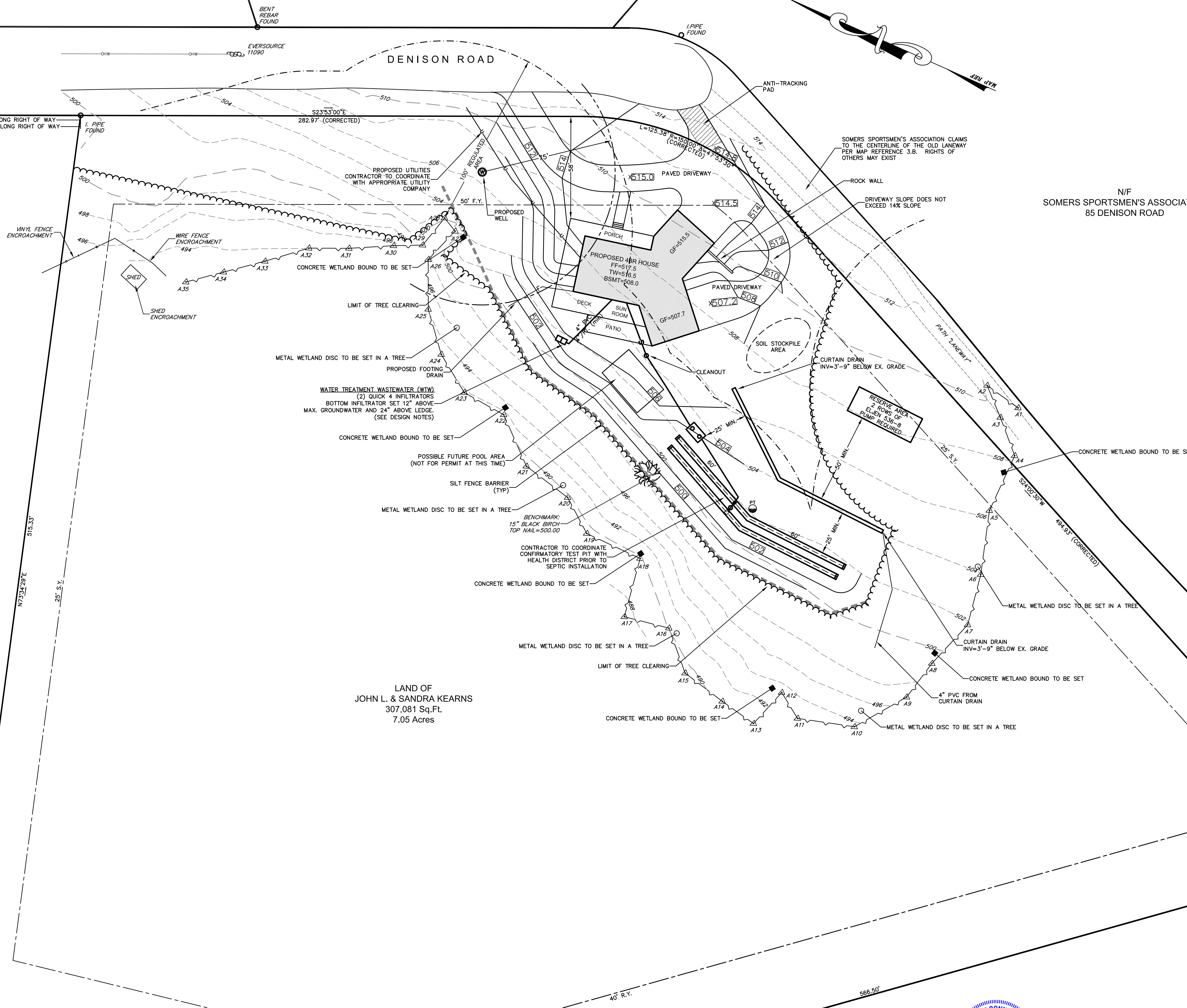


N/F  
ENFIELD PROPERTIES, LLC  
63 DENISON ROAD

N/F  
SALVATORE J. ALBANO  
79 DENISON ROAD

- NOTES:
- THIS SURVEY AND MAP HAVE BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES, SECTIONS 20-300b-1 THROUGH 20-300b-20 "MINIMUM STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT". THIS IS AN IMPROVEMENT LOCATION SURVEY AND A DEPENDANT RESURVEY WITH CORRECTIONS CONFORMING TO HORIZONTAL ACCURACY CLASS A-2 AND TOPOGRAPHIC ACCURACY CLASS T-2.
  - BEARINGS DEPICTED ON THIS PLAN ARE BASED THE PLAN REFERENCED IN NOTE 3A. ELEVATIONS DEPICTED ARE ON AN ASSUMED DATUM.
  - REFERENCE IS MADE TO THE FOLLOWING MAPS:
    - "PLAN OF LOTS SECTION 1 FOR MARY CARPENTER BRENNAN SOMERS, CONNECTICUT" BY FRANK A. MEUNIER & ASSOCIATES, INC. DATE: JANUARY 7, 1975, REVISED: JANUARY 22, 1975.
    - "LAND EXCHANGE PLAN PREPARED FOR STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION AND SOMERS SPORTSMEN'S ASSOCIATION, INC. 79 DENISON ROAD AND GULF ROAD SOMERS, CONNECTICUT STAFFORD, CONNECTICUT" BY MESSIER & ASSOCIATES, INC. DATE: 02/07, REVISED: 04-24-08.
