DATE	REVISION	CK.
8-27-21	REVISED MLSS	
8-30-21	REVISED DRIVEWAY LOCATION	

CONSTRUCTION SEQUENCE
(SANITARY SYSTEM)

1. NOTIFY TOWN HEALTH DEPARTMENT AND THE ENGINEER 48 HOURS PRIOR TO THE BEGINNING OF CONSTRUCTION. NO PORTION OF THE SYSTEM WILL BE COVERED WITHOUT INSPECTION AND APPROVAL BY THE ENGINEER OR THE SANITARIAN.
2. PLACE SILT FENCE AS SHOWN ON THE DRAWING AND IN THE DETAIL.
3. REMOVE ALL TREES, STUMPS AND DELETERIOUS MATERIAL FROM SYSTEM AREA.
4. STOCKPILE TOPSOIL FOR REUSE.
   A. DO NOT STOCKPILE TOPSOIL IN SANITARY SYSTEM AREA.
   B. DO NOT REMOVE SUBSOIL.
5. ENGINEER/LAND SURVEYOR SHALL FIELD STAKE THE PROPOSED SYSTEM PRIOR TO INSTALLATION.
6. INSTALL SEPTIC SYSTEM AS SHOWN.
   A. IF SOIL CONDITIONS OTHER THAN THOSE SHOWN IN THE SOIL LOGS ARE ENCOUNTERED DURING THE INSTALLATION OF THE SANITARY SYSTEM, THE DESIGN ENGINEER OR THE SANITARIAN SHALL BE NOTIFIED AND THE WORK WILL BE HALTED PENDING REVIEW OF THOSE CONDITIONS. IF NECESSARY THE SANITARY SYSTEM SHALL BE REVISED.
   B. A MINIMUM OF 4 FEET MUST BE MAINTAINED BETWEEN THE BOTTOM OF THE SYSTEM AND LEDGE. A MINIMUM OF 1.5 FEET MUST BE MAINTAINED BETWEEN THE BOTTOM OF THE SYSTEM AND SEASONAL HIGH GROUNDWATER.
7. DO NOT BACKFILL ANY PORTION OF THE SANITARY SYSTEM UNTIL INSPECTED BY THE SANITARIAN AND UNTIL A "RECORD" SURVEY HAS BEEN COMPLETED.
8. REPLACE TOPSOIL, GRADE, SEED AND MULCH ALL DISTURBED AREAS.
9. MAINTAIN SYNTHETIC FILTER BARRIER UNTIL ALL DISTURBED AREAS ARE STABILIZED.

SANITARY SYSTEM NOTES:

1. NO LARGE CAPACITY TUBS (> 100 GALLON CAPACITY) ARE PLANNED AND WILL NOT BE PERMITTED IN THE PROPOSED RESIDENCE.
2. NOGARBAGE GRINDER (DISPOSAL) IS PROPOSED
3. WATER SUPPLY SHALL BE BY INDIVIDUAL WELL
4. ALL SOLID PIPING AFTER THE SEPTIC TANK TO BE 4" PVC ASTM D 3034, SDR 35.
5. FILTER FABRIC SHALL BE SELECTED FROM THE FOLLOWING TABLE:

APPROVED FILTER FABRICS FOR COVERING STONE AGGREGATE

MANUFACTURER	DESIGNATION NUMBER
AMERICAN ENGINEERING FABRICS	AEF-480
BRADLEY INDUSTRIAL TEXTILE	PHOENIX LIJOMA
CARTHAGE MILLS	M35
CULTEC	410
DUPONT	SF20
ENGINEERED SYNTHETIC PRODUCTS	TNS R020
GEO FABRICS	GF 150
L&M SUPPLY COMPANY	L&M 231
MIRAFI	65304 (4' WIDE), 65303 (3' WIDE)
SKAPS INDUSTRIES	SKAPS GT 120
SRW PRODUCTS	SRW PRODUCTS DF1, SRW PRODUCTS DF2
TERRA TEX	S01.5, P01.5
TYPAR	3151, 3201
US FABRIC INC.	US 1.5 CT

