

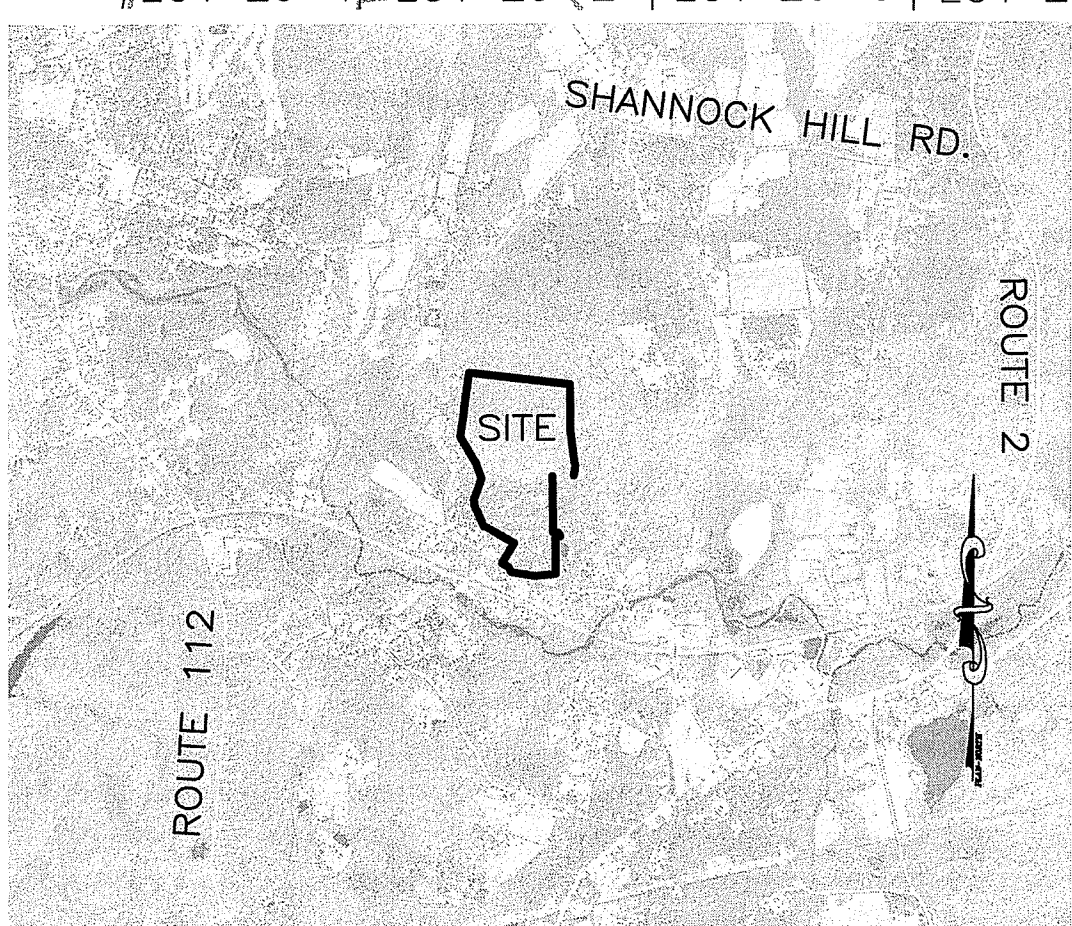
Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

ASSESSOR'S PLAT 10D LOT 46  
AREA=2,788,648 S.F.  
(64.02 ACRES)

PROPOSED NEW CONST. SEEKING MODIFIED DEM PERMIT

PERMITTED LIMIT OF DISTURBANCE: DEM PERMIT NO. 16-0319

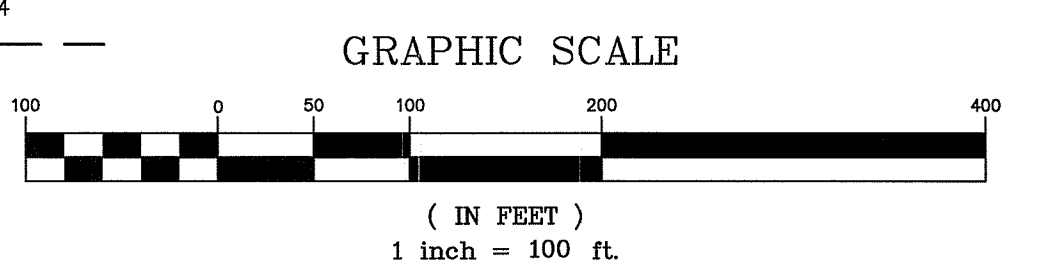
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED JUN 21 2019 FILE # 16-0071  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE  
*Signature*



**WETLAND STATEMENT:**  
THE PROPOSED DEVELOPMENT WILL HAVE NO ADVERSE IMPACT ON EXISTING WETLAND FEATURES IDENTIFIED ON THE PLANS AND FOR WHICH THE LIMITS OF DISTURBANCE ARE DEPICTED.

- PERMITS ISSUED:**
- RIDEM INSIGNIFICANT ALTERATION - PERMIT  
a.) WETLAND APPLICATION NO. 16-0319  
b.) RIPDES PROGRAM FILE NO. RIR 101525  
c.) UIC PROGRAM FILE NO. 001757
  - RIDEM ONSITE WASTEWATER TREATMENT SYSTEM CONSTRUCTION PERMIT  
a.) APPLICATION NO. 0729-2346

- LEGEND**
- EXISTING PROPERTY LINE
  - PROPOSED PROPERTY LINE
  - EXISTING STREAM
  - EXISTING STONE WALL
  - ABUTTING LINE
  - 50' WETLAND BUFFER
  - WETLAND FLAG
  - BLDG. SETBACK LINE
  - PROP. PERMANENT BOUND

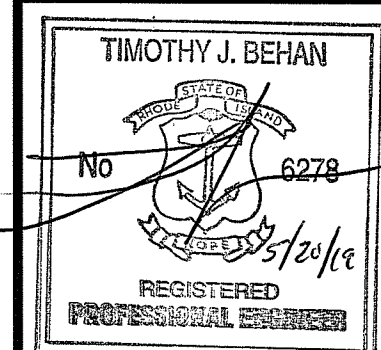


**OWNER**  
ALTAMONTE RIDGE, LLC  
861A BROAD STREET  
PROVIDENCE, RHODE ISLAND 02907

**APPLICANT**  
WOMENS DEVELOPMENT CORPORATION  
861A BROAD STREET  
PROVIDENCE, RHODE ISLAND 02907

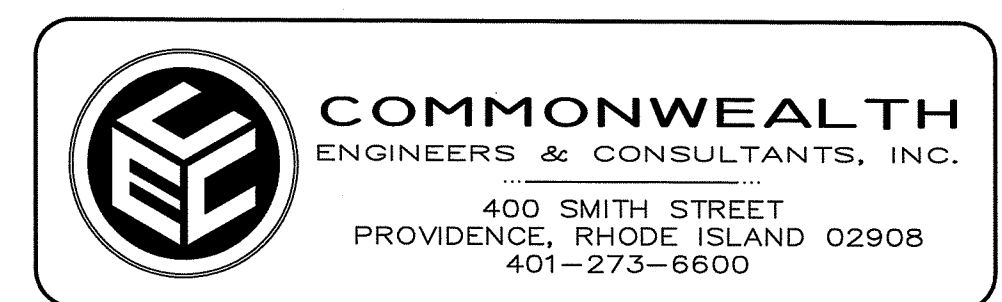
- NOTES:**
- SITE IS NOT SITUATED IN A FEMA 100-YEAR FLOOD ZONE.
  - SITE IS SITUATED IN A NATURAL HERITAGE AREA.

**PLAN REFERENCE:**  
SURVEY PLAN FOR ALTAMONTE RIDGE  
A.P. 10D LOT 46 WEST SHANNOCK ROAD  
IN RICHMOND, RHODE ISLAND, PREPARED  
BY COMMONWEALTH ENGINEERS &  
CONSULTANTS, INC. AND COMMONWEALTH  
LAND SURVEYORS, INC. DATE 10-31-08  
REVISED 2-26-09 SCALE 1"=100'  
SHEET 1 OF 5



**REVISIONS**

No.	DATE	DRWN	CHKD
1.	5-31-18	DKM	TJB
2.	4-30-19	KAB	TJB
3.	5-20-19	KAB	TJB



**WELLHOUSE PLAN**  
for  
**RICHMOND RIDGE**  
A.P. 10D, LOT 46  
on  
**WEST SHANNOCK ROAD**  
in  
**RICHMOND, RHODE ISLAND**  
**LOCATION MAP**

SCALE: 1"=100' SHEET NO: 1 OF 3  
DRAWN BY: DKM DESIGN BY: TJB CHECKED BY: TJB  
DATE: 3/27/18 PROJECT NO.: 04145.00

MAP 9D LOT 27

MAP 10D LOT 34-5

MAP 10D LOT 34-4

MAP 10D LOT 34-3

MAP 10D LOT 34-2

MAP 10D LOT 34-1

NORTH ROAD

Environmental Management  
MAY 21 2019  
Office of Water Resources

MAP 10D LOT 36

MAP 10D LOT 25-4

MAP 10D LOT 25-3

MAP 10D LOT 35

MAP 10D LOT 35-7

MAP 10D LOT 35-6

MAP 10D LOT 35-5

MAP 10D LOT 35-4

MAP 10D LOT 35-3

MAP 10D LOT 25

MAP 10D LOT 25-2

MAP 10D LOT 35-4

MAP 10D LOT 35-5

MAP 10D LOT 35-6

MAP 10D LOT 35-7

MAP 10D LOT 35-8

MAP 10D LOT 35-9

MAP 10D LOT 35-10

MAP 10D LOT 35-11

MAP 10D LOT 35-12

MAP 10D LOT 35-13

MAP 10D LOT 35-14

MAP 10D LOT 35-15

MAP 10D LOT 35-16

MAP 10D LOT 35-17

MAP 10D LOT 35-18

MAP 10D LOT 35-19

MAP 10D LOT 35-20

MAP 10D LOT 35-21

MAP 10D LOT 35-22

MAP 10D LOT 35-23

MAP 10D LOT 35-24

MAP 10D LOT 35-25

MAP 10D LOT 35-26

MAP 10D LOT 35-27

MAP 10D LOT 35-28

MAP 10D LOT 35-29

MAP 10D LOT 35-30

MAP 10D LOT 35-31

MAP 10D LOT 35-32

MAP 10D LOT 35-4

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MAP 10D LOT 35-30

MAP 10D LOT 35-31

MAP 10D LOT 35-32

MAP 10D LOT 35-33

MAP 10D LOT 25

MAP 10D LOT 25-1

MAP 10D LOT 25-2

MAP 10D LOT 25-3

MAP 10D LOT 25-4

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MAP 10D LOT 25-107

MAP 10D LOT 25-108

MAP 10D LOT 25-109

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MAP 10D LOT 25-111

MAP 10D LOT 25-112

MAP 10D LOT 25-113

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MAP 10D LOT 25-135

MAP 10D LOT 25-136

MAP 10D LOT 25-137

MAP 10D LOT 25-138

MAP 10D LOT 25-139

MAP 10D LOT 25-140

MAP 10D LOT 25-141

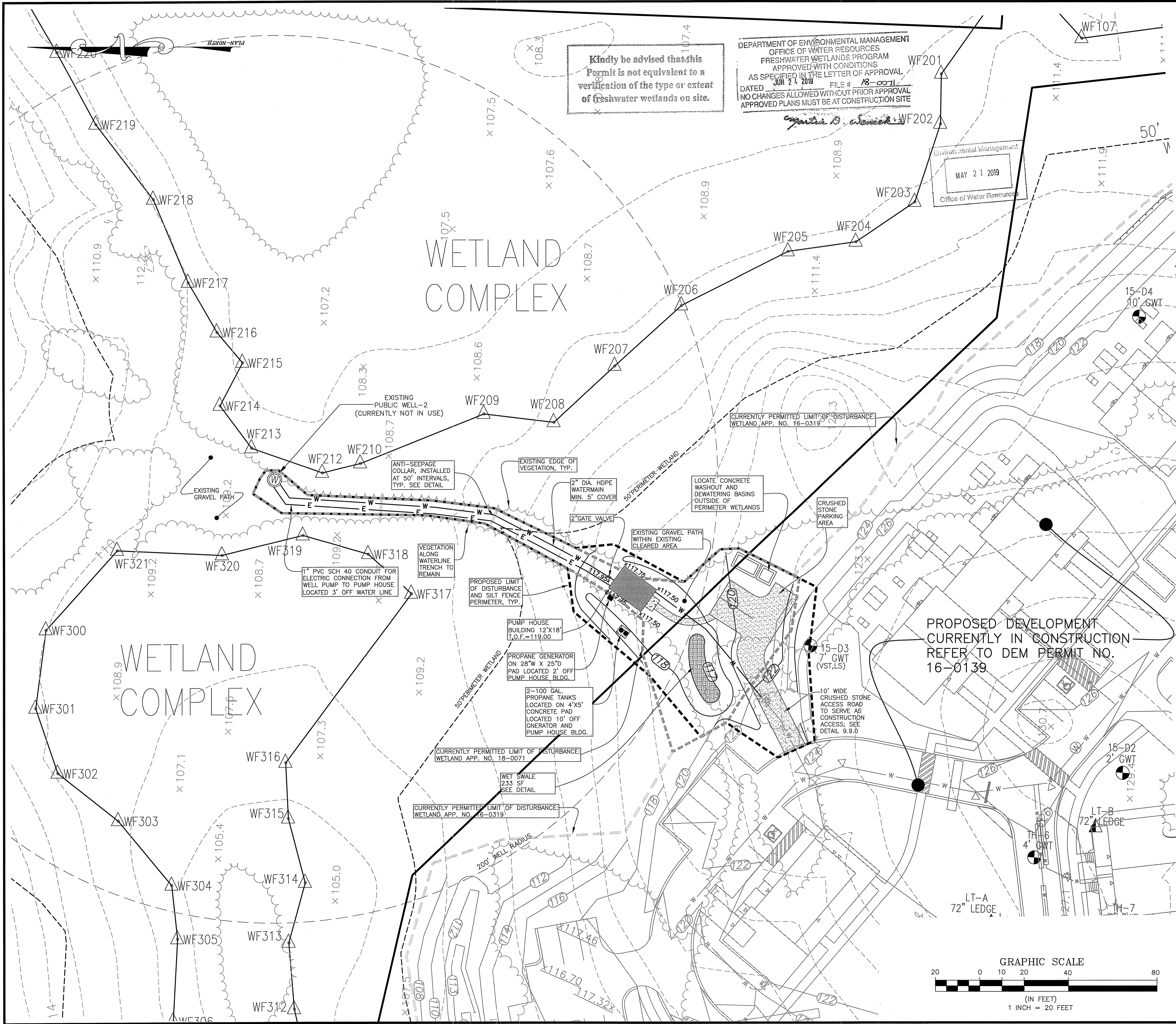
MAP 10D LOT 25-142

MAP 10D LOT 25-143

MAP 10D LOT 25-144

MAP 10D LOT 25-145

MAP 10D LOT 25-146



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

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED JUN 21 2019 FILE # 18-0071  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Environmental Management  
MAY 21 2019  
Office of Water Resources

**LEGEND**

- EXISTING PROPERTY LINE
- EXISTING STONE WALL
- ABUTTER LINE
- 50' WETLAND BUFFER
- 100' RIVERBANK WETLAND
- WETLAND FLAG
- PROPOSED SEWER MANHOLE
- PROPOSED DRAIN MANHOLE
- PROPOSED CATCH BASIN
- PROPOSED WATER SERVICE SHUT OFF
- PROPOSED SEWER CURB STOP
- PROPOSED SIGN
- PROPOSED ROOF INFILTRATION SYSTEM
- PROPOSED UNDERGROUND FIRE CISTERN
- PROPOSED WATER VALVE
- PROPOSED GRANITE CURBING
- PROPOSED ROADWAY BERM
- PROPOSED WATER LINE
- PROPOSED SEWER LINE
- PROPOSED DRAIN LINE
- PROPOSED RETAINING WALL
- PROPOSED UNDERGROUND WIRES
- PROPOSED LOT LINE
- PROPOSED ROADWAY CENTERLINE
- PROPOSED GUARDRAIL
- PROPOSED UTILITY EASEMENT
- PROPOSED DRAINAGE EASEMENT

**GENERAL NOTES:**

1. THE LOCATION AND ELEVATIONS OF ALL EXISTING UTILITIES SHALL BE CONSIDERED APPROXIMATE AND MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ANY CROSSINGS OF PROPOSED UTILITIES AND EXISTING UTILITIES. THE CONTRACTOR SHALL CONTACT THE RESPECTIVE UTILITY COMPANIES RELATIVE TO THE LOCATION AND ELEVATION OF THEIR FACILITIES AND ANY DISCREPANCIES IN THE LOCATION OF ANY UTILITY SHOWN OR ENCOUNTERED DURING CONSTRUCTION SHALL BE REPORTED TO COMMONWEALTH ENGINEERS & CONSULTANTS, INC. 400 SMITH STREET, PROVIDENCE, RHODE ISLAND 02908; (401) 273-6600.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING "DIG-SAFE" AT 1-888-344-7233 TO COMPLY WITH STATE LAW PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITY.
3. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO FAMILIARIZE HIMSELF WITH ANY APPLICABLE LOCAL, STATE AND FEDERAL LAWS GOVERNING HIS INTENDED ACTIVITIES.
4. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO MAINTAIN THE INTEGRITY OF ALL EXISTING UTILITIES, STRUCTURES, AND ABUTTING PROPERTIES. THE COST OF ANY REPAIR OR REPLACEMENT OF DAMAGED ITEMS SHALL BE BORNE BY THE CONTRACTOR.
5. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO OBTAIN ANY AND ALL PERMITS REQUIRED BY THE APPROPRIATE STATE AND MUNICIPALITY PRIOR TO COMMENCING ANY WORK.
6. EXTERIOR LIGHTING WITHIN THE FACILITY SHALL BE THE MINIMUM NECESSARY AND ALL FIXTURES SHALL BE FULL-CUT OFF FIXTURES APPROVED BY THE INTERNATIONAL DARK SKY ASSOCIATION.

