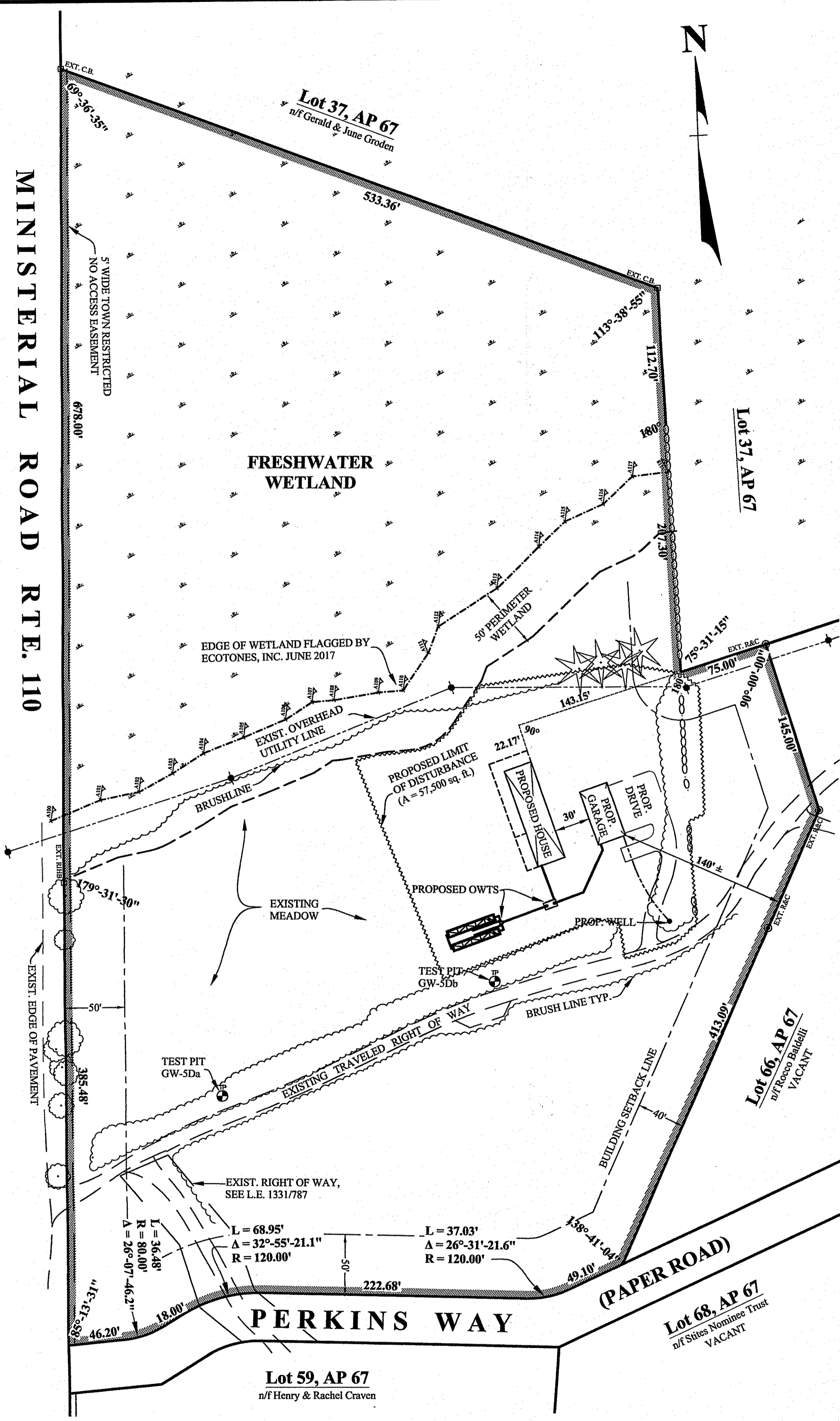
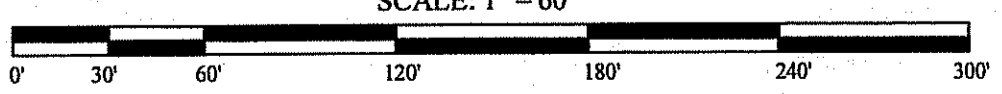


LOCATION MAP KINGSTON QUADRANGLE APPROX. SCALE: 1" = 2,000'



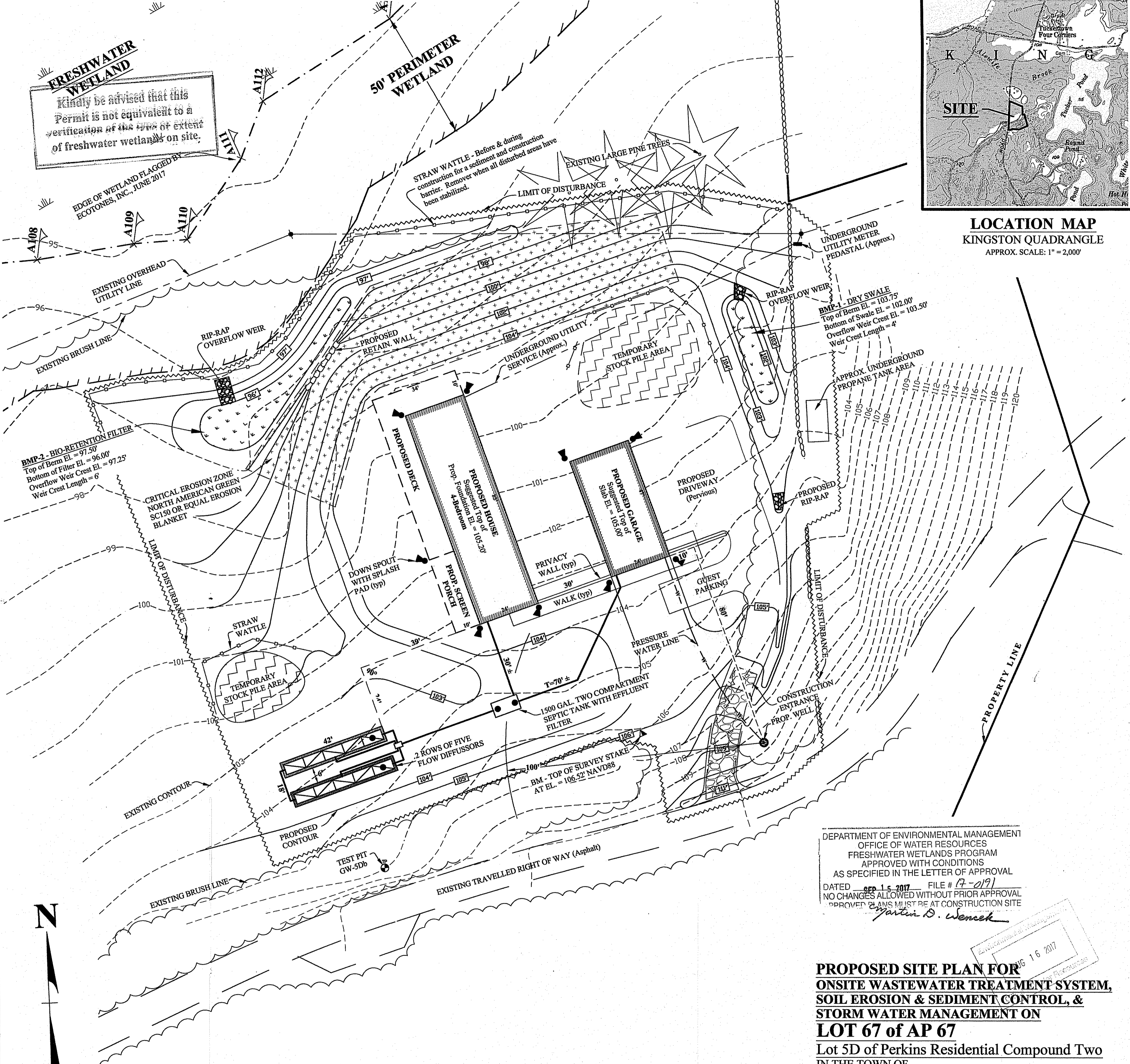
CONSOLIDATION MAP SCALE: 1" = 60'



