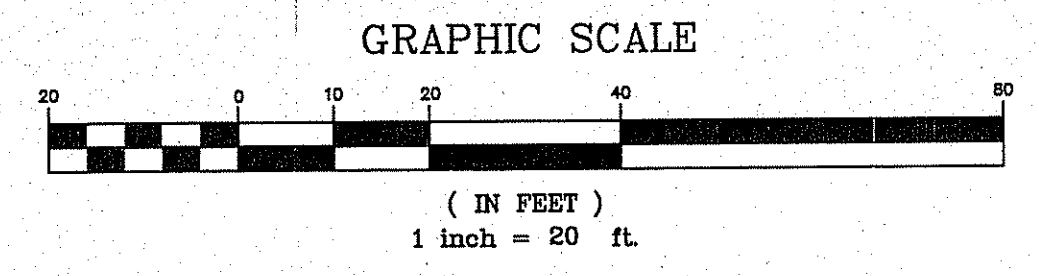


DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED NOV 23 2016 FILE # 16-0260
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

- LEGEND**
- 3.5+ EXISTING SPOT ELEVATION
 - EXISTING CONTOUR
 - ~ ~ ~ TREE LINE
 - WL-100 Δ WETLAND FLAG
 - DRAINAGE MANHOLE
 - CATCH BASIN
 - UTILITY POLE
 - WGO WATER GATE
 - Hyd Q HYDRANT
 - EXISTING WATER MAIN
 - PROPOSED CONTOUR
 - + [] PROPOSED SPOT ELEVATION



**SITE PLAN SHOWING
 PROPOSED SITE IMPROVEMENTS
 TO ACCOMPANY A RIDEM
 PRELIMINARY DETERMINATION APPLICATION**

PREPARED FOR
WASHINGTON COUNTY COMMUNITY DEVELOPMENT CORPORATION

**1129 MAIN STREET - ASSESSOR'S PLAT 5A, PARCEL 1
 RICHMOND, RHODE ISLAND**

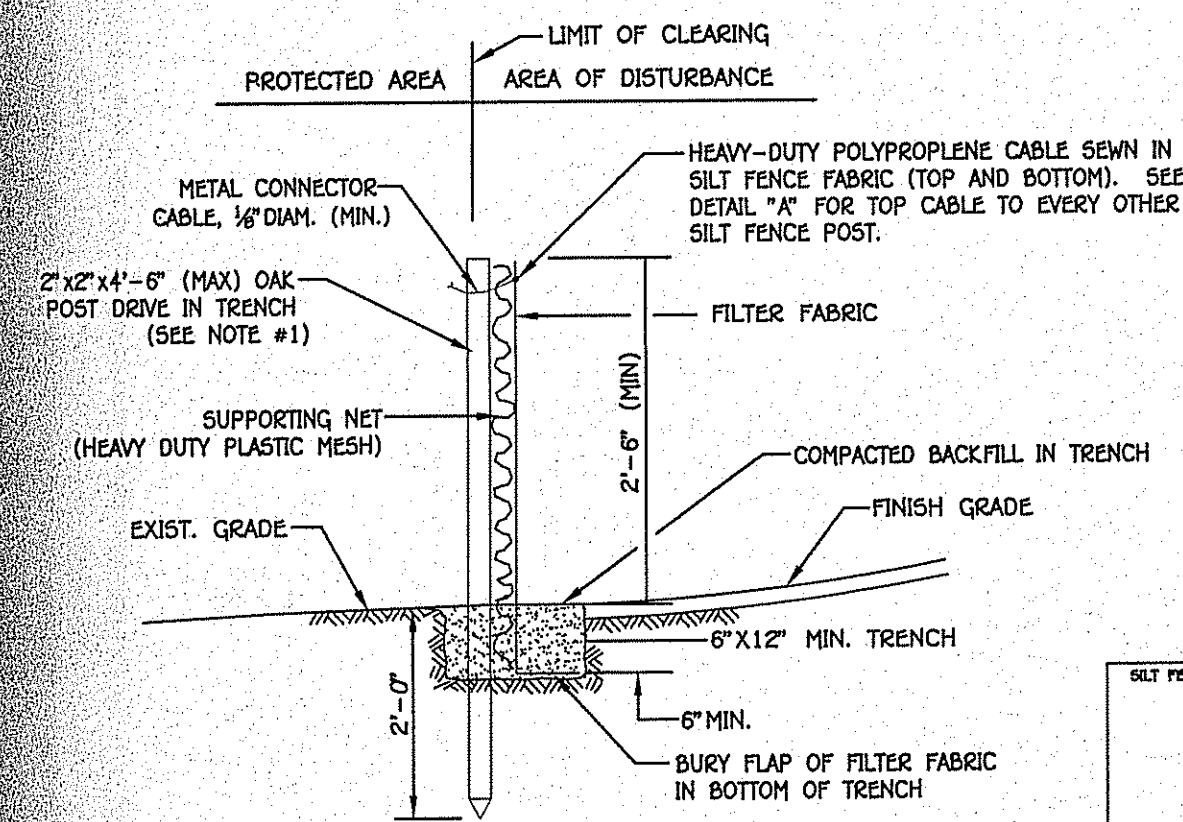
SCALE: AS SHOWN SEPTEMBER 8, 2016 JOB I.D. NO. 16-015

