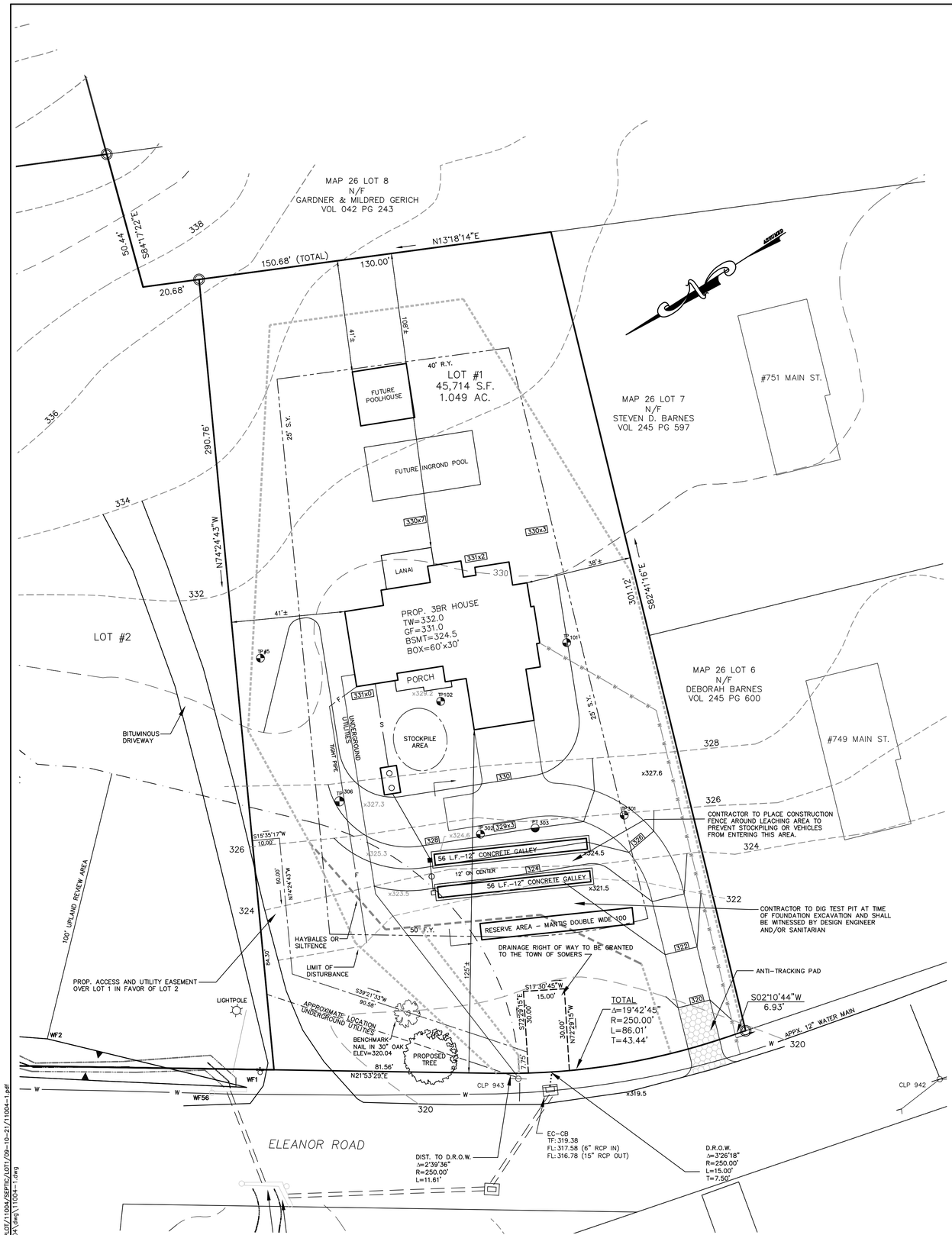

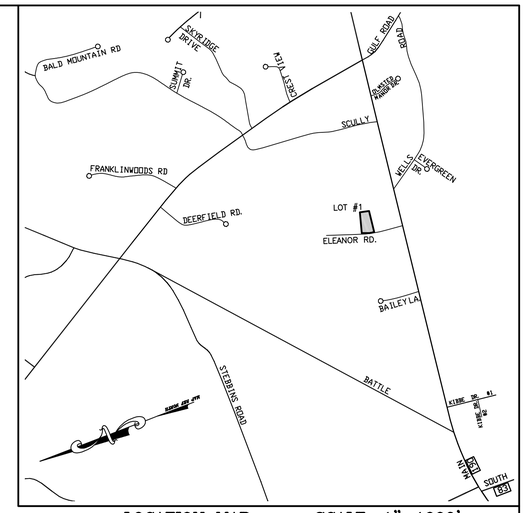

LOCATION MAP SCALE: 1"=1000'

SEPTIC NOTE:
THE SEPTIC AREA SHALL NOT BE STRIPPED OR DISTURBED UNTIL ALL TRENCHES HAVE BEEN FIELD STAKED. ANY FILLING, PARKING OR OTHER DISTURBANCE IN THE SEPTIC AREA MAY CAUSE THE LEACHING AREA TO BE UNUSABLE.

NOTES:

1. THIS MAP AND SURVEY HAVE BEEN PREPARED IN ACCORDANCE WITH THE REGULATIONS OF CONNECTICUT STATE AGENCIES, SECTIONS 20-300b-1 THROUGH 20-300b-20. THIS IS AN IMPROVEMENT LOCATION SURVEY AND A DEPENDANT RESURVEY BASED ON THE SURVEY REFERENCED IN NOTE (3A) CONFORMING TO HORIZONTAL ACCURACY CLASS A-2 AND VERTICAL ACCURACY CLASS T-D.
2. BEARINGS DEPICTED ON THIS PLAN ARE BASED UPON THOSE SHOWN ON MAP REFERENCE 3A.
3. REFERENCE IS MADE TO THE FOLLOWING MAPS:
   A. "ELEANOR ROAD, LLC SUBDIVISION 23 ELEANOR ROAD SOMERS, CONNECTICUT BY: DESIGN PROFESSIONALS, INC. DATE: APRIL 24, 2006, REVISED TO JUNE 19, 2006"
