

**REVISIONS:**

No.	DESCRIPTION	DATE
1.	REV. PER BOH	11/16/20

**GENERAL NOTES:**

- THIS PLAN IS FOR DESIGN AND CONSTRUCTION OF THE SEWAGE DISPOSAL FACILITY ONLY.
- ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO MASS. D.E.P. TITLE 3 AND LOCAL BOARD OF HEALTH REGULATIONS.
- ALL PIPES SHALL BE 4" PVC SCH 40 OR EQUAL.
- THERE ARE NO KNOWN WELLS LOCATED WITHIN 150 FT OF THE PROPOSED LEACHING FACILITY NOR ANY WELLS PROPOSED WITHIN 150 FT OF ANY KNOWN LEACHING FACILITY.
- THIS SYSTEM IS NOT DESIGNED FOR THE USE OF A GARBAGE GRINDER.
- WITHIN LIMIT OF EXCAVATION REMOVE ALL TOPSOIL (A), SUBSOIL (B) AND OTHER UNSUITABLE MATERIAL BELOW EXISTING GRADE.
- REPLACE WITH CLEAN WASHED SAND OR OTHER CLEAN GRANULAR MATERIAL IN CONFORMANCE WITH 310 CMR 15.255.
- EXISTING UTILITIES AS SHOWN ON THIS DRAWING(S) ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER LOCATION AND THE COORDINATION OF PROPOSED CONSTRUCTION ACTIVITY WITH DIG-SAFE AND THE APPLICABLE UTILITY COMPANY(S). THE CONTRACTOR SHALL MAINTAIN ANY EXISTING UTILITY SYSTEM IN SERVICE. DIG-SAFE WILL BE NOTIFIED PER STATE OF MASS-ASCHUSETTS STATUTE CHAPTER 82, SECTION 40A BY TEL. 811. THIS ENGINEER DOES NOT GUARANTEE THE ACCURACY OF OR THAT ALL UTILITIES AND SUBSURFACE STRUCTURES ARE SHOWN. LOCATIONS AND ELEVATIONS, IF ANY, OF UNDERGROUND UTILITIES ARE TAKEN FROM RECORD PLANS; THE CONTRACTOR SHALL VERIFY SIZE, LOCATION AND INVERTS OF UTILITIES AND STRUCTURES AS REQUIRED PRIOR TO THE START OF CONSTRUCTION.
- NO CHANGES ARE TO BE MADE IN THE FIELD WITHOUT THE APPROVAL OF THE DUXBURY BOARD OF HEALTH AND THE DESIGN ENGINEER.

### CONSTRUCTION NOTES

- INSPECTION PORT SHALL CONFORM TO 310 CMR 15.240 (13).
- MAGNETIC TAPE TO BE PROVIDED ON TOP OF ALL COMPONENTS IN ACCORDANCE WITH TITLE 5.
- REFER TO ATTACHED PLANS FROM BIO-MICROBICS FOR DETAILS OF MICROFAST 0.5 TREATMENT UNIT AND COMPONENTS.
- PRIOR TO INSTALLATION OF THE TREATMENT UNIT, THE OWNER AND THE TREATMENT UNIT OPERATOR SHALL AGREE ON A LOCATION OF THE SERVICE PANEL AND ALARMS.

**SEWAGE DISPOSAL SYSTEM AND THE DWELLING DO NOT FALL WITHIN A "ZONE I" OF A SURFACE WATER PROTECTION AREA BUT IS IN A "ZONE II" OF A "INTERIM WELLHEAD PROTECTION AREA".**