**DRAINAGE AND UTILITY NOTES:**

1. UNDERGROUND UTILITIES, ELECTRIC, TELEPHONE, FIRE ALARM AND CABLE TELEVISION SERVICES SHALL BE INSTALLED PER THE REQUIREMENTS OF THE APPLICABLE SITE UTILITY PROVIDER.
2. ALL ON SITE STORM WATER DRAINAGE PIPE SHALL BE ADS N-12 S.T. PIPE, OR AN APPROVED EQUAL UNLESS NOTED OTHERWISE ON THE PLANS.
4. ALL DRAINAGE STRUCTURES SHALL BE PRECAST CONCRETE CATCH BASINS OR MANHOLES.
5. METALLIC WARNING TAPE SHALL BE INSTALLED 12" ABOVE ALL STORM DRAIN AND OTHER UTILITIES.
6. CATCH BASINS SHALL BE EQUIPPED WITH RI DOT STD. FRAME & GRATES. SEE DETAILS. DRAIN MANHOLES SHALL BE EQUIPPED WITH RI DOT STD. FRAME AND COVERS. SEE DETAILS.
8. ALL WATER SYSTEM COMPONENTS SHALL MEET SHANNOCK WATER DISTRICT STANDARDS AND REGULATIONS AND PROJECT MANUAL FOR SUBJECT DEVELOPMENT. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR REVIEW AND APPROVAL PRIOR TO ORDERING.
9. ALL DRAINAGE SYSTEM COMPONENTS SHALL MEET RI DOT STANDARDS, RIDEM STORMWATER DESIGN AND INSTALLATION STANDARDS MANUAL STANDARDS AND PROJECT MANUAL FOR SUBJECT DEVELOPMENT. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR REVIEW AND APPROVAL PRIOR TO ORDERING.

1. RIDEM INSIGNIFICANT ALTERATION - PERMIT
  - a.) WETLAND APPLICATION NO. 16-0319
  - b.) WETLAND APPLICATION NO. 18-0071
  - c.) RIPDES PROGRAM FILE NO. RIR 101525
  - d.) UIC PROGRAM FILE NO. 001757

OWNER: ALTAMONTE RIDGE, LLC  
861A BROAD STREET  
PROVIDENCE, RHODE ISLAND 02907

APPLICANT: WOMENS DEVELOPMENT CORPORATION  
861A BROAD STREET  
PROVIDENCE, RHODE ISLAND 02907

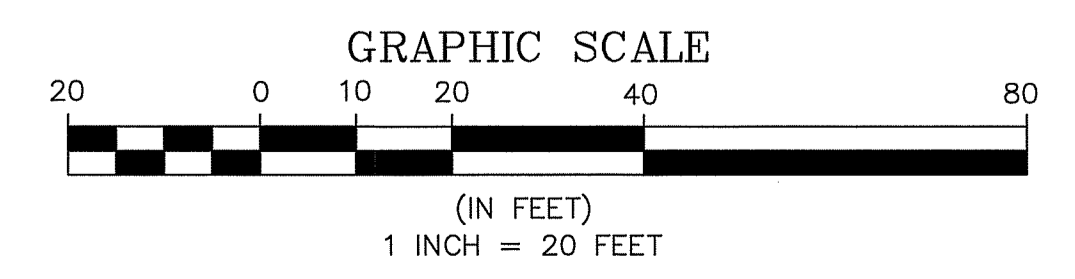
TIMOTHY J. BEHAN  
No. 6278  
REGISTERED PROFESSIONAL ENGINEER

**COMMONWEALTH**  
ENGINEERS & CONSULTANTS, INC.  
400 SMITH STREET  
PROVIDENCE, RHODE ISLAND 02908  
401-273-6600

**REVISIONS**

No.	DATE	DRWN	CHKD
1.	5-31-18	DKM	TJB
2.	4-30-19	KAB	TJB
3.	5-20-19	KAB	TJB

**WELLHOUSE PLAN**  
for  
**RICHMOND RIDGE**  
A.P. 10D, LOT 46  
on  
**WEST SHANNOCK ROAD**  
in  
**RICHMOND, RHODE ISLAND**  
**UTILITIES & GRADING PLAN**



SCALE: 1"=20'  
SHEET NO: 2 OF 3  
DRAWN BY: DKM DESIGN BY: TJB CHECKED BY: TJB  
DATE: 3/27/18 PROJECT NO.: 04145.00

**GENERAL EROSION CONTROL NOTES:**

- THE STATE OF RHODE ISLAND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AMENDED AUGUST 2013, AND THE RHODE ISLAND STANDARD DETAILS ARE MADE A PART HEREOF AS FULLY AND COMPLETELY AS IF ATTACHED HERETO. THE 2013 STANDARD SPECIFICATIONS MAY BE OBTAINED AT THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION WEB PAGE. THESE SPECIFICATIONS ARE MADE A PART HEREOF AS FULLY AND COMPLETELY AS IF ATTACHED HERETO.
- ALL REQUIRED SITE IMPROVEMENTS SHALL BE INSPECTED BY THE TOWN ENGINEER TO ENSURE SATISFACTORY COMPLETION. IN NO CASE SHALL THE INSTALLATION OF ANY IMPROVEMENTS BE STARTED UNTIL PRIOR NOTIFICATION IS GIVEN TO THE TOWN ENGINEER. AT LEAST A 48-HOUR NOTICE SHALL BE GIVEN TO THE TOWN ENGINEER PRIOR TO ANY SUCH START OF CONSTRUCTION. A FINAL INSPECTION OF ALL SITE IMPROVEMENTS, UTILITIES AND GRADING WILL BE MADE TO DETERMINE WHETHER THE WORK IS SATISFACTORY AND IN SUBSTANTIAL AGREEMENT WITH THE APPROVED FINAL CONSTRUCTION DRAWING AND THE TOWN SPECIFICATIONS.
- LOCATION AND DEPTH OF EXISTING UTILITIES ARE APPROXIMATE AND HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL CHECK AND VERIFY LOCATIONS OF ALL EXISTING UTILITIES BOTH UNDERGROUND AND OVERHEAD. ANY DAMAGE TO EXISTING UTILITIES AS SHOWN OR NOT SHOWN ON THE PLANS SHALL BE THE CONTRACTOR'S RESPONSIBILITY. COSTS OF SUCH DAMAGE SHALL BE BORNE BY THE CONTRACTOR. NO EXCAVATION SHALL BE DONE UNTIL ALL INVOLVED UTILITY COMPANIES ARE NOTIFIED 48-HOURS IN ADVANCE. THE CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY DIG-SAFE (1-800-344-7233) A MINIMUM OF 48 WORKING HOURS, EXCLUDING WEEKENDS AND HOLIDAYS, PRIOR TO THE START OF ANY EXCAVATION AND/OR BLASTING WORK. THE NAME OF THE COMPANY PERFORMING THE EXCAVATION AND/OR BLASTING WORK MUST BE SUPPLIED TO DIG-SAFE, IF IT IS DIFFERENT FROM THE CALLER.
- IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO OBTAIN ANY AND ALL PERMITS REQUIRED BY BUT NOT LIMITED TO, THE STATE OF RHODE ISLAND, THE FEDERAL GOVERNMENT, LOCAL (TOWN/CITY) GOVERNMENT AND ALL INDIVIDUAL UTILITY COMPANIES PRIOR TO COMMENCING ANY WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL TEMPORARY SEDIMENTATION AND EROSION CONTROLS.
- ALL MATERIAL FOR FILL SHALL BE CLEAN AND FREE OF MATTER WHICH COULD POLLUTE ANY DOWN STREAM WATERCOURSE.
- FILL MATERIAL SHALL BE COMPACTED IN ONE FOOT (MAXIMUM) LIFTS TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED IN ACCORDANCE WITH ASTM D-1557 (MODIFIED PROCTOR TEST).
- ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- ALL AREAS NOT TO BE DEVELOPED THAT ARE COMPACTED BY CONSTRUCTION ACTIVITIES SHALL BE RESTORED BY TILLING THE TOP 12" OF SOIL.
- ANY TREE LOCATED ON PUBLIC PROPERTY THAT IS DAMAGED OR REMOVED DURING CONSTRUCTION, SHALL BE REPLACED WITH AN EQUIVALENT TREE.

**EROSION CONTROL AND SOIL STABILIZATION PROGRAM:**

- ALL STRAW BALES OR TEMPORARY PROTECTION SHALL REMAIN IN PLACE UNTIL AN ACCEPTABLE STAND OF GRASS OR APPROVED GROUND COVER IS ESTABLISHED.
- THE TOPSOIL SHALL HAVE A SANDY LOAM TEXTURE RELATIVELY FREE OF SUBSOIL MATERIAL, STONES, ROOTS, LUMPS OF SOIL, TREE LIMBS, TRASH OR CONSTRUCTION DEBRIS AS AMENDED WITH RHODE ISLAND STANDARD SPECIFICATION W.20.01 AS AMENDED.
- THE SEED MIX SHALL BE INOCULATED WITHIN 24-HOURS BEFORE MIXING AND PLANTING, WITH APPROPRIATE INOCULUM FOR EACH VARIETY.
- THE DESIGN MIX UTILIZED IN ALL DISTURBED AREAS TO BE SEEDING SHALL BE COMPRISED OF THE FOLLOWING:

TYPE	% BY WEIGHT	SEEDING DATE
CREeping RED FESCUE	70	APRIL 1 - JUNE 15
ASTORIA BENTGRASS	5	AUGUST 15 - OCT.
BIROFOOT TREFOIL	10	
PERENNIAL RYEGRASS	15	

APPLICATION RATE: 100 LBS/ACRE  
LIMING AND FERTILIZING AS REQUIRED TO COMPLIMENT OR UPGRADE EXISTING CONDITIONS.

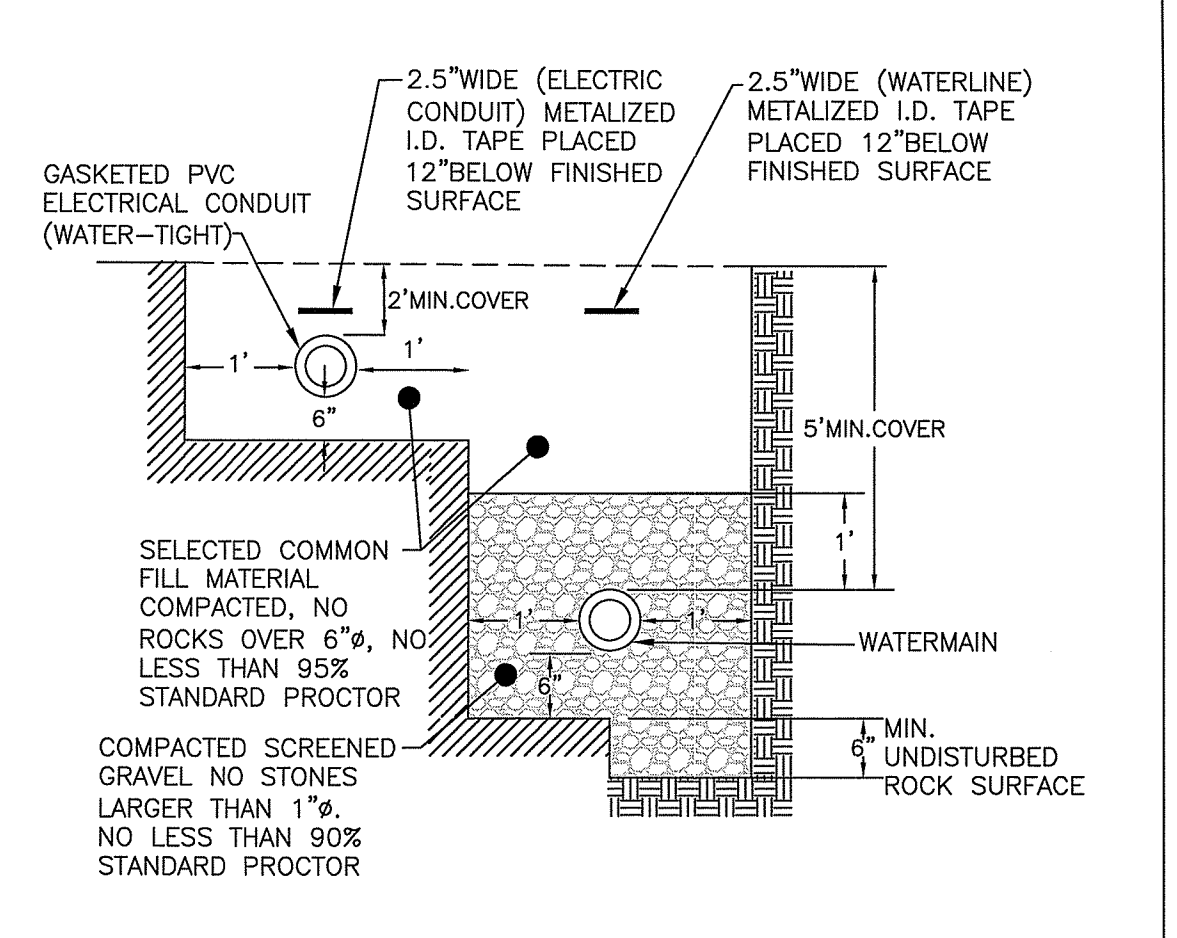
- THE CONTRACTOR MUST REPAIR AND/OR RESEED ANY AREAS THAT DO NOT DEVELOP WITHIN THE PERIOD OF ONE YEAR, AND SHALL DO SO AT NO ADDITIONAL EXPENSE.
- THE NORMAL ACCEPTABLE SEASONAL SEEDING DATES ARE APRIL 1ST THROUGH OCTOBER 15TH.
- STABILIZATION OF ONE FORM OR ANOTHER AS DESCRIBED ABOVE SHALL BE ACHIEVED WITHIN FIFTEEN (15) DAYS OF FINAL GRADING.
- STOCKPILES OF TOPSOIL AND EARTH MATERIALS SHALL NOT BE LOCATED NEAR WATERWAYS. THEY SHALL HAVE SIDE SLOPES NO GREATER THAN 2:1 AND STOCKPILE SHALL ALSO BE SEEDING AND/OR STABILIZED. THE STOCKPILES SHALL BE SURROUNDED BY STACKED STRAW BALES AND/OR SILT FENCE.
- ON SLOPES STEEPER THAN 30% MULCH APPLICATIONS SHALL BE TACKED DOWN BY "CRIMPING" OR "TRACKING".
- TREES TO BE RETAINED SHALL BE FENCED OR ROPED OFF TO PROTECT THEM FROM CONSTRUCTION EQUIPMENT.
- ALL PROPOSED PLANTINGS MUST BE ACCOMPLISHED AS EARLY AS POSSIBLE UPON COMPLETION OF GRADING AND CONSTRUCTION, AND AT LEAST PRIOR TO ANY ON-SITE OCCUPANCY.
- ALL PROPOSED PLANTINGS MUST BE MAINTAINED BY THE PROPERTY OWNER TO ENSURE SURVIVAL.
- SHOULD ANY OR ALL OF THE PROPOSED PLANTS FAIL TO SURVIVE AT LEAST ONE (1) FULL GROWING SEASON FROM THE TIME THEY HAVE BEEN PLANTED, THE OWNER SHALL BE FULLY RESPONSIBLE FOR REPLACING AND MAINTAINING THE SAME PLANT SPECIES FOR ONE (1) ADDITIONAL GROWING SEASON.
- ALL DISTURBED AREAS MUST BE SEEDING OR PLANTED WITHIN THE CONSTRUCTION SEASON.
- TEMPORARY SEEDING MUST BE DONE WITHIN ONE (1) MONTH AFTER DISTURBANCE.
- ALL DISTURBED AREAS MUST BE PERMANENTLY SEEDING OR PLANTED BEFORE OCTOBER 1ST, IF NOT THEY MUST BE TEMPORARILY SEEDING.
- SLOPES CONSTRUCTED AT, OR STEEPER THAN, 15% SHALL HAVE TEMPORARY EROSION CONTROL MATTING UTILIZED AS A SUPPORTIVE METHOD IN ADDITION TO THE METHODS DESCRIBED ABOVE UNLESS IN THE CASE WHERE PERMANENT TURF REINFORCEMENT MATS ARE INSTALLED IMMEDIATELY UPON CONSTRUCTION OF THE SLOPE. IN NO CASE SHALL STEEP SLOPES BE LEFT UNPROTECTED.
- ALL PROPOSED INLETS AND OUTLETS SHALL BE PROTECTED WITH TURF REINFORCEMENT AS PROPOSED ON THE PLANS AND/OR STRAW BALE INLET AND OUTLET PROTECTION DEVICES. SEE DETAILS.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARDS AND PROCEDURES SET FORTH IN THE TOWN ZONING ORDINANCES; RHODE ISLAND STORMWATER DESIGN AND INSTALLATION STANDARDS MANUAL, AMENDED MARCH 2015 AS PREPARED BY THE RIEM AND GMC; AND RHODE ISLAND EROSION AND SEDIMENT CONTROL HANDBOOK AS PREPARED BY RHODE ISLAND STATE CONSERVATION COMMITTEE, REVISED 2014, (AS REVISED).

