

LEGEND

- 110 - EXISTING CONTOUR
- 114.06 - EXISTING SPOT GRADE
- UTILITY POLE-LIGHT POLE
- UTILITY POLE
- EP - EDGE OF PAVEMENT
- B1 - EXISTING WETLAND FLAG
- RIHP 96 - RHODE ISLAND HIGHWAY PLAT 96
- RIHB - RHODE ISLAND HIGHWAY BOUND
- 99.5 - PROPOSED SPOT GRADE
- 103 - PROPOSED CONTOUR
- PROPOSED EROSION CONTROL
- 103 - LIMIT OF DISTURBANCE (NO EROSION CONTROL)
- 50' PERIMETER WETLAND
- 13-02 - TEST PIT / SOIL EVALUATION
- PROPOSED STONE / RIP-RAP
- Buffer zone markers per permit condition #18 must be installed as indicated

DESIGN CRITERIA

- 3 BEDROOMS X 115 GALLONS PER BEDR/DAY = 345 GALLONS PER DAY
- SOIL CATEGORY 6M = 0.70 GAL/S.F./DAY
- 345 GPD / 0.70 GAL/S.F./DAY = 493 LEACHING AREA REQUIRED
- 493 S.F. / 28 S.F. PER ELIEN UNIT = 18 ELIENS REQ'D (18 PROVIDED)
- TOTAL AREA PROVIDED = 504 S.F. > 493 S.F.

