

**LEGEND**

- GRANITE MONUMENT FOUND
- ### STREET ADDRESS
- UTILITY POLE
- EXISTING PROPERTY LINE (SUBJECT PARCEL)
- - - EXISTING PROPERTY LINE (ABUTTER)
- · - · SOIL TYPE BOUNDARY
- · - · EASEMENT LINE (ELECTRIC)
- · - · OVERHEAD ELECTRIC LINE
- · - · EASEMENT LINE (INGRESS/EGRESS)
- · - · ZONING BOUNDARY
- · - · FENCE
- · - · GRAVEL DRIVEWAY
- · - · WETLAND EDGE
- · - · EXISTING MAJOR CONTOUR LINE
- · - · EXISTING MINOR CONTOUR LINE
- ▲ WETLAND FLAG
- HYDRANT
- WC WATER GATE

**ZONING: R-40**  
 MINIMUM LOT AREA = 40,000 SQ.FT.  
 FRONTAGE & WIDTH = 150 FT.  
 LOT BUILDING COVERAGE = 20%  
 MINIMUM YARD SETBACKS:  
 FRONT = 40 FT.  
 SIDE = 20 FT.  
 REAR = 40 FT.  
 CORNER SIDE = 30 FT.

**OWNER OF RECORD:**  
 THOMAS J. STEVENSON  
 222 PEAKHAM ROAD  
 SUDBURY, MA 01276

**SOIL CLASSIFICATION:**  
 BmA - BRIDGEHAMPTON SILT LOAM  
 BnB - BRIDGEHAMPTON-CHARLTON COMPLEX  
 RaA - RAINBOW SILT LOAM

- NOTES:**
- THE PROPERTY SHOWN HEREON IS CLASSIFIED AS ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) BY THE FLOOD INSURANCE RATE MAP FOR THE TOWN OF SOUTH KINGSTOWN, RHODE ISLAND, WASHINGTON COUNTY, FIRM COMMUNITY PANEL NO. 445407 0201H, EFFECTIVE DATE: OCTOBER 19, 2010.
  - THE UTILITIES SHOWN HEREON ARE THE RESULT OF FIELD LOCATIONS OF VISIBLE STRUCTURES AT THE TIME OF THE FIELD SURVEY AND RECORD PLANS ACQUIRED FROM THE UTILITY COMPANIES. WE ACCEPT NO RESPONSIBILITY FOR THE ACCURACY OR COMPLETENESS OF THE DISTRIBUTION LINES SHOWN HEREON.

A.P. 33 - LOT 24  
 N/F SHELEEN M. CLARKE

A.P. 33 - LOT 19  
 N/F LINDA DEAN

A.P. 33 - LOT 8  
 N/F CCPI, LLC

A.P. 33 LOT 64  
 249,846 sq.ft.  
 5.7357 acres

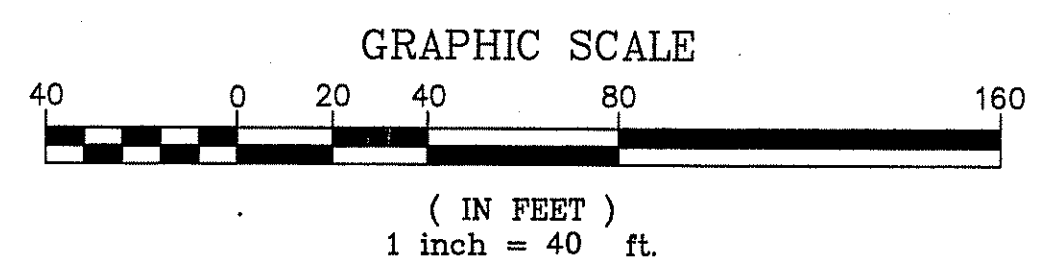
A.P. 33 - LOT 26  
 N/F LINDA BOUVIER

A.P. 41 - LOT 18  
 N/F ROLAND M. MICHAUD

A.P. 33 - LOT 5  
 N/F SUSAN CONSIDINE

A.P. 33 - LOT 27  
 N/F ISSA VANDYK

A.P. 33 - LOT 1  
 N/F PHILIP D. & CHRISTINA M. DESCHENES



**BENCH MARK  
 MUELLER BOLT  
 ELEV. = 79.02  
 (DATUM ASSUMED)**

WETLANDS FLAGGED ON  
 1/24/12 BY NATURAL  
 RESOURCE SERVICES, INC.  
 AND CLASSIFIED AS A  
 FORESTED WETLAND, LESS  
 THAN 3 ACRES

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
 APPROVED WITH CONDITIONS  
 AS SPECIFIED IN THE LETTER OF APPROVAL  
 DATED JUN 18 2012 FILE # 12-0040  
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

THIS SURVEY AND PLAN CONFORM TO A CLASS I STANDARD FOR PROPERTY LINE INFORMATION AND A CLASS III STANDARD FOR TOPOGRAPHIC INFORMATION AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS.

BY: *David D. Gardner*  
 REGISTERED PROFESSIONAL LAND SURVEYOR

DATE	REVISIONS



**DAVID D. GARDNER & ASSOCIATES, INC.**  
 200 METRO CENTER BOULEVARD  
 WARWICK, RHODE ISLAND 02886  
 (401) 738-3200 / FAX: (401) 739-4740

**DDG**

ENGINEERS • SURVEYORS • PLANNERS

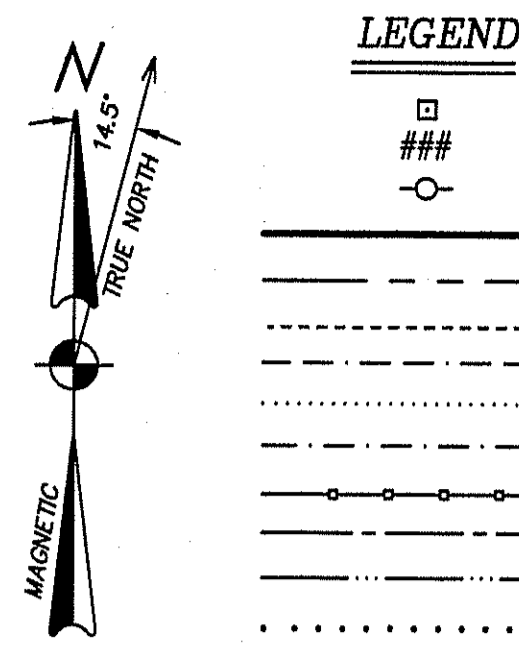
**WETLANDS PRELIMINARY DETERMINATION PLANS**

EXISTING CONDITIONS PLAN  
 "BROAD ROCK MEADOWS"  
 BROAD ROCK ROAD,  
 SOUTH KINGSTOWN, R.I.  
 A.P. 33 LOT 64  
 FOR  
 ROBERT H. CARR

DATE ISSUED: 3/1/12
SCALE: 1" = 40'
DESIGNED BY: D.A.G.
DRAWN BY: D.A.G.
CHECKED BY:
JOB NO.: 11-088
DWG NO.: 11088PD-1

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RIDEM COPY



**LEGEND**

- GRANITE MONUMENT FOUND
- ### STREET ADDRESS
- UTILITY POLE
- EXISTING PROPERTY LINE (SUBJECT PARCEL)
- - - EXISTING PROPERTY LINE (ABUTTER)
- · - · - LIMIT OF DISTURBANCE
- · - · - EASEMENT LINE (ELECTRIC)
- · - · - OVERHEAD ELECTRIC LINE
- · - · - EASEMENT LINE (INGRESS/EGRESS)
- · - · - FENCE
- · - · - GRAVEL DRIVEWAY
- · - · - WETLAND EDGE
- · - · - BUILDING SETBACK
- · - · - EXISTING MAJOR CONTOUR LINE
- · - · - EXISTING MINOR CONTOUR LINE
- · - · - PROPOSED CONTOUR LINE
- · - · - LOW FLOW CHANNEL
- · - · - WATER SERVICE LINE
- · - · - GAS SERVICE LINE

- A-1 WETLAND FLAG
- HYDRANT
- WATER GATE

A.P. 33 - LOT 24  
N/F SHELEEN M. CLARKE

**ZONING: R-40**  
 MINIMUM LOT AREA = 40,000 SQ. FT.  
 FRONTAGE & WIDTH = 150 FT.  
 LOT BUILDING COVERAGE = 20%  
 MINIMUM YARD SETBACKS:  
 FRONT = 40 FT.  
 SIDE = 20 FT.  
 REAR = 40 FT.  
 CORNER SIDE = 30 FT.

**FLEX DESIGN: R-10 ZONING**  
 MINIMUM LOT AREA = 10,000 SQ. FT.  
 FRONTAGE & WIDTH = 80 FT.  
 LOT BUILDING COVERAGE = 25%  
 MINIMUM YARD SETBACKS:  
 FRONT = 25 FT.  
 SIDE = 10 FT.  
 REAR = 30 FT.  
 CORNER SIDE = 20 FT.