4. UNDERGROUND UTILITY, STRUCTURE AND FACILITY LOCATIONS DEPICTED HEREON HAVE BEEN COMPILED, IN PART, FROM RECORD MAPPING AND OTHER DATA SUPPLIED BY THE RESPECTIVE UTILITY COMPANIES, GOVERNMENTAL AGENCIES AND / OR OTHER SOURCES. THESE LOCATIONS MUST BE CONSIDERED APPROXIMATE IN NATURE. ADDITIONALLY, OTHER SUCH FEATURES MAY EXIST ON THE SITE. THE EXISTENCE OF WHICH ARE UNKNOWN TO GARDNER & PETERSON ASSOCIATES. THE EXISTENCE, SIZE AND LOCATION OF ALL SUCH FEATURES MUST BE DETERMINED AND VERIFIED IN THE FIELD BY THE APPROPRIATE AUTHORITIES PRIOR TO CONSTRUCTION. CALL BEFORE YOU DIG 1-800-922-4455.

I HEREBY DECLARE THAT, TO THE BEST OF MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

ERIC R. PETERSON — P.L.S. 23430 REGISTRATION NO.

STATE OF CONNECTICUT · ERIC R. PETERSON · No. 23430 · LICENSED LAND SURVEYOR

LEGEND

x728.5	EXISTING ELEVATION
723x0	PROPOSED ELEVATION
730	EXISTING CONTOUR
730	PROPOSED CONTOUR
	EDGE PAVEMENT
	PROPERTY LINE
S	BUILDING SEWER PIPE
	SOLID PIPE
	CONCRETE GALLEY
	OVERFLOW PIPE
F	FOOTING DRAIN
W W W	WATER SERVICE
	STORM DRAINAGE PIPE
	CATCH BASIN
PT	PERCOLATION TEST
	TEST HOLE
	SEPTIC TANK
	DISTRIBUTION BOX
	OVERFLOW BOX
	LIMIT OF DISTURBANCE
	HAYBALES/SILT FENCE
	LIMITS OF INLAND WETLANDS
	100' UPLAND REVIEW AREA

