

DEEP TEST PIT DATA
DEEP TEST PITS 1 THROUGH 3 WERE WITNESSED BY GEORGE CALKINS, R.S.
OF THE LEDGE LIGHT HEALTH DISTRICT ON JULY 19, 2010.

TP1
0-8" TOPSOIL
8-20/22" OR/TAN - OR/GOLD FINE SANDY LOAM
20-38" TAN-OR/GOLD M/F-FINE SAND
38-91" DARK BROWN MED-F/FINE SAND,
SOME GRAVEL

GROUNDWATER WEeping @ 62"
NO LEDGE
MOTTLING @ 20/22"

TP2
0-8" TOPSOIL
8-11" ORANGE FINE SANDY LOAM
11-32/33" OLIVE GRAY F-VY FINE SAND/SILT
32-92" ORANGE/GOLD M/C-M/F SAND
& GRAVEL

GROUNDWATER WEeping @ 71"
NO LEDGE
MOTTLING @ 11"

TP3
0-8/10" TOPSOIL
8-22/24" ORANGE LOAMY SAND
22-66/73" YELLOW/TAN M/F-FINE SAND,
STONE

NO GROUNDWATER
LEDGE @ 68"
NO MOTTLING

TPA
0-10" TOPSOIL
10-41" ORANGE BROWN FINE SANDY LOAM
41-47" GRAY VERY FINE SILT LOAM, MOTTLED
47-62" GRAY FINE TO MEDIUM HARD PAN
W/COBLES & BOULDERS

NO GROUNDWATER
LEDGE @ 62"
MOTTLING @ 41"

TPB
0-9" TOPSOIL
9-33" ORANGE BROWN FINE SANDY LOAM
33-36" GRAY VERY FINE SILT LOAM, MOTTLED
36-58" GRAY FINE TO MEDIUM HARD PAN
W/COBLES & BOULDERS

NO GROUNDWATER
LEDGE @ 58"
MOTTLING @ 33"

TPC
0-9" TOPSOIL
9-28" ORANGE BROWN FINE SANDY LOAM
28-55" GRAY VERY FINE SILT LOAM, MOTTLED
55-80" MEDIUM YELLOW BROWN SAND

GROUNDWATER @ 78"
LEDGE @ 80"
MOTTLING @ 28"
ROOTS TO 40"

TPD
0-11" TOPSOIL
11-31" ORANGE BROWN FINE SANDY LOAM
31-48" ORANGE MOTTLED FINE TO MEDIUM
SAND (NORTH)
31-48" GRAY VERY FINE SILT LOAM,
MOTTLED
48-66" GRAY FINE TO MEDIUM SAND
& GRAVEL

GROUNDWATER @ 61"
LEDGE @ 66"
MOTTLING @ 31"
ROOTS TO 33"

TPE
0-11" TOPSOIL
11-25" ORANGE BROWN FINE SANDY LOAM
25-42" GRAY/YELLOW BROWN FINE SAND
W/COBLES
42-51" GRAY FINE TO MEDIUM SAND
& GRAVEL

NO GROUNDWATER
LEDGE @ 51"
MOTTLING @ 42"
ROOTS TO 42"

PERCOLATION TEST PT-4
DEPTH = 30"
TIME READING
9:45 11"
10:09 DRY
10:09:30 REFILL 12"
10:12:30 17 1/4"
10:15 21 1/4"
10:17:30 24"
10:20 25 7/8"
10:22 27 1/4"
10:24:40 DRY 28"
3:06 16 1/8"
3:11 16 3/4"
3:16 17 3/8"
3:21 DRY

PERCOLATION TESTS PT-A AND PT-B WERE PERFORMED
ON MAY 10, 2024 BY BOUNDARIES, LLC

PERCOLATION TEST PT-A
DEPTH = 20"
PRESOAK @ 1:15

TIME READING
2:21 7 3/4"
2:26 9 1/2"
2:31 10 3/4"
2:36 11 1/2"
2:41 12 1/2"
2:46 13 3/8"
2:51 14 1/8"
2:56 14 3/4"
3:01 15 1/2"
3:06 16 1/8"
3:11 16 3/4"
3:16 17 3/8"
3:21 DRY

PERCOLATION TEST PT-B
DEPTH = 20"
PRESOAK @ 1:20

TIME READING
2:22 6"
2:27 9 3/8"
2:32 11 1/2"
2:37 13 3/4"
2:42 14 3/4"
2:47 15 7/8"
2:52 16 7/8"
2:57 17 3/4"
3:02 15 1/2"
3:06 18 5/8"
3:07 19 1/2"
3:12 DRY