**POLLUTION PREVENTION NOTES:**

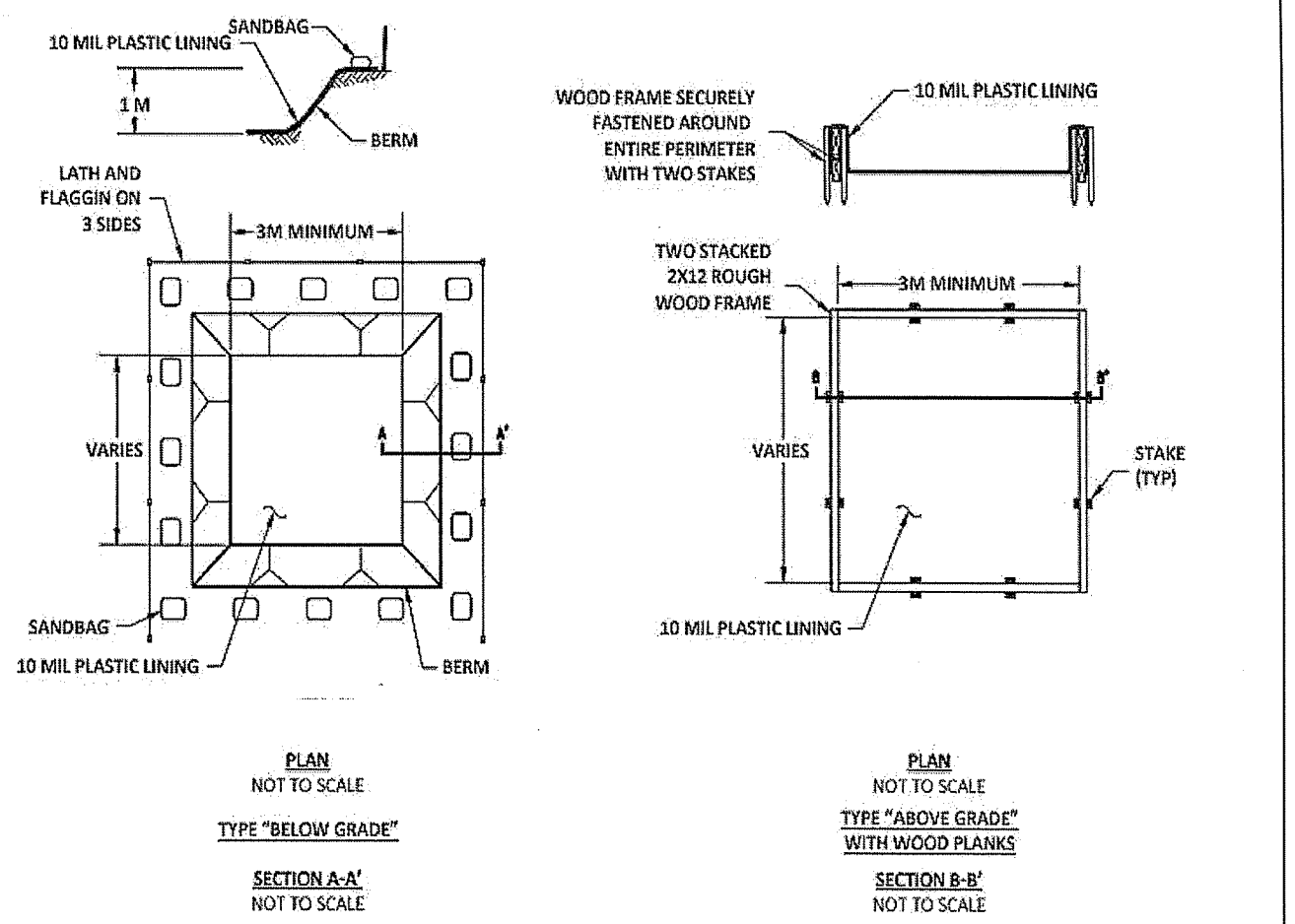
- REFERENCE IS MADE TO APPENDIX G "POLLUTION PREVENTION AND SOURCE CONTROLS" OF THE RHODE ISLAND STORMWATER DESIGN AND INSTALLATION STANDARDS MANUAL, AMENDED 2015. THIS DOCUMENT SHALL BE REFERENCED WHEN IMPLEMENTING THE POLLUTION PREVENTION TECHNIQUES. A BRIEF SUMMARY OF THE TECHNIQUES IS PROVIDED BELOW, REFER TO THE ABOVE REFERENCE FOR ALL TECHNIQUES TO BE IMPLEMENTED.
- SOIL WASTE CONTAINMENT:**
  - OWNER TO PROVIDE TRASH CONTAINER. CONTAINER TO HAVE A COVER TO PREVENT TRASH FROM BLOWING OUT.
  - SWEEP STREET/PARKING AREA ANNUALLY.
- HAZARDOUS MATERIALS CONTAINMENT:**
  - CONTRACTOR TO STORE ALL HAZARDOUS MATERIALS INSIDE STORAGE LOCKERS OR OTHER APPROVED METHODS WHICH HAVE SECONDARY CONTAINMENT SYSTEMS.
  - SECONDARY CONTAINMENT MUST BE INCLUDED WHENEVER SPILLS MIGHT OCCUR (E.G. FUELING AND HAZARDOUS MATERIAL TRANSFER AND LOADING AREAS).
- ROADS AND PARKING AREA MANAGEMENT:**
  - USE DEICING CHEMICALS JUDICIOUSLY SINCE THEY CAUSE WATER QUALITY PROBLEMS. PROVIDE AND SPREAD IN ACCORDANCE WITH APPENDIX G RECOMMENDATIONS.
  - PLOW SNOW AND STORE ACCUMULATED SNOW PILES AWAY FROM DRYWELL SYSTEM.
  - DEBRIS SHOULD BE CLEANED FROM THE SITE PRIOR TO USING THE SITE FOR SNOW STORAGE.
  - DEBRIS SHOULD BE CLEANED FROM THE SITE AND PROPERLY DISPOSED OF AT THE END OF THE SNOW SEASON.
- SEPTIC SYSTEMS:**
  - NO SEPTIC SYSTEMS PROPOSED.
- LAWN, GARDEN, AND LANDSCAPE MANAGEMENT:**
  - LAWN CONVERSION** - REDUCE THE AMOUNT OF LAWN BY REPLANTING LAWN WITH GARDEN BEDS CONTAINING FLOWERS/SHRUBS. LAWNS REQUIRE MORE MAINTENANCE THAN FLOWER BEDS.
  - SOIL BUILDING** - MAINTAIN A HEALTHY LAWN BY TESTING SOIL FOR PH, FERTILITY, COMPACTION, TEXTURE, AND EARTH WORM CONTENT.
  - GRASS SELECTION** - SELECT DROUGHT TOLERANT GRASS SPECIES. REFER TO APPENDIX G FOR ADDITIONAL INFORMATION.
  - MOWING AND THATCH MANAGEMENT** - KEEP GRASS HEIGHT HIGH SUCH AS 2 TO 3 INCHES IN HEIGHT. THIS WILL REDUCE WEED GROWTH.
  - FERTILIZATION** - MINIMIZE FERTILIZATION. FERTILIZE NO MORE THAN TWICE A YEAR. APPLY CAREFULLY SO FERTILIZER DOES NOT SPREAD ONTO IMPERVIOUS SURFACES. REFRAIN FROM THE USE OF PHOSPHATE BASED FERTILIZERS. REFER TO APPENDIX G FOR ADDITIONAL INFORMATION.
  - WEED MANAGEMENT** - NEVER USE CHEMICAL HERBICIDES TO ELIMINATE OR CONTROL WEEDS. OWNER SHALL REMOVE WEEDS BY PULLING OR DIGGING OUT. REFER TO APPENDIX G FOR ADDITIONAL INFORMATION.
  - PEST MANAGEMENT** - LIMIT PESTICIDE USE. CHOOSE PESTICIDES THAT POSE THE LEAST RISK TO HUMAN HEALTH AND THE ENVIRONMENT. REFER TO APPENDIX G FOR ADDITIONAL INFORMATION.
  - SENSIBLE IRRIGATION** - WATER NO MORE THAN 1" PER WEEK. USE DROUGHT-RESISTANT GRASSES. CUT GRASS AT 2-3 INCHES.

**SEDIMENTATION CONTROL PROGRAM:**

- EXTREME CARE SHALL BE EXERCISED SO AS TO PREVENT ANY UNSUITABLE MATERIAL FROM ENTERING DOWNSTREAM WATERCOURSES AND STORMWATER DRAINAGE SYSTEMS.
- DURING CONSTRUCTION, THE CONTRACTOR AND/OR DEVELOPER SHALL BE RESPONSIBLE FOR MAINTAINING DRAINAGE AND RUN-OFF FLOW DURING STORMS.
- SEDIMENTATION CONTROL DEVICES SHALL BE INSPECTED CLOSELY AND MAINTAINED PROMPTLY AFTER EACH RAINFALL.
- CARE SHALL BE TAKEN SO AS NOT TO PLACE "REMOVED SEDIMENTS" WITHIN THE PATH OF WATERCOURSES OR THOSE AREAS SUBJECT TO STORMWATER FLOWAGE.
- ADDITIONAL STRAW BALES OR SANDBAGS SHALL BE LOCATED AS CONDITIONS WARRANT OR AS DIRECTED BY THE ENGINEER.
- SEDIMENTATION TRAPS SHALL BE PROVIDED AT ALL DRAINAGE STRUCTURES DURING CONSTRUCTION (SILT SACS, STRAW BALES, TEMPORARY DITCHES, ETC).
- EROSION AND SEDIMENTATION CONTROLS SHALL BE INSTALLED AT THE SITE PRIOR TO THE START OF CONSTRUCTION AND BE PROPERLY MAINTAINED UNTIL ALL DISTURBED AREAS ARE STABILIZED INCLUDING:
  - THE INSTALLATION OF AN EROSION CONTROL FENCE IN ALL LOCATIONS SHOWN ON THE APPROVED SITE PLANS AND WHERE OTHERWISE NECESSARY TO PREVENT SEDIMENTS FROM ENTERING DOWNSTREAM WATERCOURSES AND STORMWATER DRAINAGE SYSTEMS.
  - ALL DISTURBED AREAS ARE TO BE PERMANENTLY STABILIZED WITH APPROVED GROUND COVER PRIOR TO THE COMPLETION OF THE PROJECT. AREAS EXPOSED FOR EXTENDED PERIODS ARE TO BE COMPLETELY COVERED WITH STRAW MULCH.
  - CATCH BASINS WILL BE PROTECTED WITH SILT SACS & STRAW BALE FILTERS THROUGHOUT THE CONSTRUCTION PERIOD AND UNTIL ALL DISTURBED AREAS ARE THOROUGHLY STABILIZED. SUMPS ARE TO BE CLEANED IMMEDIATELY FOLLOWING INSTALLATION OF PERMANENT PAVEMENT.
  - OUTFALLS ARE TO BE PROTECTED BY STRAW BALE FILTERS UNTIL DISTURBED AREAS ARE PERMANENTLY STABILIZED WITH APPROVED GROUND COVER.
  - ALL CONTROL MEASURES WILL BE MAINTAINED IN EFFECTIVE CONDITION THROUGHOUT THE CONSTRUCTION PERIOD.
- THE LIMITS OF ALL CLEARING, GRADING AND DISTURBANCE SHALL BE KEPT TO A MINIMUM WITHIN THE PROPOSED AREA OF CONSTRUCTION. ALL AREAS OUTSIDE OF THE LIMITS OF DISTURBANCE SHALL REMAIN TOTALLY UNDISTURBED.
- UPON COMPLETION OF CONSTRUCTION OF SITE IMPROVEMENTS AND THE STORMWATER DRAINAGE SYSTEM, ALL CATCH BASINS AND STORM DRAIN PIPING SHALL BE CLEANED OF SEDIMENT.
- AT NO TIME DURING CONSTRUCTION SHALL THE SUBGRADE OF THE SITE BE SUCH THAT SURFACE RUNOFF WILL BE PERMITTED TO DIRECTLY ENTER ANY DRAINAGE STRUCTURE. A TEMPORARY DEPRESSED AREA AROUND THE STRUCTURE SHALL BE INCORPORATED AS A SEDIMENTATION TRAP. THE MOUTH OF THE TRAP SHALL BE LINED WITH STRAW BALES AROUND THE COMPLETE PERIMETER. DURING ALL PRELIMINARY STAGES, THE TOP OF THE STRUCTURE SHALL ALWAYS BE HIGHER THAN THE SUBGRADE.
- STRAW BALE EROSION CHECKS SHALL BE MAINTAINED AROUND ALL CATCH BASINS UNTIL ALL UPGRADIENT DISTURBED AREAS ARE STABILIZED BY PAVEMENT OR VEGETATION.
- ALL COMPONENTS OF THE DRAINAGE SYSTEM MUST BE CLEANED OF SEDIMENT BY THE APPLICANT OR HIS REPRESENTATIVE IMMEDIATELY AFTER CONSTRUCTION IS COMPLETED.
- INSPECT TEMPORARY DIVERSIONS AND THEIR COMPONENTS ONCE A WEEK AND AFTER EVERY RAINFALL. DAMAGE CAUSED BY CONSTRUCTION TRAFFIC OR OTHER ACTIVITY SHOULD BE REPAIRED BEFORE THE END OF EACH WORKING DAY.
- CHECK DAMS SHALL BE INSTALLED EVERY 300 FEET FOR SLOPES OF 1% OR LESS, EVERY 200 FEET FOR SLOPES OF 2%, EVERY 150 FEET FOR SLOPES OF 3% TO 5%, AND EVERY 100 FEET FOR SLOPES OF 5% OR GREATER.
- CHECK DAMS SHALL BE INSTALLED EVERY 20 FEET ALONG THE PROPOSED SWALE.
- SEDIMENTS SHOULD BE REMOVED FROM THE CHECK DAM WHEN IT REACHES ONE-HALF THE DAM HEIGHT.



**TRENCH INSTALLATION IN ROCK AND SOIL**  
NOT TO SCALE



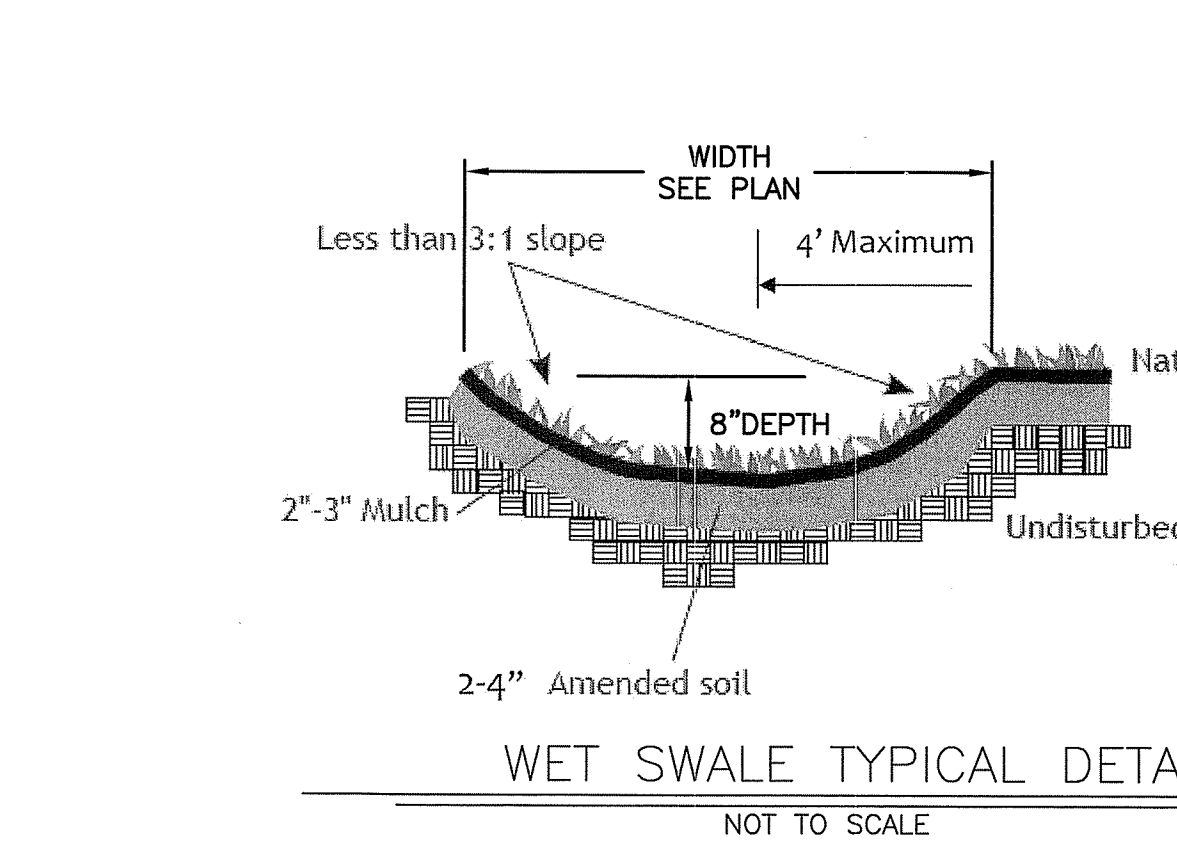
**CONCRETE WASHOUT DETAIL**  
NOT TO SCALE

**STORMWATER CALCULATION:**

IMPERVIOUS AREAS:  
 ROOF = 216 SQ. FT.  
 DRIVEWAY = 1,221 SQ. FT.  
 TOTAL = 1,437 SQ. FT.

