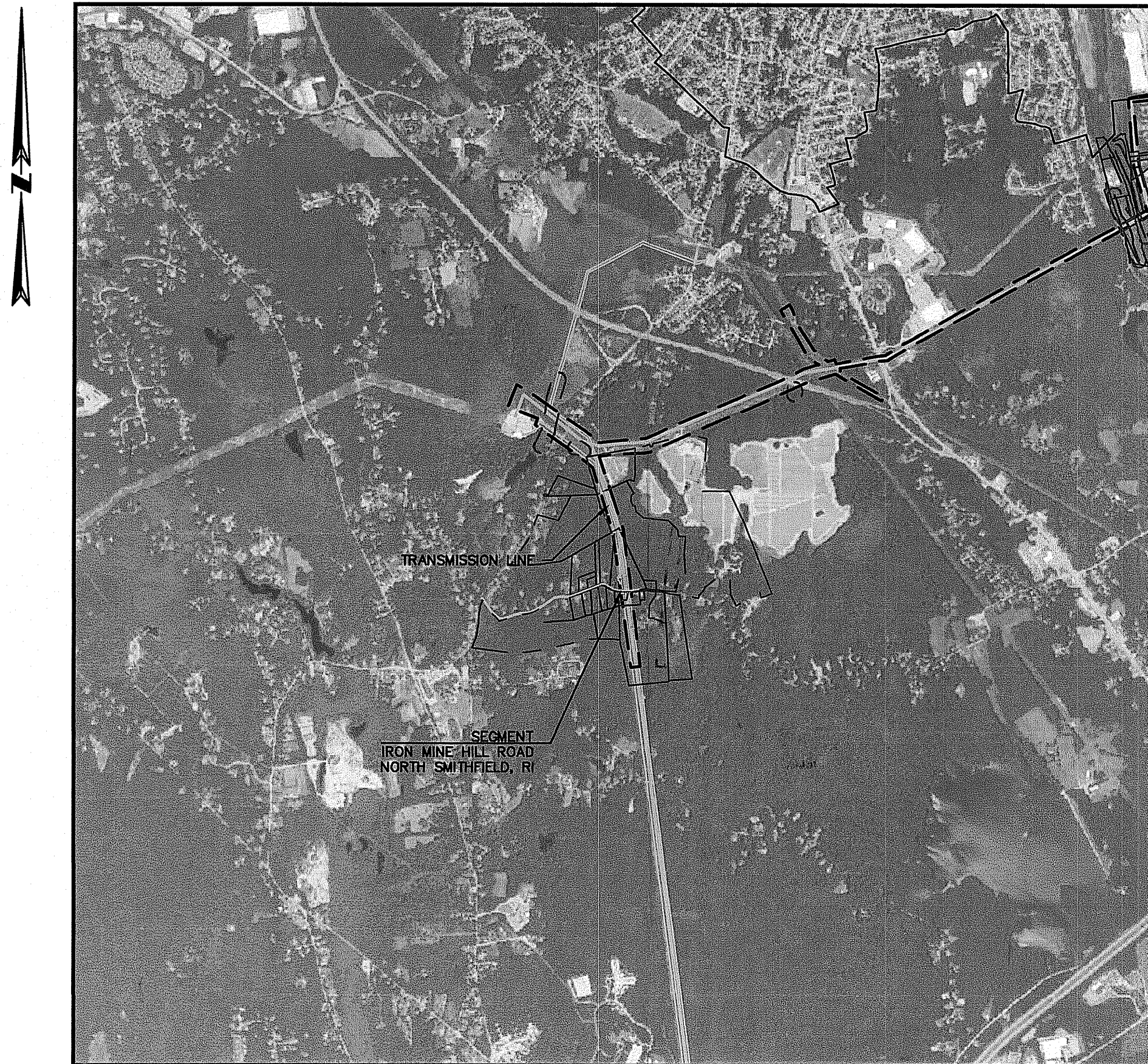


IRON MINE HILL ROAD

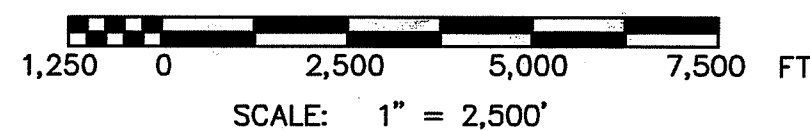
ACCESS DESIGN

NORTH SMITHFIELD, RHODE ISLAND

AUGUST 22, 2024



SITE MAP



FOR PERMITTING

INDEX OF DRAWINGS

COV-001	COVER SHEET
OV-001	OVERALL PLAN
DET-001	DETAILS & NOTES
PP-001	PERMANENT WETLAND CROSSING ACCESS PLAN

ASSESSOR'S MAP: 15
LOT: 74

ASSESSOR'S MAP: 16
LOT: 3, 4, 5, 30, 42, 50, 59, 75, 77, 95, 96, 104, 107, 113, 114, 115, 116, 117, 121, 136

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS
SPECIFIED IN THE LETTER OF APPROVAL
DATED: NOV 06 2024 FILE #: 24-0224
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Signature