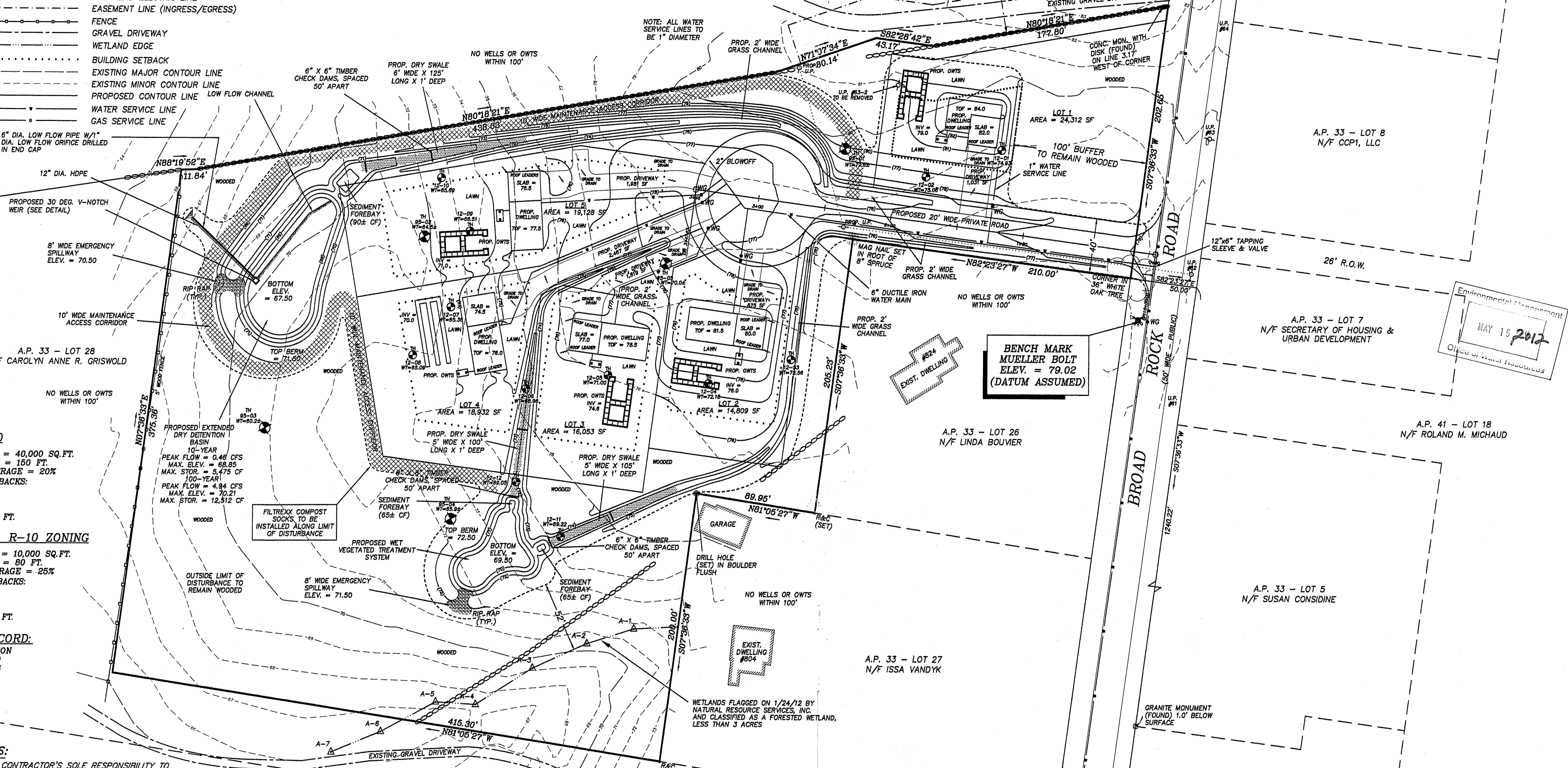
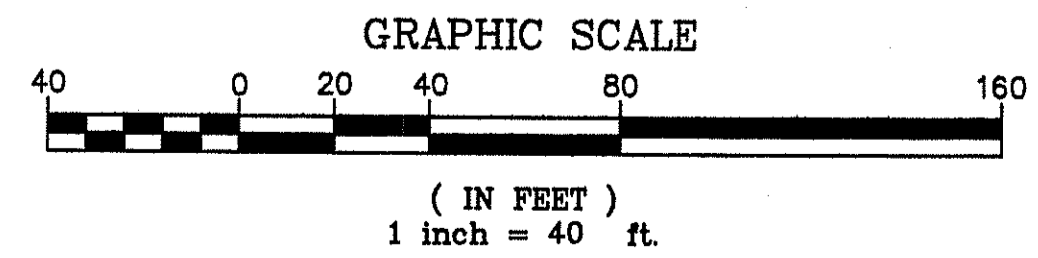
**OWNER OF RECORD:**  
 THOMAS I. STEVENSON  
 222 PEAKHAM ROAD  
 SUDBURY, MA 01276

**GENERAL NOTES:**

- IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO OBTAIN ANY AND ALL PERMITS REQUIRED BY THE STATE AND THE MUNICIPALITY IN WHICH WORK IS BEING PERFORMED PRIOR TO START OF ANY WORK.
- IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO DOCUMENT EXISTING CONDITIONS OF SURROUNDING PROPERTIES AND TO MAINTAIN THE INTEGRITY OF THE SAME. ANY DAMAGE TO AND THE COST OF REPAIR OF UTILITIES, ROADWAYS, STRUCTURES AND SURROUNDING PROPERTY SHALL BE FULLY BORNE BY THE CONTRACTOR.
- ALL WORKMANSHIP AND MATERIALS SHALL MEET OR EXCEED THE LATEST STANDARDS OF THE MUNICIPALITY, AND THE LATEST STATE STANDARDS AND SPECIFICATIONS PUBLISHED FOR ROAD AND BRIDGE CONSTRUCTION.
- CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES, THE MUNICIPAL PUBLIC WORKS DEPARTMENT, FIRE DEPARTMENT AND THE DEPARTMENT OF TRANSPORTATION FOR VERIFICATION OF APPROVED LOCATIONS SHOWN HEREON PRIOR TO START OF CONSTRUCTION. IF ANY DISCREPANCIES ARE NOTED, THE CONTRACTOR SHALL CONTACT THIS ENGINEER IMMEDIATELY FOR A RESOLUTION.
- THE LOCATION OF ALL EXISTING UTILITIES IS APPROXIMATE ONLY AND SHALL BE VERIFIED BY CONTRACTOR PRIOR TO START OF CONSTRUCTION.
- CONTACT DIG-SAFE AND UTILITY COMPANIES FOR EXACT-ON-SITE LOCATION OF EXISTING UNDERGROUND UTILITIES AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO START OF CONSTRUCTION.
- CONTRACTOR SHALL OBTAIN REQUIRED INSPECTION SCHEDULE OF THE MUNICIPALITY. UTILITY COMPANIES AND ALL OTHER REQUIRED PARTIES AND SHALL STRICTLY ADHERE TO THOSE REQUIREMENTS.

**NOTES:**

- THE PROPERTY SHOWN HEREON IS CLASSIFIED AS ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) BY THE FLOOD INSURANCE RATE MAP FOR THE TOWN OF SOUTH KINGSTOWN, RHODE ISLAND, WASHINGTON COUNTY, FIRM COMMUNITY PANEL NO. 445407 0201H, EFFECTIVE DATE: OCTOBER 19, 2010.
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Environmental Management  
 MAY 15 2012  
 Office of Water Resources

DATE	REVISIONS
4/23/12	RIDEN COMMENTS

**BARRY C. LAMOND**  
 No. 7123  
 REGISTERED PROFESSIONAL ENGINEER  
 CIVIL

**DAVID D. GARDNER & ASSOCIATES, INC.**  
 200 METRO CENTER BOULEVARD  
 WARWICK, RHODE ISLAND 02886  
 (401) 738-3200 | FAX: (401) 739-4740

**DE**  
 ENGINEERS • SURVEYORS • PLANNERS

**WETLANDS PRELIMINARY DETERMINATION PLANS**  
 SITE, GRADING & DRAINAGE PLAN  
 "BROAD ROCK MEADOWS"  
 BROAD ROCK ROAD  
 SOUTH KINGSTOWN, R.I.  
 A.P. 33 LOT 64  
 FOR  
**ROBERT H. CARR**

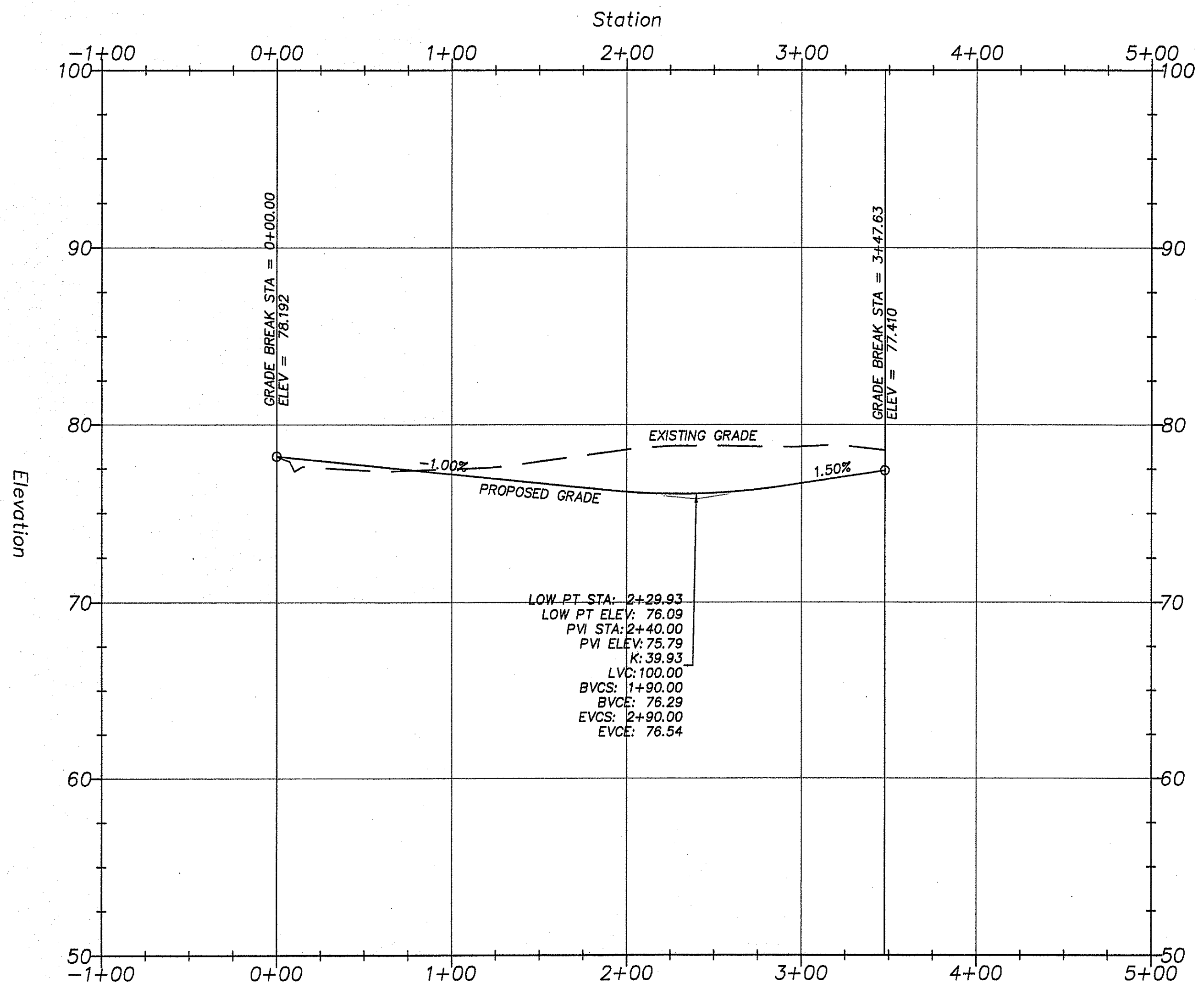
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SCALE: 1" = 40'
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DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
 APPROVED WITH CONDITIONS  
 AS SPECIFIED IN THE LETTER OF APPROVAL  
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*Robert H. Carr*

