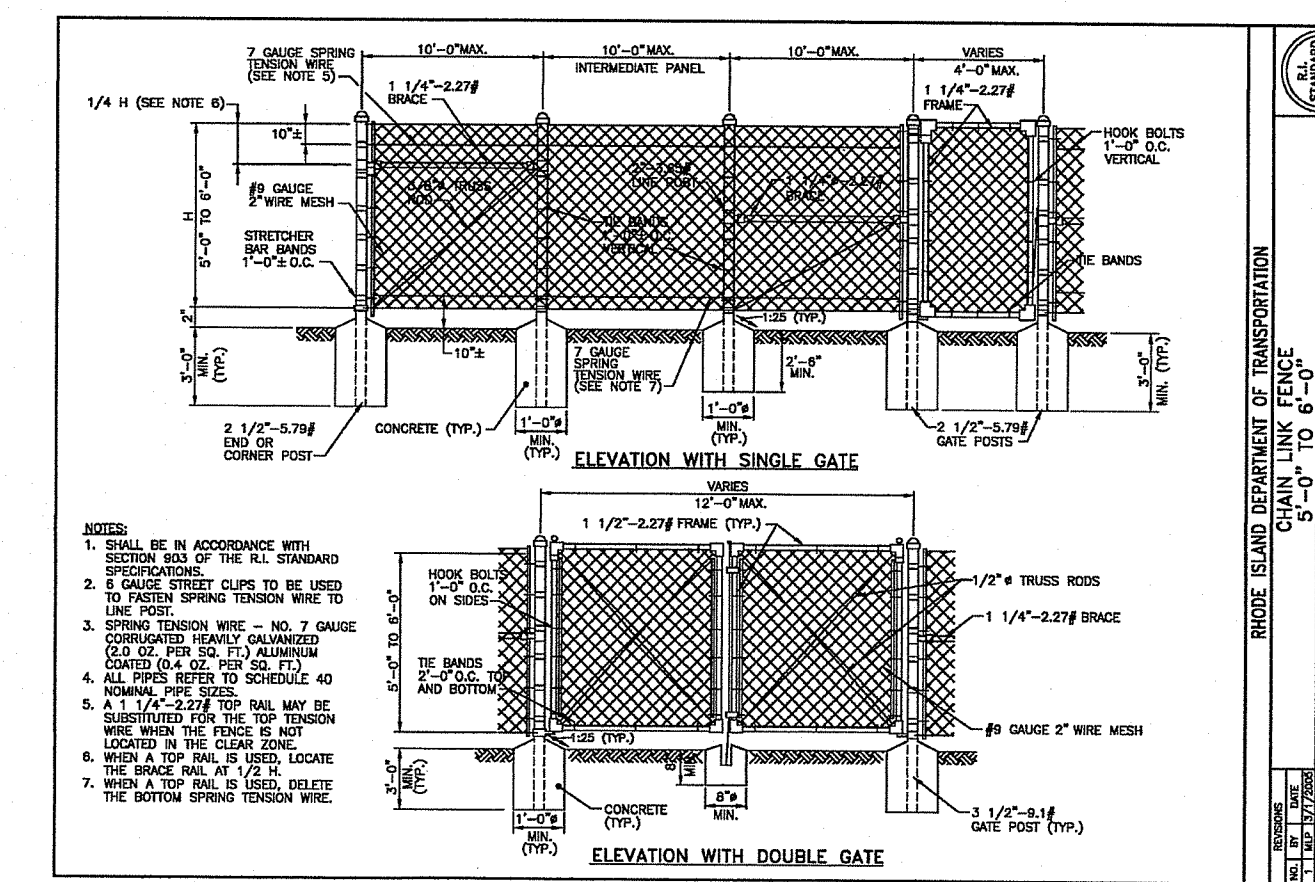
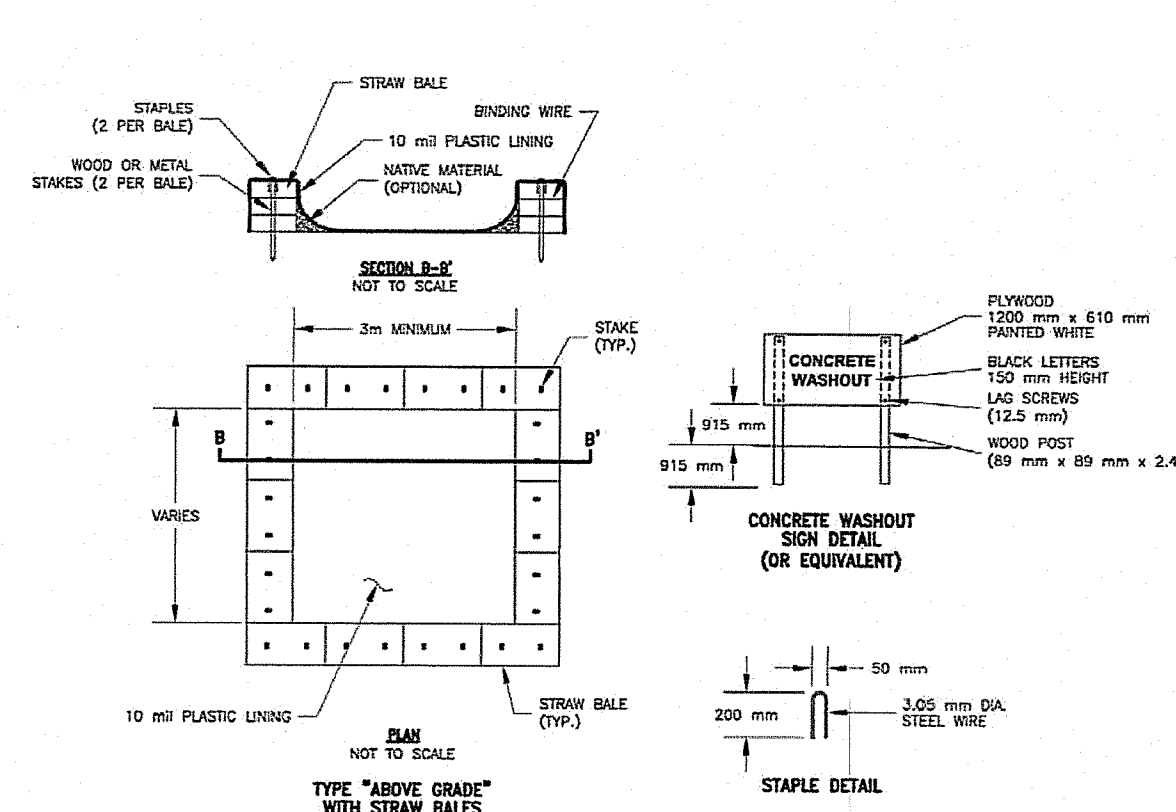
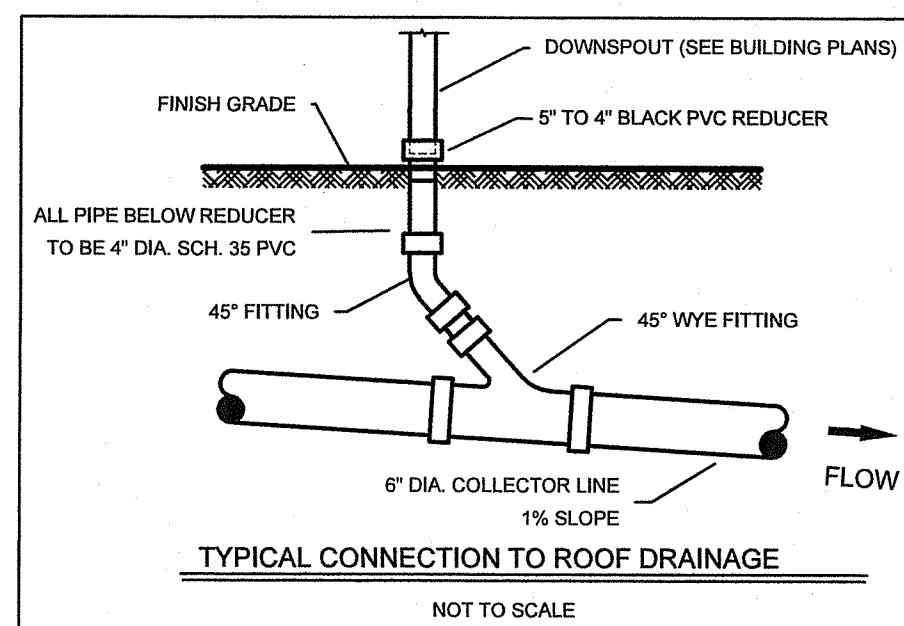