  - PARCEL IS LOCATED IN THE RESIDENCE A-1 ZONE.
  - 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, 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.



N/F  
SOMERS SPORTSMEN'S ASSOCIATION  
85 DENISON ROAD

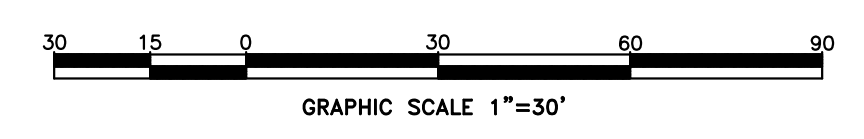
N/F  
THERESA L. BOTELLIO  
68 DENISON ROAD

LAND OF  
JOHN L. & SANDRA KEARNS  
307,081 Sq.Ft.  
7.05 Acres

N/F  
CHRISTIAN BUJDUD, MARUEEN BUJDUD,  
& DENNIS BUJDUD  
241 GULF ROAD

LEGEND

- PROPERTY BOUNDARY
- IRON PIN/PIPE FOUND
- ZONING SETBACK
- EXISTING ELEVATION CONTOUR
- EX. ELEVATION
- UTILITY POLE/OVERHEAD WIRE
- PROPOSED CONTOUR
- PROPOSED ELEVATION
- PROPOSED FOUNDATION DRAIN
- PROPOSED SILT FENCE BARRIER
- BUILDING SEWER
- SOLID PIPE
- OVERFLOW PIPE
- LEACHING CHAMBERS
- SEPTIC TANK
- DISTRIBUTION BOX
- OVERFLOW BOX
- PERCOLATION TEST
- LIMIT OF INLAND WETLANDS
- LIMIT OF CLEARING

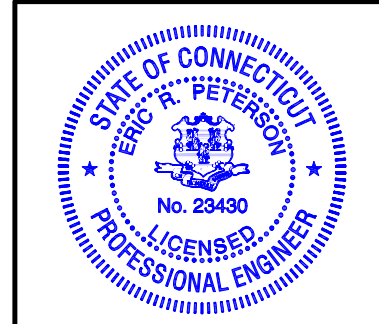
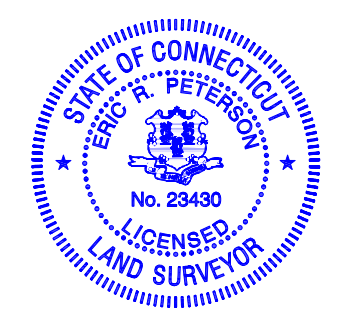


THE WETLAND SOILS ON THIS PROPERTY WERE IDENTIFIED IN THE FIELD USING THE CRITERIA REQUIRED BY CONNECTICUT P.A. 72-155 AS AMENDED BY P.A. 73-571 AND ARE ACCURATELY REPRESENTED ON THIS PLAN.

