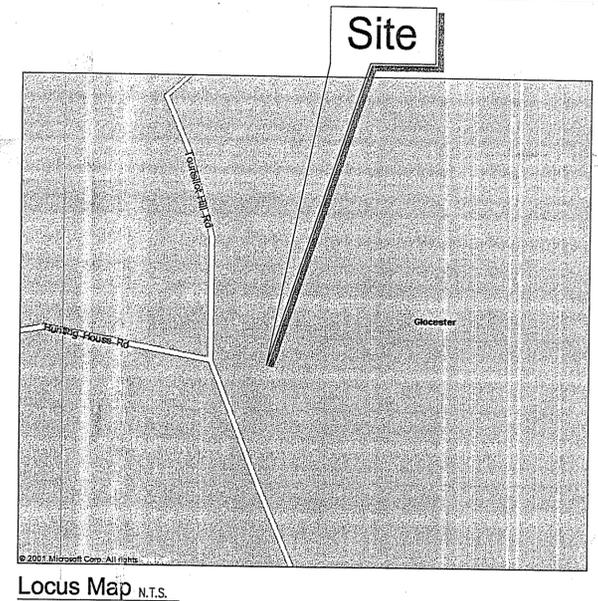
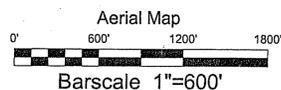
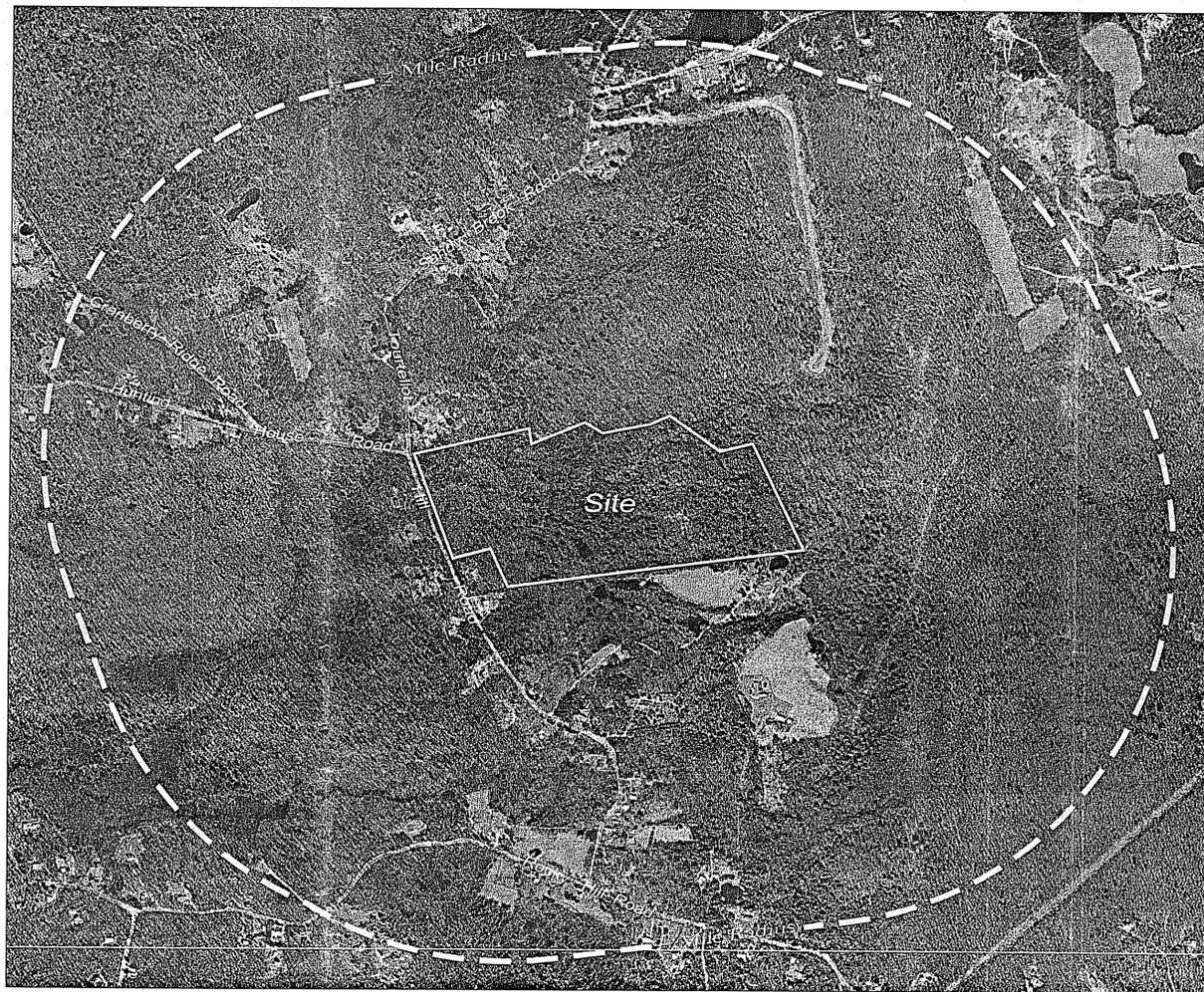


Preliminary Design Plans Residential Compound

Four Lot Subdivision
Assessor's Plat 18 Lot 190
Tourtellot Hill Road Gloucester, RI



Owner/Applicant:

Julian Forge
401 Snake Hill Road
North Scituate, RI 02857

Sheet Index:

- Sheet 1 Cover Sheet
- Sheet 2 Existing Conditions Plan
- Sheet 3 Overall Plan
- Sheet 4 Grading Plan 1
- Sheet 5 Grading Plan 2
- Sheet 6 Roadway Profile Plan
- Sheet 7 Construction Details 1
- Sheet 8 Construction Details 2

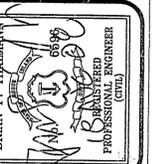
Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATE: SEP 22 2008 FILE # 08-0258
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Nancy L. Freeman

AUG 18 2008

NO.	DATE	DESCRIPTION	BY
1	5/10/08	REDESIGN ROAD LAYOUT & GRADING	REB
1	8/10/08	PER RIDEM	NJP



Thalmann Engineering Co., Inc.
Civil Engineering • Land Planning
600 Putnam Pike, Suite #7
Greenville, Rhode Island 02828
(401) 349-3040 • (401) 349-3041 (fax)

Cover Sheet
Residential Compound
Tourtellot Hill Road
Prepared for:
Julian Forge
401 Snake Hill Road North Scituate, RI 02857
date: Apr-2008
scale: As Noted
Lot 190
Rhode Island
A.P. 18
Gloucester

Design By: REB

Checked By: NJP

Sheet

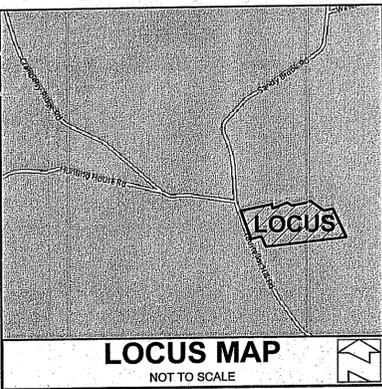
1

of 8

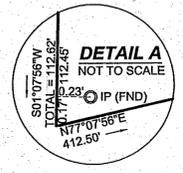
FILE NO.: 08.007

RIDEM COPY

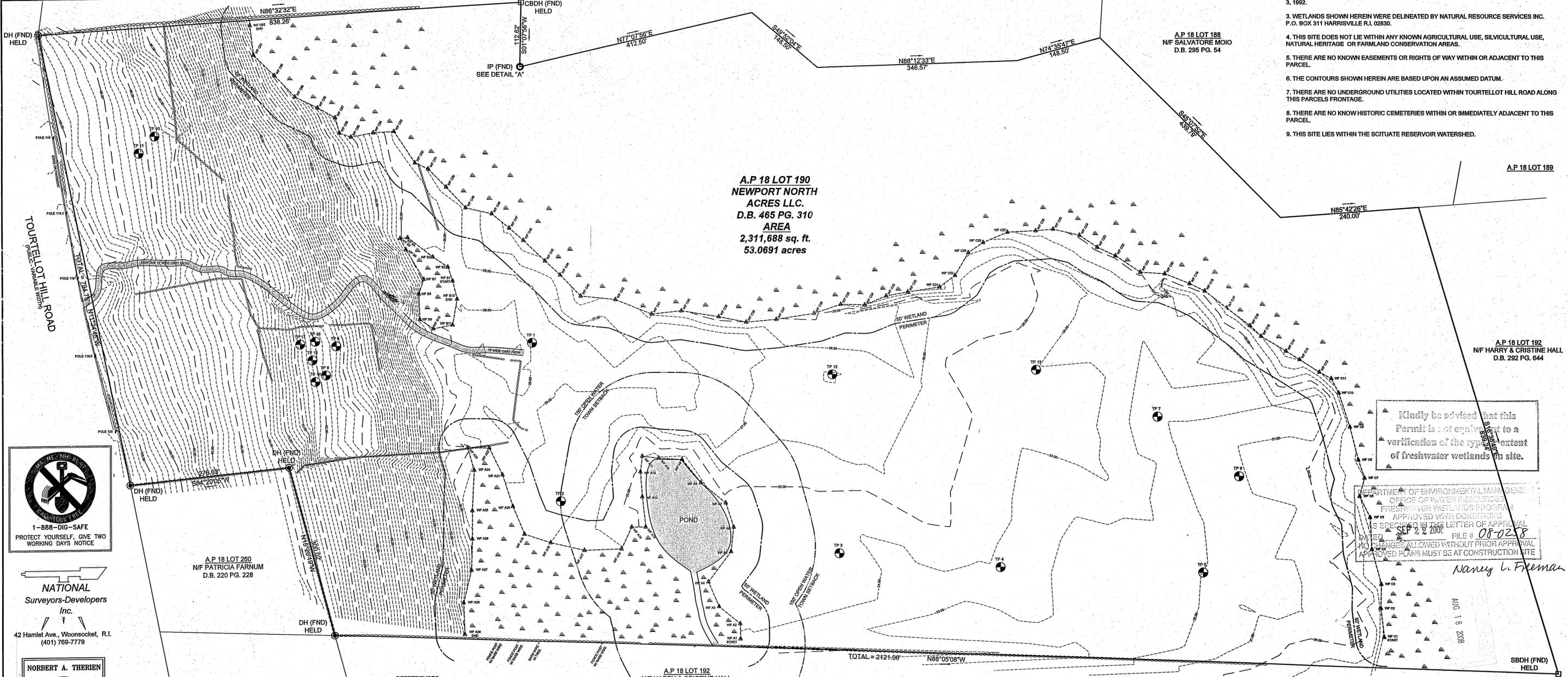
NO.	DATE	DESCRIPTION	BY



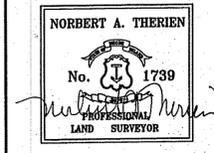
- LEGEND**
NOT TO SCALE
- MAJOR CONTOUR
 - MINOR CONTOUR
 - STONEWALL
 - BOUNDARY
 - ABUTTER
 - WETLANDS EDGE
 - 50' PERIMETER WETLAND
 - 200' WATERSHED
 - BUILDING ENVELOPE
 - OVERHEAD WIRES
 - SOIL EVALUATION HOLE
 - IRON PIN
 - BOUND
 - DRILL HOLE
 - WELL
 - UTILITY POLE



