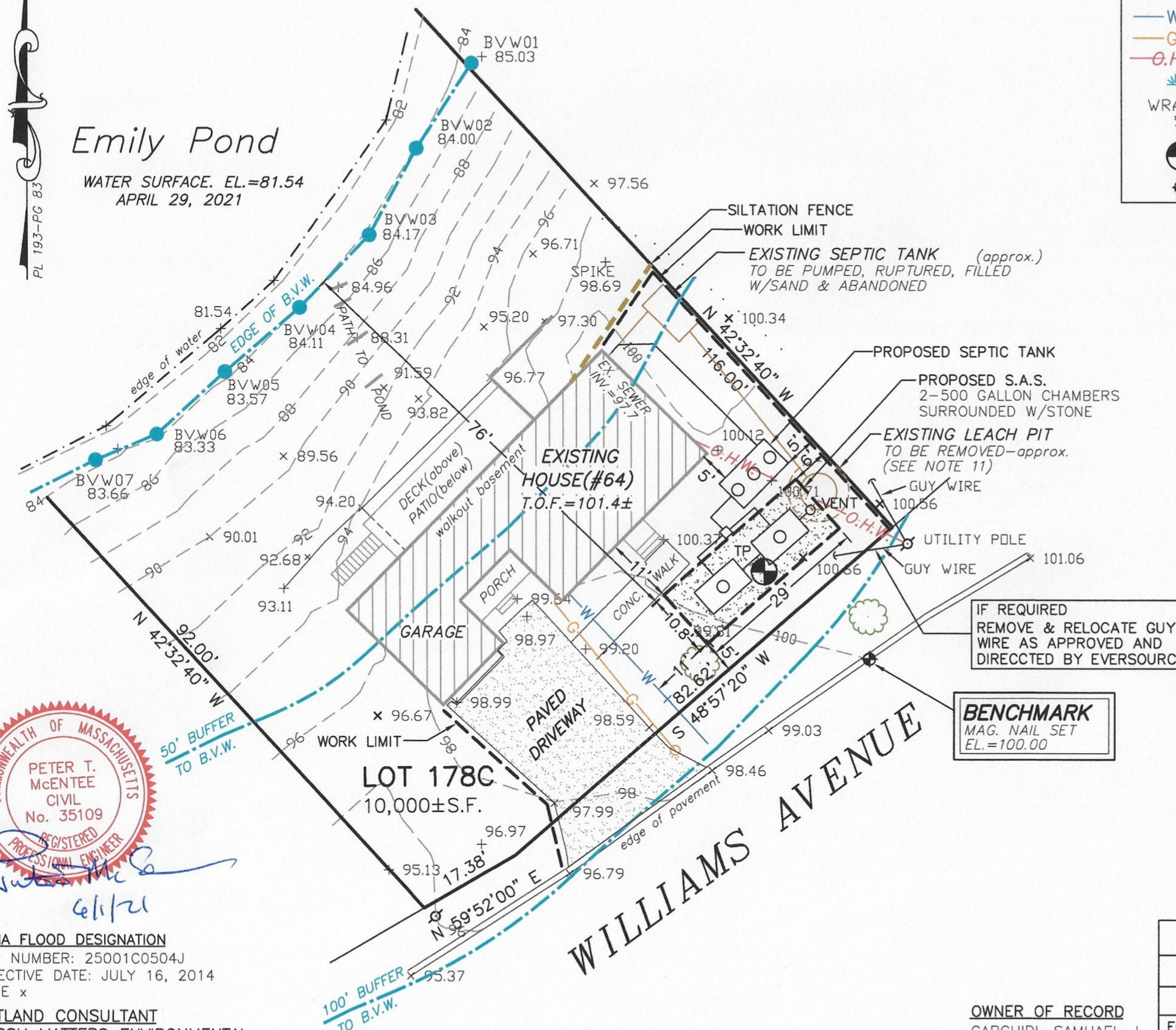


PL 193-PC 83

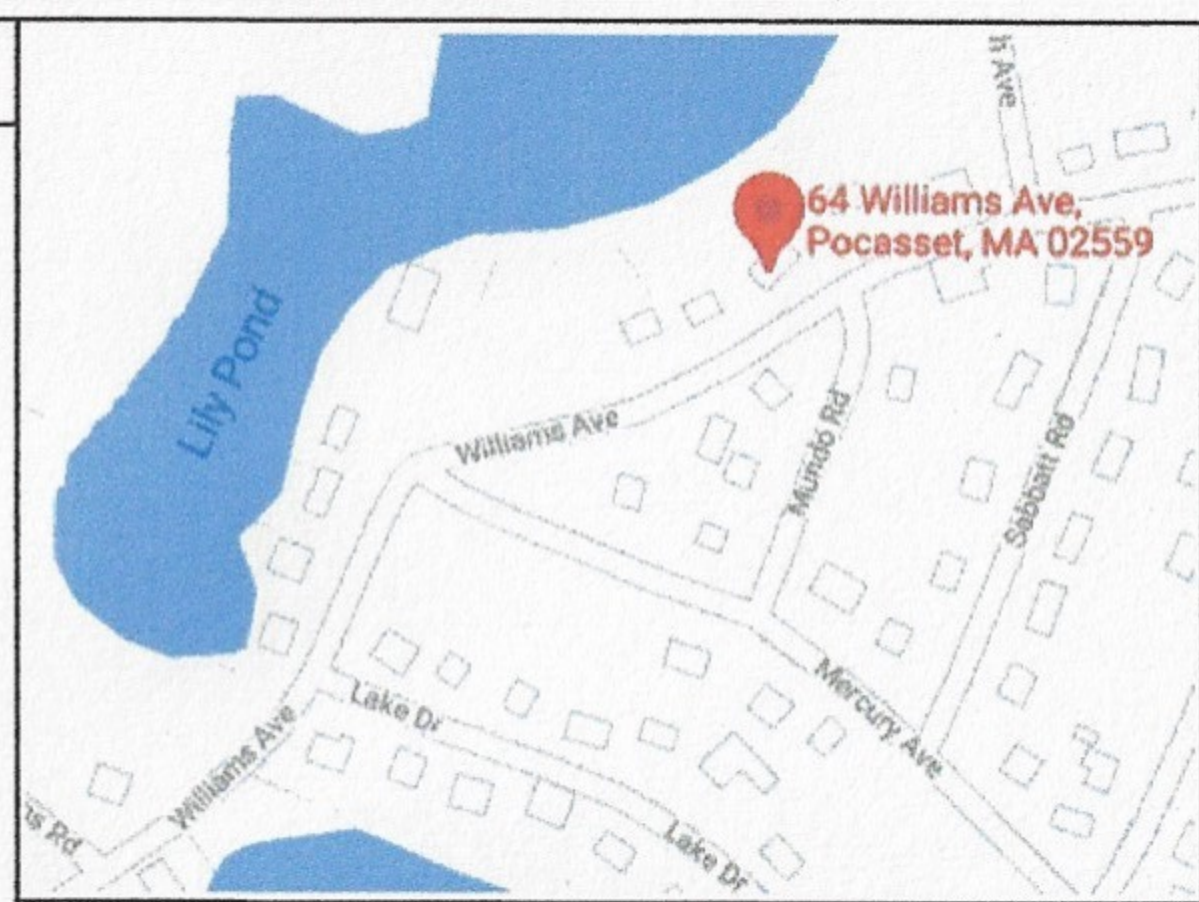
# Emily Pond

WATER SURFACE. EL.=81.54  
APRIL 29, 2021



## LEGEND

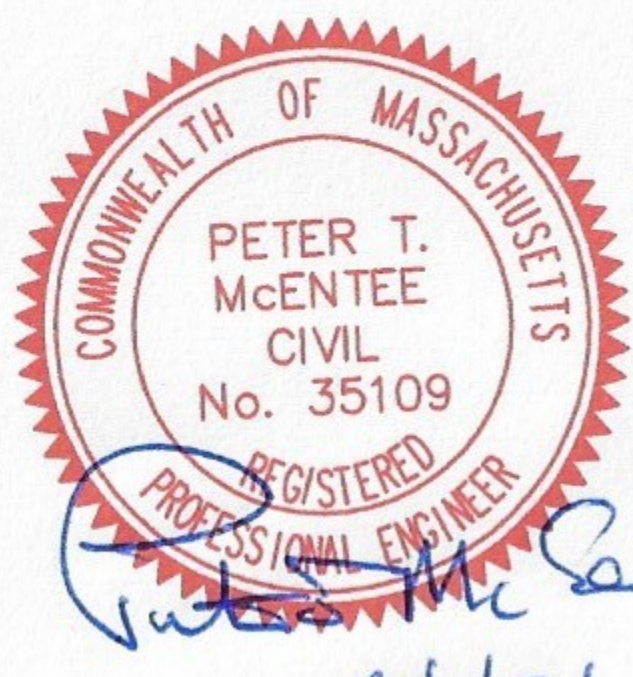
- 88--- EXISTING CONTOUR
- x 88.98 EXISTING SPOT GRADE
- W EXISTING WATER SERVICE
- G EXISTING GAS SERVICE
- O.H.W. OVERHEAD WIRES
- WETLAND SYMBOL
- WRA09 5.62 WETLAND FLAG
- TP TEST PIT
- BENCHMARK



LOCUS MAP

## GENERAL NOTES:

1. ALL CHANGES TO THIS PLAN MUST BE APPROVED BY THE LOCAL BOARD OF HEALTH AND THE DESIGN ENGINEER.
2. ALL WORK AND MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF THE STATE ENVIRONMENTAL CODE, TITLE V, AND ANY APPLICABLE LOCAL RULES AND REGULATIONS, EXCEPT AS REQUESTED BELOW:  
**-310 CMR 15.405(1)(a)&(b): LOCAL UPGRADE APPROVAL**
  - 1) A 4' variance, S.A.S. to side property line, for a 6' setback.
  - 2) A 5' variance, S.A.S. to front property line, for a 5' setback.