*George T. Logan*  
GEORGE T. LOGAN, PWS  
Registered Soil Scientist

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

*Eric R. Peterson*  
ERIC R. PETERSON  
L.S. 23430  
REGISTRATION NO.



IMPROVEMENT LOCATION SURVEY  
PERMIT PLAN AND  
SUBSURFACE DISPOSAL SYSTEM DESIGN  
PREPARED FOR PATSUN CONSTRUCTION  
80 DENISON ROAD  
SOMERS, CONNECTICUT

GARDNER & PETERSON ASSOCIATES, LLC				
178 HARTFORD TURNPIKE TOLLAND, CONNECTICUT				
REVISIONS		DATE		
02/19/2021		01-15-2021		
BY	SCALE	DATE	SHEET NO.	MAP NO.
E.R.P.	1"=30'	01-15-2021	1 OF 2	10937A

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MINIMUM LEACHING SYSTEM SPREAD (MLSS)

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

MLSS = HF X FF X PF 30 X 1.75 X 1.5 = 79

HYDRAULIC FACTOR (HF)

TO VERTICAL DEPTH 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	
48.1-54	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

2 BEDROOMS = 300 / 300 = 1.0

3 BEDROOMS = 450 / 300 = 1.5

4 BEDROOMS = 525 / 300 = 1.75

COMMERCIAL = DESIGN FLOW / 300

PERCOLATION FACTOR:

Up to 10.0 Minutes/Inch	= 1.0
10.1 - 20 Minutes/Inch	= 1.25
20.1 - 30 Minutes/Inch	= 1.5
30.1 - 45 Minutes/Inch	= 3.0 or 2.0*
45.1 - 60 Minutes/Inch	= 5.0 or 3.0*

NOTES - SEPTIC SYSTEM DESIGN

- Soil testing observed by the Steve Jacobs, R.S. & Gardner & Peterson Associates, LLC.
  - Design based on a 4 bedroom house and a percolation rate in the range of 20.1-30.0 min./inch (875 sf required).
  - Provide a 1250 gallon 2-compartment septic tank and 2 rows of Quick 4 Infiltrators (3.6 sf/ft) each 122 feet long including end caps, 12 inches deep by 36 inches wide for a total of 244 lf. or 878 sq. feet of leaching area. Provide a floating drain as shown. Drain is to outlet to the ground surface as shown. Outlet to be screened against rodents.
  - 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.
  - 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.
  - Bottoms of trenches to be set not more than 3" 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.
  - 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:
    - The fill should not contain any material larger than 3 inches.
    - 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).
    - The material that passes the #4 sieve is then reweighed and the sieve analysis started.
    - The remaining sample shall meet the following gradation criteria:
 

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

 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, 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.
- Disturbed areas to be loamed and seeded. Final grade to shed surface water.
  - Elevations shown are based on an assumed datum. A benchmark will be established at the time of house staking.
  - No in-ground fuel tank, bury hole, or other source of pollution is to be within 75' of a well.
  - It is recommended that the Town of Somers Sanitarian be contacted before any site work is performed contacted before any site work is performed.
  - 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.
  - It is the responsibility of the owner or his contractor to 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.
  - 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 of the septic system and assure conformance to the plan and all requirements of the Public Health Code of Connecticut.

Deep Test Pit Results  
Date Tested: 3/31/1986  
By: S. Jacobs, R.S.