JACKSON SURVEYING, Inc. SURVEYING & ENGINEERING P.O. BOX 454 CHARLESTOWN, RI 02813 PH. (401) 364-3130

This survey has been conducted and the Consolidation Map has been prepared pursuant to Section 9 of the Rules and Regulations adopted by the Rhode Island State Board of Registration for Professional Land Surveyors on Nov. 25, 2015 as follows: LIMITED CONTENT BOUNDARY SURVEY CLASS I Purpose: See Title and/or Content

DONALD W. JACKSON PROFESSIONAL LAND SURVEYOR



- NOTES: 1. ASSESSOR'S MAP 67 LOT 67, LOT 5D OF "PERKINS RESIDENTIAL COMPOUND TWO" SUBDIVISION. 2. LOT AREA = 11,549 AC. 3. ZONING CLASSIFICATION IS A R-80 RESIDENTIAL ZONE. BUILDING SETBACKS ARE: Front = 50', Side = 40', Rear = 50' 4. THE CONSTRUCTION AREA IS NOT LOCATED IN A FLOOD ZONE AS DESIGNATED ON THE FEMA FLOOD MAPS. THE NORTHERLY HALF OF THE LOT, MAINLY THE WETLAND COMPLEX IS LOCATED WITHIN AN A ZONE. SEE FEMA FIRM MAP NO. 44090C019H. 5. THE EXISTING CONTOURS REFERENCE VERTICAL DATUM NAVD88. 6. THE WESTERLY PORTION, IN THE VICINITY OF THE CONSTRUCTION AREA IS LOCATED WITHIN NATURAL HERITAGE AREA #240.

CHAREE M. JACKSON REGISTERED PROFESSIONAL ENGINEER CIVIL

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF WATER RESOURCES FRESHWATER WETLANDS PROGRAM APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL DATED SEP 15, 2017 FILE # 17-0191 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL APPROVED 22 AM MUST BE AT CONSTRUCTION SITE

PROPOSED SITE PLAN FOR ONSITE WASTEWATER TREATMENT SYSTEM, SOIL EROSION & SEDIMENT CONTROL, & STORM WATER MANAGEMENT ON LOT 67 of AP 67

Lot 5D of Perkins Residential Compound Two IN THE TOWN OF SOUTH KINGSTOWN, RI OWNER & APPLICANT ROCCO BALDELLI

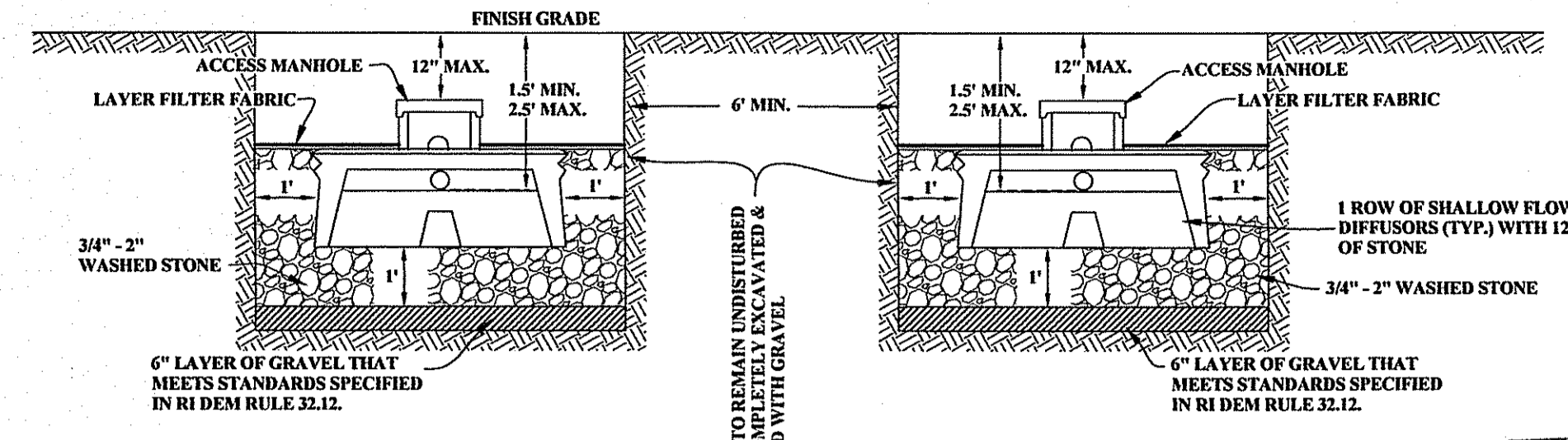
326 17th AVENUE, NE ST. PETERSBURG, FL 33704 MAY 2017, REV.: JULY 2017 SCALE: 1" = 20'

OWTS NOTES

- 1. ASSESSOR'S MAP 67 LOT 67, LOT 5d OF PERKINS RESIDENTIAL COMPOUND TWO SUBDIVISION.
2. LOT AREA = 11.549 AC.
3. 4 BEDROOM DESIGN - FULL FOUNDATION.
4. 1500 GALLON 2-COMPARTMENT SEPTIC TANK WITH EFFLUENT FILTER.
5. THE CONSTRUCTION AREA IS NOT LOCATED IN A FLOOD ZONE AS DESIGNATED ON THE FEMA FLOOD MAPS. THE NORTHERLY HALF OF THE LOT, MAINLY THE TOWN HOME COMPLEX, IS LOCATED WITHIN AN A ZONE. SEE FEMA FIRM MAP NO. 4409C019H.
6. THIS PARCEL IS NOT LOCATED WITHIN RI CRMC JURISDICTION.
7. THIS PARCEL IS NOT LOCATED IN A CRITICAL RESOURCE AREA AS DEFINED BY THE OWTS SECTION RULES AND REGULATIONS.
8. THERE ARE NO TRIBUTARIES, STORMWATER STRUCTURES, OR SUB-SURFACE DRAINS WITHIN 200 FT. OF THE PROPOSED OWTS OTHER THAN THOSE SHOWN HEREON.
9. THERE ARE NO OTHER EXISTING PRIVATE DRINKING WELLS OR KNOWN PROPOSED PRIVATE DRINKING WELLS WITHIN 200 FT. OF THE PROPOSED LEACHFIELD ON THE DATE OF SUBMITTAL OF THIS APPLICATION.
10. THERE ARE NO OTHER EXISTING OR KNOWN PROPOSED NON-POTABLE WELLS WITHIN 100 FEET OF THE PROPOSED LEACHFIELD ON THE DATE OF SUBMITTAL OF THIS APPLICATION.
11. THERE ARE NO EXISTING OR PROPOSED PUBLIC WELLS WITHIN 500' OF THE PROPOSED OWTS OTHER THAN THOSE SHOWN HEREON ON THE DATE OF SUBMITTAL OF THIS APPLICATION.
12. THE PROPOSED WELL DOES NOT NEED A VARIANCE FROM THE WELL DRILLING REGULATIONS.