- GENERAL NOTES:**
1. THE LOCATION AND DEPTH OF EXISTING UTILITIES ARE APPROXIMATE AND HAVE BEEN PLOTTED FROM THE LATEST AVAILABLE INFORMATION. THE UTILITY LOCATIONS ARE APPROXIMATE AND MAY NOT BE ALL INCLUSIVE. THE CONTRACTOR SHALL CHECK AND VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES, BOTH OVERHEAD AND UNDERGROUND, AND "DIG-SAFE" MUST BE NOTIFIED PRIOR TO COMMENCING ANY CONSTRUCTION OPERATIONS. RESTORATION AND REPAIR OF DAMAGE TO EXISTING UTILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR WITH NO ADDITIONAL COST TO THE OWNER. NO EXCAVATION SHALL COMMENCE UNTIL ALL INVOLVED UTILITY COMPANIES AND/OR TOWN WHOSE FACILITIES MIGHT BE AFFECTED BY ANY WORK TO BE PERFORMED BY THE CONTRACTOR ARE NOTIFIED AT LEAST 72 HOURS IN ADVANCE.
 2. THIS SITE LIES IN ZONE X AREAS BOTH INSIDE AND OUTSIDE THE 500 YEAR FLOOD PLAIN, AND AREAS OF A 100 YEAR FLOOD TO THE DEPTH OF 1 FOOT AS SHOWN ON THE FIRM MAP FOR THE TOWN OF GLOCESTER, RI COMMUNITY PANEL NO. 440034 0005 C, MAP REVISED MARCH 3, 1992.
 3. WETLANDS SHOWN HEREIN WERE DELINEATED BY NATURAL RESOURCE SERVICES INC. P.O. BOX 311 HARRISVILLE R.I. 02830.
 4. THIS SITE DOES NOT LIE WITHIN ANY KNOWN AGRICULTURAL USE, SILVICULTURAL USE, NATURAL HERITAGE OR FARMLAND CONSERVATION AREAS.
 5. THERE ARE NO KNOWN EASEMENTS OR RIGHTS OF WAY WITHIN OR ADJACENT TO THIS PARCEL.
 6. THE CONTOURS SHOWN HEREIN ARE BASED UPON AN ASSUMED DATUM.
 7. THERE ARE NO UNDERGROUND UTILITIES LOCATED WITHIN TOURTELLOTT HILL ROAD ALONG THIS PARCELS FRONTAGE.
 8. THERE ARE NO KNOWN HISTORIC CEMETERIES WITHIN OR IMMEDIATELY ADJACENT TO THIS PARCEL.
 9. THIS SITE LIES WITHIN THE SCITUATE RESERVOIR WATERSHED.



NATIONAL
Surveyors-Developers
Inc.
42 Hamlet Ave., Woonsocket, R.I.
(401) 769-7779



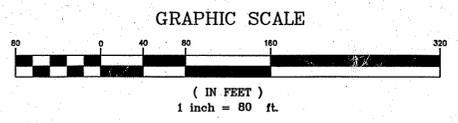
"I CERTIFY THAT THE INFORMATION SHOWN HEREON HAS BEEN OBTAINED BY AN ACTUAL SURVEY ON THE GROUND, THAT IT IS CORRECT AND THIS SURVEY AND PLAN CONFORM TO A CLASS I STANDARD AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS.

BY: *Norbert A. Therien*
NORBERT A. THERIEN P.L.S.

- REFERENCES:**
1. A CERTAIN PLAN ENTITLED "MAP OF LAND - EAST OF TOURTELLOTT HILL ROAD, LOCATED IN THE TOWN OF GLOCESTER R.I., OWNED BY ROBERT S. COOK" SURVEYED BY ALFRED E. HANSEN ASSOCIATES INC., DATED DECEMBER 5, 1980, SCALE 1" = 50', RECORDED IN THE TOWN OF GLOCESTER R.I., MAP #278A ON H.F. 49
 2. MAP #227 ON H.F. 623 RECORDED IN THE TOWN OF GLOCESTER R.I.

ZONING CRITERIA

ZONING DISTRICT	A-4 (SINGLE FAMILY)
MINIMUM LOT AREA	174,240 SQ. FT. (4 ACRE)
MINIMUM LOT FRONTAGE	350'
MINIMUM FRONT YARD SETBACK	75'
MINIMUM SIDE YARD SETBACK	50'
MINIMUM REAR YARD SETBACK	100'
MAXIMUM BUILDING COVERAGE	4%
MAXIMUM BUILDING HEIGHT	35'



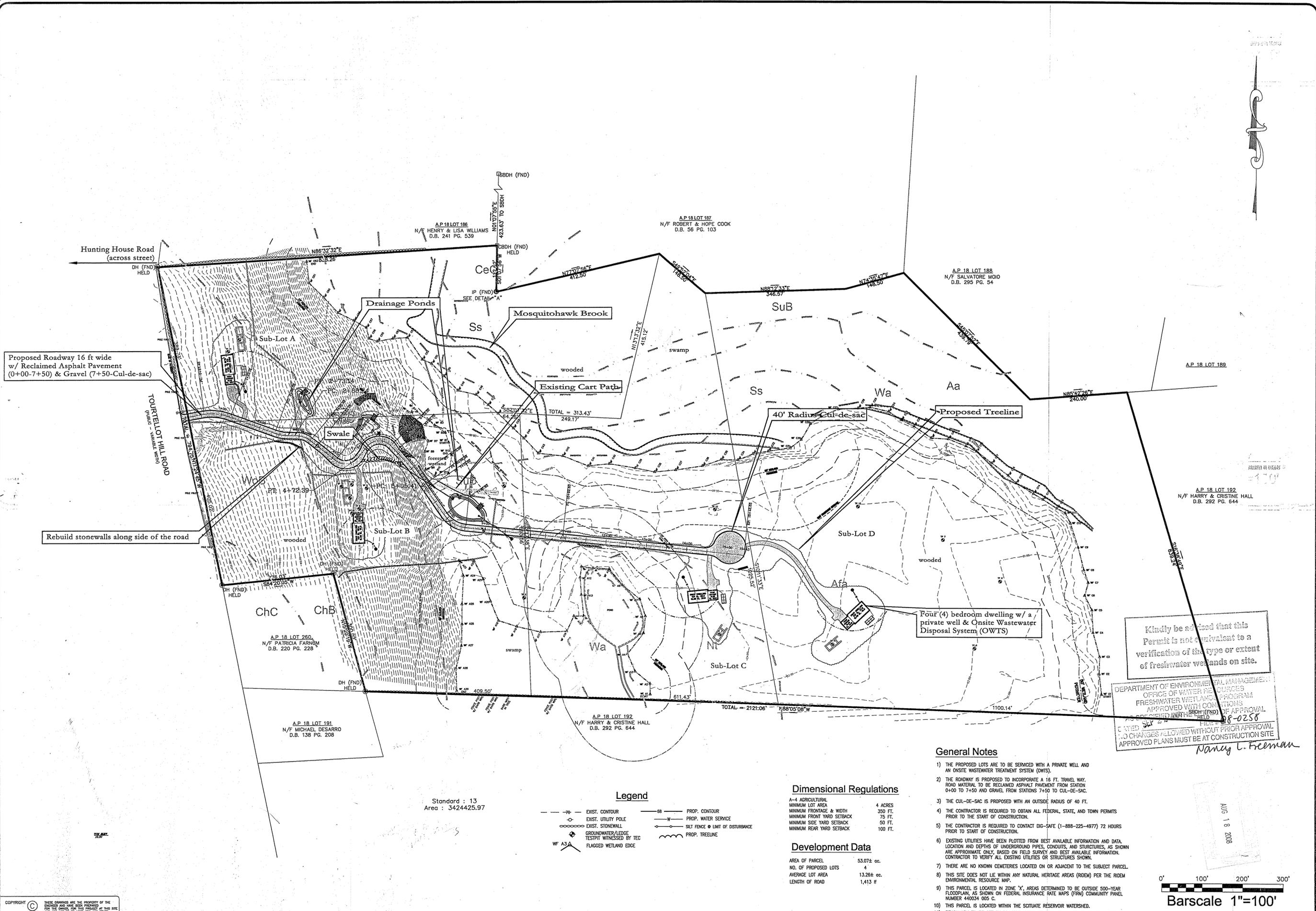
Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED SEP 22 2008 FILE # 08-028
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Nancy L. Freeman

RESIDENTIAL COMPOUND
FOR
JULLIAN FOURGE
AP 18 LOT 190
POLE 118 1/2 TOURTELLOTT HILL ROAD
GLOCESTER, RHODE ISLAND

EXISTING CONDITIONS
JANUARY 2008 JOB No. 2007-138 SHEET 1 OF 2



Proposed Roadway 16 ft wide w/ Reclaimed Asphalt Pavement (0+00-7+50) & Gravel (7+50-Cul-de-sac)