(SEE SKETCH IN HEALTH DEPARTMENT FILES FOR TEST PIT LOCATIONS)

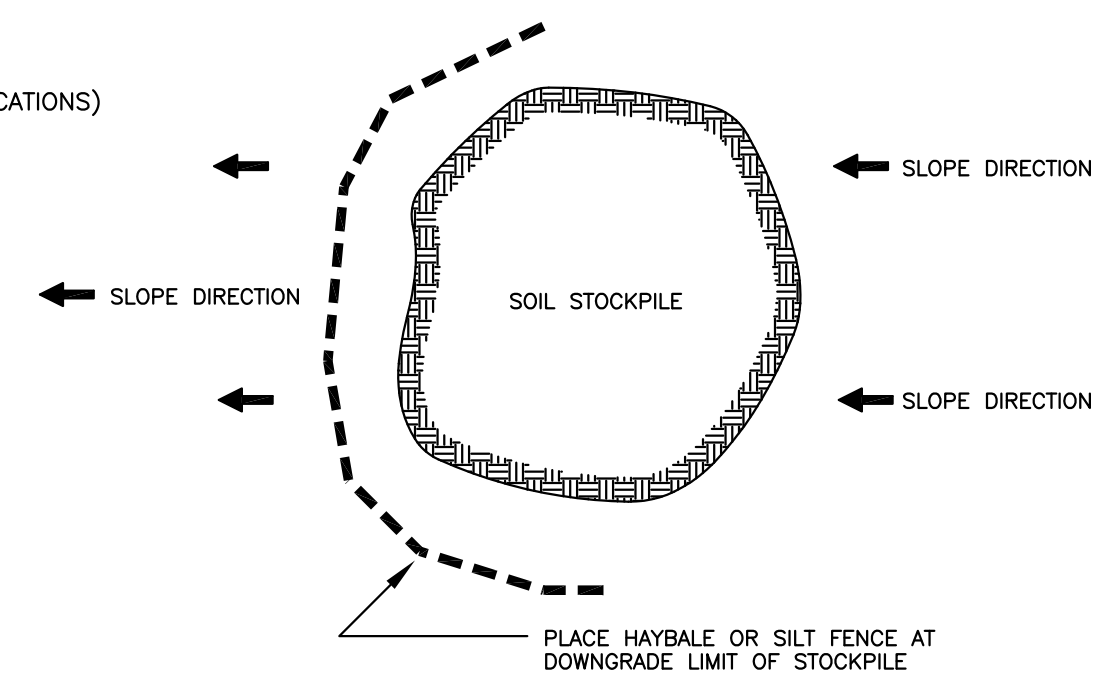
TP A:  
0-7" TOPSOIL  
7-28" FINE SANDY LOAM  
28-80" COMPACT SAND TILL  
GROUNDWATER @ 21"  
MOTTLING @ 21"  
NO LEDGE

TP B:  
0-8" TOPSOIL  
8-29" FINE SANDY LOAM  
29-76" COMPACT SAND TILL  
GROUNDWATER @ 23"  
MOTTLING @ 23"  
NO LEDGE

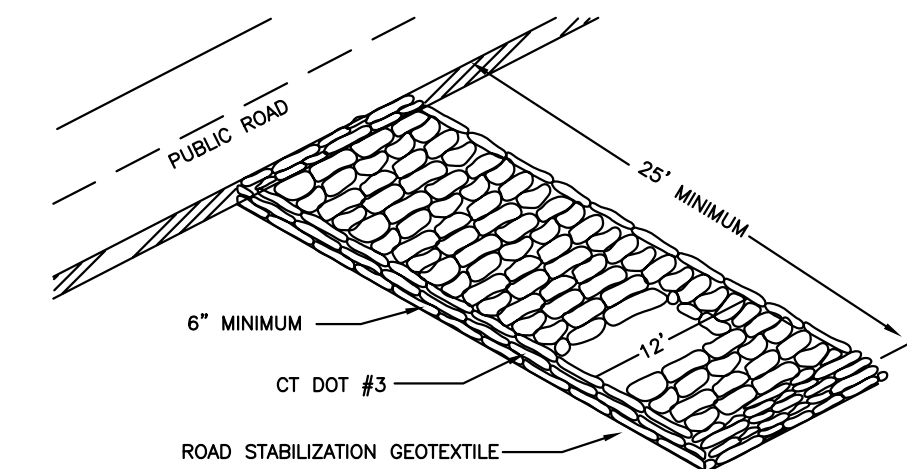
TP C:  
0-9" TOPSOIL  
9-28" FINE SANDY LOAM  
28-84" COMPACT SAND TILL  
GROUNDWATER @ 25"  
MOTTLING @ 25"  
NO LEDGE