PREPARED BY
ON-SITE ENGINEERING, INC.
 85 BEACH STREET, BUILDING B
 WESTERLY, RHODE ISLAND 02891
 TELE.: 401-348-6831

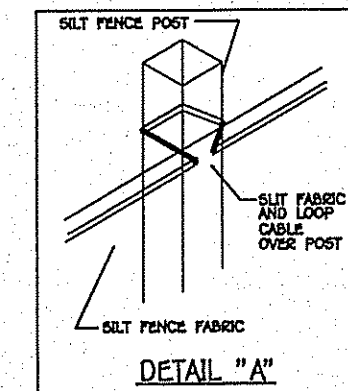
Environmental Management
OCT 12 2016
 Office of Water Resources

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

ANTHONY A. NENNA
 No. 7240
 REGISTERED
 PROFESSIONAL ENGINEER
 CIVIL

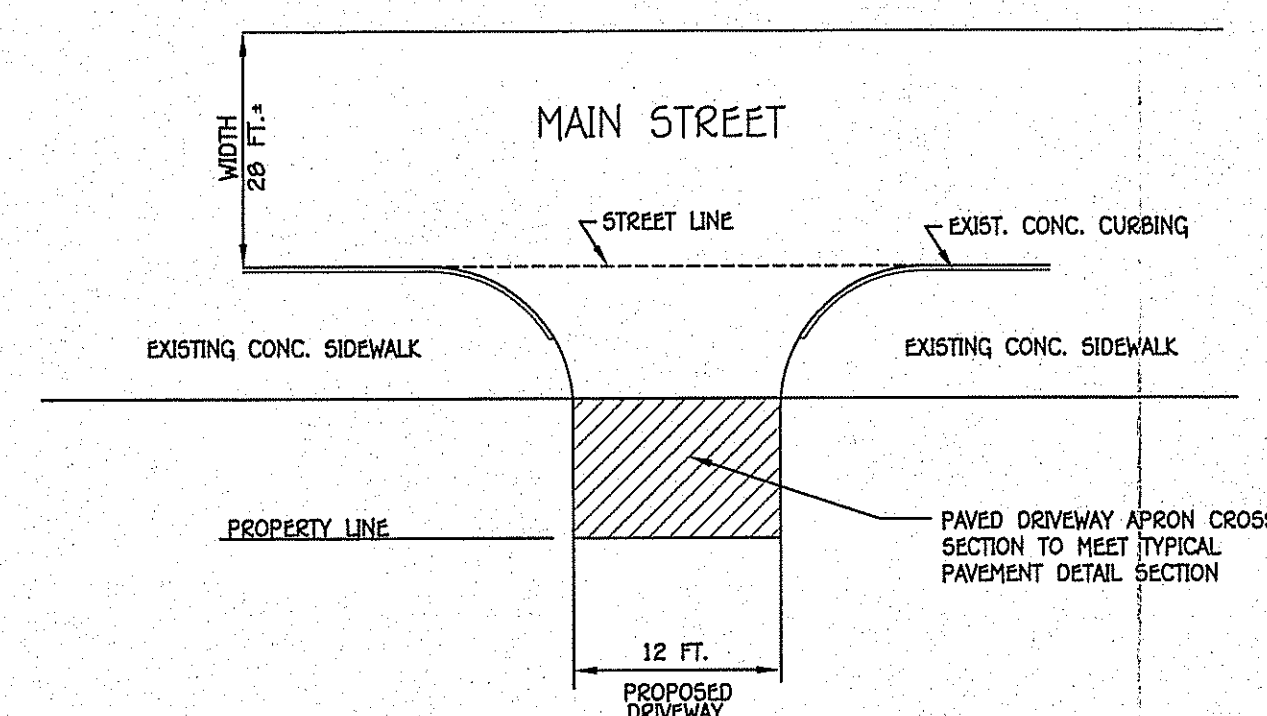


- NOTES:**
1. 2"x2"x4'-6" (MAX) OAK POSTS FOR SILT FENCE SHALL BE LOCATED ON 8'-0" (MAX) O.C. IN WETLAND AREAS AND LOCATED ON 4'-0" (MAX) O.C. IN WETLAND RAVINE, GULLY OR DROPOFF AREAS AS SHOWN ON THE PLANS.
