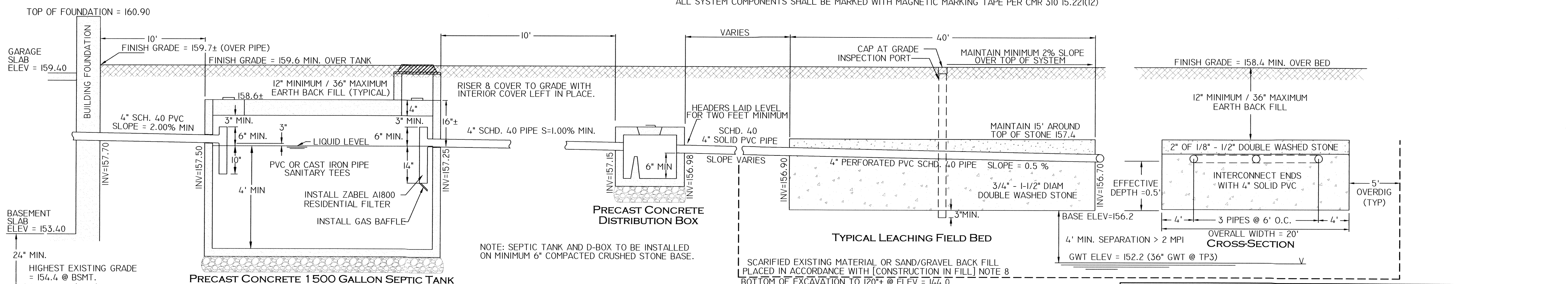


CROSS SECTION THROUGH SEPTIC SYSTEM

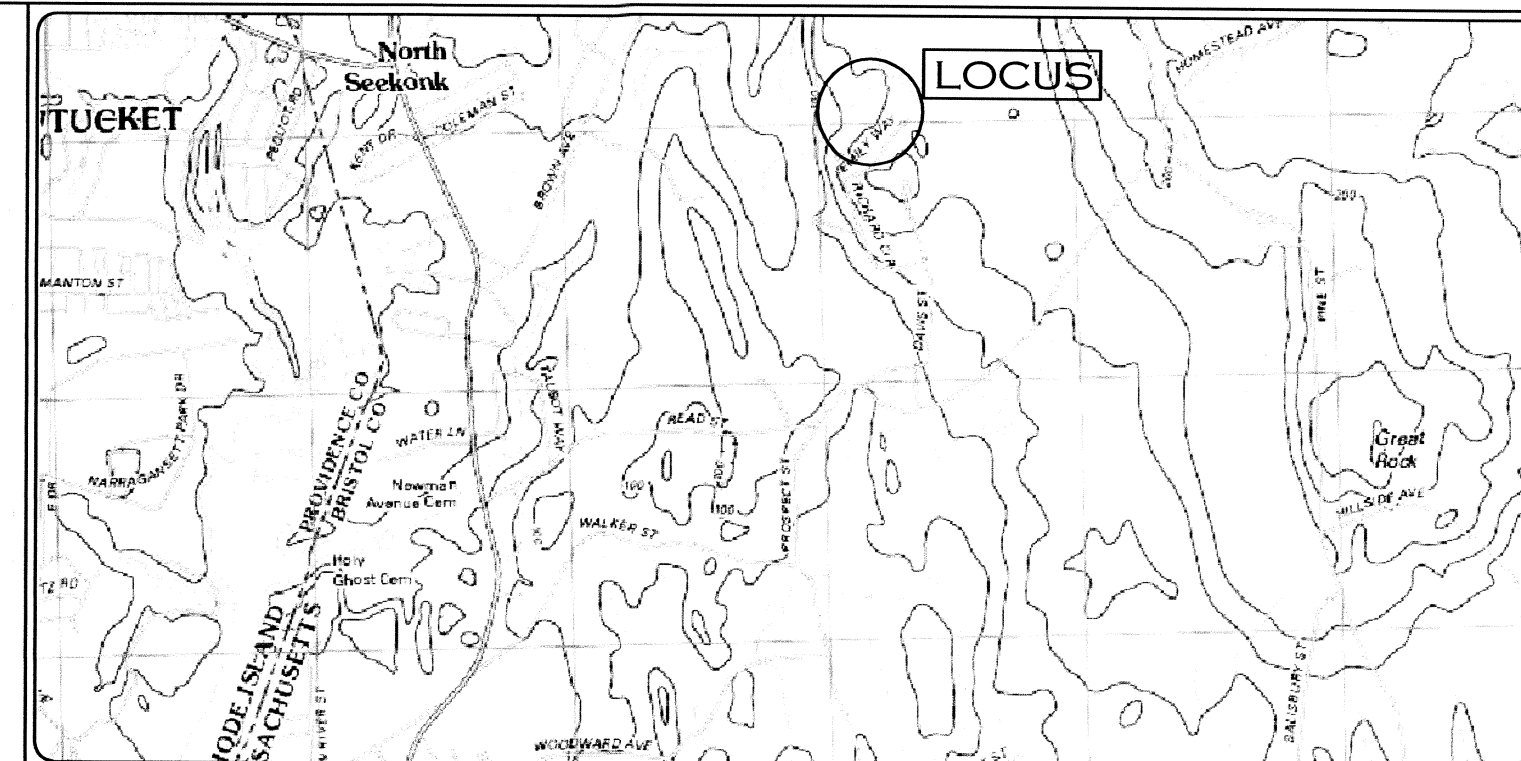
NOT TO SCALE

ALL SYSTEM COMPONENTS SHALL BE MARKED WITH MAGNETIC MARKING TAPE PER CMR 310 15.22(12)



NOTE: SEPTIC TANK AND D-BOX TO BE INSTALLED ON MINIMUM 6" COMPACTED CRUSHED STONE BASE.

SCARIFIED EXISTING MATERIAL OR SAND/GRAVEL BACK FILL PLACED IN ACCORDANCE WITH [CONSTRUCTION IN FILL] NOTE 8 BOTTOM OF EXCAVATION TO 120" ± @ ELEV = 147.0



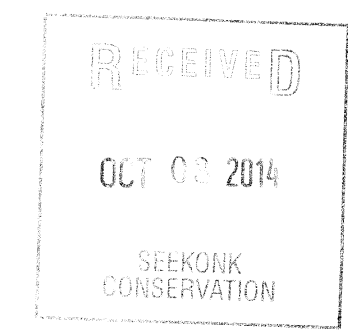
LOCATION MAP (1"=500')

NOTES & SPECIFICATIONS

- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF 310 CMR 15 (TITLE V) OF THE COMMONWEALTH OF MASSACHUSETTS AND THOSE OF THE TOWN BOARD OF HEALTH.
- THE REQUIRED INSPECTION SCHEDULE DURING THE PROCESS OF CONSTRUCTION SHALL BE ARRANGED BY THE CONTRACTOR WITH THE BOARD OF HEALTH & DESIGN ENGINEER PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- THE SEPTIC TANK AND DISTRIBUTION BOX SHALL BE STANDARD DUTY (H-10) OR HEAVY DUTY (H-20) IF LOCATED UNDER A DRIVEWAY.
- ALL PIPING SHALL BE 4" DIA. SCHD. 40 NSF PVC, WITH ALL JOINTS SEALED WATERTIGHT.
- ALL STONE SHALL BE DOUBLE WASHED AND FREE OF IRONS, CLAY OR FINES AND SHALL BE SATISFACTORY TO THE TOWN BOARD OF HEALTH.
- THIS SYSTEM IS NOT DESIGNED TO ACCOMMODATE A GARBAGE DISPOSAL OR OTHER HIGH WATER USE UNITS.
- THE PROPOSED SEPTIC SYSTEM IS NOT LOCATED WITHIN THE CONE OF INFLUENCE OF ANY MUNICIPAL WELL NOR ARE THERE ANY PRIVATE WELLS LOCATED WITHIN 100 FEET (RADIAL) OF THE PROPOSED SYSTEM. CONTRACTOR TO VERIFY PRIOR TO CONSTRUCTION.
