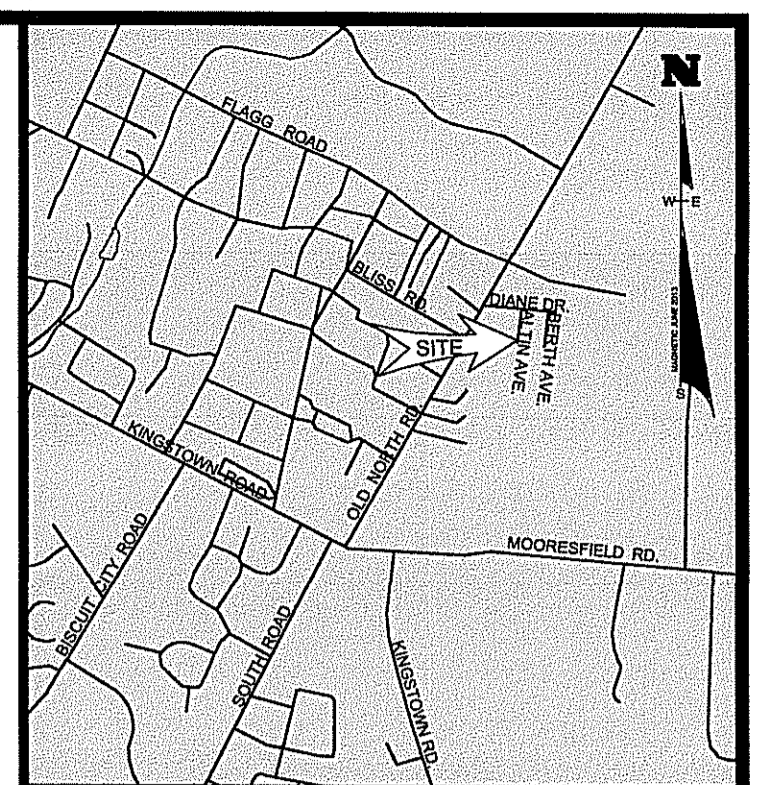


**SITE INFORMATION**

LOT: 16  
 24-1  
 AREA: 7,875 SF  
 ROAD FRONTAGE: 75'  
 ZONING DISTRICT: R-10

**REQUIRED SETBACKS**

FRONT: 25 FEET  
 REAR: 30 FEET  
 SIDE: 10 FEET  
 BUILDING COVERAGE: 25 %  
 BUILDING HEIGHT: 35 FEET



JUL 24 2013

**LEGEND**

- PROPERTY LINE
- UTILITY POLE
- 102 — PROPOSED CONTOUR
- 97.5 — PROPOSED SPOT GRADE
- - - 102 — EXISTING CONTOUR
- \*\*\*\*\* SILT FENCE / LIMIT OF DISTURBANCE
- W W W — EXISTING WATER LINE
- ~ ~ ~ EXISTING EDGE OF BRUSH

THIS SURVEY SUBSTANTIALLY CONFORMS TO A CLASS III STANDARD AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS.

BY: *Jeffrey K. Balch* DATE: 7/15/2013  
 REGISTERED PROFESSIONAL LAND SURVEYOR



**FRISELLA - BALCH & ASSOCIATES**  
 LAND SURVEYORS

33 NORTH RD. SUITE C-201 • PEACE DALE, RI  
 PHONE (401) 783-0849 • FAX (401) 783-6997  
 www.friseλλα.com

NO.	DATE	DESCRIPTION	BY

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
 APPROVED WITH CONDITIONS  
 AS SPECIFIED IN THE LETTER OF APPROVAL  
 DATED 7/27/2013 FILE # 13-0127  
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

*Nancy L. Tolman*

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

**UTILITIES:**  
 THE LOCATION OF EXISTING UTILITIES SHOWN ON THIS PLAN ARE APPROXIMATE ONLY AND HAVE BEEN SHOWN USING THE BEST AVAILABLE DATA.