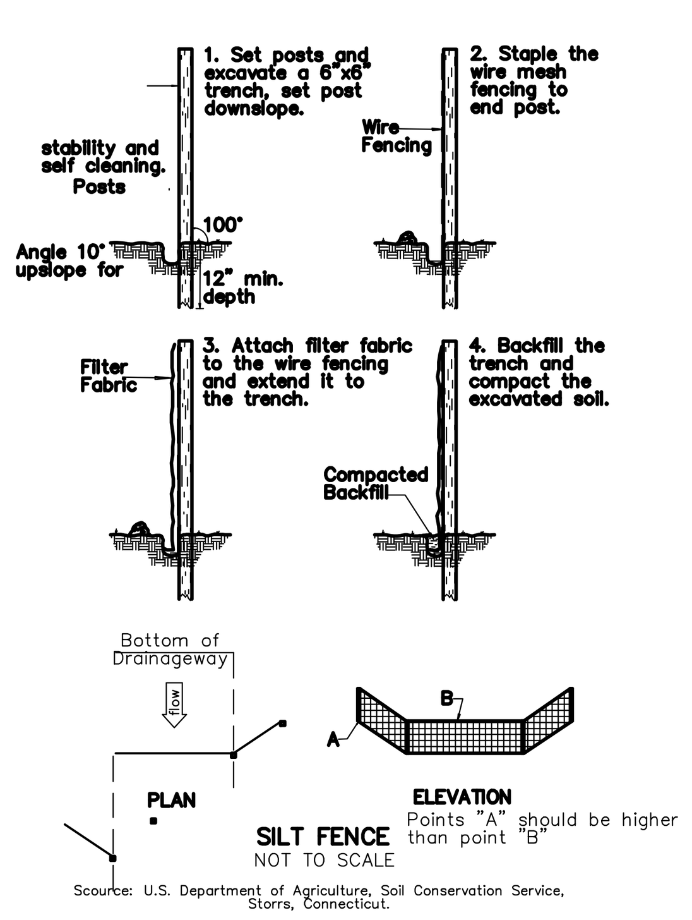
6. NO DEVIATION FROM THIS PLAN WILL BE ALLOWED WITHOUT THE APPROVAL OF THE ENGINEER AND SANITARIAN.
7. SEPTIC TANK CONSTRUCTION JOINTS SHALL BE SEALED WITH ASPHALT CEMENT. ALL PIPE CONNECTIONS TO THE SEPTIC TANK AND DISTRIBUTION BOXES SHALL BE SEALED WITH A POLYETHYLENE GASKET ("POLY-LOK" OR APPROVED EQUAL)
8. SEPTIC TANK AND BAFFLES SHALL CONFORM TO SECTION V.A.1 TECHNICAL STANDARDS OF THE STATE HEALTH CODE.
9. SEPTIC TANK SHALL BE TWO COMPARTMENT TANK WITH HEAVY DUTY STEEL HANDLES FOR MANHOLE ACCESS COVERS AND GAS BAFFLES INSTALLED ON OUTLET PIPING. SEPTIC TANK TO BE EQUIPPED WITH AN APPROVED NON-BY-PASS EFFLUENT FILTER AT THE OUTLET. SEE TABLE BELOW:

APPROVED SEPTIC TANK EFFLUENT FILTERS

MANUFACTURER	MODEL
BEAR ONSITE	ML2-416, ML2-920, ML3-910 ML3-916, ML3-925, ML3-932
BIO-MICROBICS	Sanitee Series, ST 416, ST 418, ST 818 ST 838, ST 1618, ST 1638
BOWCO INDUSTRIES	EF-235
GAG-SIMTECH	STF-110, STF-110-7R STF-110-6W, STF-110-8B
NORWECO	BIO-KINETIC BK2000
ORENCO SYSTEMS	FT0444-36 FT0854-36 FT1254-36 FT1554-36 FTJ0418
POLYLOK	PL-68, PL-122, PL-525, PL-625 GF 10-8, GF 10-16
PREMIER TECH	EFT-080
RISSY PLASTICS	45 - CLIK N'STICK
TUF-TITE	EF-4, EF-6
ZABEL	A100 A300 A1800 A1801 A100-HIP A300-HIP A1800-HIP A1801-HIP A600-12, A600-8
ZOELLER/CLARUS	WW1 (170-0078) WW4 (5000-0007)

10. STONE AGGREGATE MEANS BROKEN STONE, CRUSHED STONE, OR SCREENED GRAVEL MEETING DEPARTMENT OF TRANSPORTATION FORM 816 SPECIFICATION M.01.01 FOR NO. 4 OR NO. 6 STONE (AS SHOWN BELOW OR LATEST SPECIFICATION). STONE AGGREGATE SHALL BE FREE OF SILT, DIRT OR DEBRIS AND SHALL SHOW A LOSS OF ABRASION OF NOT MORE THAN 50 PERCENT USING AASHTO METHOD T-96.