 2. 1"x1"x4'-6" (MIN) POSTS PERMITTED FOR PRE-FABRICATED SILT FENCE.
 3. SILT FENCE SHALL BE INSTALLED BEFORE GRUBBING OR EARTH EXCAVATION TAKES PLACE.



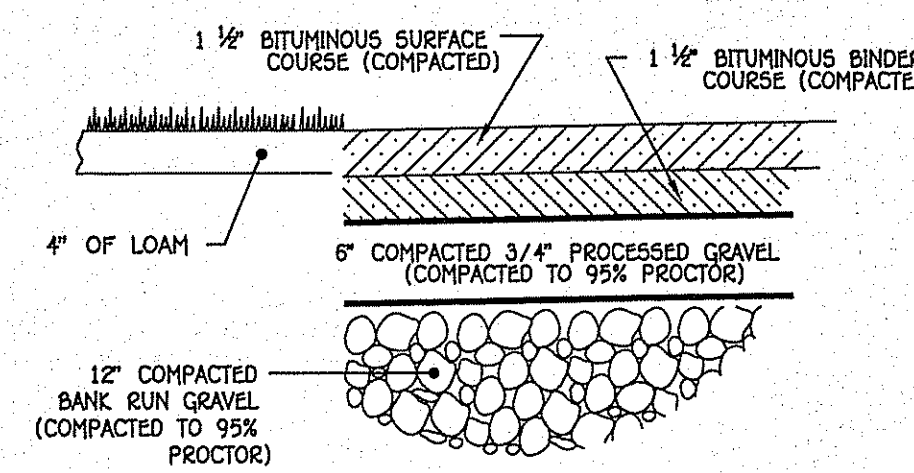
SILT FENCE DETAIL

NOT TO SCALE



PAVEMENT CUT AND MATCH DRIVEWAY APRON

SCALE: NONE



TYPICAL PAVED AREA SECTION

SCALE: NONE

MATERIAL SPECIFICATIONS FOR BIO-RETENTION AREAS

PLANTING SOIL

THE SOIL SHOULD BE A UNIFORM MIX, FREE OF STONES, STUMPS, ROOTS OR OTHER OBJECTS LARGER THAN 2 INCHES. NO OTHER MATERIALS OR SUBSTANCES SHOULD BE MIXED OR DUMPED WITH THE RAIN GARDEN AREAS THAT MAY BE HARMFUL TO PLANT GROWTH. THE PLANTING SOIL SHALL BE FREE OF NOXIOUS WEEDS.

