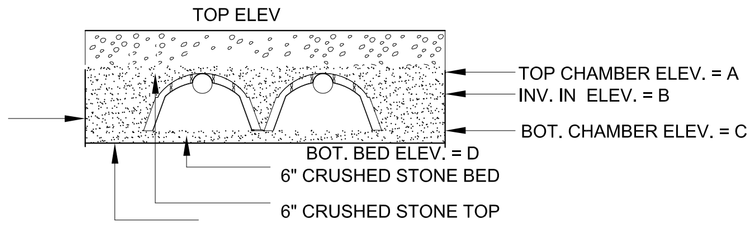
DWELL.	A	B	C	D	TOP MIN.	GROUND WATER
1–2	100.60	99.60	96.60	96.10	101.35	94.00
3–4	101.60	100.60	97.60	97.10	102.65	95.00
5	99.60	98.60	95.60	95.10	100.35	93.00
6	109.90	108.90	105.90	105.40	110.65	103.30
7–8	103.50	103.00	100.00	99.50	104.25	97.40
9–10	99.90	98.90	96.40	95.90	100.65	93.80
11	98.40	97.40	95.40	94.90	99.15	92.80
12	93.40	92.40	90.40	89.90	94.15	87.80
13–14	95.50	94.50	91.50	91.10	96.25	89.00
15–16	90.10	89.10	86.10	85.60	90.85	83.50
17–18	89.20	88.20	85.20	84.70	89.95	82.60
19–20	83.20	82.20	79.20	78.70	83.95	76.60
21–22	78.60	77.60	74.60	74.10	78.35	72.00
23–24	79.60	78.60	75.60	75.10	80.35	73.00
25–26	80.60	79.60	76.60	76.10	81.35	74.00
27–28	81.60	80.60	77.60	77.10	82.35	75.00
29–30	84.60	83.60	80.60	80.10	85.35	78.00
31	88.60	87.60	84.60	84.10	89.35	82.00
32	91.60	90.60	87.60	87.10	92.35	85.00

ROOF DRAIN CHAMBER ELEVATION CHART

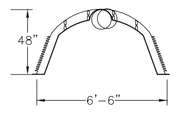
40 MIL. LINER ON ALL SIDES
BOTTOM SET 1' INTO IN-SITU SOIL
TOP SET 2 INCHES ABOVE
CRUSHED STONE