	NO. 4 STONE AGGREGATE (A.K.A. 1 & $\frac{1}{4}$" STONE)	NO. 6 STONE AGGREGATE (A.K.A. 3/4" STONE)
SIEVE SIZE	PERCENT PASSING (by weight)	PERCENT PASSING (by weight)
2 - INCH	100	N/A
1.5 INCH	90-100	N/A
1 INCH	20-55	100
3/4 INCH	0-15	90-100
1/2 INCH	N/A	20-55
3/8 INCH	0-5	0-15
#4	N/A	0-5
#40	0-3	0-3
#200	0-15	0-15



SILT FENCE
NOT TO SCALE

Source: U.S. Department of Agriculture, Soil Conservation Service, Storrs, Connecticut.

Test Hole Data
Performed by Doane Engineering
& Don Mitchell, R.S., Town of Essex
03/04/21

TH 1

0 – 11" Topsoil
11 – 28" Orange brown fine sandy loam
28 – 86" Very fine to medium sand, some gravel

Roots observed to 32"
No ledge observed
Groundwater observed seeps at 62"
Mottling observed at 32"

TH 2

0 – 8" Topsoil
8 – 28" Orange brown silty fine sandy loam (damp)
28 – 72" Grey fine to medium sand some gravel

Roots observed to 38"
No ledge observed
No Groundwater observed
Mottling observed at 32"

TH 3

0 – 11" Topsoil
11 – 36" Orange brown fine sandy loam
36 – 84" Grey brown fine to medium sand

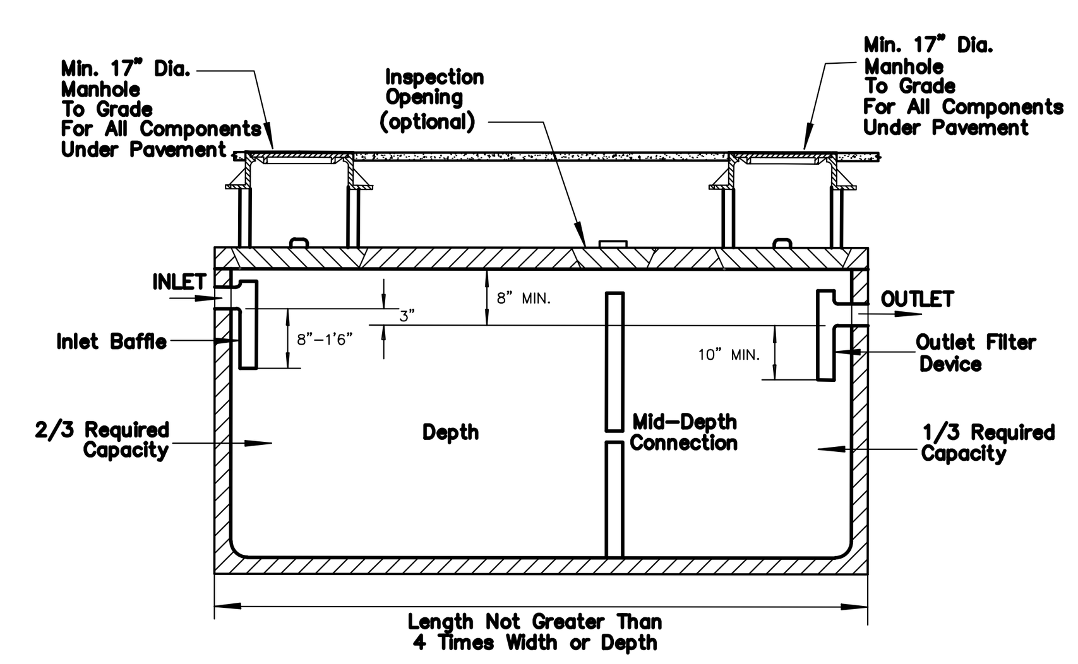
Roots observed to 53"
No ledge observed
Groundwater observed seeps at 53"
No Mottling observed

