

APPROXIMATE CENTERLINE OF RIVER (<10' WIDE)

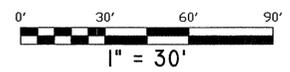
PROPOSED 2.5' (l.d.) HIGH x 10' (l.d.) WIDE x 20' LONG BOX CULVERT WITH HEADWALLS ON INLET AND OUTLET SIDE (SEE PROFILE & DETAIL)  
 INV. IN = 97.1  
 INV. OUT = 96.9  
 INSIDE TOP OF CULVERT = 99.6  
 (IN STALL WINGWALLS ON CULVERT ENDS AS SHOWN)  
 (STREET SIDE WINGWALL TOP = 100.0)  
 (WEST SIDE WINGWALL TOP = 99.0)

BENCHMARK-NAIL IN PAVEMENT-100.80

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS  
 APPROVED PLAN  
 AS SPECIFIED IN THE LETTER OF 11-0182  
 DATED MAR 22 2016  
 NO CHANGES ALLOWED WITHOUT APPROVED PLANS MUST BE

**LEGEND**

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>--- 100 --- EXISTING CONTOUR</li> <li>-▲- DELINEATED WETLAND EDGE</li> <li>- - - 50' PERIMETER WETLAND</li> <li>- - - 100' TOWN SETBACK</li> <li>- - - PROPOSED HAYBALE OR SILT FENCE EROSION CONTROL = LIMITS OF DISTURBANCE</li> <li>- - - TEMPORARY LIMITS OF DISTURBANCE (HAYBALES OR SILT FENCE)</li> <li>○ STONE WALL</li> <li>○ PROPOSED CONTOUR</li> <li>○ MONUMENT FOUND</li> <li>○ DH DRILL HOLE</li> <li>○ STONE WALL (TO BE REMOVED)</li> </ul> | <ul style="list-style-type: none"> <li>○ UTILITY POLE</li> <li>▨ 100' RIVERBANK WETLAND</li> <li>▨ PROPOSED CONSTRUCTION ENTRANCE</li> <li>○ PROPOSED UTILITY POLE INKBERRY (ILEX GLABRA) 3'-5" HIGH, 8" ON CENTER</li> <li>○ SWAMP AZALEA (RHODODENDRON VISCOSUM) 3'-5" HIGH, 8" ON CENTER</li> <li>- - - APPROXIMATE RIVER CENTERLINE</li> <li>○ SOIL EVALUATION TEST PIT</li> <li>○ PROPOSED UNDERGROUND ELECTRIC, TELEPHONE &amp; CATV</li> <li>○ EXISTING CONDITION 100 YEAR FLOOD PLAIN (ELEV. 100.5) (PER ABLE ENGINEERING CALCULATIONS)</li> <li>○ PROPOSED CONDITION 100 YEAR FLOOD PLAIN (ELEV. 101.5) (PER ABLE ENGINEERING CALCULATIONS)</li> </ul> |
|--|---|



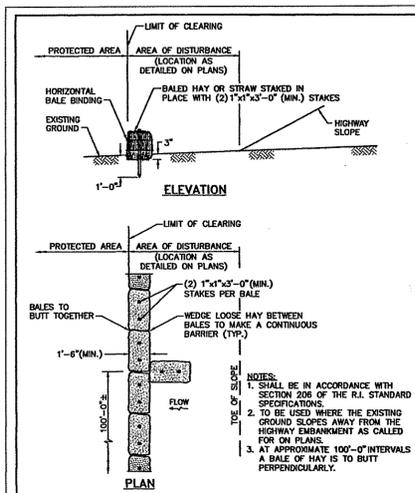
\*REFER TO SHEET 2 OF 2 FOR PLAN NOTES

	#6; 04/08/14: ADD DEWATERING BASIN, RIPRAP, 100 YR FLOOD PLAIN, & DRIVEWAY GRADING
	#5; 03/01/13: VARIOUS EDITS
	#4; 12/05/12: REVISE L.O.D.
	#3; 12/21/11: ADD STORMWATER BMP'S
	#2; 09/15/11: ADD BOX CULVERT
#1; 11/8/10: PER BIOLOGIST COMMENTS	

FRESHWATER WETLAND ALTERATION APPLICATION  
 PREPARED FOR  
**WILLIAM, JOANN & BETH RYAN**  
 ASSESSOR'S PLAT 31 LOT 55-1  
 LONG HIGHWAY  
 LITTLE COMPTON, RHODE ISLAND