PREPARED FOR:

THE NARRAGANSETT ELECTRIC COMPANY
280 MELROSE STREET
PROVIDENCE, RI 02907

PREPARED BY:

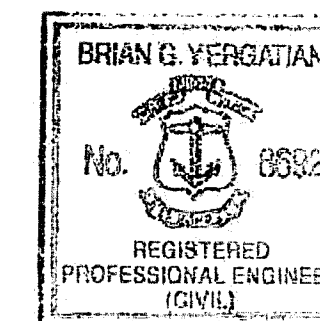
BSC GROUP
BUILD | SUPPORT | CONNECT
803 Summer Street
Boston, Massachusetts
02127

617 896 4300

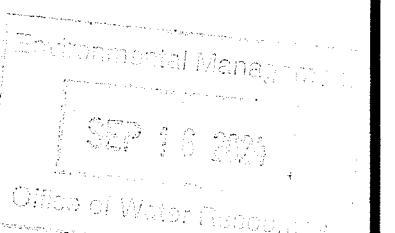
RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM

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



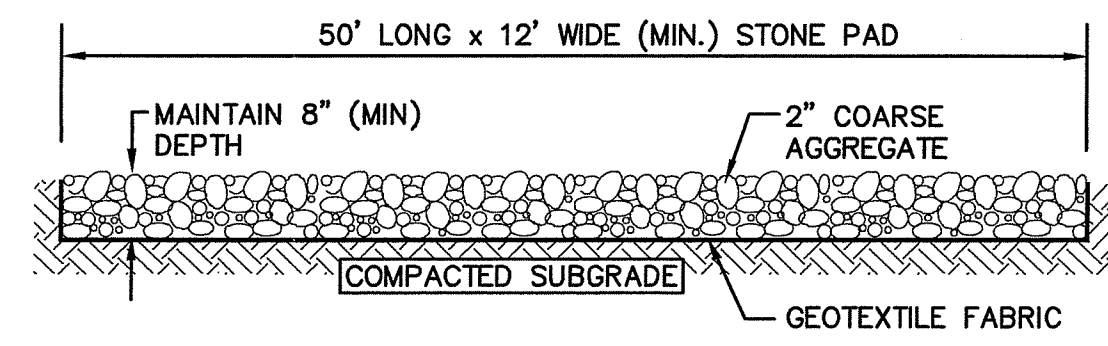
Signature
8/22/2024



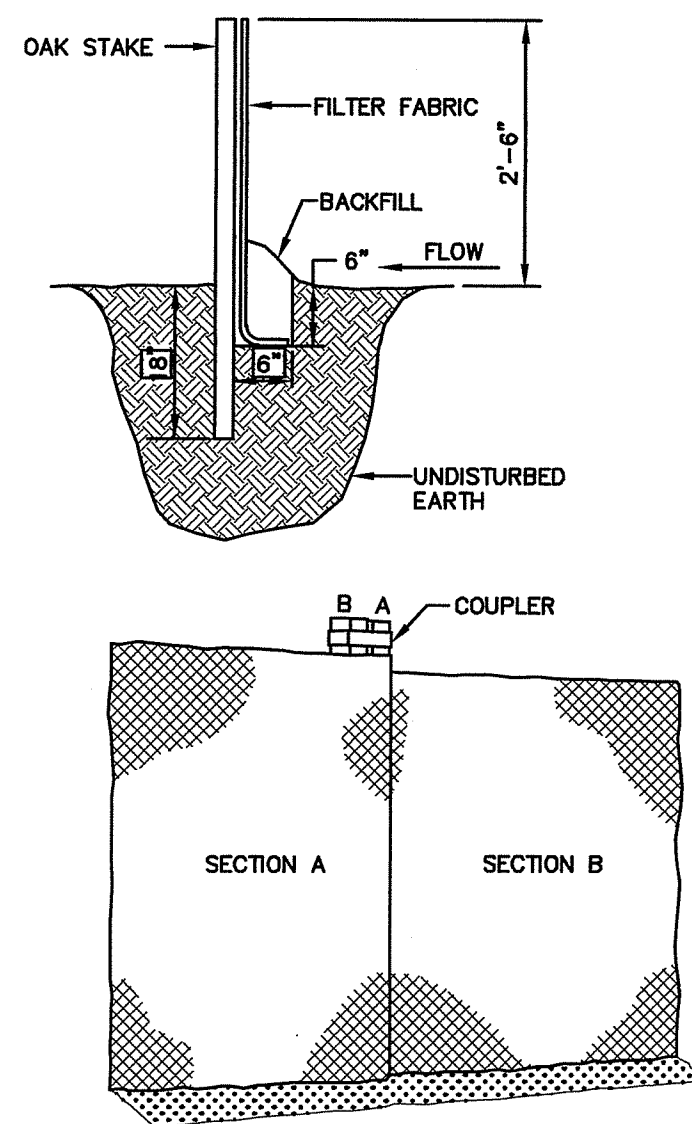
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SHEET COV-001

