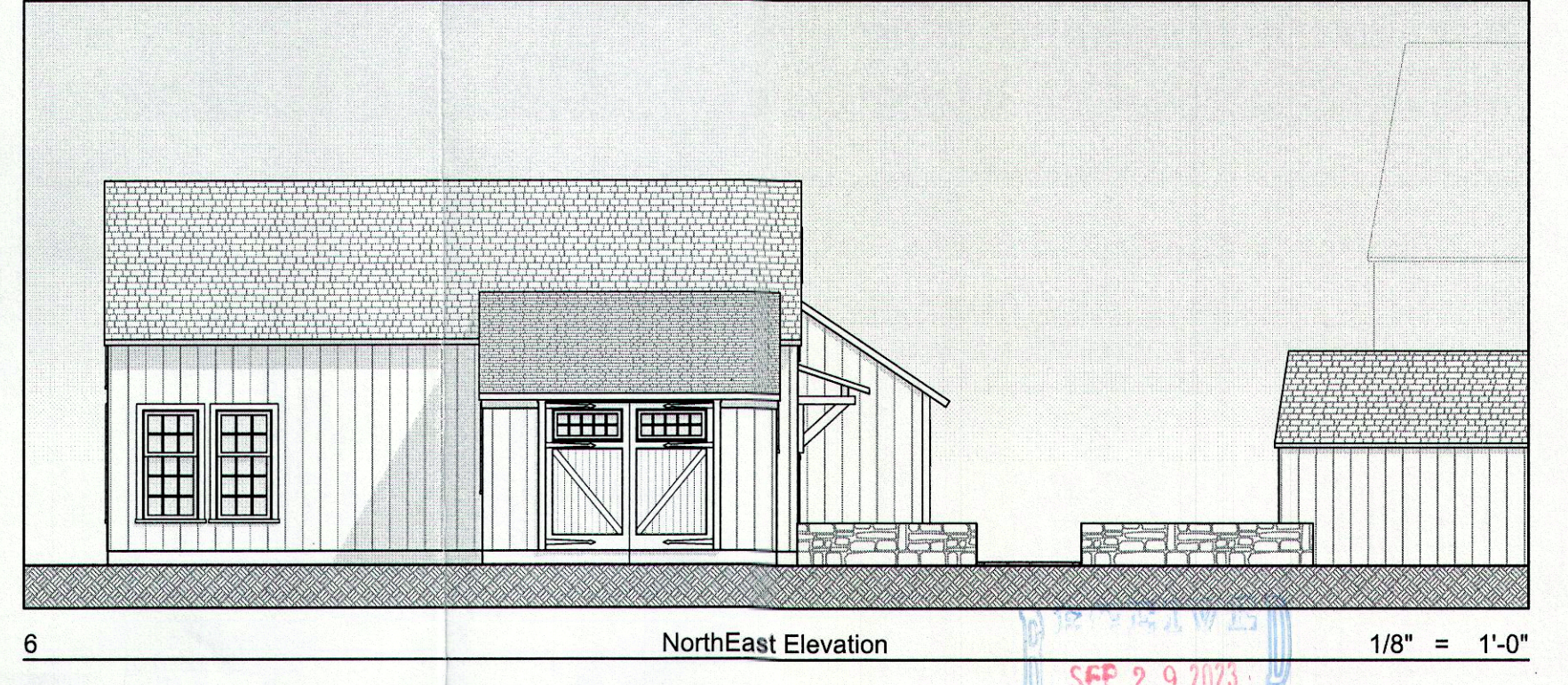
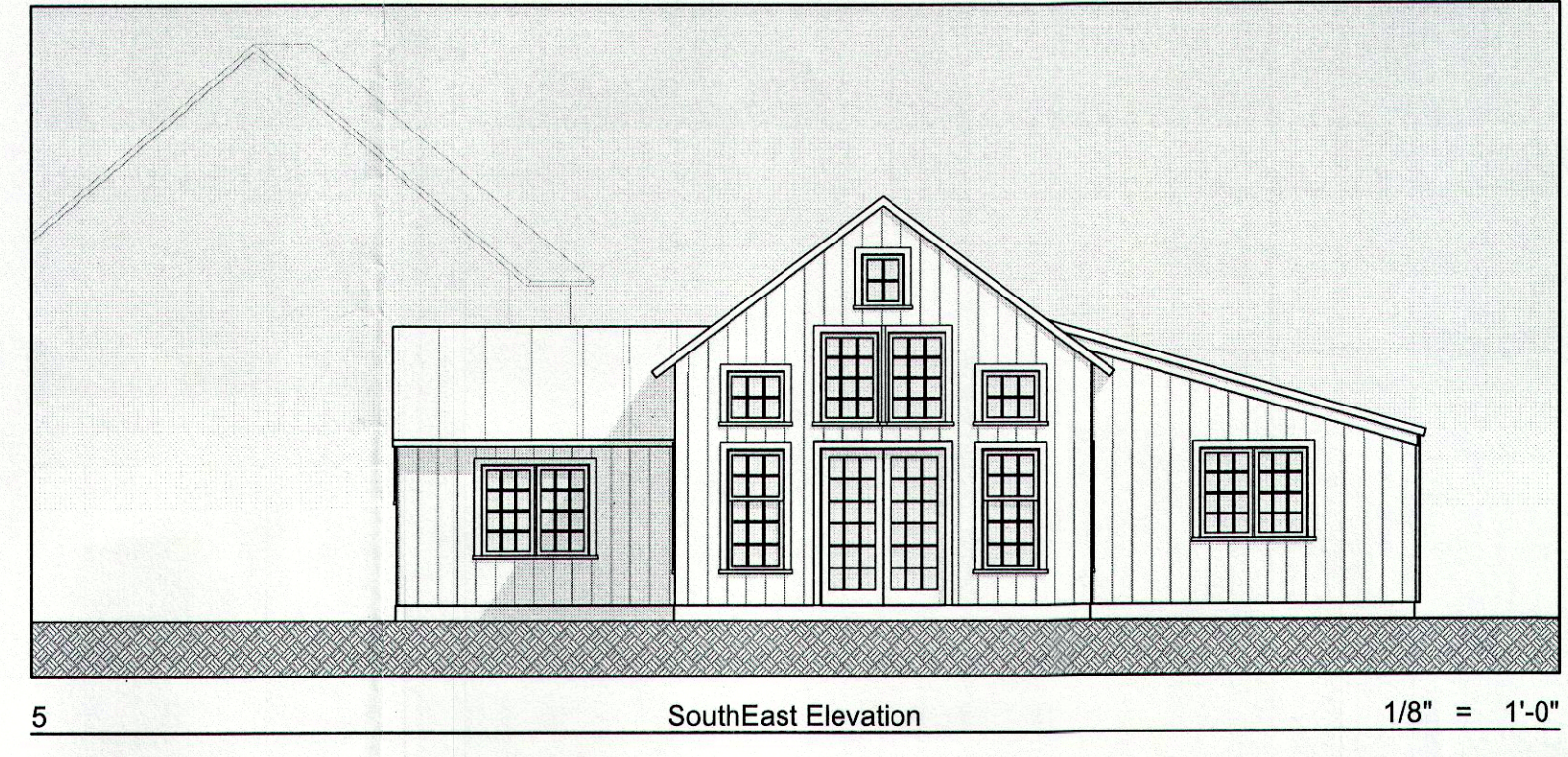
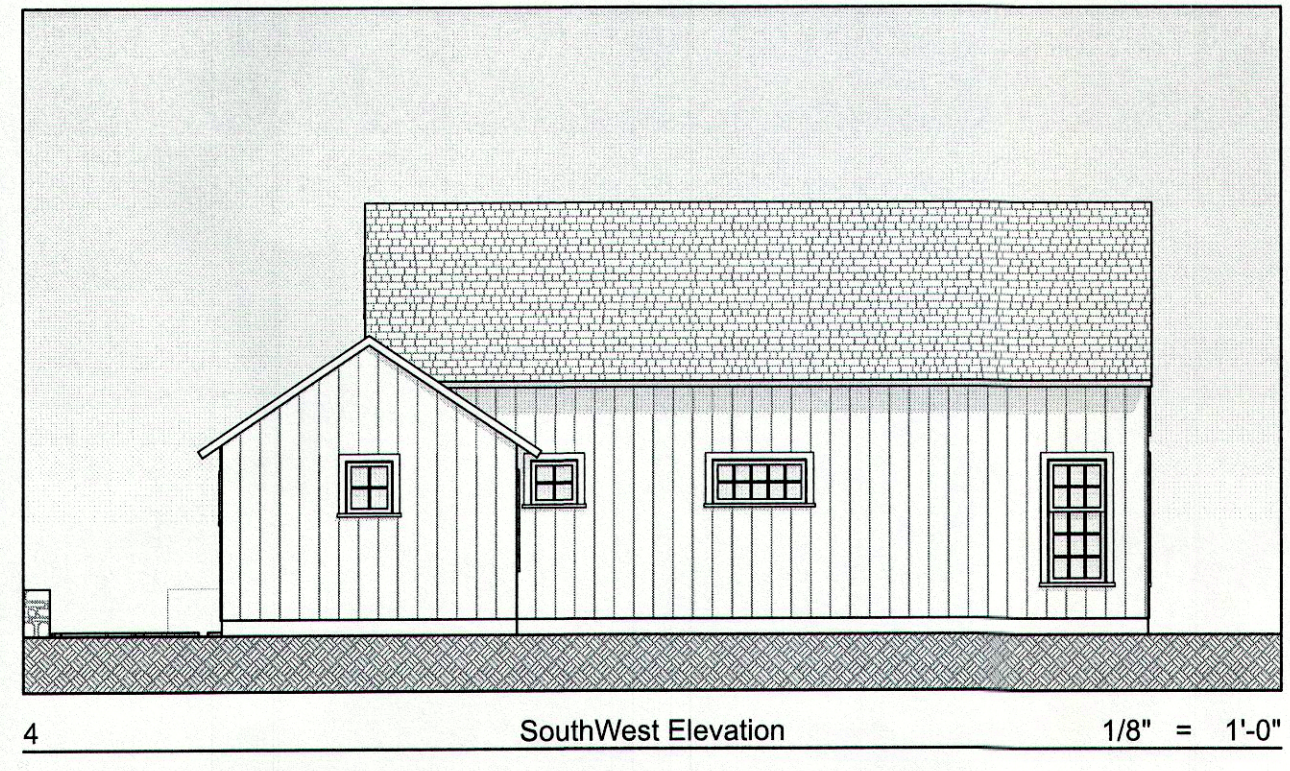
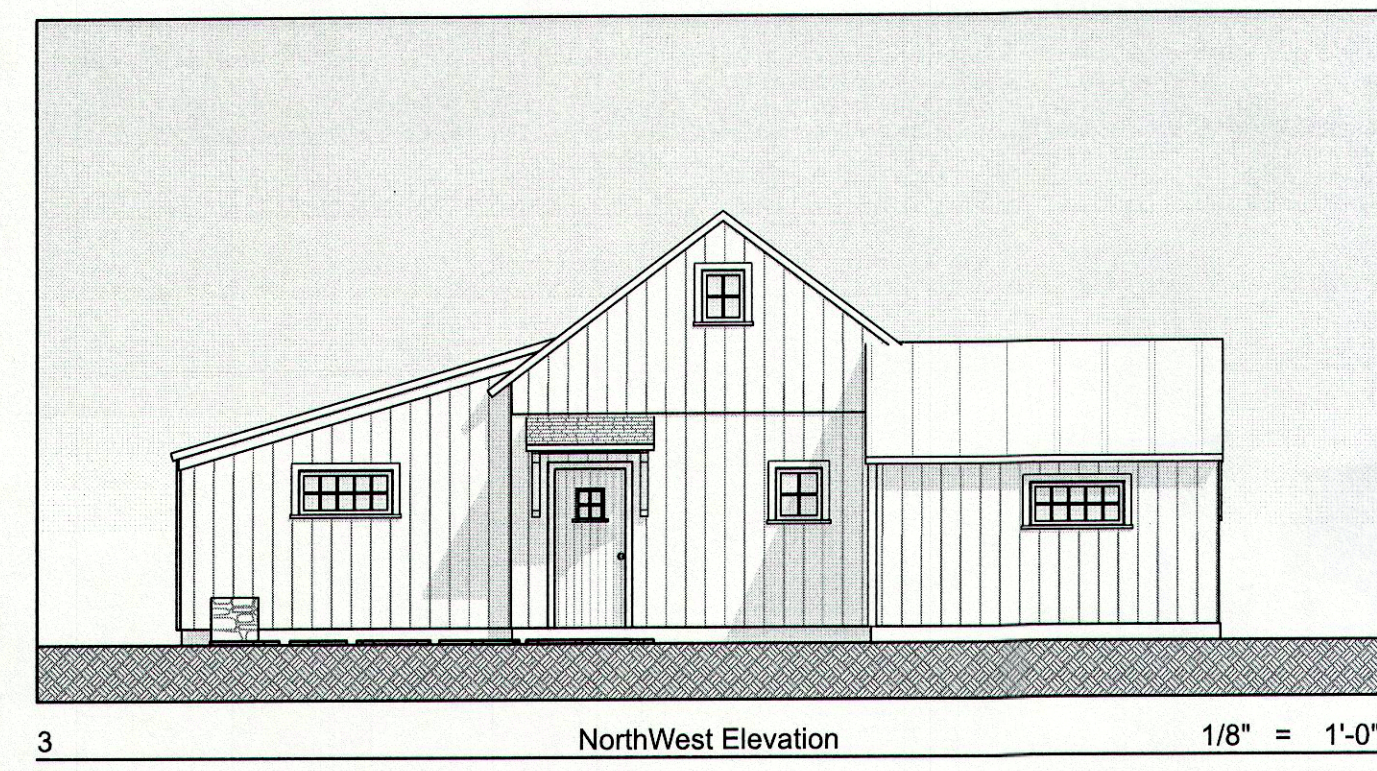