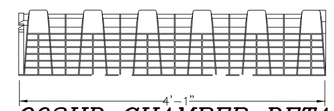


10'-8" WIDE , 3.5 FT HIGH CRUSHED STONE ALL SIDES
HEIGHT FROM 6" FROM THE TOP OF CHAMBER TO 6" BELOW THE CHAMBER

ROOF DRAIN CHAMBER LAYOUT DETAIL: SIDE VIEW

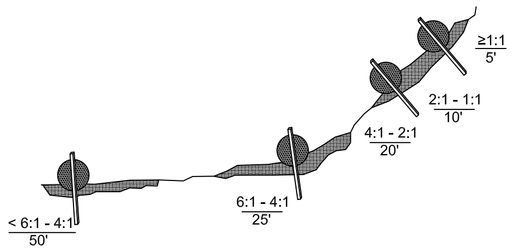
NOT TO SCALE



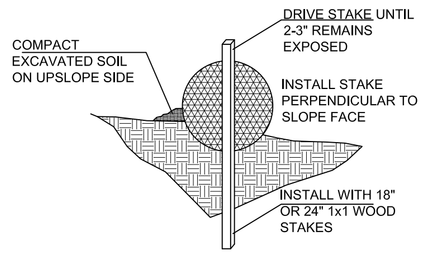


CULTEC R-902HD CHAMBER DETAIL

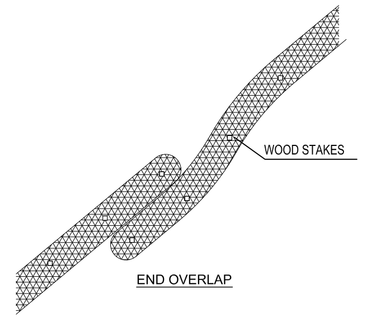
OR EQUAL
NOT TO SCALE



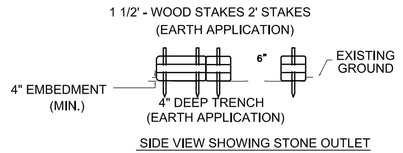
TYPICAL WATTLE SPACING BASED ON SLOPE GRADIENT



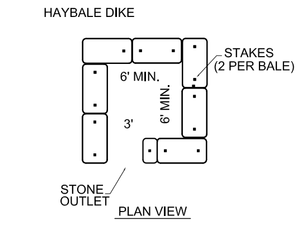
ENTRENCHMENT DETAIL



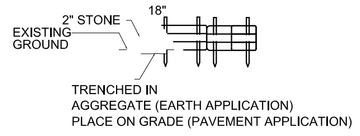
END OVERLAP



SIDE VIEW SHOWING STONE OUTLET



PLAN VIEW



TRENCHED IN
AGGREGATE (EARTH APPLICATION)
PLACE ON GRADE (PAVEMENT APPLICATION)

CROSS SECTION OF STONE OUTLET

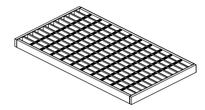
1. WHEN USED ON EXISTING PAVEMENT PLACE HAYBALES AND STONE ON SURFACE OF PAVEMENT. SECURE HAYBALES BY DRIVING 5/8" REBAR THROUGH BALES AND INTO PAVEMENT A MINIMUM OF 6". AFTER USE REMOVE, RODS, AND HAYBALES.
2. BALES SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS AND REPAIR OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED.

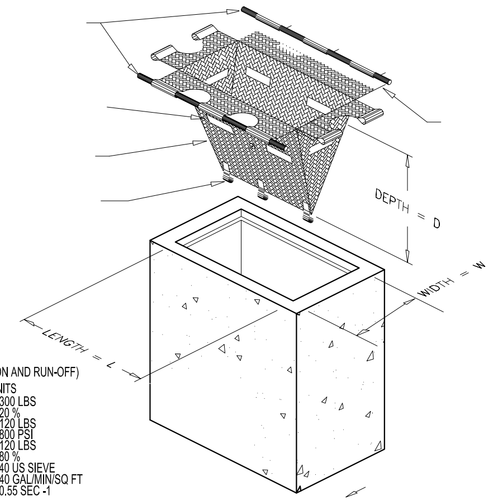
TEMPORARY SEDIMENTATION BASIN

NOT TO SCALE

SILTSACK
SPECIFICATIONS

NOTE: THE SILTSACK WILL BE MANUFACTURED FROM A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS.





REGULAR FLOW SILTSACK
(FOR AREAS OF LOW TO MODERATE PRECIPITATION AND RUN-OFF)

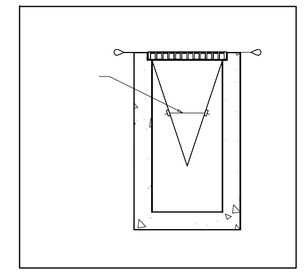
PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	300 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20 %
PUNCTURE	ASTM D-4833	120 LBS
MULLEN BURST	ASTM D-3786	600 PSI
TRAPEZOID TEAR	ASTM D-4533	120 LBS
UV RESISTANCE	ASTM D-4355	90 %
APPARENT OPENING SIZE	ASTM D-4751	40 US SIEVE
FLOW RATE	ASTM D-4491	40 GAL/MIN/SQ.FT
PERMITTIVITY	ASTM D-4491	0.55 SEC -1

HI-FLOW SILTSACK
(FOR AREAS OF MODERATE TO HEAVY PRECIPITATION AND RUN-OFF)

PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	265 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20 %
PUNCTURE	ASTM D-4833	120 LBS
MULLEN BURST	ASTM D-3786	420 PSI
TRAPEZOID TEAR	ASTM D-4533	40 LBS
UV RESISTANCE	ASTM D-4355	90 %
APPARENT OPENING SIZE	ASTM D-4751	20 US SIEVE
FLOW RATE	ASTM D-4491	200 GAL/MIN/SQ.FT
PERMITTIVITY	ASTM D-4491	1.5 SEC -1