INVERT SCHEDULE

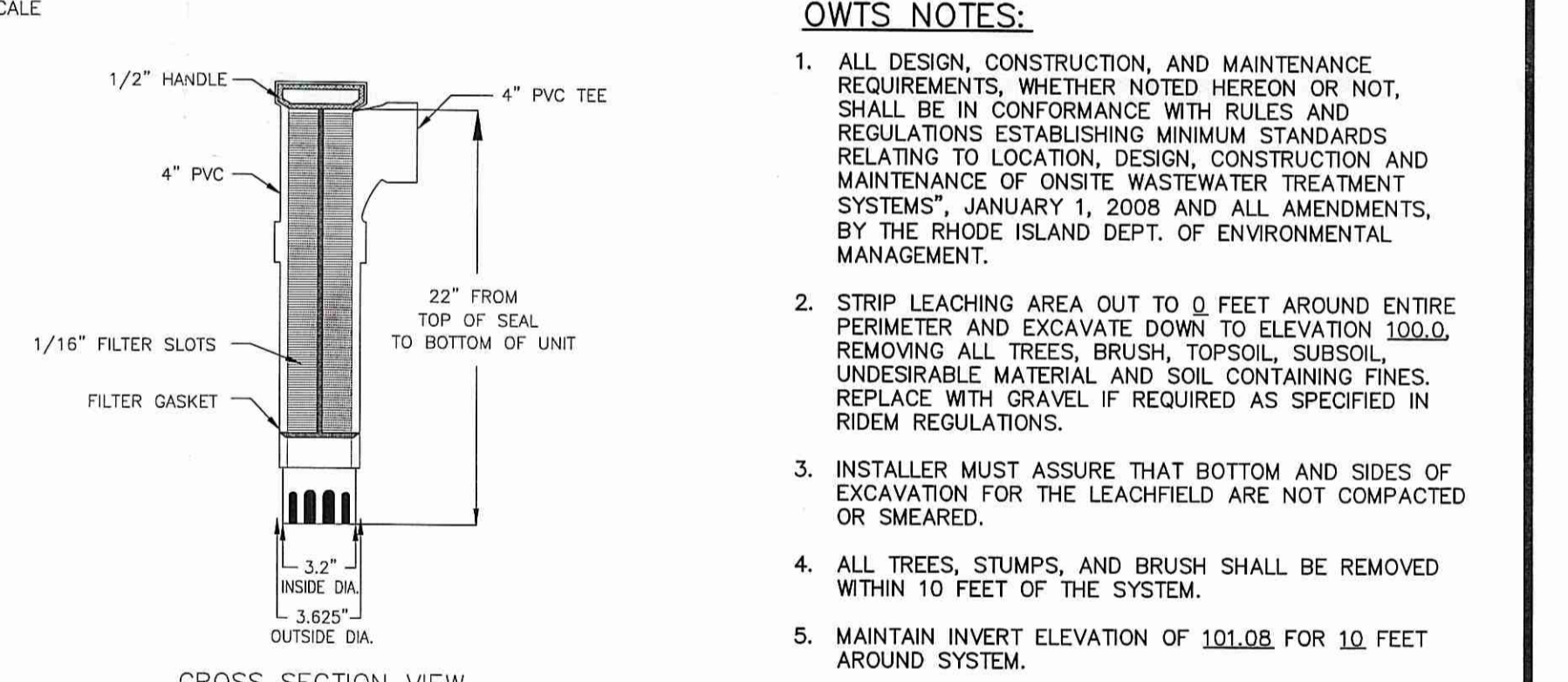
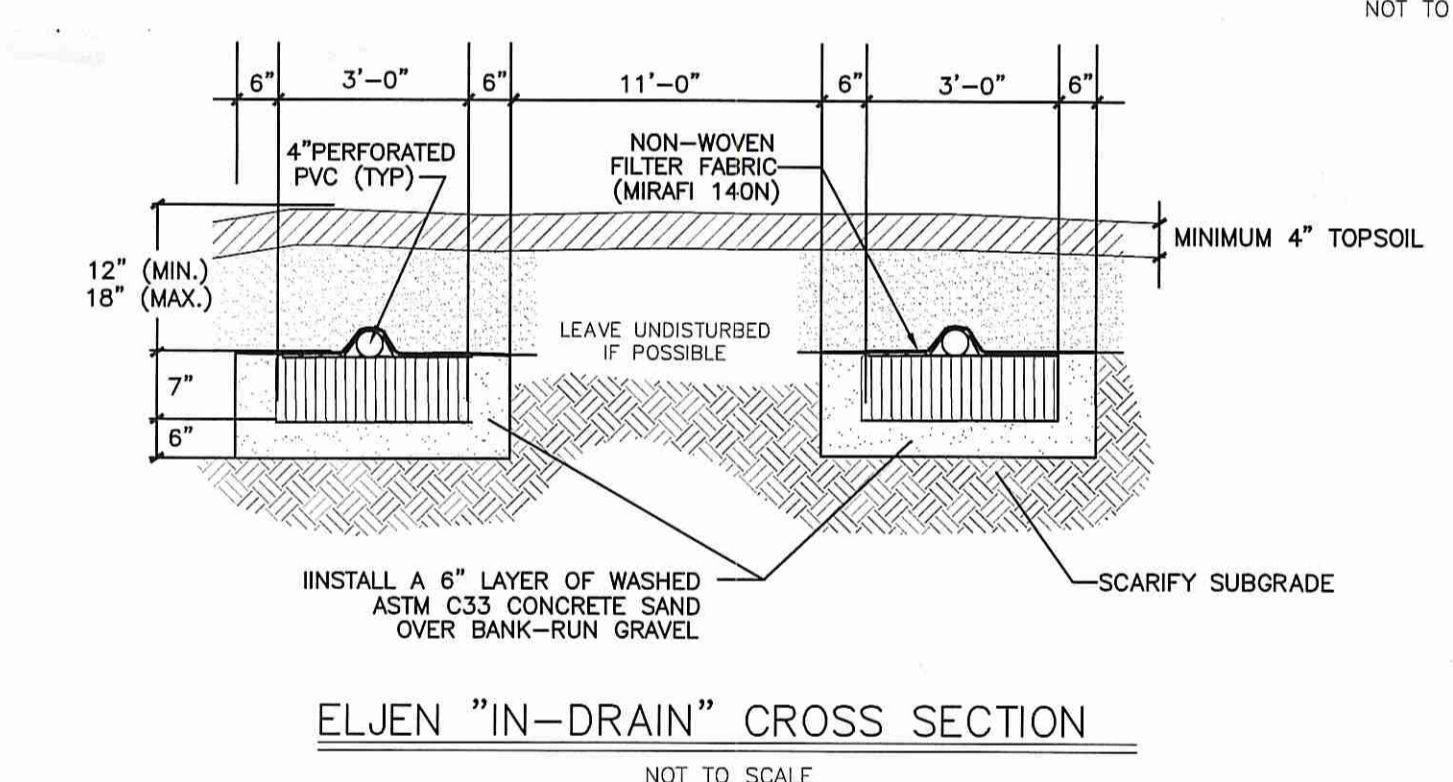
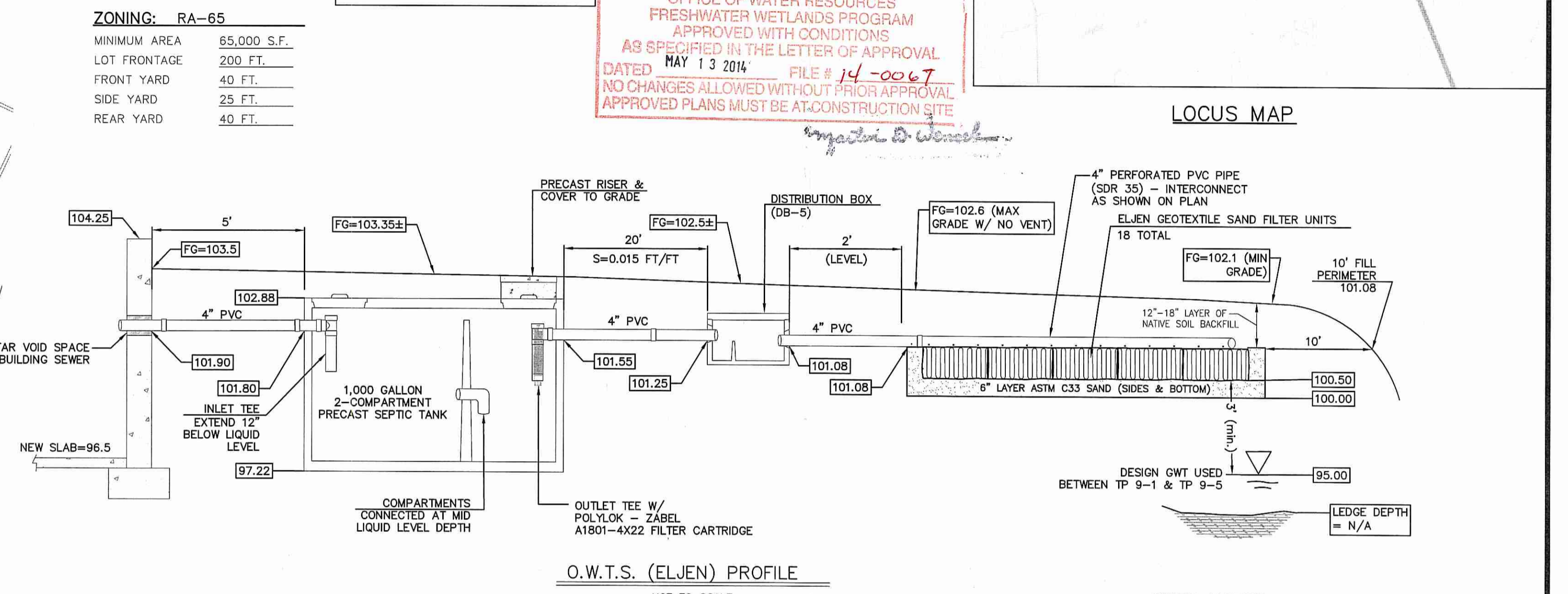
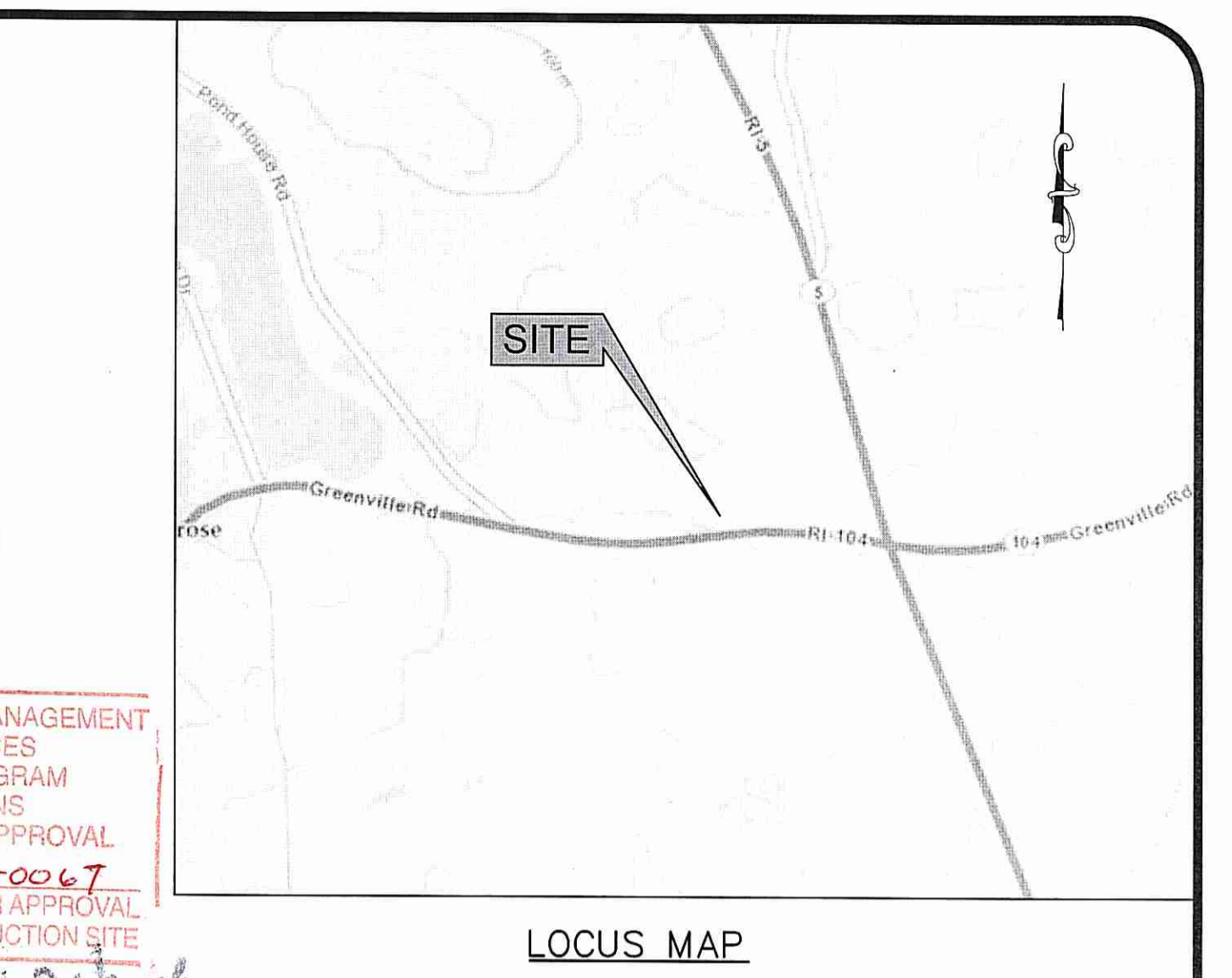
TOP OF FOUNDATION	EL. 104.25
FOUNDATION SLAB	EL. 96.50
BUILDING SEWER	EL. 101.90
SEPTIC TANK IN	EL. 101.80
SEPTIC TANK OUT	EL. 101.55
D-BOX IN	EL. 101.25
D-BOX OUT	EL. 101.08
ELIEN INVERT	EL. 101.08
BOTTOM OF ELIENS	EL. 100.50
BOTTOM OF SAND	EL. 100.00
LEACHFIELD STRIP	EL. 100.00
DESIGN G.W.T. AT FIELD	EL. 95.00