  - 3) A 5' variance, septic tank to side property line, for a 5' setback.
  - 4) A 9' variance, S.A.S. to cellar wall, for an 11' setback.
  - 5) A 5' variance, septic tank to cellar wall, for a 5' setback.
  - 6) A 1'± variance, to the 3' max. depth of cover requirement, for 4'± of cover over the S.A.S.**-LOCAL REGULATION - 150' SETBACK TO WETLANDS**
  - 7) A 74' variance, S.A.S. to B.V.W., for a 76' setback.
3. THE SEWAGE DISPOSAL SYSTEM SHALL NOT BE BACKFILLED PRIOR TO INSPECTION AND APPROVAL BY THE BOARD OF HEALTH AND THE DESIGN ENGINEER.
4. ANY CONDITIONS ENCOUNTERED DURING CONSTRUCTION DIFFERING FROM THOSE SHOWN HEREON SHALL BE REPORTED TO THE DESIGN ENGINEER BEFORE CONSTRUCTION CONTINUES.
5. ALL ELEVATIONS BASED ON AN ASSUMED DATUM.
6. THE DESIGN ENGINEER IS NOT RESPONSIBLE FOR THE FAILURE OF THE CONTRACTOR OR OWNER TO NOTIFY THE LOCAL BOARD OF HEALTH FOR PROPER INSPECTIONS DURING CONSTRUCTION.