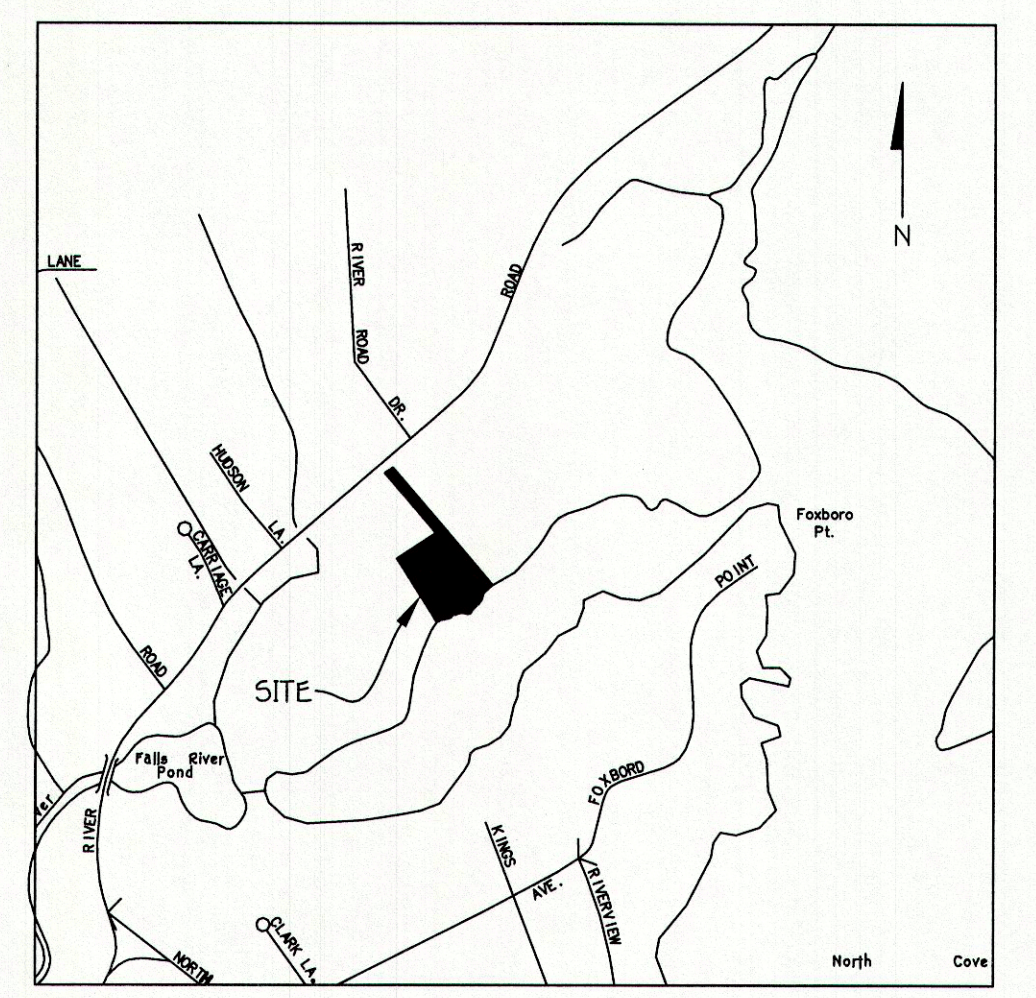
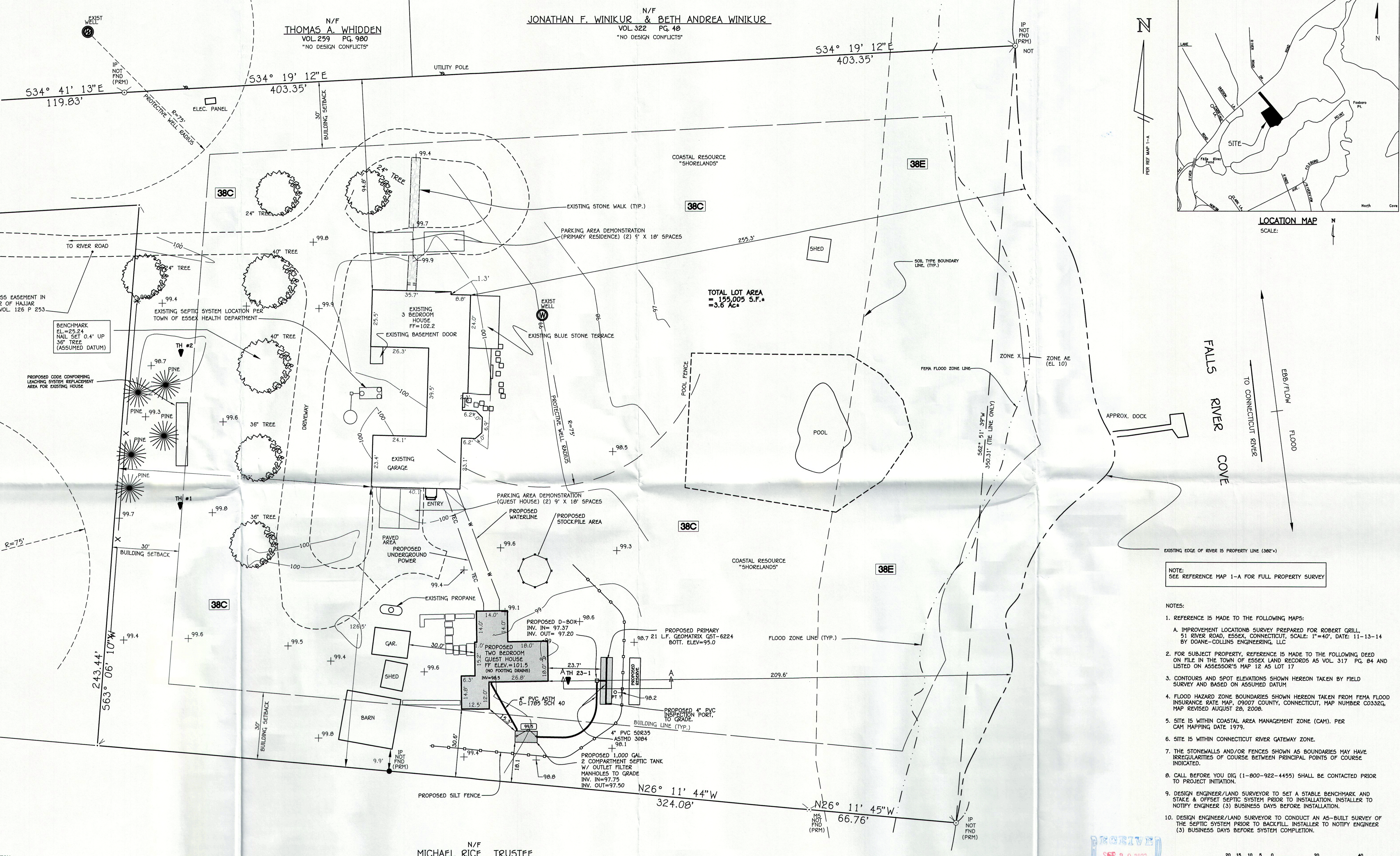
1  
A1 Proposed First Floor Plan  
SCALE: 1/4" = 1'-0"