PERCOLATION RATE AT 20"
PERC RATE: 5.7 MINS/INCH

LEGEND

- STONE WALL
- PROPERTY LINE
- STREET PROPERTY LINE
- MONUMENT FOUND
- REBAR FOUND
- EXISTING CONTOUR
- PROPOSED CONTOUR
- APPROXIMATE DEEP TEST PIT LOCATION
- APPROXIMATE PERC TEST LOCATION
- BUILDING SETBACK LINE
- UTILITY POLE
- SILT FENCE OR HAYBALES OR WOODCHIPS
- EDGE OF WETLANDS & FLAG NUMBER
- FOOTING DRAIN
- GRADE TO DRAIN

NOTE: BOUNDARY LINES OF ADJOINING PROPERTIES ARE SHOWN FOR GENERAL INFORMATION PURPOSES ONLY AND ARE NOT TO BE CONSTRUED AS BEING ACCURATELY LOCATED OR DEPICTED.

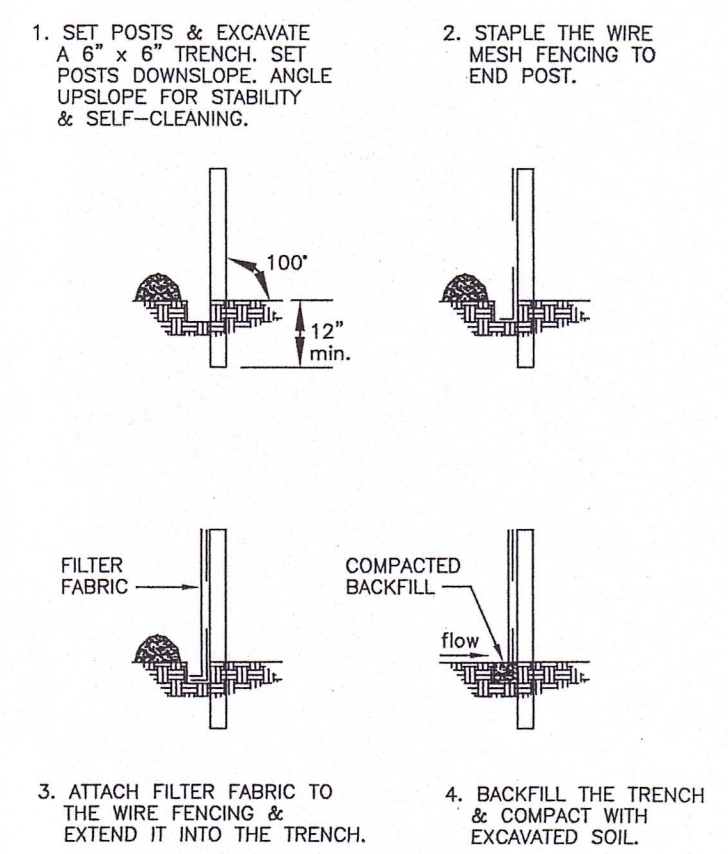
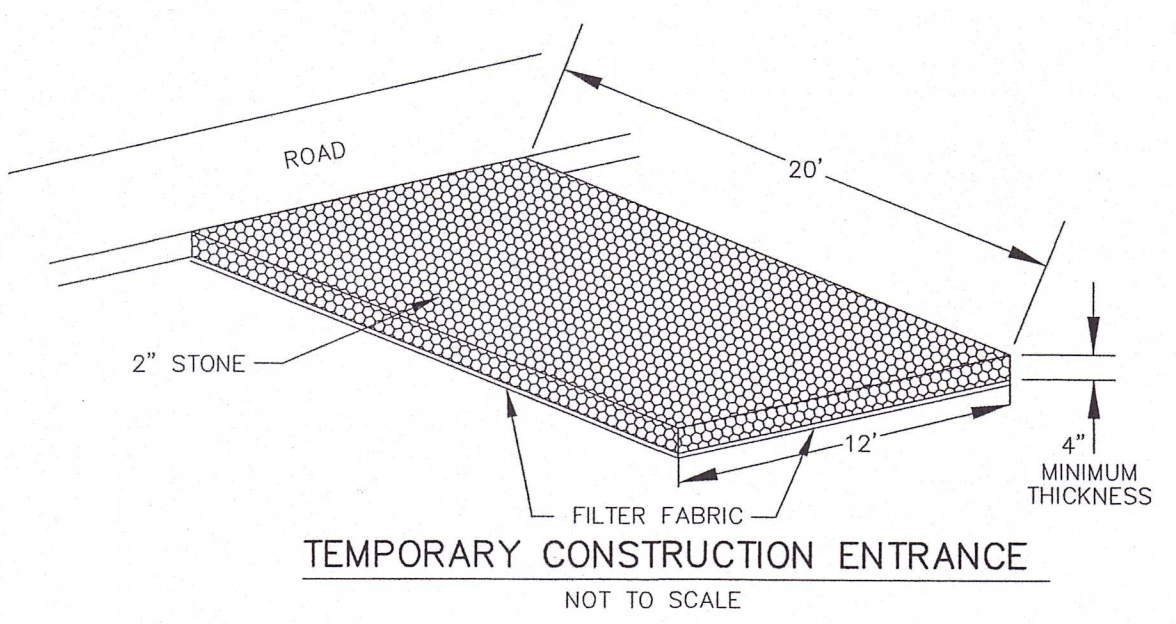
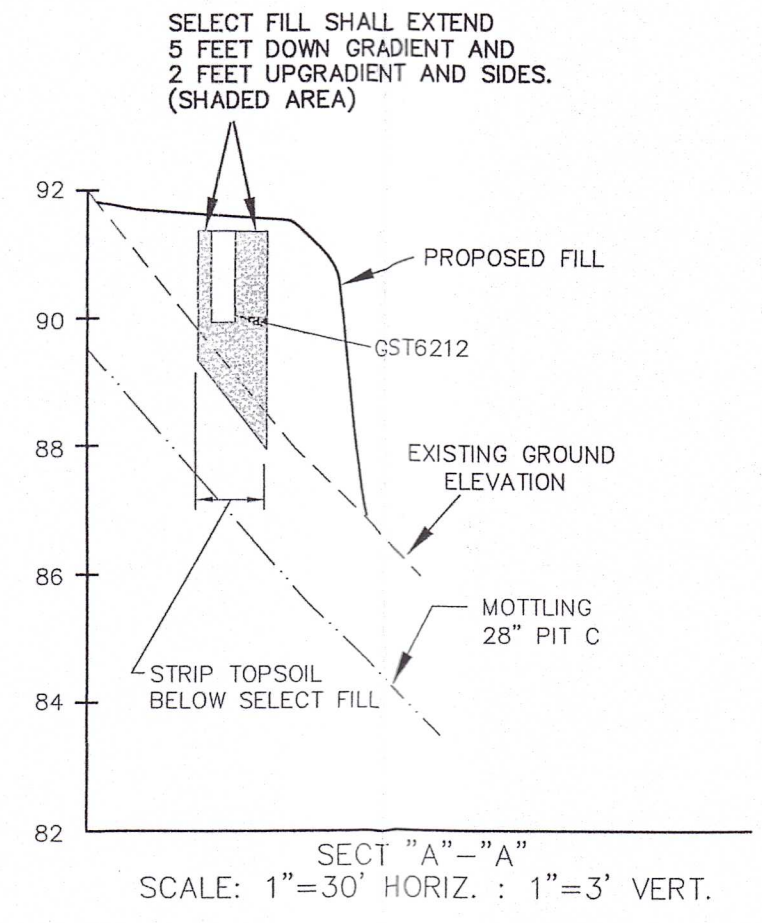
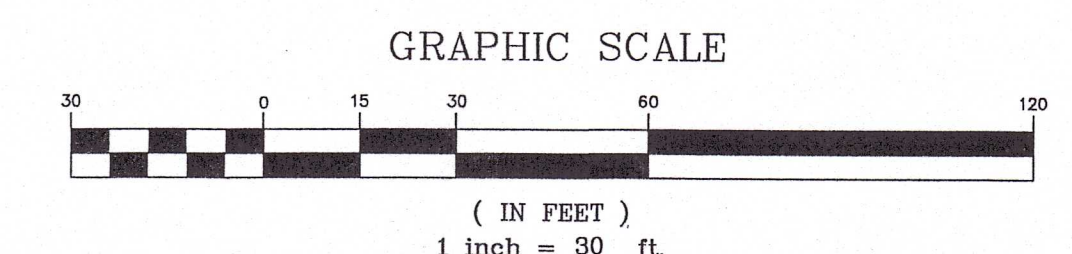
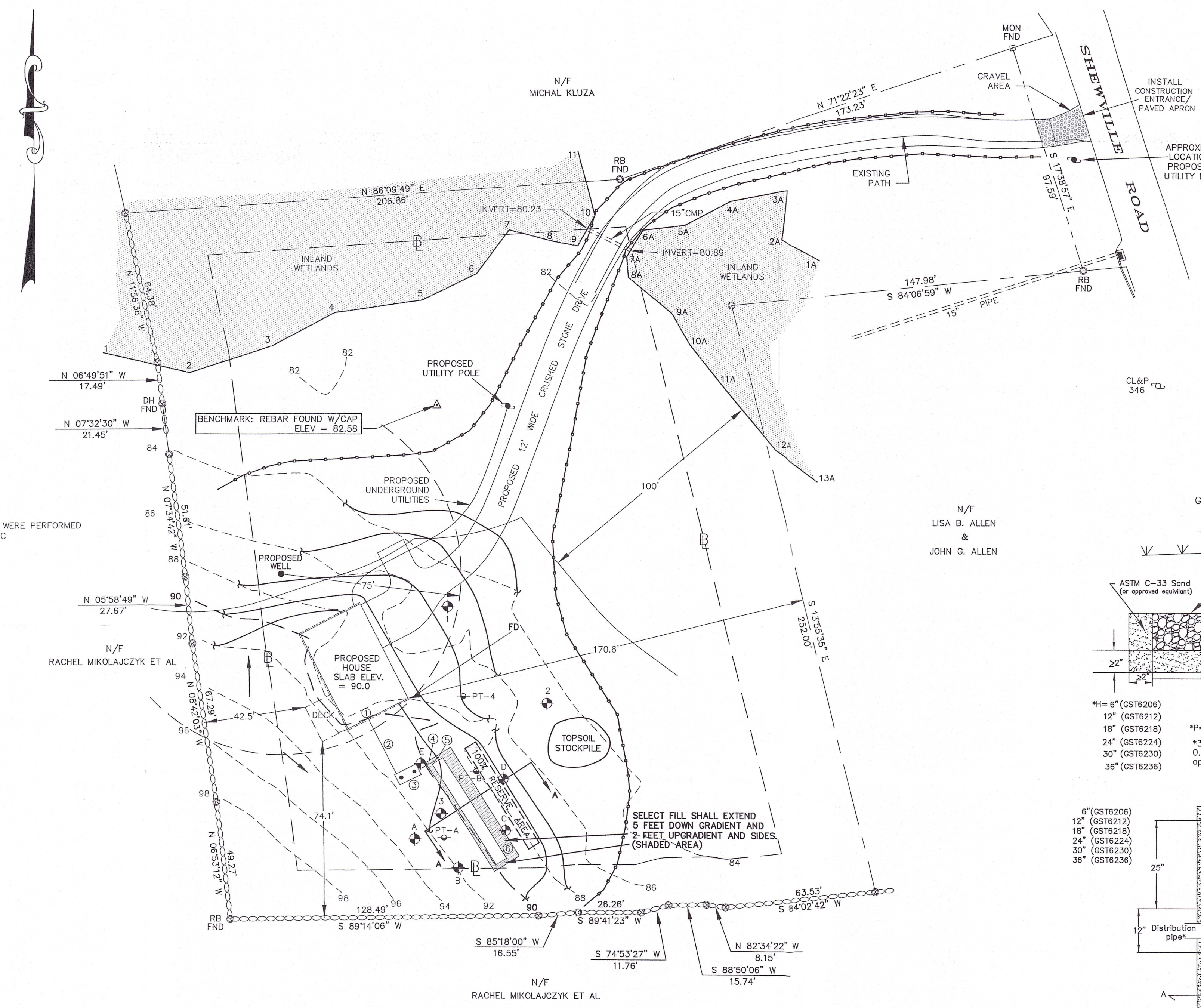
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JOB# 26-007.DWG FBK#337