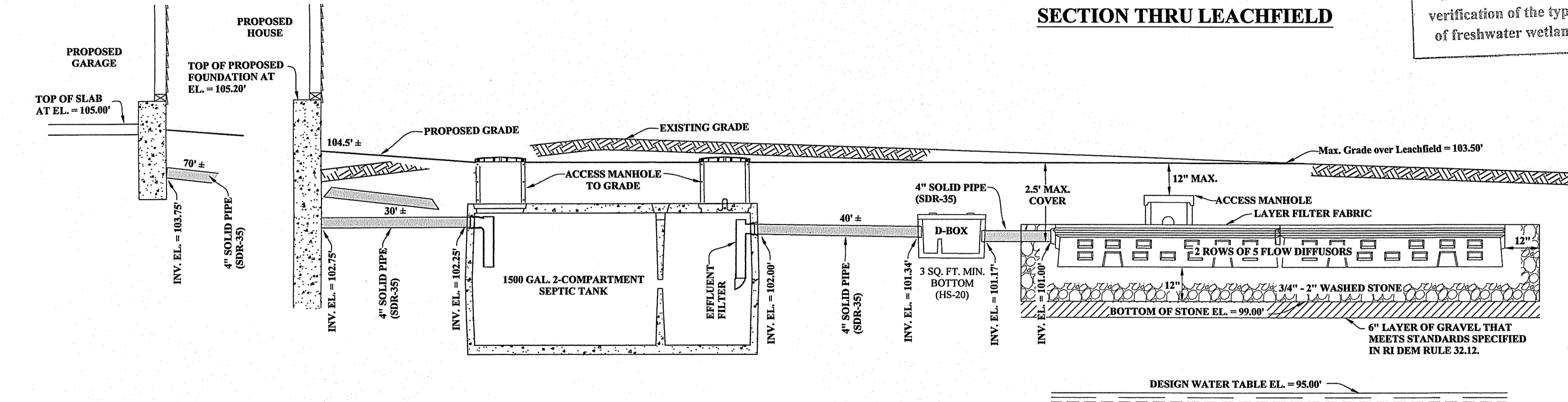
- 13. THERE ARE NO OTHER EXISTING OWTS OR KNOWN PROPOSED OWTS WITHIN 200 FT. OF THE PROPOSED WELL ON THE DATE OF SUBMITTAL OF THIS APPLICATION.
14. THERE ARE NO DRINKING WATER LINES WITHIN 50 FT. OF THE PROPOSED OWTS OTHER THAN THOSE SHOWN HEREON.
15. THERE ARE NO SUB-DRAINS WITHIN 50 FT. OF THE PROPOSED LEACHING AREA.
16. THERE ARE NO WATERCOURSES OR WETLANDS WITHIN 200 FT. OF THE PROPOSED OWTS OTHER THAN THOSE SHOWN HEREON.
17. THERE ARE NO EXISTING OR KNOWN PROPOSED PUBLIC WASTEWATER SYSTEM LINES WITHIN 200 FT. OF THE AS SHOWN PROPERTY LINES ON THE DATE OF SUBMITTAL OF THIS APPLICATION.
18. THERE ARE NO STRUCTURES, EXISTING OWTS OR WATER SUPPLIES WITHIN 100 FT. OF THE ADJACENT PROPERTY LINES OTHER THAN THOSE SHOWN HEREON.
19. THE SAME ELEVATION OF THE INVERT OF THE LEACHING DISTRIBUTION LINES SHALL BE MAINTAINED FOR A 10 FT. PERIMETER FROM THE EDGES OF THE LEACHING ZONE. THE ADJACENT SIDE SLOPES SHALL NOT BE STEEPER THAN 3:1 FOR A 25 FOOT PERIMETER.
20. CLEAR AND REMOVE ALL TREES AND BRUSH TO A 10 FT. PERIMETER OF THE LEACHING AREA.
21. PROPER EROSION AND SEDIMENT CONTROL PRACTICES MUST BE IMPLEMENTED DURING ALL PHASES OF CONSTRUCTION AND UNTIL THE SITE IS SATISFACTORILY STABILIZED. ALL CONTROL PRACTICES SHOULD BE IN ACCORDANCE WITH THE MOST RECENT EDITION OF THE RI SOIL EROSION AND SEDIMENT CONTROL HANDBOOK.