THE PLANTING SOIL SHALL HAVE THE FOLLOWING COMPOSITION:

SAND: 80%
SILT: 15-20%
CLAY: <5%

THE PLANTING SOIL SHALL BE TESTED PRIOR TO PLACING AND SHALL MEET THE FOLLOWING CRITERIA:

PH RANGE: 5.2-7.0
ORGANIC MATTER: 1.5-4%
MAGNESIUM: 35 LBS./ACRE
PHOSPHORUS: 75 LBS./ACRE
POTASSIUM: 85 LBS./ACRE
SOLUBLE SALTS: NOT TO EXCEED 500 PPM

A MINIMUM OF ONE TEST SHALL BE CONDUCTED ON THE PLANTING SOIL. A SIEVE ANALYSIS SHALL BE CONDUCTED ON THE PLANTING AND TOPSOIL. IF TOPSOIL IS IMPORTED OFF-SITE, THEN A SIEVE ANALYSIS SHALL BE CONDUCTED FOR EACH LOCATION WHERE THE TOPSOIL WAS EXCAVATED.

IF PH NEEDS ADJUSTING, IT MAY BE MODIFIED WITH LIME TO RAISE THE PH AND IRON PHOSPHATE PLUS SULFUR TO REDUCE THE PH.

MULCH

MULCH AROUND INDIVIDUAL PLANTS ONLY. SHREDDED HARDWOOD MULCH IS THE ONLY ACCEPTED MULCH. PINE MULCH AND WOOD CHIPS THAT MAY FLOAT ARE NOT ACCEPTED.

SHREDDED MULCH MUST BE AGED FOR 6-12 MONTHS

MIX APPROXIMATELY 1/2 OF THE SPECIFIED MULCH LAYER INTO THE PLANTING SOIL TO A DEPTH OF APPROXIMATELY 4 INCHES.

COMPACTION

THE CONTRACTOR SHALL MINIMIZE COMPACTION WITHIN THE BIO-RETENTION AREAS AND DURING BACKFILLING. USE OF EQUIPMENT WITH NARROW TRACKS OR NARROW TIRES, RUBBER TIRES WITH LARGE LUGS OR HIGH PRESSURE TIRES WILL CAUSE EXCESSIVE COMPACTION.

ONCE THE ELEVATION OF THE BOTTOM OF THE PLANTING SOIL LAYER HAS BEEN ESTABLISHED, UTILIZE A CHISEL PLOW, RIPPER OR SUBSOILER TO TILL AND REFRACURE THE SOIL PROFILE. THE BOTTOM 12 INCHES SHALL BE TILLED IN THIS MANNER.

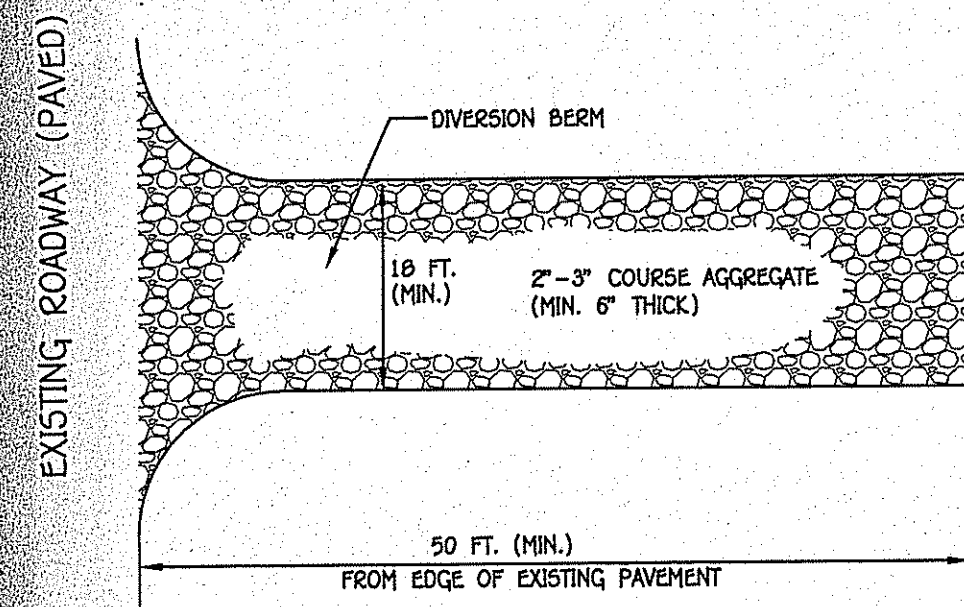
WHEN BACKFILLING THE BIO-RETENTION AREAS, PLACE THE SOIL IN LIFTS OF 12 INCHES OR GREATER. DO NOT USE HEAVY EQUIPMENT IN THE RAIN GARDEN AREAS. GRADE THE MATERIALS WITH LIGHT EQUIPMENT SUCH AS A COMPACT LOADER, OR A DOZER/LOADER WITH MARSH TRACKS.