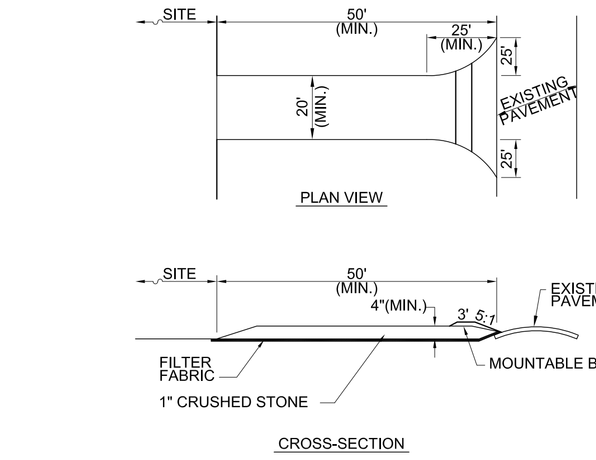
OIL-ABSORBANT SILTSACK
(FOR AREAS WHERE THERE IS A CONCERN FOR OIL RUN-OFF OR SPILLS)

DEPENDING ON YOUR PARTICULAR APPLICATION, THE SILTSACK CAN BE MADE FROM EITHER ONE OF THE ABOVE FABRICS WITH AN OIL-ABSORBANT PILLOW INSERT OR, MADE COMPLETELY FROM AN OIL-ABSORBANT SILTSACK , WITH A WOVEN PILLOW INSERT.

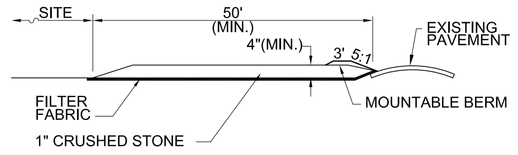


SILT SACK DETAIL

NOT TO SCALE



PLAN VIEW



CROSS-SECTION

NOTES:

1. ENTRANCE WIDTH SHALL BE A EIGHTEEN (18) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. THE ENTRANCE PAD SHALL BE PLACED AT THE PROPOSED ENTRANCE TO PADDOCK CIRCLE.
2. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY. BERM SHALL BE PERMITTED. PERIODIC INSPECTION AND MAINTENANCE SHALL BE PROVIDED AS NEEDED.
3. USE 4-8" QUARRY SPILL STONES.

CONSTRUCTION ENTRANCE DETAIL

NOT TO SCALE

1. BEGIN AT THE LOCATION WHERE THE WATTLE IS TO BE INSTALLED BY EXCAVATING A 2-3" DEEP X 9" WIDE TRENCH ALONG THE CONTOUR OF THE SLOPE. EXCAVATED SOIL SHOULD BE PLACED UP SLOPE FROM THE ANCHOR TRENCH
2. PLACE THE WATTLE IN THE TRENCH SO THAT IT CONTOURS TO THE SOIL SURFACE. COMPACT THE SOIL FROM THE EXCAVATED TRENCH AGAINST THE WATTLE ON THE UPHILL SIDE. ADJACENT WATTLES SHOULD TIGHTLY ABUT.
3. SECURE THE WATTLE WITH 18-24" STAKES EVERY 3-4 FEET WITH A STAKE ON EACH END. STAKES SHOULD BE DRIVEN THROUGH THE MIDDLE OF THE WATTLES LEAVING AT LEAST 2-3" OF STAKE EXTENDING ABOVE THE WATTLE STAKES SHOULD BE DRIVEN PERPENDICULAR TO THE SLOPE FACE.