2  
A1 Proposed Roof Plan  
SCALE: 1/4" = 1'-0"

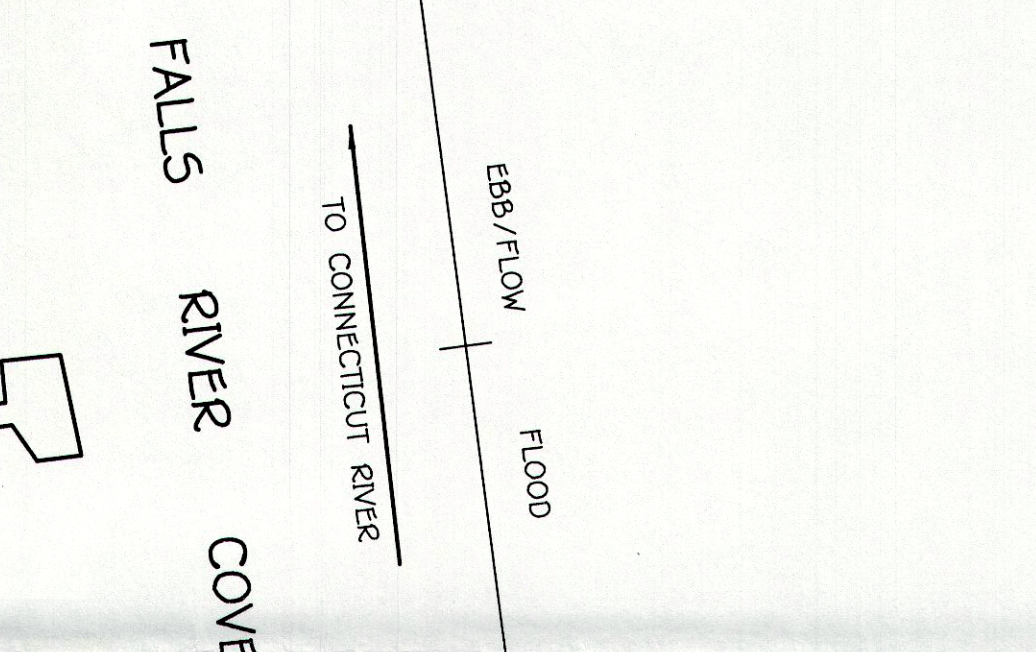


SEP 29 2023



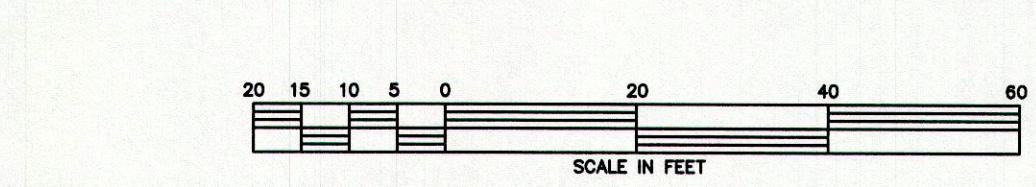


LOCATION MAP  
SCALE:



EXISTING EDGE OF RIVER IS PROPERTY LINE (38E+)  
NOTE:  
SEE REFERENCE MAP 1-A FOR FULL PROPERTY SURVEY

- NOTES:
- REFERENCE IS MADE TO THE FOLLOWING MAPS:
    - IMPROVEMENT LOCATIONS SURVEY PREPARED FOR ROBERT GRILL, 51 RIVER ROAD, ESSEX, CONNECTICUT, SCALE: 1"=40', DATE: 11-13-14 BY DOANE-COLLINS ENGINEERING, LLC
    - FOR SUBJECT PROPERTY, REFERENCE IS MADE TO THE FOLLOWING DEED ON FILE IN THE TOWN OF ESSEX LAND RECORDS AS VOL. 317 PG. 84 AND LISTED ON ASSESSOR'S MAP 12 AS LOT 17
  - CONTOURS AND SPOT ELEVATIONS SHOWN HEREON TAKEN BY FIELD SURVEY AND BASED ON ASSUMED DATUM
  - FLOOD HAZARD ZONE BOUNDARIES SHOWN HEREON TAKEN FROM FEMA FLOOD INSURANCE RATE MAP, 09007 COUNTY, CONNECTICUT, MAP NUMBER C0332G, MAP REVISED AUGUST 28, 2008.
  - SITE IS WITHIN COASTAL AREA MANAGEMENT ZONE (CAM), PER CAM MAPPING DATE 1979.
  - SITE IS WITHIN CONNECTICUT RIVER GATEWAY ZONE.
  - THE STONEWALLS AND/OR FENCES SHOWN AS BOUNDARIES MAY HAVE IRREGULARITIES OF COURSE BETWEEN PRINCIPAL POINTS OF COURSE INDICATED.
  - CALL BEFORE YOU DIG (1-800-922-4455) SHALL BE CONTACTED PRIOR TO PROJECT INITIATION.
  - DESIGN ENGINEER/LAND SURVEYOR TO SET A STABLE BENCHMARK AND STAKE & OFFSET SEPTIC SYSTEM PRIOR TO INSTALLATION. INSTALLER TO NOTIFY ENGINEER (3) BUSINESS DAYS BEFORE INSTALLATION.
  - DESIGN ENGINEER/LAND SURVEYOR TO CONDUCT AN AS-BUILT SURVEY OF THE SEPTIC SYSTEM PRIOR TO BACKFILL. INSTALLER TO NOTIFY ENGINEER (3) BUSINESS DAYS BEFORE SYSTEM COMPLETION.



N/F  
**SALLY B. FMCH**  
VOL. 104 PG. 301  
"NO DESIGN CONFLICTS"

N/F  
**THOMAS A. WHIDDEN**  
VOL. 259 PG. 980  
"NO DESIGN CONFLICTS"

N/F  
**JONATHAN F. WINIKUR & BETH ANDREA WINIKUR**  
VOL. 322 PG. 48  
"NO DESIGN CONFLICTS"

N/F  
**MICHAEL RICE TRUSTEE**  
VOL. 335 PG. 635  
"NO DESIGN CONFLICTS"

**LEGEND**

- UTILITY POLE
- CONC. MON. CONCRETE MONUMENT
- M.S. MERESTONE
- FND. FOUND
- LPIN IRON PIN
- LP IRON PIPE
- D.H. DRILL HOLE
- EXISTING CONTOURS
- EXISTING SPOT ELEVATION
- STONEWALL
- FIRE HYDRANT
- DEEP TEST HOLE LOCATION
- PERCOLATION TEST LOCATION
- EDGE OF TREELINE
- 38C SOIL TYPE
- 1001 PROPOSED SPOT ELEVATION
- TBR PROPOSED CONTOUR TO BE REMOVED
- PRM PER REFERENCE MAP

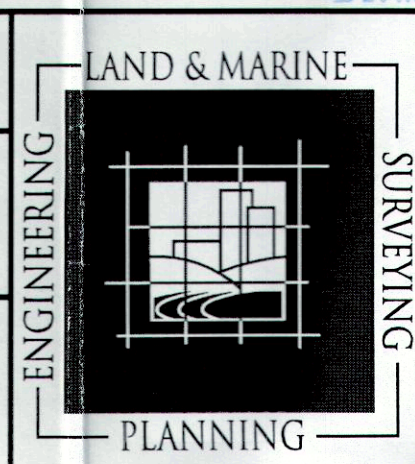
ZONING DATA TABLE DISTRICT RU	REQUIRED/ALLOWED	EXISTING	PROPOSED
MINIMUM GROSS LOT AREA	80,000 S.F.	155,005 S.F.	155,005 S.F.
SETBACKS			
FRONT YARD	40'	<40'	<40'
REAR YARD	30'	255.3'	216.3'
SIDE YARD	30'	(N)94.8' (S) 125.5'	(N)94.8' (S) 32.6'
COVERAGE			
MAX BUILDING COVERAGE	15%	2.4% 3,713 SF	3.0% 4,670 SF
MAX BUILDING COVERAGE	15%	2.4% 3,713 SF	3.0% 4,670 SF
BUILDING HEIGHT	35'	>35'	>35'

SOIL TYPE LEGEND  
SOURCE: NATURAL RESOURCES CONSERVATION SERVICE WEB SOIL  
SURVEY URL: <http://vebaaolsurvey.nrcs.usda.gov>  
MAP UNIT SYMBOL: MAP UNIT NAME:  
38C HINCLEY GRAVELLY SANDY LOAM, 3% TO 15% SLOPES  
38E HINCLEY GRAVELLY SANDY LOAM, 15% TO 45% SLOPES

STUART J. FAIRBANK  
CONN. P.E. #20206



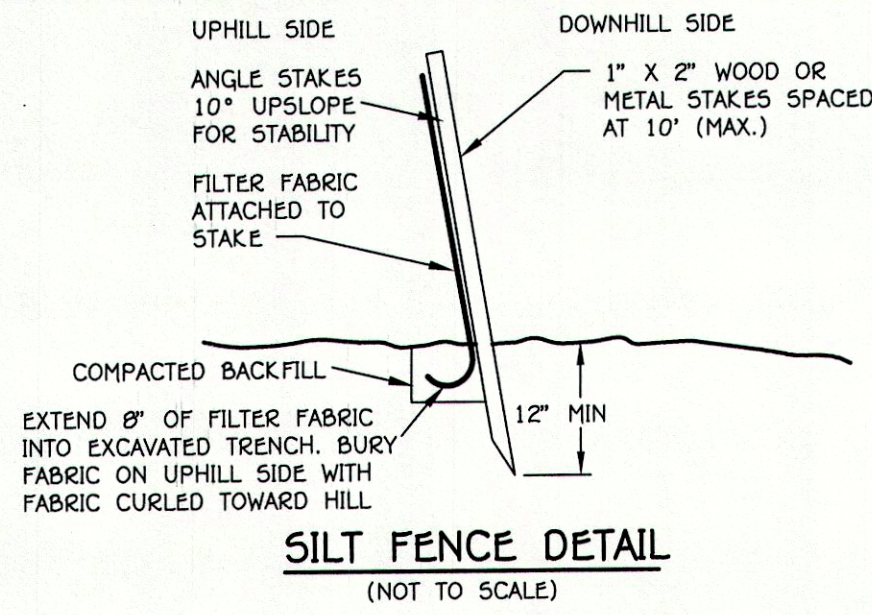
BOUNDARY LINES OF ADJOINING PROPERTIES ARE SHOWN FOR GENERAL INFORMATION PURPOSES ONLY AND ARE NOT TO BE CONSTRUED AS BEING ACCURATELY LOCATED OR DEPICTED.  
©2023 - ANGUS McDONALD / GARY SHARPE & ASSOCIATES, INC.  
THESE DRAWINGS ARE THE PROPERTY OF ANGUS McDONALD/GARY SHARPE & ASSOCIATES, INC. AND HAVE BEEN SPECIFICALLY PREPARED FOR THE OWNER OF THIS PROJECT OR PROPERTY. THEY ARE NOT TO BE DUPLICATED OR USED IN PART OR WHOLE FOR ANY OTHER PURPOSE, PROJECT, LOCATION OR OWNER WITHOUT THE EXPRESS WRITTEN CONSENT OF ANGUS McDONALD/GARY SHARPE & ASSOCIATES, INC.  
THE WORD "CERTIFY" AS USED IS UNDERSTOOD TO BE AN EXPRESSION OF PROFESSIONAL OPINION BY THE ENGINEER OR SURVEYOR. IT IS A DECLARATORY STATEMENT WHICH IS BASED ON HIS BEST KNOWLEDGE, INFORMATION AND BELIEF, AS SUCH IT CONSTITUTES NEITHER GUARANTEE NOR WARRANTY, EXPRESSED OR IMPLIED, OF ANY INFORMATION CONTAINED HEREON. NO CERTIFICATION IS EXPRESSED OR IMPLIED ON ANY