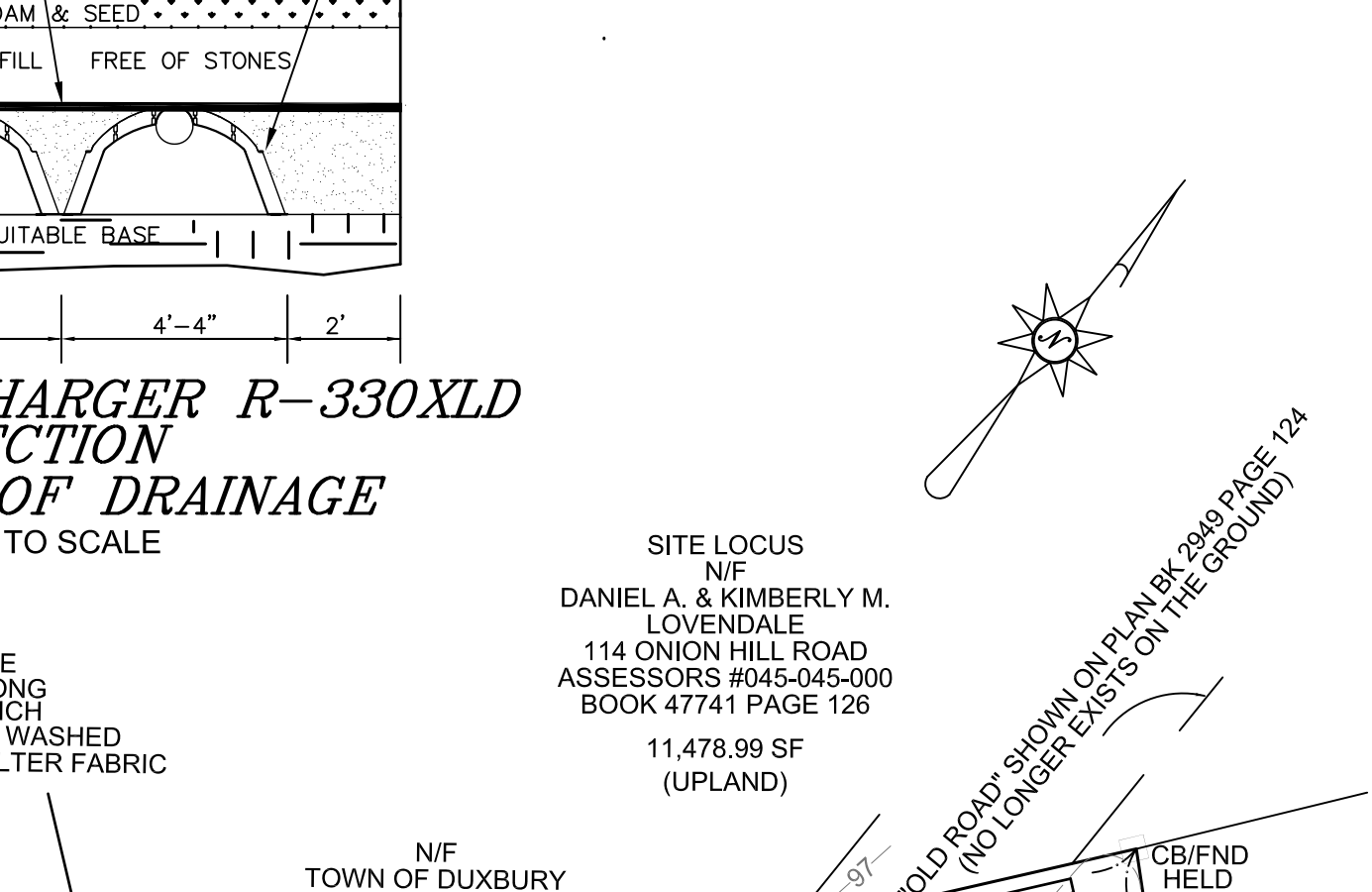
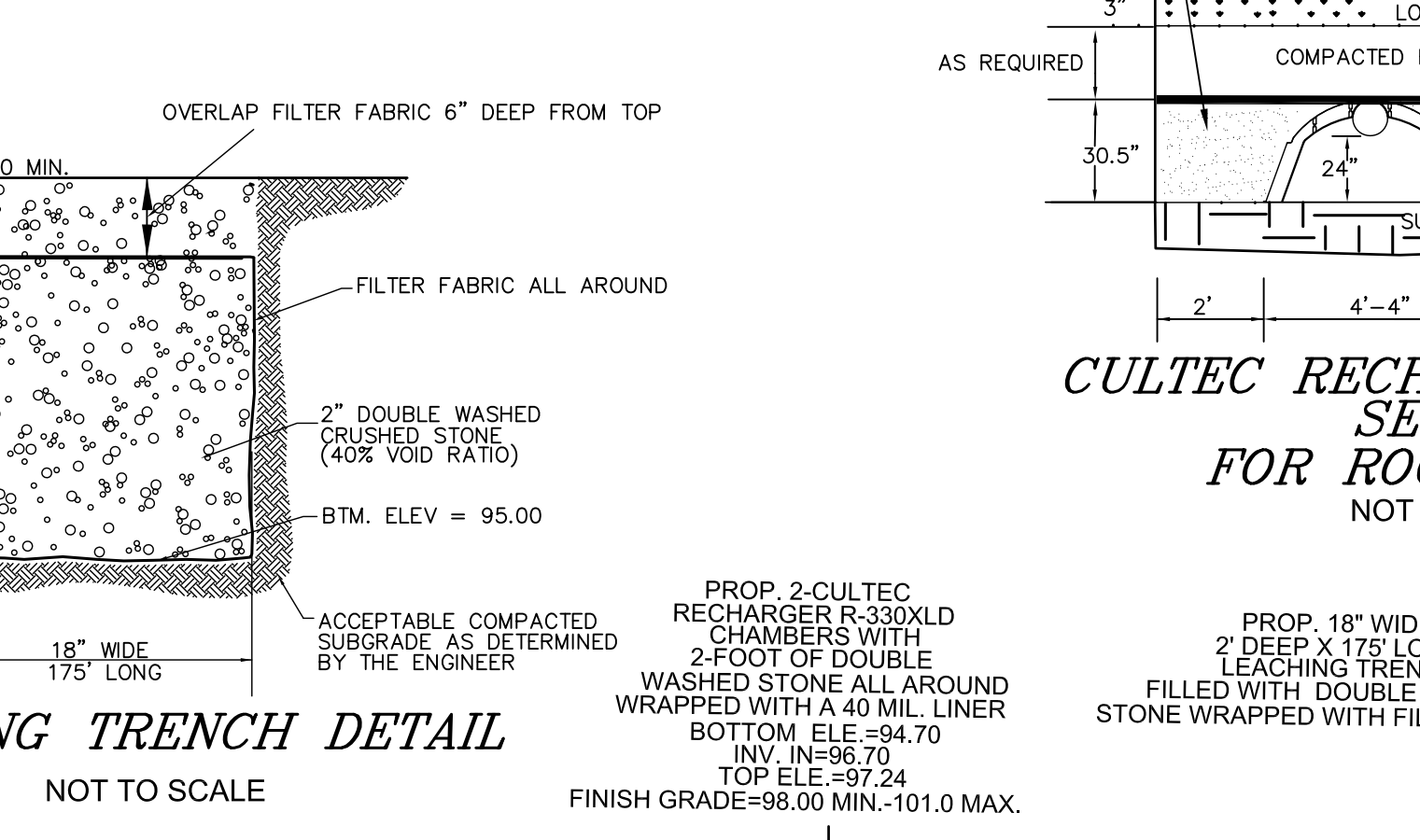
**THIS SITE FALLS WITHIN A FLOOD ZONE "X" AND IS NOT IN A SPECIAL FLOOD HAZARD AREA AS SHOWN ON FIRM MAP 25023C0236J DATED JULY 12, 2012**