EROSION AND SEDIMENT CONTROL NOTES

1. ALL EROSION CONTROLS SHALL BE INSTALLED PRIOR TO ANY SITE ACTIVITY.
2. THE EROSION CONTROLS SHALL REMAIN IN PLACE UNTIL VEGETATION HAS BEEN ESTABLISHED.

SILT FENCE MAINTENANCE

1. INSPECTION SHALL BE MADE AFTER EACH STORM EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS REQUIRED.
2. CLEANOUT OF ACCUMULATED SEDIMENT BEHIND THE BALES IS NECESSARY IF 1/2 OF THE ORIGINAL HEIGHT OF THE BALES BECOMES FILLED WITH SEDIMENT.



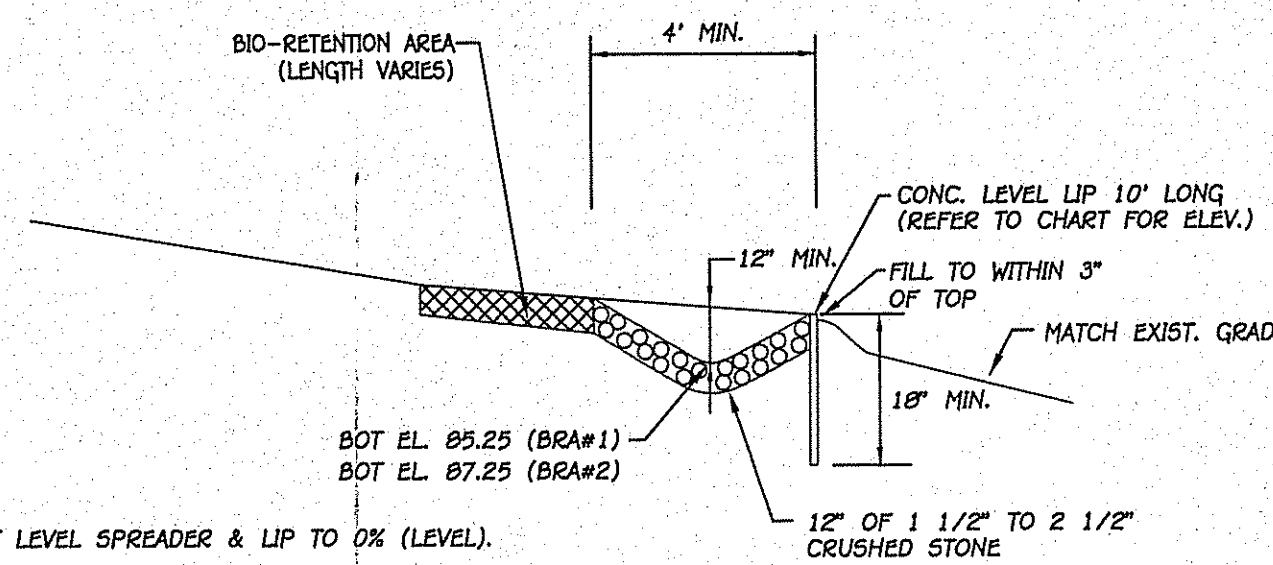
- GENERAL NOTES:**
1. STONE SIZE: 2"-3" COARSE AGGREGATE AND SHALL MEET RIDOT SPECIFICATIONS AND RIDOT STD 9.9.0.
 2. LENGTH SHALL NOT BE LESS THAN 50 FEET.
 3. THE THICKNESS SHALL NOT BE LESS THAN 6-INCHES.
 4. THE WIDTH SHALL BE A MINIMUM OF 18 FEET AT POINTS WHERE INGRESS/EGRESS OCCURS.
 5. A FILTER FABRIC SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO THE PLACEMENT OF STONE AGGREGATE.
 6. MAINTENANCE: THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACED ONTO PUBLIC RIGHTS-OF-WAY SHALL BE REMOVED IMMEDIATELY.
 7. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTERING ONTO PUBLIC RIGHT-OF-WAY.