SOIL DATA

DATE EXCAVATED: 9/9/2013
 SOIL EVALUATOR: SUSAN B. CAPASSO, D4028
 DEPTH TO DESIGN WATER TABLE:
 13'-01" 8'-0"
 13'-02" 8'-0"
 (SEE SHEET 2 FOR SOIL EVALUATION LOGS)

ZONING: RA-65

MINIMUM AREA	65,000 S.F.
LOT FRONTAGE	200 FT.
FRONT YARD	40 FT.
SIDE YARD	25 FT.
REAR YARD	40 FT.



- OWTS NOTES:**
- ALL DESIGN, CONSTRUCTION, AND MAINTENANCE REQUIREMENTS, WHETHER NOTED HEREON OR NOT, SHALL BE IN CONFORMANCE WITH RULES AND REGULATIONS ESTABLISHING MINIMUM STANDARDS RELATING TO LOCATION, DESIGN, CONSTRUCTION AND MAINTENANCE OF ONSITE WASTEWATER TREATMENT SYSTEMS, JANUARY 1, 2008 AND ALL AMENDMENTS, BY THE RHODE ISLAND DEPT. OF ENVIRONMENTAL MANAGEMENT.
 - STRIP LEACHING AREA OUT TO 0 FEET AROUND ENTIRE PERIMETER AND EXCAVATE DOWN TO ELEVATION 100.0, REMOVING ALL TREES, BRUSH, TOPSOIL, SUBSOIL, UNDESIRABLE MATERIAL AND SOIL CONTAINING FINES. REPLACE WITH GRAVEL IF REQUIRED AS SPECIFIED IN RIDEM REGULATIONS.
 - INSTALLER MUST ASSURE THAT BOTTOM AND SIDES OF EXCAVATION FOR THE LEACHFIELD ARE NOT COMPACTED OR SMEARED.
 - ALL TREES, STUMPS, AND BRUSH SHALL BE REMOVED WITHIN 10 FEET OF THE SYSTEM.
 - MAINTAIN INVERT ELEVATION OF 101.08 FOR 10 FEET AROUND SYSTEM.
 - THERE ARE NO KNOWN PRIVATE WELLS OR DRAINS EXIST OR PROPOSED LOCATED WITHIN 200 FEET OF THE OWTS EXCEPT AS SHOWN AND NO KNOWN PUBLIC WELLS (EXIST. & PROP.) LOCATED WITHIN 500 FEET OF THE PROPOSED ISDS.
 - THERE ARE NO KNOWN SUBSURFACE DRAINS, EXISTING OR PROPOSED, WITHIN 50 FEET OF THE PROPOSED OWTS.
 - ALL PVC PIPE SHALL BE 4" DIA. SDR 35 OR EQUIVALENT, UNLESS NOTED OTHERWISE.
 - THE SEPTIC TANK SHALL HAVE TEES ON BOTH THE INLET AND OUTLET AND SHALL BE A TWO (2) COMPARTMENT TANK WITH THE 1ST COMPARTMENT CONSISTING OF 2/3 TANK CAPACITY.
 - THE DISTRIBUTION BOX SHALL HAVE A MINIMUM BOTTOM AREA OF 3 SQUARE FEET.
 - NO VEHICULAR TRAFFIC IS ALLOWED OVER THE LEACHFIELD.