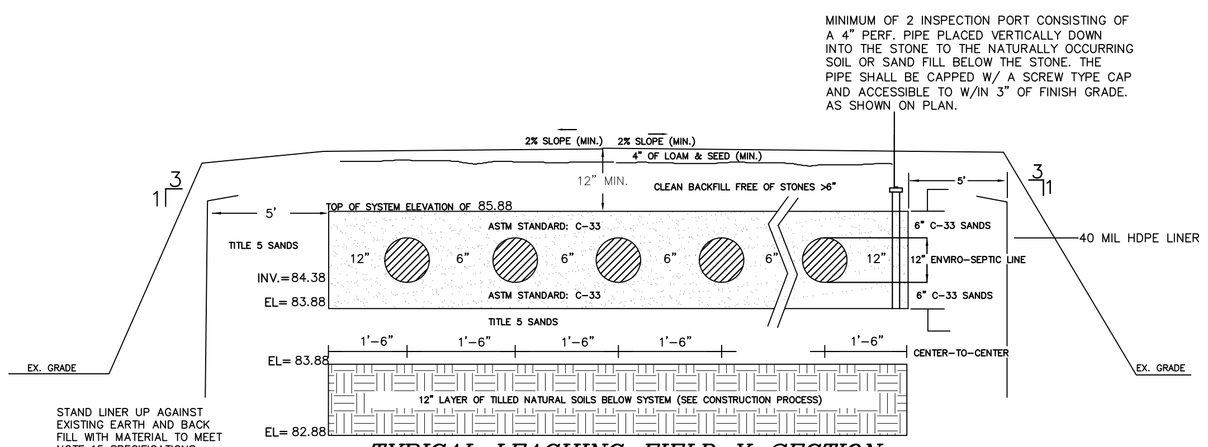
STRAW WATTLE INSTALLATION

NOT TO SCALE

CONSTRUCTION PROCESS FOR PRESBY SAND BEDS:

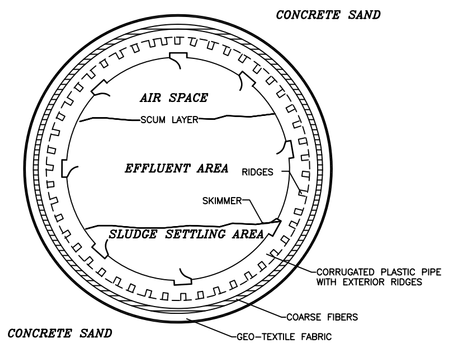
INSTALLER TO COMPLY WITH THE MOST RECENT PRESBY ENVIRO-SEPTIC WASTEWATER TREATMENT SYSTEM DESIGN AND INSTALLATION MANUAL FOR MASSACHUSETTS. THE FOLLOWING IS A GENERAL INSTALLATION GUIDE:

1- CONTRACTOR IS TO EXCAVATE TOTAL BOTTOM AREA OF 73'x74' AND 86'x75' TO A DEPTH OF THE C1 LAYER ON SLOPE.
2- CONTRACTOR IS TO TILL ENTIRE BOTTOM HOLE AREA FOR A DEPTH OF 12".
3- TITLE 5 SANDS TO BE PUT IN PLACE TO BOTTOM ELEVATION IMMEDIATELY AFTER TILLING TO PROTECT BED FROM PRECIPITATION DAMAGE.
4- A 6" LAYER OF ASTM C-33 SYSTEM SANDS SHOULD THEN BE PLACED IN CENTER OF HOLE COVERING THE BOTTOM OF THE HOLE TO BOTTOM ELEVATION (SEE SCHEDULE).
5- PIPE NETWORK SHALL BE LAID IN PLACE AND CONNECTED.
6- SYSTEM SAND SHOULD THEN BE PLACED OVER ENTIRE PIPE NETWORK TO A TOP ELEVATION (SEE SCHEDULE).
7- SURROUNDING TITLE 5 SANDS SHOULD BE SET IN PLACE AROUND PERIMETER OF SYSTEM TO MAINTAIN SYSTEM SIZE.
8- COMPLETE VENTING AND INSPECTION PORTS. PORTS SHALL BE INSTALLED PER TITLE 5 AS SHOWN ON SITE PLAN AND DETAILS AS WELL AS 1 PORT IN THE MIDDLE OF EACH ENVIRO SEPTIC LINE.
9- AS-BUILT SHALL BE PERFORMED BY THE DESIGN ENGINEER AND TOWN BOARD OF HEALTH.
10- CLEAN FILL PLACED OVER SYSTEM.
11- AS-BUILT FOR FINAL GRADES BY ENGINEER.