CONSTRUCTION ENTRANCE

SCALE: NONE

NOTES:

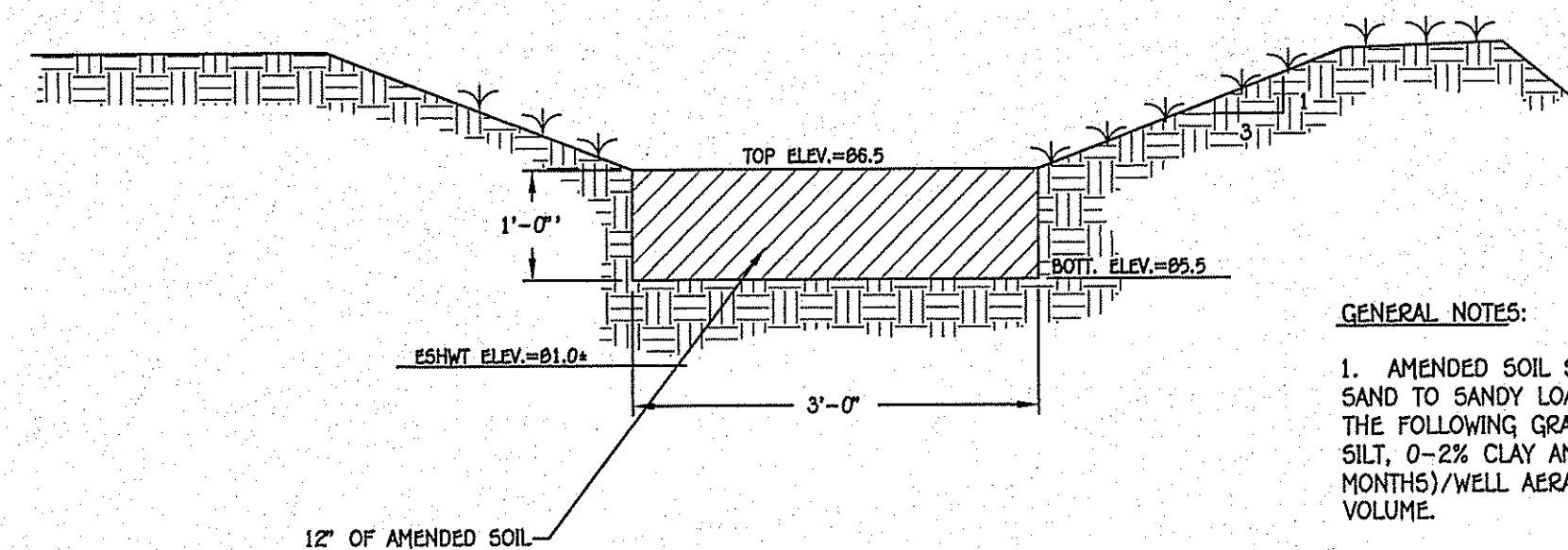
1. GRADE BOTTOM OF LEVEL SPREADER & LIP TO 0% (LEVEL).
2. ALL SIDES OF THE SPREADER CHANNEL SHALL BE A MINIMUM OF 6" HIGHER THAN THE ELEVATION OF THE LEVEL LIP.
3. CONSTRUCT IN UNDISTURBED SOIL.
4. CONTRACTOR IS RESPONSIBLE FOR REPAIR & MAINTENANCE OF LEVEL SPREADER THROUGHOUT THE DURATION OF THE CONSTRUCTION.