THE CONTRACTOR SHALL CONTACT "DIG-SAFE" AND/OR OTHER APPROPRIATE UTILITY COMPANIES TO ASCERTAIN THE EXACT LOCATION OF THE RESPECTIVE UTILITY PRIOR TO CONSTRUCTION. UTILITIES INCLUDE BUT ARE NOT LIMITED TO GAS, ELECTRIC, WATER, TELEPHONE CABLE TV, ETC.

**WETLANDS:**  
 WETLAND DELINEATION WAS PERFORMED BY APPLIED BIO-SYSTEMS, INC. ON MARCH 25, 2013. THE FLAGGING 100 TO 102 DELINEATES A FRESHWATER WETLAND PRESUMED TO BE GREATER THAN 3 ACRES IN SIZE.  
 100' RIVERBANK WETLAND SHOWN, WAS SCALED FROM TOWN OF SOUTH KINGSTOWN SEWER PLANS.

DRAWING TITLED: PROPOSED RESIDENTIAL LOT DEVELOPMENT

LOCATED ON: LOT: 16 OF TAX ASSESSOR'S MAP: 24-1

OWNED BY: WILLIAM D. KOVACS TRUST

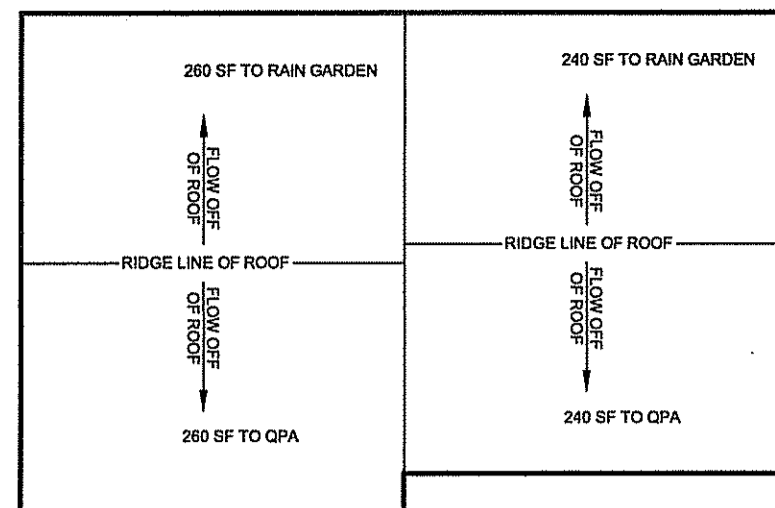
ADDRESS: ALTIN AVENUE IN THE TOWN OF SOUTH KINGSTOWN, RI

DESIGNED BY: JEFFREY K. BALCH, P.L.S.

SCALE: 1" = 10'  
 DRAWN BY: JK CHECKED BY: JKB

DRAWING No.: SHEET 1 OF 2

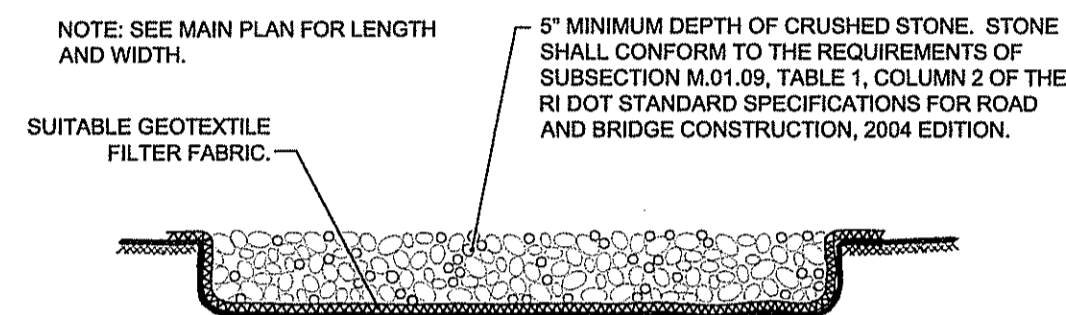
JEFFREY K. BALCH  
 No. 1839  
 PROFESSIONAL LAND SURVEYOR



**DETAIL ROOF AREAS**  
NOT TO SCALE

**QUALIFYING PEROUS AREAS:**  
THE WIDTH OF THE QPA SHALL BE EQUAL TO OR GREATER THAN THE LENGTH OF THE CONTRIBUTING ROOFTOP AREA.