OWTS DETAILS & TYPICALS



SECTION THRU LEACHFIELD

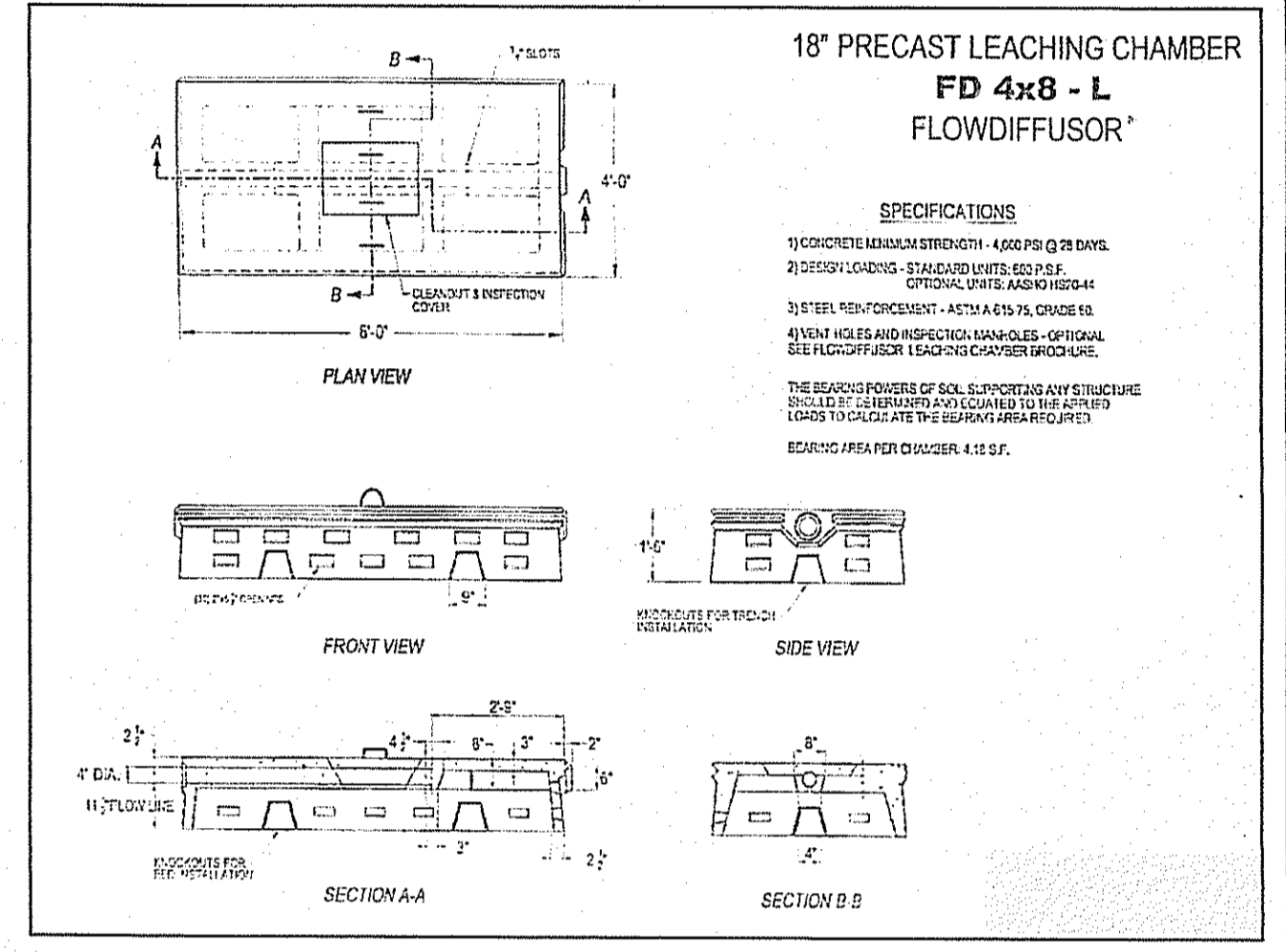
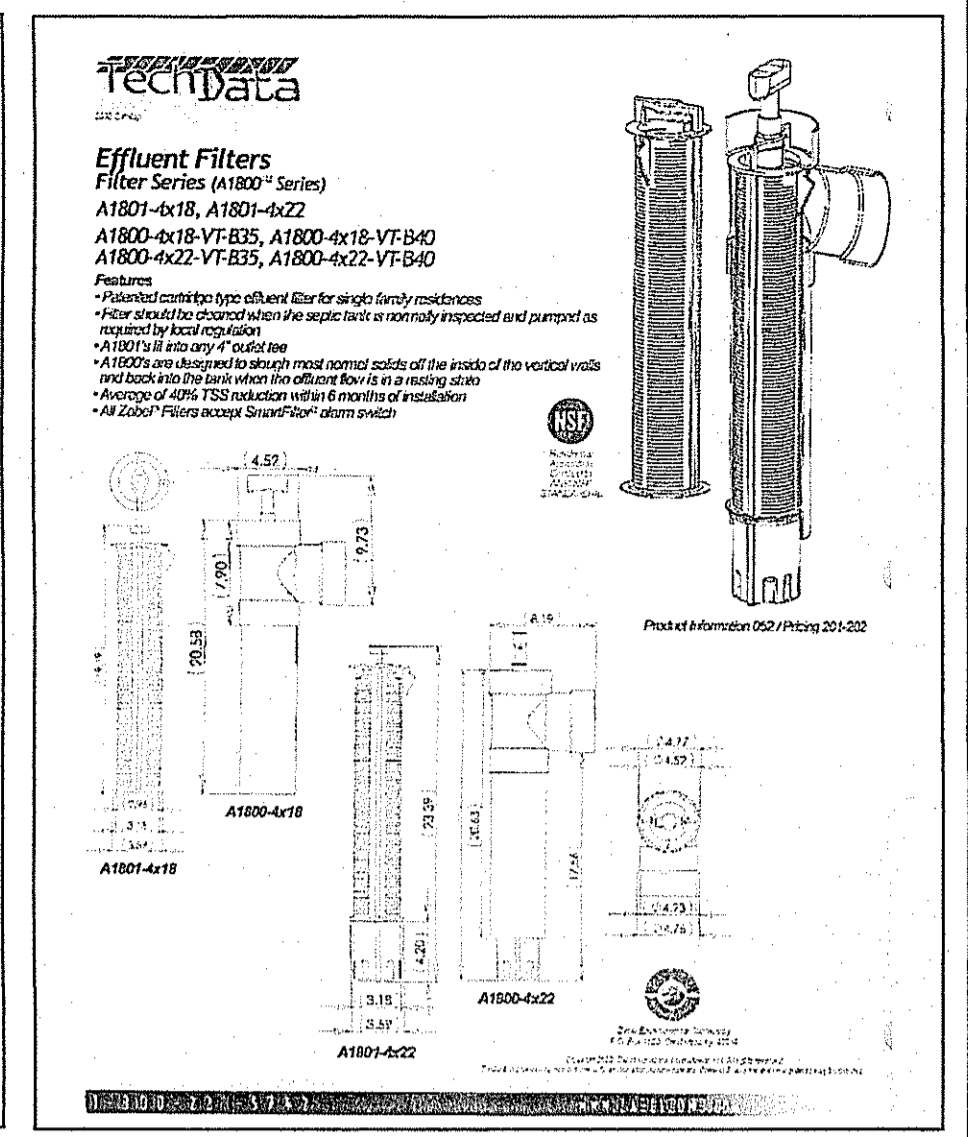
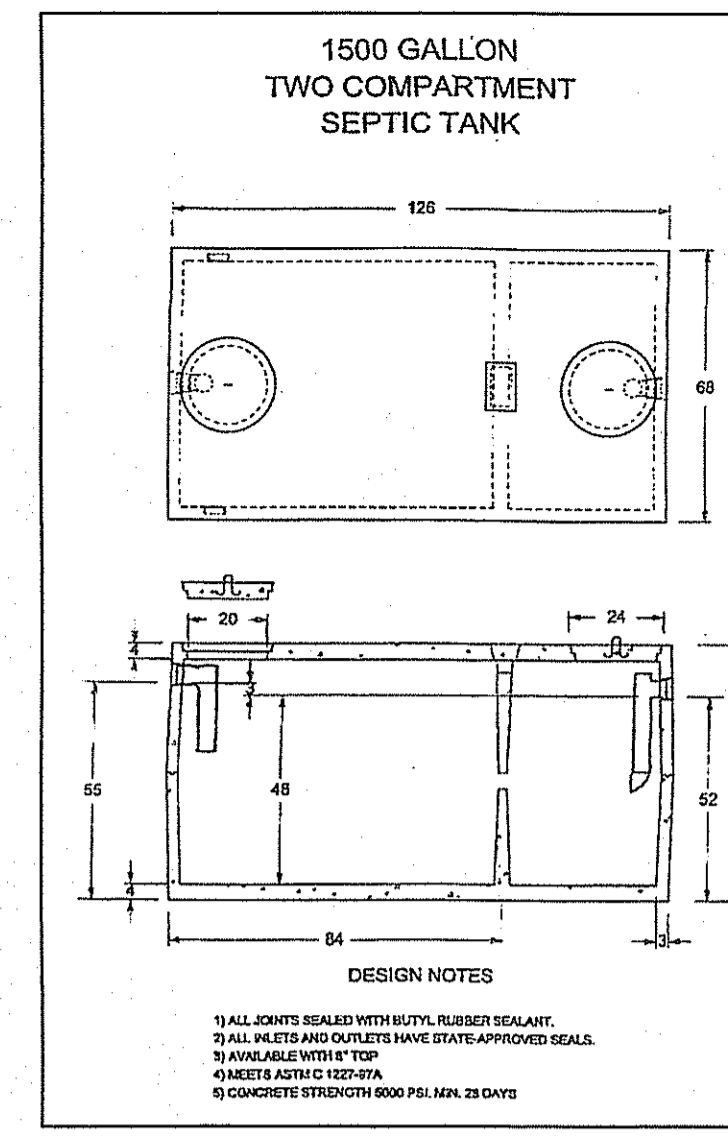
Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.