7. WATER SUPPLY PROVIDED BY TOWN WATER SERVICE.
8. THERE ARE NO WELLS WITHIN 100' OF THE PROPOSED S.A.S.
9. ALL AREAS CLEARED FOR CONSTRUCTION SHALL BE RESTORED AS AGREED UPON BY OWNER AND CONTRACTOR OR AS OTHERWISE DIRECTED BY THE APPROVING AUTHORITIES.
10. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES, PRIOR TO BEGINNING CONSTRUCTION.
11. WHERE REQUIRED, CONTRACTOR SHALL REMOVE ALL UNSUITABLE SOILS IN THE AREA BENEATH AND FOR 5' ON ALL SIDES OF THE S.A.S. AND REPLACE WITH CLEAN SAND AS SPECIFIED IN 310 CMR 255(3).
12. AREAS REQUIRING STRIPOUT OF UNSUITABLE MATERIALS SHALL BE INSPECTED BY DESIGN ENGINEER PRIOR TO BACKFILL.
13. THIS PLAN IS TO BE USED FOR SEPTIC SYSTEM PURPOSES ONLY AND NOT CONSIDERED TO BE A PROPERTY LINE SURVEY.
14. THE ENGINEER IS NOT RESPONSIBLE FOR ANY UNDOCUMENTED SEPTIC SYSTEM COMPONENTS NOT SHOWN ON THE PLAN.