- EXCAVATE ALL TOP, SUB AND ANY OTHER SOILS ENCOUNTERED DOWN TO THE BOTTOM OF EXCAVATION (SEE CROSS SECTION) INTO THE C HORIZON FOR A HORIZONTAL DISTANCE OF 5' ON ALL SIDES OF THE PROPOSED SYSTEM. BACK FILL TO TOP OF STONE ELEVATION WITH SELECT ON SITE OR IMPORTED SOIL MATERIAL CONSISTING OF CLEAN GRANULAR SAND, FREE OF ORGANIC MATTER OR OTHER DELETERIOUS SUBSTANCES AND MEETING THE SIEVE SIZE REQUIREMENTS OF 310 CMR 15.255(3) & (5) [CONSTRUCTION IN FILL].
- ELEVATIONS SHOWN ON THIS PLAN ARE BASED ON AN ASSUMED DATUM.
- CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO THE CONTINUATION OF CONSTRUCTION.
- WATER TABLE FLUCTUATES ANNUALLY, NO WARRANTY OF A DRY BASEMENT IS EXPRESSED OR IMPLIED.
- THE PROPOSED WORK DOES NOT LIE IN A CRITICAL FLOOD HAZARD ZONE.
- THE LOT DOES NOT LIE IN AN OVERLAY DISTRICT FOR GROUNDWATER AQUIFER PROTECTION.
- THE CONTRACTOR IS TO VERIFY THE BENCHMARK WITH THE SURVEYOR PRIOR TO CONSTRUCTION.
- MAINTAIN 15" MINIMUM SEPARATION FROM WATER SERVICE TO PROPOSED SEPTIC COMPONENTS.
- HOUSE DIMENSIONS, ELEVATION AND LOCATION ARE APPROXIMATE AND SUBJECT TO CHANGE. CONTRACTOR TO VERIFY PRIOR TO CONSTRUCTION.
- THE LOT LIES IN A R4 ZONING DISTRICT. FRONT YARD SETBACK: 50' SIDE YARD SETBACK: 35' 45'/STORY REAR YARD SETBACK: 80'
- CERTIFY THAT THE PROPOSED WATER SERVICE SHOWN ON THIS PLAN IS IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE SEEKONK WATER DISTRICT. NO TOWN WATER SERVICE PROPOSED.
- WETLAND DELINEATION BY ECOSYSTEM SOLUTIONS, INC. 2014.
- THE SPLIT RAIL FENCE WILL SERVE AS THE LIMIT OF LAWN AND FUTURE YARD ACTIVITIES AND SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION.
- THE 25-FOOT BUFFER ZONE DELINEATES THE LIMITS OF DISTURBANCE AND ALL FUTURE ACTIVITIES.
- THE 50-FOOT WETLAND BUFFER DELINEATES THE LIMITS OF ALL STRUCTURES AS STATED WITHIN THE TOWN OF SEEKONK CONSERVATION COMMISSION REGULATIONS AMENDED MARCH, 2003.
- APPLICANT: CHRISTINA PACIFIC, 26 CHELSEA DRIVE, SEEKONK, MA 02771.