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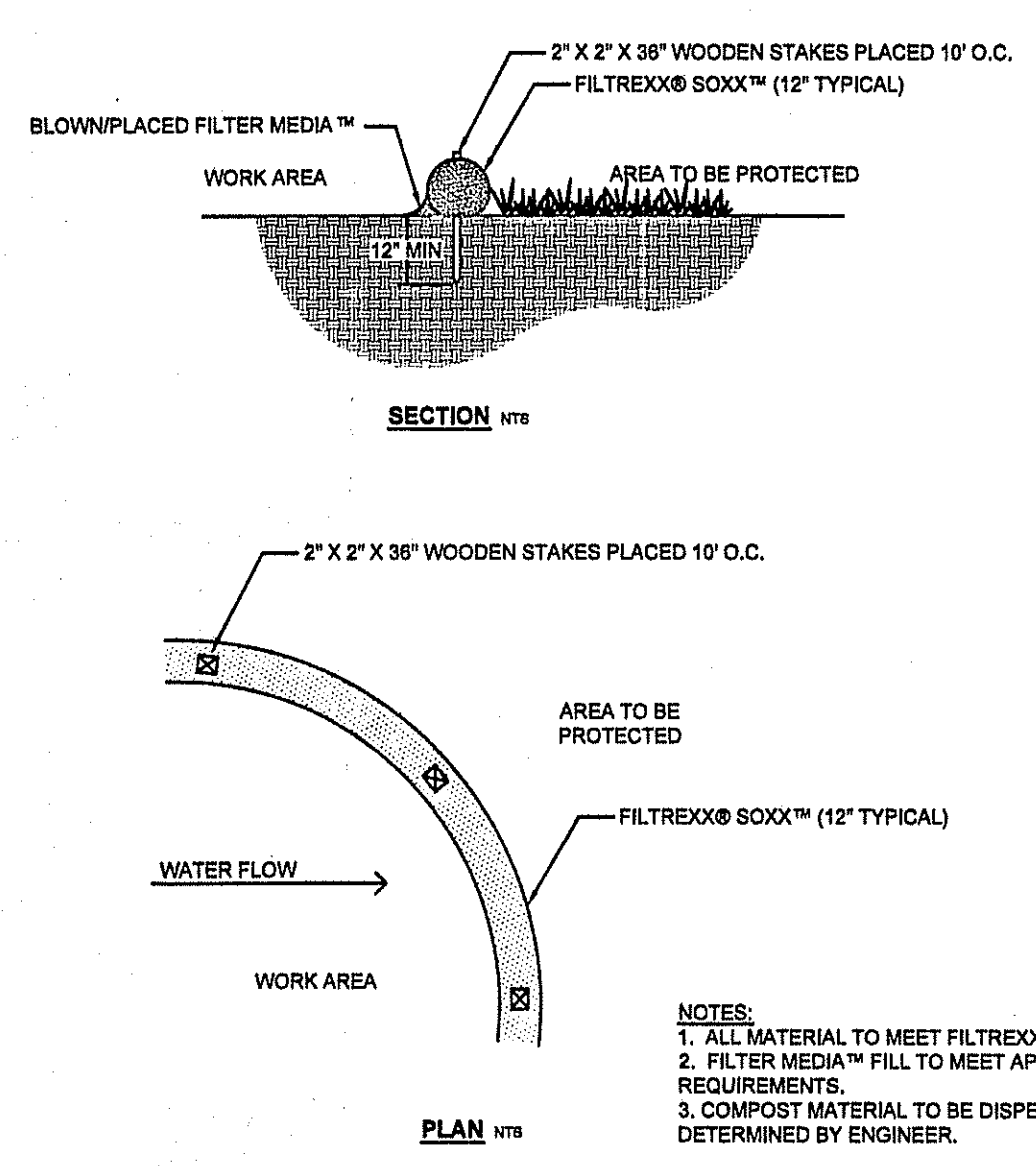
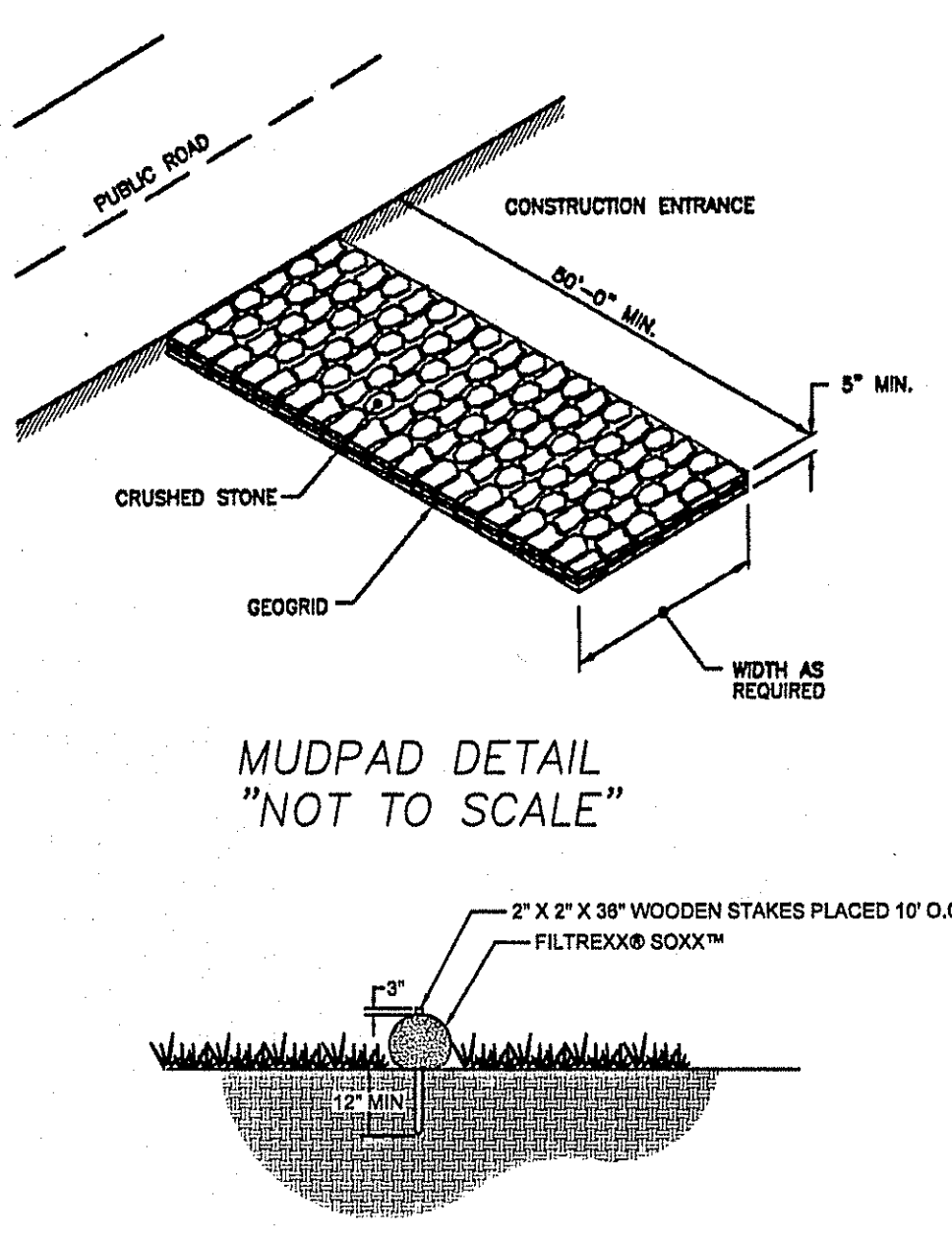
PRIVATE ROAD PROFILE



LOW PT STA: 2+29.93  
 LOW PT ELEV: 76.09  
 PVI STA: 2+40.00  
 PVI ELEV: 75.79  
 K: 39.93  
 LVC: 100.00  
 BVCS: 1+90.00  
 BVCE: 76.29  
 EVCS: 2+90.00  
 EVCE: 76.54

78.19	78.192	77.48	77.192	76.58	76.204	76.76	76.694
0+00	1+00	2+00	3+00	4+00			

HORIZONTAL SCALE: 1" = 50'  
 VERTICAL SCALE: 1" = 5'



FILTREXX® SOXX™ STAKING  
 NTS

FILTREXX® SEDIMENT CONTROL  
 NTS

SOIL STABILIZATION & PLANTING PROGRAM  
 ACCEPTABLE PLANTING MATERIALS:  
 LOAM - THE MATERIAL TO BE FURNISHED SHALL CONSIST OF LOOSE, FRIABLE, SANDY LOAM OR LOAM TOPSOIL FREE OF A MIXTURE OF SUBSOIL, REFUSE, STUMPS, ROOTS, ROCKS, BRUSH, WEEDS AND OTHER MATERIAL WHICH WILL PREVENT THE FORMATION OF A SUITABLE SEED BED.  
 SEED MIXTURES - ALL LEGUME SEED SHALL BE INOCULATED WITHIN 24 HOURS BEFORE MIXING AND PLANTING WITH THE APPROPRIATE INOCULUM FOR EACH VARIETY. ALL INOCULA SHALL BE FRESH AND SHALL BE USED WITHIN THE DATE LIMIT PRESCRIBED BY THE MANUFACTURER.