SCALE: 1" = 30' DATE: JUNE 11, 2010

**Civil Engineering Concepts, Inc.**  
 34A MAIN STREET P.O. BOX 5323  
 LITTLE COMPTON, RI 02837 NEW BEDFORD, MA, 02742  
 PH: (401) 592-0177 FAX: (401) 592-0178 EMAIL: wsmithc@comcast.net  
 SHEET 1 OF 2 JOB#: 04-123



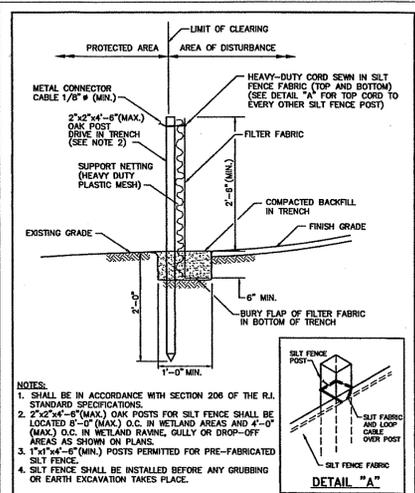
RHODE ISLAND DEPARTMENT OF TRANSPORTATION

**BALED HAY EROSION CHECK**

DATE: JUNE 15, 1998

BY: [Signatures]

R.I. STANDARD 9.1.0



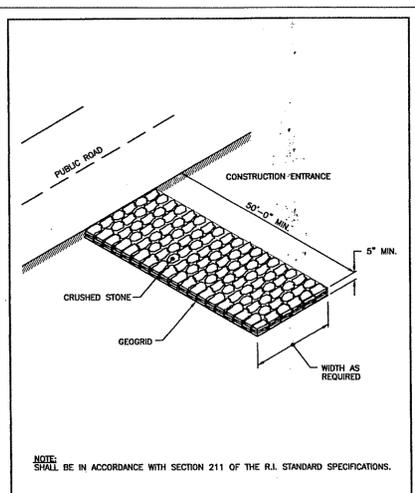
RHODE ISLAND DEPARTMENT OF TRANSPORTATION

**SILT FENCE DETAIL**

DATE: JUNE 15, 1998

BY: [Signatures]

R.I. STANDARD 9.2.0



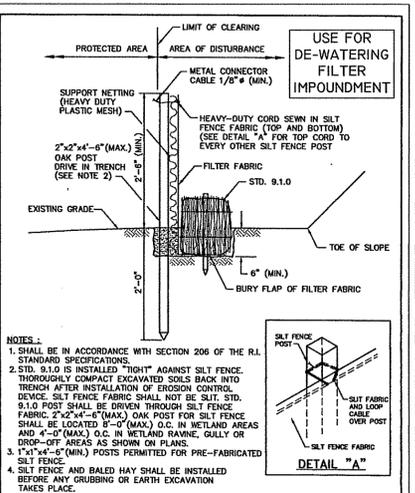
RHODE ISLAND DEPARTMENT OF TRANSPORTATION

**CONSTRUCTION ACCESS**

DATE: JUNE 15, 1998

BY: [Signatures]