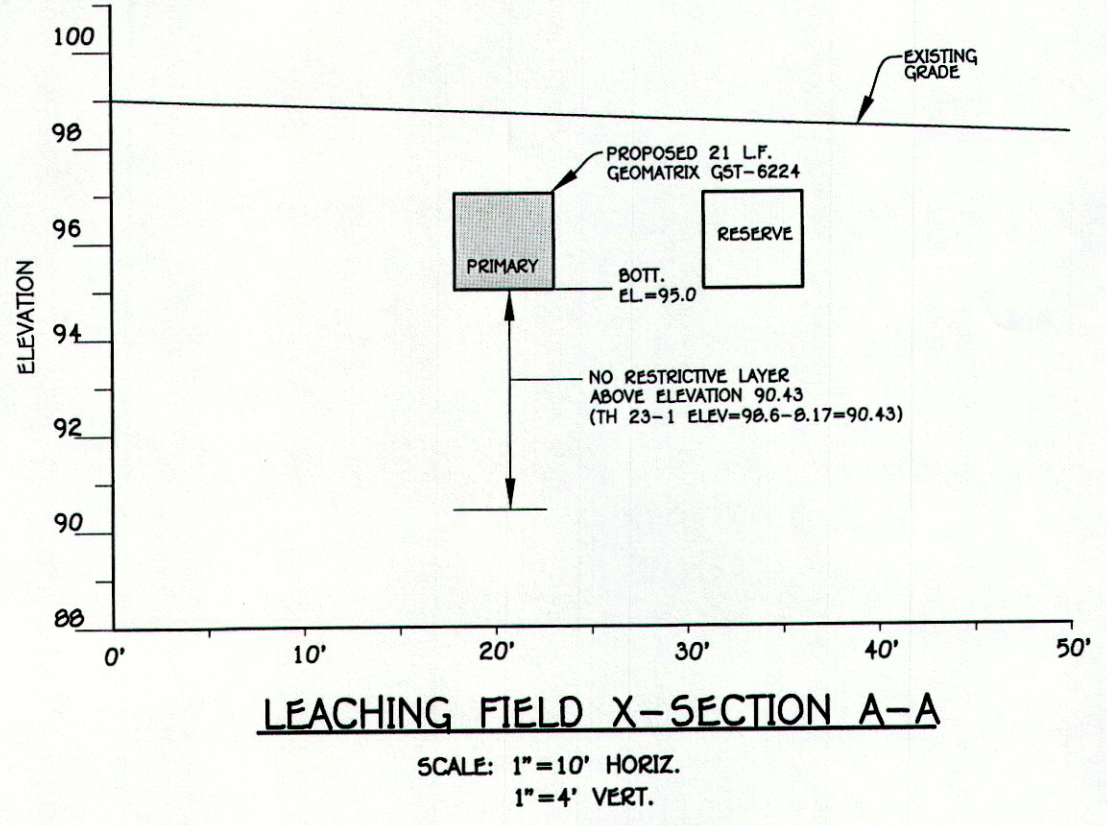
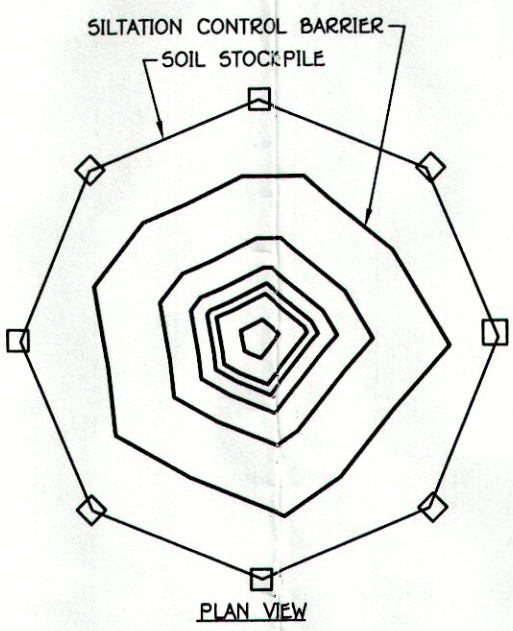
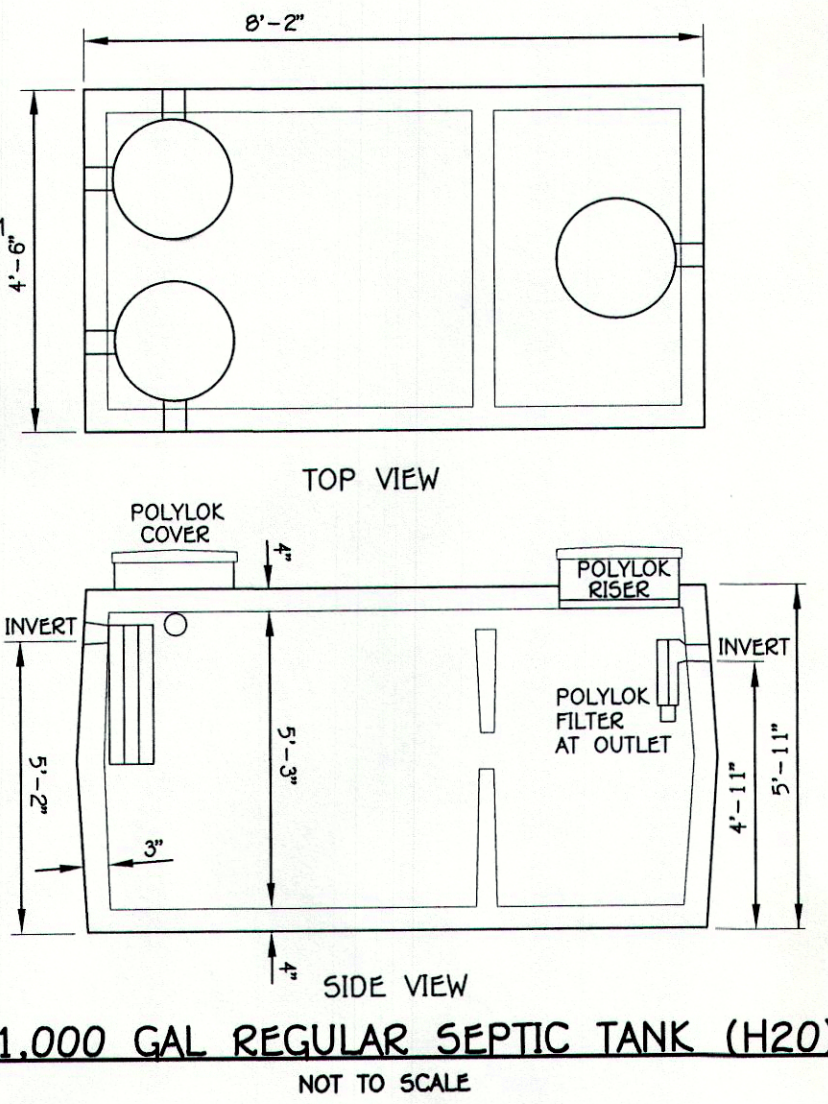
**ANGUS McDONALD  
GARY SHARPE  
& ASSOCIATES, INC.**  
SINCE 1966  
P.O. BOX 608, 233 BOSTON POST ROAD  
OLD SAYBROOK, CONNECTICUT 06476  
TEL. (860) 386-4671 FAX (860) 386-3882