- GENERAL NOTES:**
- THE EXISTING CONDITIONS AND TOPOGRAPHY SHOWN ON THIS PLAN WAS PROVIDED BY INTERNATIONAL MAPPING & SURVEYING INC. OF SMITHFIELD, RI.
 - THE CONTRACTOR SHALL NOTIFY DIG-SAFE 72 HOURS PRIOR TO START OF CONSTRUCTION.
 - PROPER EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO EARTH DISTURBING ACTIVITIES. THIS SHALL INCLUDE SILT FENCE AT ALL DOWN GRADIENT AREAS, INLET PROTECTION OF CATCH BASINS, AND DUST CONTROL.

CP CONCRETE PRODUCTS
 Terry Lane
 Glocester, RI 02814
 (401) 568-8874

1,000 Gallon Septic Tank - 2 Compartment

PRODUCT CODE: CPST-1000-2

DESIGN NOTES:

- Inlets and outlets have flange approved seal.
- Concrete is 3000 psi at 28 days.
- All joints sealed with a butyl rubber sealant.
- Top, bottom, and sides reinforced with #4 rebar.
- Cover maximum 18 inches. Do Not Exceed.

Pre-cast Bulkheads, Steps, and Septic Tanks

CP CONCRETE PRODUCTS
 Terry Lane
 Glocester, RI 02814
 (401) 568-8874

Distribution Box - 5

PRODUCT CODE: CPDB-5

DESIGN NOTES:

- Inlet baffles cast in place.
- Concrete is 3000 psi at 28 days.

Pre-cast Bulkheads, Steps, and Septic Tanks

OWTS SITE PLAN & DETAILS W/ LOW IMPACT DEVELOPMENT (LID) FOR STORMWATER

SINGLE FAMILY DWELLING

GREENVILLE ROAD, NORTH SMITHFIELD, RI
 A.P. 15 LOT 124

PREPARED FOR:
 LOUIS MACCARONE

ADVANCED CIVIL DESIGN, INC.
 CIVIL ENGINEERS

7 COUNTRYSIDE LANE
 SCITUATE, RI 02857

PH: (401) 473-4404

CURTIS S. RUOTOLO
 3/23/14
 No. 8756
 REGISTERED PROFESSIONAL ENGINEER (CIVIL)

NO. DATE DESCRIPTION

DATE: MARCH 28, 2014
 SCALE: AS NOTED
 DESIGN/CHECK BY: C.S.R.

SHEET NO. **1**

Sheet 1 of 2

Site Evaluation Form
Part A - Soil Profile Description Application Number **1325-1064**
Property Owner: **ROBERT CLAUDI FRANCESCO**
Property Location: **475 GREENVILLE RD A/P SMITHFIELD APIS 60124**
Date of Test Hole: **3/13/14**
Soil Evaluator: **ERIN B. CAPASSO** License Number: **D-4028**
Weather: **60° Sunny** Shaded Yes No Time: **7:32 AM**