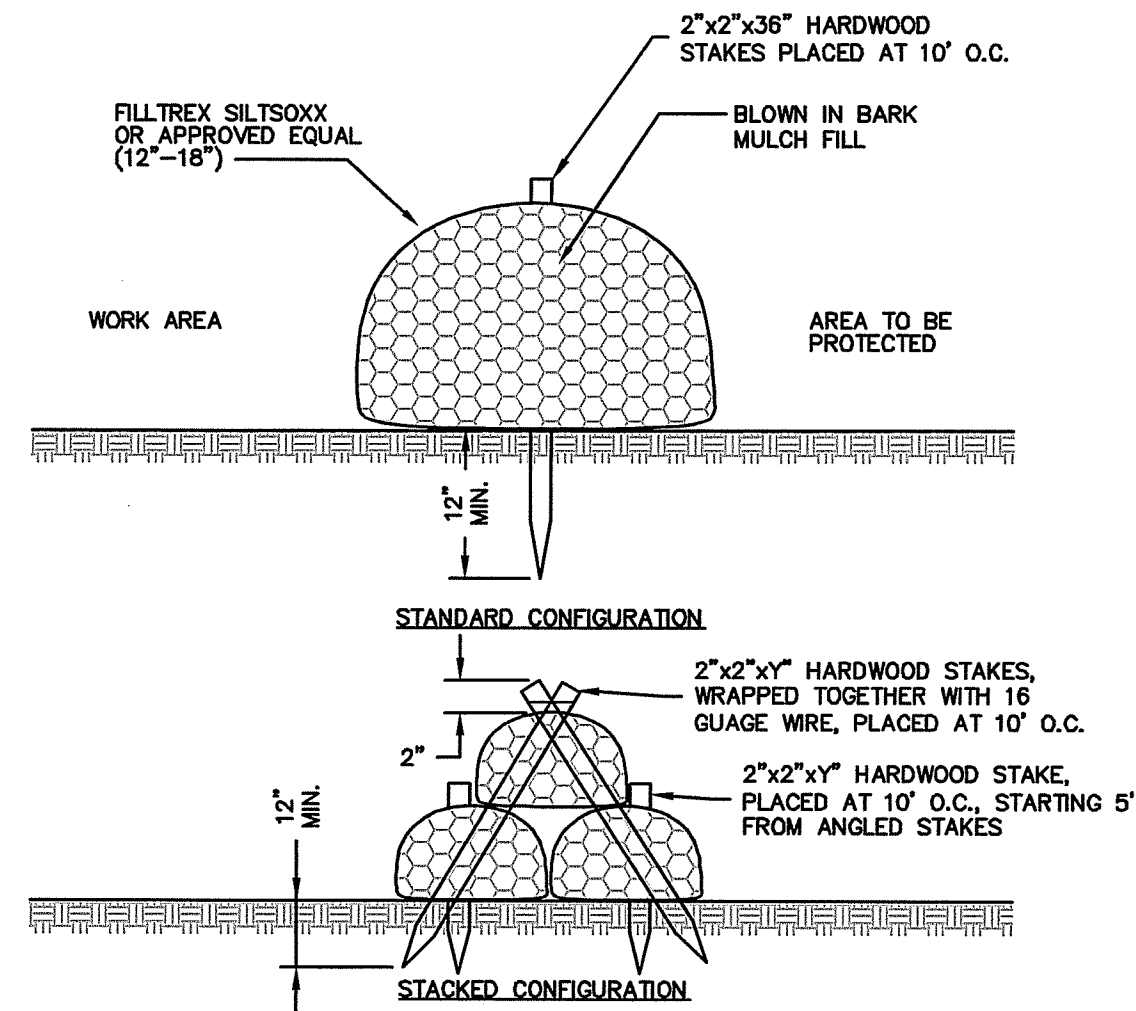
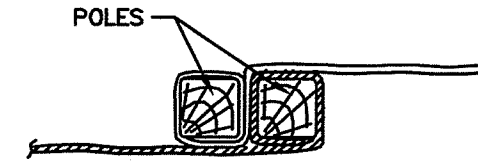
Per RIDEM: Sheet 1 of 4