THE WORD "CERTIFY" IS UNDERSTOOD TO BE AN EXPRESSION OF
THE PROFESSIONAL OPINION BY THE LAND SURVEYOR WHICH IS
BASED ON HIS OR HER BEST KNOWLEDGE, INFORMATION AND BELIEF.
AS SUCH IT CONSTITUTES NEITHER GUARANTEE OR WARRANTY.
THE STONE WALLS AND/OR FENCES SHOWN AS BOUNDARIES
MAY HAVE IRREGULARITIES OF COURSE BETWEEN PRINCIPAL
POINTS OF COURSE INDICATED.

I HAVE REVIEWED THE INLAND WETLAND BOUNDARY I DELINEATED
AND I AM OF THE OPINION THAT THE WETLAND BOUNDARY IS SHOWN
CORRECTLY ON THIS MAP.

IAN COLE
SOIL SCIENTIST

DIETER & GARDNER
LAND SURVEYORS • PLANNERS
1641 ROUTE 12
P.O. BOX 335
GALES FERRY, CT. 06335
(860) 464-7455
EMAIL: DIETER.GARDNER@YAHOO.COM

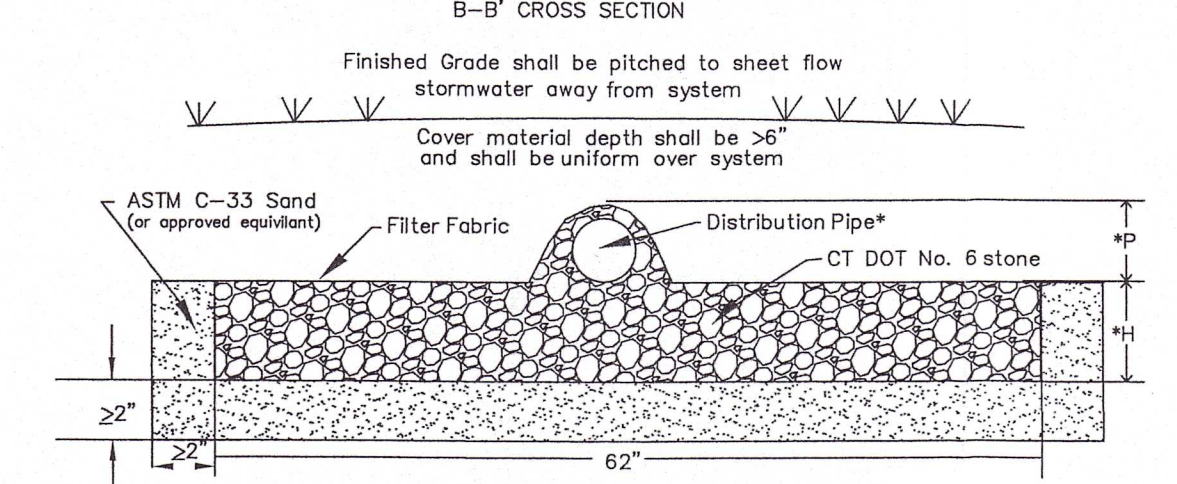


- SANITARY DESIGN CRITERIA:
- PROPOSED THREE BEDROOM HOME. NO TUBS GREATER THAN 100 GALLONS IN SIZE.
 - 1000 GALLON TWO COMPARTMENT SEPTIC TANK REQUIRED BY CODE AND PROVIDED.
 - DESIGN PERCOLATION RATE: 5.7 MIN./IN.
 - MINIMUM LEACHING SYSTEM SPREAD:
HF = 24, GRADIENT BETWEEN 10.1 TO 15.0%
RESTRICTION BETWEEN 26.1 TO 30.0"
FF = 1.5, THREE BEDROOM HOME
PF = 1.0, PERC RATE 5.7 MIN./INCH
MLSS = HF X FF X PF = 24 X 1.5 X 1.0 = 36"
 - EFFECTIVE LEACHING AREA REQUIRED PER CODE: 10 S.F.
 - GEOMATRIX GST 6212 SELECTED FOR PRIMARY SYSTEM DESIGN.
EFFECTIVE LEACHING AREA PROVIDED PER L.F. PER CODE: 10 S.F./L.F.
MINIMUM LENGTH OF TRENCH REQUIRED: 495 S.F./10 S.F./L.F. = 49.5'
 - EFFECTIVE LEACHING AREA PROVIDED:
1 ROW 50' LONG GEOMATRIX GST 6212 1 X 50' X 10 S.F./L.F. = 510 S.F.
 - 100% RESERVE AREA REQUIRED AND PROVIDED 50 L.F. GEOMATRIX GST 6212.

SANITARY ELEVATION DATA:

- SANITARY INVERT AT FOUNDATION: 92.45
- 26"-4" DIA. SCHEDULE 40 ASTM D1785 OR EQUAL PIPE (MIN. SLOPE = 1/4" PER FT.)
- 1000 GALLON TWO COMPARTMENT SEPTIC TANK
INVERT IN: 91.85
INVERT OUT: 91.60
- 8" - 4" DIA. SDR 35 PVC PIPE
- "D" BOX
INVERT IN: 91.20
INVERT OUT: 91.00
- 50' LONG GEOMATRIX GST 6212
DIST PIPE INV: 91.00
BOTTOM OF STONE ELEV.: 90.00