CONCRETE LEVEL SPREADER ELEVATIONS	
BIO-RET. AREA #1	86.25*
BIO-RET. AREA #2	86.25*

LEVEL SPREADER DETAIL

NOT TO SCALE

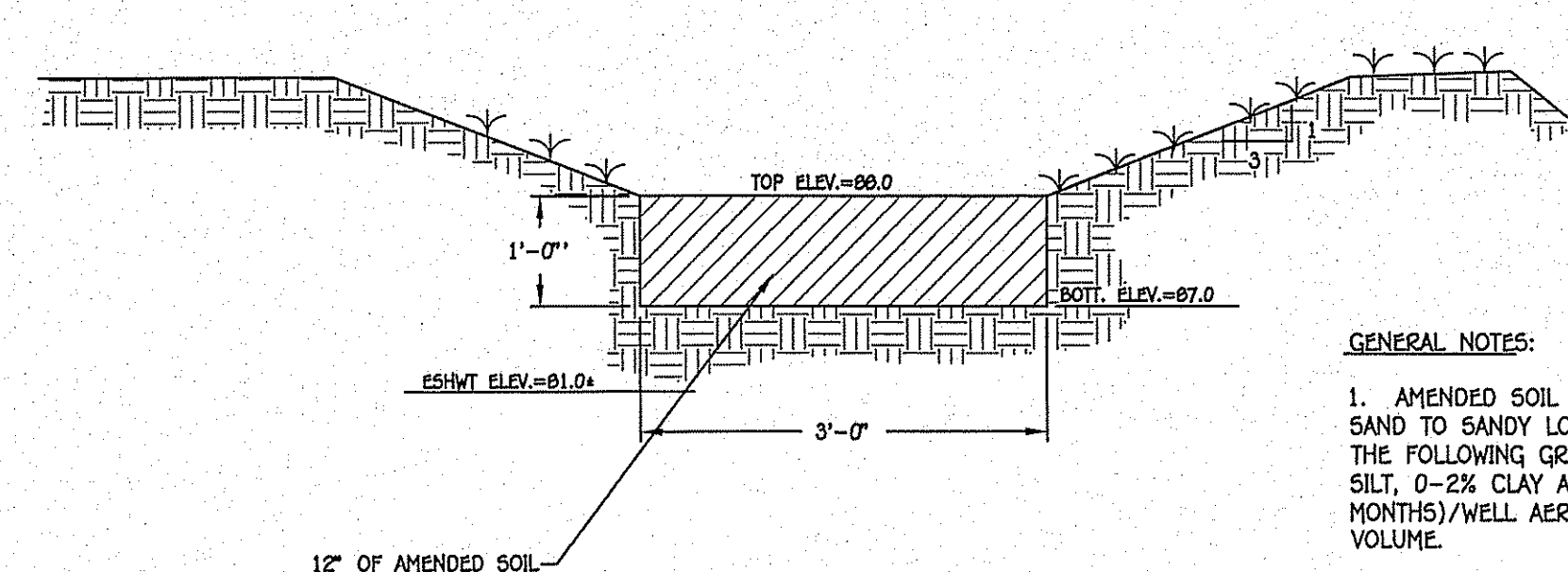


BIO-RETENTION AREA #1-SECTION

SCALE: NONE

GENERAL NOTES:

1. AMENDED SOIL SHALL CONSIST OF USDA LOAMY SAND TO SANDY LOAM CLASSIFICATION AND SHALL MEET THE FOLLOWING GRADUATION: 85-88% SAND, 8-12% SILT, 0-2% CLAY AND WELL AGED (6-12 MONTHS)/WELL AERATED LEAF COMPOST 20% BY VOLUME.
2. PROTECT BIO-RETENTION AREAS DURING CONSTRUCTION BY UTILIZING ORANGE "CONSTRUCTION FENCING"