SECTION THRU CENTER LINE OF SYSTEM

SYSTEM COMPUTATIONS:

TOTAL DAILY FLOW
4 BEDROOM x 115 Gal/Day = 460 Gal/Day
REQUIRED TANKAGE
Per Rule 26.1 - Min. Septic Tank Size = 1250 Gal.
Use 1500 Gal. Two Compartment Septic Tank
REQUIRED LEACHING AREA
Use Class 6m Soil Rate = 0.70 Gal/Sq.Ft./Day
460 Gal/Day / 0.70 Gal/Sq.Ft./Day = 657 Sq.Ft.
Use 2 rows of 5 Flow Diffusers: 2 x 348 Sq.Ft. = 696 Sq.Ft.



SOIL EROSION, RUN-OFF & SEDIMENT CONTROL PLAN

DESCRIPTION OF WORK
The subject site is located off Ministerial Road, a state highway, in South Kingstown, RI and is delineated as Lot 5d of Perkins Residential Compound Two. The proposed project on this site includes the construction of a new single family residence, detached garage, installation of a pervious driveway, OWTS, private well, along with the final grading for disturbed areas. The proposed dwelling with garage is 3,168 sq. ft. and is to be located on a 11.549 ac. parcel. The proposed OWTS has been approved by RI DEM. The system is a conventional type system that consists of a 1,500 gal septic tank with effluent filter that will discharge to a Flow Diffuser leach field system. The total area within the proposed limit of disturbance is 99,500 sq. ft.

SITE CONDITIONS
The subject site is 11.549 ac. in size. There is a wetland complex located on-site with an associated 50-foot perimeter wetland. All proposed construction and disturbance has been located outside of the existing wetlands and buffers. The proposed dwelling has been located within an existing field located on the lot. The remainder of the parcel is vegetated mostly with oaks, mountain laurel, white pines and their respective types of undergrowth. The existing field slopes northerly with an average grade of 3%. The other areas south of the existing field are rolling and hilly with slopes as great as 25% in areas. The construction site is not located within any FEMA designated flood areas however, there is an A zone within the wetland complex.

SOILS
The soils within the construction area is classified as Dc - Dorderfield loamy fine sand. The permeability of these soils range from rapid to very rapid with slow runoff characteristics. This soil is classified as Hydrological Soil Group B.

EROSION & SEDIMENT CONTROL MEASURES
A construction access road pad will be utilized for access to the construction area from the existing asphalt travelled right of way in the location of the proposed driveway. A straw wattle will be employed on the down gradient sides of all stock piles and on the down gradient side of the perimeter of the construction zone. If the stock piles are to remain undisturbed for a period of 3 months or more, then a temporary vegetative cover shall be applied. Periodic watering will be instituted on disturbed areas that receive traffic to control dust erosion. All management, vegetative, structural erosion and sediment control practices will be constructed and maintained in accordance with the Rhode Island Soil Erosion and Sediment Control Handbook.

PERMANENT & TEMPORARY STABILIZATION
A stone construction access pad will be installed for a minimum of 50 feet to act as a wheel cleaning blanket for the construction vehicles. This construction pad shall be placed prior to the start of any excavation and shall remain in place until the construction site has been stabilized.

A straw wattle will be installed along the down gradient side of the limit of disturbance for the proposed construction site before the start of any excavation for a construction barrier and for sediment control. Once stock pile materials are created, a straw wattle shall be immediately erected on the down gradient side of the pile to control sediments from runoff.

An erosion control blanket will be utilized on the slopes of the fill perimeter. The blanket shall be placed down as soon as final grading has been completed and staked in accordance with manufacturer standards.

All erosion and sediment control measures will be checked weekly and after each significant rainfall. If sufficient rain events do not occur, the periodic watering of the disturbed areas that receive construction traffic shall be done to control dust as needed.

All disturbed areas will be loamed and seeded after construction is complete. All seeded areas will be checked regularly to see that a good stand is maintained. Areas shall be re-seeded as needed.

INSPECTION & MAINTENANCE REQUIREMENTS
The following areas must be inspected by or under the supervision of the owner and operator at least once every seven calendar days and within twenty four hours after any storm event which generates at least 0.25 inches of rainfall per twenty four hour period and/or after a significant amount of runoff. a. All areas that have been cleared, graded or excavated and that have not yet completed stabilization; b. All storm water erosion, runoff, and sediment control measures; c. Construction material, un-stabilized soil stock piles; d. All areas where storm water typically flows within the site; e. All points of discharge from the site; f. All locations where temporary or permanent soil stabilization measures have been implemented; g. All locations where vehicles enter or exit the site. If the inspector find a problem he/she must ensure that the necessary repairs or modifications are made by the close of the next work day after discovering the problem.

STORMWATER MANGEMENT

Stormwater runoff for the proposed parcel will be handled on-site by means of a Dry Swale and a Bio-Retention Filter, both are a best management practice allowed under the RI Stormwater Manual. The dry swale will collect roof runoff and a majority of the driveway runoff to provide proper treatment for groundwater recharge and water quality, mitigation of the 10 YR storm event, and proper attenuation of the 100 YR storm event. The Bio-Retention Filter will collect roof runoff from the dwelling and lawn areas to provide proper treatment for recharging, water quality, and attenuation of the larger storm events. The fill slopes shall also be directed to this facility to help protect the wetland complex. The proposed best management practices are recommended to be inspected and maintained in accordance with the RI Stormwater Manual and the Stormwater Operation & Maintenance outlined hereon.