20 10 0 20 40 60
GRAPHIC SCALE 1"= 20'

STATE OF CONNECTICUT · MARK A. PETERSON · No. 20905 · LICENSED PROFESSIONAL ENGINEER

REVISIONS

IMPROVEMENT LOCATION SURVEY
SUBSURFACE DISPOSAL DESIGN
ELEANOR ROAD SUBDIVISION
LOT #1
PREPARED FOR STEVE RILEY
10 ELEANOR ROAD
SOMERS, CONNECTICUT

GARDNER & PETERSON ASSOCIATES, LLC
178 HARTFORD TURNPIKE
TOLLAND, CONNECTICUT
(860) 871-0808
PROFESSIONAL ENGINEERS LAND SURVEYORS

BY	SCALE	DATE	SHEET NO.	MAP NO.
M.A.P.	1"=20'	09-10-2021	1 of 2	11004-1

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11004\dwg\11004-1.dwg

PERCOLATION TEST RESULTS
BY: DESIGN PROFESSIONALS, INC.
PER SUBDIVISION PLAN

PERCOLATION TEST 303:
DEPTH OF HOLE-24"
PRESOAK 10:55AM

TIME	DEPTH
12:25	10 3/4"
12:27	11 1/4"
12:29	11 3/4"
12:31	12 1/4"
12:35	12 3/4"
12:40	13 1/2"
12:50	14 3/4"
1:00	15 1/2"
1:15	16 3/4"
1:30	18"
1:50	19"
2:10	20 1/4"
2:30	21 1/2"
2:32	22" (DRY)

DESIGN RATE = 10.1-20 MIN/IN

DEEP TEST PIT RESULTS
DATE TESTED: 02-08-06
BY: DESIGN PROFESSIONALS, INC. & STEVEN JACOBS
PER SUBDIVISION PLAN

TH301:
0-9" TOPSOIL
9-18" VERY FRIABLE LOAMY GRAVEL
49-86" LOOSE COARSE SAND AND GRAVEL W/COBBLES
LEDGE: N/A
WATER: N/A
MOTTLING: N/A
ROOTS TO 24"

TH 302:
0-8" TOPSOIL
8-22" VERY FRIABLE LOAMY GRAVEL
22-84" LOOSE COARSE SAND & GRAVEL W/COBBLES
LEDGE: N/A
WATER: N/A
MOTTLING: N/A
ROOTS TO 23"

DATE TESTED: 02-22-05
BY: STEVE JACOBS & COOKER CONSTRUCTION

TH 101
0-12" TOPSOIL
12-16" LOOSE LOAMY COARSE SAND
16-72" LOOSE COARSE SAND & GRAVEL W/COBBLES
LEDGE: N/A
WATER: N/A
MOTTLING: N/A
ROOTS TO 30"

TH 102
0-13" TOPSOIL
13-29" FRIABLE SANDY LOAM
29-45" LOOSE COARSE SAND
LEDGE @ 45"
WATER: N/A
MOTTLING: N/A
ROOTS TO 28"

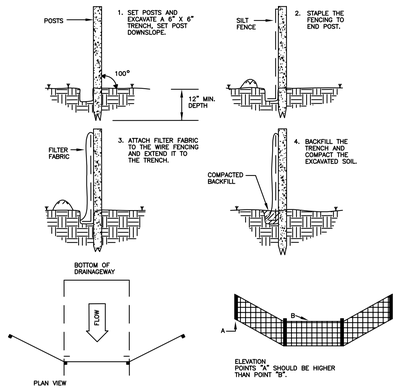
DATE TESTED: 03-17-06
BY: DESIGN PROFESSIONALS & STEVEN JACOBS

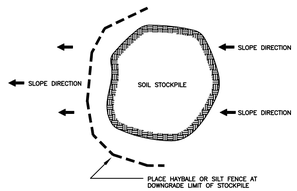
TH 306
0-10" TOPSOIL
10-16" LOOSE GRAVELLY LOAM
16-74" LOOSE COARSE SAND AND GRAVEL
DEPTH TO LEDGE: 53-74"
DEPTH TO WATER: N/A
DEPTH TO MOTTLING:N/A
ROOTS TO: 20"