Percolation Test Pit Results  
Date Tested: 01/20/2021  
By: Gardner & Peterson Associates, LLC

PT  
DEPTH: 20"  
PRESOAK @ 9:15  
MARK 8" BELOW GRADE  
TIME DEPTH  
12:28 0"  
12:43 1 1/2"  
12:58 2 1/2"  
1:13 3"  
1:28 3 1/2"  
1:43 4"  
1:58 4 1/2"  
2:13 5"  
2:28 5 1/2"  
3:43 6"  
RATE: 30 MIN/IN

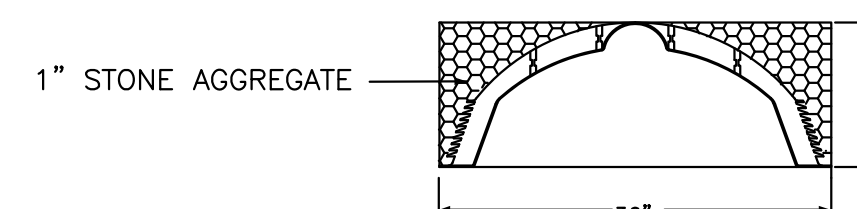


STOCKPILE EROSION PROTECTION DETAIL



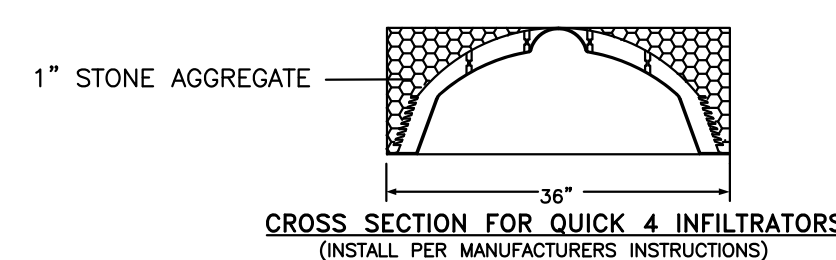
CONSTRUCTION ENTRANCE

NOT TO SCALE



CROSS SECTION FOR QUICK 4 INFILTRATORS

NOT TO SCALE



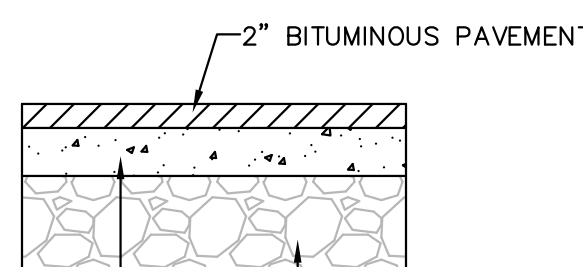
CROSS SECTION FOR QUICK 4 INFILTRATORS

(INSTALL PER MANUFACTURERS INSTRUCTIONS)

WATER TREATMENT WASTEWATER (WTW)  
ANY WASTEWATER FROM A DEVICE USED FOR THE TREATMENT OF WELL WATER THAT ENHANCES THE QUALITY OF WATER AND/OR PROVIDES FOR THE REMOVAL OF IRON, MANGANESE, RADIONUCLIDES OR OTHER SUBSTANCES SHALL DISCHARGE TO A WTW SYSTEM.  
WTW BASED ON A MAXIMUM DISCHARGE OF 50 GPD.  
STORAGE VOLUME REQUIRED: 50 GPD x 1.5 = 75gallons  
STORAGE VOLUME PROVIDED: QUICK 4 STANDARD INFILTRATOR 2 units x 43gallons/unit = 86gallons