**THIS DESIGN DOES NOT REQUIRE VARIANCE FROM TITLE 5 AND DOES NOT REQUIRE A VARIANCE FROM THE DUXBURY SUPPLEMENTARY RULES & REGULATIONS TO TITLE 5.**

**THERE ARE NO KNOWN WETLANDS WITHIN 150' OF THE SOIL ABSORPTION SYSTEM.**

**THERE ARE NO KNOWN IRRIGATION WELLS WITHIN 100' OF THE SYSTEM. THERE ARE NO KNOWN PRIVATE WATER SUPPLY WELLS WITHIN 150' OF THE SYSTEM.**

**THIS SITE DOES NOT FALL WITHIN AN ESTIMATED OR PRIORITY NATURAL HERITAGE ENDANGERED SPECIES HABITAT MAPPED AREA.**



### INVERT ELEVATIONS:

4" INVERT AT BUILDING	99.75
4" INVERT AT MICRO-FAST UNIT (IN)	99.55
4" INVERT AT MICRO-FAST UNIT (OUT)	99.30
4" INVERT AT D-BOX (IN)	99.26
4" INVERT AT D-BOX (OUT)	99.09

### INVERTS AT LEACHING FACILITY:

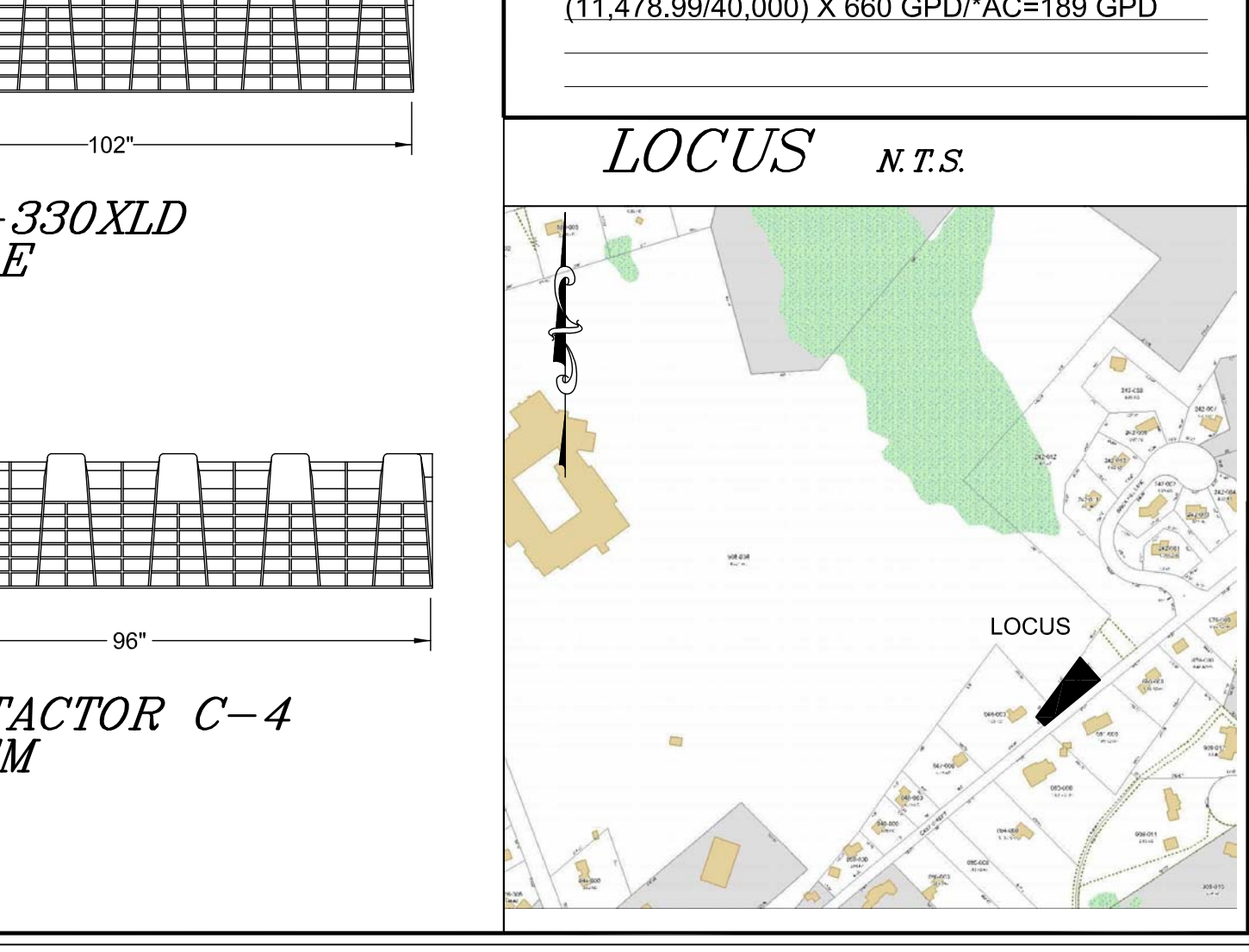
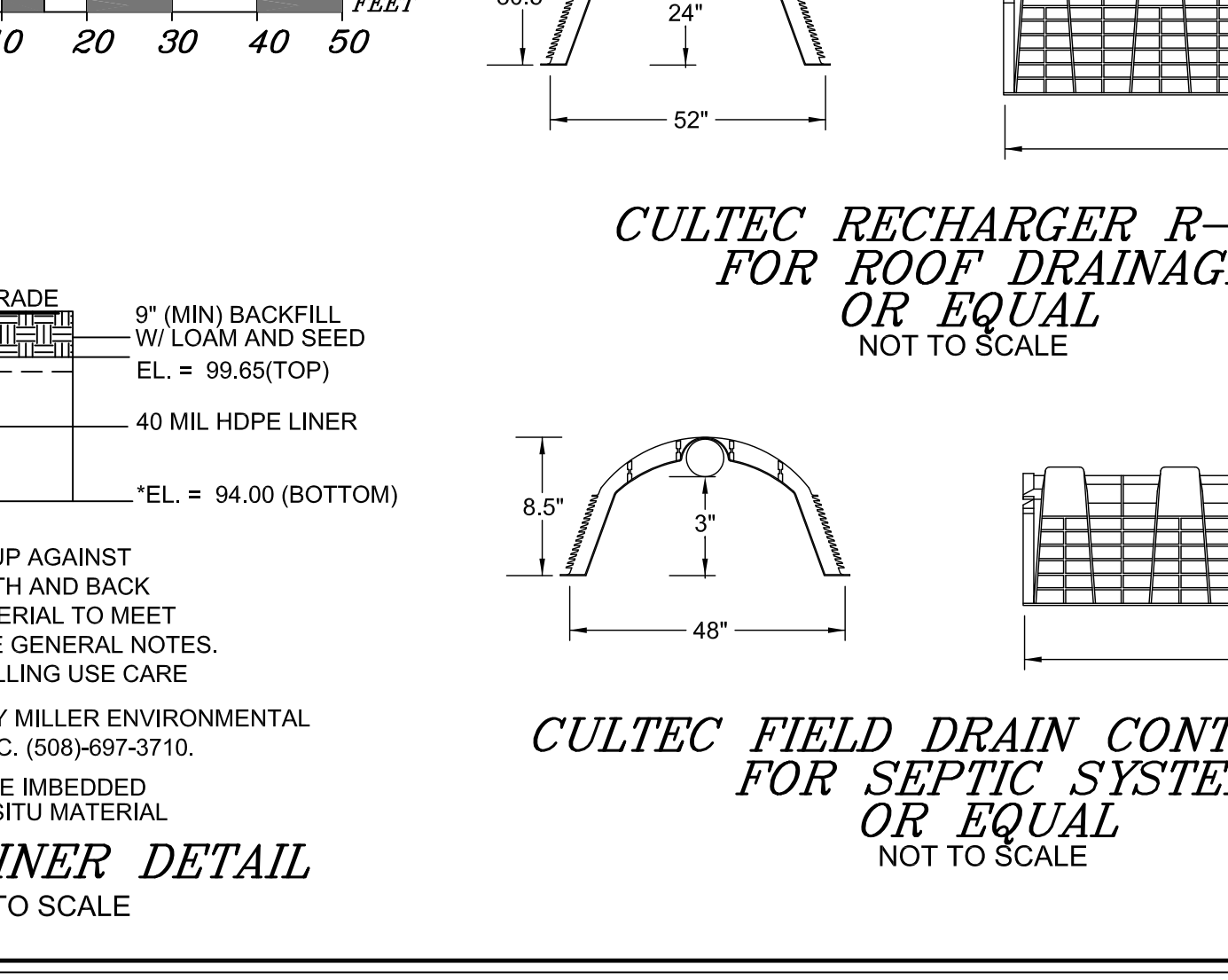