R.I. STANDARD 9.9.0



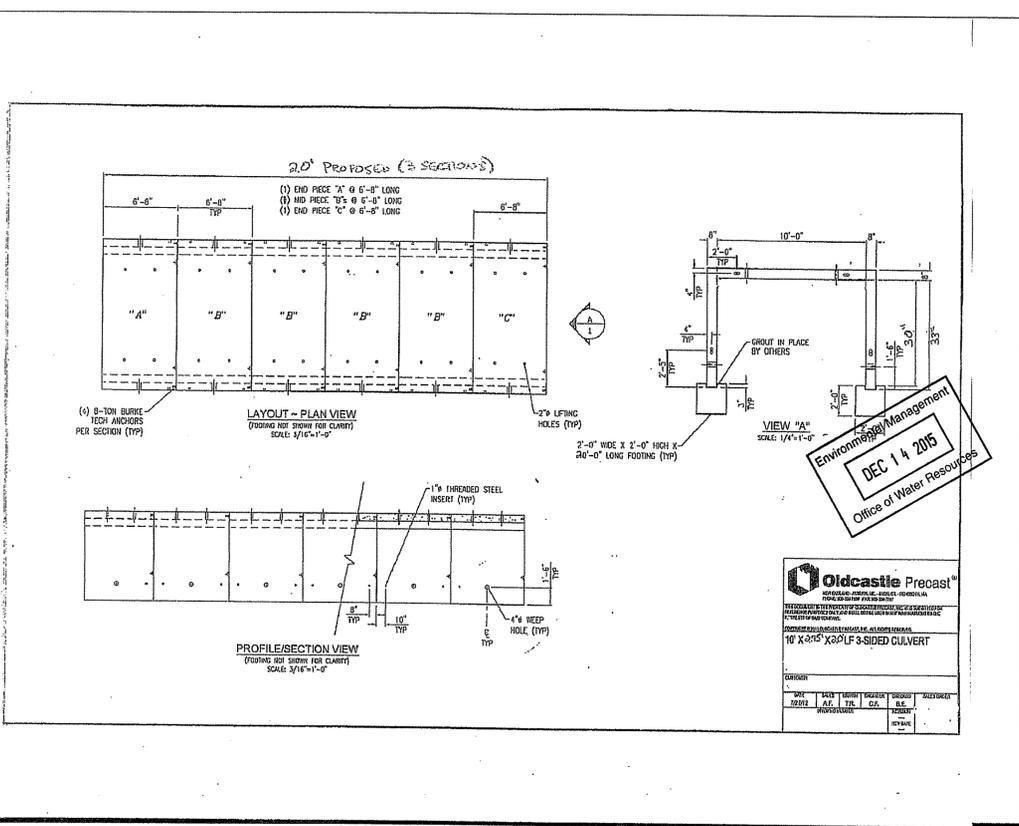
RHODE ISLAND DEPARTMENT OF TRANSPORTATION

**BALED HAY EROSION CHECK AND SILT FENCE COMBINED**

DATE: JUNE 15, 1998

BY: [Signatures]

R.I. STANDARD 9.3.0

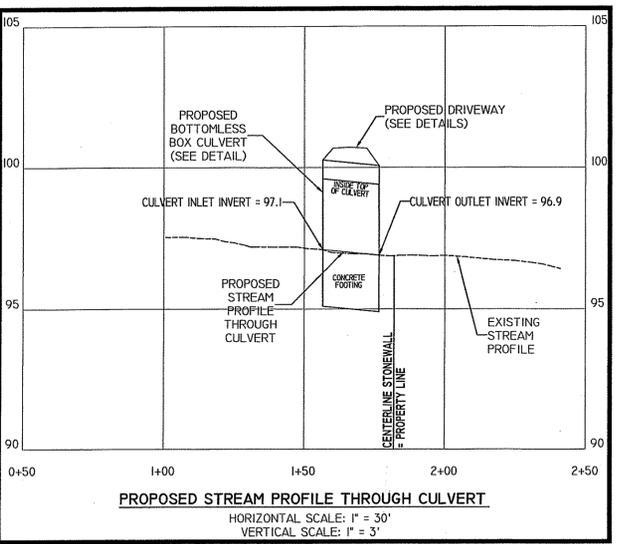
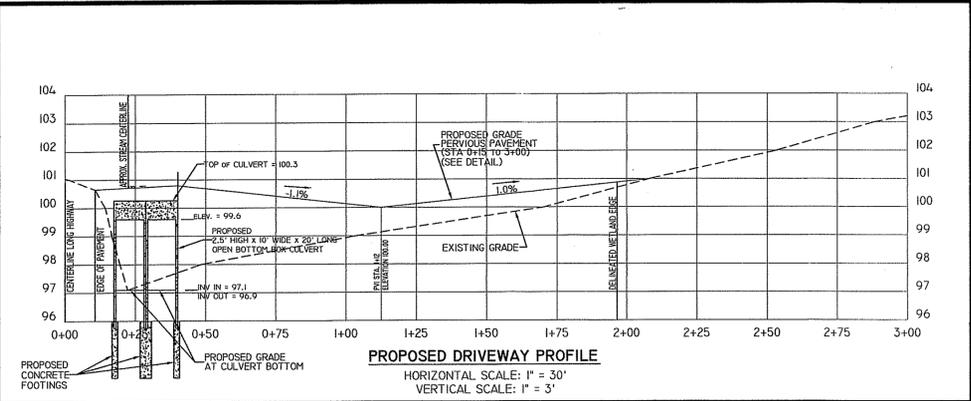
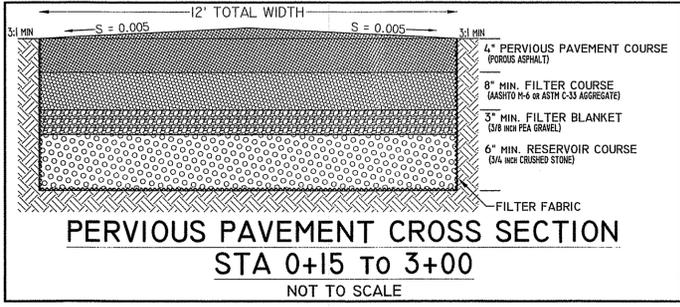
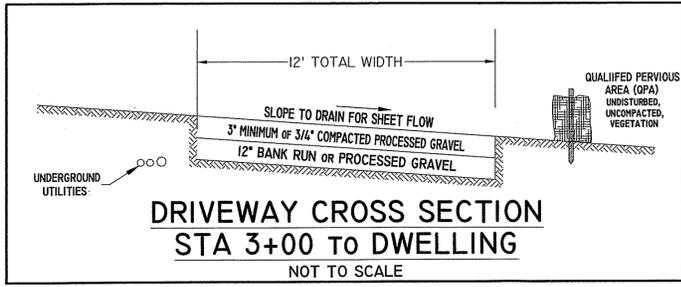