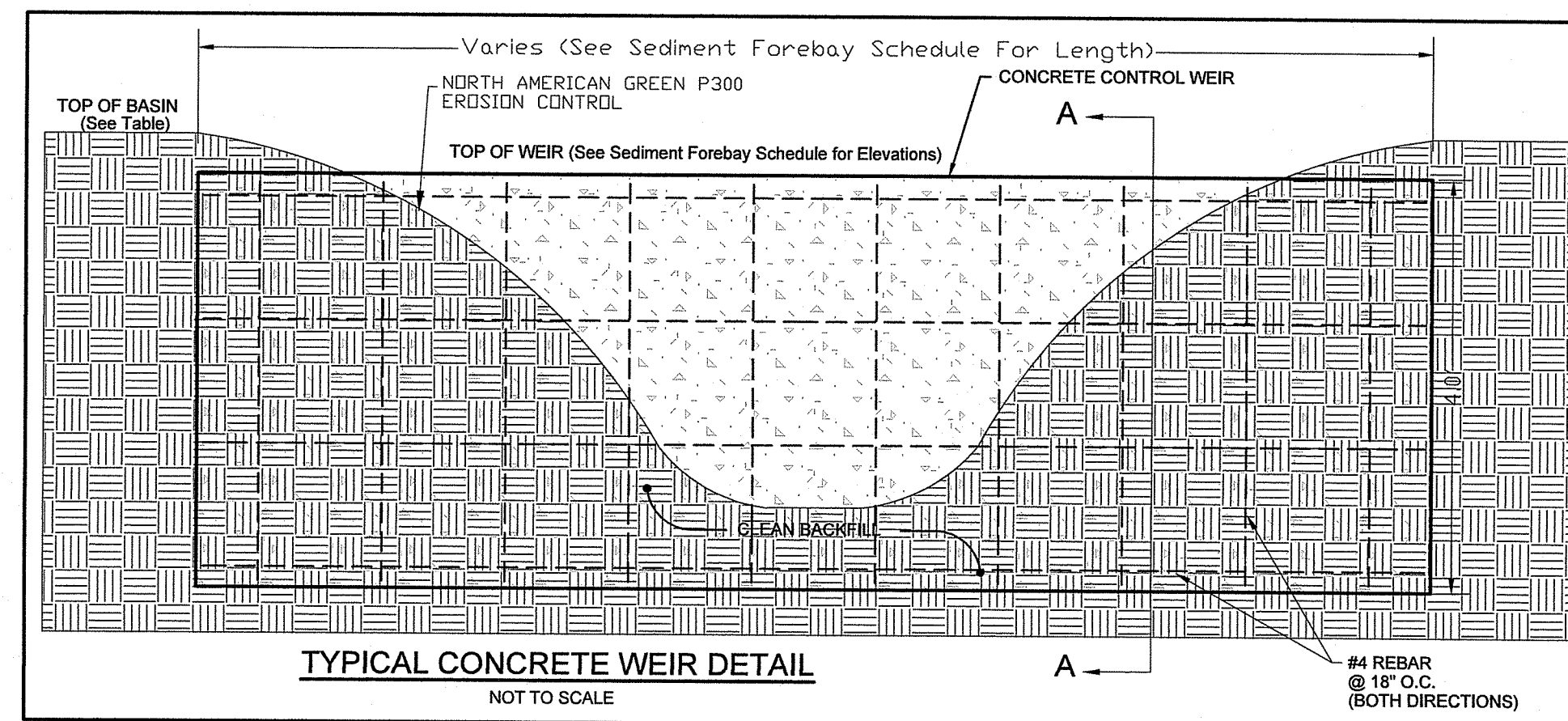
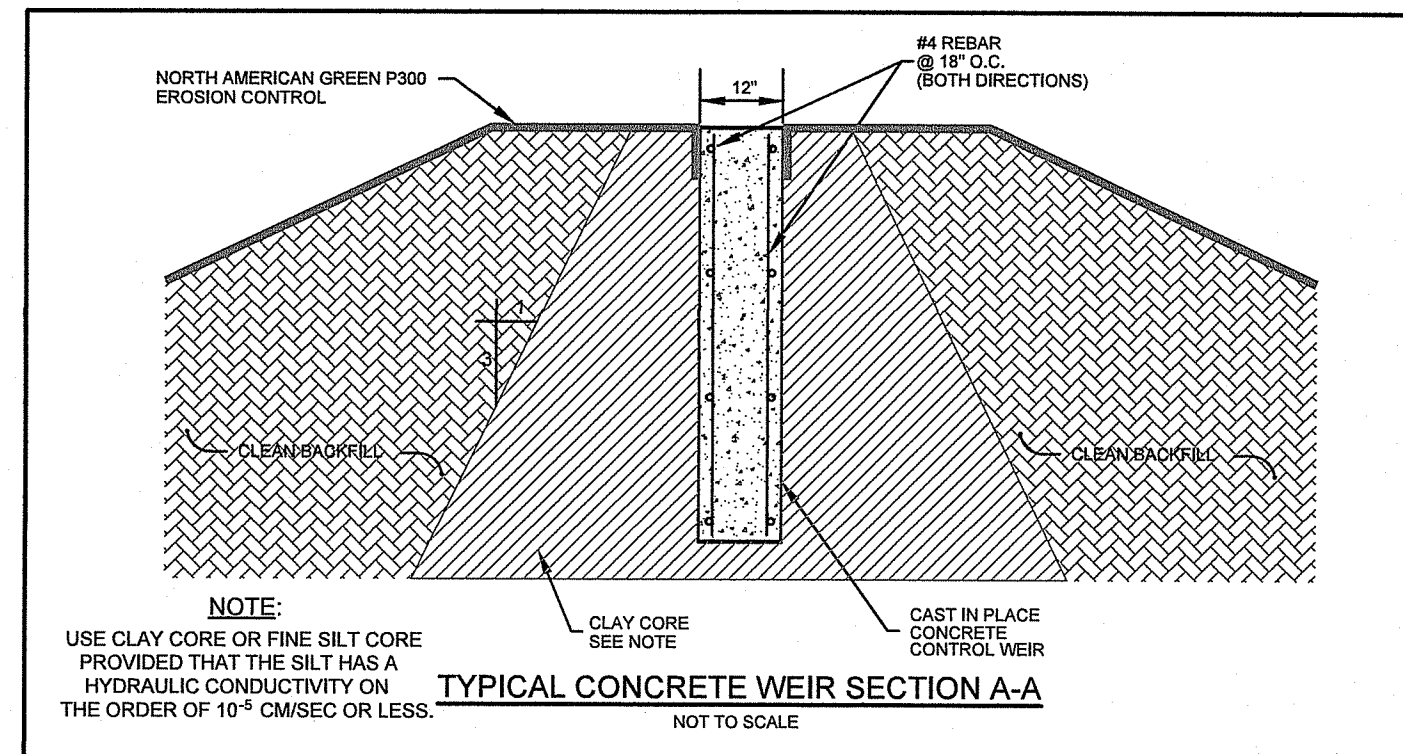
ORDER OF PROCEDURE

- IMMEDIATELY UPON COMPLETION OF THE CLEARING AND GRUBBING OPERATION AND PRIOR TO ANY GRADING, TEMPORARY HAYBALES, SILT FENCE OR SANDBAGS SHALL BE PLACED OUTSIDE THE LIMITS OF DISTURBANCE AS SHOWN ON THE PLANS. (I.E. ALONG NEW ROADWAYS, STREAMBANKS, CRITICAL AREAS, ETC.)
- ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE PERIODICALLY CLEANED AND MAINTAINED AS PER THE RESPECTIVE PROGRAMS DURING THE CONSTRUCTION.
- IF WORK PROGRESS IS TO BE INTERRUPTED AT ANY TIME, REFERENCE EROSION AND SEDIMENTATION CONTROL PROGRAMS FOR TEMPORARY CONTROL.

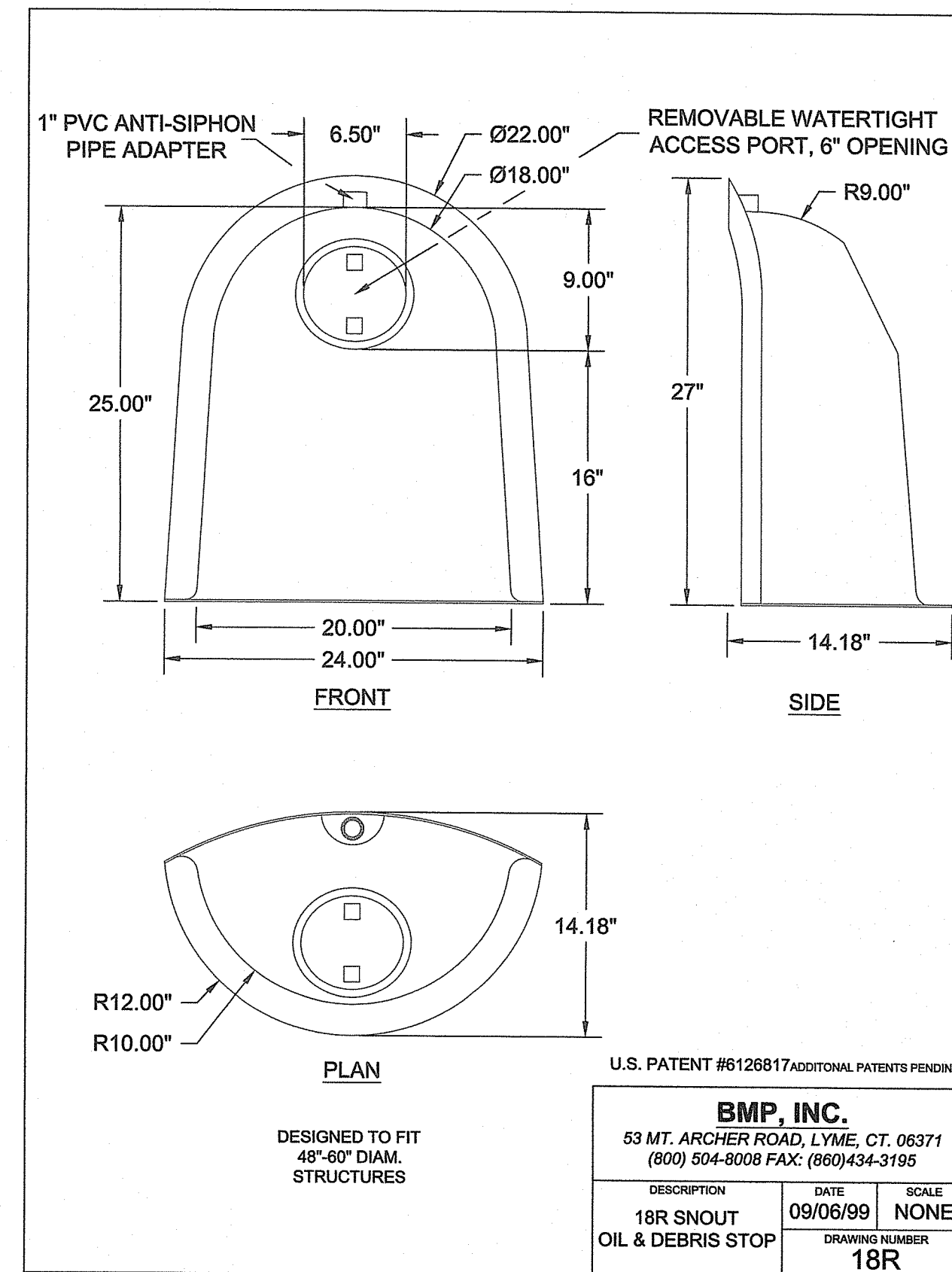
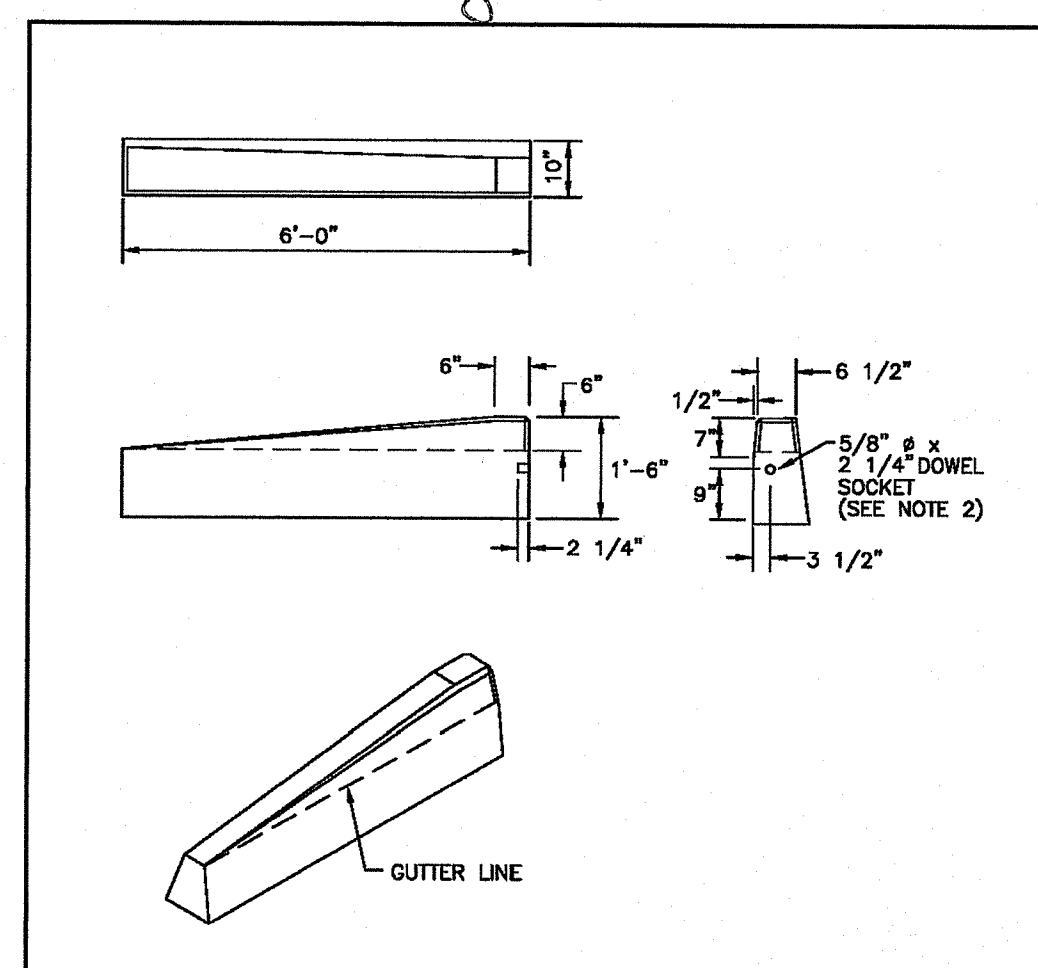
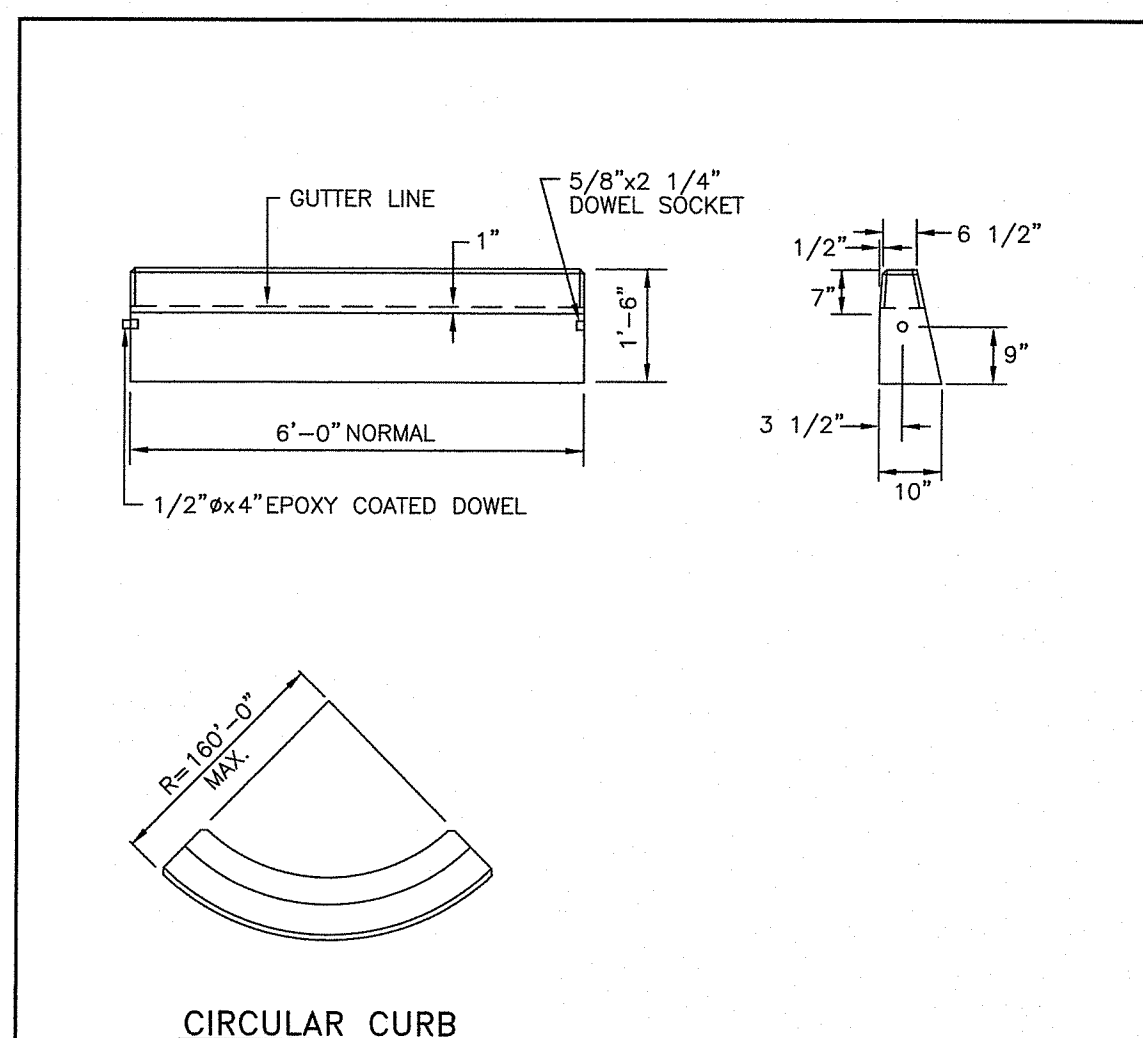
CONSTRUCTION PHASING NOTES:

- PRIOR TO ANY GROUND DISTURBING ACTIVITY, PERIMETER SOIL EROSION AND SEDIMENT CONTROLS SHALL BE INSTALLED. FOR CONSTRUCTION OF THE PROPOSED ROAD, SOIL EROSION CONTROLS SHALL BE PLACED DOWN-GRADIENT PRIOR TO ANY GROUND DISTURBANCE.