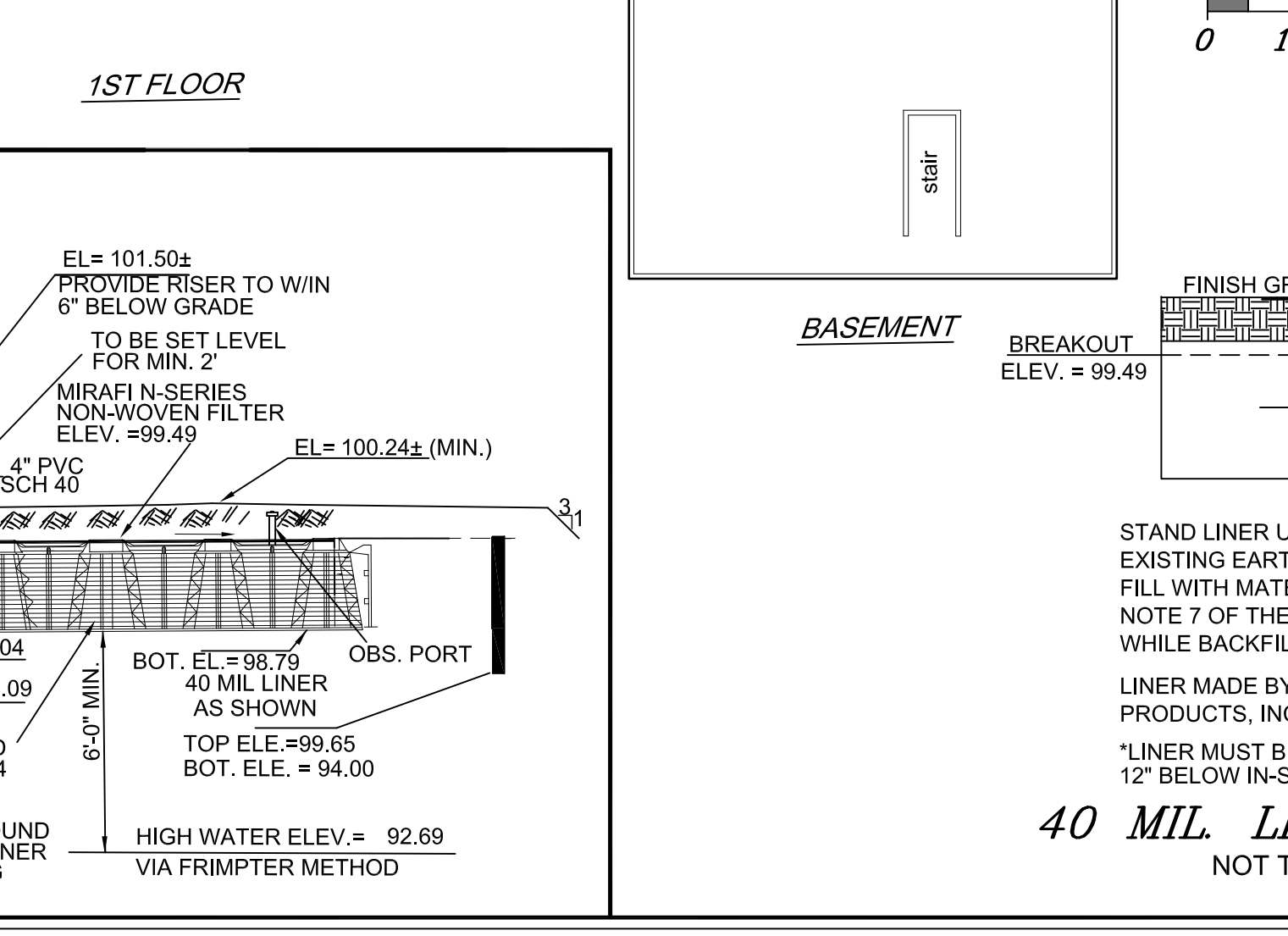
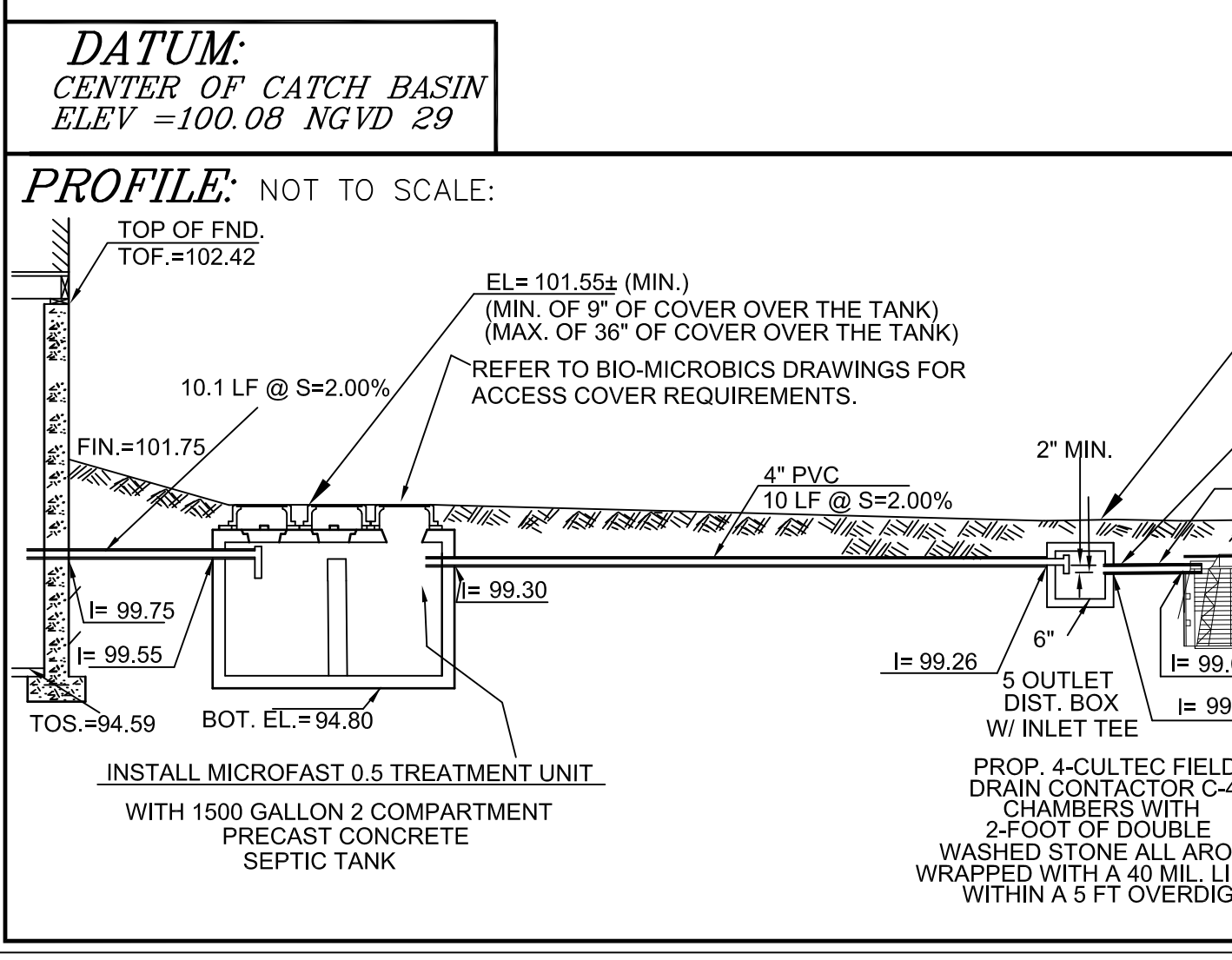
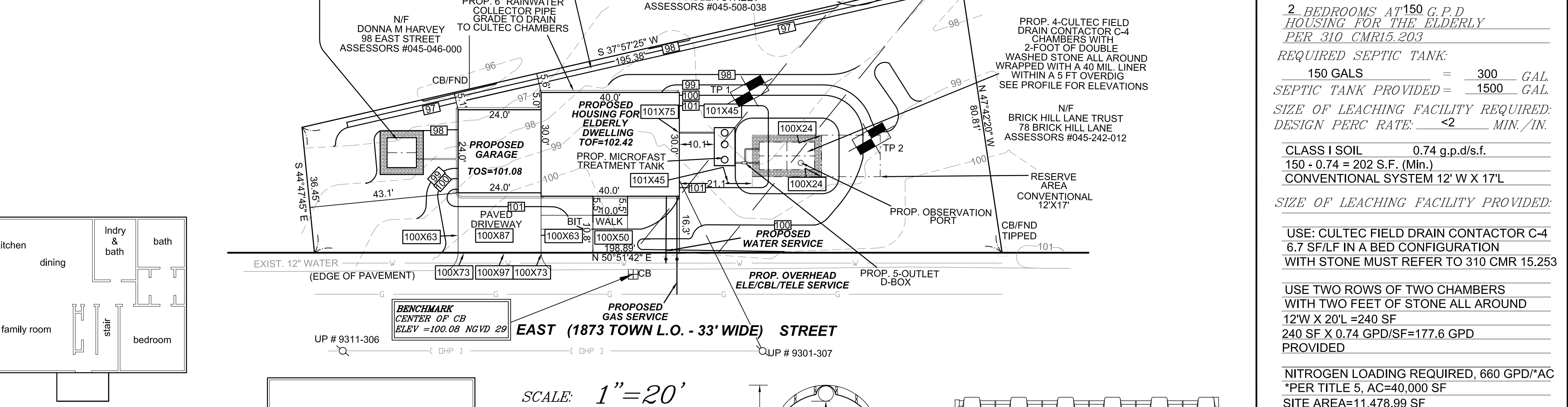
4" INVERT AT INTO CHAMBER FIELD	99.04
ELEVATION AT TOP OF CHAMBERS	99.49
ELEVATION AT BOTTOM OF CHAMBERS	98.79
GROUNDWATER ELEVATION VIA FRIMPTER METHOD	92.69