SANITARY SYSTEM DESIGN
PROPOSED 2 BEDROOM HOUSE
DESIGN PERCOLATION RATE = 10.1–20.0 MIN/IN
REQUIRED EFFECTIVE LEACHING AREA = 500 SF
PROVIDE 1–33.33 FT ROW OF SB1–7–72
EFFECTIVE LEACHING AREA PROVIDED
33.33 LF X 15.9 SF/LF = 530 SF
PROVIDE 100 PERCENT RESERVE AREA
PROVIDE 1,000 GALLON SEPTIC TANK

MINIMUM LEACHING SYSTEM SPREAD
(MLSS)

DEPTH TO RESTRICTIVE LAYER = 32"
SLOPE = 7.3% PERCENT
HF = 26
FF = 1.0 (2 BEDROOM HOUSE)
PF = 1.25 (10.1–20.0 MIN/IN)

MLSS REQUIRED = 26 x 1.0 x 1.25 = 32.5 LF
MLSS PROVIDED = 33.33 LF



TYPICAL SEPTIC TANK

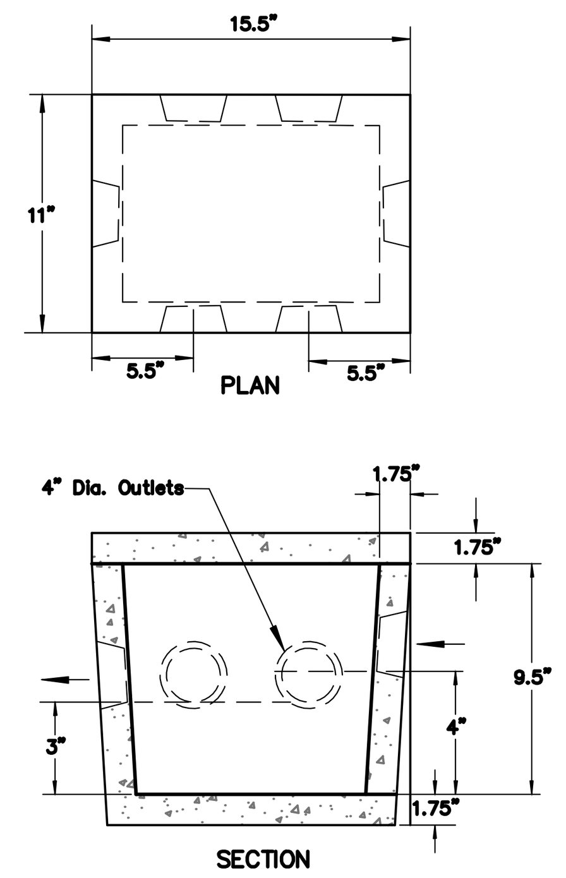
PERCOLATION TEST
PERFORMED BY DON MITCHELL, RS
TOWN OF ESSEX
3/9/2021

PT 1

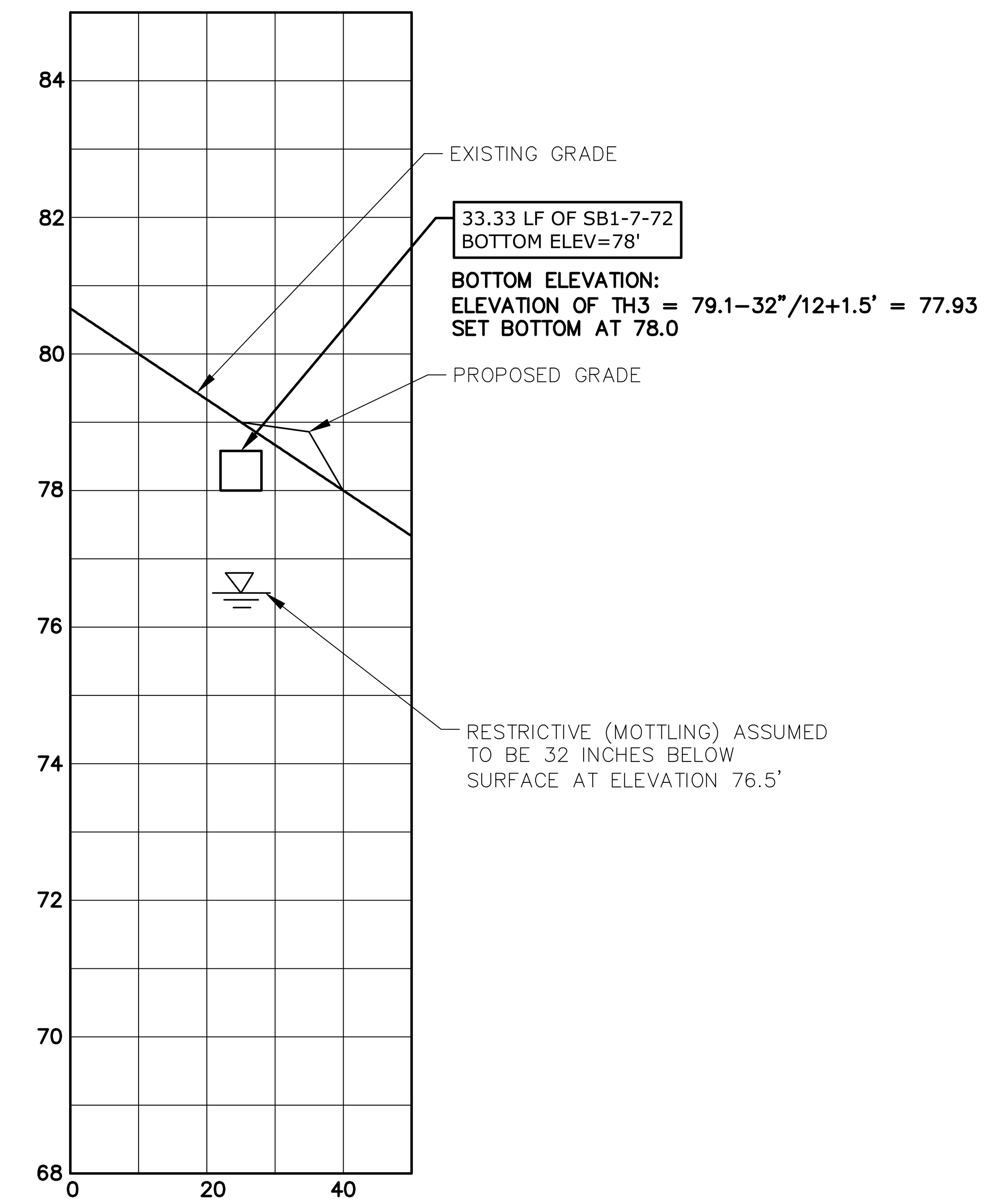
D = 17" PRESOAK @ 1:39 PM

TIME (IN)	DEPTH (IN)	CHANGE DEPTH (IN)	RATE (MIN/IN)
2:23	3		
2:24	5 1/8	2 1/8	5.2
2:35	7 3/4	2 5/8	4.2
2:44	9 1/2	1 3/4	5.1
2:53	10 1/2	1	9
3:02	11 5/8	1 1/8	10.3
3:13	12 5/8	1	11
3:20	13	3/8	18.7