DESIGN CALCULATIONS

AVERAGE DAILY SEWAGE FLOW (GALLONS PER DAY)
 4 BEDROOM DWELLING @ 110 GPD PER BEDROOM = 440 GPD
SEPTIC TANK SIZING (GALLONS)
 200% AVERAGE DAILY FLOW = 2 (440) = 880 GALLONS
 4 BEDROOM HOME REQUIRES 1500 GALLON TANK (MINIMUM).
DESIGN SOIL TYPE AND PERCOLATION RATE
 SOIL CLASS II (SANDY LOAM)
 PERC RATE IN TP2 WAS 15 MPI & TP4 WAS 5 MPI
 DESIGN FOR 15 MPI PER TITLE V
REQUIRED MINIMUM LEACHING AREA
 REQUIRED AREA = 440 GPD / 0.56 GPD / SF = 786 SF MINIMUM
 LEACHING FIELD BED: 20' X 40' = 800 SF
 RESERVE AREA: 20' X 40' = 800 SF



MODIFIED DEP FORMS II & 12 - SOIL SUITABILITY ASSESSMENT & PERCOLATION TEST FOR ON-SITE SEWAGE DISPOSAL MASSACHUSETTS CITY OR TOWN: SEEKONK

INSITE Engineering Services, LLC
 1101 Old State Street, Suite 1
 Seekonk, MA 02771
 Phone: 508-336-4500 Fax: 508-336-4508
 Web Address: insiteengineers.com

CLIENT: CHRISTINA PACIFIC
 ADDRESS: 26 CHELSEA DRIVE
 SEEKONK, MA
 PHONE #:
 DATE: 7-31-2014
 WEATHER: 85°F SUN
 REPAIR: NEW [X]

SITE: INSITE JOB# 14-041
 STREET: 54 EMILY WAY
 TOWN: SEEKONK, MA
 MAP/LOT: 26 / 148
 LAND USE: RESIDENTIAL
 VEGETATION: WOODS
 DEPTH TO BEDROCK: NONE OBSERVED
 SLOPE: 2% ±

PERFORMED BY: MICHAEL S. FARIA R I PE & SE, MA SE708
 WITNESSED BY: HAROLD E. CHENEVERT, JR.
 EXCAVATION CO.: MIKE COSTA
 SURFACE STONES: FEW