Rebuild stone walls along side of the road

General Notes

- 1) THE PROPOSED LOTS ARE TO BE SERVICED WITH A PRIVATE WELL AND AN ONSITE WASTEWATER TREATMENT SYSTEM (OWTS).
- 2) THE ROADWAY IS PROPOSED TO INCORPORATE A 16 FT. TRAVEL WAY. ROAD MATERIAL TO BE RECLAIMED ASPHALT PAVEMENT FROM STATION 0+00 TO 7+50 AND GRAVEL FROM STATIONS 7+50 TO CUL-DE-SAC.
- 3) THE CUL-DE-SAC IS PROPOSED WITH AN OUTSIDE RADIUS OF 40 FT.
- 4) THE CONTRACTOR IS REQUIRED TO OBTAIN ALL FEDERAL, STATE, AND TOWN PERMITS PRIOR TO THE START OF CONSTRUCTION.
- 5) THE CONTRACTOR IS REQUIRED TO CONTACT DIG-SAFE (1-888-225-4977) 72 HOURS PRIOR TO START OF CONSTRUCTION.
- 6) EXISTING UTILITIES HAVE BEEN PLOTTED FROM BEST AVAILABLE INFORMATION AND DATA. LOCATION AND DEPTHS OF UNDERGROUND PIPES, CONDUITS, AND STRUCTURES, AS SHOWN ARE APPROXIMATE ONLY, BASED ON FIELD SURVEY AND BEST AVAILABLE INFORMATION. CONTRACTOR TO VERIFY ALL EXISTING UTILITIES OR STRUCTURES SHOWN.
- 7) THERE ARE NO KNOWN CEMETERIES LOCATED ON OR ADJACENT TO THE SUBJECT PARCEL.
- 8) THIS SITE DOES NOT LIE WITHIN ANY NATURAL HERITAGE AREAS (RIDEM) PER THE RIDEM ENVIRONMENTAL RESOURCE MAP.
- 9) THIS PARCEL IS LOCATED IN ZONE "X". AREAS DETERMINED TO BE OUTSIDE 500-YEAR FLOODPLAIN, AS SHOWN ON FEDERAL INSURANCE RATE MAPS (FIRM) COMMUNITY PANEL NUMBER 44034 005 C.
- 10) THIS PARCEL IS LOCATED WITHIN THE SCITUATE RESERVOIR WATERSHED.
- 11) BENCHMARK TO BE SET BY PROJECT SURVEYOR PRIOR TO START OF CONSTRUCTION.

Dimensional Regulations

A-4 AGRICULTURAL MINIMUM LOT AREA	4 ACRES
MINIMUM FRONTAGE & WIDTH	350 FT.
MINIMUM FRONT YARD SETBACK	75 FT.
MINIMUM SIDE YARD SETBACK	50 FT.
MINIMUM REAR YARD SETBACK	100 FT.

Development Data

AREA OF PARCEL	53.07± ac.
NO. OF PROPOSED LOTS	4
AVERAGE LOT AREA	13.26± ac.
LENGTH OF ROAD	1,413 #

Legend

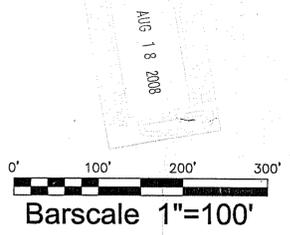
- - - - - 76 - - - - - EXIST. CONTOUR
- ○ ○ ○ ○ EXIST. UTILITY POLE
- — — — — EXIST. STONEWALL
- ⊕ ⊕ ⊕ ⊕ ⊕ GROUNDWATER/ALEDGE TEST PIT WITNESSED BY TEC
- WF AS A FLAGGED WETLAND EDGE
- - - - - 88 - - - - - PROP. CONTOUR
- — — — — W PROP. WATER SERVICE
- — — — — SILT FENCE @ LIMIT OF DISTURBANCE
- ~ ~ ~ ~ ~ PROP. TREELINE

Standard : 13
Area : 3424425.97

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 SHOWN ON THE FIELD APPROVAL
DATED SLIP # 18-0258
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Nancy L. Freeman



NO.	DATE	DESCRIPTION	BY
1	15/10/08	REDESIGN ROAD LAYOUT & GRADING	REB
2	8/15/08	RIDEM COMMENTS	NJP



Thalmann Engineering Co., Inc.
Civil Engineering • Land Planners
600 Putnam Pike, Suite #7
Greenville, Rhode Island 02828
(401) 349-3040 • (401) 349-3041 (fax)

Overall Site Layout
Residential Compound
Tourelot Hill Road
Prepared for:
Julian Forge
401 Snake Hill Road North Scituate, RI 02857
date: March-2008

Design By: REB
Checked By: BPT
Sheet
3
of 8

COPYRIGHT © THESE DRAWINGS ARE THE PROPERTY OF THE ENGINEER AND ARE NOT TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN CONSENT OF THE ENGINEER OR ONE OF ITS DIRECTORS.



TOURTELLOTT HILL ROAD
(PUBLIC - VARIABLE WIDTH)



- NOTES**
1. TREES 1/2" OR GREATER TO REMAIN IN DEFENTION "BASINS"
 - 2, 3, & 4 WHERE POSSIBLE - ALL SMALL BRUSH TO BE REMOVED AND BOTTOM OF BASINS TO HAVE LIMITED DISTURBANCE ONLY TO GRADE TO DRAIN TO OULET.
 2. ALL STONEWALLS DISTURBED TO BE REBUILT ALONG PROPOSED ROADWAY (MINIMUM OF 3' OFF ROADWAY).

NO.	DATE	DESCRIPTION
1	15/10/08	REDESIGN ROAD LAYOUT & GRADING
1	8/15/08	RIDEM COMMENTS



Thalmann Engineering Co., Inc.
Civil Engineering • Land Planners
600 Putnam Pike, Suite #7
Greenville, Rhode Island 02828
(401) 349-3040 • (401) 349-3041 (fax)

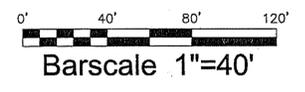
Grading Plan 1
Residential Compound
Tourtelott Hill Road
Prepared for:
Julian Forge
401 Snake Hill Road North Scituate, RI 02857
date: March-2008
scale: 1"=40'

Design By: REB
Checked By: BPT
Sheet
4
of 8
FILE NO.: 08.007

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

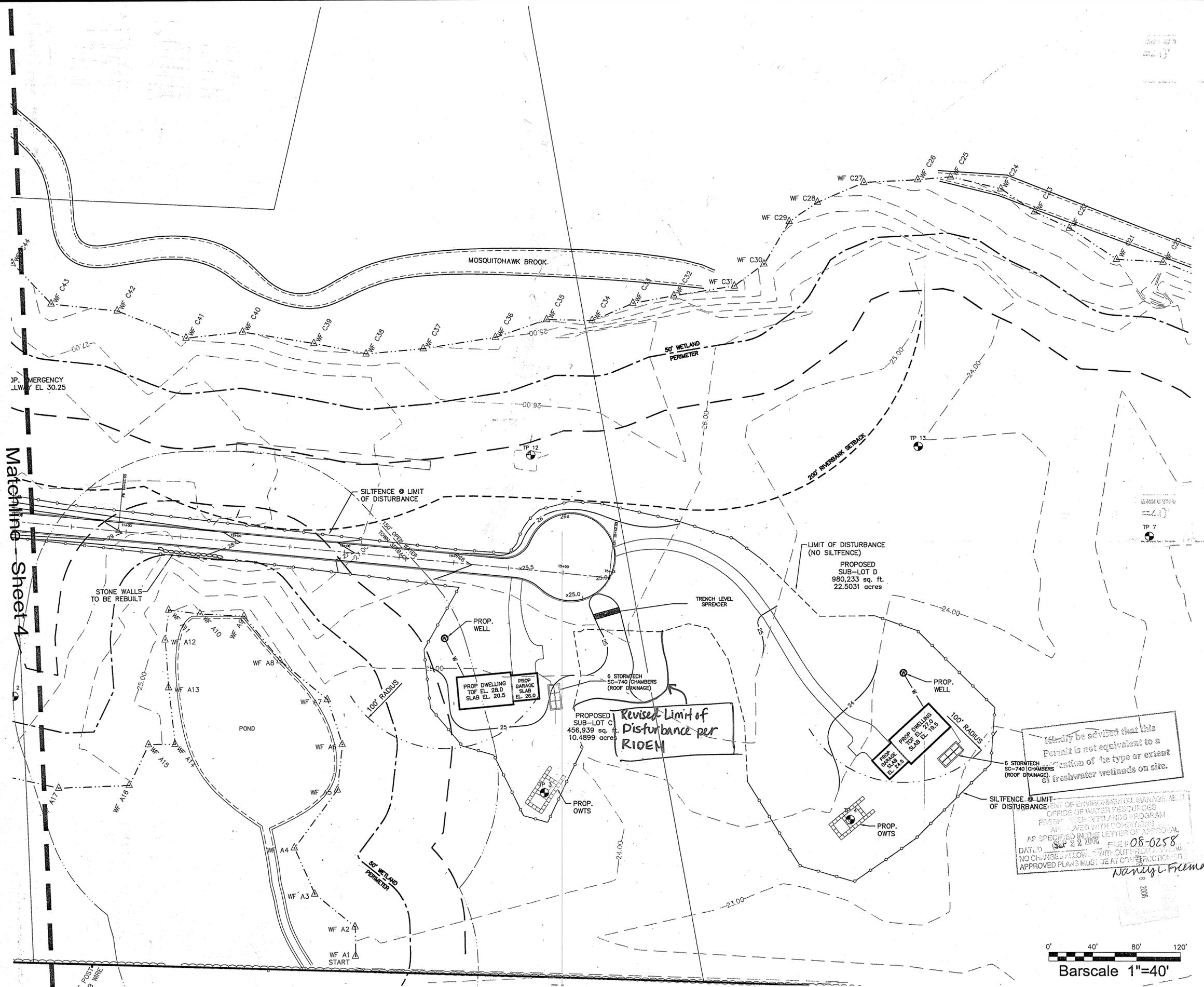
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED SEP 22 2008 FILE # 08-0258
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Nancy L. Freeman



A.P 18 LOT 260.
N/F PATRICIA FARNUM
D.B. 220 PG. 228

COPYRIGHT © THESE DRAWINGS ARE THE PROPERTY OF THE ENGINEER AND HAVE BEEN PREPARED FOR THE OWNER FOR THIS PROJECT AT HIS SITE AND ARE NOT TO BE USED FOR ANY OTHER PURPOSE, LOCATION OR ORIGIN WITHOUT THE CONSENT OF THE OWNER OR ONE OF THE ENGINEER'S OFFICES.