GEOMATRIX GST™ LEACHING SYSTEM

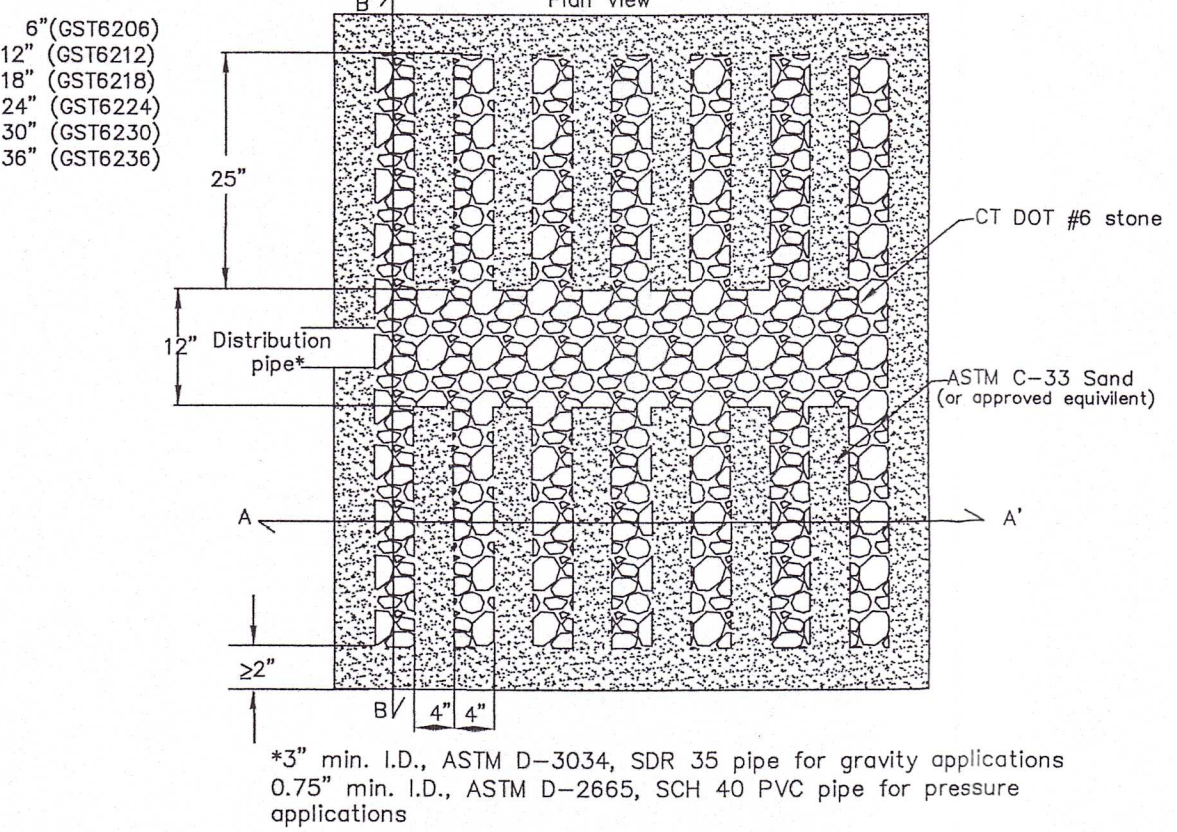


*H = 6" (GST6206)
12" (GST6212)
18" (GST6218)
24" (GST6224)
30" (GST6230)
36" (GST6236)

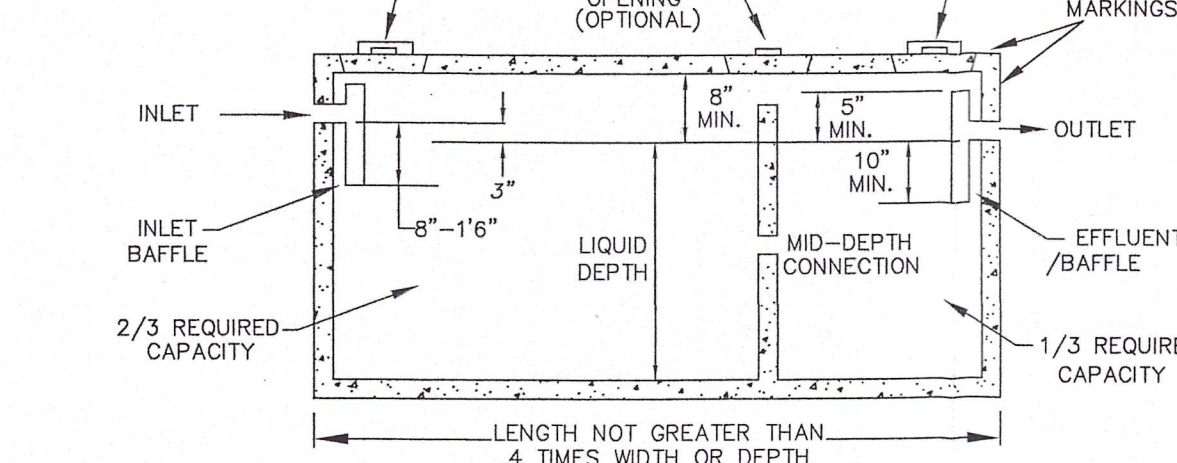
*P = 2"-5.5"