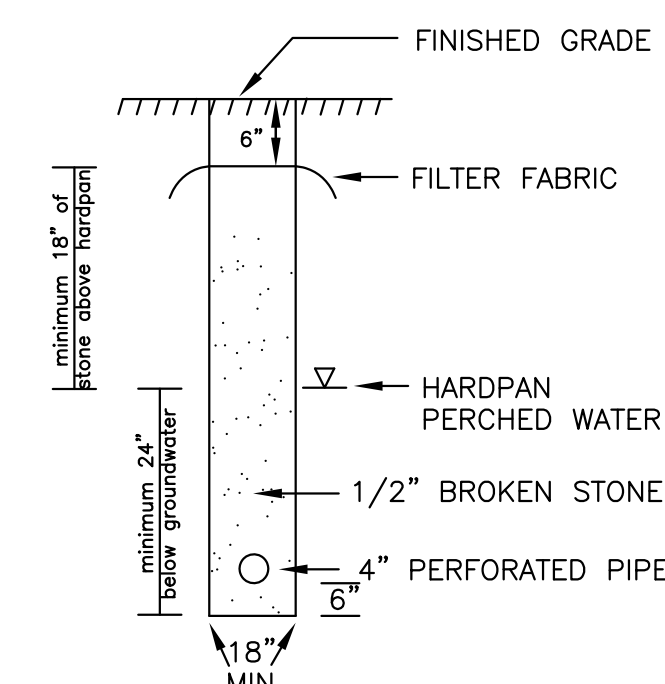
WATER TREATMENT WASTEWATER SYSTEM

NOT TO SCALE



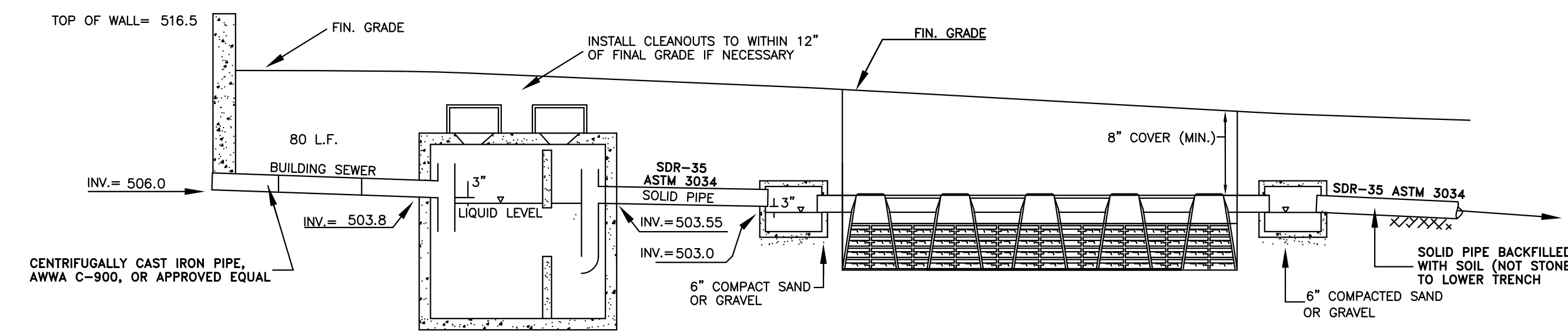
DRIVEWAY DETAIL

NOT TO SCALE



CURTAIN DRAIN DETAIL

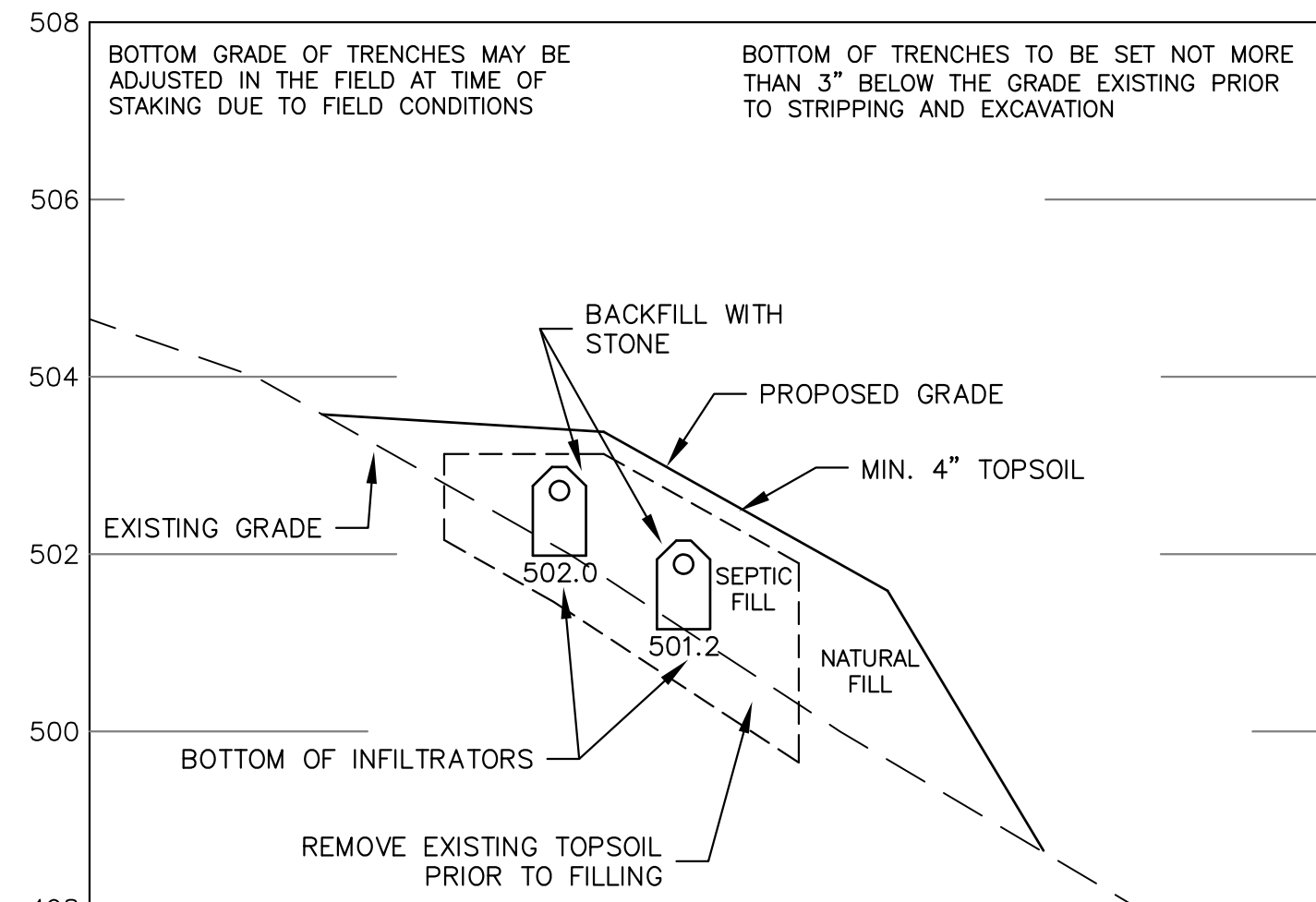
NOT TO SCALE



SUBSURFACE DISPOSAL DISTRIBUTION

NOT TO SCALE

SECTION DISTRIBUTION SYSTEM



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

CONSTRUCTION SCHEDULE & EROSION & SEDIMENT CONTROL CHECKLIST

PROJECT NAME: SINGLE FAMILY RESIDENCE  
LOCATION: 80 DENISON ROAD, SOMERS, CT  
PROJECT DESCRIPTION: CONSTRUCTION OF SINGLE FAMILY HOME  
PARCEL AREA: 7 ACRES  
RESPONSIBLE PERSONNEL: JIM PATSUN (860) 573-5570