- CONSTRUCT THE CONSTRUCTION ENTRANCE.
- CONSTRUCT TEMPORARY SEDIMENT BASINS.
- CLEAR AND GRUB AREAS FOR ROAD AND DRAINAGE STRUCTURES. DISPOSE OF STUMPS.
- REMOVE LOAM AND SUB-SOILS AND STOCKPILE FOR LATER USE. SEE THE EROSION CONTROL & SOIL STABILIZATION PROGRAM FOR ADDITIONAL GUIDANCE.
- CONSTRUCT FOREBAYS & INFILTRATION BASIN.
- CONSTRUCT THE ROAD (SUBGRADE, BASE COURSE, AND BINDER PAVEMENT), UTILITIES, AND ASSOCIATED DRAINAGE STRUCTURES.
- INSTALL HAYBALE EROSION CONTROL DEVICES AT CATCH BASIN INLETS.
- INDIVIDUAL LOTS SHALL BE CONSTRUCTED ON A LOT BY LOT BASIS.
 - PRIOR TO ANY GROUND DISTURBING ACTIVITY, PERIMETER SOIL EROSION AND SEDIMENT CONTROLS SHALL BE INSTALLED.
 - CLEAR AND GRUB AREAS TO BE DISTURBED.
 - REMOVE LOAM AND SUB-SOILS AND STOCKPILE FOR LATER USE. SILT FENCE SHOULD BE PLACED AROUND THE STOCKPILE AND IT SHOULD BE SEED. ROUGH GRADE THEN SEED THE SITE.
 - CONSTRUCT THE DWELLING, DRIVEWAY, OWTS, AND INSTALL ANY PROPOSED WELLS.
 - FINISH GRADE AND SEED/SOD THE SITE.
 - EROSION CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL SUCH A TIME THAT A DESIRABLE STAND OF GRASS OR GROUND COVER HAS BEEN ESTABLISHED.

REFER TO THE "SOIL EROSION AND SEDIMENT CONTROL PLAN" FOR GUIDANCE ON SEQUENCING OF CONSTRUCTION ACTIVITY AND EROSION CONTROL MEASURES



R.I. DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
DATED: **JUL 24 2024** FILE #: **24-0100**
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE



| RHODE ISLAND DEPARTMENT OF TRANSPORTATION | | | |
|---|------|--------|--|
| PRECAST CONCRETE CURB | | | |
| NO. | BY | DATE | |
| 1 | M.P. | Mar 05 | |

DESIGNED BY: *James J. Gaudin*
CHECKED BY: *Shawn J. Gaudin*
DATE: **JUNE 15, 1998**

| RHODE ISLAND DEPARTMENT OF TRANSPORTATION | | | |
|---|------|--------|--|
| 6'-0" PRECAST CONCRETE TRANSITION CURB | | | |
| NO. | BY | DATE | |
| 1 | M.P. | Mar 05 | |

DESIGNED BY: *James J. Gaudin*
CHECKED BY: *Shawn J. Gaudin*
DATE: **JUNE 15, 1998**

GENERAL NOTES AND DETAILS
FOR
PERRY HILL
LOCATED AT
POLE #15 - PUNCHBOWL TRAIL
RICHMOND, R.I.

| Checked By: P.J.F. | | Date: 3/14/2024 | |
|--------------------|--------------------|-----------------|----------|
| Scale: As Shown | | BY DATE | |
| NO. | REVISION | BY | DATE |
| 1. | PER RIDER COMMENTS | P.J.F. | 8/1/2024 |

PATRICK J. FREEMAN
13125
REGISTERED PROFESSIONAL ENGINEER
675124

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