**SITE DEVELOPMENT PLAN**  
MAP DEPICTING A PORTION OF PROPERTY OF  
**DAVID P. HAJJAR & KATHERINE A. HAJJAR**  
51 RIVER ROAD  
ESSEX, CONNECTICUT  
DATE: JULY 21, 2023 SCALE: 1"=20'  
DR'N MCM CK'D APP'D  
SHEET 1 of 2 JOB NO. 236869  
REVISIONS: 9-23-23 - PROPOSED HOUSE AND SEPTIC SYSTEM LOCATION REVISED  
9-28-23 - COASTAL RESOURCES AND SOIL TYPE DESIGNATIONS ADDED





- CONFORMS TO LATEST: ASTM DESIGNATION C1227
- NOTES:**
1. JOINT SEALANT IS BUTYL RUBBER MASTIC TYPE SEAL THAT CONFORMS TO LATEST AASHTO SPECIFICATION M-198. MEETS FEDERAL SPECIFICATION 55-5-0221 (210-A).
  2. PIPE INLET AND OUTLET LOCATIONS HAVE POLYLOK II PIPE SEALS.
  3. REINFORCING STEEL DEFORMED BARS CONFORM TO LATEST ASTM SPECIFICATION A615.
  4. REINFORCING STEEL WELDED WIRE FABRIC CONFORM TO LATEST ASTM SPEC. A185.
  5. CONCRETE COMPRESSIVE STRENGTH- 4000 PSI AT 28 DAYS.
  6. METHOD OF MANUFACTURE: WET CAST
  7. SECTIONS ARE MONOLITHIC.
  8. APPROX. TANK WEIGHT: 9500 LBS



**SEDIMENTATION AND EROSION CONTROL MEASURES**

1. CLEAR TREES, BRUSH FROM AREA TO BE GRADED.
2. INSTALL SILT FENCE EROSION BARRIER (SEE PLAN).
3. FILL AND GRADE ONLY THOSE AREAS SHOWN ON PLAN.
4. REMOVE ALL STONES, STUMPS, ETC. FROM GRADED AREA, THEN PLACE LOAM TO A DEPTH OF 4" OR MORE.
5. DURING SEED BED PREPARATION, APPLY FERTILIZER AT THE RATE OF 7.5 LBS. PER 1000 SQUARE FEET USING 10-10-10 OR EQUIVALENT.
6. SEED ALL EXPOSED AREAS WITH THE FOLLOWING SEED MIXTURE:  
 KENTUCKY BLUEGRASS 2.25 LBS/1000 SQ. FT.  
 CREEPING RED FESCUE 2.25 LBS/1000 SQ. FT.  
 PERENNIAL RYEGRASS .50 LBS/1000 SQ. FT.
7. AFTER SEEDING, MULCH SHOULD BE APPLIED TO EXPOSED AREAS. STRAW AND HAY MULCHES REQUIRE ANCHORING. THIS MAY BE ACCOMPLISHED BY THE USE OF A MULCHING ANCHORING LIQUID MULCH BINDER, OR BY DRIVING TRACKED EQUIPMENT UP AND DOWN THE SLOPE KEEPING THE TRACK CLEATS PERPENDICULAR TO THE SLOPE.
8. WHERE VEGETATIVE COVER HAS NOT BEEN ESTABLISHED PRIOR TO OCTOBER 30, APPLY JUTE MESH AS PER CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL.
9. ALL INSTALLED SEDIMENTATION AND EROSION CONTROL MEASURES MUST BE MAINTAINED UNTIL THE AREA IS ESTABLISHED. INSPECTIONS SHOULD BE MADE AT LEAST ONCE A WEEK AND AFTER EACH RAIN.

**CONSTRUCTION NOTES FOR SEPTIC SYSTEM**

1. REMOVE TOPSOIL FROM SYSTEM AREA AND STORE ON-SITE FOR FUTURE USE.
2. ENGINEER TO SET A BENCHMARK AND STAKE SEPTIC SYSTEM PRIOR TO CONSTRUCTION. ENGINEER TO AS-BUILT SEPTIC SYSTEM COMPONENTS PRIOR TO BACKFILL AND PRODUCE AN AS-BUILT MAP. CONTRACTOR TO NOTIFY ENGINEER (3) BUSINESS DAYS IN ADVANCE FOR REQUEST TO PERFORM STAKEOUT OR AS-BUILT SURVEYS.
3. PRIOR TO FILL PLACEMENT, KEEP HEAVY EQUIPMENT TRAFFIC TO A MINIMUM IN SYSTEM AREA TO AVOID COMPACTION OF SUBSOIL. SCARIFY SUBSOIL WHERE COMPACTED OR IF HEAVY RAIN FALLS DURING CONSTRUCTION WHEN SUBSOIL IS EXPOSED.
4. ANY UNSUITABLE MATERIAL ENCOUNTERED BELOW TOPSOIL TO BE REMOVED. AREA TO BE INSPECTED AND APPROVED BY DESIGN ENGINEER AND TOWN SANITARIAN PRIOR TO PLACEMENT OF FILL.
5. PLACE APPROVED FILL TO CONTOURS SHOWN IN 6" LIFTS. FILL IN SYSTEM AREA TO BE APPROVED BY TOWN SANITARIAN AND DESIGN ENGINEER, AND CONFORM TO THE FOLLOWING GRADATION DETERMINED BY WASHED SIEVE ANALYSIS:  
 A. THE SELECT FILL SHALL NOT CONTAIN ANY MATERIAL LARGER THAN THE #4 SIEVE.  
 B. UP TO 45% OF THE DRY WEIGHT OF THE REPRESENTATIVE SAMPLE MAY BE RETAINED ON THE #4 SIEVE.  
 C. THE MATERIAL THAT PASSES THE #4 SIEVE IS THE REWEIGHTED AND THE SIEVE ANALYSIS STARTED.  
 D. THE REMAINING MATERIAL SHALL MEET THE FOLLOWING GRADATION CRITERIA:

PERCENT PASSING	
SIEVE SIZE	WET SIEVE
#4	100
#10	70-100
#40	10-50
#100	0-20
#200	0-5

6. PERCENT PASSING THE #40 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%.
7. EXCAVATE AND INSTALL LEACHFIELD OR GALLERY. LEACHFIELD OR GALLERY MUST BE INSPECTED BY TOWN SANITARIAN BEFORE BACKFILLING.
8. AFTER BACKFILLING SYSTEM, GRADE, LOAM AND SEED ALL EXPOSED AREAS IMMEDIATELY. ALL SEEDING MUST BE COMPLETE PRIOR TO SEPTEMBER 15.
9. IMPLEMENT STEPS 5-9 OF SEDIMENTATION & EROSION CONTROL MEASURES.