*3" min. I.D., ASTM D-3034, SDR 35 pipe for gravity applications
0.75" min. I.D., ASTM D-2665, SCH 40 PVC pipe for pressure applications

GEOMATRIX GST™ LEACHING SYSTEM



*3" min. I.D., ASTM D-3034, SDR 35 pipe for gravity applications
0.75" min. I.D., ASTM D-2665, SCH 40 PVC pipe for pressure applications



NOTE: CLEANOUT MANHOLES AND ALL BAFFLED INSPECTION MANHOLES SHALL BE LOCATED AT A DEPTH NOT GREATER THAN 12" BELOW FINAL GRADE.

TYPICAL SEPTIC TANK

NOT TO SCALE

GENERAL NOTES:

- MAP REFERENCE:
IMPROVEMENT LOCATION & TOPOGRAPHIC SURVEY "SUBDIVISION PLAN" PREPARED FOR KENNETH G. & BRENDA L. MATTEAU 669 SHEWVILLE ROAD, LEDYARD, CONNECTICUT SCALE: 1"=30' DATE: APRIL 2014 REVISIONS "A"-GENERAL REVS 6-19-14 REV "B" PER P & Z CONDITIONS OF APPROVAL & MONUMENTATION SET 7-18-14.
- THIS LOT WAS TOPOED IN THE AREA OF THE HOUSE AND SEPTIC SYSTEM AND A BENCH MARK FOUND BY DIETER & GARDNER, INC. LAND SURVEYORS IN MARCH 2026.
- AT THE TIME OF THIS DESIGN THERE WERE NO EXISTING WELLS WITHIN 75' OF THE PROPOSED SEPTIC SYSTEM AND THERE WERE NO EXISTING SEPTIC SYSTEMS WITHIN 75' OF THE PROPOSED WELL LOCATION.
- SELECT FILL PLACED WITHIN AND ADJACENT TO LEACHING SYSTEM AREAS SHALL BE COMPRISED OF CLEAN SAND, OR SAND AND GRAVEL, FREE FROM ORGANIC MATTER AND FOREIGN SUBSTANCES. THE SELECT FILL SHALL MEET THE FOLLOWING REQUIREMENTS UNLESS OTHERWISE APPROVED BY THE DESIGN ENGINEER. SELECT FILL EXCEEDING 6% PASSING THE #200 SIEVE BASED ON A WET SIEVE TEST CANNOT BE APPROVED BY THE DESIGN ENGINEER.
 - THE SELECT FILL SHALL NOT CONTAIN ANY MATERIAL LARGER THAN THE THREE (3) INCH SIEVE.
 - UP TO 45% OF THE DRY WEIGHT OF THE REPRESENTATIVE SAMPLE MAY BE RETAINED ON THE #4 SIEVE. NOTE: 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 SIZE	PERCENT PASSING	
	WET SIEVE	DRY SIEVE
#4	100	100
#10	70-100	70-100
#40	10-50 *	10-75
#100	0-20	0-5
#200	0-5	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%.

SELECT FILL THAT DOES NOT MEET THE DRY SIEVE GRADATION CRITERIA BUT MEETS THE WET SIEVE GRADATION CRITERIA IS ACCEPTABLE. SIEVE TESTING OF SELECT FILL IS REQUIRED FOR LARGE (2,000 GPD OR GREATER) SYSTEMS WHENEVER THE LEACHING SYSTEM IS LOCATED TOTALLY IN SELECT FILL. THE LOCAL DIRECTOR OF HEALTH MAY REQUIRE SIEVE TESTING OF SELECT FILL ON LESS THAN 2,000 GPD SEWAGE SYSTEMS IN ACCORDANCE WITH PHC SECTION 19-13-6103e (D) (6).

THE LICENSED INSTALLER IS RESPONSIBLE FOR PREPARING THE LEACHING AREA WITH NECESSARY SELECT FILL. THE TOPSOIL IN THE LEACHING SYSTEM AREA MUST BE REMOVED AND THE SUBSOIL SCARIFIED PRIOR TO SELECT FILL PLACEMENT UNLESS OTHERWISE DIRECTED BY THE DESIGN ENGINEER. THE INSTALLER SHALL TAKE THE NECESSARY STEPS TO PROTECT THE UNDERLYING NATURALLY OCCURRING SOIL FROM OVER COMPACTION OR DAMAGE. THE INSTALLER IS RESPONSIBLE FOR PROPERLY COMPACTING SELECT FILL TO FACILITATE CONSTRUCTION AND TO PREVENT SETTLING. SELECT FILL SHALL EXTEND A MINIMUM OF FIVE (5) FEET LATERALLY IN ALL DIRECTIONS BEYOND THE OUTER PERIMETER OF THE LEACHING SYSTEM.