FEMA FLOOD DESIGNATION  
MAP NUMBER: 25001C0504J  
EFFECTIVE DATE: JULY 16, 2014  
ZONE X

WETLAND CONSULTANT  
MARSH MATTERS ENVIRONMENTAL  
P.O. BOX 554  
FORESTDALE, MA 02644  
978-434-1228

IF REQUIRED  
REMOVE & RELOCATE GUY  
WIRE AS APPROVED AND  
DIRECCED BY EVERSOURCE.

**BENCHMARK**  
MAG. NAIL SET  
EL.=100.00

OWNER OF RECORD  
CARCHIDI, SAMUAEL J  
C/O MARK CARCHIDI  
370 COTUIT ROAD  
SANDWICH, MA 02563

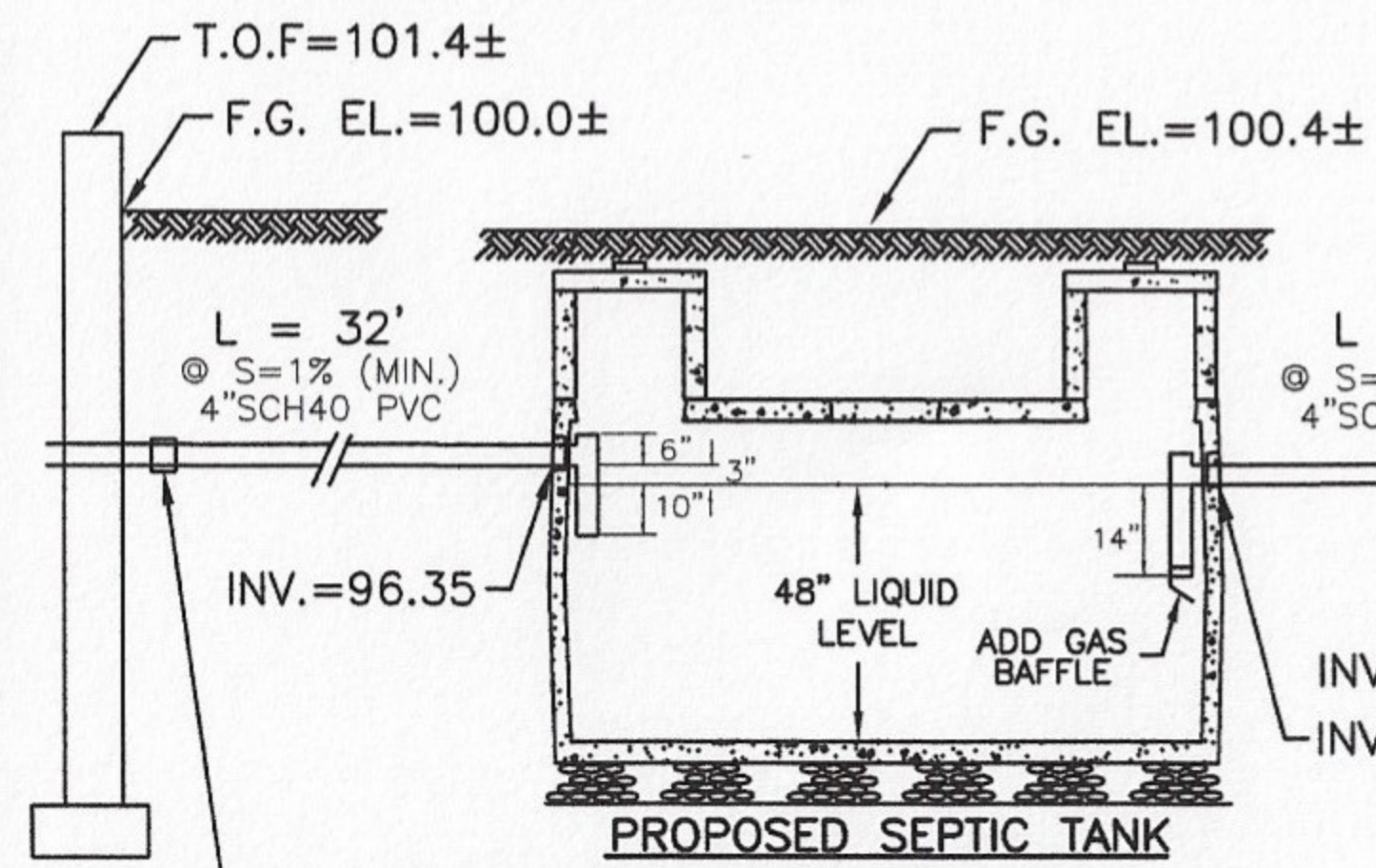
PROPOSED SEPTIC SYSTEM UPGRADE PLAN			
64 WILLIAMS AVENUE, POCASSET, MA			
Prepared for: Mark Carchidi, 370 Cotuit Road, Sandwich, MA 02563			
Engineering by:	SCALE	DRAWN	JOB. NO.
<b>Engineering Works, Inc.</b>	1"=20'	P.T.M.	139-21
12 West Crossfield Road, Forestdale, MA 02644	DATE	CHECKED	SHEET NO.
(508) 477-5313	6/1/21	P.T.M.	1 of 2