TEMPORARY CONSTRUCTION ENTRANCE
SCALE: NONE

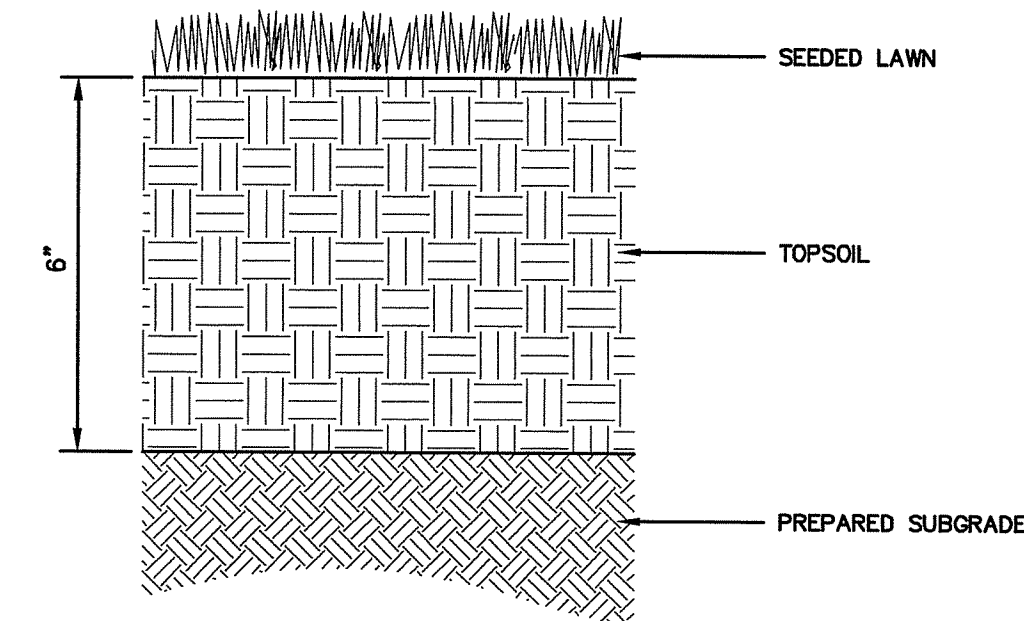


SILT SOXX
SCALE: NONE



- NOTES:**
1. PRODUCT TO BE FILTREX SILT SOXX OR ACCEPTED EQUAL BY NATIONAL GRID ENVIRONMENTAL SCIENTIST.
 2. ALL MATERIAL TO MEET MANUFACTURER SPECIFICATIONS.
 3. FILTER MEDIA FILL TO MEET APPLICATION REQUIREMENTS.
 4. MESH CONTAINMENT MATERIAL SHALL BE KNITTED PHOTODEGRADABLE OR BIODEGRADABLE MATERIAL, WITH OPENING SIZES BETWEEN 1/8" AND 3/8". IN VERMONT, SILT SOXX SHALL BE BIODEGRADABLE.
 5. COMPOST MEDIA SHALL HAVE PARTICLE SIZE WHERE 99% < 2", 50% > 1/2".
 6. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY NATIONAL GRID ENVIRONMENTAL SCIENTIST.

SILT SOXX
SCALE: NONE



- NOTES:**
1. CONTRACTOR SHALL PREPARE SOILS IN ALL DISTURBED AREAS AND AREAS USED FOR EQUIPMENT ACCESS.
 2. SEED MIX PER SECTION 10, NATIONAL GRID ENVIRONMENTAL GUIDANCE DOCUMENT. SEE SHEET DET-02.

LOAM AND SEED
SCALE: NONE

UPLAND ROW RESTORATION MIX - GENERAL

- Species Composition Options:**
- Andropogon gerardii; Niagra Big Bluestem
 - Schizachyrium scoparium; Little Bluestem
 - Elymus Canadensis; Canada Wild Rye
 - Elymus virginicus; Virginia Wildrye
 - Lolium multiflorum; Annual Ryegrass
 - Sorghastrum nutans; Indiangrass
 - Chamaecrista fasciculata; Partridge Pea
 - Desmodium canadense; Showy Tick Trefol
 - Helianthus annuus; Ox-Eye Sunflower
 - Panicum virgatum; Switchgrass
 - Rudbeckia hirta; Black Eyed Susan
 - Poa polystris; Fowl Bluegrass
 - Agrostis perennans; Upland Bentgrass
 - Agrostis alba; Redtop
 - Festuca rubra; Red Fescue
 - Lotus corniculatus; Birds-Foot Trefol
 - Chrysanthemum leucanthemum; Ox-Eye Daisy
 - Aster novae-angliae; New England Aster