SEQUENCE OF CONSTRUCTION
Construction is expected to begin shortly after permits have been received. It is expected that construction activities will last between six and twelve months. The planned priority of construction for each of the lots is as follows:
1. Marking of all limits of disturbance per plans
2. Overall clearing of trees in all construction areas
3. Placement of down gradient straw wattle per plans
4. Grubbing and clearing of stumps and boulders
5. Roughing out and preliminary grading of the driveway and installation of construction entrance and rough grading of the dry swale and bio-retention filter with swales
6. Protection of those grubbed areas until completion of whatever facilities are being built.
7. Excavation of the foundation and construction of the dwelling.
8. Installation of the on-site waste water treatment systems and private well
9. Completion of the dry swale and bio-retention filter, installation of splash pads on downspouts
10. Final grading of disturbed areas, seeding and stabilization
11. In-situ final growth, landscaping, cleanup and stabilization of all disturbed areas.

STATEMENT OF RESPONSIBILITY
Rocco Baldelli, owner of the parcel, is assigned the responsibility for the erosion and sediment control measures and informing all parties working on the construction site of the erosion and sediment control plan requirements and objectives. The above named persons shall notify the offices of the building inspector and public works of any transfer of this responsibility and for the conveyance of the erosion and sediment control requirements if the title of the land is transferred.

STORMWATER OPERATION & MAINTENANCE
The complete storm water control system shall be inspected twice annually with periodic inspection for each integral part of the control system as listed below. Maintenance of the individual components of the storm water control system shall be as outlined below for each item.

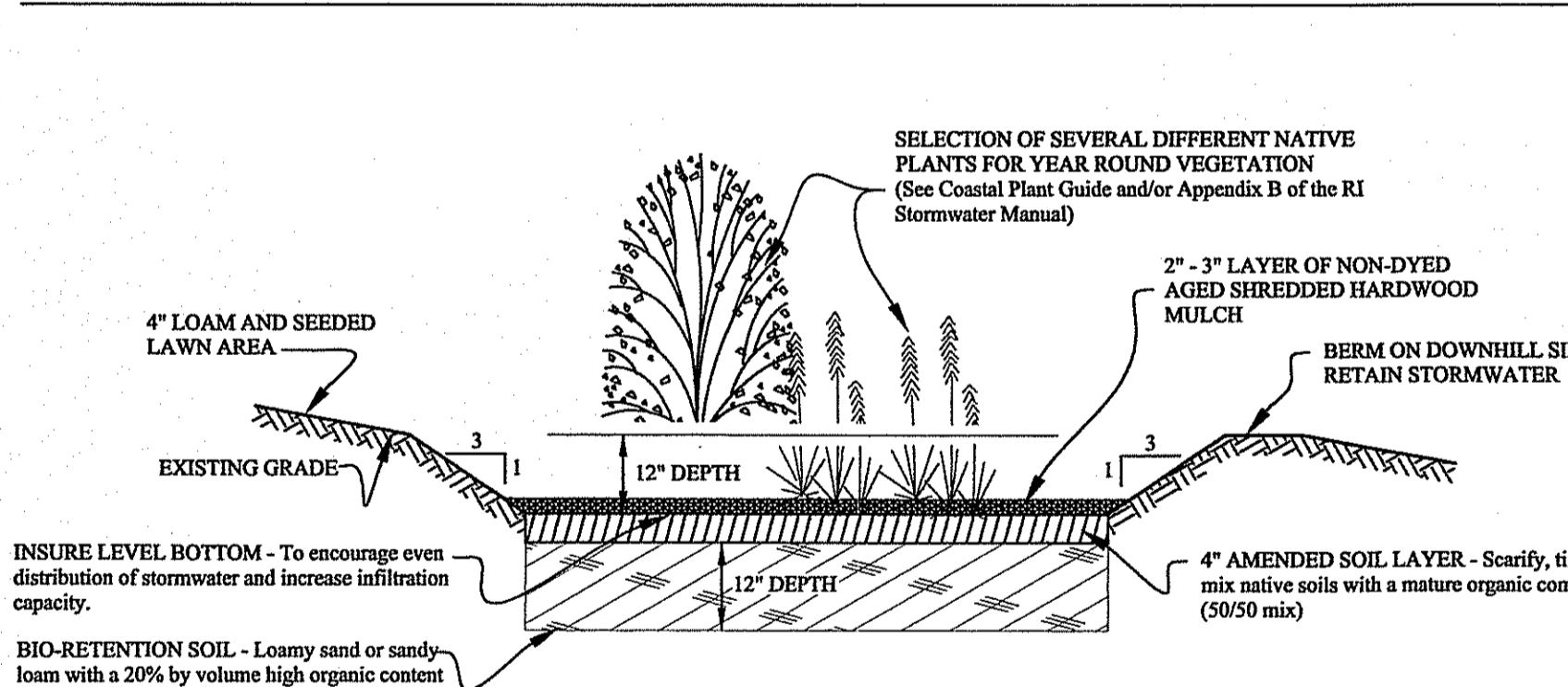
BMP - 1: DRY SWALE
Inspection
-Twice annually
-After every large storm event (2.5\"/>

Maintenance
-Remove any trash or debris
-Repair any erosion or gully and re-vegetate immediately
-Dry Swale is to be mowed as required to maintain heights in the 4-6 inch range, with mandatory mowing once heights exceed 10 inches

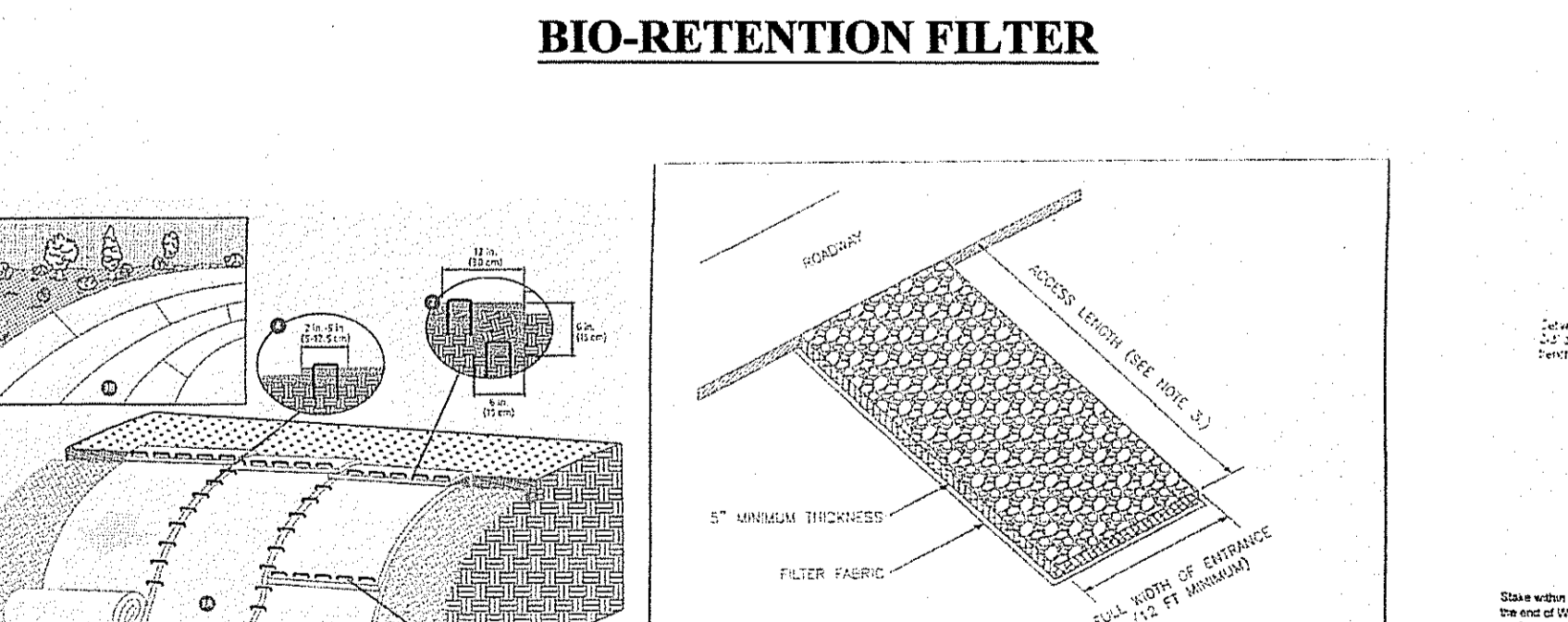
BMP - 2: BIO-RETENTION FILTER
Inspection
-Twice annually
-After every large storm event (2.5\"/>