- CONTRIBUTING ROOFTOP AREA: 240 SF / 13.3' = 19.5' = LENGTH OF FLOW PATH THROUGH QPA.
- CONTRIBUTING ROOFTOP AREA: 2240 SF / 13.3' = 18.0' = LENGTH OF FLOW PATH THROUGH QPA.



- WIDTH SHALL NOT BE LESS THAN THE FULL WIDTH OF THE RESPECTIVE POINTS OF INGRESS OR EGRESS (12' MINIMUM).
- THE LENGTH OF CONSTRUCTION ENTRANCE SHALL BE AT LEAST 50 FEET WHERE THE SOILS ARE SANDS OR GRAVELS, EXCEPT WHERE THE TRAVELED LENGTH IS LESS THAN 50 FEET. WHERE SOILS ARE CLAYS OR SILTS, THE LENGTH OF CONSTRUCTION ENTRANCES SHALL BE AT LEAST 100 FEET EXCEPT WHERE THE TRAVELED LENGTH IS LESS THAN 100 FEET.

**CONSTRUCTION ENTRANCE SECTION**

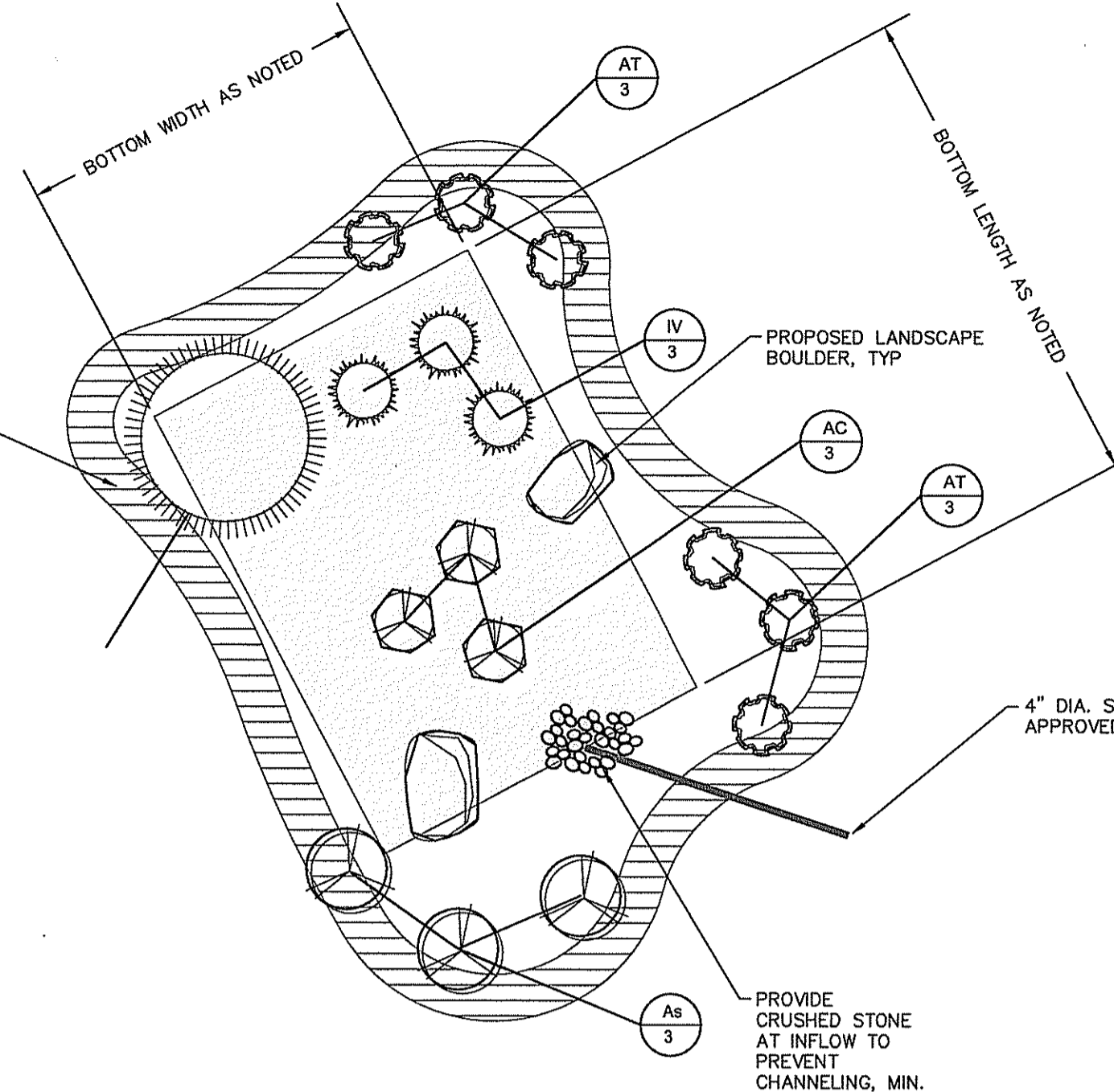
SCALE: NONE

**MATERIAL SIZE**

SQUARE MESH SIEVE	R1 DOT 2" CRUSHED STONE	% FINER
2 1/2"		100
2"		90-100
1 1/2"		30-55
1 1/4"		0-25
1"		0-5

**TYPICAL DETAIL PLAN VIEW OF RAIN GARDEN**  
NOT TO SCALE

EARTHEN BERM, TOP OF BERM, AS NOTED BERM TO BLEND IN WITH GRADE ON UPHILL SIDE AS NEEDED.