TYPICAL LEACHING FIELD X-SECTION

NOT TO SCALE



ENVIRO-SEPTIC SYSTEM DETAIL

NOT TO SCALE

NOTES:

1.) ENVIRO-SEPTIC SUPPLIED BY PRESBY ENVIRONMENTAL INC INNOVATIVE SEPTIC TECHNOLOGIES.(143 AIRPORT ROAD, WHITEFIELD, NH 03598, 1-800-473-5298)

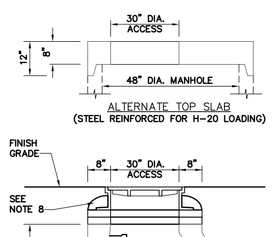
2.) OPERATION AND MAINTENANCE PLAN TO BE OBTAINED BY HOMEOWNER WITH A CERTIFIED INSPECTOR FOR A MINIMUM OF 2YEARS AND MAINTAINED IN ACCORDANCE WITH D.E.P. GUIDELINES FOR REMEDIAL USE.

3.) CURRENTLY, THE SYSTEM SHALL BE MONITORED ANNUALLY WITH ALL DATA SUBMITTED TO THE LOCAL BOARD OF HEALTH AND D.E.P., WITHIN 30 DAYS.

4.) ONLY AN APPROVED INSTALLER WHO HAS ATTENDED THE ENVIRO-SEPTIC CERTIFICATION CLASS CAN BE ALLOWED TO INSTALL THE ENVIRO-SEPTIC WASTEWATER TREATMENT SYSTEM.

PRESBY SYSTEM DETAILS

NOT TO SCALE



ALTERNATE TOP SLAB
(STEEL REINFORCED FOR H-20 LOADING)

SEWER MANHOLE DETAIL

NOT TO SCALE

NOTES:

1. BASE SECTION SHALL BE MONOLITHIC WITH A 48" INSIDE DIAMETER.
2. ALL SECTIONS SHALL BE DESIGNED FOR H-20 LOADING.
3. CONCRETE SHALL BE COMPRESSIVE STRENGTH 4000 PSI TYPE I CEMENT.
4. MANHOLE STEPS SHALL BE INSTALLED AT 12" O.C. FOR THE FULL DEPTH OF THE STRUCTURE.
5. ALL EXTERIOR SURFACES SHALL BE GIVEN TWO COATS OF BITUMINOUS WATER-PROOFING MATERIAL.
6. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
7. STANDARD SEWER MANHOLE FRAME AND COVER SHALL MEET MUNICIPAL AND/OR STATE SPECIFICATIONS WHEN APPLICABLE.
8. STANDARD SEWER MANHOLE FRAME AND COVER SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM)

REVISIONS:

No.	DESCRIPTION	DATE

PROJECT TITLE:

THE COTTAGES AT OLD OAKEN BUCKET AT #279-281 OLD OAKEN BUCKET ROAD SCITUATE, MA

CONSTRUCTION DETAILS 1 PLAN

PARCEL 41-1-3-D
PARCEL 41-1-3-0

PREPARED BY:

South Shore Survey Consultants, Inc.

REGISTERED LAND SURVEYORS
& CIVIL ENGINEERS
167 R SUMMER STREET
KINGSTON, MA 02364
781-582-2185
mark@ssscinc.net

PREPARED FOR:

LOVENDALE, LLC
107 EAST. ST.
DUXBURY, MA 02332

COMMONWEALTH OF MASSACHUSETTS
ANTHONY A. ESPOSITO
CIVIL
No. 39782
REGISTERED PROFESSIONAL ENGINEER

2/7/2022

SCALE: 1" = 50'

50 0 50 100

DATE: FEBRUARY 7, 2022
COMP./DESIGN: A. ESPOSITO
CHECK: M. D. CASEY
DRAWN: A. ESPOSITO
FIELD: LJL/PS
APPROVED: M. D. CASEY
DWG.No. 1908 DET1
JOB No. 1908

SHEET 10 OF 13