DATE TESTED: 04-16-02
BY: STEVEN JACOBS & HOWARD FROMSON

TH 5
14-18" LEDGE

PLACEMENT AND CONSTRUCTION OF A SYNTHETIC FILTER BARRIER





STOCKPILE EROSION PROTECTION DETAIL
N.T.S.

ADDITIONAL STOCKPILE AREAS, WITH EROSION CONTROLS, MAY BE ADDED OUTSIDE THE SEPTIC AREA AS NECESSARY.

NOTES - SEPTIC SYSTEM DESIGN

1. Soil testing by the Town of Somers and Design Professionals, Inc.

2. Design based on a 3 bedroom house and a percolation rate of 10.1-20 min/in. (675s.f. required). Topography in primary septic area has been field verified.

3. Provide a 1250 gallon (add 250 gallons for garbage grinder) 2-compartment septic tank and 2 rows of concrete galleys each 56 feet long, 12 inches deep by 48 inches wide, with one foot of stone on each end, totaling 116 lin. feet or 684 sq. feet of leaching area. Provide a footing drain as shown. Drain is to outlet to the ground surface as shown. Drained to be screened for rodents.

4. House sewer to be 4" I.D. centrifugally cast iron pipe hubless ASTM A 74 with 3" wide heavy duty stainless steel coupling and rubber gasket, or Extra Strength PVC pressure water pipe AWWA C-900 75-100 psi with rubber compression gaskets, or an approved equal. Minimum slope to be 1/4" per foot.

5. Serial distribution - inverts of overflow pipes in upper trenches to be set 3" above inverts of distribution pipes in those trenches. Overflow boxes are D-boxes using high hole for overflow.

6. Bottoms of trenches to be set not more than 24" below the grade existing prior to stripping and excavation. Bottom of each trench to be constructed level and distribution pipe in each trench to be set level.

7. Topsoil to be stripped off prior to filling. The fill material (natural or manufactured) between and beyond trenches to be pervious, good quality and clean medium sand (select fill) placed and compacted in 6" lifts. Select fill shall meet the following minimum requirements:
   A. The fill should not contain any material larger than 3 inches.
   B. Up to 45% of the dry weight of the representative sample may be retained on the #4 sieve (This is the gravel portion of the sample).
   C. The material that passes the #4 sieve is then reweighed and the sieve analysis started.
   D. The remaining sample shall meet the following gradation criteria:

Wet Sieve	Percent Passing	Dry Sieve	Percent Passing
No. 4	100	No. 4	100
No. 10	70-100	No. 10	70-100
No. 40	10-50	No. 40	10-50
No. 100	0-20	No. 100	0-5
No. 200	0-5	No. 200	0-2.5

Percent passing the #40 sieve can be increased to no greater than 75% if the percent passing the #100 sieve does not exceed 10% and the #200 sieve does not exceed 5%.

The responsibility for the preparation of a leaching area utilizing "select material" is that of the licensed installer. The installer shall take the necessary steps to protect the underlying naturally occurring soils from overcompaction and siltation once exposed.

Fill material to be placed prior to trench excavation. No traffic other than track-driven equipment is to cross, dump, unload or otherwise compact the fill area after topsoil removal until 18" of fill material has been placed. Initial 18" of fill material to be dumped at the edge of the stripped area and spread and compacted with track-driven vehicles. Stockpiling is to take place upgradient of the leaching area. The area down gradient of the leaching area is not to be disturbed. The contractor shall contact the Town of Somers for a percolation test when fill is in place.