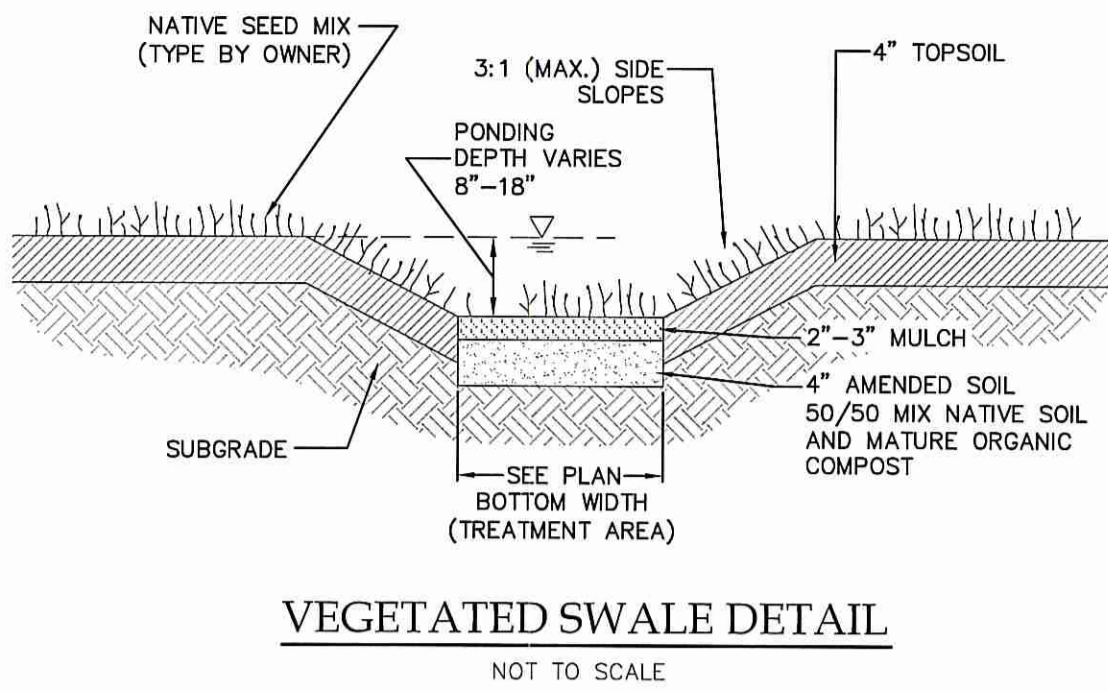
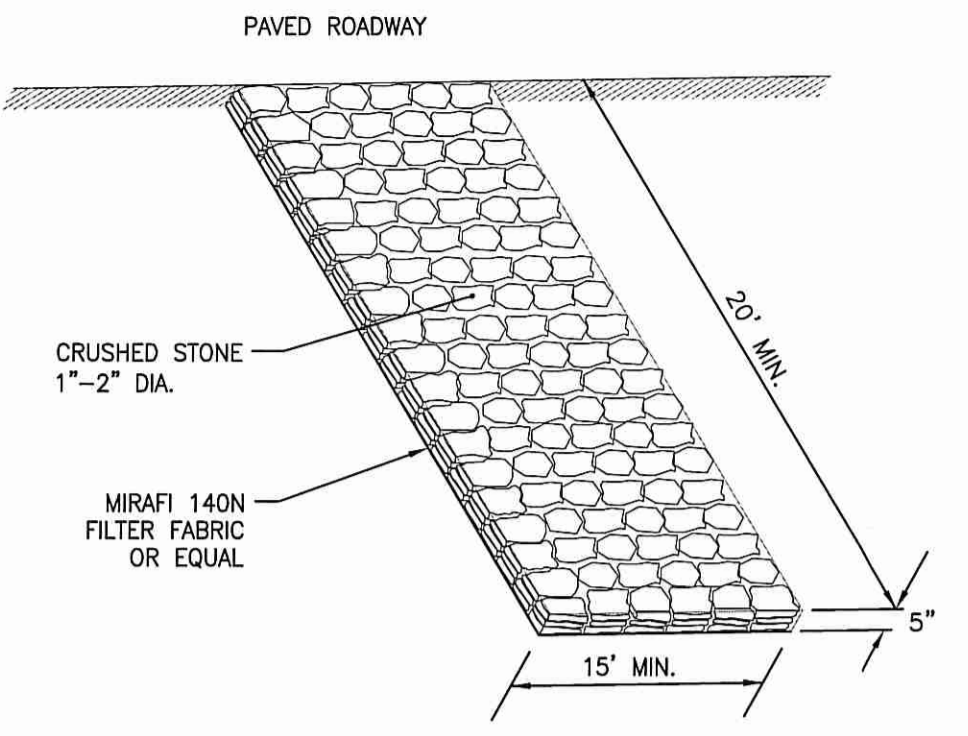
Profile	Horizon	Depth	Horizon Boundaries	Soil Color	Soil Description	Texture	Structure	Consistence	Soil Category
A	0-8"	C	S	10YR 5/4		slt	slb	vfr	4
	8-18"	C	S	10YR 5/4		slt	slb	vfr	4
B ₁	18-23"	C	W	10YR 5/4		slt	slb	fr	4M
	23-30"	C	W	2.5Y 5/3		slt	slb	fr	3
C ₁	30-38"	C	S	2.5Y 5/3		slt	slb	fr	5M
	38-48"	C	S	2.5Y 5/3		slt	slb	fr	5M
A	0-16"	C	S	10YR 5/4		slt	slb	vfr	4
	16-22"	C	S	10YR 5/4		slt	slb	vfr	4
B ₁	22-28"	C	S	10YR 5/4		slt	slb	vfr	4M
	28-32"	C	W	2.5Y 5/3		slt	slb	fr	3
C ₁	32-38"	C	S	2.5Y 5/3		slt	slb	fr	6M
	38-48"	C	S	2.5Y 5/3		slt	slb	fr	6M

Soil Class: **A-B-C-T-D-N-T-J-K-L** Total Depth of each Test Hole: **48"**
Depth to Groundwater Seepage: **None Observed**
Estimated Seasonal High Water Table: **2.0' to 1.0' below surface**