**GRADATION TABLE FOR ASTM C-33 SAND TO BE USED IN GEOMATRIX PRODUCTS**

SIEVE SIZE	PERCENT PASSING
3/8"	100
#4	95-100
#8	80-100
#16	50-95
#30	25-60
#50	10-30
#100	2-10
#200	0-3

**GRADATION TABLE FOR CRUSHED AGGREGATE FILL TO BE USED AS COVER OVER GEOMATRIX PRODUCTS**

SIEVE SIZE	PERCENT PASSING
1 1/2"	100
3/4"	50-100
#4	25-50
#40	10-20
#100	5-15
#200	<10

**TEST HOLE DATA**  
DATE: 6-28-23  
PRESENT: DON MITCHELL (ESSEX HEALTH DEPARTMENT)  
FERN TREMBLAY (ALMGPS) HALLAHAN (EXCAVATOR)  
TH 23-1  
0-16" TOPSOIL-FILL  
16-28" BLANK  
28-98" BLANK  
NO WATER, NO MOTTLING, NO LEDGE

**TEST HOLE DATA**  
PERFORMED BY DOANE-COLLINS ENG. ASSOC., LLC  
& LISA FASULO, SANITARIAN, TOWN OF ESSEX  
12/9/14

**TH #1**  
0 - 7" TOPSOIL  
7 - 32" BROWN, FINE SANDY SUBSOIL  
32 - 84" RED/BROWN, MEDIUM/COARSE SAND, & GRAVEL  
NO LEDGE OBSERVED  
NO GROUNDWATER OBSERVED  
NO MOTTLING OBSERVED

**TH #2**  
0 - 6" TOPSOIL  
6 - 19" BROWN, FINE SANDY SUBSOIL  
19 - 84" RED/BROWN, MEDIUM/COARSE SAND, & GRAVEL  
NO LEDGE OBSERVED  
NO GROUNDWATER OBSERVED  
NO MOTTLING OBSERVED

**PERCOLATION TEST DATA**

DATE: 6-28-23  
DEPTH: 28"  
BEGIN PRESOAK: 10:20

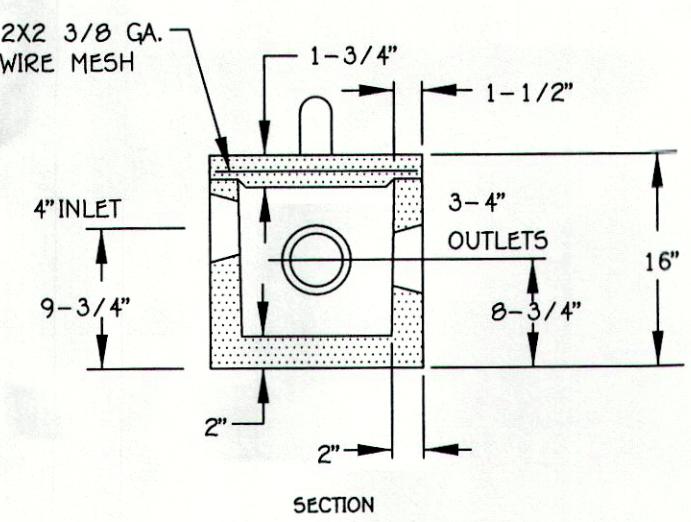
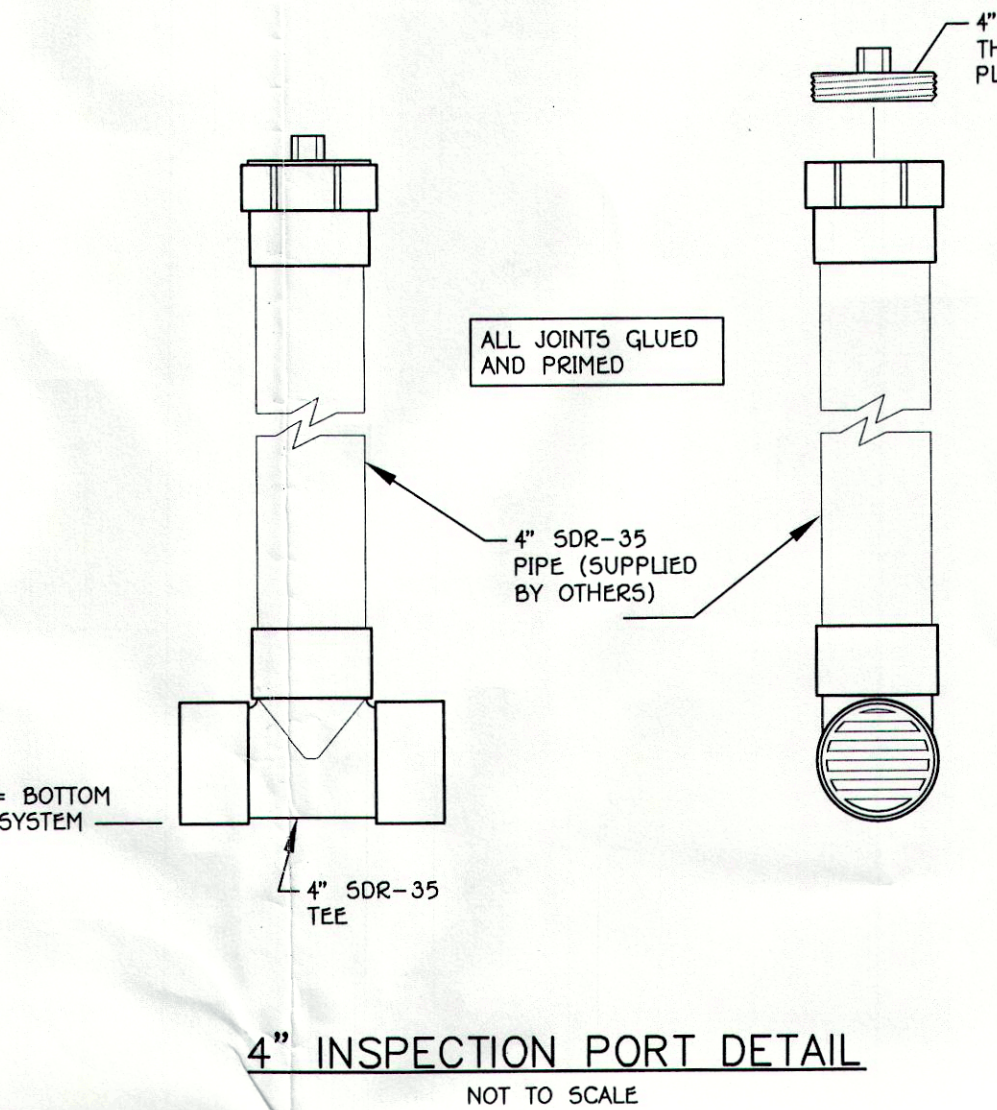
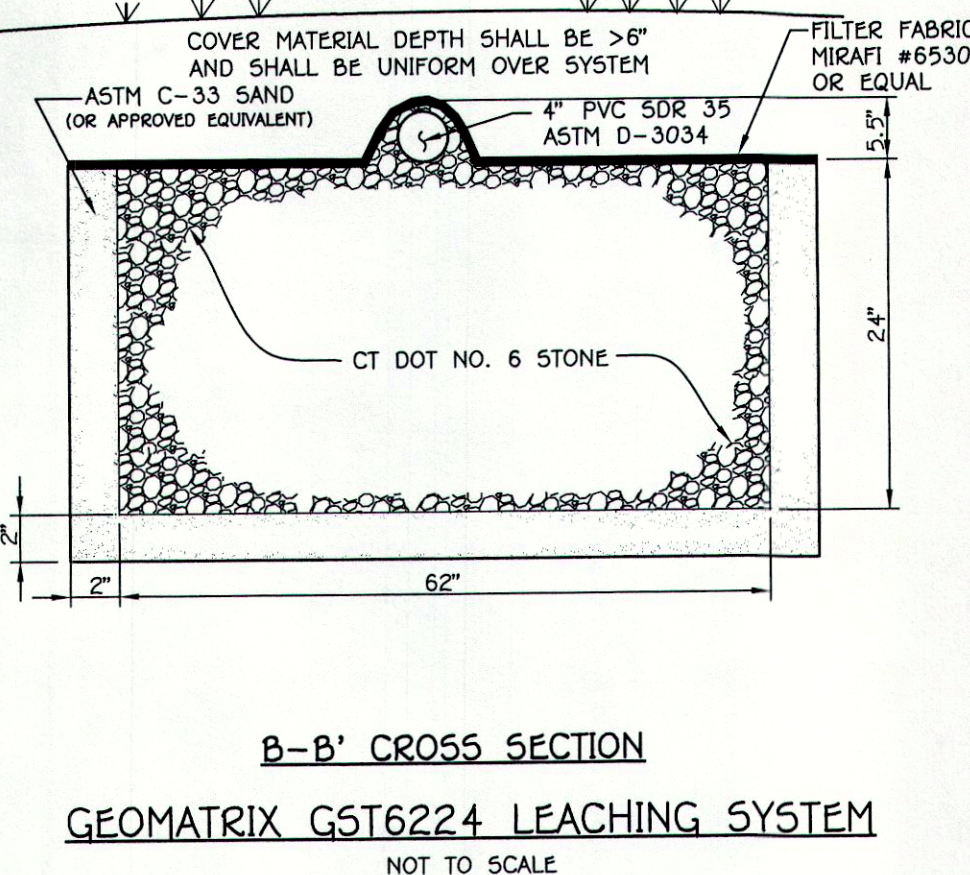
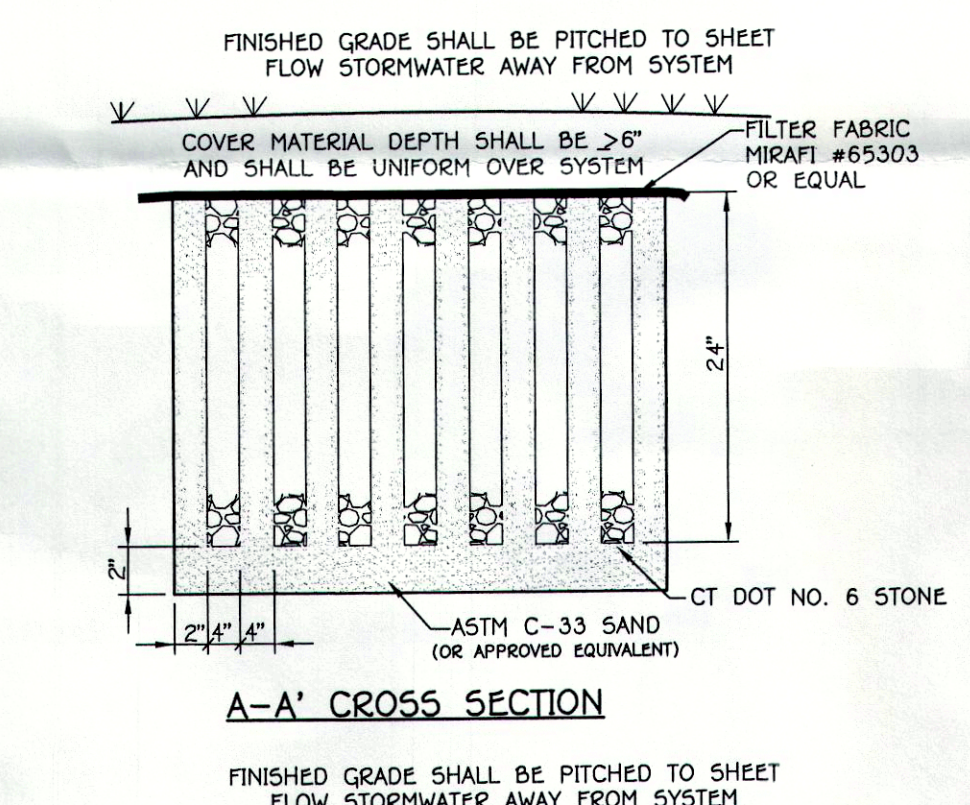
**PT. 1**