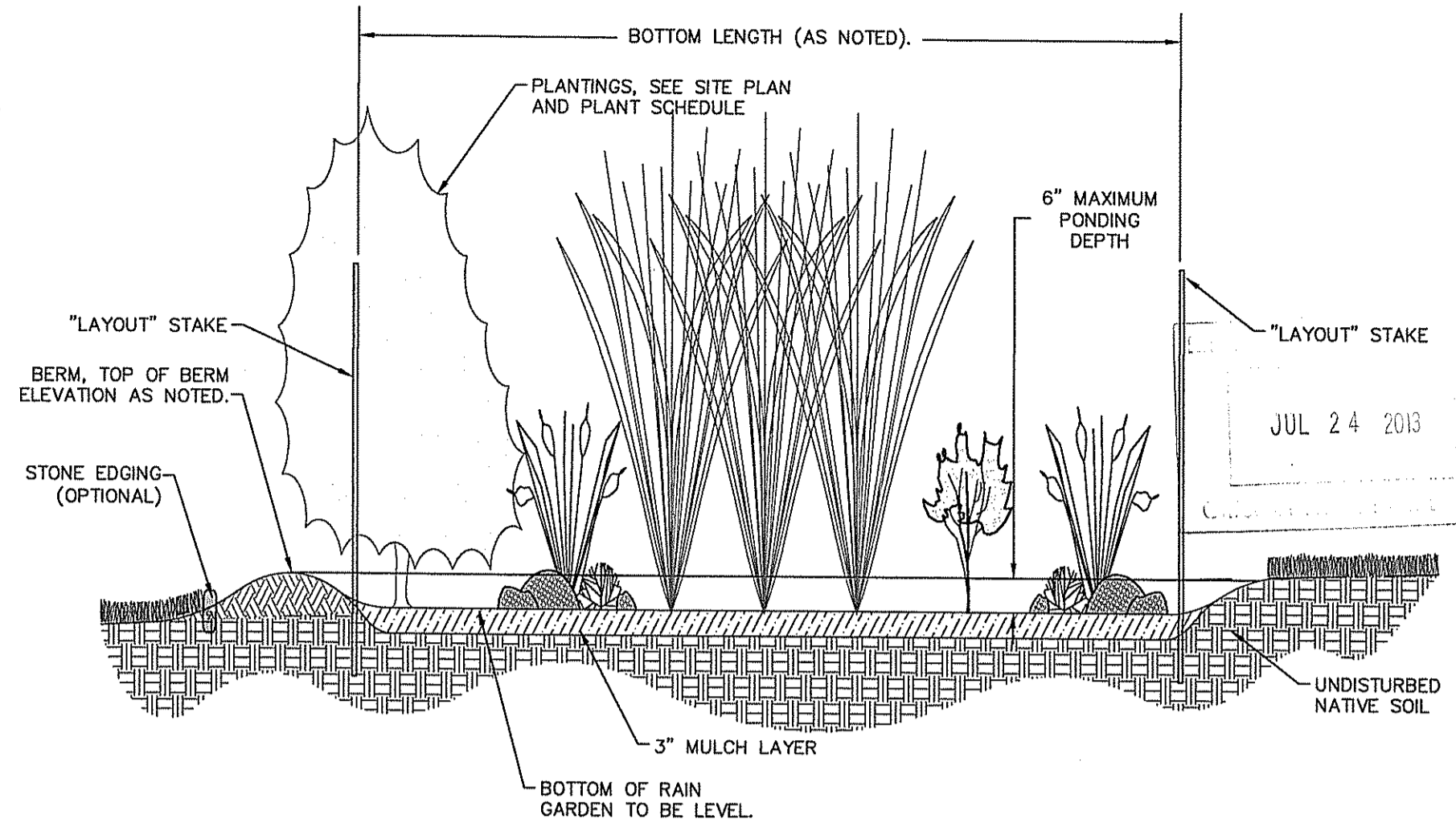


**RAIN GARDEN SIZING:**

**SIZING CRITERIA:**  
DRAINAGE AREA: 500 SF (CONTRIBUTING BLDG ROOF AREA)  
SOIL TYPE: CANTON URBAN LAND COMPLEX  
\* SITE SOIL EVALUATION FOR TEXTURE DETERMINATION NOT COMPLETED, THEREFORE, SILTY SOILS USED FOR REQUIRED AREAS.  
BOTTOM SURFACE AREA (SF) FOR AN 6" DEEP GARDEN: 125 SF, REQUIRED.  
130 SF OF BOTTOM AREA PROVIDED. BOTTOM SHALL BE LEVEL.  
AMENDED SOIL LAYER SHOULD BE A 1/2 MIXTURE OF THE EXCAVATED NATIVE SOILS AND MATURE ORGANIC COMPOST.  
3" MULCH LAYER SHALL BE NON-DYED AGED SHREDDED HARDWOOD MULCH.  
\*\*REFERENCE TABLE 7 & 8, PAGE 9 OF 15, STATE OF RI STORMWATER GUIDANCE FOR INDIVIDUAL SINGLE-FAMILY RESIDENTIAL LOT DEVELOPMENT.

**RAIN GARDEN NOTES:**

ALL RAIN GARDEN CONSTRUCTION METHODS, MATERIALS AND MAINTENANCE SHALL BE DONE IN ACCORDANCE WITH THE STATE OF RI STORMWATER GUIDANCE FOR INDIVIDUAL SINGLE-FAMILY RESIDENTIAL LOT DEVELOPMENT.