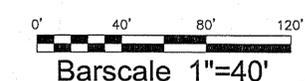


Matchline Sheet 4

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

STATE OF RHODE ISLAND
 DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATE: 8/2/2008 FILE # 08-0258
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Nancy L. Freeman
 2008



NO.	DATE	DESCRIPTION
1	5/10/08	REDESIGN ROAD LAYOUT & GRADING
2	8/15/08	RIDEM COMMENTS

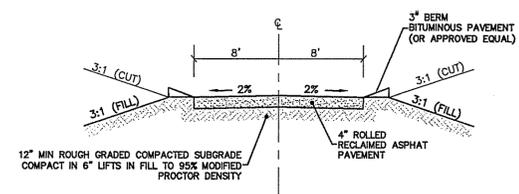
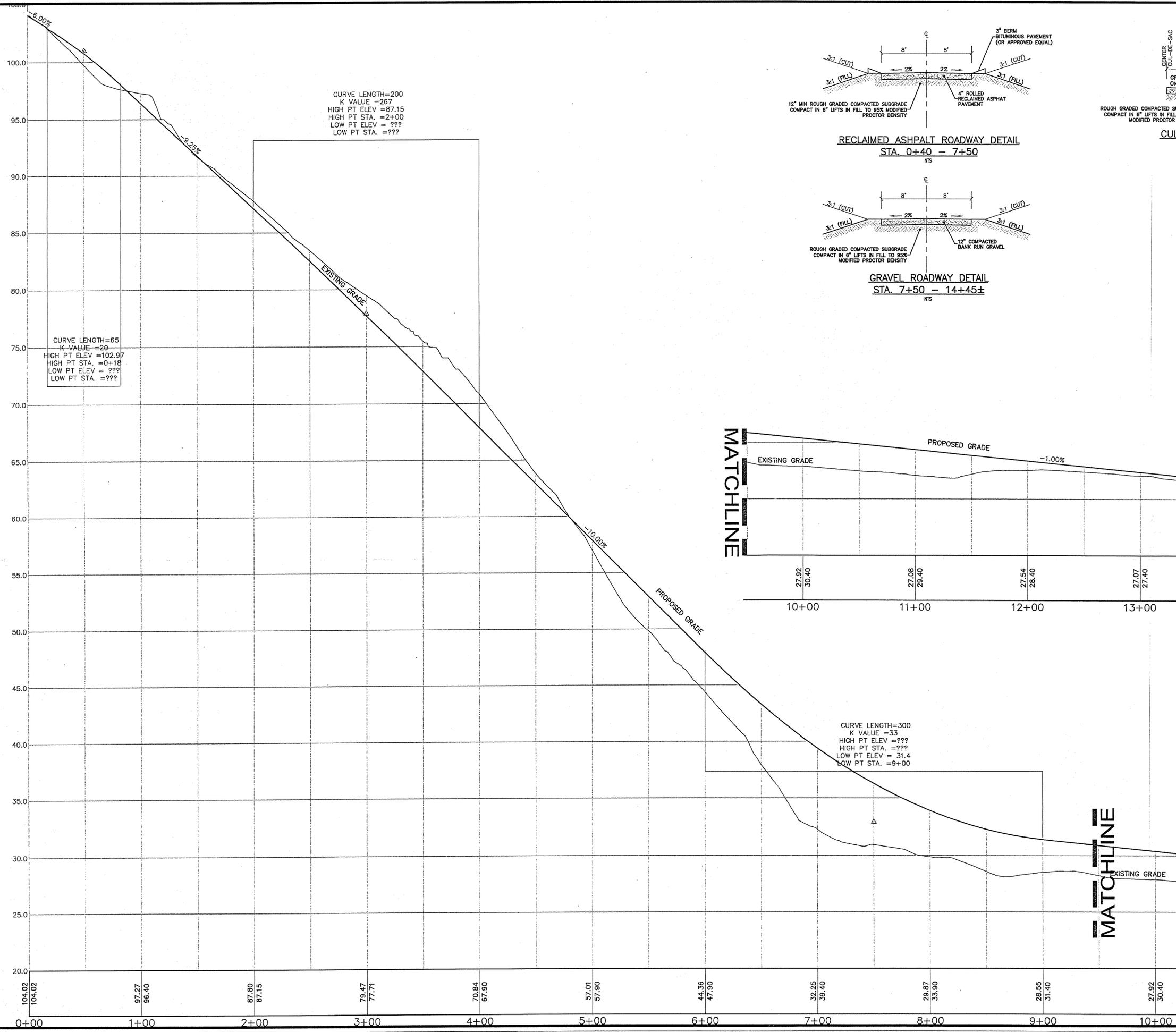
BRIAN P. THALMANN
 No. 6596
 150800000
 PROFESSIONAL ENGINEER
 (CIVIL)

Thalman Engineering Co., Inc.
 Civil Engineering • Land Planners
 600 Putnam Pike, Suite #7
 Greenville, Rhode Island 02828
 (401) 349-3040 • (401) 349-3041 (fax)

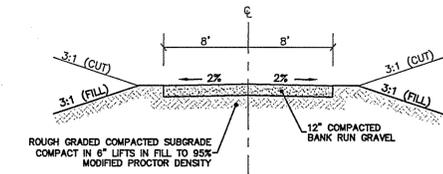
A.P. 18
 Grading Plan 2
Residential Compound
 Tourtelott Hill Road
 Prepared for:
Jullian Forge
 401 Snake Hill Road North Scituate, RI 02857
 date: March-2008

Design By: REB
 Checked By: BPT
 Sheet
5
 of 8
 FILE NO.: 08.007

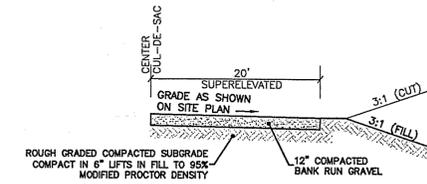
COPYRIGHT © THESE DRAWINGS ARE THE PROPERTY OF THE ENGINEER AND HAVE BEEN PREPARED FOR THE CLIENT FOR THIS PROJECT AT THIS SITE AND ARE NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS WITHOUT THE WRITTEN CONSENT OF THE ENGINEER OR ONE OF ITS EMPLOYEES.



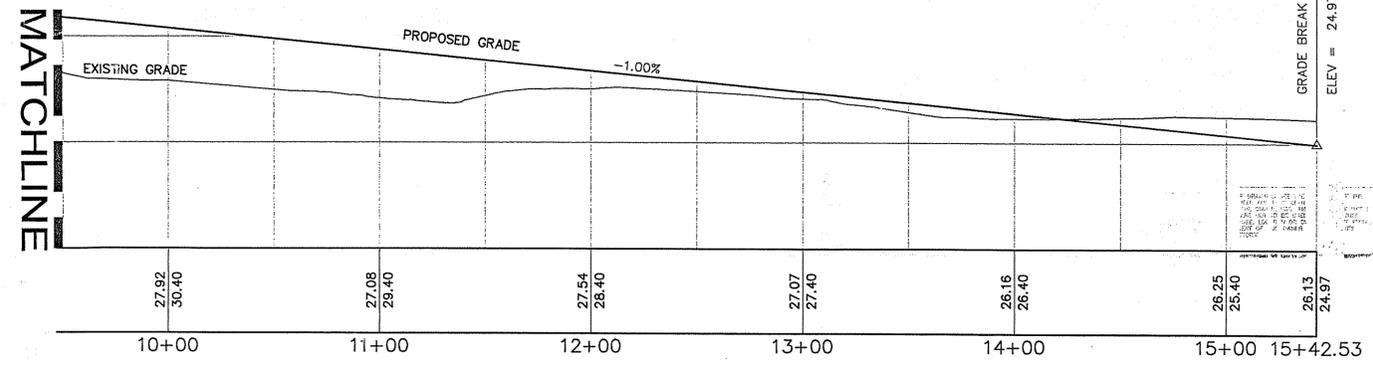
RECLAIMED ASPHALT ROADWAY DETAIL
STA. 0+40 - 7+50
NTS



GRAVEL ROADWAY DETAIL
STA. 7+50 - 14+45±
NTS



CUL-DE-SAC SECTION
NTS



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 8/18/08 FILE # 08-0258
NO CHANGE ALLOWED WITHOUT PRIOR APPROVAL
APPROVED BY: Nancy L. Freeman

Proposed Roadway
HORIZONTAL 1"=40' 0'
VERTICAL 1"=4' 0'

COPYRIGHT © 2008
THALMANN ENGINEERING CO., INC.
ALL RIGHTS RESERVED. THIS DOCUMENT IS THE PROPERTY OF THALMANN ENGINEERING CO., INC. AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT THE WRITTEN PERMISSION OF THALMANN ENGINEERING CO., INC.