TIME: DROP:  
10:49 ABOUT DRY  
10:52 11 5/8"  
10:55 13 3/4"  
10:58 15 3/8"  
11:05 17 3/4"  
11:12 19 5/8"  
11:21 21 3/8"

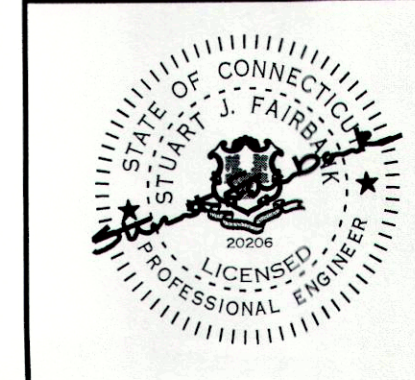
PERCOLATION RATE= 5.1 MIN/INCH

**SEPTIC SYSTEM DESIGN CRITERIA**  
PROPOSED 2 BEDROOM GUEST HOUSE  
EXISTING 3 BEDROOM HOME  
DESIGN PERCOLATION RATE = 1-10 MIN./IN.  
375 S.F. LEACHING AREA REQUIRED  
PROVIDE 1 RUN 21 L.F. (GEOMATRIX GST 6224)  
21 L.F. x 18.1 S.F./L.F. = 380.1 S.F. LEACHING AREA PROVIDED

**MLSS CALCULATION**  
RESTRICTIVE LAYER >60", NO MLSS NECESSARY



STUART J. FAIRBANK  
CONN. P.E. #20206

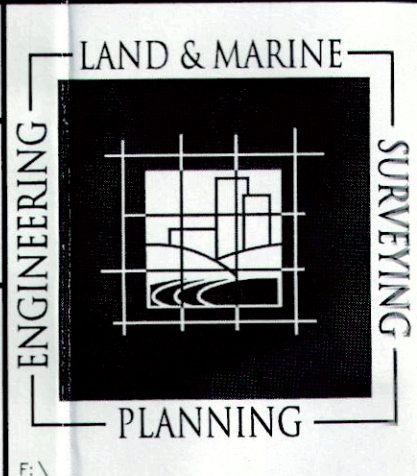


BOUNDARY LINES OF ADJOINING PROPERTIES ARE SHOWN FOR GENERAL INFORMATIONAL PURPOSES ONLY AND ARE NOT TO BE CONSTRUED AS BEING ACCURATELY LOCATED OR DEPICTED.

©2023 - ANGUS McDONALD / GARY SHARPE & ASSOCIATES, INC.

THESE DRAWINGS ARE THE PROPERTY OF ANGUS McDONALD/GARY SHARPE & ASSOCIATES, INC. AND HAVE BEEN SPECIFICALLY PREPARED FOR THE OWNER OF THIS PROJECT OR PROPERTY. THEY ARE NOT TO BE REPRODUCED OR USED IN PART OR WHOLE FOR ANY OTHER PURPOSE, PROJECT, LOCATION OR OWNER WITHOUT THE EXPRESS WRITTEN CONSENT OF ANGUS McDONALD/GARY SHARPE & ASSOCIATES, INC.

THE WORD "CERTIFY" AS USED IS UNDERSTOOD TO BE AN EXPRESSION OF PROFESSIONAL OPINION BY THE ENGINEER OR SURVEYOR. IT IS A DECLARATORY STATEMENT WHICH IS BASED ON HIS BEST KNOWLEDGE, INFORMATION AND BELIEF, AS SUCH IT CONSTITUTES NEITHER GUARANTEE NOR WARRANTY, EXPRESSED OR IMPLIED, OF ANY INFORMATION CONTAINED HEREON. NO CERTIFICATION IS EXPRESSED OR IMPLIED ON ANY ORIGINAL OR ANY DUPLICATE OF THIS PLAN UNLESS IT BEARS AN ORIGINAL STAMP OR SEAL AND ORIGINAL SIGNATURE OF THE INDIVIDUAL WHOSE REGISTRATION NUMBER APPEARS HEREON.



**ANGUS McDONALD GARY SHARPE & ASSOCIATES, INC.**  
SINCE 1966

P.O. BOX 608, 238 BOSTON POST ROAD  
OLD SAYBROOK, CONNECTICUT 06470  
TEL. (860) 386-4571 FAX (860) 386-3862

**SITE DEVELOPMENT PLAN**  
MAP DEPICTING A PORTION OF PROPERTY OF  
**DAVID P. HAJJAR & KATHERINE A. HAJJAR**  
51 RIVER ROAD  
ESSEX, CONNECTICUT  
DATE: JULY 21, 2023 SCALE: 1"=20'

DR'N MCM CKD APPD

SHEET 2 of 2 JOB NO. 238689

REVISIONS: 8-23-23 - PROPOSED HOUSE AND SEPTIC SYSTEM LOCATION REVISED  
9-28-23 - COASTAL RESOURCES AND SDR TYPE DESIGNATIONS ADDED