WORK DESCRIPTION	EROSION & SEDIMENT CONTROL MEASURES	DATE INSTALLED	INITIALS
ESTABLISH CONSTRUCTION ENTRANCE	INSTALL ANTI-TRACKING PAD		
CUT TREES AND BRUSH			
REMOVE STUMPS	INSTALL SILT FENCE		
ROUGH GRADING			
CONSTRUCT HOUSE AND UTILITIES			
FINAL GRADE SITE			
FINAL GRADE/PAVE DRIVEWAY	LOW AND SEED DISTURBED ALL DISTURBED AREAS REMOVE SILT FENCE WHEN SITE IS STABILIZED		

PROJECT DATES:  
DATE OF CONSTRUCTION START: APRIL 1, 2021  
DATE OF CONSTRUCTION COMPLETION: 1 YEAR AFTER START

EROSION AND SEDIMENT CONTROL PROCEDURES SHALL ESSENTIALLY BE IN ACCORDANCE WITH THESE PLANS, AS REQUIRED BY TOWN REGULATIONS, AND THE MANUAL, "GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL" FOR CONNECTICUT, BY THE COUNCIL ON SOIL AND WATER CONSERVATION, 1985, REVISED TO 2002.

TEMPORARY SEEDING SCHEDULE:

SPECIES	LBS/ACRE	LBS/1000SF	SEEDING DATES
ANNUAL RYEGRASS	40	0.9	3/1-6/15, 8/1-10/1
WINTER RYE	40	0.9	4/15-6/15, 8/15-10/1
SUDAGRASS	11	0.25	5/15-8/15

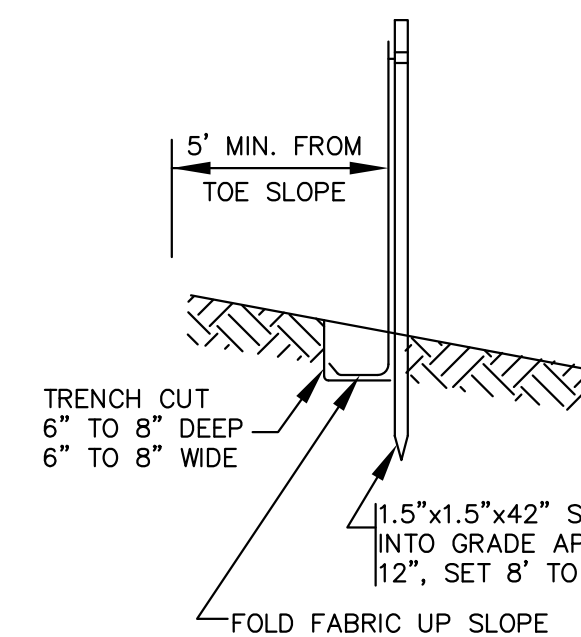
TEMPORARY SEEDING IS NOT LIMITED TO THE SPECIES SHOWN. OTHER SPECIES RECOMMENDED BY THE SCS OR AS LIMITED BY SITE CONDITIONS MAY BE USED.

STRAW MULCH IS TO BE APPLIED TO SEEDING 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	40	0.90	4/15-6/15, 8/15-9/15
CREeping RED FESCUE	120	2.75	
PERENNIAL RYEGRASS	40	0.90	



SILT FENCE INSTALLATION

NOT TO SCALE



REVISIONS  
02/19/2021

IMPROVEMENT LOCATION SURVEY  
PERMIT PLAN AND  
SUBSURFACE DISPOSAL SYSTEM DESIGN  
PREPARED FOR PATSUN CONSTRUCTION  
80 DENISON ROAD  
SOMERS, CONNECTICUT

GARDNER & PETERSON ASSOCIATES, LLC  
178 HARTFORD TURNPIKE  
TOLLAND, CONNECTICUT

BY	SCALE	DATE	SHEET NO.	MAP NO.
E.R.P.	AS SHOWN	01-15-2021	2 OF 2	10937A