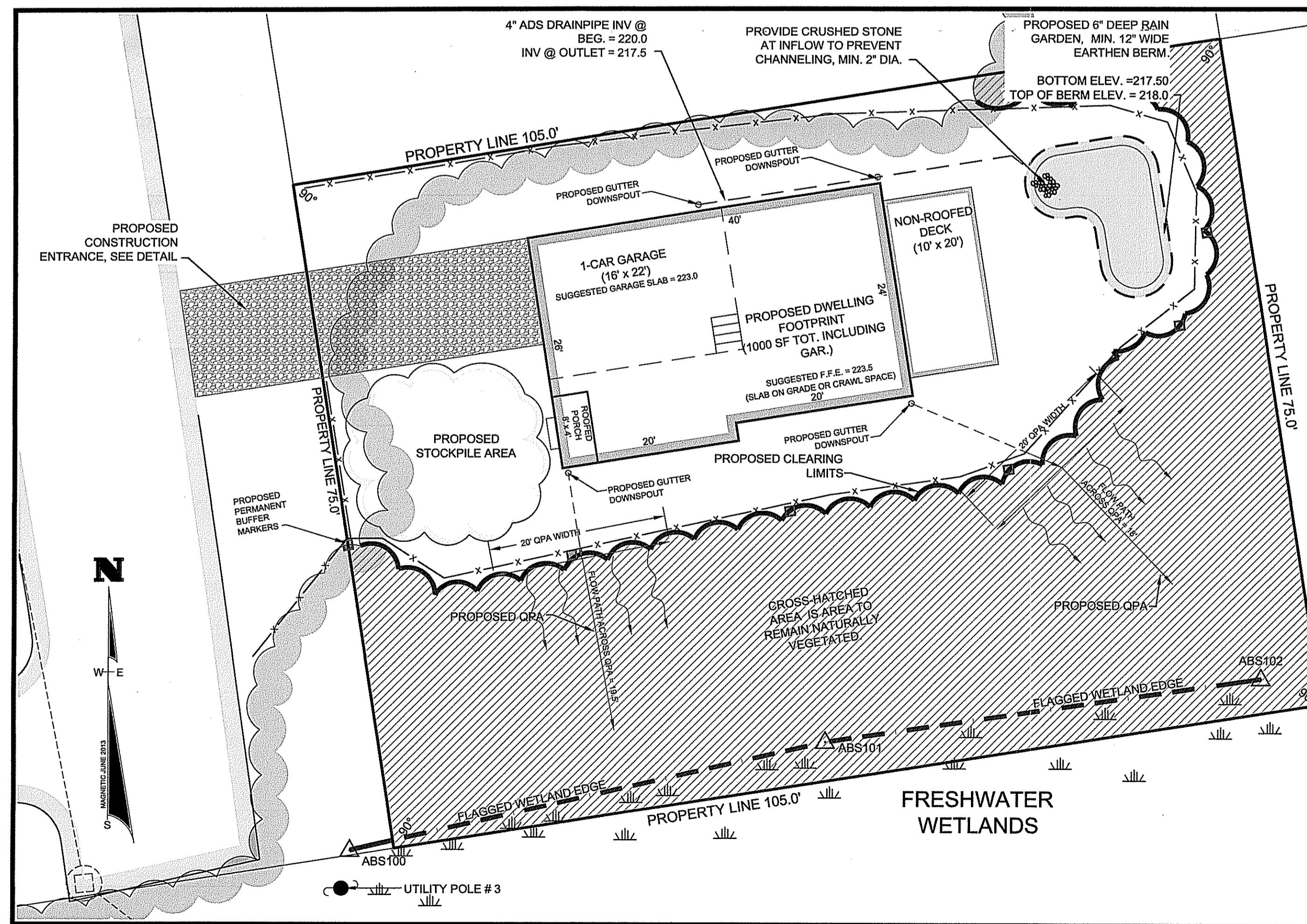


**DETAIL RAIN GARDEN, TYPICAL CROSS-SECTION**  
NOT TO SCALE

**PLANT SCHEDULE FOR EACH GARDEN**

Key	Botanical Name	Common Name	Size	Spacing
<b>Grasses</b>				
AC	Carex stricta	Tussock Sedge	#3	3' O.C.
<b>Perennials / ground cover</b>				
AT	Asclepias tuberosa	Butterfly milkweed	#3	3' O.C.
As	Astilbe sp.	Astilbe	#3	3' O.C.
IV	Iris versicolor	Blue flag	#3	3' O.C.
<b>Shrubs</b>				
CA	Clethra alnifolia	Sweet pepperbush	#5	NA

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED AUG 27 2013 FILE # 13-0187  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE  
*Kathy L. Freeman*