FOR RELATIVELY FLAT SLOPES:

MIX	% BY WEIGHT
RED FESCUE - CHEWING'S PENNLAWN OR CREEPING KENTUCKY BLUEGRASS	70
COLONIAL BENTGRASS - ASTORIA OR EXETER	15
PERENNIAL RYEGRASS	5
- SEEDING RATE = 100 LBS. PER ACRE	

MIX	% BY WEIGHT
RED FESCUE - PENNLAWN OR CREEPING PERENNIAL RYEGRASS	75
COLONIAL BENTGRASS - ASTORIA OR EXETER	5
BIRDSFOOT TREFLOIL - EMPIRE	15
- SEEDING RATE: 100 LBS. PER ACRE	

FOR SOD WATERWAYS, DRAINAGE DITCHES, DRAINAGE BASINS:

MIX	% BY WEIGHT
CREEPING RED FESCUE	50
TALL FESCUE OR REED CANARYGRASS*	50

\* USE REED CANARYGRASS WHERE MOWING IS NOT REQUIRED.

THE ACCEPTED PLANTING SEASON SHALL BE BETWEEN APRIL 1ST AND OCTOBER 15TH. CONTRACTOR SHOULD COORDINATE ON ALL DISTURBED AREAS. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF FOUR (4) INCHES OF LOAM ON AREAS UP TO 10% IN GRADE. ALL AREAS OVER 10% SHALL RECEIVE A MINIMUM OF SIX (6) INCHES.  
 REFERENCE IS HEREBY MADE TO THE RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK PUBLISHED BY THE SOIL CONSERVATION SERVICE. THE GUIDELINES SHOWN THEREIN SHOULD BE INCORPORATED INTO THE CONSTRUCTION PRACTICES ON SITE.

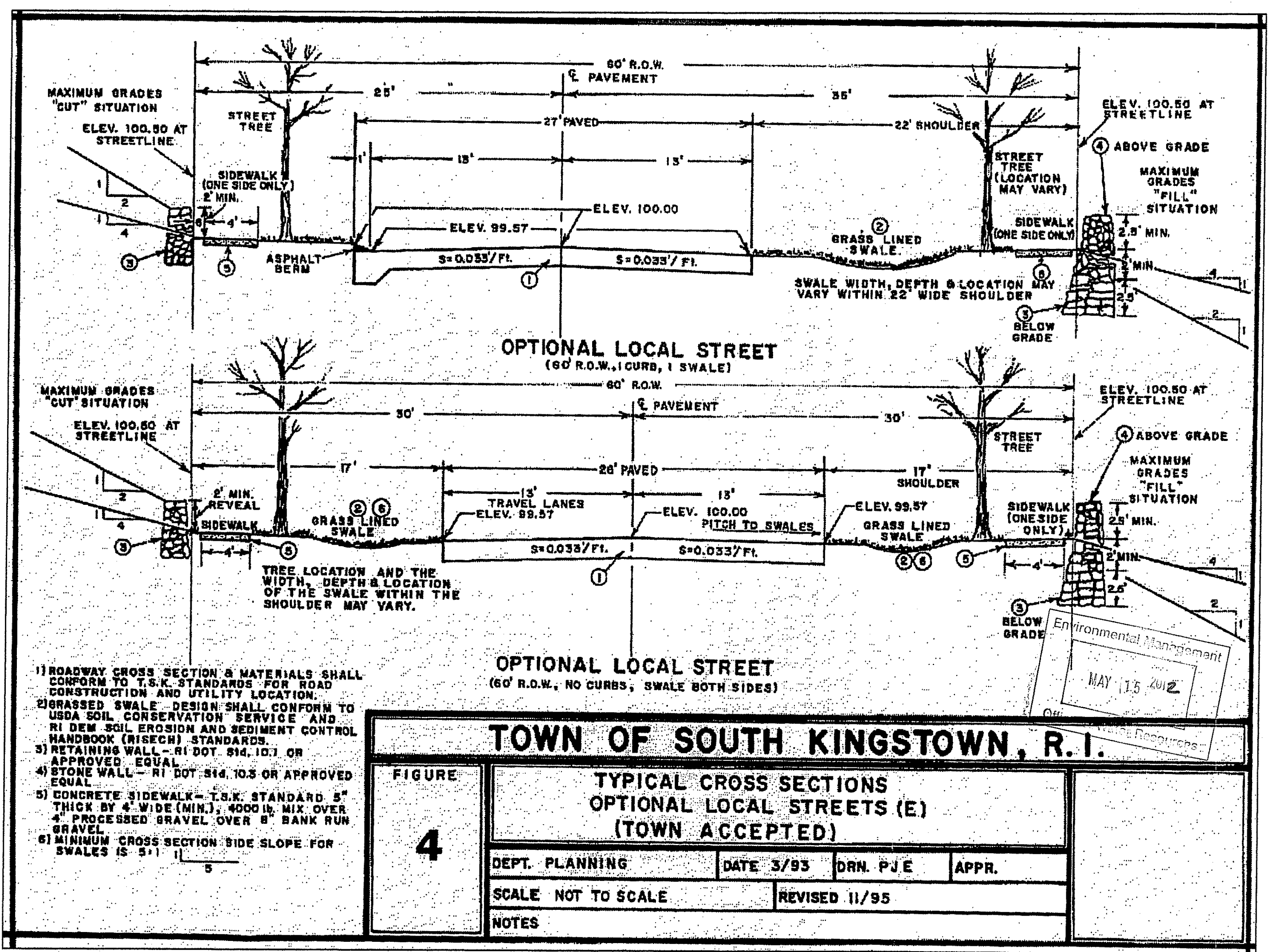


FIGURE 4  
 TYPICAL CROSS SECTIONS  
 OPTIONAL LOCAL STREETS (E)  
 (TOWN ACCEPTED)

DEPT. PLANNING	DATE 3/93	DRN. PJE	APPR.
SCALE NOT TO SCALE		REVISED 11/95	

NOTES

EROSION & SEDIMENT CONTROL PROGRAM

- PRIOR TO START OF CONSTRUCTION, FILTREXX COMPOST SOCKS AND ALL OTHER SPECIFIED EROSION CONTROL FENCES SHALL BE IN PLACE.
  - CRITICAL AREAS SUCH AS WETLAND AREAS, SLOPES AND STREAMS SHALL BE PROTECTED AS PER PLAN AND, IN THE PRESENCE OF WETLANDS, THE CONDITIONS OF THE PERMIT ORDER SHALL BE ADHERED TO.
  - THE CONTRACTOR SHALL BE REQUIRED TO ESTABLISH AND FULLY MAINTAIN ALL REQUIRED EROSION AND SEDIMENTATION CONTROLS.
  - ALL EXPOSED SLOPES, INCLUDING STOCKPILES OF MATERIAL, SHALL RECEIVE TEMPORARY SEDIMENTATION AND EROSION CONTROLS. THIS WILL INCLUDE LOAMING AND SEEDING, MULCHING, HAYMATS, FILTREXX COMPOST SOCKS, ETC., TO STABILIZE THE AREA.
  - ALL DRAINAGE FACILITIES SHALL BE CONSTRUCTED AND FULLY STABILIZED PRIOR TO ROADWAY CONSTRUCTION AND SHALL BE SURROUNDED BY FILTREXX COMPOST SOCKS TO PREVENT INFILTRATION OF SEDIMENTS.
  - SHOULD SEDIMENTS ENTER A CRITICAL AREA (WETLAND, BUFFER ZONE, ABUTTING PROPERTY) THE CONTRACTOR SHALL IMMEDIATELY CLEAN AND RESTORE THE AFFECTED AREA.
  - A STABILIZED CONSTRUCTION ENTRANCE SHALL BE INSTALLED TO ALLOW CONSTRUCTION TRAFFIC IN AND OUT OF THE PROJECT.
  - TEMPORARY SEDIMENTATION CONTROLS (FILTREXX COMPOST SOCKS) SHALL BE PLACED AROUND ROADWAY DURING CONSTRUCTION.
  - THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSPECTING AND REPAIRING EROSION AND SEDIMENTATION CONTROLS FOLLOWING PERIODS OF RAINFALL AND HEAVY SNOWMELT.
  - SHOULD DEWATERING BECOME NECESSARY, DIRECT DISCHARGE INTO A WETLAND OR WATERCOURSE WILL NOT BE ALLOWED.
- GENERAL NOTES:  
 1. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO OBTAIN ANY AND ALL PERMITS REQUIRED BY THE STATE AND THE MUNICIPALITY IN WHICH WORK IS BEING PERFORMED PRIOR TO START OF ANY WORK.  
 2. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO DOCUMENT EXISTING CONDITIONS OF SURROUNDING PROPERTIES AND TO MAINTAIN THE INTEGRITY OF THE SAME. ANY DAMAGE TO AND THE COST OF REPAIR OF UTILITIES, ROADWAYS, STRUCTURES AND SURROUNDING PROPERTY SHALL BE FULLY BORNE BY THE CONTRACTOR.  
 3. ALL WORKMANSHIP AND MATERIALS SHALL MEET OR EXCEED THE LATEST STANDARDS OF THE MUNICIPALITY, AND THE LATEST STATE STANDARDS AND SPECIFICATIONS PUBLISHED FOR ROAD AND BRIDGE CONSTRUCTION.  
 4. CONTACT DIG-SAFE AND UTILITY COMPANIES FOR EXACT ON-SITE LOCATION OF EXISTING UNDERGROUND UTILITIES AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO START OF CONSTRUCTION.  
 5. CONTRACTOR SHALL OBTAIN REQUIRED INSPECTION SCHEDULE OF THE MUNICIPALITY. UTILITY COMPANIES AND ALL OTHER REQUIRED PARTIES AND SHALL STRICTLY ADHERE TO THOSE REQUIREMENTS.  
 6. ALL CONTRACTORS SHALL ADHERE TO ALL CONDITIONS OF CONSTRUCTION APPROVALS AND SHALL KEEP A COPY OF ALL APPROVALS ON-SITE DURING CONSTRUCTION. CONTRACTOR SHALL READ ALL APPROVALS PRIOR TO START OF CONSTRUCTION AND SHALL CLARIFY ANY QUESTIONS BEFOREHAND.