Environmental Management  
DEC 14 2015  
Office of Water Resources

**Oldcastle Precast**

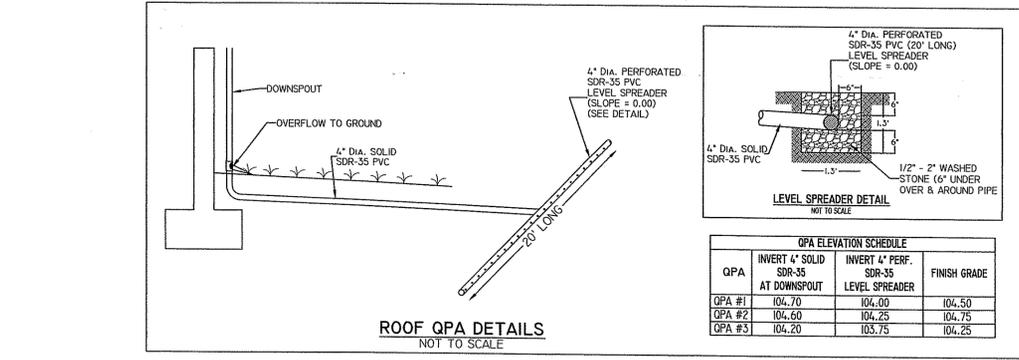
10' x 20' x 4" SDR-35 PVC

10' x 20' x 4" SDR-35 PVC



- EROSION AND SEDIMENT CONTROL:**
- ELEMENTS OF THE EROSION AND SEDIMENT CONTROL PLAN AREA AS FOLLOWS:
- A haybale checkdam will be installed along the limits of disturbance and as designated on the site plan. Haybale checkdam will be inspected weekly or after rainfall events in excess of 0.5" during construction with repairs made as needed. A minimum of 20 extra haybales shall be kept on-site for repairs.
  - Vegetation removal shall be limited to the areas designated on the site plans. Encroachment beyond the approved limits of disturbance is not allowed. Any encroachment will require stabilizing the site, tilling the soil to uncompact the soil and replanting.
  - A stone construction entrance will be installed at the proposed driveway (outside of wetland areas) to minimize transport of sediment by vehicles off site.
  - Culvert and pervious pavement construction shall take place during the 'dry months'. Culvert work shall not commence until culverts are available for delivery from the manufacturer. Culvert work shall be scheduled when the river bed is dry and no rain is forecasted for the next 7 days. Work shall commence diligently in order to complete as soon as possible. Disturbed areas shall be hydroseeded and stabilized with erosion control blankets or burlap. The need for de-watering shall be avoided by scheduling. In the event that de-watering is required, water from the excavation shall be pumped into a combined haybale silt fence checkdam (RI STANDARD 9.3.0) impoundment. Any de-watering impoundment shall be located at least 50 feet from any wetland areas and overflow shall be directed away from any OPA sites.
  - Lawn and landscape related work will commence as soon as practical after construction of the structure and pavement. Hydroseeding shall contain mulch to resist runoff. Water to be applied as necessary to minimize dusting and to establish stand of turf. Any stocpile areas or exposed soil that will not be worked within 30 days shall be hydroseeded to stabilize and reduce potential for sedimentation.
  - OPA's shall remain in natural condition. Care is to be taken to prevent compaction of soils during construction activities.
  - The owner agrees to allow the Little Compton Building Inspector or RIDEM to initiate any additional erosion or sediment control measures necessary to minimize siltation or sedimentation.
  - De-watering filter system will be installed prior to culvert installation. Adequate de-watering pumps and hose shall be on-site.