**DETAIL SITE DEVELOPMENT**  
INSET SCALE: 1" = 10'

**CONSTRUCTION WASTE:**

- IT IS THE SOLE RESPONSIBILITY OF THE SITE CONTRACTOR FOR THE FOLLOWING:
- ALL CONSTRUCTION WASTE SHALL BE PROPERLY HANDLED AND DISPOSED IN A PROPER MANNER, I.E., STORED IN APPROPRIATE CONTAINERS AND DISPOSED OFFSITE AT APPROPRIATE FACILITIES.
  - HAZARDOUS MATERIALS SHALL BE HANDLED IN ACCORDANCE WITH LOCAL, STATE OR FEDERAL LAWS OR REGULATIONS.
  - THE CONSTRUCTION SITE SHALL BE MAINTAINED IN A CLEAN ORDERLY FASHION WITH DEBRIS, LITTER AND CONSTRUCTION WASTE CLEANED UP AS NEEDED. THE SITE SHALL ALSO BE CLEANED AT THE END OF EACH DAY.
  - CONCRETE WASHDOWN WATER USED TO CLEAN CONCRETE TOOLS AND EQUIPMENT SHALL BE DISPOSED OF PROPERLY AND SHALL NOT BE ALLOWED TO ENTER STORM DRAINS, SANITARY SEWERS OR PERMITTED TO DISCHARGE TO STREET SURFACES. HARDENED WASTE CONCRETE CAN BE DISPOSED IN A MANNER SIMILAR TO ANY EARTH SPOILS PROVIDED THE MATERIALS ARE NOT CONTAMINATED WITH HAZARDOUS SUBSTANCES.
  - A SUFFICIENT NUMBER OF ONSITE PORTABLE TOILETS SHALL BE PROVIDED FOR PERSONNEL. IF OTHER TOILET FACILITIES ARE NOT ALREADY AVAILABLE.
  - CONTRACTOR SHALL INSURE TRUCKS AND VEHICLES DO NOT CARRY MUD FROM THE SITE ONTO ADJUTING STREETS OR PROPERTIES BY THE USE OF APPROPRIATE VEHICLE CONSTRUCTION ENTRANCE PADS. THE CONTRACTOR SHALL BE ESPECIALLY DILIGENT WHERE CONSTRUCTION PADS CANNOT BE USED OR ARE UNFEASIBLE DUE TO SITE CONSTRAINTS, E.G. EXISTING PAVEMENT OR LIMITED AREA.
  - CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING TRACKED MUD FROM ADJUTING STREETS, STORM DRAINS, ETC., TO THE SATISFACTION OF THE OWNER OF THE STREET OR DRAINS.

**EROSION AND SEDIMENTATION CONTROL NOTES:**

TEMPORARY AND/OR PERMANENT EROSION CONTROL DEVICES SUCH AS BALED HAY, SILT FENCING, ETC. SHALL BE INSTALLED PRIOR TO ANY CLEARING OR EXCAVATION. HAY BALES OR SILT FENCING SHALL BE PLACED IMMEDIATELY DOWN SLOPE AND ADJOINING AREAS OF SOIL DISTURBANCE AND STOCKPILES. INSTALLATION OF ALL EROSION CONTROL DEVICES SHALL BE CONDUCTED IN ACCORDANCE TO DETAIL SPECIFICATIONS.

CLEARING OF EXISTING VEGETATION SHALL BE DONE IN A CONTROLLED MANNER SO AS TO AVOID EXTENSIVE AREAS OF DEFOLIATED TERRAIN SUBJECT TO EROSION. AREAS SO DISTURBED SHALL BE BROUGHT TO FINAL GRADES AND STABILIZED AS SOON AS POSSIBLE.

DURING CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING DRAINAGE AND RUNOFF FLOW DURING STORMS AND PERIODS OF RAINFALL.

ALL EROSION CONTROL DEVICES SHALL BE INSPECTED AND MAINTAINED ON A REGULAR BASIS DURING CONSTRUCTION, ESPECIALLY AFTER EACH RAINFALL.