NO.	DATE	DESCRIPTION
1	5/10/08	REDESIGN ROAD LAYOUT & GRADING
1	8/15/08	REDEM COMMENTS

BRIAN P. THALMANN
REGISTERED PROFESSIONAL ENGINEER
(CIVIL)

Thalman Engineering Co., Inc.
Civil Engineering • Land Planners
600 Putnam Pike, Suite #7
Greenville, Rhode Island 02828
(401) 349-3040 • (401) 349-3041 (fax)

Lot 190
Rhode Island
scale: 1"=40'
Roadway Profile Plan
Residential Compound
Tourelot Hill Road
Prepared for:
Julian Forge
401 Snake Hill Road North Scituate, RI 02857
date: March-2008
A.P. 18
Gloucester

Design By: REB
Checked By: BPT
Sheet
6
of 8
FILE NO.: 08.007

STRUCTURAL MEASURES

1. POND DETENTION SYSTEMS ARE USED TO CONTROL RUNOFF.
2. A PERMANENT COVER SHALL BE ESTABLISHED IN ACCORDANCE WITH THE VEGETATIVE COVER PROVISIONS. THE SEEDING SHALL EXTEND TO AT LEAST THE DESIGN TOP WIDTH AND INCLUDE ANY OTHER AREAS DISTURBED BY CONSTRUCTION ACTIVITIES. ACTIVITIES SHALL BE CONFINED TO WITHIN THE LIMIT OF WORK AS SHOWN ON THE PLANS.
3. VIGOROUS VEGETATION SHALL BE MAINTAINED BY APPLYING LIME AND FERTILIZER. BARE OR ERODED AREAS SHALL BE IMMEDIATELY REPAIRED AND RESEED BY THE CONTRACTOR.
4. THE CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE AND INSPECTION OF THE DETENTION AREAS UP TO A YEAR AFTER COMPLETION OF CONSTRUCTION. THE OWNERS ARE RESPONSIBLE THEREAFTER.
5. THE CONSTRUCTION SUPERINTENDENT SHALL HAVE THE OVERALL RESPONSIBILITY FOR STRUCTURAL MEASURE IMPLEMENTATION AND FOR SEEING THAT APPROPRIATE WORKERS ARE AWARE OF THE PROVISIONS OF THE PLAN.
6. REFERENCE THE "RHODE ISLAND EROSION AND SEDIMENT CONTROL HANDBOOK" PREPARED BY USDA SOIL CONSERVATION SERVICE 1989, AS A GUIDE.

NONSTRUCTURAL MEASURES

1. CONSTRUCTION TRAFFIC SHALL BE LIMITED TO ACCESS ROADS, DRAINAGE EASEMENTS, AND AREAS TO BE GRADED. HEAVY CONSTRUCTION EQUIPMENT SHALL NOT BE OPERATED IN THE PROPOSED DETENTION AREAS PRIOR TO INSTALLATION.
2. A STONE STABILIZATION PAD IS LOCATED AT THE SITE ENTRANCE TO REDUCE THE TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT OF WAY.
3. THE ENTRANCE SHALL BE MAINTAINED BY THE CONTRACTOR. THE MAINTENANCE SHALL INCLUDE TOP DRESSING WITH ADDITIONAL STONE OR ADDITIONAL LENGTH AS CONDITIONS DEMAND OR AS DIRECTED BY THE ENGINEER. ALL SEDIMENTS SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHT OF WAY, MUST BE REMOVED IMMEDIATELY BY THE CONTRACTOR.
4. TOPSOIL SHALL BE STRIPPED FROM AREAS TO BE GRADED AND STOCKPILED FOR LATER USE. STOCK PILE LOCATION SHALL BE SUBJECT TO APPROVAL BY THE TOWN ENGINEER. A SEDIMENT BARRIER SHOULD SURROUND ALL TOPSOIL STOCKPILES.
5. HAY BALES OR SILT FENCE SHALL BE INSTALLED DOWNSTREAM OUTSIDE THE LIMITS OF ANY PROPOSED CONSTRUCTION AS SHOWN ON THE SITE PLANS AND PRIOR TO THE COMMENCEMENT OF THE PROPOSED ALTERATION.
6. HAY BALES/SILT FENCE SHALL BE MAINTAINED BY THE CONTRACTOR. INSPECTIONS SHALL BE MADE AFTER EACH STORM EVENT TO REPAIR OR REPLACE. CONTRACTOR SHALL CLEAN THE ACCUMULATED SEDIMENT IF HALF OF THE ORIGINAL HEIGHT OF THE BALES/FENCE BECOMES FILLED WITH SEDIMENT.
7. THE HAY BALES OR SILT FENCE SHALL BE CHECKED WEEKLY FOR UNDERMINING OR DETERIORATION BY THE CONTRACTOR.
8. THE CONSTRUCTION SUPERINTENDENT SHALL HAVE OVERALL RESPONSIBILITY FOR PLAN IMPLEMENTATION OF NON-STRUCTURAL MEASURES AND FOR SEEING THAT APPROPRIATE WORKERS ARE AWARE OF THE PROVISIONS OF THE PLAN.
9. REFERENCE THE "RHODE ISLAND EROSION AND SEDIMENT CONTROL HANDBOOK" PREPARED BY THE USDA SOIL CONSERVATION SERVICE 1989, AS A GUIDE.

ESTABLISHMENT OF VEGETATIVE COVER

1. SLOPES SHALL NOT BE LEFT UNATTENDED OR EXPOSED FOR EXCESSIVE PERIODS OF TIME SUCH AS THE INACTIVE WINTER SEASON.
2. ALL DISTURBED SLOPES EITHER NEWLY CREATED OR CURRENTLY EXPOSED SHALL BE SEED OR PROTECTED.
3. PLANTABLE SOIL SHALL HAVE A SANDY LOAM TEXTURE RELATIVELY FREE OF SUBSOIL MATERIAL, STONES, ROOTS, LUMPS OF SOIL, TREE LIMBS, TRASH OR CONSTRUCTION DEBRIS AND SHALL CONFORM WITH RHODE ISLAND'S STANDARD SPECIFICATIONS, AS AMENDED.
4. THE DESIGN MIX SHALL BE COMPRISED OF THE FOLLOWING:

TYPE	LB'S/AC.
CREeping RED FESCUE	75
KENTUCKY BLUE GRASS	15
COLONIAL BENT GRASS	5
PERENNIAL RUE GRASS	5
5. EARLY SPRING OR LATE SUMMER SEEDING IS RECOMMENDED. LIME AND FERTILIZER AS REQUIRED BY SOIL TESTING TO COMPLEMENT OR UPGRADE EXISTING CONDITIONS. THE SEED MIX SHALL BE INOCULATED WITHIN 24 HOURS BEFORE MIXING AND PLANTING, WITH APPROPRIATE INOCULUM FOR EACH VARIETY. THE RECOMMENDED SEEDING DATES ARE APRIL 1ST THROUGH JUNE 15TH AND AUGUST 15TH THROUGH SEPTEMBER 30TH.
6. TEMPORARY TREATMENTS SHALL CONSIST OF NORTH AMERICAN GREEN S150 OR APPROVED EQUAL. THEY SHALL BE INCORPORATED INTO THE WORK AS WARRANTED OR AS ORDERED BY THE ENGINEER. HAY OR STRAW APPLICATIONS SHALL BE IN THE AMOUNT OF 2 TONS/ACRE.
7. ALL HAY BALES OR TEMPORARY PROTECTION SHALL REMAIN IN PLACE UNTIL AN ACCEPTABLE STAND OF GRASS OR APPROVED GROUND COVER IS ESTABLISHED.
8. ALL FILL SHALL BE THOROUGHLY COMPACTED UPON PLACEMENT IN STRICT CONFORMANCE WITH THE RHODE ISLAND STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, SECTION 202.
9. STOCKPILES OF TOPSOIL SHALL NOT BE LOCATED NEAR WATERWAY. THEY SHALL HAVE SIDE SLOPES NO GREATER THAN 2:1 AND SHALL BE TEMPORARILY SEED AND/OR STABILIZED.
10. THE CONSTRUCTION SUPERINTENDENT SHALL HAVE OVERALL RESPONSIBILITY FOR PLAN IMPLEMENTATION AND FOR SEEING THAT THE APPROPRIATE WORKERS ARE AWARE OF THE PROVISIONS OF THE PLAN. THE CONTRACTOR MUST REPAIR AND/OR RESEED ANY AREAS THAT DO NOT DEVELOP WITHIN A PERIOD OF SIX MONTHS AND SHALL DO SO AT THE CONTRACTOR'S EXPENSE.
11. ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE STABILIZED WITH PERMANENT SEEDING IMMEDIATELY FOLLOWING FINISH GRADING. PERMANENTLY SEEDING AREAS SHALL BE PROTECTED DURING ESTABLISHMENT WITH MULCH. ALL SEEDING AREAS WILL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHALL BE FERTILIZED AND RESEED AS NECESSARY.
12. REFERENCE THE "RHODE ISLAND EROSION AND SEDIMENTATION CONTROL HANDBOOK" PREPARED BY THE USDA SOIL CONSERVATION SERVICE AS A GUIDE.
13. TEMPORARY HAY MULCH TO BE TACKED IN PLACE WITH NYLON MESH NETTING.
14. MAXIMUM GRADED SLOPE WITHIN THE SITE TO BE 3:1, UNLESS SPECIFIED OTHERWISE.

WETLAND NOTES

1. THE LIMITS OF DISTURBANCE SHOWN ON THIS PLAN ARE VERY STRICT. IN NO CASE SHALL THE CONTRACTOR WORK BEYOND WITHOUT APPROVAL FROM RIDEM.
2. THE OWNER, IN WRITING, MUST NOTIFY THE DEPARTMENT OF ENVIRONMENTAL MANAGEMENT PRIOR TO THE START OF CONSTRUCTION.