SWALE SIZING, 160 SQ. FT. PER 1,000 SQ. FT. OF IMPERVIOUS = 230 SQ. FT. REQUIRED

SWALE PROVIDED = 233 SQ. FT. > 230 SQ. FT.; THEREFORE, OK

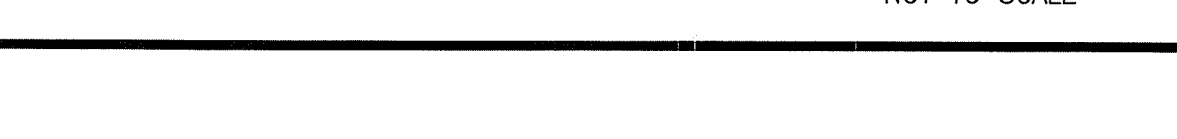


**WET SWALE TYPICAL DETAIL**  
NOT TO SCALE

**SWALE MAINTENANCE NOTES:**

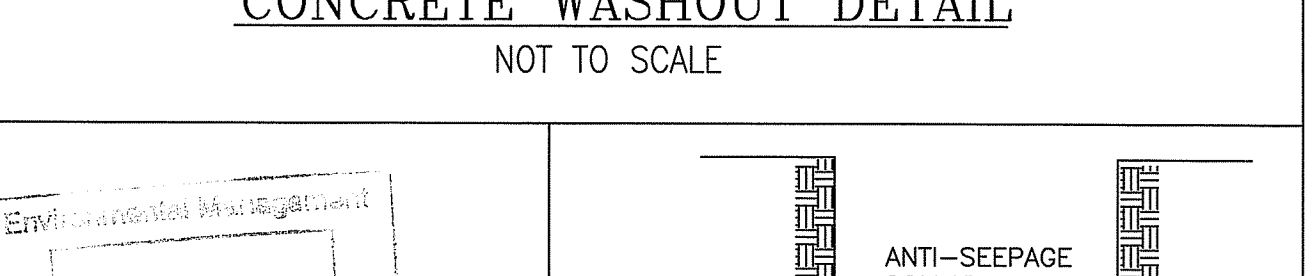
- WET SWALES SHALL BE INSPECTED ANNUALLY AND AFTER LARGE STORM EVENTS.
- ERODED SIDE SLOPES AND CHANNEL BOTTOMS SHALL BE STABILIZED AS NECESSARY.
- IF THE SURFACE OF THE SWALE BECOMES CLOGGED TO THE POINT THAT STANDING WATER IS OBSERVED ON THE SURFACE 48 HOURS AFTER THE PRECIPITATION EVENTS, THE BOTTOM SHALL BE ROTO-TILLED OR CULTIVATED TO BREAK UP ANY HARD-PACKED SEDIMENT, AND THEN RESEDED.
- VEGETATION IN SWALES SHALL BE MOWED AS REQUIRED TO MAINTAIN MINIMUM GRASS HEIGHTS IN THE 4 TO 6 INCH RANGE.
- EVERY FIVE YEARS, THE CHANNEL BOTTOM OF SWALES SHOULD BE SCRAPED TO REMOVE SEDIMENT AND TO ENSURE ORIGINAL CROSS SECTION AND INFILTRATION RATE, AND SHOULD BE SEEDING TO RESTORE GROUND COVER, WHERE NECESSARY.

**CRUSHED STONE ACCESS ROAD TYPICAL CROSS SECTION DETAIL**



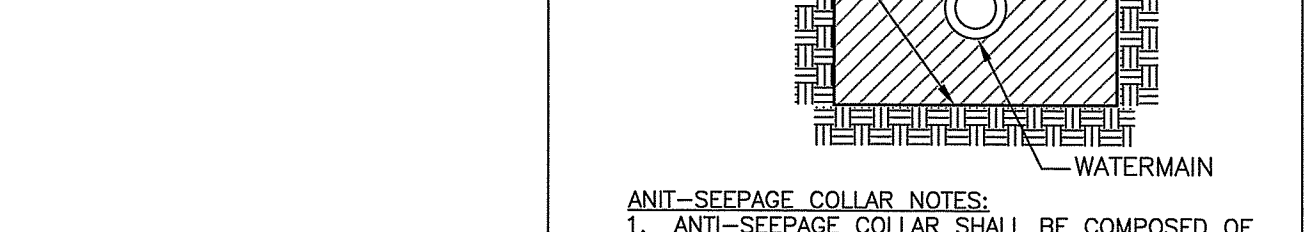
**CRUSHED STONE ACCESS ROAD TYPICAL CROSS SECTION DETAIL**  
NOT TO SCALE

**DEWATERING BASIN**



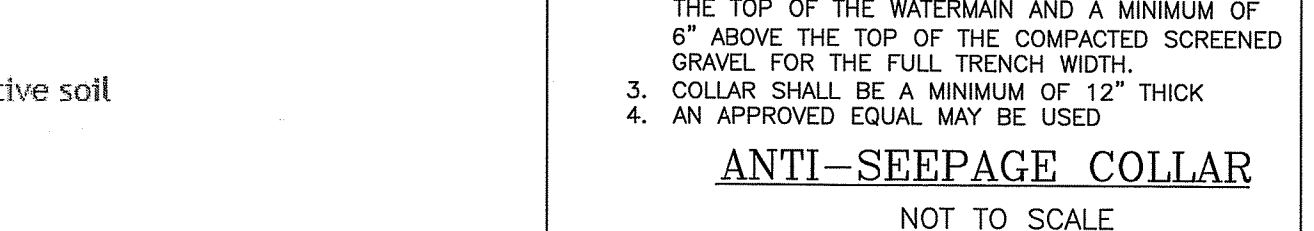
**DEWATERING BASIN**  
NOT TO SCALE

**ANTI-SEEPAGE COLLAR**



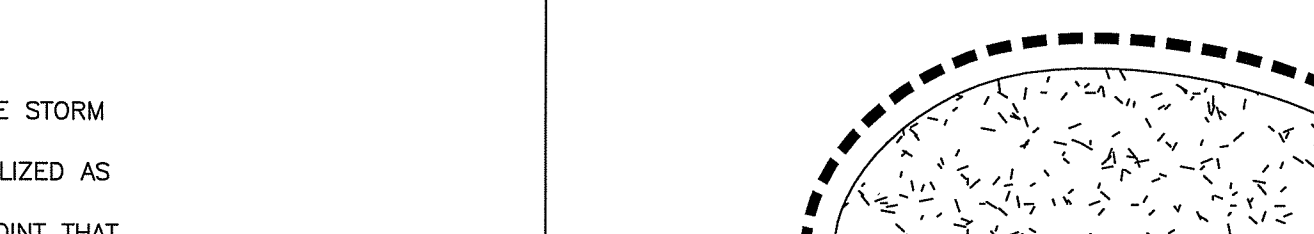
**ANTI-SEEPAGE COLLAR**  
NOT TO SCALE

**SILT FENCE DETAIL**



**SILT FENCE DETAIL**  
NOT TO SCALE

**STOCKPILE DETAIL**



**STOCKPILE DETAIL**  
NOT TO SCALE

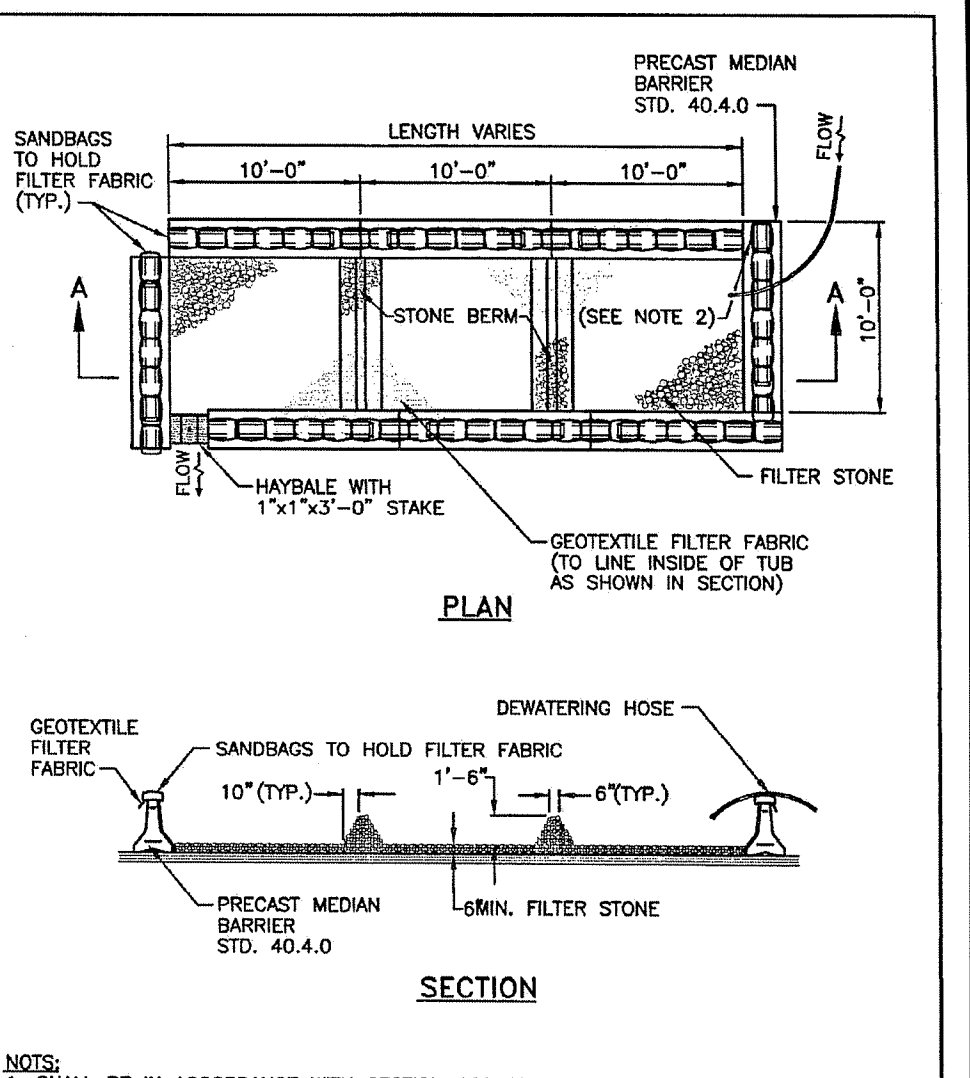
**DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**

OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
 APPROVED WITH CONDITIONS  
 AS SPECIFIED IN THE LETTER OF APPROVAL  
 DATED JUN 24 2019 FILE # 18-0071  
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

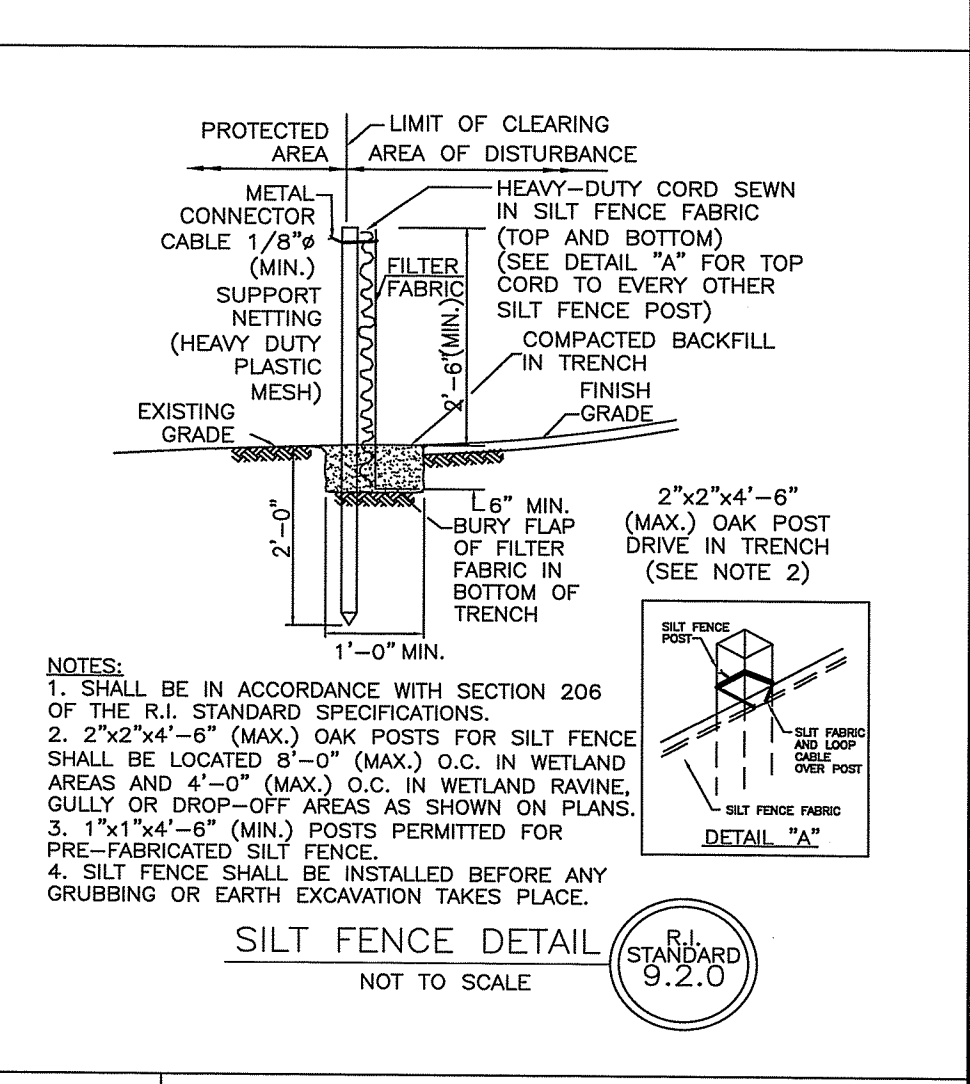
TIMOTHY J. BEHAN  
 REGISTERED PROFESSIONAL ENGINEER  
 No. 6278

NO.	DATE	DRWN	CHKD
1.	5-31-18	DKM	TJB
2.	4-30-19	KAB	TJB
3.	5-20-19	KAB	TJB

SCALE: AS SHOWN SHEET NO: 3 OF 3  
 DRAWN BY: DKM DESIGN BY: TJB CHECKED BY: TJB  
 DATE: 3/27/18 PROJECT NO.: 04145.00



RHODE ISLAND DEPARTMENT OF TRANSPORTATION  
 DEWATERING BASIN  
 JUN 15, 1998  
 R.I. STANDARD 9.7.0



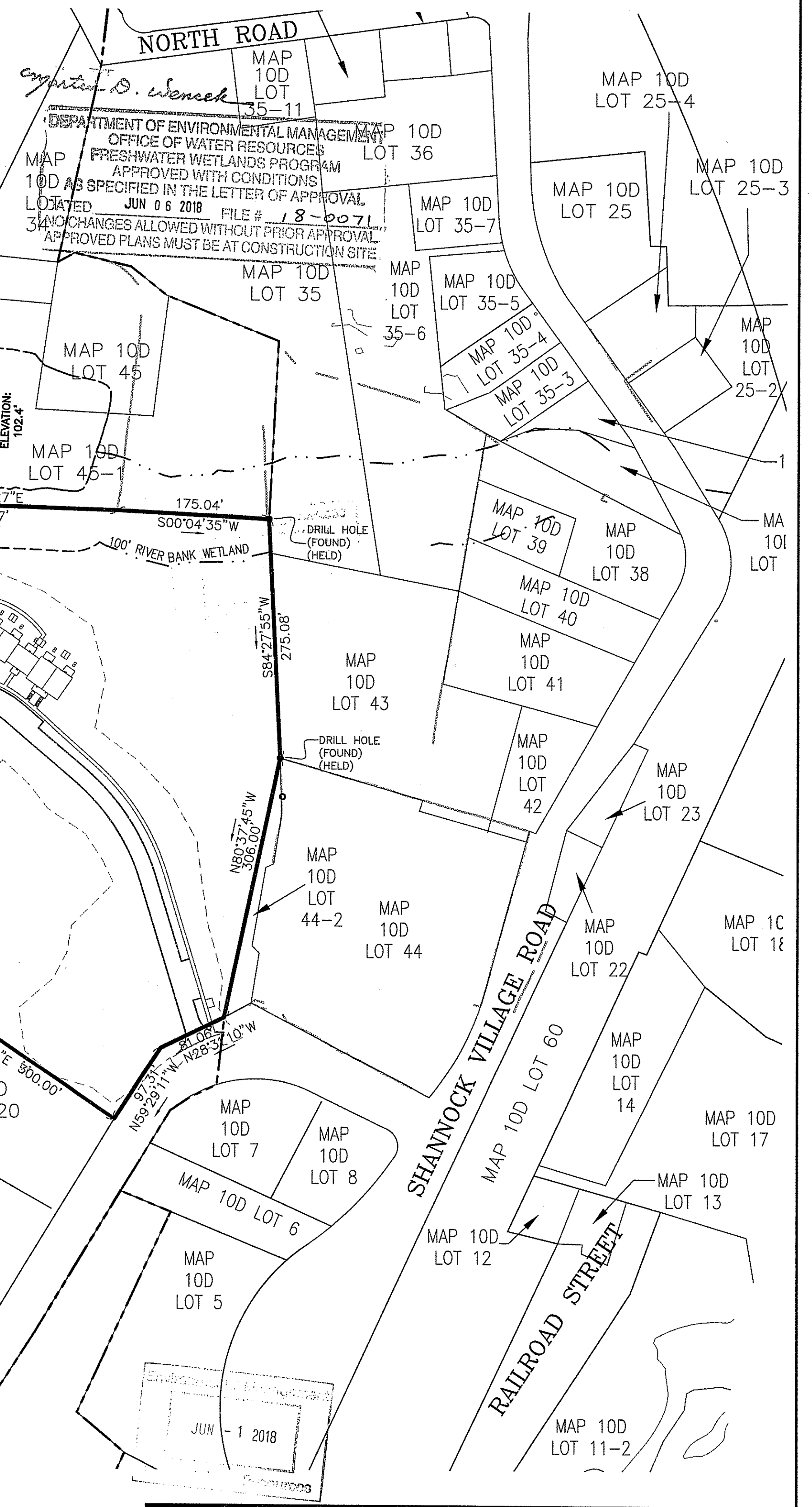
OWNER  
 ALTAMONTE RIDGE, LLC  
 861A BROAD STREET  
 PROVIDENCE, RHODE ISLAND 02907