Maintenance
-Remove any trash or debris
-Repair any erosion or gully and re-vegetate immediately. Persistent erosion shall be corrected with rip rap
-Prune or replacement of woody vegetation shall occur when dead or dying vegetation is observed
-Remove and accumulation of sediment build up
-Any ponding that lasts longer than 48 hours after a storm event shall be corrected by removing the top few inches of material and replaced with a fresh soil mixture and mulch.

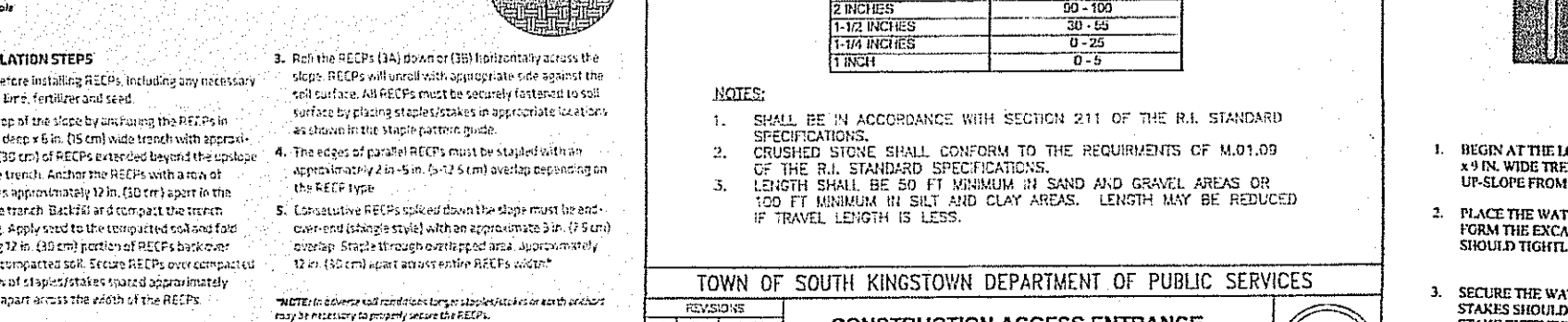
SERSC DETAILS & TYPICALS



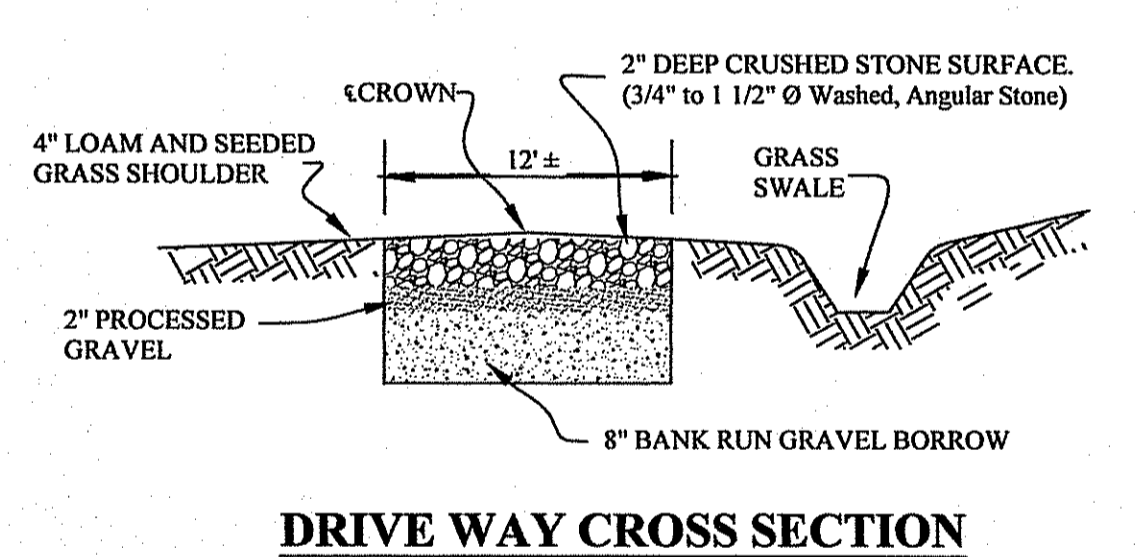
BIO-RETENTION FILTER



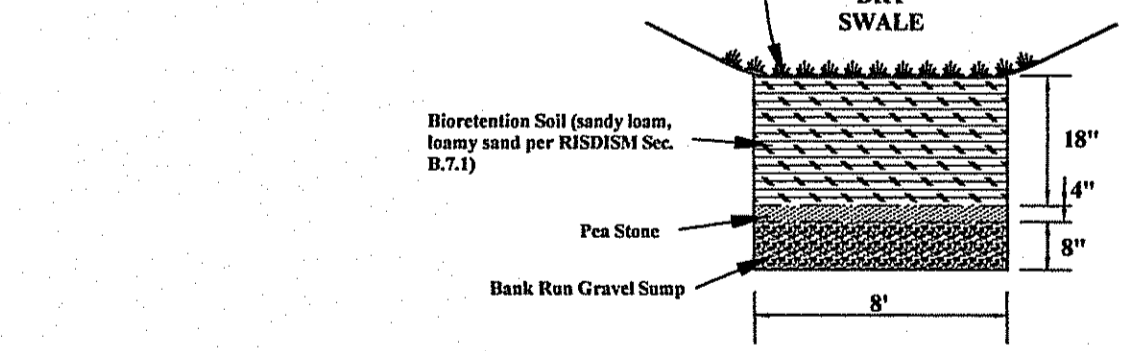
EROSION BLANKET



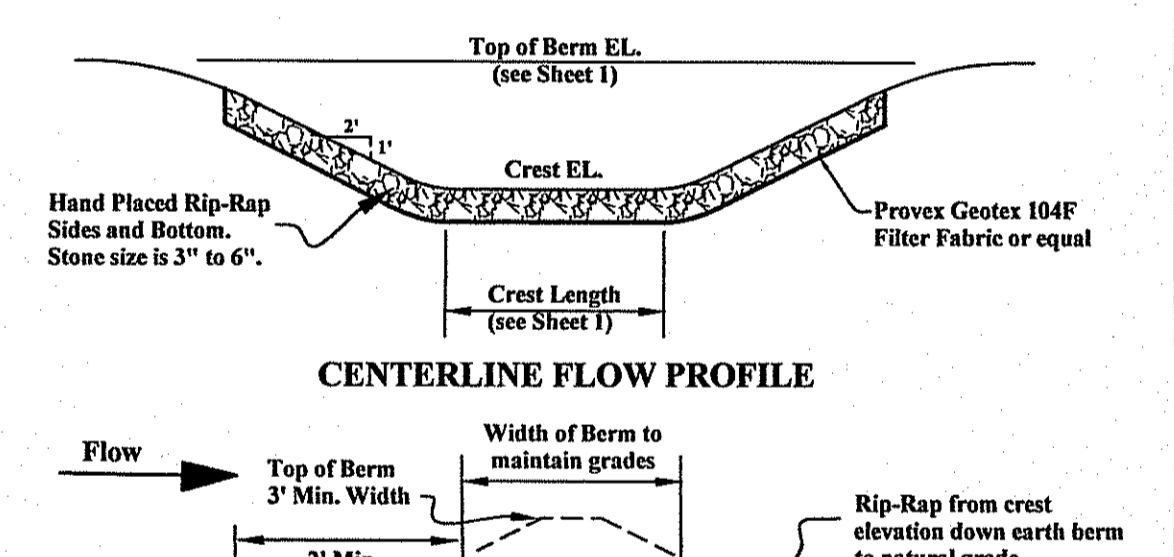
STRAW WATTLE



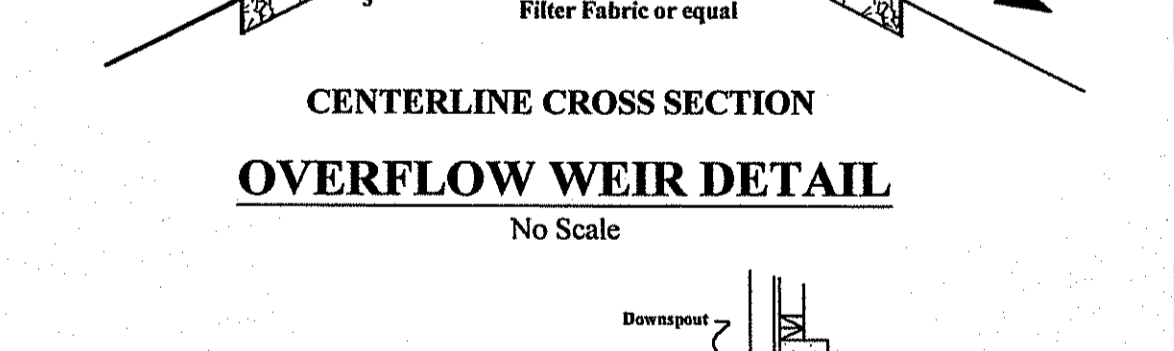
DRIVE WAY CROSS SECTION



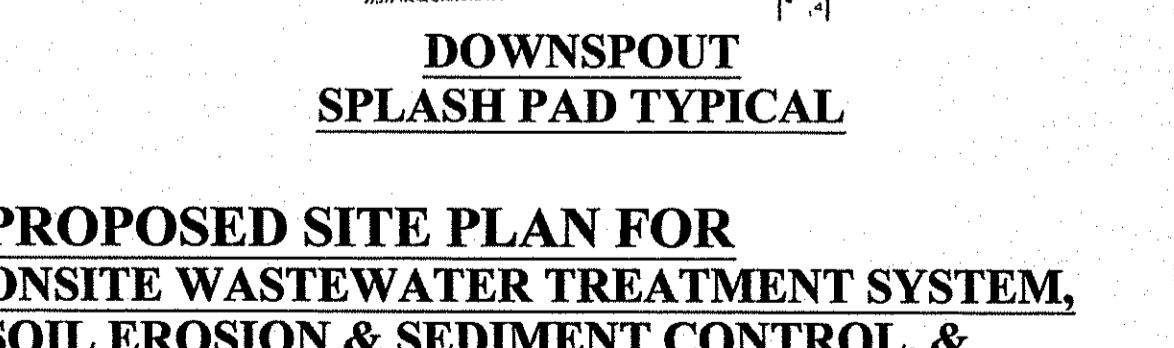