PARCEL ID: 44.2-10-0



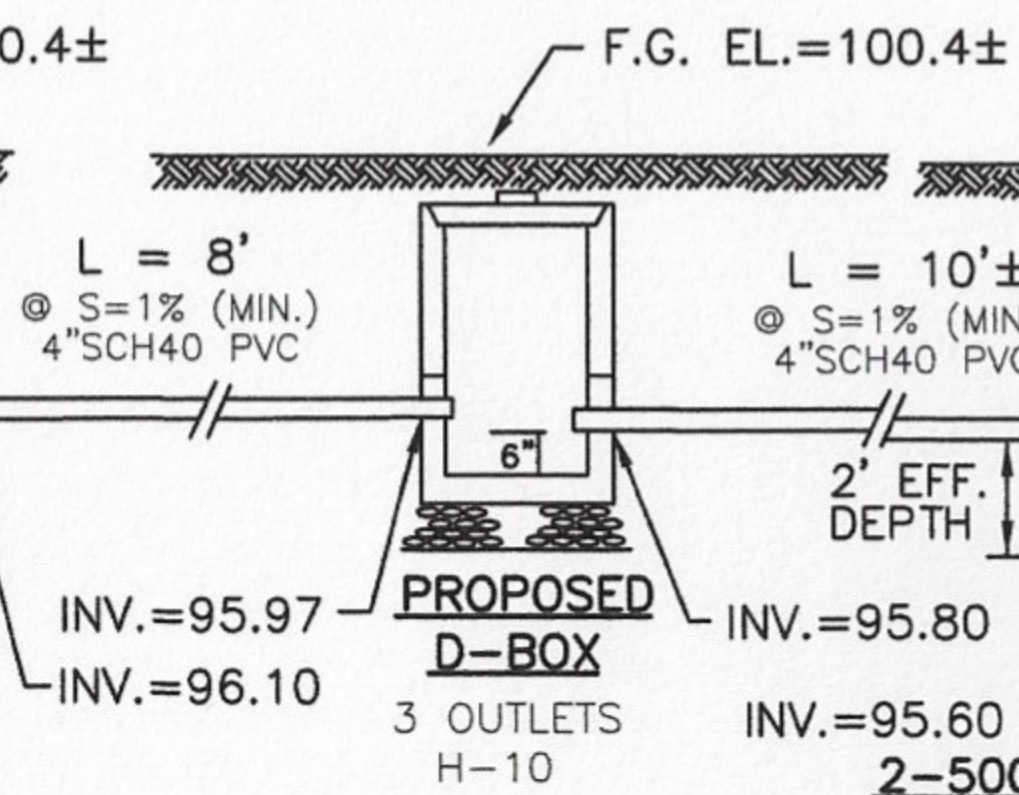
**PROPOSED SEPTIC TANK**

PROVIDE RISER WITH FRAME & COVER OVER INLET & OUTLET MANHOLES AND SET OUTLET RISER TO FINISH GRADE. OUTLET COVER SHALL BE SECURED TO PREVENT UNAUTHORIZED ACCESS.