APPLICANT  
 WOMENS DEVELOPMENT CORPORATION  
 861A BROAD STREET  
 PROVIDENCE, RHODE ISLAND 02907

COMMONWEALTH ENGINEERS & CONSULTANTS, INC.  
 400 SMITH STREET  
 PROVIDENCE, RHODE ISLAND 02908  
 401-273-6600

WELLHOUSE PLAN  
 for  
 RICHMOND RIDGE  
 A.P. 10D, LOT 46  
 on  
 WEST SHANNOCK ROAD  
 in  
 RICHMOND, RHODE ISLAND  
 DETAIL SHEET

SCALE: AS SHOWN SHEET NO: 3 OF 3  
 DRAWN BY: DKM DESIGN BY: TJB CHECKED BY: TJB  
 DATE: 3/27/18 PROJECT NO.: 04145.00



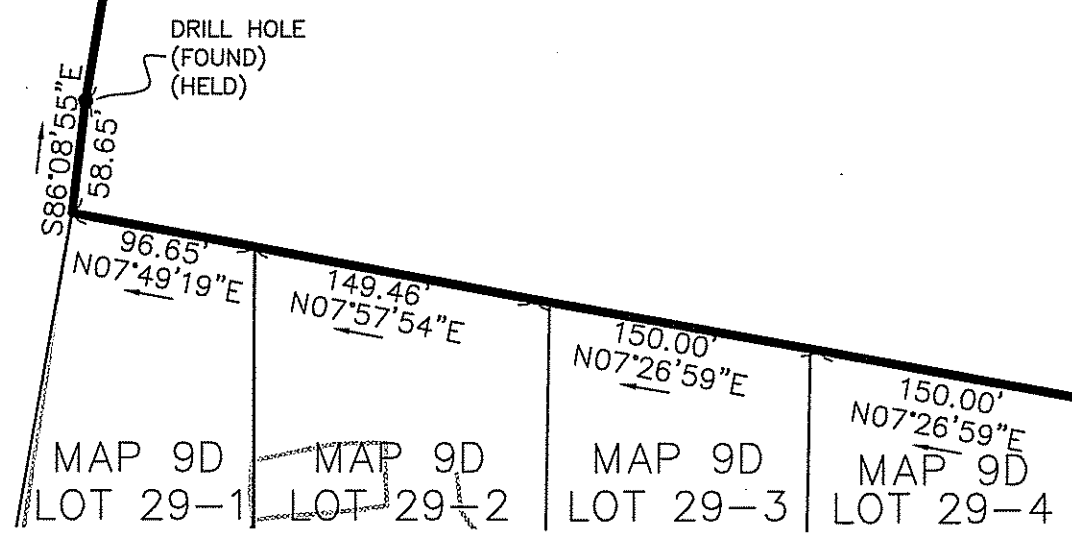
ASSESSOR'S PLAT 10D LOT 46  
AREA=2,788,648 S.F.  
(64.02 ACRES)

PROPOSED NEW CONSTRUCTION  
SEEKING DEM PERMIT

PERMITTED LIMIT OF  
DISTURBANCE: DEM  
PERMIT NO. 16-0319

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

MAP 9D  
LOT 27



LOCUS MAP SCALE: 1"=2,500'

**WETLAND STATEMENT:**  
THE PROPOSED DEVELOPMENT WILL HAVE NO ADVERSE IMPACT ON EXISTING WETLAND FEATURES IDENTIFIED ON THE PLANS AND FOR WHICH THE LIMITS OF DISTURBANCE ARE DEPICTED.

**PERMITS ISSUED:**

- RIDEM INSIGNIFICANT ALTERATION - PERMIT
  - WETLAND APPLICATION NO. 16-0319
  - RIPDES PROGRAM FILE NO. RIR 101525
  - UIC PROGRAM FILE NO. 001757
- RIDEM ONSITE WASTEWATER TREATMENT SYSTEM CONSTRUCTION PERMIT
  - APPLICATION NO. 0729-2346

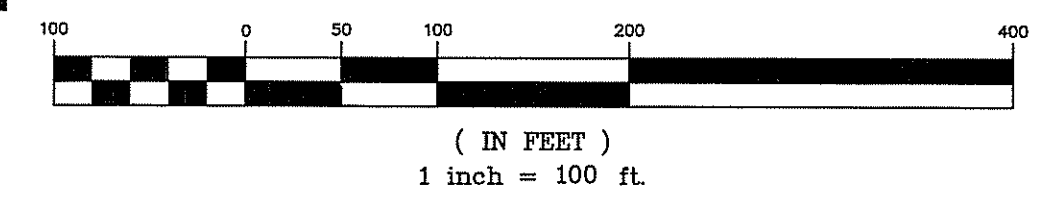
**LEGEND**

- EXISTING PROPERTY LINE
- PROPOSED PROPERTY LINE
- EXISTING STREAM
- EXISTING STONE WALL
- ABUTTING LINE
- 50' WETLAND BUFFER
- WETLAND FLAG
- BLDG. SETBACK LINE
- PROP. PERMANENT BOUND

**OWNER**  
ALTAMONTE RIDGE, LLC  
861A BROAD STREET  
PROVIDENCE, RHODE ISLAND 02907

**APPLICANT**  
WOMENS DEVELOPMENT CORPORATION  
861A BROAD STREET  
PROVIDENCE, RHODE ISLAND 02907

**GRAPHIC SCALE**



**NOTES:**

- SITE IS NOT SITUATED IN A FEMA 100-YEAR FLOOD ZONE.
- SITE IS SITUATED IN A NATURAL HERITAGE AREA.

**PLAN REFERENCE:**  
SURVEY PLAN FOR ALTAMONTE RIDGE  
A.P. 10D LOT 46 WEST SHANNOCK ROAD  
IN RICHMOND, RHODE ISLAND, PREPARED  
BY COMMONWEALTH ENGINEERS &  
CONSULTANTS, INC. AND COMMONWEALTH  
LAND SURVEYORS, INC. DATE 10-31-08  
REVISED 2-26-09 SCALE 1"=100'  
SHEET 1 OF 5

TIMOTHY J. BEHAN  
REGISTERED PROFESSIONAL ENGINEER  
No. 6278  
EXPIRES 5/31/18

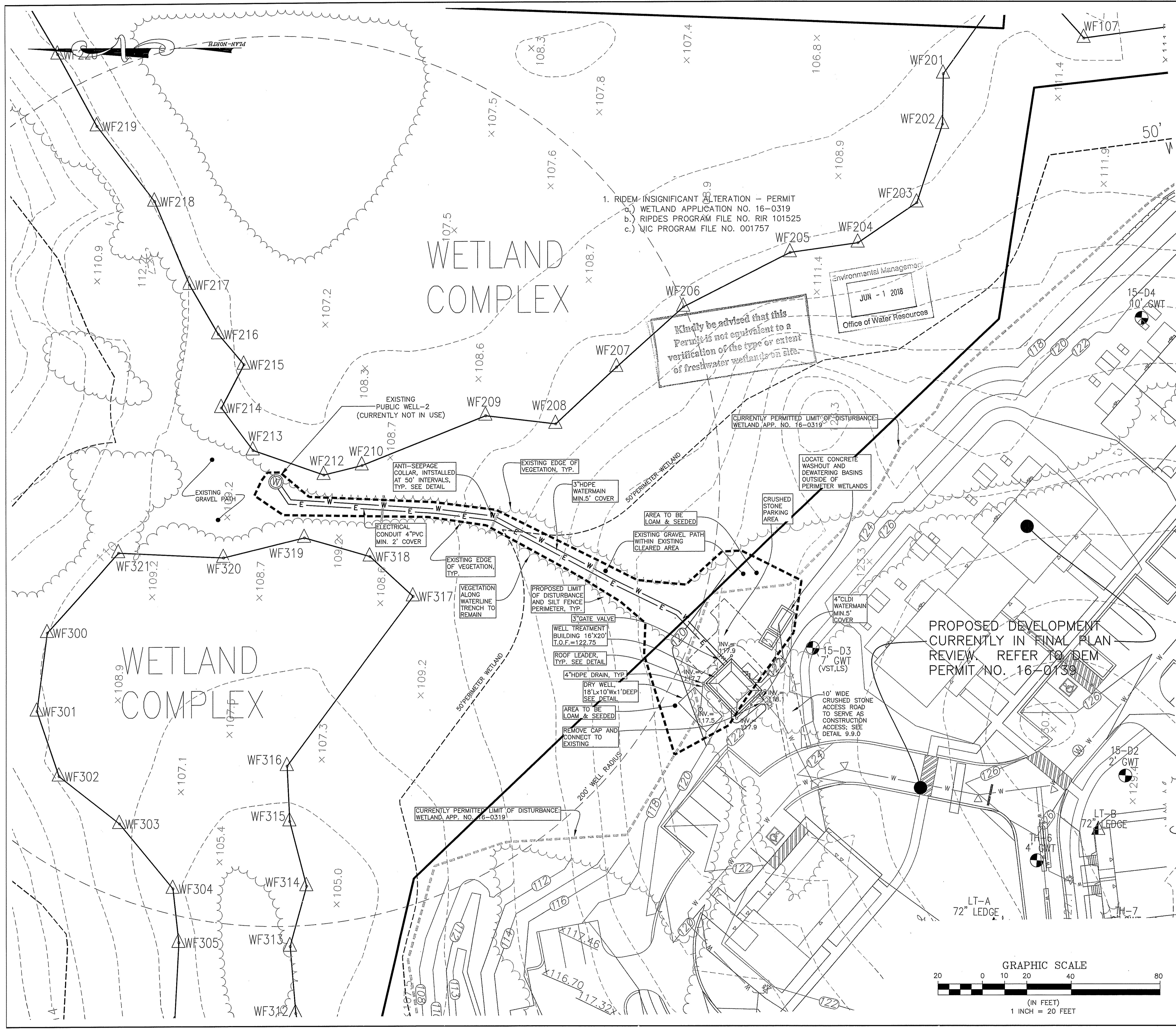
**COMMONWEALTH ENGINEERS & CONSULTANTS, INC.**  
400 SMITH STREET  
PROVIDENCE, RHODE ISLAND 02908  
401-273-6600

**REVISIONS**

No.	DATE	DRWN	CHKD
1.	5-31-18	DKM	TJB

**WELLHOUSE PLAN**  
for  
**RICHMOND RIDGE**  
A.P. 10D, LOT 46  
on  
**WEST SHANNOCK ROAD**  
in  
**RICHMOND, RHODE ISLAND**  
**LOCATION MAP**

SCALE: 1"=100'	SHEET NO: 1 OF 3
DRAWN BY: DKM	DESIGN BY: TJB
DATE: 3/27/18	CHECKED BY: TJB
	PROJECT NO.: 04145.00



**LEGEND**

- |                                   |                             |
|-----------------------------------|-----------------------------|
| EXISTING PROPERTY LINE            | PROPOSED GRANITE CURBING    |
| EXISTING STONE WALL               | PROPOSED ROADWAY BERM       |
| ABUTTER LINE                      | PROPOSED WATER LINE         |
| 50' WETLAND BUFFER                | PROPOSED SEWER LINE         |
| 100' RIVERBANK WETLAND            | PROPOSED DRAIN LINE         |
| WETLAND FLAG                      | PROPOSED RETAINING WALL     |
| PROPOSED SEWER MANHOLE            | PROPOSED UNDERGROUND WIRES  |
| PROPOSED DRAIN MANHOLE            | PROPOSED LOT LINE           |
| PROPOSED CATCH BASIN              | PROPOSED ROADWAY CENTERLINE |
| PROPOSED WATER SERVICE SHUT OFF   | PROPOSED GUARDRAIL          |
| PROPOSED SEWER CURB STOP          | PROPOSED UTILITY EASEMENT   |
| PROPOSED SIGN                     | PROPOSED DRAINAGE EASEMENT  |
| PROPOSED ROOF INFILTRATION SYSTEM |                             |
| PROPOSED UNDERGROUND FIRE CISTERN |                             |
| PROPOSED WATER VALVE              |                             |

**GENERAL NOTES:**

1. THE LOCATION AND ELEVATIONS OF ALL EXISTING UTILITIES SHALL BE CONSIDERED APPROXIMATE AND MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ANY CROSSINGS OF PROPOSED UTILITIES AND EXISTING UTILITIES. THE CONTRACTOR SHALL CONTACT THE RESPECTIVE UTILITY COMPANIES RELATIVE TO THE LOCATION AND ELEVATION OF THEIR FACILITIES AND ANY DISCREPANCIES IN THE LOCATION OF ANY UTILITY SHOWN OR ENCOUNTERED DURING CONSTRUCTION SHALL BE REPORTED TO COMMONWEALTH ENGINEERS & CONSULTANTS, INC. 400 SMITH STREET, PROVIDENCE, RHODE ISLAND 02908; (401) 273-6600.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING "DIG-SAFE" AT 1-888-344-7233 TO COMPLY WITH STATE LAW PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITY.
3. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO FAMILIARIZE HIMSELF WITH ANY APPLICABLE LOCAL, STATE AND FEDERAL LAWS GOVERNING HIS INTENDED ACTIVITIES.
4. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO MAINTAIN THE INTEGRITY OF ALL EXISTING UTILITIES, STRUCTURES, AND ABUTTING PROPERTIES. THE COST OF ANY REPAIR OR REPLACEMENT OF DAMAGED ITEMS SHALL BE BORNE BY THE CONTRACTOR.
5. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO OBTAIN ANY AND ALL PERMITS REQUIRED BY THE APPROPRIATE STATE AND MUNICIPALITY PRIOR TO COMMENCING ANY WORK.
6. EXTERIOR LIGHTING WITHIN THE FACILITY SHALL BE THE MINIMUM NECESSARY AND ALL FIXTURES SHALL BE FULL-CUT OFF FIXTURES APPROVED BY THE INTERNATIONAL DARK SKY ASSOCIATION.