- Example Seed Mixes:**
1. Native Upland wildlife forage and Cover Meadow Mix - Ernst Conservation Seeds (ERNMX-123)
 2. Eastern Ecotype Native Grass Mix - Ernst Conservation Seeds (ERNMX-177)
 3. New England Native Warm Season Grass Mix - New England Wetland Plants, Inc.
 4. New England Logging Road Mix - New England Wetland Plants, Inc.
 5. Northeast Upland Wildflower/Restoration Erosion Mix - Southern Tier Consulting (STCMX-2)

UPLAND ROW RESTORATION MIX - DRY/ROCKY SITES

- Species Composition Options:**
- Festuca rubra; Red Fescue
 - Schizachyrium scoparium; Little Bluestem
 - Elymus Canadensis; Canada Wild Rye
 - Bouteloua gracilis; Blue Grama
 - Lolium multiflorum; Annual Ryegrass
 - Lolium perenne; Perennial Ryegrass
 - Agrostis scabra; Rough Bentgrass
 - Agrostis perennans; Upland Bentgrass
 - Sorghastrum nutans; Indiangrass

- Example Seed Mixes:**
1. New England Erosion Control/Restoration Mix for Dry Sites - New England Wetland Plants, Inc.
 2. Ernst Conservation Seeds and similar companies can create a custom seed mix matching the composition above (with site specific additions if necessary).

TEMPORARY STOCKPILES:

1. ALL TEMPORARY MATERIAL STOCKPILE LOCATIONS SHALL BE LOCATED ON A GRAVEL WORK PAD UNLESS OTHERWISE DIRECTED BY THE ENGINEER. NO STOCKPILES SHALL BE LOCATED WITHIN 50- FEET OF A WETLAND OR WATERCOURSE.
2. THE DOWN-GRADIENT SIDE OF ALL STOCKPILES SHALL BE PROTECTED WITH A LAYER OF SILT SOXX OR OTHER APPROVED SEDIMENT CONTROL BARRIER.
3. FOLLOWING 30 DAYS OF INACTIVITY, ALL STOCKPILES SHALL BE TEMPORARILY STABILIZED IN ACCORDANCE WITH THE CRITERIA BELOW, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
SPRING, SUMMER, OR EARLY FALL: SEED AREA WITH RYEGRASS (ANNUAL OR PERENNIAL) AT 20 LB/AC (0.5 LB/1,000 SF).
LATE FALL OR EARLY WINTER: SEED CERTIFIED "AROSTOOK" WINTER RYE (CEREAL RYE) AT 90 LB/AC (2.0 LB/1,000 SF).

NOTE:
ADDITIONAL BMP MEASURES MAY BE INSTALLED AS REQUIRED IN ACCORDANCE WITH THE LATEST VERSION OF SPECIFICATION EG-303NE.

NOTES:

1. EXISTING CONDITIONS SHOWN HAVE BEEN PREPARED FROM AVAILABLE GIS DATA AND FROM EXISTING TOPOGRAPHY PROVIDED BY THE OWNER, PREPARED BY NM GROUP, USING LIDAR SURVEY. BSC HAS NOT FIELD VERIFIED THE EXISTING CONDITIONS INFORMATION PROVIDED AND SHOWN AND PROVIDES NO WARRANTY TO ITS ACCURACY. THE CONTRACTOR SHALL INFORM THE ENGINEER OF ANY DISCREPANCIES DISCOVERED.
2. CONTRACTOR TO PROTECT BOUNDARY MONUMENTS. IF NOT FEASIBLE OR A CONFLICT WITH DESIGN, CONTRACTOR TO NOTIFY RI ENERGY PRIOR TO DISTURBING PROPERTY MONUMENT.
3. CONTRACTOR'S RESPONSIBILITY TO ENSURE STRUCTURAL INTEGRITY OF EXISTING STRUCTURE THROUGHOUT CONSTRUCTION OF SURROUNDING WORK PADS.
4. APPROXIMATE LIMITS OF RIGHT-OF-WAY WERE PROVIDED BY RHODE ISLAND ENERGY PROJECT TEAM.
5. CONTRACTOR SHALL CONSTRUCT ADDITIONAL STORMWATER BMPs (E.G., SWALES, WATER BARS, CHECK DAMS, PLUNGE POOLS) THROUGHOUT ACCESS CONSTRUCTION AS NECESSARY TO CONTROL STORMWATER FLOWS AND PREVENT EROSION AND WASHOUTS. ENGINEER SHALL REVIEW WORK PERIODICALLY.
6. ALL WORK TO BE DONE WITHIN THE STATE HIGHWAY RIGHT OF WAY (ROW) SHALL CONFORM TO THE RHODE ISLAND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AUGUST 2023 EDITION WITH ALL REVISIONS. STANDARD DETAILS FOR THIS WORK ARE R.I. STANDARD DETAILS 1998 EDITION (AMENDED OCTOBER 2022) WITH ALL REVISIONS.
7. ALL TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), 2009 EDITION, INCLUDING ALL REVISIONS.