DEEP OBSERVATION HOLE LOG

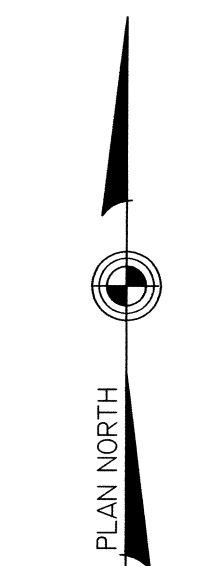
DEEP HOLE #	DEPTH FROM SURFACE IN (ELEV)	SOIL HORIZON	SOIL TEXTURE (USDA)	SOIL COLOR (MUNSELL)	SOIL MOTTLING IN (ELEV)	OTHER (STRUCTURE, STONES, CONSISTENCY, % GRAVEL)
TP1 (155.0)	0-4	A0	SANDY LOAM	10YR/4/3	-	FRIABLE
	4-14	Bw	SANDY LOAM	10YR/4/4	-	FRIABLE, GRAVEL
	14-96	C1	SANDY LOAM	10YR5/2	36*(152.0)2.5YR/4/8	GRAVEL
TP2 (155.1)	0-4	A0	SANDY LOAM	10YR5/3	-	STONE
	4-14	Bw	SANDY LOAM	10YR/4/4	-	FRIABLE, GRAVEL
	14-96	C1	SANDY LOAM	10YR5/2	36*(152.1)2.5YR/4/8	GRAVEL
TP3 (155.2)	0-4	A0	SANDY LOAM	10YR/3	-	FRIABLE
	4-14	Bw	SANDY LOAM	10YR/4/4	-	FRIABLE, GRAVEL
	14-96	C1	SANDY LOAM	10YR5/2	36*(152.2)2.5YR/4/8	GRAVEL
TP4 (155.3)	0-4	A0	SANDY LOAM	10YR/3	-	FRIABLE
	4-14	Bw	SANDY LOAM	10YR/4/4	-	FRIABLE, GRAVEL
	14-96	C1	SANDY LOAM	10YR5/2	36*(152.3)2.5YR/4/8	GRAVEL

PERCOLATION TEST

HOLE #	TP2	TP4
DEPTH OF PERC IN (ELEV)	108(146.1)	120(145.3)
START/PRE-SOAK	11:32	11:08
TIME AT 12"	11:47	11:23
TIME AT 9"	12:20	11:37
TIME AT 6"	1:03	11:52
TIME (12"-9"-6") (MIN)	4.3	15
RATE (MIN/INCH)	15	5

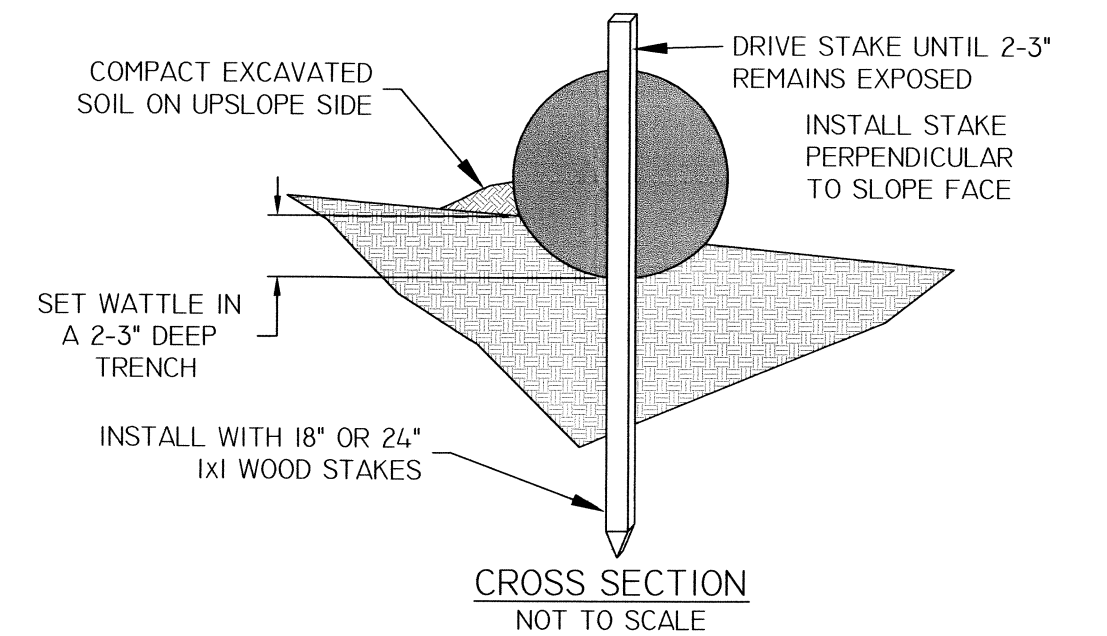
ASSESSMENT OF DEEP HOLE: SUITABLE
 UNUSABLE
 ADDITIONAL TESTING NEEDED: NO
 COMMENTS: Bw & C1 BROKEN BOUNDARY & POCKETS OF SILT. *20" REMOVAL AND REPLACE WITH TITLE 5 SAND REQUIRED.