WATER MAIN INSTALLATION NOTES

- THE CONTRACTOR SHALL ADHERE TO THE REQUIREMENTS OF THE UNITED WATER SPECIFICATIONS
- UNITED WATER PERSONNEL SHALL BE PRESENT ON SITE DURING ALL CONSTRUCTION ACTIVITIES RELATING TO OR PERFORMED IN THE VICINITY OF EXISTING PUBLIC WATER UTILITY INFRASTRUCTURE (I.E. TIE-INS, ISOLATION, ETC.) CONTRACTOR SHALL NOT OPERATE EXISTING VALVES, HYDRANTS, ETC. THE UNITED WATER PERSONNEL SHALL HAVE THE SOLE AUTHORITY FOR THE OPERATION OF EXISTING WATER UTILITY INFRASTRUCTURE.
- THE PIPING LAYOUT INDICATED IS DIAGRAMATIC ONLY AND DOES NOT NECESSARILY SHOW ALL THE REQUIRED FITTINGS FOR PROPER HORIZONTAL OR VERTICAL ALIGNMENT. THE CONTRACTOR SHALL PROVIDE ALL REQUIRED FITTINGS TO OBTAIN PROPER ALIGNMENT BASED UPON FIELD CONDITIONS.
- THE CONTRACTOR SHALL MAINTAIN A MINIMUM CLEARANCE BETWEEN THE NEW WATER AND ALL OTHER EXISTING UTILITIES OF AT LEAST 18 INCHES.
- ALL NEW WATER MAINS AND SERVICES SHALL A MINIMUM DEPTH OF COVER EQUAL TO 4.5' WHERE EVER POSSIBLE. PIPE INSULATION, AS SPECIFIED AND DIRECTED BY THE ENGINEER, SHALL BE REQUIRED FOR WATER MAINS WITHOUT THIS MINIMUM COVER.
- THE NEW WATER MAIN SHALL PASS UNDER ALL EXISTING UTILITIES EXCEPT SEWERS UNLESS OTHERWISE NOTED ON THE DRAWING OR DIRECTED BY THE ENGINEER.
- NEW WATER MAINS SHALL BE CLASS 52 D.I. WITH PUSH-IN JOINT PIPING. BELOW GROUND FITTINGS SHALL BE DUCTILE IRON WITH MECHANICAL RESTRAINED JOINTS (MEGALUGS) WITH CONCRETE THRUST BLOCKS UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL SET ALL VALVE BOXES TO MATCH FINAL GRADES.
- NEW WATER MAINS, METER AND BACKFLOW PREVENTOR WETTED COMPONENTS SHALL BE DISINFECTED AND PRESSURE TESTED IN ACCORDANCE WITH PROJECT SPECIFICATIONS. NO NEW WATER MAINS SHALL BE PHYSICALLY CONNECTED TO EXISTING MAINS UNTIL DISINFECTION IS COMPLETED AND BACTERIA TEST ARE APPROVED BY UNITED WATER. A CLOSED VALVE WILL NOT CONSTITUTE PHYSICAL SEPARATION BETWEEN NEW AND EXISTING MAINS. AN APPROVED BACKFLOW PREVENTOR MUST BE USED FOR ANY CONNECTIONS TO NEW MAINS PRIOR TO ACCEPTANCE.

DATED JUN 18 2012  
 NO CHANGES ALLOWED WITHOUT APPROVAL  
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE  
 Robert H. Carr