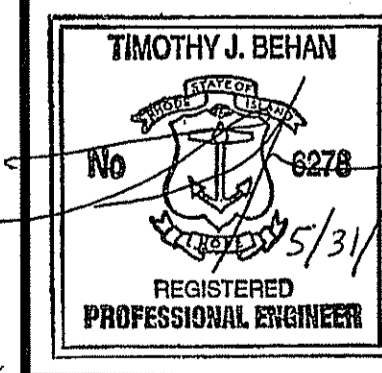
**DRAINAGE AND UTILITY NOTES:**

1. UNDERGROUND UTILITIES, ELECTRIC, TELEPHONE, FIRE ALARM AND CABLE TELEVISION SERVICES SHALL BE INSTALLED PER THE REQUIREMENTS OF THE APPLICABLE SITE UTILITY PROVIDER.
2. ALL ON SITE STORM WATER DRAINAGE PIPE SHALL BE ADS N-12 S.T. PIPE, OR AN APPROVED EQUAL UNLESS NOTED OTHERWISE ON THE PLANS.
4. ALL DRAINAGE STRUCTURES SHALL BE PRECAST CONCRETE CATCH BASINS OR MANHOLES.
5. METALLIC WARNING TAPE SHALL BE INSTALLED 12" ABOVE ALL STORM DRAIN AND OTHER UTILITIES.
6. CATCH BASINS SHALL BE EQUIPPED WITH RI DOT STD. FRAME & GRATES, SEE DETAILS. DRAIN MANHOLES SHALL BE EQUIPPED WITH RI DOT STD. FRAME AND COVERS, SEE DETAILS.
8. ALL WATER SYSTEM COMPONENTS SHALL MEET SHANNOCK WATER DISTRICT STANDARDS AND REGULATIONS AND PROJECT MANUAL FOR SUBJECT DEVELOPMENT. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR REVIEW AND APPROVAL PRIOR TO ORDERING.
9. ALL DRAINAGE SYSTEM COMPONENTS SHALL MEET RI DOT STANDARDS, RIDEM STORMWATER DESIGN AND INSTALLATION STANDARDS MANUAL STANDARDS AND PROJECT MANUAL FOR SUBJECT DEVELOPMENT. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR REVIEW AND APPROVAL PRIOR TO ORDERING.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
 APPROVED WITH CONDITIONS  
 AS SPECIFIED IN THE LETTER OF APPROVAL  
 DATED JUN 06 2018 FILE #  
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE.  
*Walter D. Wenczek*

OWNER: ALTAMONTE RIDGE, LLC  
 861A BROAD STREET  
 PROVIDENCE, RHODE ISLAND 02907

APPLICANT: WOMENS DEVELOPMENT CORPORATION  
 861A BROAD STREET  
 PROVIDENCE, RHODE ISLAND 02907

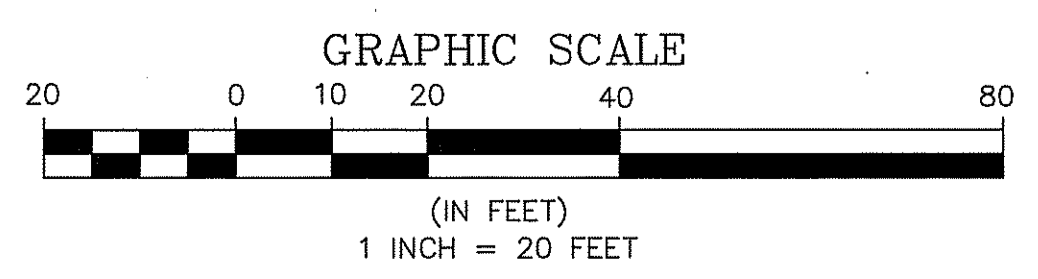


**REVISIONS**

No.	DATE	DRWN	CHKD
1.	5-31-18	DKM	TJB

**WELLHOUSE PLAN**  
 for  
**RICHMOND RIDGE**  
 A.P. 10D, LOT 46  
 on  
 WEST SHANNOCK ROAD  
 in  
 RICHMOND, RHODE ISLAND  
**UTILITIES & GRADING PLAN**

SCALE: 1"=20'  
 SHEET NO: 2 OF 3  
 DRAWN BY: DKM DESIGN BY: TJB CHECKED BY: TJB  
 DATE: 3/27/18 PROJECT NO.: 04145.00



1. RIDEM INSIGNIFICANT ALTERATION - PERMIT
  - a.) WETLAND APPLICATION NO. 16-0319
  - b.) RIDDES PROGRAM FILE NO. RIR 101525
  - c.) NIC PROGRAM FILE NO. 001757

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

PROPOSED DEVELOPMENT  
 CURRENTLY IN FINAL PLAN  
 REVIEW, REFER TO DEM  
 PERMIT NO. 16-0319

**GENERAL EROSION CONTROL NOTES:**

- THE STATE OF RHODE ISLAND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AMENDED AUG. 2013, AND THE RHODE ISLAND STANDARD DETAILS ARE MADE A PART HEREOF AS FULLY AND COMPLETELY AS IF ATTACHED HERETO. THE 2013 STANDARD SPECIFICATIONS MAY BE OBTAINED AT THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION WEB PAGE. THESE SPECIFICATIONS ARE MADE A PART HEREOF AS FULLY AND COMPLETELY AS IF ATTACHED HERETO.
- ALL REQUIRED SITE IMPROVEMENTS SHALL BE INSPECTED BY THE TOWN ENGINEER TO ENSURE SATISFACTORY COMPLETION. IN NO CASE SHALL THE INSTALLATION OF ANY IMPROVEMENTS BE STARTED UNTIL PRIOR NOTIFICATION IS GIVEN TO THE TOWN ENGINEER. AT LEAST A 48-HOUR NOTICE SHALL BE GIVEN TO THE TOWN ENGINEER PRIOR TO ANY SUCH START OF CONSTRUCTION. THE TOWN ENGINEER SHALL BE RESPONSIBLE TO NOTIFY UTILITIES A FINAL INSPECTION OF ALL SITE IMPROVEMENTS, UTILITIES AND GRADING WILL BE MADE TO DETERMINE WHETHER THE WORK IS SATISFACTORY AND IN SUBSTANTIAL AGREEMENT WITH THE APPROVED FINAL CONSTRUCTION DRAWING AND THE TOWN SPECIFICATIONS.
- LOCATION AND DEPTH OF EXISTING UTILITIES ARE APPROXIMATE AND HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL CHECK AND VERIFY LOCATIONS OF ALL EXISTING UTILITIES BOTH UNDERGROUND AND OVERHEAD. ANY DAMAGE TO EXISTING UTILITIES AS SHOWN OR NOT SHOWN ON THE PLANS SHALL BE THE CONTRACTOR'S RESPONSIBILITY. COSTS OF SUCH DAMAGE SHALL BE BORNE BY THE CONTRACTOR. NO EXCAVATION SHALL BE DONE UNTIL ALL INVOLVED UTILITY COMPANIES ARE NOTIFIED 48-HOURS IN ADVANCE. THE CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY THE CONTRACTOR'S SHOWN OR NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY THE CONTRACTOR'S SHOWN OR NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY THE CONTRACTOR'S SHOWN OR NOT SHOWN ON THE PLANS.
- IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO OBTAIN ANY AND ALL PERMITS REQUIRED BY, BUT NOT LIMITED TO, THE STATE OF RHODE ISLAND, THE FEDERAL GOVERNMENT, LOCAL (TOWN/CITY) GOVERNMENT AND ALL INDIVIDUAL UTILITY COMPANIES PRIOR TO COMMENCING ANY WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL TEMPORARY SEDIMENTATION AND EROSION CONTROLS.
- ALL MATERIAL FOR FILL SHALL BE CLEAN AND FREE OF MATTER WHICH COULD POLLUTE ANY DOWN STREAM WATERCOURSE.
- FILL MATERIAL SHALL BE COMPACTED IN ONE FOOT (MAXIMUM) LIFTS TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED IN ACCORDANCE WITH ASTM D-1557 (MODIFIED PROCTOR TEST).
- ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- ALL AREAS NOT TO BE DEVELOPED THAT ARE COMPACTED BY CONSTRUCTION ACTIVITIES SHALL BE RESTORED BY TILLING THE TOP 12" OF SOIL.
- ANY TREE LOCATED ON PUBLIC PROPERTY THAT IS DAMAGED OR REMOVED DURING CONSTRUCTION, SHALL BE REPLACED WITH AN EQUIVALENT TREE.

**EROSION CONTROL AND SOIL STABILIZATION PROGRAM:**

- ALL STRAW BALES OR TEMPORARY PROTECTION SHALL REMAIN IN-PLACE UNTIL AN ACCEPTABLE STAND OF GRASS OR APPROVED GROUND COVER IS ESTABLISHED.
  - THE TOPSOIL SHALL HAVE A SANDY LOAM TEXTURE RELATIVELY FREE OF SUBSIL MATERIAL, STONES, ROOTS, LUMPS OF SOIL, TREE LIMBS, TRASH OR CONSTRUCTION DEBRIS AND SHALL CONFORM WITH RHODE ISLAND STANDARD SPECIFICATION M.20.01, AS AMENDED.
  - THE SEED MIX SHALL BE INOCULATED WITHIN 24-HOURS BEFORE MIXING AND PLANTING, WITH APPROPRIATE INOCULUM FOR EACH VARIETY. THE DESIGN MIX UTILIZED IN ALL DISTURBED AREAS TO BE SEEDING SHALL BE COMPRISED OF THE FOLLOWING:
- | TYPE                | % BY WEIGHT | SEEDING DATE      |
|---------------------|-------------|-------------------|
| CREeping RED FESCUE | 70          | APRIL 1 - JUNE 15 |
| ASTORIA BENTGRASS   | 5           | AUGUST 15 - OCT.  |
| BIRDFOOT TREETOP    | 5           |                   |
| PERENNIAL RYEGRASS  | 10          |                   |
- APPLICATION RATE: 100 LBS/ACRE  
LIMING AND FERTILIZING AS REQUIRED TO COMPLY OR UPGRADE EXISTING CONDITIONS.
- THE CONTRACTOR MUST REPAIR AND/OR RESEED ANY AREAS THAT DO NOT DEVELOP WITHIN THE PERIOD OF ONE YEAR, AND SHALL DO SO AT NO ADDITIONAL EXPENSE.
  - THE NORMAL ACCEPTABLE SEASONAL SEEDING DATES ARE APRIL 1ST THROUGH OCTOBER 15TH.
  - STABILIZATION OF ONE FORM OR ANOTHER AS DESCRIBED ABOVE SHALL BE ACHIEVED WITHIN FIFTEEN (15) DAYS OF FINAL GRADING.
  - STOCKPILES OF TOPSOIL AND EARTH MATERIALS SHALL NOT BE LOCATED NEAR WATERWAYS. THEY SHALL HAVE SLOPES NO GREATER THAN 2:1 AND STOCKPILES SHALL ALSO BE SEEDING AND/OR STABILIZED. THE STOCKPILES SHALL BE SURROUNDED BY STACKED STRAW BALES AND/OR SILT FENCE.
  - ON SLOPES STEEPER THAN 30% MULCH APPLICATIONS SHALL BE TACKED DOWN BY "CRIMPING" OR "TRACKING".
  - TREES TO BE RETAINED SHALL BE FENCED OR ROPED OFF TO PROTECT THEM FROM CONSTRUCTION EQUIPMENT.
  - ALL PROPOSED PLANTINGS MUST BE ACCOMPLISHED AS EARLY AS POSSIBLE UPON COMPLETION OF GRADING AND CONSTRUCTION, AND AT LEAST PRIOR TO ANY ON-SITE OCCUPANCY.
  - ALL PROPOSED PLANTINGS MUST BE MAINTAINED BY THE PROPERTY OWNER TO ENSURE SURVIVAL.
  - SHOULD ANY OR ALL OF THE PROPOSED PLANTS FAIL TO SURVIVE AT LEAST ONE (1) FULL GROWING SEASON FROM THE TIME THEY HAVE BEEN PLANTED, THE OWNER SHALL BE FULLY RESPONSIBLE FOR REPLACING AND MAINTAINING THE SAME PLANT SPECIES FOR ONE (1) ADDITIONAL GROWING SEASON.
  - ALL DISTURBED AREAS MUST BE SEEDING OR PLANTED WITHIN THE CONSTRUCTION SEASON.
  - TEMPORARY SEEDING MUST BE DONE WITHIN ONE (1) MONTH AFTER DISTURBANCE.
  - ALL DISTURBED AREAS MUST BE PERMANENTLY SEEDING OR PLANTED BEFORE OCTOBER 1ST, IF NOT THEY MUST BE TEMPORARILY SEEDING.
  - SLOPES CONSTRUCTED AT, OR STEEPER THAN, 15% SHALL HAVE TEMPORARY EROSION CONTROL MATTING UTILIZED AS A SUPPORTIVE METHOD IN ADDITION TO THE METHODS DESCRIBED ABOVE UNLESS IN THE CASE WHERE PERMANENT TURF REINFORCEMENT MATS ARE INSTALLED IMMEDIATELY UPON CONSTRUCTION OF THE SLOPE. IN NO CASE SHALL STEEP SLOPES BE LEFT UNPROTECTED.
  - ALL PROPOSED INLETS AND OUTLETS SHALL BE PROTECTED WITH TURF REINFORCEMENT AS PROPOSED ON THE PLANS AND/OR STRAW BALE INLET AND OUTLET PROTECTION DEVICES. SEE DETAILS.
  - ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARDS AND PROCEDURES SET FORTH IN THE TOWN ZONING ORDINANCES; RHODE ISLAND STORMWATER DESIGN AND INSTALLATION STANDARDS MANUAL, AMENDED MARCH 2015 AS PREPARED BY THE RIDEM AND GRAC, AND RHODE ISLAND EROSION AND SEDIMENT CONTROL HANDBOOK AS PREPARED BY RHODE ISLAND STATE CONSERVATION COMMITTEE, REVISED 2014, (AS REVISED).

**SEQUENCE AND STAGING OF LAND DISTURBING ACTIVITIES:**

- CONTRACTOR TO REFER TO RIDEM RIDES SOIL EROSION AND SEDIMENT CONTROL PLAN (SESCP) REPORT AS WELL AS THESE DRAWINGS.
- SURVEY AND STAKE LIMIT OF DISTURBANCE FOR PLACEMENT OF SEDIMENTATION CONTROL DEVICES (HAYBALE OR SILT FENCE). IN NO CASE SHALL THE LIMIT OF WORK EXTEND BEYOND THE SEDIMENTATION CONTROL DEVICES.
- PLACE PERIMETER SEDIMENTATION ENTRANCE DEVICE (S.E.D.) CLEAR AND GRUB SITE.
- CONSTRUCT UTILITIES, WELL HOUSE, AND PARKING AREA.
- CONSTRUCT DRYWELL.
- ALL DISTURBED AREAS SHALL BE LOAMED AND SEEDING WITH GRASS.
- REMOVE TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER A PERMANENT GROWTH OF VEGETATION IS ESTABLISHED. REMOVE ALL ACCUMULATED SEDIMENTS IN DRAINAGE SYSTEMS.

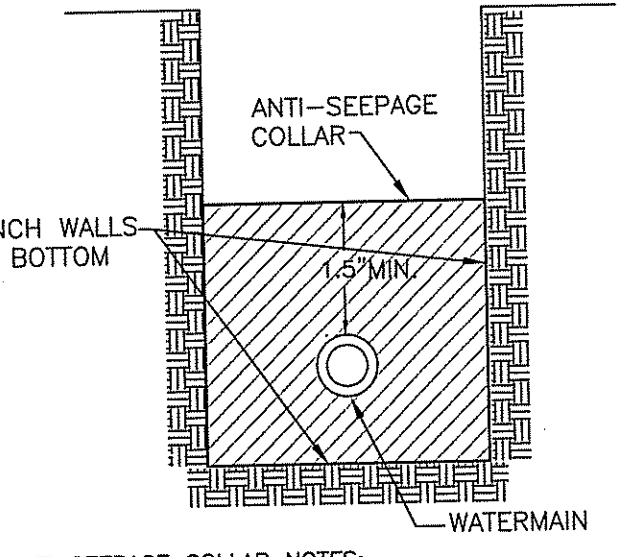
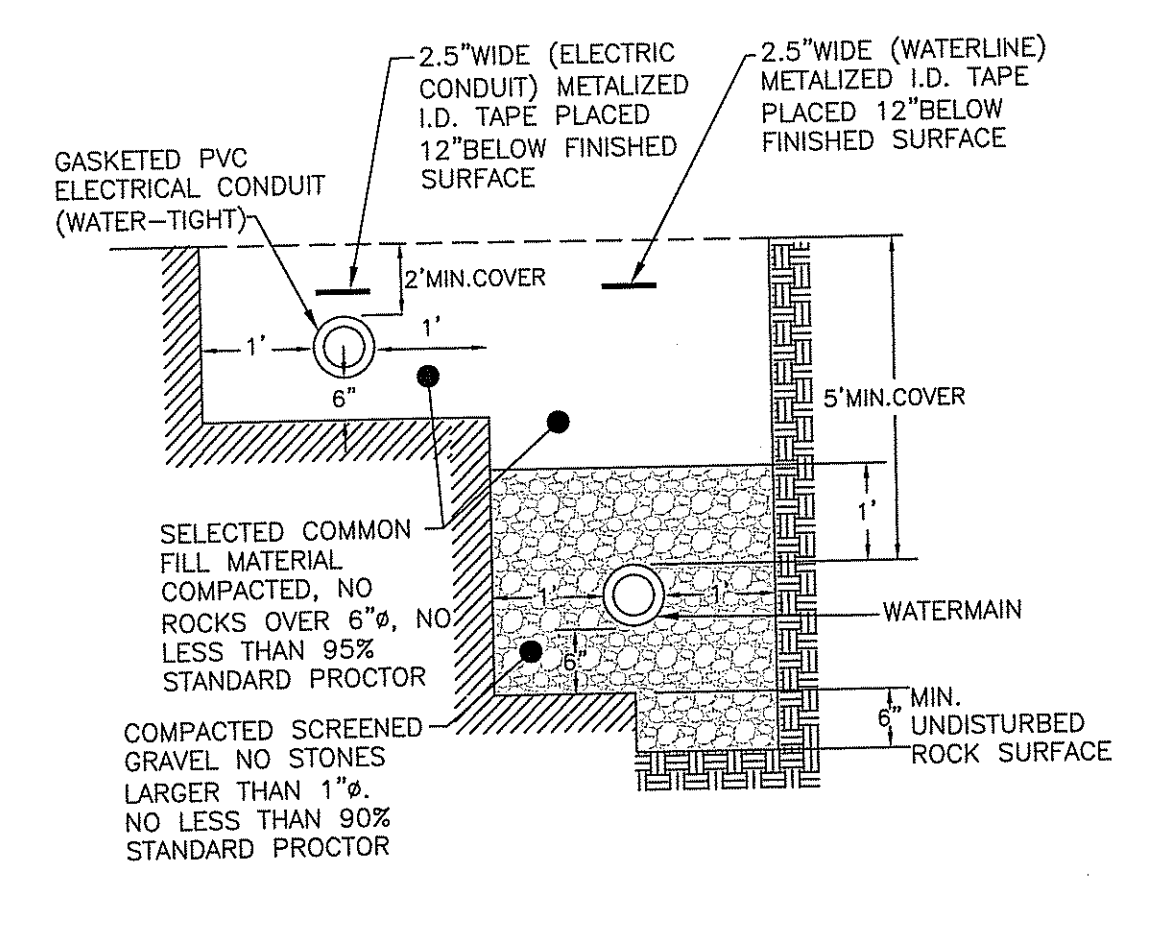
**POLLUTION PREVENTION NOTES:**