(DEP CERTIFIED SOIL EVALUATOR) PRINTED MICHAEL S. FARIA R I PE & SE, MA SE708
 I CERTIFY THAT I AM CURRENTLY APPROVED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION PURSUANT TO 310 CMR 15.017 TO CONDUCT SOIL EVALUATIONS AND THAT THE ABOVE ANALYSIS HAS BEEN PERFORMED BY ME CONSISTENT WITH THE REQUIRED TRAINING, EXPERISE AND EXPERIENCE DESCRIBED IN 310 CMR 15.017. I FURTHER CERTIFY THAT THE RESULTS OF MY SOIL EVALUATION, AS INDICATED ON THIS SOIL EVALUATION FORM, ARE ACCURATE AND IN ACCORDANCE TO 310 CMR 15.017.



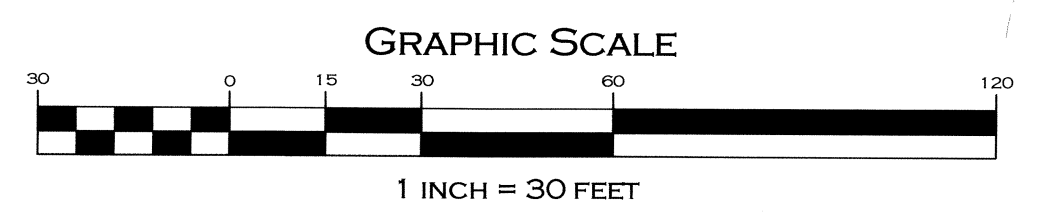
General Notes:

- BEGIN AT THE LOCATION WHERE WATTLE IS TO BE INSTALLED BY EXCAVATING 2-3" DEED X 9" WIDE TRENCH ALONG THE CONTOUR OF THE SLOPE. EXCAVATED SOIL SHOULD BE PLACED UP SLOPE FROM THE ANCHOR TRENCH.
- PLACE THE WATTLE IN THE TRENCH SO THAT IT CONTOURS TO THE SOIL SURFACE. COMPACT SOIL FROM THE EXCAVATED TRENCH AGAINST THE WATTLE ON THE UPHILL SIDE. ADJACENT WATTLES SHOULD TIGHTLY ABUT.
- SECURE THE WATTLE WITH 18-24" STAKES EVERY 3-4' AND WITH A STAKE ON EACH END. STAKES SHOULD BE DRIVEN THROUGH THE MIDDLE OF THE OF THE WATTLE LEAVING AT LEAST 2-3" OF STAKE EXTENDING ABOVE THE WATTLE. STAKES SHOULD BE DRIVEN PERPENDICULAR TO SLOPE FACE.
- CONTRACTOR IS RESPONSIBLE TO MAINTAIN INTEGRITY OF STRAW WATTLE FOR DURATION OF CONSTRUCTION.
- EROSION CONTROLS TO REMAIN UNTIL SOIL CONDITIONS STABILIZE.
- LOOSE HAY TO BE SPREAD ON AREAS OF EXPOSED LOAM & SEED UNTIL GERMINATION AND STABILIZATION OCCURS.



STRAW WATTLE (OR SILT SOCK) DETAIL

NOT TO SCALE



"SEPTIC SYSTEM DESIGN AND NOI PLAN"

"EMILY WAY"
 54 EMILY WAY, SEEKONK, MA 02771
 ASSESSORS MAP 26 LOT 148

OWNER: CHRISTINA PACIFIC
 26 CHELSEA DRIVE, SEEKONK, MA 02771

JOB # 14-041 SCALE: 1" = 30' DESIGN BY: MSF DATE: SEPT. 25, 2014

REVISED:

INSITE Engineering Services, LLC
 PROFESSIONAL ENGINEERS | LAND SURVEYORS
 Precision. Clarity. Certainty.

1539 Fall River Avenue Seekonk, MA 02771
 Phone: (508) 336-4500 Fax: (508) 336-4508
 Web Address: insiteengineers.com

SHEET 1 OF 1