Part B
Site Evaluation Form to be completed by Class I or II Designer or Soil Evaluator
Please use the area below to describe:
1. Test holes
2. Approximate location of test holes
3. Estimated position and direction of slope
4. Approximate direction of due north

1. Relief and Slope: **2.5% to 8.1% SW to NE**
2. Presence of any watercourse, wetlands or surface water bodies within 200 feet of test holes: YES/NO
3. Presence of existing or proposed private drinking water wells within 200 feet of test holes: YES/NO
4. Public drinking water wells within 500 feet of test holes: YES/NO
5. Is site within the watershed of a public drinking water reservoir or other critical area defined in SD 19.007? YES/NO
6. Has soil been excavated from or filled deposited on site? YES/NO
7. Site's potential for flooding or ponding: NONE/SLIGHT/MODERATE/SEVERE
8. Landscape position: **FLAT SLOPE, MILD SLOPE**
9. Vegetation: **GRASS**
10. Indicate approximate location of property lines and roadways.
11. Additional comments, site constraints or additional information regarding site:

Signature Authorized Agent: **Erin B. Capasso** Date: **3/13/14**



STORMWATER TREATMENT PRACTICE

IMPERVIOUS SURFACE	AREA	METHOD	AREA REQ'D	AREA PROVIDED
DRIVEWAY	600 S.F.	VEGETATED SWALE	48 S.F.	50 S.F.
ROOFTOP	2,500 S.F.	VEGETATED SWALE	200 S.F.	200 S.F.

- Maintenance Notes:
- VEGETATIVE SWALE
- VEGETATED SWALES SHALL BE INSPECTED ANNUALLY AND SHOULD BE INSPECTED AFTER LARGE STORM EVENTS.
 - ERODED SIDE SLOPES AND CHANNEL BOTTOMS SHALL BE STABILIZED AS NECESSARY.
 - IF THE SURFACE OF THE DRY SWALE BECOMES CLOGGED TO THE POINT THAT STANDING WATER IS OBSERVED ON THE SURFACE 48 HOURS AFTER PRECIPITATION EVENTS, THE BOTTOM SHALL BE ROTO-TILLED OR CULTIVATED TO BREAK UP ANY HARD-PACKED SEDIMENT, AND THEN RESEDED.
 - VEGETATION IN DRY SWALES SHALL BE MOWED AS REQUIRED TO MAINTAIN MINIMUM GRASS HEIGHTS IN THE 4-6 INCH RANGE.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED **MAY 13 2014** FILE # **14-0067**
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE.

Erin B. Capasso

STRAW WATTLE INSTALLATION GUIDE

1. BEGIN AT THE LOCATION WHERE THE WATTLE IS TO BE INSTALLED BY EXCAVATING A 3'-3" (91.4 CM) DEEP X 9" (22.9 CM) WIDE TRENCH ALONG THE CONTOUR OF THE SLOPE. EXCAVATED SOIL SHOULD BE PLACED UPSLOPE FROM THE ANCHOR TRENCH.
2. PLACE THE WATTLE IN THE TRENCH SO THAT IT CONTACTS TO THE SOIL SURFACE. COMPACT SOIL FROM THE EXCAVATED TRENCH AGAINST THE WATTLE ON THE UPRILL SIDE. ADJACENT WATTLES SHOULD TIGHTLY ABUT.
3. SECURE THE WATTLE WITH 1/2" (12.7 CM) STAKES EVERY 3'-0" (91.4 CM) AND WITH A STAKE ON EACH END. STAKES SHOULD BE DRIVEN THROUGH THE MIDDLE OF THE WATTLE LEAVING AT LEAST 3" (7.6 CM) OF STAKE EXTENDING ABOVE THE WATTLE. STAKES SHOULD BE DRIVEN PERPENDICULAR TO THE SLOPE FACE.

NORTH AMERICAN GREEN STRAW WATTLES ARE A BEST MANAGEMENT PRACTICE (BMP) THAT OFFERS AN EFFECTIVE AND ECONOMICAL ALTERNATIVE TO SILT FENCE AND STRAW BALES FOR SEDIMENT CONTROL AND STORM WATER RUNOFF.

GUIDELINES ARE PROVIDED TO ASSIST IN DESIGN, INSTALLATION, AND STRUCTURE SPACING. THE GUIDELINES MAY REQUIRE MODIFICATION DUE TO VARIATION IN SOIL TYPE, RAINFALL INTENSITY OR DURATION, AND AMOUNT OF RUNOFF AFFECTING THE APPLICATION SITE.