- REFERENCE IS MADE TO APPENDIX G "POLLUTION PREVENTION AND SOURCE CONTROLS" OF THE RHODE ISLAND STORMWATER DESIGN AND INSTALLATION STANDARDS MANUAL, AMENDED 2015. THIS DOCUMENT SHALL BE REFERENCED WHEN IMPLEMENTING THE POLLUTION PREVENTION TECHNIQUES. A BRIEF SUMMARY OF THE TECHNIQUES IS PROVIDED BELOW FOR THE ABOVE REFERENCE FOR ALL TECHNIQUES TO BE IMPLEMENTED.
- SOLID WASTE CONTAINMENT:**
  - OWNER TO PROVIDE TRASH CONTAINER, CONTAINER TO HAVE A COVER TO PREVENT TRASH FROM BLOWING OUT.
  - KEEP STREET/PARKING AREA ANNUALLY.
- HAZARDOUS MATERIALS CONTAINMENT:**
  - CONTRACTOR TO STORE ALL HAZARDOUS MATERIALS INSIDE STORAGE LOCKERS OR OTHER APPROVED METHODS WHICH HAVE SECONDARY CONTAINMENT SYSTEMS.
  - SECONDARY CONTAINMENT MUST BE INCLUDED WHEREVER SPILLS MIGHT OCCUR (E.G. FUELING AND HAZARDOUS MATERIAL TRANSFER AND LOADING AREAS).
- ROADS AND PARKING AREA MANAGEMENT:**
  - USE DESIGN CHEMICALS JUDICIOUSLY SINCE THEY CAUSE WATER QUALITY PROBLEMS. PROVIDE AND SPREAD IN ACCORDANCE WITH APPENDIX G RECOMMENDATIONS.
  - PLOW SNOW AND STORE ACCUMULATED SNOW PILES AWAY FROM DRYWELL SYSTEMS.
  - DEBRIS SHOULD BE CLEANED FROM THE SITE PRIOR TO USING THE SITE FOR SNOW DISPOSAL.
  - DEBRIS SHOULD BE CLEANED FROM THE SITE AND PROPERLY DISPOSED OF AT THE END OF THE SNOW SEASON.
- SEPTIC SYSTEM:**
  - NO SEPTIC SYSTEMS PROPOSED.
- LAWN, GARDEN, AND LANDSCAPE MANAGEMENT:**
  - LAWN CONVERSION - REDUCE THE AMOUNT OF LAWN BY REPLANTING LAWN WITH GARDEN BEDS CONTAINING FLOWERS/SHRUBS. LAWNS REQUIRE MORE MAINTENANCE THAN FLOWER BEDS.
  - SOIL BUILDUP - MAINTAIN A HEALTHY LAWN BY TESTING SOIL FOR PH, FERTILITY, COMPACTURE, TEXTURE, AND EARTH WORM CONTENT.
  - GRASS SELECTION - SELECT DROUGHT TOLERANT GRASS SPECIES. REFER TO APPENDIX G FOR ADDITIONAL INFORMATION.
  - MOWING AND THATCH MANAGEMENT - KEEP GRASS HEIGHT HIGH SUCH AS 2 TO 3 INCHES IN HEIGHT. THIS WILL REDUCE WEED GROWTH.
  - WEED MANAGEMENT - MINIMIZE FERTILIZATION. FERTILIZER DOES NOT SPREAD ONTO IMPERVIOUS SURFACES. REFRAIN FROM THE USE OF PHOSPHATE BASED FERTILIZERS. REFER TO APPENDIX G FOR ADDITIONAL INFORMATION.
  - WEED MANAGEMENT - NEVER USE CHEMICAL HERBICIDES TO ELIMINATE OR CONTROL WEEDS. OWNER SHALL REMOVE WEEDS BY PULLING OR DIGGING OUT. REFER TO APPENDIX G FOR ADDITIONAL INFORMATION.
  - PEST MANAGEMENT - LIMIT PESTICIDE USE. CHOOSE PESTICIDES THAT POSE THE LEAST RISK TO HUMAN HEALTH AND THE ENVIRONMENT. REFER TO APPENDIX G FOR ADDITIONAL INFORMATION.
  - SENSIBLE IRRIGATION - WATER NO MORE THAN 1" PER WEEK. USE DROUGHT-RESISTANT GRASSES. CUT GRASS AT 2-3 INCHES.

**SEDIMENTATION CONTROL PROGRAM:**

- EXTREME CARE SHALL BE EXERCISED SO AS TO PREVENT ANY UNSUITABLE MATERIAL FROM ENTERING DOWNSCREEN AND STORMWATER DRAINAGE SYSTEMS.
- DURING CONSTRUCTION, THE CONTRACTOR AND/OR WATERCOURSES SHALL BE RESPONSIBLE FOR MAINTAINING DRAINAGE AND RUN-OFF FLOW DURING STORMS.
- SEDIMENTATION CONTROL DEVICES SHALL BE INSPECTED CLOSELY AND MAINTAINED PROMPTLY AFTER EACH RAINFALL. CARE SHALL BE TAKEN SO AS NOT TO PLACE "REMOVED SEDIMENTS" WITHIN THE PATH OF WATERCOURSES OR THOSE AREAS SUBJECT TO STORMWATER FLOWAGE.
- ADDITIONAL STRAW BALES OR SANDBAGS SHALL BE LOCATED AS CONDITIONS WARRANT OR AS DIRECTED BY THE ENGINEER.
- SEDIMENTATION TRAPS SHALL BE PROVIDED AT ALL DRAINAGE STRUCTURES DURING CONSTRUCTION (SILT SACS, STRAW BALES, TEMPORARY DITCHES, ETC).
- EROSION AND SEDIMENTATION CONTROLS SHALL BE INSTALLED AT THE SITE PRIOR TO THE START OF CONSTRUCTION AND TO BE PROPERLY MAINTAINED UNTIL ALL DISTURBED AREAS ARE STABILIZED INCLUDING:
  - THE INSTALLATION OF AN EROSION CONTROL FENCE IN ALL LOCATIONS SHOWN ON THE APPROVED SITE PLANS AND WHERE OTHERWISE NECESSARY TO PREVENT SEDIMENTS FROM ENTERING DOWNSCREEN WATERCOURSES AND STORMWATER DRAINAGE SYSTEMS.
  - ALL DISTURBED AREAS ARE TO BE PERMANENTLY STABILIZED WITH APPROVED GROUND COVER PRIOR TO THE COMPLETION OF THE PROJECT. AREAS EXPOSED FOR EXTENDED PERIODS ARE TO BE COMPLETELY COVERED WITH SPREAD STRAW MULCH.
  - CATCH BASINS WILL BE PROTECTED WITH SILT SACS & STRAW BALE FILTERS THROUGHOUT THE CONSTRUCTION PERIOD AND UNTIL ALL DISTURBED AREAS ARE THOROUGHLY STABILIZED. SUMP ARE TO BE CLEANED IMMEDIATELY FOLLOWING INSTALLATION OF PERMANENT PAVEMENT.
  - OUTFALLS ARE TO BE PROTECTED BY STRAW BALE FILTERS UNTIL DISTURBED AREAS ARE PERMANENTLY STABILIZED WITH APPROVED GROUND COVER.
  - ALL CONTROL MEASURES WILL BE MAINTAINED IN EFFECTIVE CONDITION THROUGHOUT THE CONSTRUCTION PERIOD.
- THE LIMITS OF ALL CLEARING, GRADING AND DISTURBANCE SHALL BE KEPT TO A MINIMUM WITHIN THE PROPOSED AREA OF CONSTRUCTION. ALL AREAS OUTSIDE OF THE LIMITS OF DISTURBANCE SHALL REMAIN TOTALLY UNDISTURBED.
- UPON COMPLETION OF CONSTRUCTION OF SITE IMPROVEMENTS AND THE STORMWATER DRAINAGE SYSTEM, ALL CATCH BASINS AND STORM DRAIN PIPING SHALL BE CLEANED OF SEDIMENT.
- AT NO TIME DURING CONSTRUCTION SHALL THE SUBGRADE OF THE SITE BE SUCH THAT SURFACE RUNOFF WILL BE PERMITTED TO DIRECTLY ENTER ANY DRAINAGE STRUCTURE. A TEMPORARY DEPRESSED AREA AROUND THE STRUCTURE SHALL BE INCORPORATED AS A SEDIMENTATION TRAP. THE MOUTH OF THE TRAP SHALL BE LINED WITH STRAW BALES AROUND THE COMPLETE PERIMETER. DURING ALL PRELIMINARY STAGES, THE TOP OF THE STRUCTURE SHALL ALWAYS BE HIGHER THAN THE SUBGRADE.
- STRAW BALE EROSION CHECKS SHALL BE MAINTAINED AROUND ALL CATCH BASINS UNTIL ALL UPGRADIENT DISTURBED AREAS ARE STABILIZED BY PAVEMENT OR VEGETATION.
- ALL COMPONENTS OF THE DRAINAGE SYSTEM MUST BE CLEANED OF SEDIMENT BY THE APPLICANT OR HIS REPRESENTATIVE IMMEDIATELY AFTER CONSTRUCTION IS COMPLETED.
- INSPECT TEMPORARY DIVERSIONS AND THEIR COMPONENTS ONCE A WEEK, AND AFTER EVERY RAINFALL. DAMAGE CAUSED BY CONSTRUCTION TRAFFIC OR OTHER ACTIVITY SHOULD BE REPAIRED BEFORE THE END OF EACH WORKING DAY.
- CHECK DAMS SHALL BE INSTALLED EVERY 300 FEET FOR SLOPES OF 1% OR LESS, EVERY 200 FEET FOR SLOPES OF 2%, EVERY 150 FEET FOR SLOPES OF 3% TO 5%, AND EVERY 100 FEET FOR SLOPES OF 5% OR GREATER.
- CHECK DAMS SHALL BE INSTALLED EVERY 20 FEET ALONG THE PROPOSED SWALE.
- SAND AND SALT SHALL NOT BE USED ON DRIVEWAY.
- DRIVEWAY SHALL NOT BE REPAIRED OR RESEALED WITH IMPERMEABLE PRODUCTS.
- CRUSHED STONE SHALL BE REPLACED OR RE-GRADING PERFORMED AS NECESSARY TO MAINTAIN THE MINIMUM DEPTH OF STONE AND A LEVEL BOTTOM SURFACE.

**TRENCH INSTALLATION IN ROCK AND SOIL**

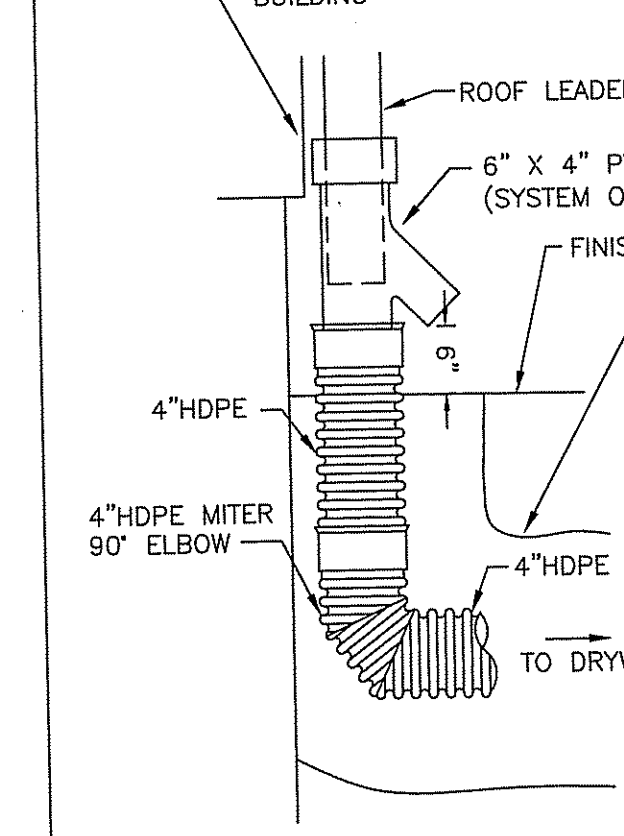
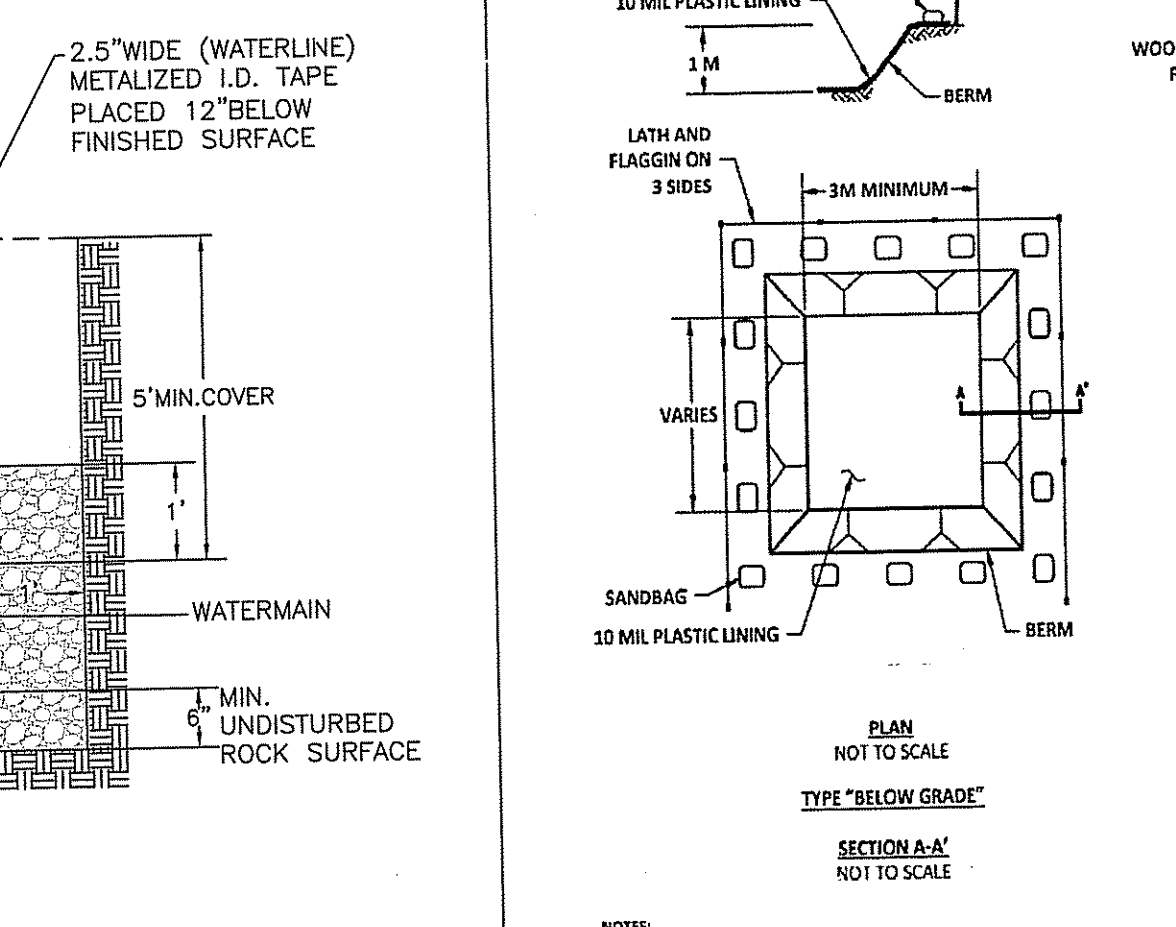


**ANTI-SEEPAGE COLLAR NOTES:**  
1. ANTI-SEEPAGE COLLAR SHALL BE COMPOSED OF IMPERVIOUS MATERIAL (UNIFIED SOIL CLASSIFICATION GC, SC, CH OR CL AND AT LEAST 30% PASSING 200 SIEVE) COMPACTED TO 95% MATERIAL SHALL BE FREE OF ROOTS, STUMPS, WOOD, RUBBISH, STONES GREATER THAN 6", FROZEN OR OTHER OBJECTIONAL MATERIALS.  
2. COLLAR SHALL BE INSTALLED FROM THE BOTTOM OF THE TRENCH UP TO A MINIMUM OF 18" ABOVE THE TOP OF THE WATERMAIN AND A MINIMUM OF 6" ABOVE THE TOP OF THE COMPACTED SCREENED GRAVEL FOR THE FULL TRENCH WIDTH.  
3. COLLAR SHALL BE A MINIMUM OF 12" THICK AND AN APPROVED EQUAL MAY BE USED.