8. Disturbed areas to be loamed and seeded. Final grade to shed surface water.

9. Elevations shown are based on the referenced subdivision plan. A benchmark has been set in a 30" Oak (Elevation=320.04).

10. No in-ground fuel tank, bury hole, or other source of pollution is to be within 75' of a well.

11. It is recommended that the Town of Somers Sanitarian be contacted before any site work is performed.

12. It is the responsibility of the contractor to contact the property owners, appropriate utility companies, or "Call Before You Dig" to verify the location of underground utilities prior to construction. Any utility locations shown on this plan are approximate only, and must be verified by the contractor prior to construction.

13. It is the responsibility of the owner or his contractor the obtain all local, state, or federal, or other permits which are required to implement the activities shown on this plan, and to perform the activities in accordance with the regulations recommendations of the appropriate agencies.

14. As required by the Town of Somers, the design engineer shall supervise the staking of the septic system and assure conformance to the plan and all requirements working days following the local health department's final inspection and approval.

15. The leaching system shall be properly covered by the licensed system installer within two (2) working days following the local health department's final inspection and approval.

MINIMUM LEACHING SYSTEM SPREAD (MLSS)

HYDRAULIC FACTOR (HF) X FLOW FACTOR (FF) X PERCOLATION FACTOR (PF)

MLSS = HF X FF X PF NEED NOT BE CONSIDERED

HYDRAULIC FACTOR (HF)

AVERAGE DEPTH TO RESTRICTIVE LAYER	HYDRAULIC GRADIENT (% OF SLOPE)								
	<1	1.1-2	2.1-3	3.1-4	4.1-6	6.1-8	8.1-10	10.1-15	>15
<17.9	SEE	NOTE	#1						
18-22	72	62	54	48	42	34	30	28	26
22.1-26	66	56	48	42	34	30	28	26	24
26.1-30	56	49	42	34	30	28	26	24	20
30.1-36	48	42	34	30	28	26	24	20	18
36.1-42	42	36	30	28	26	24	20	18	16
42.1-48	36	32	28	26	24	20	18	16	14
48.1-60	30	28	24	22	20	18	16	14	10
>60	MLSS NEED NOT BE CONSIDERED								

#1-CANNOT BE APPROVED UNLESS HYDRAULIC ANALYSIS DEMONSTRATES SUITABILITY

FLOW FACTOR (FF) = DESIGN FLOW / 300 SO:

3 BEDROOMS = 450/300 = 1.5

4 BEDROOMS = 525/300 = 1.75

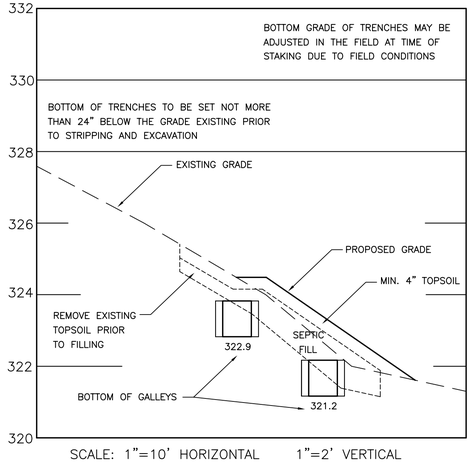
5 BEDROOMS = 600/300 = 2.0

PERCOLATION FACTOR (PF) LESS THAN 10 MIN/IN = 1.0

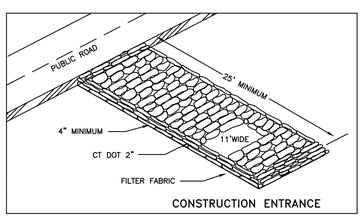
10.1 - 20 = 1.25

20.1 - 30 = 1.5

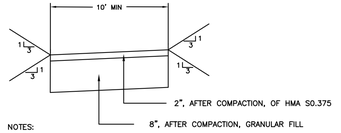
SECTION DISTRIBUTION SYSTEM



SCALE: 1"=10' HORIZONTAL 1"=2' VERTICAL



CONSTRUCTION ENTRANCE



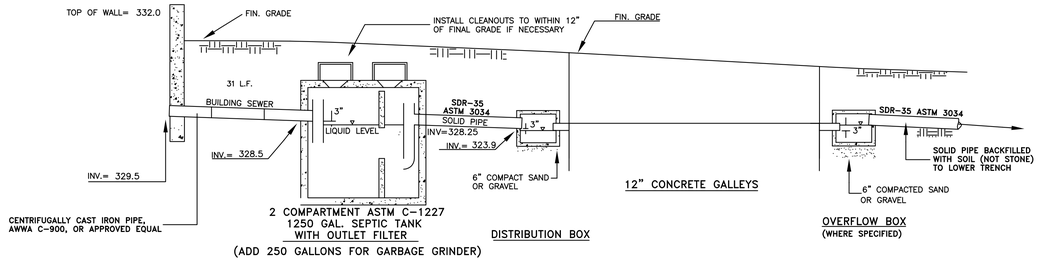
NOTES:

1. THE MAXIMUM SLOPE FOR THE FIRST 10' OF THE DRIVEWAY MEASURED FROM THE EDGE OF THE RIGHT-OF-WAY ONTO THE PROPERTY SHALL NOT EXCEED 5%. A GRAVEL DRIVEWAY SHALL HAVE A MAXIMUM SLOPE OF 10% AND A PAVED DRIVEWAY SHALL HAVE A MAXIMUM SLOPE OF 15%.

2. A 1½" LIP IS REQUIRED WHERE THE DRIVEWAY MEETS THE TOWN ROAD.

3. SEE THE TOLLAND DRIVEWAY SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

DRIVEWAY STANDARDS



(ADD 250 GALLONS FOR GARBAGE GRINDER)

SUBSURFACE DISPOSAL DISTRIBUTION

NOT TO SCALE

TEMPORARY SEEDING SCHEDULE:

SPECIES	LBS/ACRE	LBS/1000SF	SEEDING DATES
ANNUAL RYEGRASS	40	1.0	3/1-6/15, 8/1-10/15
WINTER RYE	120	3.0	4/15-7/1, 8/15-10/15
SUDANGRASS	30	0.7	5/15-8/1

TEMPORARY SEEDING IS NOT LIMITED TO THE SPECIES SHOWN. OTHER SPECIES RECOMMENDED BY THE SCS OR AS LIMITED BY SITE CONDITIONS MAY BE USED.

STRAW MULCH IS TO BE APPLIED TO SEEDED AREA AT THE RATE OF 1-1/2 TO 2 TONS PER ACRE, 70 TO 90 LBS. PER 1000 SQ. FT.

FINAL SEEDING SCHEDULE:

PROVIDE 4 INCHES OF TOPSOIL MINIMUM, FREE OF ROOTS, LARGE STONES, AND OTHER OBJECTS.

SPECIES	LBS/ACRE	LBS/1000SF	SEEDING DATES
KENTUCKY BLUEGRASS	20	0.45	4/1-6/15, 8/15-10/1
CREEPING RED FESCUE	20	0.45	4/1-6/15, 8/15-10/1
PERENNIAL RYEGRASS	5	0.10	4/1-6/15, 8/15-10/1
TOTAL	45	1.00	

IMPROVEMENT LOCATION SURVEY
SUBSURFACE DISPOSAL DESIGN

ELEANOR ROAD SUBDIVISION LOT #1

PREPARED FOR STEVE RILEY
10 ELEANOR ROAD
SOMERS, CONNECTICUT

REVISIONS

GARDNER & PETERSON ASSOCIATES, LLC
178 HARTFORD TURNPIKE
TOLLAND, CONNECTICUT
(860) 871-0808
PROFESSIONAL ENGINEERS LAND SURVEYORS

BY	SCALE	DATE	SHEET NO.	MAP NO.
M.A.P.	AS SHOWN	09-10-2021	2 of 2	11004-1

11004\dwg\11004-1.dwg