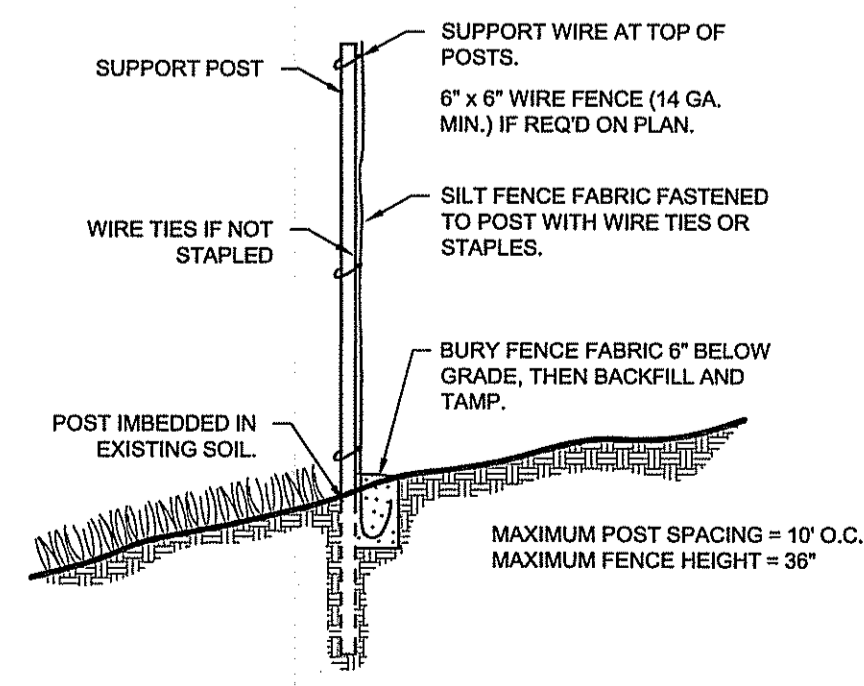
DUE TO CHANGING CHARACTERISTICS OF THE SITE CAUSED BY AND DURING CONSTRUCTION ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED AS SITE CONDITIONS WARRANT.

IF CONSTRUCTION IS SUSPENDED, ALL DISTURBED AREAS SHALL BE SEEDED AND ALL NECESSARY EROSION CONTROL DEVICES SHALL BE IN PLACE AND IN GOOD WORKING ORDER. IF SEEDING IS NOT POSSIBLE THEN EROSION CONTROL MATS SHALL BE PLACED OVER ALL DISTURBED SOIL. EROSION CONTROL BLANKETS (MATS) SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS. EROSION CONTROL BLANKETS (MATS) SHALL BE MANUFACTURED BY NORTH AMERICAN GREEN OR APPROVED EQUIVALENT AND INSTALLED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

ALL EROSION CONTROL METHODS, MATERIALS AND MAINTENANCE SHALL BE DONE IN ACCORDANCE WITH THE "RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK".

ALL AREAS WHICH ARE DISTURBED DURING CONSTRUCTION ARE TO BE BROUGHT TO FINISHED GRADE WITH AT LEAST 6" MINIMUM DEPTH OF GOOD QUALITY LOAM AND ALL SOIL AMENDMENTS DEEMED NECESSARY. THE AREA SHALL BE SEEDED WITH A QUICK GERMINATING GRASS SEED SUCH AS URI #2 OR APPROVED EQUIVALENT.

THE CONTRACTOR SHALL PROVIDE FOR ALL SEEDED AREAS TO BE WATERED AND IN GOOD CONDITION UNTIL A GOOD HEALTHY AND UNIFORM GROWTH IS ESTABLISHED OVER THE ENTIRE AREA.



**SILT FENCE DETAIL**  
NOT TO SCALE

**FRISELLA - BALCH & ASSOCIATES**  
LAND SURVEYORS  
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PHONE (401) 783-5949 FAX (401) 783-5997  
www.frissella.com

NO.	DATE	DESCRIPTION	BY

**SEDIMENTATION AND EROSION CONTROL PLAN**

LOCATED ON:  
LOT: 16 OF TAX ASSESSOR'S MAP: 24-1

OWNED BY:  
WILLIAM D. KOVACS TRUST

ADDRESS:  
ALTIN AVENUE  
IN THE TOWN OF SOUTH KINGSTOWN, RI

JULY 2013  
DESIGNED BY:  
JEFFREY K. BALCH, P.L.S.

SCALE: AS SHOWN  
DRAWN BY:  
JK

CHECKED BY:  
JKB  
DRAWING NO.  
SHEET 2 OF 2

**JEFFREY K. BALCH**  
No. 1839  
PROFESSIONAL LAND SURVEYOR