TO MAXIMIZE SEDIMENT CONTROL WITH THE STRAW WATTLE PLACE THE INITIAL STRUCTURE AT THE TOP/CREST OF THE SLOPE IF SIGNIFICANT RUNOFF IS EXPECTED FROM ABOVE. IF NO RUNOFF FROM ABOVE IS EXPECTED, THE INITIAL STRAW WATTLE CAN BE INSTALLED AT THE APPROPRIATE DISTANCE DOWNHILL FROM THE TOP/CREST OF THE SLOPE. THE FINAL STRUCTURE SHOULD BE INSTALLED AT OR JUST BEYOND THE BOTTOM/TOE OF THE SLOPE. WATTLES SHOULD BE INSTALLED PERPENDICULAR TO THE PRIMARY DIRECTION OF OVERLAND FLOW.

STRAW WATTLES ARE A TEMPORARY SEDIMENT CONTROL DEVICE AND ARE NOT INTENDED TO REPLACE ROLLED EROSION CONTROL PRODUCTS (RECPs) OR HYDRALIC EROSION CONTROL PRODUCTS (HECPs). IF VEGETATION IS DESIRED FOR PERMANENT EROSION CONTROL, NORTH AMERICAN GREEN RECOMMENDS THAT RECPs OR HECPs BE USED TO PROVIDE EFFECTIVE IMMEDIATE EROSION CONTROL UNTIL VEGETATION IS ESTABLISHED. STRAW WATTLES MAY BE USED IN CONJUNCTION WITH BLANKETS, MATS, AND MULCHES AS SUPPLEMENTAL SEDIMENT AND RUNOFF CONTROL FOR THESE APPLICATIONS. LIKE ALL SEDIMENT CONTROL DEVICES, THE EFFECTIVENESS OF THE STRAW WATTLE IS DEPENDENT ON STORAGE CAPACITY.

14649 HIGHWAY 41 NORTH, EVANSVILLE, INDIANA 47225
1-800-772-2040 TOLL FREE 812-867-6532
www.nagreen.com

MITERED DRAIN

MITERED END SECTION TO BE INSTALLED ON ROOF DRAIN OFFFALL AT SWALE

245 DIMENSION TABLE *

PIPE SIZE	SLOPE	MODEL NO.	GRATE MATERIAL	ATTACHED MITERED PIPE MATERIAL	A (in.)	B (in.)	C (in.)	DD (in.)	EE (in.)	FF (in.)	GG (in.)	HH (in.)	II (in.)	JK (in.)	LL (in.)	MM (in.)	AREA OF GRATE OPENING (sq. in.)
3"	2:1	3MD2B	BRASS	PVC Sch. 40	12	5	0.25	3.00	3.5	0.25	8.4	4.2	28.5"	3	7		
3"	3:1	3MD3P-Q	GRAY HDPE	PVC Sch. 80	15	4	0.375	2.85	3.5	0.375	11.6	4.0	18.0"	2	10.4		
3"	3:1	3MD3P-S	BLACK HDPE	PVC Sch. 80	15	4	0.375	2.85	3.5	0.375	11.6	4.0	18.0"	2	10.4		
4"	3:1	4MD3P-Q	GRAY HDPE	PVC Sch. 80	18.5	4.5	0.375	3.77	4.5	0.375	14.7	5.0	18.5"	3.5	17.9		
4"	3:1	4MD3P-S	BLACK HDPE	PVC Sch. 80	18.5	4.5	0.375	3.77	4.5	0.375	14.7	5.0	18.5"	3.5	17.9		
6"	3:1	6MD3P	GRAY HDPE	C900-CL 200	29	7.5	0.75	5.85	6.9	0.50	22.4	7.5	18.5"	16	41.9		
8"	3:1	8MD3P	GRAY HDPE	C900-CL 150	37	9	0.75	7.97	9.1	0.75	29.3	9.7	18.5"	31	70.7		
12"	3:1	12MD3P	GRAY HDPE	C900-CL 150	52	12	0.75	11.63	13.2	1.0	42.5	14	18.5"	71	165.1		

* ALL DIMENSIONS ARE IN INCHES AND ALL WEIGHTS ARE IN POUNDS, AND MAY VARY.

BASIC SPECIFICATIONS
Grates are made of copper alloy No. 636.
HDPE grates have UV inhibitor.
Set screws are type 300 stainless steel.
Not recommended for traffic loads. Made in the U.S.A.

DETAILS
SINGLE FAMILY DWELLING
GREENVILLE ROAD, NORTH SMITHFIELD, RI
A.P. 15 LOT 124

PREPARED FOR:
LOUIS MACCARONE

ADVANCED CIVIL DESIGN, INC.
CIVIL ENGINEERS

7 COUNTRYSIDE LANE
SCITUATE, RI 02857

PH: (401) 473-4404

CURRIS S. RUOTOLO
REGISTERED PROFESSIONAL ENGINEER (CIVIL)
No. 8756

NO.	DATE	DESCRIPTION

DATE: MARCH 28, 2014
SCALE: AS NOTED
DESIGN/CHECK BY: C.S.R.

SHEET NO.
2
Sheet 1 of 2