SEQUENCE AND STAGING OF LAND DISTURBING ACTIVITIES

1. SURVEY AND STAKE THE ROADWAY, STORMWATER DETENTION AREAS, AND THE LIMIT OF WORK AND SEDIMENTATION BARRIERS.
2. PLACE SEDIMENTATION BARRIERS (HAY BALES OR SILT FENCE) AS SHOWN ON THE PLANS AND STAKED OUT IN THE FIELD. IN NO CASE IS THE LIMIT OF WORK TO EXTEND BEYOND THE SEDIMENTATION BARRIERS.
3. EXCAVATE, LOAM, AND SEED DETENTION BASINS AS SHOWN ON PLAN.
4. BEGIN ROADWAY AND DRAINAGE WORK (CLEARING AND GRUBBING, EXCAVATING AND GRADING, ETC.). ANY TOP SOIL TO BE STRIPPED AND STOCKPILED IN APPROVED AREAS PER TOWN ENGINEER. THE STOCKPILES ARE TO BE PROTECTED BY A ROW OF SEDIMENTATION BARRIER AND COVERED OR TEMPORARILY SEEDED. NO RUNOFF IS TO BE DISCHARGED TO THE DETENTION AREAS UNTIL THE FINISH COURSE OF ROADWAY MATERIAL IS INSTALLED AND DISTURBED AREAS ARE STABILIZED WITH VEGETATION.
6. INSTALL UTILITIES AS SHOWN FROM RESPECTIVE WORK PLANS.
7. BEGIN HOUSES AND LANDSCAPING WHILE UNDER CONSTRUCTION.
8. FINISH HOUSES AND SITE WORK.
9. FINISH LANDSCAPING, AND PERMANENT STABILIZATION.
10. REPAIR DRAINAGE AREAS AS REQUIRED.
11. REMOVE ALL TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROL MEASURES FOLLOWING VEGETATIVE ESTABLISHMENT OF ALL DISTURBED AREAS.

MAINTENANCE: SHORT TERM/LONG TERM

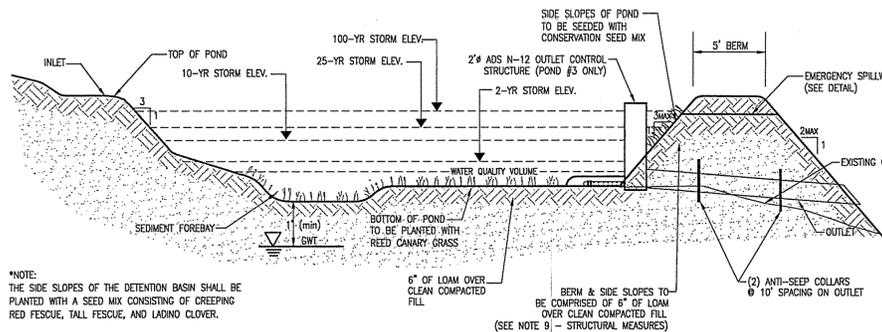
1. ALL DISTURBED SLOPES EITHER NEWLY CREATED OR CURRENTLY EXPOSED SHALL BE SEED, PROTECTED, AND MAINTAINED BY THE CONTRACTOR. THE CONTRACTOR SHALL CHECK REGULARLY ALL SEEDED AREAS TO SEE THAT A GOOD STAND IS MAINTAINED.
2. THE CONTRACTOR MUST REPAIR OR RESEED ANY AREAS THAT DO NOT DEVELOP WITHIN A PERIOD OF SIX MONTHS AND SHALL DO SO AT THE CONTRACTOR'S EXPENSE.
3. ALL HAY BALES, TEMPORARY TREATMENTS (HAY, STRAW, ETC.) AND TEMPORARY PROTECTION SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT CONSTRUCTION AND SHALL REMAIN IN PLACE UNTIL AN ACCEPTABLE STAND OF GRASS OR APPROVED GROUND COVER IS ESTABLISHED.
4. THE CONTRACTOR SHALL MAINTAIN ALL TOP SOIL STOCKPILES AND SEDIMENT BARRIERS THROUGHOUT CONSTRUCTION. EXTREME CARE SHALL BE TAKEN TO ENSURE THAT SEDIMENTS DO NOT SPILL OVER THE SEDIMENT BARRIER.
5. THE HAY BALES OR SILT FENCE SHALL BE CHECKED BY THE CONTRACTOR ON A WEEKLY BASIS AND AFTER EACH STORM FOR UNDERMINING OR DETERIORATION. CONTRACTOR SHALL REPAIR OR REPLACE THE HAY BALES AS NECESSARY. CONTRACTOR SHALL CLEAN THE ACCUMULATED SEDIMENT IF HALF OF THE ORIGINAL HEIGHT OF THE BALES BECOMES FILLED IN WITH SEDIMENTS.
6. THE STONE STABILIZATION PAD AT THE SITE ENTRANCE SHALL BE MAINTAINED BY THE CONTRACTOR. THE MAINTENANCE SHALL INCLUDE TOP DRESSING WITH ADDITIONAL STONE OR ADDITIONAL LENGTH AS CONDITIONS DEMAND OR AS DIRECTED BY THE ENGINEER. ALL SEDIMENTS SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHT OF WAY MUST BE REMOVED IMMEDIATELY BY THE CONTRACTOR.
7. THE CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE AND INSPECTION OF THE DETENTION PONDS DURING AND UP TO ONE (1) YEAR AFTER COMPLETION OF CONSTRUCTION. MAINTENANCE WILL INCLUDE RESEEDING ANY UNDEVELOPED AREAS AFTER A FULL GROWING SEASON. ADDITIONAL EXPENSE, REMOVING ACCUMULATED SILT/SEDIMENT OVER 3" IN THE PONDS, AND MAINTAINING THE GRASS TO A GROWING HEIGHT OF 2"-10". EXCAVATION OF SILT/SEDIMENT WILL BE MANUAL WITH SHOVELS AND WHEELBARROWS ONLY. REMOVE ALL WOODY VEGETATION FROM POND EMBANKMENTS.
8. THE OWNER IS RESPONSIBLE FOR THE LONG TERM MAINTENANCE OF THE PONDS AND ALL DRAINAGE INFRASTRUCTURE. MAINTENANCE SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:
 - a) INSPECT STRUCTURAL INTEGRITY OF POND ON A YEARLY BASIS. INSPECT POND INLET AND REPAIR AS NECESSARY.
 - b) THE MOWING OF GRASS IN AND AROUND THE POND SHALL BE ACCOMPLISHED AT LEAST ONCE PER GROWING SEASON, PREFERABLY AFTER AUGUST 15th. TRASH AND LITTER MUST BE REMOVED DURING MOWING OPERATIONS.
 - c) RESEED ANY ERODED OR BARE SPOTS IN OR AROUND THE POND IMMEDIATELY FOLLOWING EXAMINATIONS.
 - d) REMOVE ALL SEDIMENT FROM FOREBAY EVERY 10 YEARS USING SHOVELS & WHEELBARROWS. RESEED FOREBAY IMMEDIATELY FOLLOWING REMOVAL OF SEDIMENT.
 - e) TILLING OF POND FLOOR SHALL BE PERFORMED IF STANDING WATER IS OBSERVED FOR MORE THAN 72 HOURS AFTER A RAINFALL EVENT. TILLING CAN BE ACCOMPLISHED WITH A ROTARY TILLER OR DISC HARROW. THE ADDITION OF ORGANIC WATER AND SAND WILL AID IN RESTORING INFILTRATION CAPACITY. RESEED IMMEDIATELY AFTER TILLING.
 - f) ALL CATCH BASINS AND DRAINAGE MANHOLES ARE TO BE MAINTAINED ON A YEARLY BASIS, OR AT A MAXIMUM OF 5 YEARS. ALL DEBRIS AND SEDIMENT IS TO BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH STATE AND FEDERAL GUIDELINES.
9. THE CONSTRUCTION SUPERINTENDENT SHALL HAVE OVERALL RESPONSIBILITY FOR THE MAINTENANCE PROGRAM DURING THE CONSTRUCTION PROGRAM. DURING THE CONSTRUCTION PHASE, THE SUPERINTENDENT SHALL SEE THAT THE APPROPRIATE WORKERS ARE AWARE OF THE PROVISIONS OF THE PLAN.
10. AFTER THE FIRST YEAR AND ACCEPTANCE BY THE OWNER, THE OWNER SHALL HAVE OVERALL RESPONSIBILITY FOR IMPLEMENTING THESE MAINTENANCE NOTES.

SEDIMENT CONTROL PROGRAM

1. DISTURBED AREAS WHICH ARE PARTICULARLY SENSITIVE TO EROSION SHALL RECEIVE A CRUSHED STONE OR SHARP ANGULAR RIP-RAP TREATMENT IF OTHER METHODS OF STABILIZATION ARE UNSUCCESSFUL.
2. BANKS OR SLOPES NOT RECEIVING RIP RAP SHALL BE SEED AND PROTECTED WITH FIBER MULCH.
3. DURING CONSTRUCTION, THE CONTRACTOR AND OR THE DEVELOPER SHALL BE RESPONSIBLE FOR UTILIZING BEST MANAGEMENT PRACTICES TO CONTROL ENVIRONMENTAL DAMAGE THAT COULD RESULT FROM UNCHECKED STORMWATER RUNOFF.
4. SEDIMENTATION CONTROL DEVICES SHALL BE INSPECTED PERIODICALLY AND MAINTAINED REGULARLY. SPECIAL ATTENTION SHOULD BE GIVEN AFTER A HEAVY OR PROLONGED RAINFALL.
5. CARE SHALL BE SO AS NOT TO PLACE "REMOVED SEDIMENTS" WITHIN THE PATH OF EXISTING, NEWLY CREATED (BOTH TEMPORARY AND PERMANENT) OR PROPOSED WATERCOURSES OR THOSE AREAS SUBJECTED TO STORM WATER FLOWAGE.
6. ADDITIONAL HAY BALES, SILT FENCE OR SANDBAGS SHALL BE LOCATED AS CONDITIONS WARRANT OR AS DIRECTED BY THE ENGINEER.
7. SEDIMENTATION TRAPS SHALL BE PROVIDED AND MAINTAINED AT ALL DRAINAGE STRUCTURES DURING CONSTRUCTION.
8. REFERENCE THE "RHODE ISLAND EROSION AND SEDIMENT CONTROL HANDBOOK" (1989) PREPARED BY THE RI DEPT. OF ENVIRONMENTAL MANAGEMENT, RI STATE CONSERVATION COMMISSION AND THE U.S. DEPT. OF AGRICULTURE, SOIL CONSERVATION SERVICE AS A PRACTICAL GUIDE.
9. SOIL EROSION APPLICATIONS SHALL BE FILED IN ACCORDANCE WITH ORDINANCE. EACH SUBDIVISION LOT SHALL RECEIVE SEPARATE APPROVALS.