DATE	REVISIONS
4/23/12	RDEN COMMENTS

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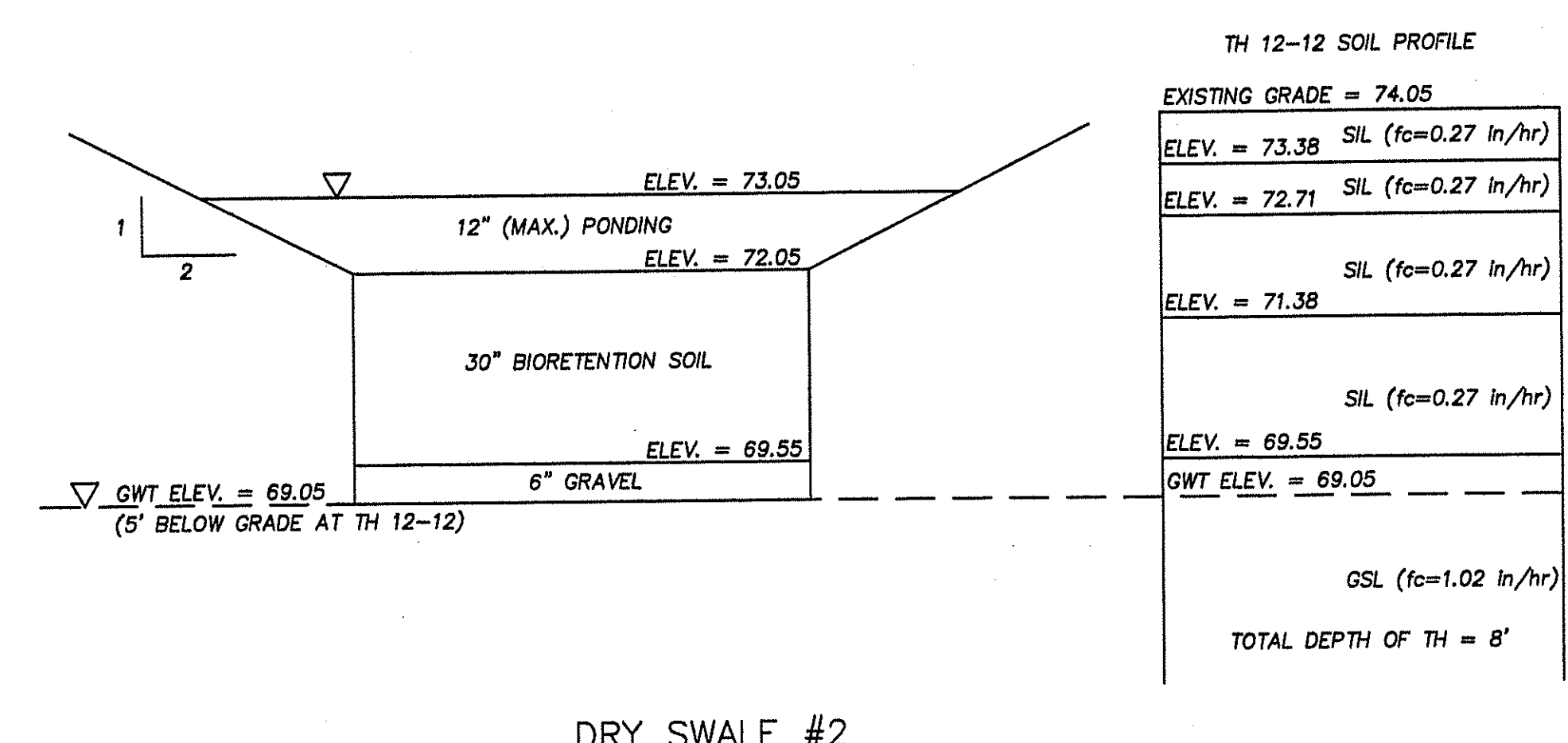
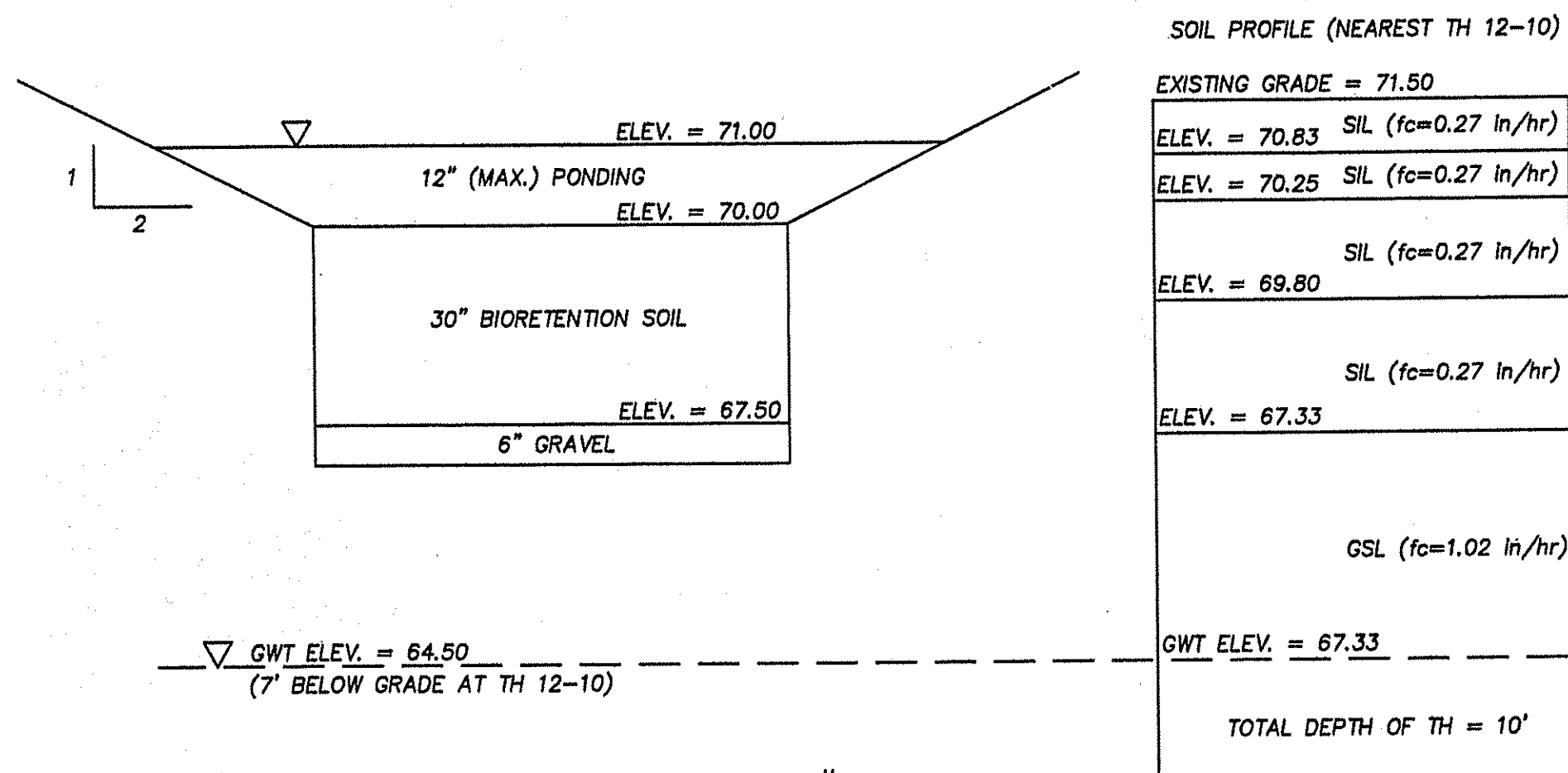
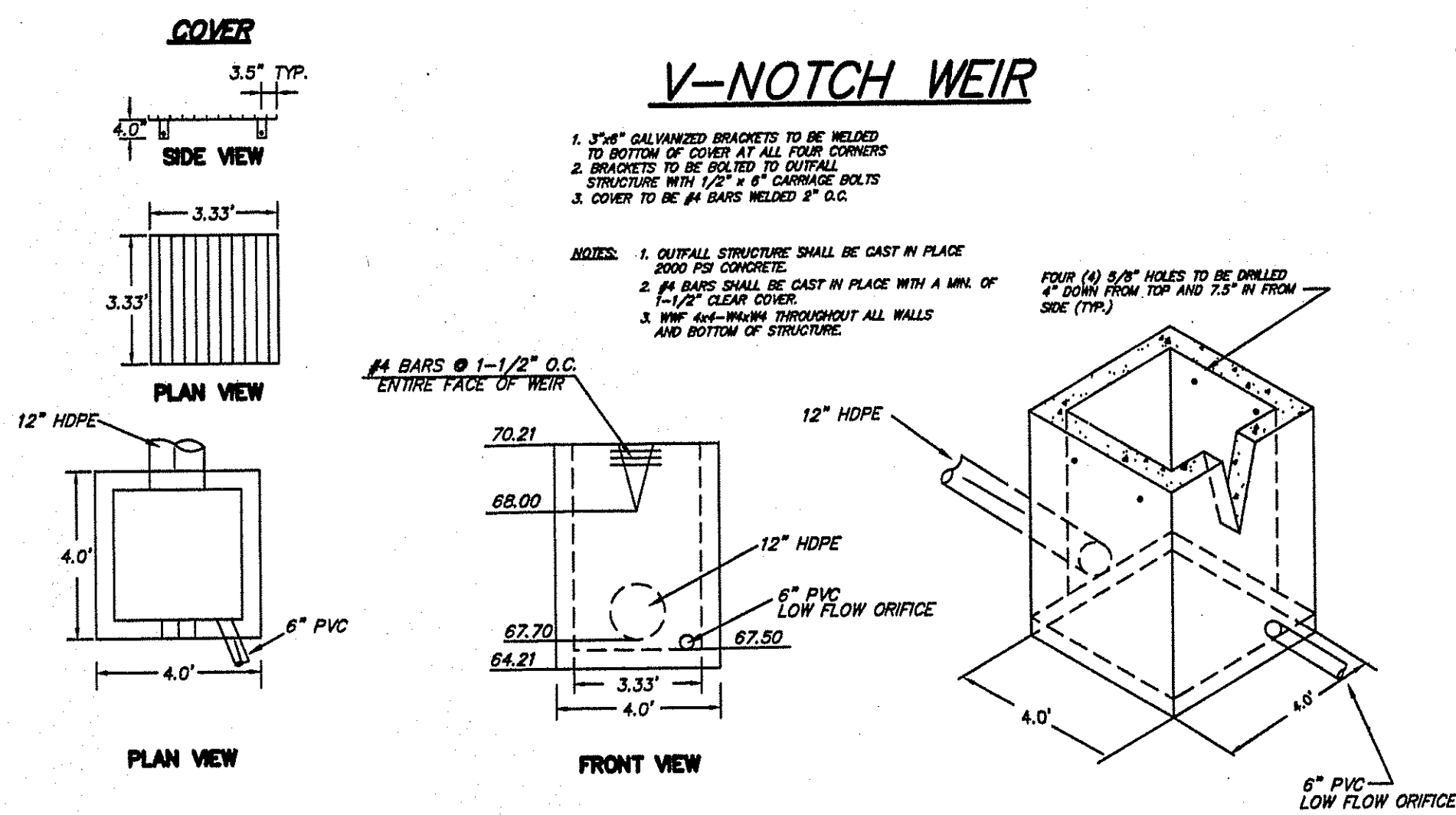
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WETLANDS PRELIMINARY DETERMINATION PLANS  
 DETAIL SHEET  
 "BROAD ROCK MEADOWS"  
 BROAD ROCK ROAD  
 SOUTH KINGSTOWN, R.I.  
 A.P. 33 LOT 64  
 FOR ROBERT H. CARR