THE COMMISSIONER OF PUBLIC HEALTH MUST APPROVE MANUFACTURED FILL. ROCK USED TO PRODUCE MANUFACTURED FILL MUST HAVE A LOSS OF ABRASION OF NOT MORE THAN 50% USING AASHTO METHOD T-96, AND WHEN TESTED FOR SOUNDNESS USING AASHTO METHOD T104 NOT HAVE A LOSS OF MORE THAN 15% AT THE END OF 5 CYCLES. SUPPLIERS OF MANUFACTURED FILL MUST MAKE APPLICATION FOR APPROVAL TO THE COMMISSIONER OF PUBLIC HEALTH. DOCUMENTATION MUST BE SUBMITTED ON THE QUARRY OPERATION AND PRODUCTION PROCESS, FILL SPECIFICATIONS (GRADATION, PERMEABILITY, ETC) AND A NARRATIVE OF THE QUALITY CONTROL/QUALITY ASSURANCE PROGRAM MUST ALSO BE INCLUDED FOR ALL ACTIVE QUARRIES. THE MANUFACTURED FILL PRODUCERS MUST PROVIDE ANNUAL PRODUCT REGISTRATIONS TO THE COMMISSIONER OF PUBLIC HEALTH BY JULY 1ST OF EACH YEAR.

- APPLICANT: JOHN HARDY
860-625-4632
- ENGINEER: JOHN MARTUCCI
C/O DIETER & GARDNER, INC.
P.O. BOX 335
GALES FERRY CT. 06335
(860) 464-7455
- THE FOUNDATION AND SEPTIC SYSTEM SHALL BE STAKED OUT AND GRADES ESTABLISHED BY A LICENSED LAND SURVEYOR.
- AT THE TIME OF THIS DESIGN THERE WERE NO EXISTING WELLS WITHIN 75' OF THE PROPOSED SEPTIC SYSTEM AND NO EXISTING SEPTIC SYSTEMS WITHIN 75' OF THE PROPOSED WELL.
- INLAND WETLANDS AS SHOWN ON RECORDED SUBDIVISION PLAN.
- UTILITIES WILL BE OVERHEAD TO A POINT 80'± WEST OF WETLANDS THEN UNDERGROUND TO HOUSE.

ZONING DISTRICT R-60

ITEM	REQUIRED	PROVIDED
LOT AREA	60,000 Sq. Ft.	88,428 Sq. Ft.
FRONT YARD SETBACK	35 FT.	170.6 FT.
SIDE YARD SETBACK	20 FT.	74.1 FT.
REAR YARD SETBACK	30 FT.	42.6 FT.

PLAN SHOWING PROPOSED HOUSE, DRIVE, WELL AND SEWAGE DISPOSAL SYSTEM PREPARED FOR JOHN HARDY 669 SHEWVILLE ROAD LEDYARD, CONNECTICUT

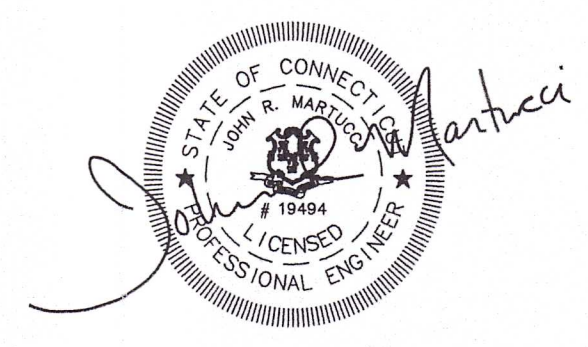
SCALE: 1"=30' RECEIVED

JUNE 2026 JUL 06 2026

Land Use Department

THIS MAP AND SURVEY HAS BEEN PREPARED IN ACCORDANCE WITH SECTIONS 20-300B-1 THROUGH 20-300B-20 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES-MINIMUM STANDARDS OF ACCURACY, CONTENT AND CERTIFICATION FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT, ADOPTED EFFECTIVE JUNE 21, 1996, REVISED OCTOBER 26, 2018. IT IS AN IMPROVEMENT LOCATION SURVEY BASED ON A DEPENDENT RESURVEY CONFORMING TO HORIZONTAL ACCURACY CLASS A-2 AND TOPOGRAPHIC ACCURACY 1-2. TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

TITLE: LAND SURVEYOR CT No. 14208
DATE: JUNE 30, 2026



FDH4