- DRIVEWAY, CULVERT & STORMWATER SYSTEM MAINTENANCE PLAN**
- MAINTENANCE SCHEDULE AND TASKS:
- ROUTINE MAINTENANCE WILL BE THE RESPONSIBILITY OF THE HOMEOWNER.
- ROUTINE MAINTENANCE OF THE STORMWATER MANAGEMENT SYSTEM SHALL OCCUR AS FOLLOWS:
- The pervious pavement driveway surface shall be swept with a motorized street sweeper/vacuum at least twice per year (in the spring and late fall).
  - The qualified pervious areas (OPA's) shall be inspected twice per year. Any sediments shall be removed at this time. Correct any ponding, erosion and re-plant any vegetation that has died as soon as possible. Heavy equipment shall not be driven over OPA's to prevent compaction. The use of fertilizers, chemical/sweed killer is not recommended in or near the OPA's or wetland areas.
  - Screening vegetation shall be inspected after the first growing season. Any plantings that do not survive will be replaced. Whenever 6 inches of silt has accumulated in the culvert, the sediments shall be removed by mechanical or vacuum equipment. All sediments shall be removed from the site and disposed of at an approved facility. This work will be accomplished one year after installation and at least every 2 years thereafter.
  - The culvert shall be inspected annually or after rainfall events in excess of 1". The vegetated condition downstream of surface runoff shall be inspected annually. Any erosion channels or banks, any scouring or any loss of vegetative cover shall be promptly repaired using standard landscaping practices. All trash and debris will be removed from the culvert area or OPA by hand on a monthly basis.
  - The level spreader structures will be inspected monthly for the first 6 months to insure proper operation and at least semi-annually thereafter.



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES

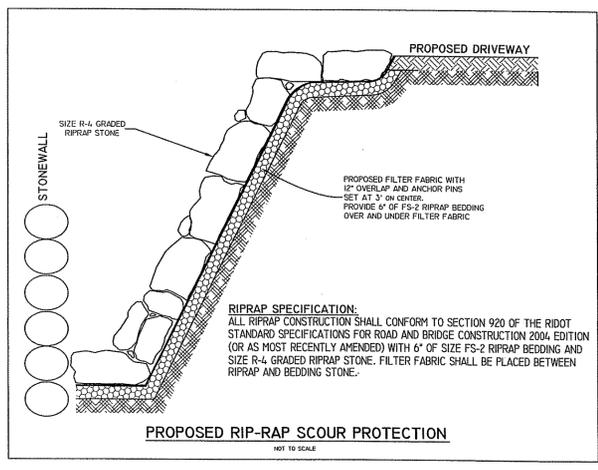
FRESHWATER WETLAND ALTERATION APPLICATION

APPROVED

DATE: MAR 22 2015

NO CHANGES ALLOWED WITHOUT APPROVED PLANS MUST BE AT

11-0182



**WILLIAM F. SMITH**

REGISTERED PROFESSIONAL ENGINEER

#6: 04/08/16: REVISE PROFILE, NOTES, ADD DETAILS

#5: 3/12/13: ADD DETAILS, NOTES

#4: 12/05/12: ADD DETAILS

#3: 12/21/11: ADD & REVISE DETAILS

#2: 09/15/11: ADD BOX CULVERT

#1: 11/8/10: PER BIOLOGIST COMMENTS

REVISIONS:

FRESHWATER WETLAND ALTERATION APPLICATION

PREPARED FOR

**WILLIAM, JOANN & BETH RYAN**

ASSESSOR'S PLAT 31 LOT 55-1

LONG HIGHWAY

LITTLE COMPTON, RHODE ISLAND

SCALE: AS NOTED DATE: JUNE 11, 2010

**Civil Engineering Concepts, Inc.**

34A MAIN STREET P.O. BOX 5323

LITTLE COMPTON, RI 02837 NEW BEDFORD, MA 02742

PH: (401) 592-0177 (508) 990-4900

FAX: (401) 592-0178 EMAIL: wsmithccc@aol.com

SHEET 2 OF 2 JOB#: 04-123