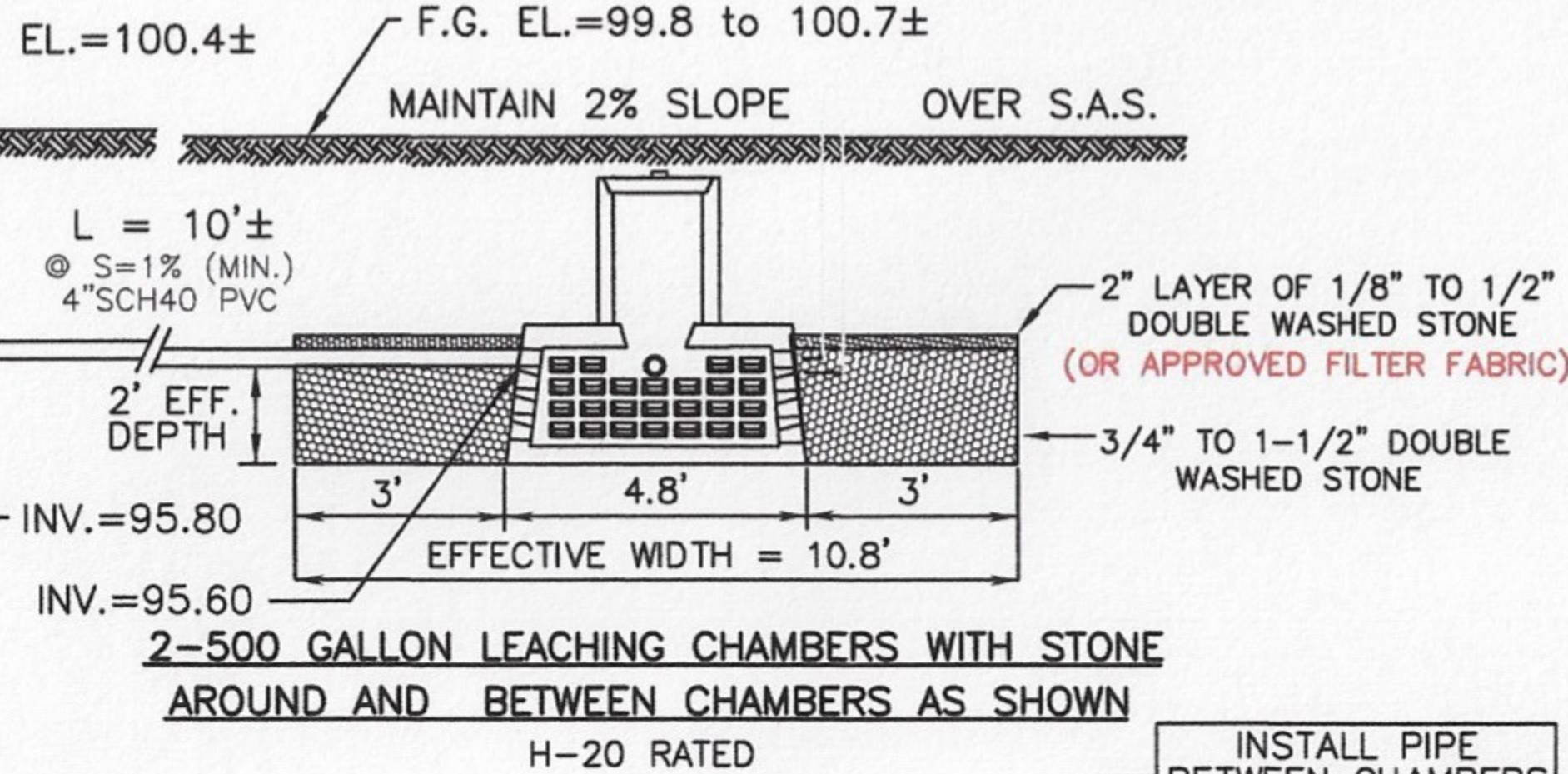
**PROPOSED D-BOX**

INSTALL RISER & COVER SET TO 6" OF GRADE



**PROPOSED S.A.S.**

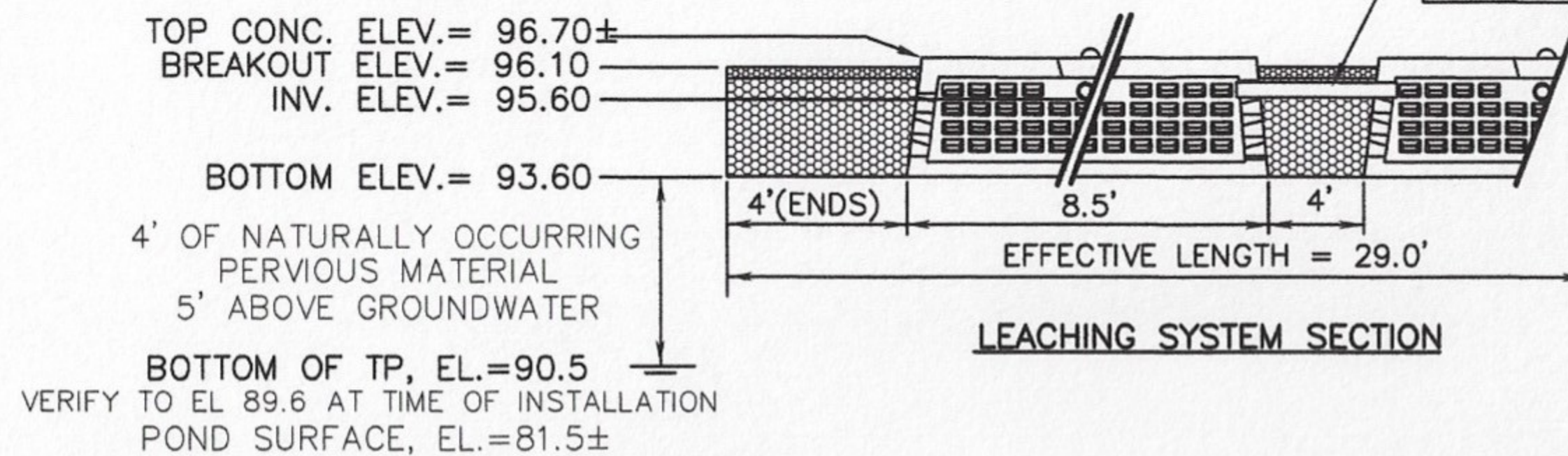
INSTALL RISER & COVER OVER ONE CHAMBER AND SET TO 3" OF F.G. TO SERVE AS INSPECTION PORT



CONNECT TO EXISTING SEWER PIPE  
INV.=97.7±(VERIFY)