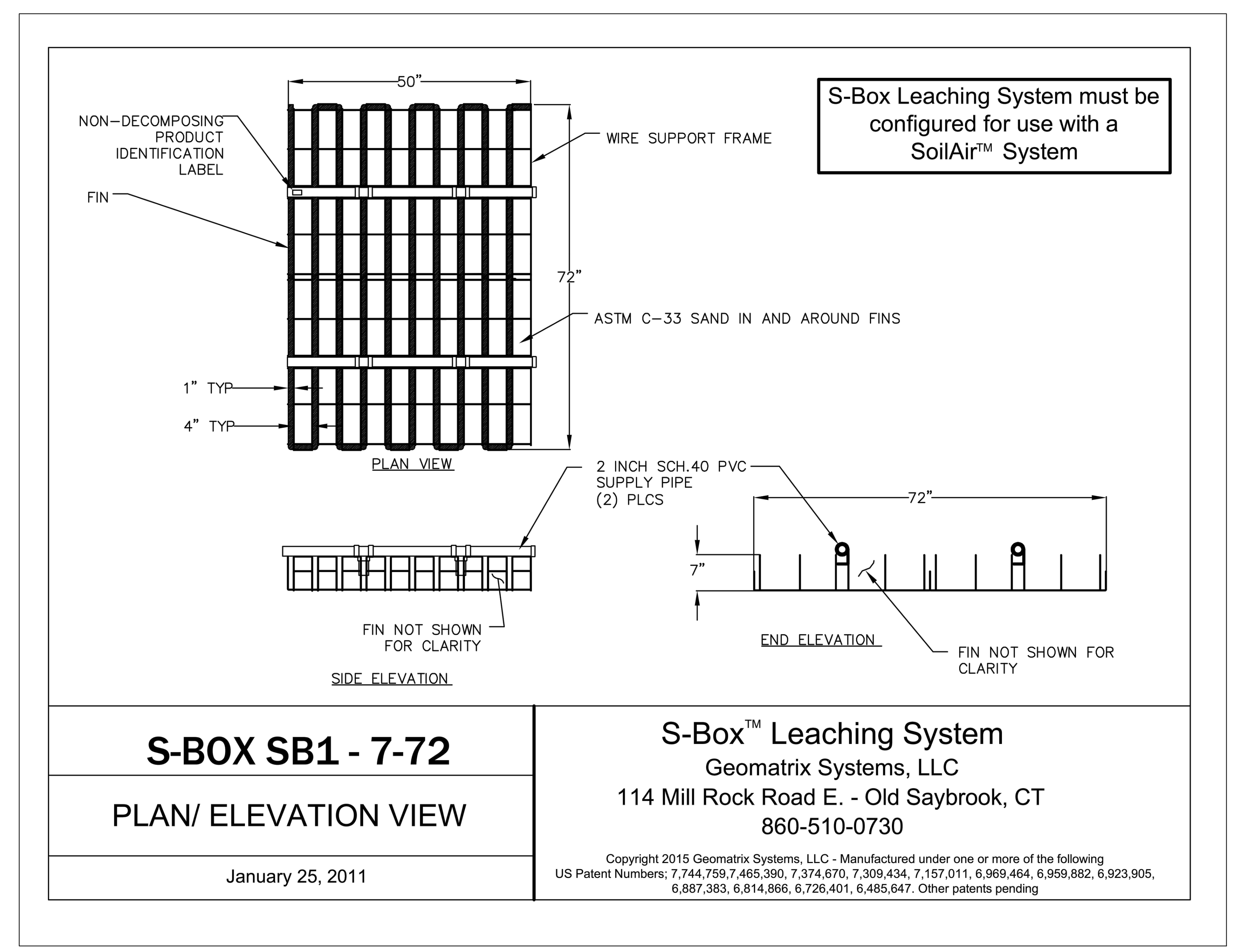
PERCOLATION RATE = 10.1–20.0 MIN/INCH



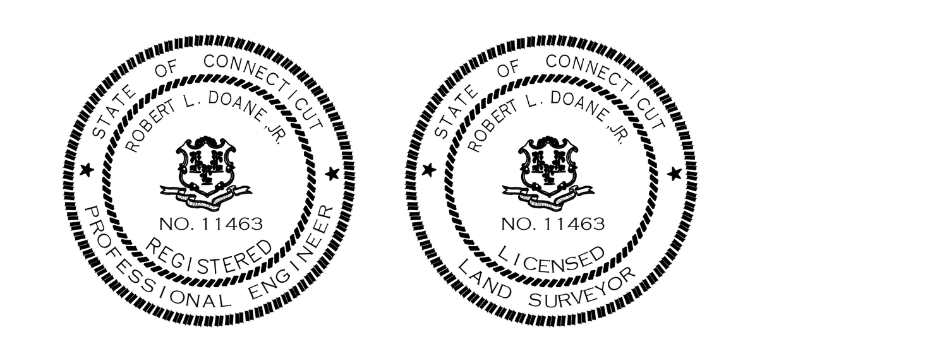
DISTRIBUTION BOX
N.T.S.



SECTION A–A
SANITARY SYSTEM X–SECTION
HORZ. SCALE: 1" = 20'
VERT. SCALE: 1" = 2'



TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.



ROBERT L. DOANE, JR.
CONN. P.E. & L.S. LIC. NO. 11463

"DETAILS"

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CIVIL ENGINEERING AND LAND SURVEYING
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TEL: (860)767-0138, FAX: (860)767-9104

SITE PLAN
PREPARED FOR
COLLEEN HUTCHINSON
18 EDGEWOOD AVENUE, IVORYTON, CONNECTICUT

SCALE:	DATE:	SHEET NO.:	IDENT. NO.:
AS NOTED	08/26/21	2 OF 2	

FILE:P:HUTCHINSON-SITE PLAN 2021-08-30.DWG