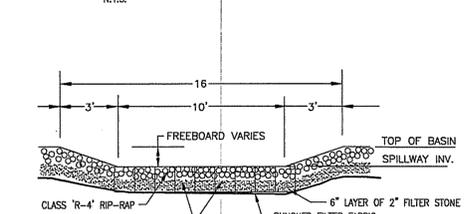
GENERAL CONSTRUCTION NOTES

1. AN APPROVED SET OF PLANS AND ALL APPLICABLE PERMITS MUST BE AVAILABLE AT THE CONSTRUCTION SITE. DEVIATIONS OR CHANGES WILL NOT BE ALLOWED UNLESS APPROVED BY THE ENGINEER.
2. THE CONTRACTOR SHALL VERIFY THE PROPOSED LAYOUT WITH ITS RELATIONSHIP TO THE EXISTING SITE SURVEY. THE CONTRACTOR SHALL ALSO VERIFY ALL DIMENSIONS, SITE CONDITIONS, AND MATERIAL SPECIFICATIONS AND SHALL NOTIFY THE OWNER AND ENGINEER OF ANY ERRORS, OMISSIONS OR DISCREPANCIES BEFORE COMMENCING OR PROCEEDING WITH WORK.
3. BUILDING DIMENSIONS INDICATED ARE PRELIMINARY AND BASED ON GENERAL INFORMATION ONLY. FINAL BUILDING DIMENSIONS AND LAYOUT MAY VARY TO INCLUDE CHANGES TO DRIVEWAY LOCATIONS, GRADES AROUND HOUSES, ETC. HOWEVER, THE LIMIT OF DISTURBANCE SHALL REMAIN THE SAME AS SHOWN.
4. METHODS AND MATERIALS USED IN THE CONSTRUCTION OF IMPROVEMENTS FOR THIS PROJECT SHALL CONFORM TO THE CURRENT CONSTRUCTION STANDARDS AND SPECIFICATIONS OF THE TOWN OF GLOUCESTER AND THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION.
5. THE CONTRACTOR SHALL MAKE EXPLORATORY EXCAVATIONS AND LOCATE ALL EXISTING UTILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO VERIFY ALL DIMENSIONS, SITE CONDITIONS, AND MATERIAL SPECIFICATIONS AND SHALL NOTIFY THE OWNER AND ENGINEER OF ANY ERRORS, OMISSIONS OR DISCREPANCIES BEFORE COMMENCING OR PROCEEDING WITH WORK.
6. CONTRACTORS SHALL NOTIFY OPERATORS WHO MAINTAIN UNDERGROUND UTILITY LINES IN THE AREA OF PROPOSED EXCAVATION OR BLASTING AT LEAST TWO WORKING DAYS, BUT NOT MORE THAN TEN WORKING DAYS, PRIOR TO COMMENCEMENT OF EXCAVATION OR DEMOLITION. ALL WATER, GAS, SEWER, AND OTHER UTILITIES SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING, WITH MATCHING MATERIALS, ANY PAVEMENT, DRIVEWAYS, WALKS, WALLS, CURBS, ETC. THAT MUST BE CUT OR THAT ARE DAMAGED DURING CONSTRUCTION.
8. THE CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITIES, REAL AND ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM "THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER."
9. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES AND TO TAKE WHATEVER STEPS NECESSARY TO PROVIDE FOR THEIR PROTECTION. THE ENGINEER HAS DILIGENTLY ATTEMPTED TO LOCATE AND INDICATE ALL EXISTING FACILITIES ON THESE PLANS; HOWEVER, THIS INFORMATION SHOWN FOR THE CONTRACTOR'S CONVENIENCE ONLY. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS OF UTILITIES SHOWN OR NOT SHOWN. THE CONTRACTOR SHALL CONTACT THE UTILITY COMPANIES FOR EXACT LOCATION OF THEIR UTILITIES PRIOR TO STARTING CONSTRUCTION. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR AND REPLACE ANY AND ALL DAMAGE MADE TO THE UTILITIES BY THE CONTRACTOR.



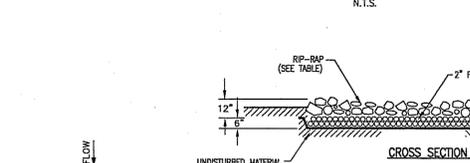
Description	Basin 1	Basin 2	Basin 3
Top of Basin Elevation	73.00	50.00	31.00
100 Year Storm Elevation	72.58	49.56	29.97
25 Year Storm Elevation	72.48	49.39	29.77
10 Year Storm Elevation	72.25	49.26	29.65
2 Year Storm Elevation	71.95	48.93	29.41
Water Quality Volume Elev.	71.82	48.96	29.30
Bottom of Basin	71.00	48.00	29.00
Sediment Forebay	70.50	47.00	29.00
GWT Elevation	69.50	41.00*	28.00

DETENTION BASIN DETAIL



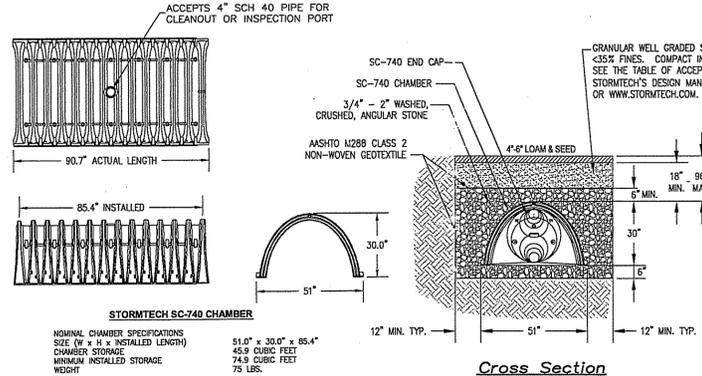
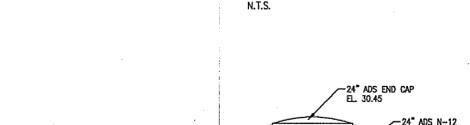
Location	top of pond elev.	spillway invert
Detention Basin 1	73.00	72.50
Detention Basin 2	50.00	49.50
Detention Basin 3	31.00	30.25

EMERGENCY SPILLWAY DETAIL

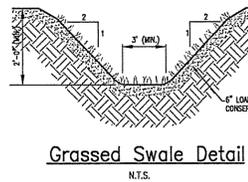


Location	L	W	SIZE
Pond #1 Inlet Rip-Rap Apron	19'	12'	R-4
Pond #1 Outlet Rip-Rap Apron	10'	7'	R-4
Pond #2 Inlet Rip-Rap Apron	18'	12'	R-4
Pond #2 Outlet Rip-Rap Apron	11'	7.5'	R-4
Pond #3 Inlet Rip-Rap Apron	17'	11'	R-4
Pond #3 Outlet Rip-Rap Apron	9'	12'	R-4

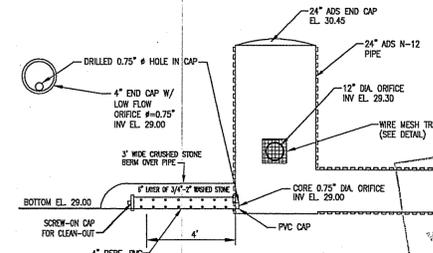
RIP-RAP APRON DETAIL



STORMTECH SC-740 CHAMBER FOR DRYWELL APPLICATION

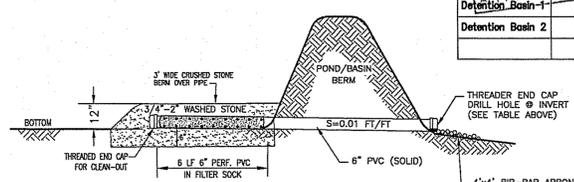


Grassed Swale Detail



OUTLET CONTROL STRUCTURE

Location	bottom of pond	diameter
Detention Basin 1	71.00	5/16"
Detention Basin 2	48.00	1/4"



WATER QUALITY PIPE DETAIL FOR PONDS 1, & 2

N.T.S.

NO.	DATE	DESCRIPTION
1	8/15/08	RIDEM COMMENTS

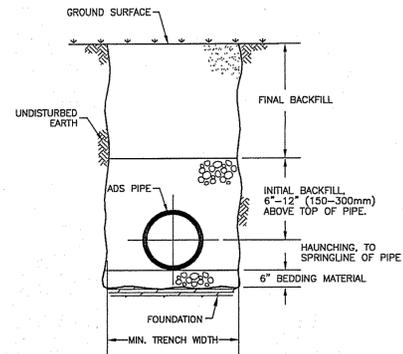
BRIAN P. CULMANN
 1000 Main Street
 Providence, RI 02903
 (401) 455-1100
 REGISTERED PROFESSIONAL ENGINEER

Thalman Engineering Co., Inc.
 Civil Engineering • Land Planners
 600 Putnam Pike, Suite #7
 Greenville, Rhode Island 02828
 (401) 349-3040 • (401) 349-3041 (fax)

Construction Details 1
Residential Compound
 Tourtelot Hill Road
 Prepared for:
Julian Forge
 401 Snake Hill Road North Schuette, RI 02857
 date: March-2008

Design By: **REB**
 Checked By: **BPT**
 Sheet
7
 of 8
 FILE NO.: 08.007

THESE DRAWINGS ARE THE PROPERTY OF THE ENGINEER AND ARE NOT TO BE REPRODUCED OR COPIED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF THE ENGINEER.



ADS Pipe Installation Notes:

- FOUNDATION:** WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A STABLE DEPTH AND REPLACE WITH A FOUNDATION OF CLASS I OR II MATERIAL AS DEFINED IN ASTM D2321, "STANDARD PRACTICE FOR INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY-FLOW APPLICATIONS," LATEST EDITION, AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A WOVEN GEOTEXTILE FABRIC.
- BEDDING:** SUITABLE MATERIAL SHALL BE CLASS I, II, OR III AND INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION. UNLESS OTHERWISE SPECIFIED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" FOR 4" TO 24" DIA. & 6" FOR 30" TO 60" DIA.
- HAUNCHING AND INITIAL BACKFILL:** SUITABLE MATERIAL SHALL BE CLASS I, II, OR III AND INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
- UNLESS OTHERWISE SPECIFIED BY THE ENGINEER, MINIMUM TRENCH WIDTHS SHALL BE AS FOLLOWS:

NOMINAL DIA. (IN)	MIN. TRENCH WIDTH (IN)
6"	23"
8"	25"
10"	28"
12"	31"
15"	34"
18"	39"

- MINIMUM COVER:** RECOMMENDED DEPTHS OF COVER FOR VARIOUS LIVE LOADING CONDITIONS ARE SUMMARIZED IN THE FOLLOWING TABLE. UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE TAKEN FROM THE TOP OF PIPE TO THE GROUND SURFACE.