DRY SWALE CROSS SECTION



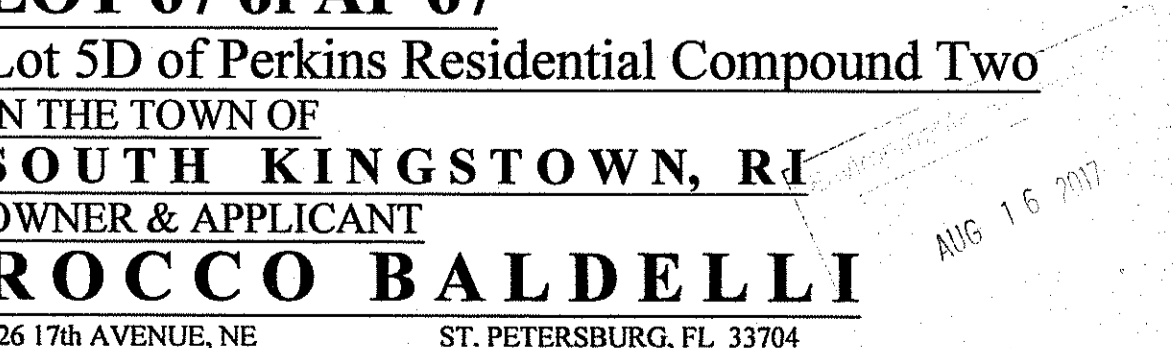
CENTERLINE FLOW PROFILE



CENTERLINE CROSS SECTION



OVERFLOW WEIR DETAIL



DOWNSPOUT SPLASH PAD TYPICAL

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED SEP 15 2017 FILE # 17-091
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED BY ANS MUST BE AT CONSTRUCTION SITE

Chararee M. Jackson

CHAREE M. JACKSON
REGISTERED PROFESSIONAL ENGINEER
CIVIL

PROPOSED SITE PLAN FOR
ONSITE WASTEWATER TREATMENT SYSTEM,
SOIL EROSION & SEDIMENT CONTROL, &
STORM WATER MANAGEMENT ON
LOT 67 of AP 67

Lot 5D of Perkins Residential Compound Two
IN THE TOWN OF
SOUTH KINGSTOWN, RI
OWNER & APPLICANT
ROCCO BALDELLI
326 17th AVENUE, NE ST. PETERSBURG, FL 33704
MAY 2017
SCALE: 1\"/>

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