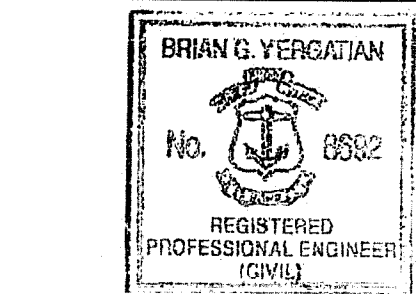
WETLAND ROW RESTORATION MIX

- Species Composition Options:**
- Agrostis stolonifera; Creeping Bentgrass
 - Poa trivialis; Rough Bluegrass
 - Alopecurus arundinaceus; Creeping Meadow Foxtail
 - Lolium multiflorum; Annual Ryegrass
 - Festuca rubra; Creeping Red Fescue
 - Elymus virginicus; Virginia Wildrye
 - Schizachyrium scoparium; Little Bluestem
 - Andropogon gerardii; Niagra Big Bluestem
 - Carex vulpinoidea; Fox sedge
 - Panicum virgatum; Switchgrass
 - Agrostis scabra; Rough Bentgrass
 - Aster novae-angliae; New England Aster
 - Eupatorium perfoliatum; Boneset
 - Euthamia graminifolia; Grass Leaved Goldenrod
 - Scirpus atrovirens; Green Bulrush
 - Verbena hastata; Blue Vervain
 - Juncus effusus; Soft Rush
 - Scirpus cyperinus; Wool Grass
 - Panicum clandestinum; Deertongue

- Example Seed Mixes:**
1. New England Erosion Control/Restoration Mix for Detention Basins and Moist Sites - New England Wetland Plants, Inc.
 2. Northeast Wetland Grass Seed Mix - Southern Tier Consulting (STCMX-7)
 3. Ernst Conservation Seeds and similar companies can create a custom seed mix matching the composition above (with site specific additions if necessary).

GENERAL NOTES:

1. Seed mixes described herein are intended to cover a variety of typical new england landscapes. However, site specific seed mixes will need to be evaluated in coastal or mountainous regions.
2. Seed mixes described herein are intended for general ROW restoration. Site specific wetland seed mixes may be required by local, state and/or federal regulators for certain impacts to wetlands.
3. All seed mixes are to be approved by National Grid Environmental Scientist prior to construction and must conform with all project permits.
4. Seedbed preparation and maintenance as well as temporary erosion and sediment controls are crucial to the establishment of newly seeded areas. Coordinate with National Grid Environmental Scientist on seed bed preparation and maintenance as well as temporary erosion and sediment controls prior to construction.



B. Vercautien
8/22/2024

IRON MINE HILL ROAD ACCESS DESIGN

IN
NORTH SMITHFIELD
RHODE ISLAND

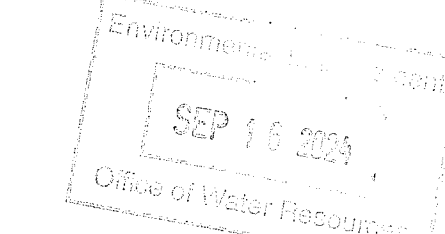
DETAILS & NOTES

AUGUST 22, 2024

REVISIONS:

NO.	DESCRIPTION	DATE

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
DATED: NOV 06 2024 FILE # 24-0224
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Gregory D. Weneck