SURFACE LIVE LOADING CONDITION	MINIMUM RECOMMENDED COVER (IN)
H25 (FLEXIBLE PAVEMENT)	12"
H25 (RIGID PAVEMENT)	12"
HEAVY CONSTRUCTION	48"

INITIAL BACKFILL, HAUNCHING, AND BEDDING MATERIAL SHALL CONFORM TO EITHER CLASS I, II, OR III STANDARDS IN ACCORDANCE WITH ADS RECOMMENDATIONS.

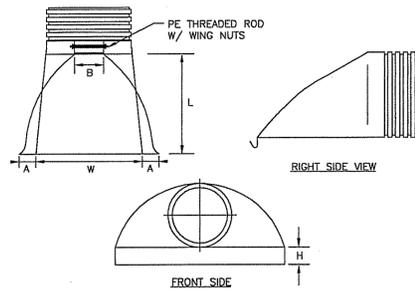
CLASS I - ANGULAR CRUSHED STONE OR ROCK, DENSE OR OPEN GRADED W/IT LITTLE OR NO FINES (1/2" TO 1 1/2" SIZE)

CLASS II - CLEAN, COARSE GRAINED MATERIALS, SUCH AS GRAVEL, COARSE SANDS, AND GRAVEL/SANDS MIXTURES (1/2" SIZE) (ASHTO CLASSIFICATION A1 & A3)

CLASS III - COARSE GRAINED MATERIALS WITH FINES INCLUDING SILTY OR CLAYEY GRAVELS OR SANDS. GRAVEL OR SAND MUST COMPRESE MORE THAN 50% OF CLASS III MATERIALS (1/2" SIZE) (ASHTO CLASSIFICATIONS A-2-4 & A-2-5)

ADS DRAIN PIPE TRENCH INSTALLATION

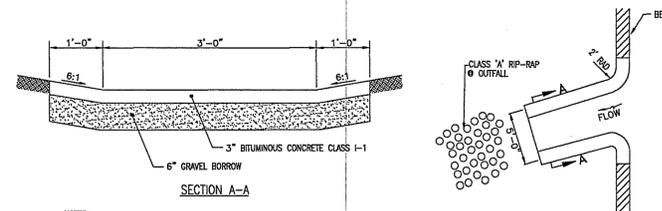
N.T.S.



PIPE DIA.	A	B (MAX)	H	L	W
12"	6.5"	10"	6.5"	25"	29"
15"	6.5"	10"	6.5"	25"	29"
18"	7.5"	15"	6.5"	32"	35"

ADS - FLARED END SECTION

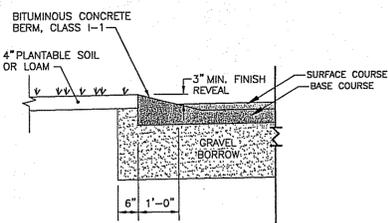
N.T.S.



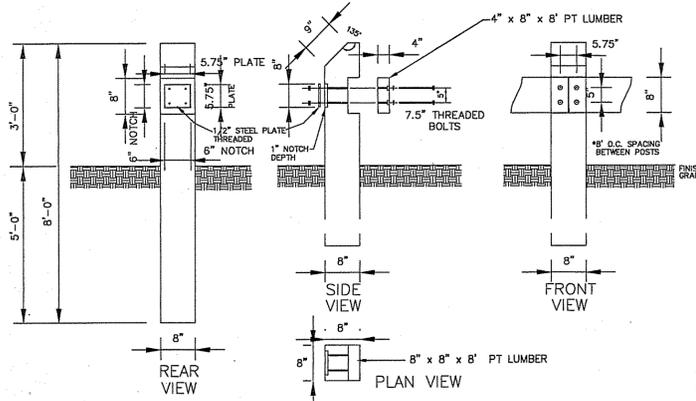
- NOTES:
- MODIFIED FROM RI STANDARD SPECIFICATION.
 - WHEN PAVED WATERWAY IS USED AT A LOW POINT THIS ANGLE SHALL BE 90°.

PAVED WATERWAY

N.T.S.

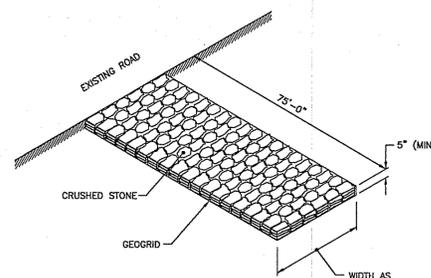


BITUMINOUS BERM
N.T.S.
(MODIFIED)



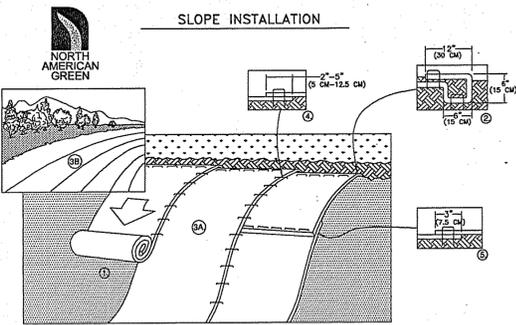
TIMBER GUARDRAIL

N.T.S.



- NOTE:
- SHALL BE IN ACCORDANCE WITH SECTION 211 OF THE R.I. STANDARD SPECIFICATIONS.

CONSTRUCTION ACCESS
N.T.S.

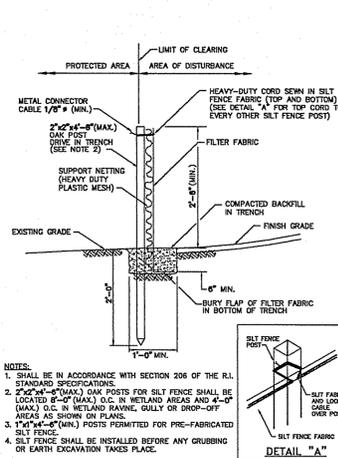


- PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
- BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30 CM) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) APART ACROSS THE WIDTH OF THE BLANKET.
- ROLL THE BLANKETS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
- THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" - 5" (5 CM - 12.5 CM) OVERLAP DEPENDING ON BLANKET TYPE.
- CONSECUTIVE BLANKETS STRIPPED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5 CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA APPROXIMATELY 12" (30 CM) APART ACROSS ENTIRE BLANKET WIDTH.

*QUANTITY AS TAKEN FROM SITE PLAN

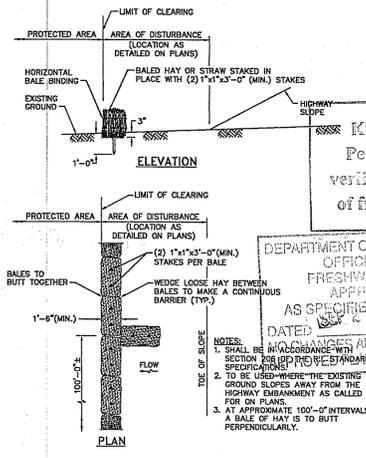
NORTH AMERICAN GREEN DETAIL

N.T.S.



- NOTES:
- SHALL BE IN ACCORDANCE WITH SECTION 206 OF THE R.I. STANDARD SPECIFICATIONS.
 - 2"x2" (50x50) MAX. OAK POSTS FOR SILT FENCE SHALL BE LOCATED 8'-0" (MAX.) O.C. IN WETLAND AREAS AND 4'-0" (MAX.) O.C. IN WETLAND RAVINE, GULLY OR DROP-OFF AREAS AS SHOWN ON PLANS.
 - 1"x1" (25x25) (MIN.) POSTS PERMITTED FOR PRE-FABRICATED SILT FENCE.
 - SILT FENCE SHALL BE INSTALLED BEFORE ANY GRUBBING OR EARTH EXCAVATION TAKES PLACE.

SILT FENCE DETAIL
N.T.S.



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 08/16/08 FILE #08-0258

- NOTES:
- SHALL BE IN ACCORDANCE WITH SECTION 206 OF THE R.I. STANDARD SPECIFICATIONS.
 - TO BE USED WHERE THE EXISTING GROUND SLOPES AWAY FROM THE HIGHWAY EMBANKMENT AS CALLED FOR ON PLANS.
 - AT APPROXIMATE 100'-0" INTERVALS A BALE OF HAY IS TO BUTT PERPENDICULARLY.

BALED HAY EROSION CHECK
N.T.S.

NO.	DATE	DESCRIPTION	BY

BRIAN P. THALMANN
Professional Engineer
No. 4586
13 YEARS EXPERIENCE
REGISTERED ENGINEER (GEN.)

Thalman Engineering Co., Inc.
Civil Engineering • Land Planners
600 Putnam Pike, Suite #7
Greenville, Rhode Island 02828
(401) 949-3040 • (401) 349-3041 (fax)

Construction Details 2
Residential Compound
Tourtelot Hill Road
Prepared for:
Jullian Forge
401 Snake Hill Road North Scituate, RI 02857
date: March 2008
scale: 1"=40'

Design By: **REB**
Checked By: **BPT**
Sheet
8
of 8
FILE NO.: 08.007

COPYRIGHT © 2008 THALMAN ENGINEERING CO., INC. THESE DRAWINGS ARE THE PROPERTY OF THE ENGINEER AND HAVE BEEN PREPARED FOR THE OWNER. FOR HIS PROTECTION, THIS SITE AND ARE NOT TO BE USED FOR ANY OTHER PURPOSES, REVISIONS OR OTHER PROJECTS WITHOUT THE WRITTEN CONSENT OF THE ENGINEER. THIS DRAWING IS ONE OF ITS SEVERAL SHEETS.