### PARCELS WITHIN 150' OF SOIL ABSORPTION SYSTEM:

045-046-000	98 EAST ST.	TOWN WATER
045-008-038	93 CHANDLER ST.	TOWN WATER
045-242-012	78 BRICK HILL LANE	TOWN WATER
045-080-000	131 EAST ST.	TOWN WATER
045-081-000	107 EAST ST.	TOWN WATER
045-083-000	93 EAST ST.	TOWN WATER

**2ND FLOOR**

**1ST FLOOR**



**DESIGN CRITERIA:**

**DESIGN FLOW PER LOCAL REG.:**

2 BEDROOMS AT 150 G.P.D HOUSING FOR THE ELDERLY PER 310 CMR15.203

**REQUIRED SEPTIC TANK:**

150 GALS = 300 GAL

SEPTIC TANK PROVIDED = 1500 GAL

**SIZE OF LEACHING FACILITY REQUIRED:**

DESIGN PERC RATE: <2 MIN./IN.

**CLASS I SOIL** 0.74 g.p.d/s.f.

150 x 0.74 = 202 S.F. (Min.)

CONVENTIONAL SYSTEM 12' W X 17' L

**SIZE OF LEACHING FACILITY PROVIDED:**

USE: CULTEC FIELD DRAIN CONTACTOR C-4

6.7 SF/IF IN A BED CONFIGURATION

WITH STONE MUST REFER TO 310 CMR 15.253

USE TWO ROWS OF TWO CHAMBERS WITH TWO FEET OF STONE ALL AROUND

12' W X 20' L = 240 SF

240 SF X 0.74 GPD/SF = 177.6 GPD PROVIDED

NITROGEN LOADING REQUIRED, 660 GPD/\*AC \*PER TITLE 5, AC=40,000 SF

SITE AREA=11,478.99 SF

(11,478.99/40,000) X 660 GPD/\*AC=189 GPD

**LOCUS N.T.S.**

**PREPARED BY:**

**South Shore Survey Consultants, Inc.**

Registered Land Surveyors & Civil Engineers

167 R Summer Street  
Kingston, MA 02364  
781-582-2185  
mark@ssscinc.net

**PROJECT TITLE:**

**NEW CONSTRUCTION SEWAGE DISPOSAL SYSTEM DESIGN**

AT

0 EAST ST.  
DUXBURY, MA.  
ASSRS # 045-045-000

**PREPARED FOR:**

**LOVENDALE LLC**  
114 ONION HILL RD.  
DUXBURY, MA 02332

**DATE:** NOVEMBER 11, 2020

**COMP/DESIGN:** A. ESPOSITO

**CHECK:** M. D. CASEY

**DRAWN:** A. ESPOSITO

**FIELD:** J.M./P.P.

**APPROVED:** M. D. CASEY

**DWG. No. 1902 SEP**

**JOB No. 1902**

**1 SHEET OF 1**