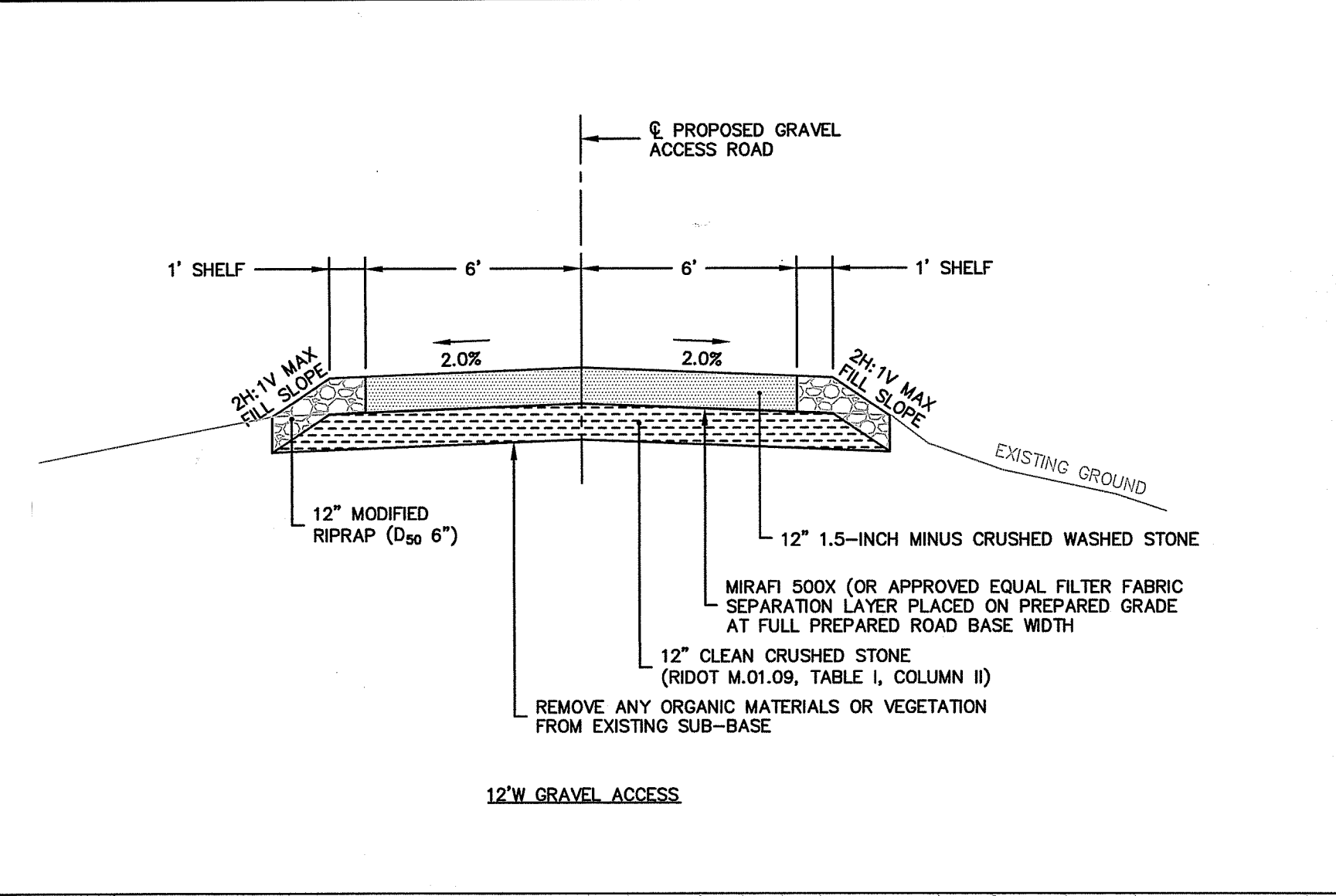
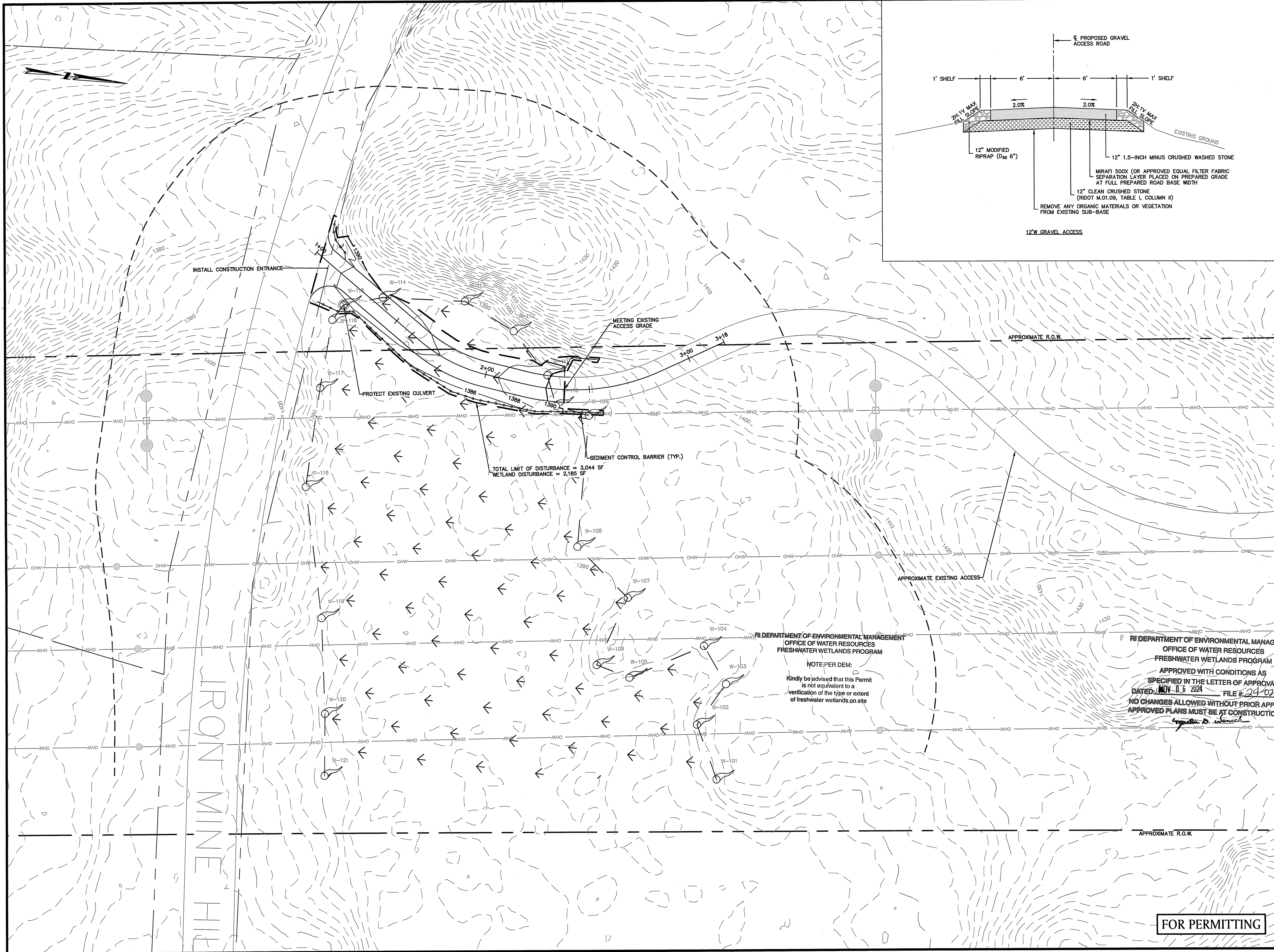
PREPARED FOR:
THE NARRAGANSETT ELECTRIC COMPANY
280 MELROSE STREET
PROVIDENCE, RI 02907