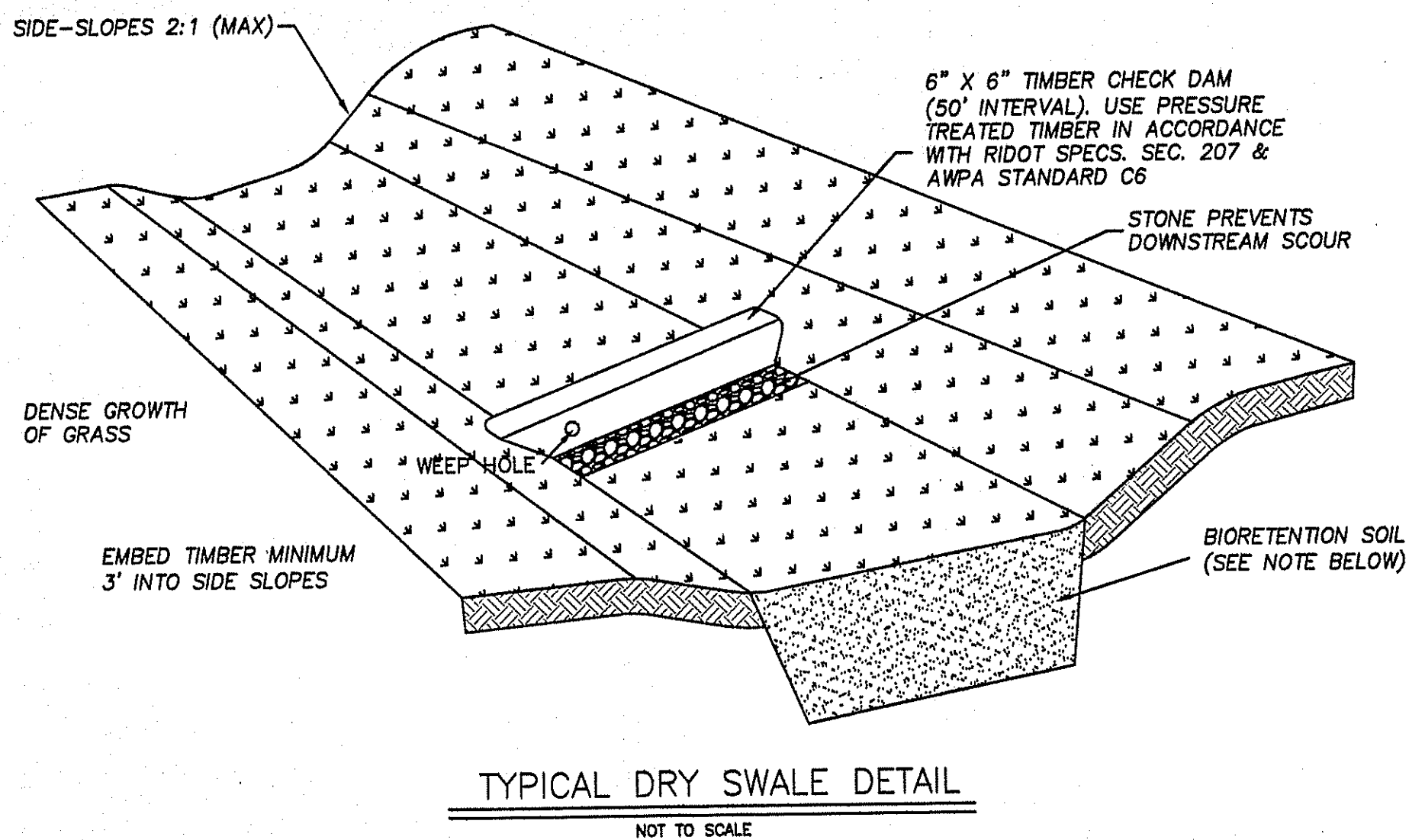
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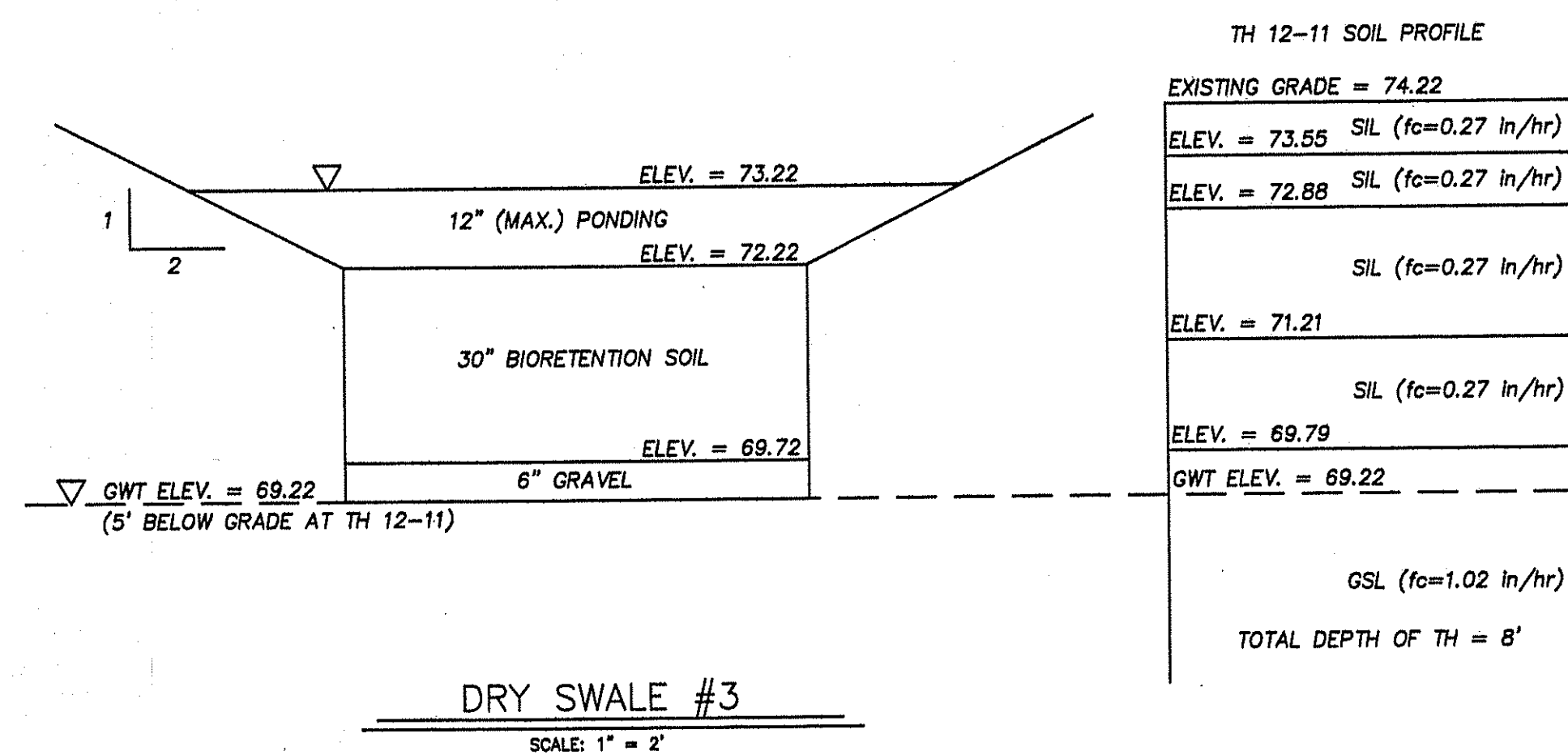


DRY SWALE #1  
SCALE: 1" = 2'

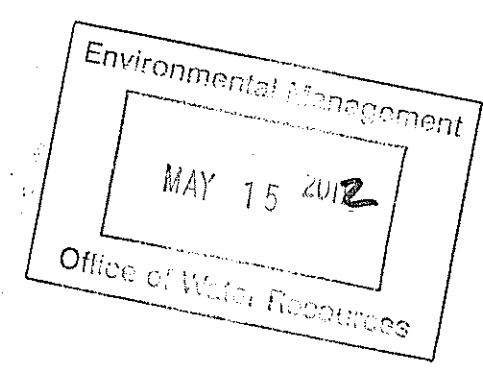
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SCALE: 1" = 2'



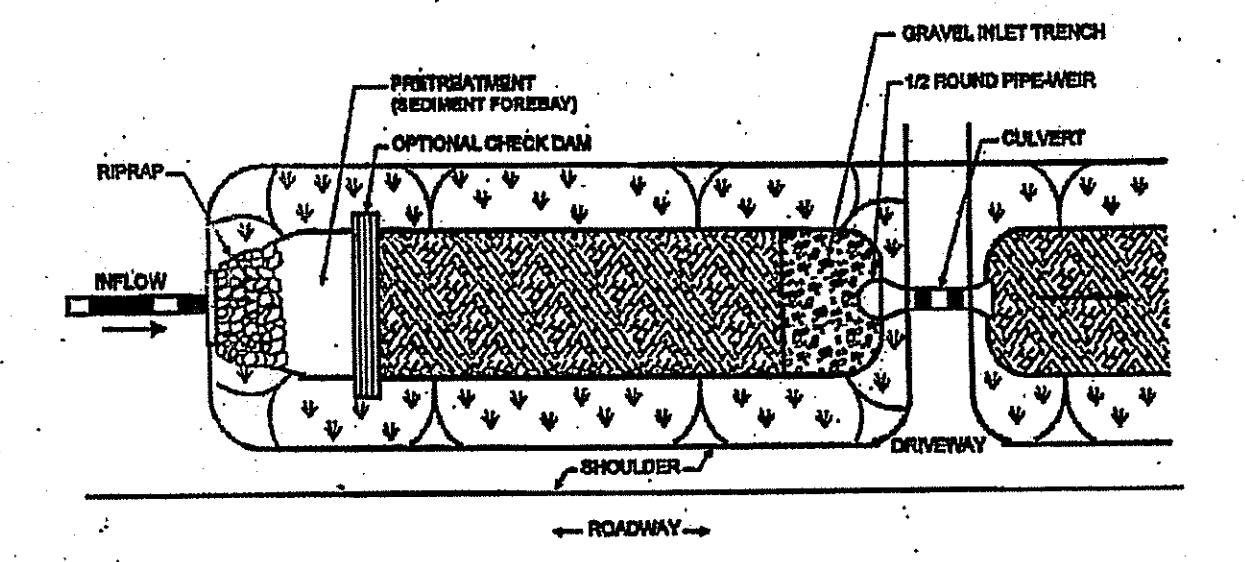
TYPICAL DRY SWALE DETAIL  
NOT TO SCALE



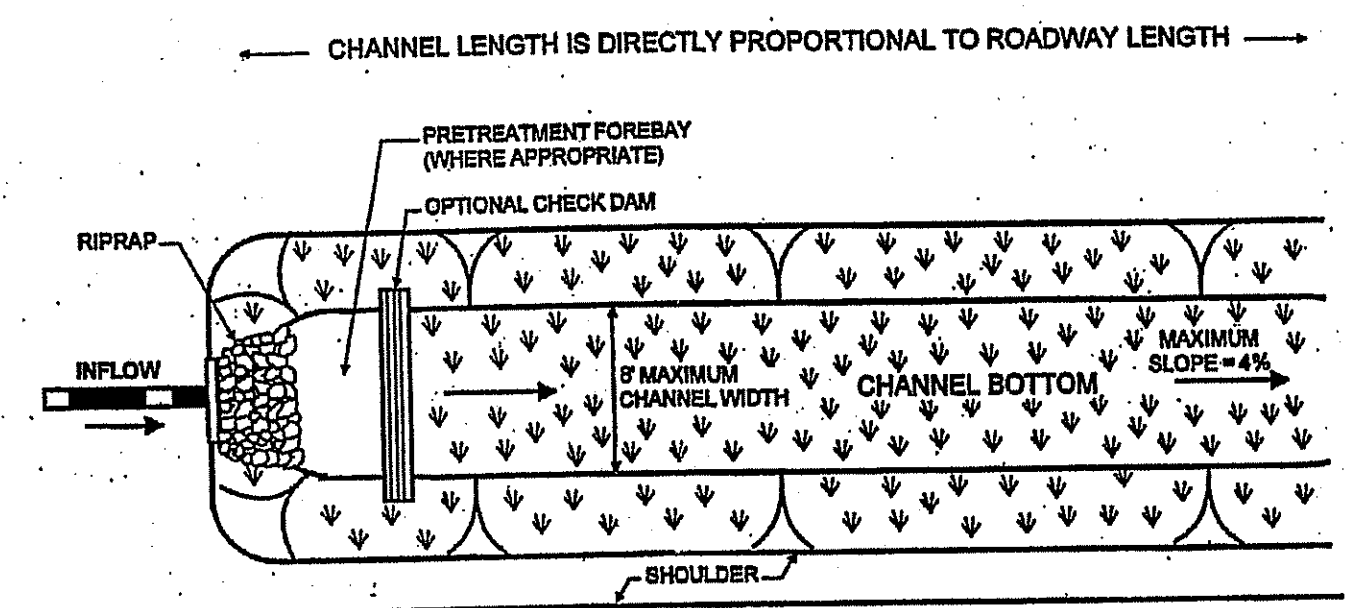
DRY SWALE #3  
SCALE: 1" = 2'



DRY SWALE DETAIL (N.T.S.)