**ANTI-SEEPAGE COLLAR**

NOT TO SCALE

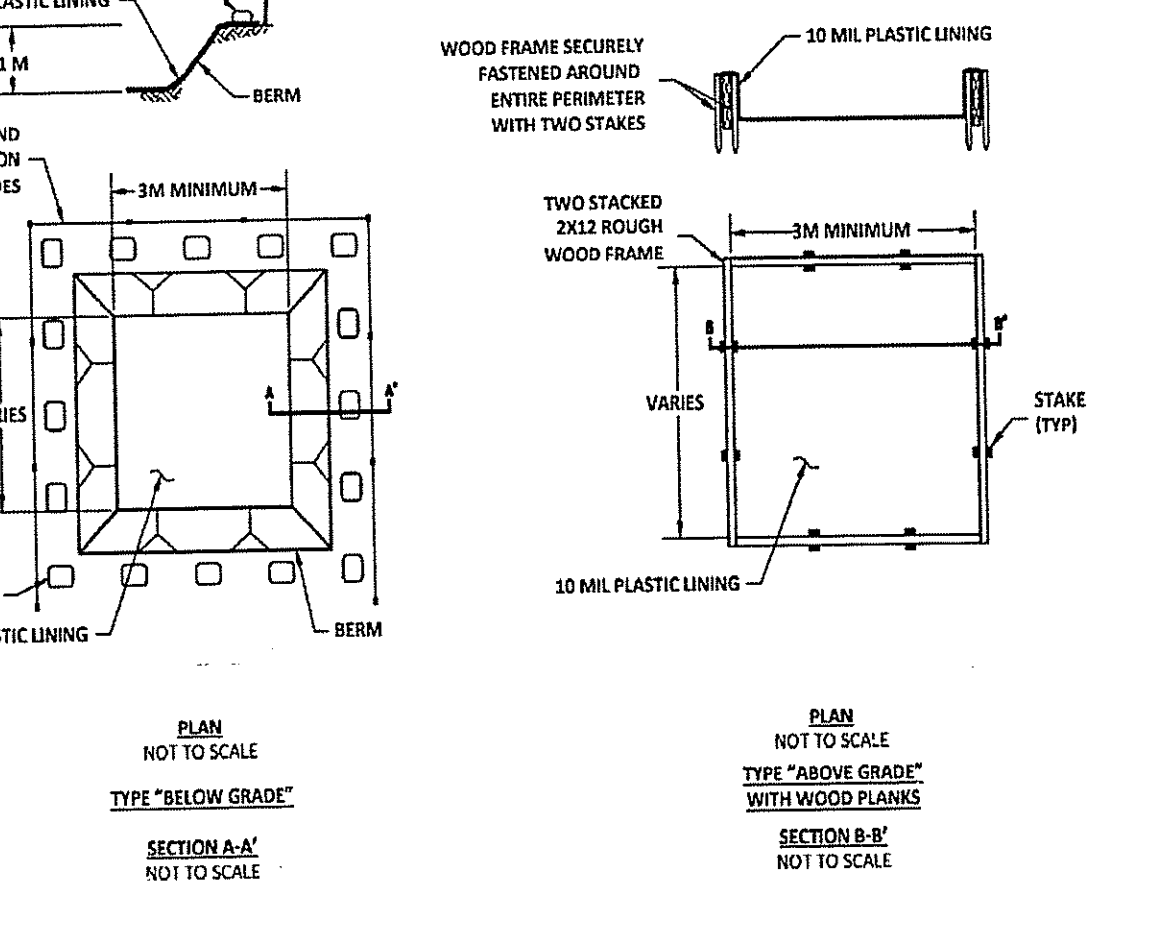
**TRENCH INSTALLATION IN ROCK AND SOIL**



**ROOF LEADER DETAIL**

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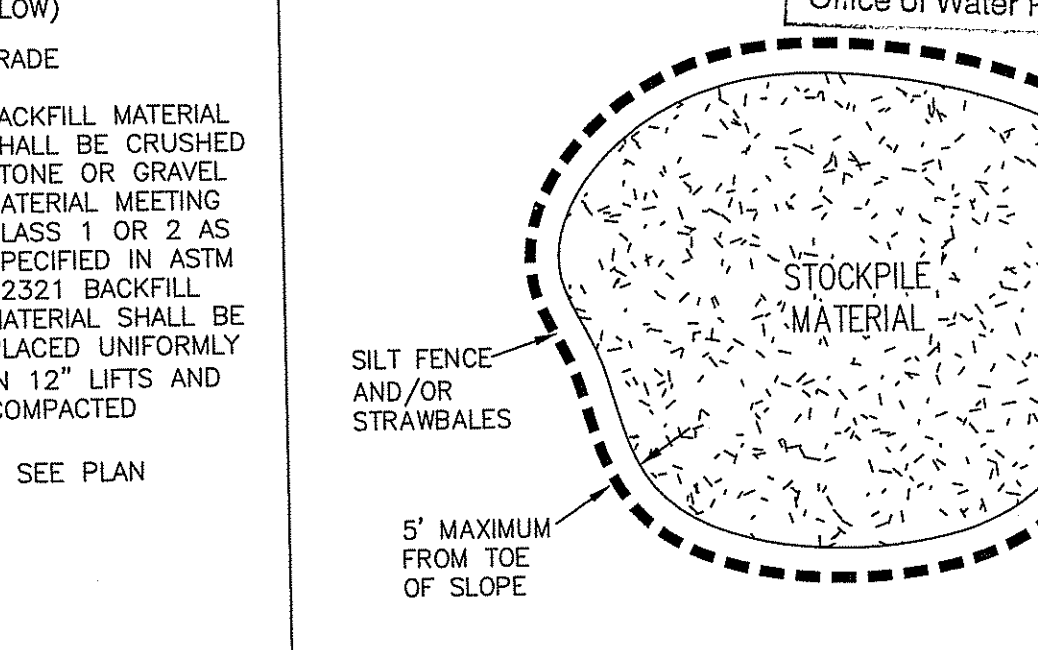
**CONCRETE WASHOUT DETAIL**



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**CONCRETE WASHOUT DETAIL**

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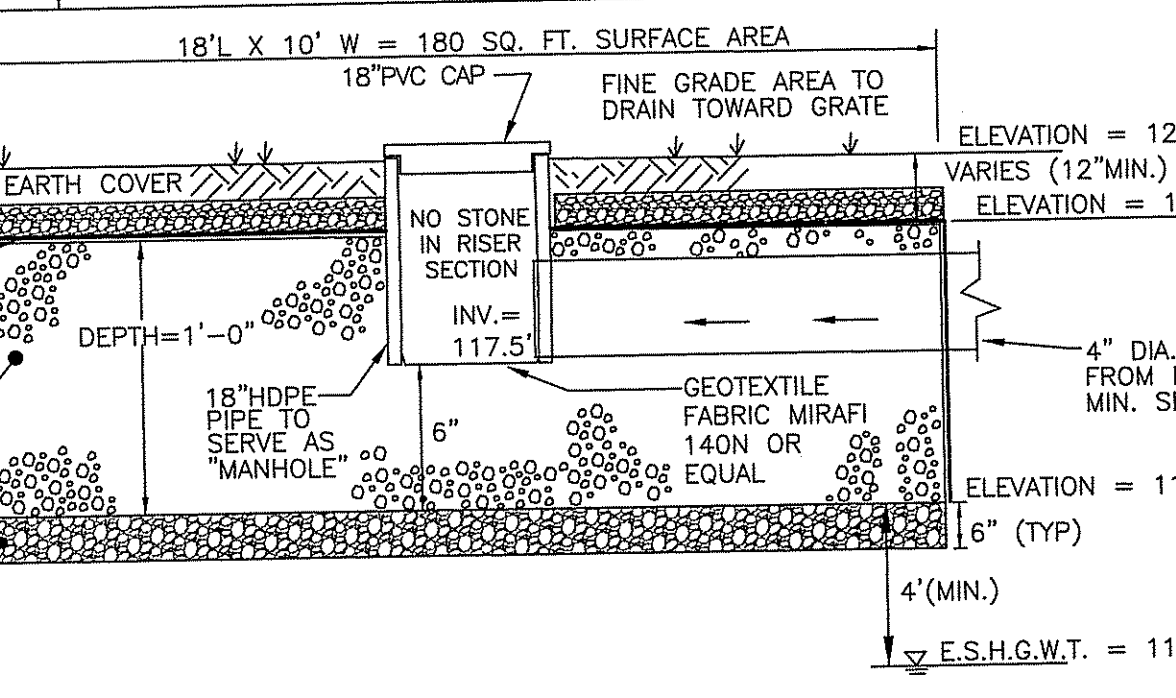


**STOCKPILE DETAIL**

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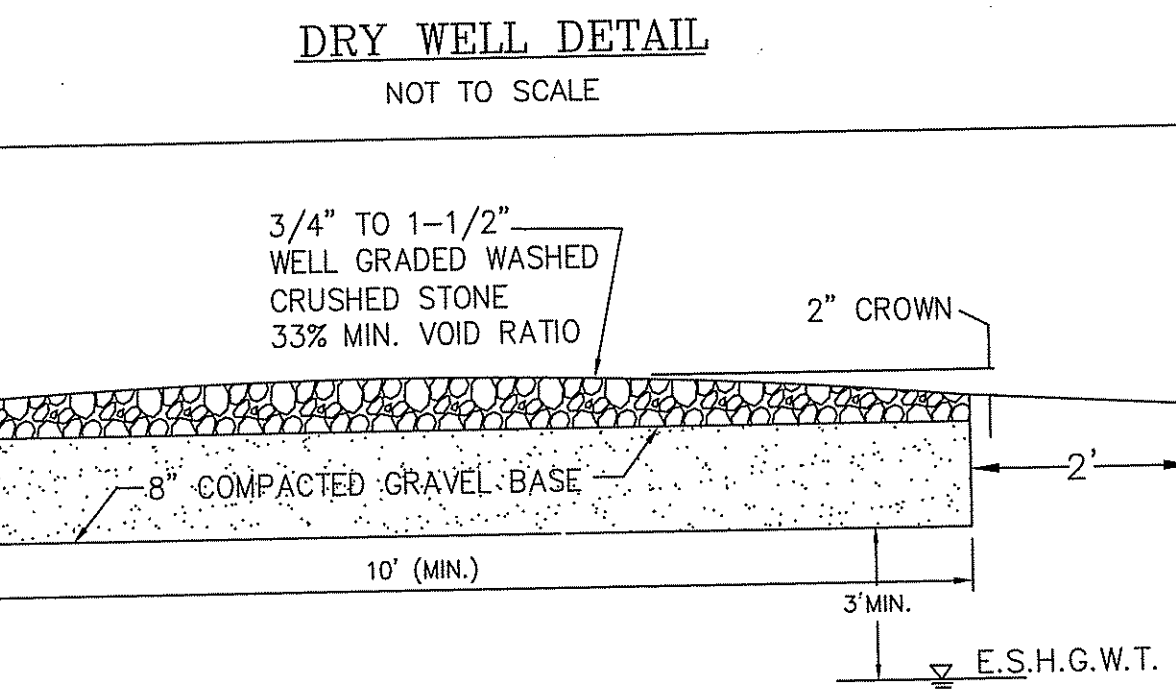
**ANTI-SEEPAGE COLLAR**

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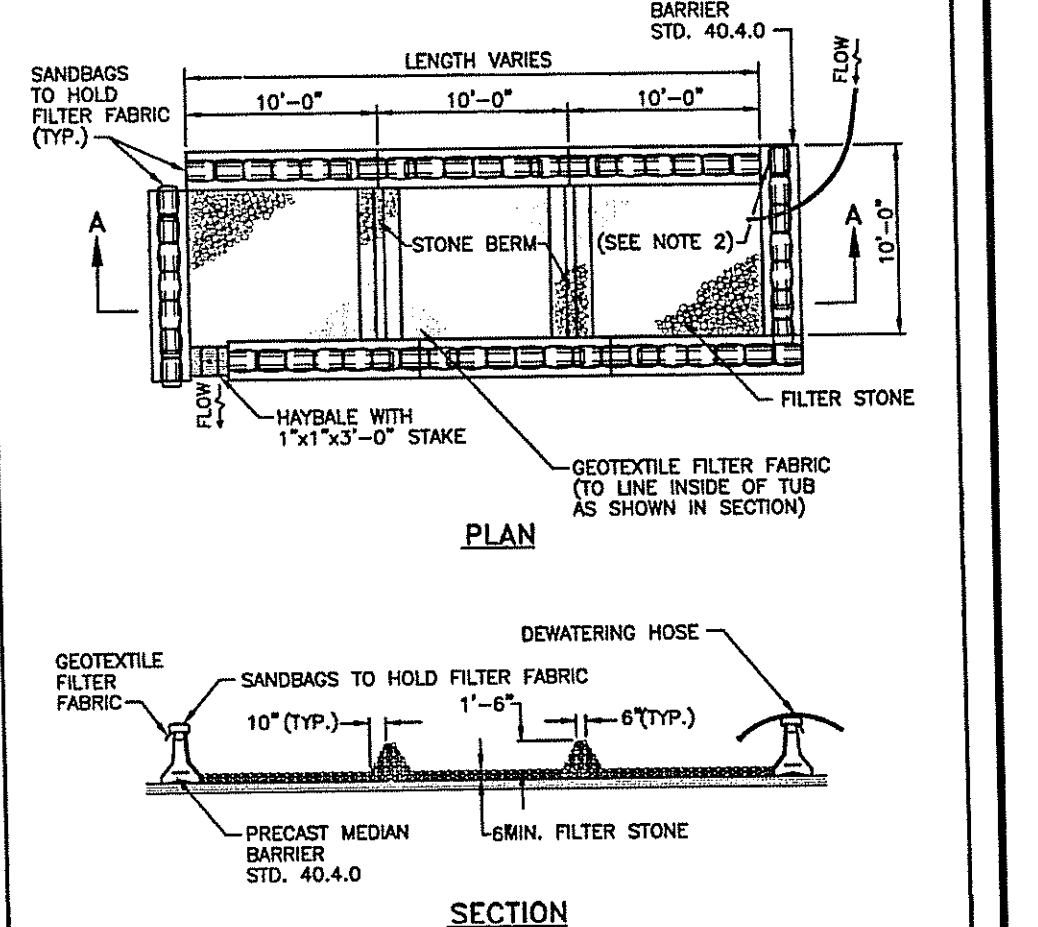
**DRY WELL DETAIL**

NOT TO SCALE



**CRUSHED STONE ACCESS ROAD TYPICAL CROSS SECTION DETAIL**

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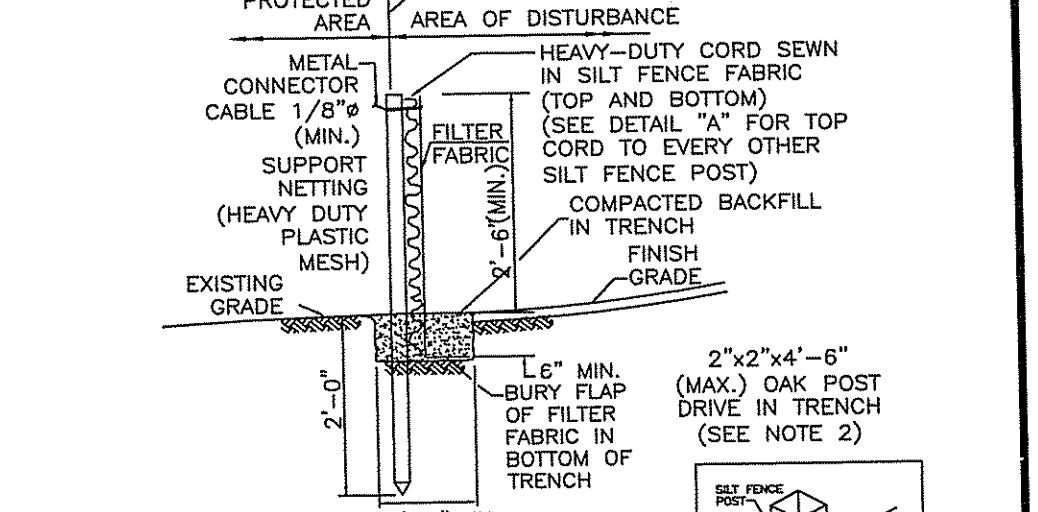


**DEWATERING BASIN**

NOT TO SCALE

NO.	DATE	DRWN	CHKD
1.	5-31-18	DKM	TJB

REVISIONS



**SILT FENCE DETAIL**

NOT TO SCALE

NOT TO SCALE

Environmental Management  
Office of Water Resources  
JUN - 1 2018

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED JUN 06 2018 FILE # 18-0071  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE.

OWNER: ALTAMONTE RIDGE, LLC  
861A BROAD STREET  
PROVIDENCE, RHODE ISLAND 02907

APPLICANT: WOMENS DEVELOPMENT CORPORATION  
861A BROAD STREET  
PROVIDENCE, RHODE ISLAND 02907

TIMOTHY J. BEHAN  
REGISTERED PROFESSIONAL ENGINEER  
No. 6278  
5/31/18

COMMONWEALTH ENGINEERS & CONSULTANTS, INC.  
400 SMITH STREET  
PROVIDENCE, RHODE ISLAND 02908  
401-273-6600

WELLHOUSE PLAN  
for  
RICHMOND RIDGE  
A.P. 10D, LOT 46  
on  
WEST SHANNOCK ROAD  
RICHMOND, RHODE ISLAND  
DETAIL SHEET

SCALE: AS SHOWN SHEET NO: 3 OF 3  
DRAWN BY: DKM DESIGN BY: TJB CHECKED BY: TJB  
DATE: 3/27/18 PROJECT NO.: 04145.00