BSC GROUP
BUILD | SUPPORT | CONNECT
803 Summer Street
Boston, Massachusetts
02127
617 896 4300

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SCALE: AS SHOWN

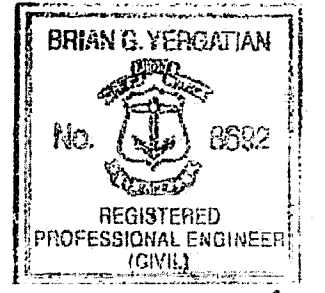
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DWG. NO.:
JOB. NO: B9840.45
DET-001

FOR PERMITTING



LEGEND

- APPROXIMATE RIGHT-OF-WAY
- APPROXIMATE ABUTTER PROPERTY LINE
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- OHW --- 315 TRANSMISSION CONDUCTOR
- WETLANDS EDGE
- 100' WETLAND BUFFER
- EXISTING TRANSMISSION LINE STRUCTURE LOCATION
- DELINEATED WETLAND
- PROPOSED DRAINAGE CROSSING
- DRAINAGE DIRECTION
- PROPOSED DRAINAGE SWALE
- SEDIMENT CONTROL BARRIER



B. Vergatian
8/22/2024

IRON MINE HILL ROAD ACCESS DESIGN

IRON MINE HILL ROAD
IN
NORTH SMITHFIELD
RHODE ISLAND

PERMANENT WETLAND CROSSING ACCESS PLAN

AUGUST 22, 2024

REVISIONS:

NO.	DESCRIPTION

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
NOTE PER DEM:
Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL DATED NOV 05 2024 FILE # 24-0244
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Stephen D. Wenzel

PREPARED FOR:
THE NARRAGANSETT ELECTRIC COMPANY
280 MELROSE STREET
PROVIDENCE, RI 02907

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803 Summer Street
Boston, Massachusetts
02127
617 896 4300

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SCALE: 1" = 20'
0 10 20 40 FEET
FILE: 8984045 - SHEET FILES.DWG
DWG. NO: PP-001
JOB. NO: 89840.45

FOR PERMITTING