GRASS CHANNEL DETAIL (N.T.S.)



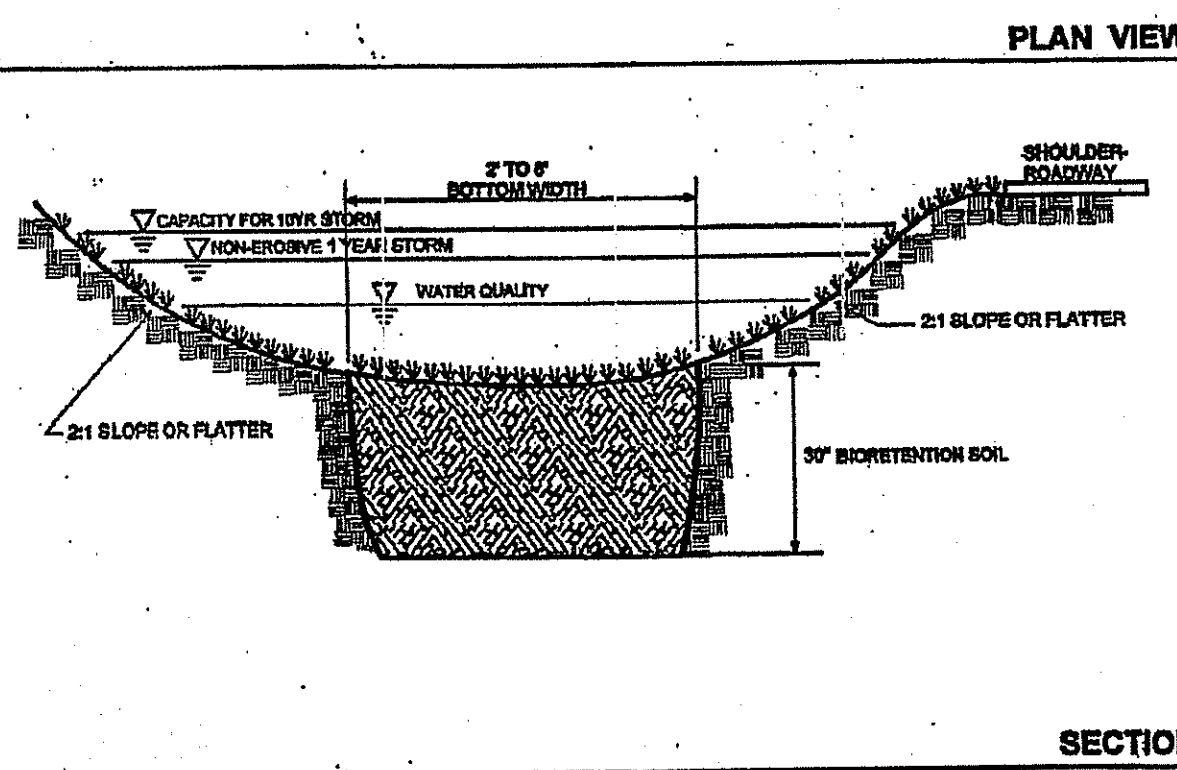
**BIORETENTION SOIL**

BIORETENTION SOIL SHOULD BE A UNIFORM MIX FREE OF STONES, STUMPS, ROOTS OR OTHER OBJECTS LARGER THAN 2" AND SHALL CONSIST OF USDA LOAMY SAND TO SANDY LOAM CLASSIFICATION AND MEET THE FOLLOWING GRADATION: SAND (85-88%), SILT (8-12%), CLAY (0-2%), AND ORGANIC MATTER IN THE FORM OF LEAF COMPOST (3-5%). THE BIORETENTION SOIL SHALL BE MIXED SO THAT A COEFFICIENT OF PERMEABILITY OF 1.0 FT/DAY IS ACHIEVED. A TEXTURAL ANALYSIS IS REQUIRED TO ENSURE THAT THE BIORETENTION SOIL MEETS THE ABOVE CRITERIA.

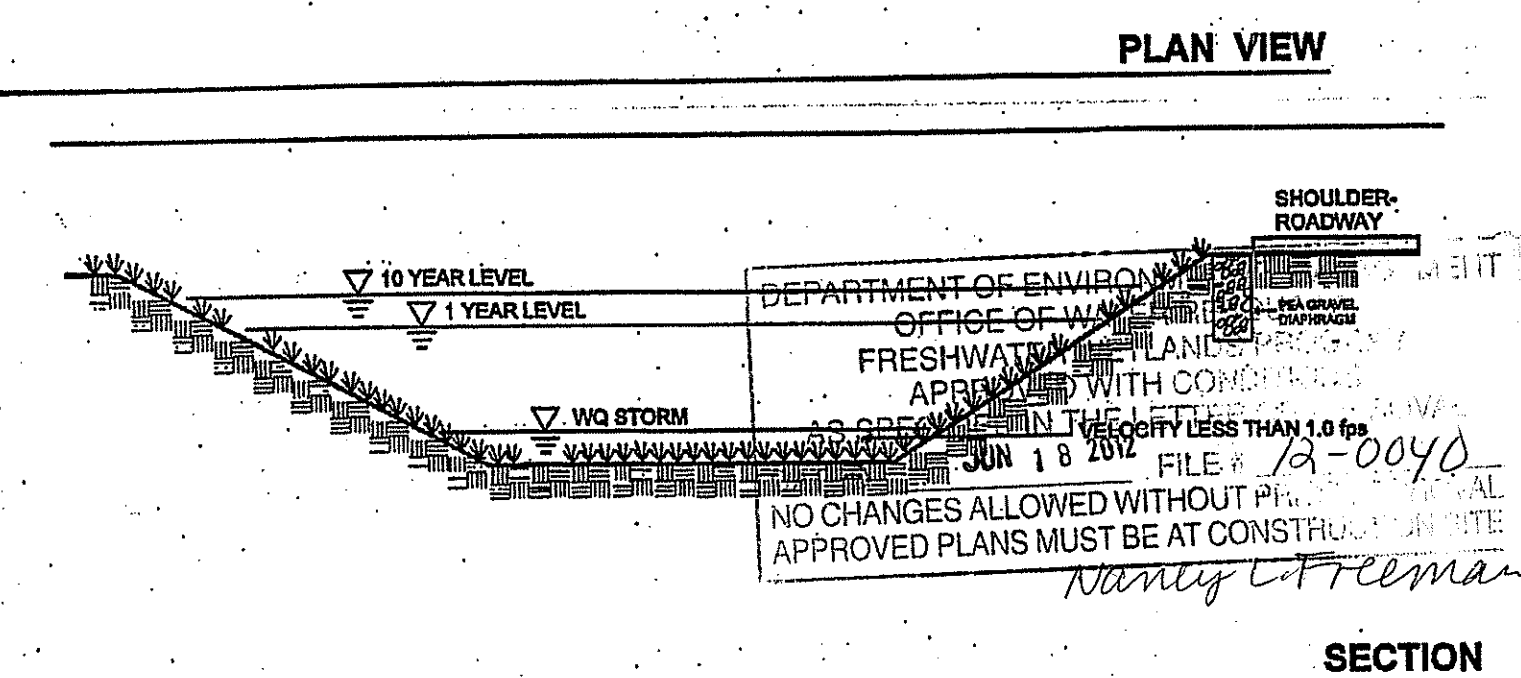
THE BIORETENTION SOIL SHALL ALSO BE TESTED (MINIMUM 1 TEST PER DRY SWALE BY SAME TESTING FACILITY) FOR pH, MAGNESIUM, PHOSPHORUS, POTASSIUM AND SOLUBLE SALTS TO MEET THE FOLLOWING CRITERIA:

pH RANGE	5.2 - 7.0
MAGNESIUM	NOT TO EXCEED 32 PPM
PHOSPHORUS OXIDE	NOT TO EXCEED 69 PPM
POTASSIUM OXIDE	NOT TO EXCEED 78 PPM
SOLUBLE SALTS	NOT TO EXCEED 500 PPM

IF THE pH DOES NOT TEST WITHIN THE ACCEPTABLE RANGE, LIME OR IRON SULFATE PLUS SULFUR MAY BE ADDED TO RAISE OR LOWER THE pH OF THE BIORETENTION SOIL, RESPECTIVELY.



SECTION



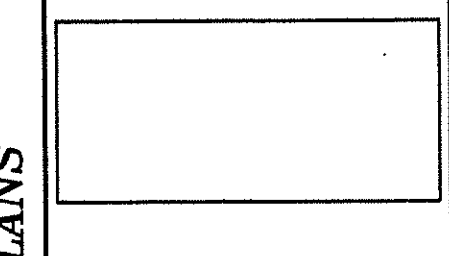
SECTION

DEPARTMENT OF ENVIRONMENT & PLANNING  
OFFICE OF WATER RESOURCES  
FRESHWATER PLANNING  
APPROVED WITH COMMENTS  
JUN 18 2012 FILE # 12-0048  
NO CHANGES ALLOWED WITHOUT PERMIT  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE  
Nancy Freeman

DATE	REVISIONS
4/23/12	RDM COMMENTS

GARY C. LAMOND  
No. 7123  
REGISTERED PROFESSIONAL ENGINEER  
CIVIL

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ENGINEERS • SURVEYORS • PLANNERS



WETLANDS PRELIMINARY DETERMINATION PLANS  
DETAIL SHEET  
"BROAD ROCK MEADOWS"  
BROAD ROCK ROAD  
SOUTH KINGSTOWN, R.I.  
A.P. 33 LOT 64  
FOR ROBERT H. CARR

DATE ISSUED:	3/1/12
SCALE:	1" = 40'
DESIGNED BY:	D.A.G.
DRAWN BY:	D.A.G.
CHECKED BY:	
JOB NO.:	11-088
DWG NO.:	11088PD-4

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