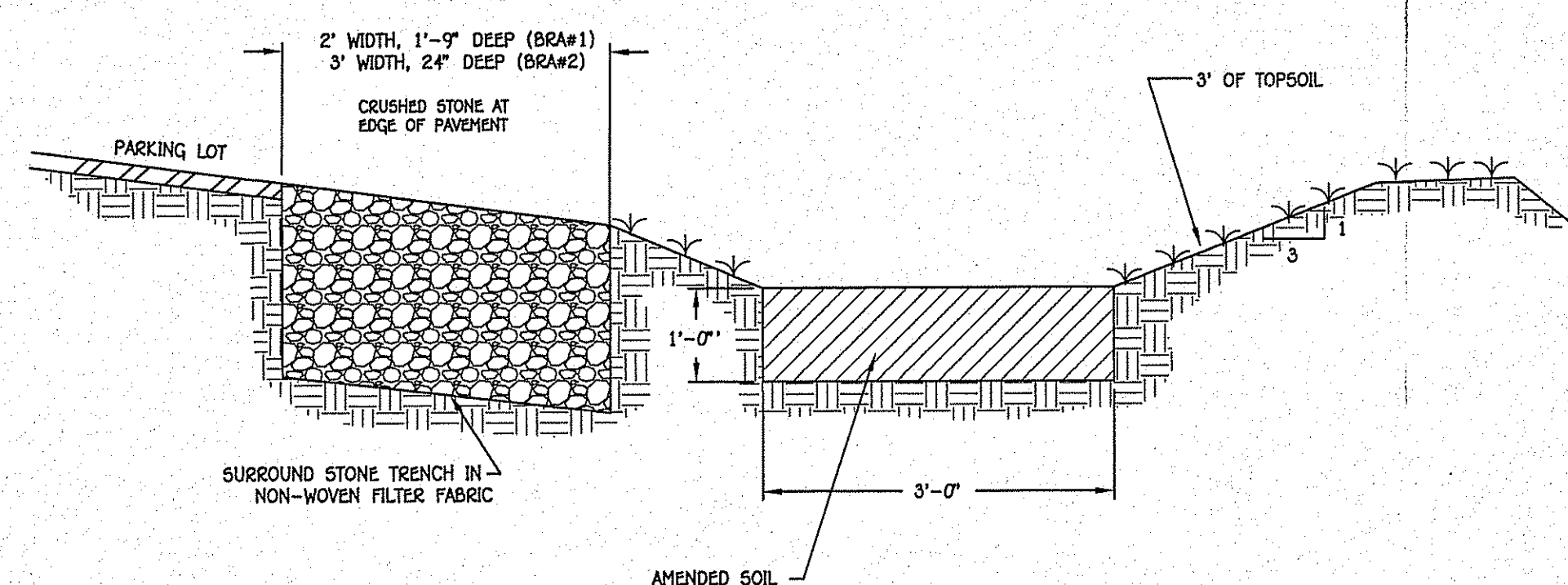


BIO-RETENTION AREA #2-SECTION

SCALE: NONE

GENERAL NOTES:

1. AMENDED SOIL SHALL CONSIST OF USDA LOAMY SAND TO SANDY LOAM CLASSIFICATION AND SHALL MEET THE FOLLOWING GRADUATION: 85-88% SAND, 8-12% SILT, 0-2% CLAY AND WELL AGED (6-12 MONTHS)/WELL AERATED LEAF COMPOST 20% BY VOLUME.
2. PROTECT BIO-RETENTION AREAS DURING CONSTRUCTION BY UTILIZING ORANGE "CONSTRUCTION FENCING"



STONE DIAPHRAM SECTION

SCALE: NONE

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DETAILS TO ACCOMPANY A RIDEM PRELIMINARY DETERMINATION APPLICATION

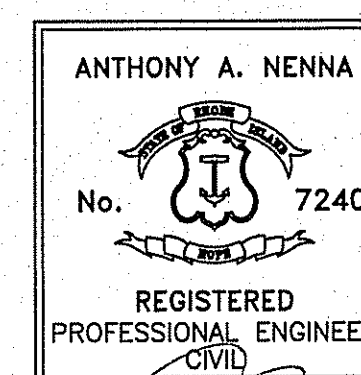
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Environmental Management

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