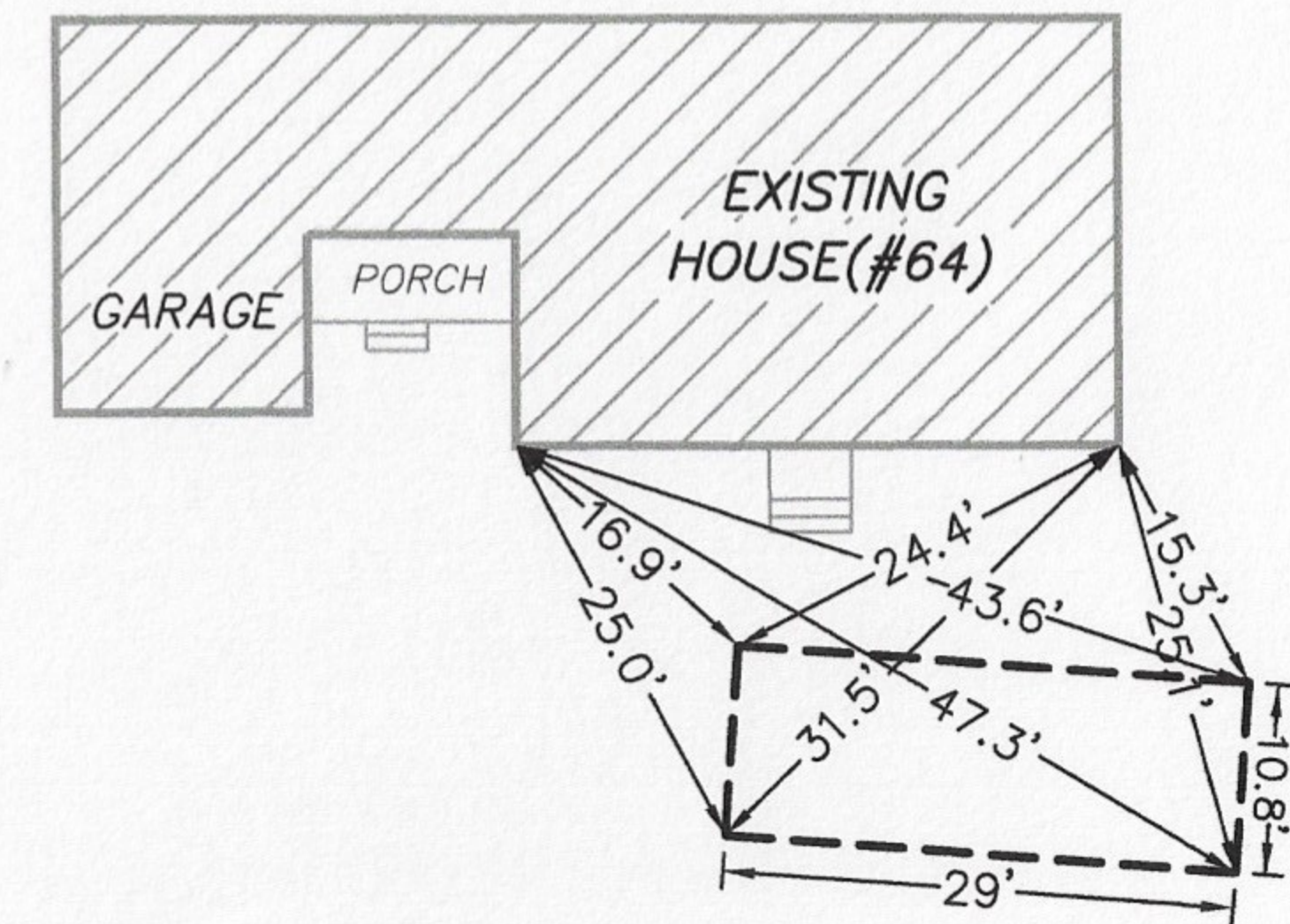
**NOTES:**

- 1) CONTRACTOR SHALL VERIFY ALL EXISTING PIPES & INVERTS EXISTING HOUSE, PRIOR TO INSTALLATION.
- 2) SEPTIC TANK & D-BOX SHALL BE SET LEVEL AND TRUE TO GRADE ON A MECHANICALLY COMPACTED SIX INCH CRUSHED STONE BASE, AS SPECIFIED IN 310 CMR 15.221(2).
- 3) INSTALL INLET & OUTLET TEES AS REQUIRED.
- 4) GAS BAFFLE TO BE INSTALLED ON OUTLET TEE AS MANUFACTURED BY TUF-TITE, ZABEL OR EQUAL.

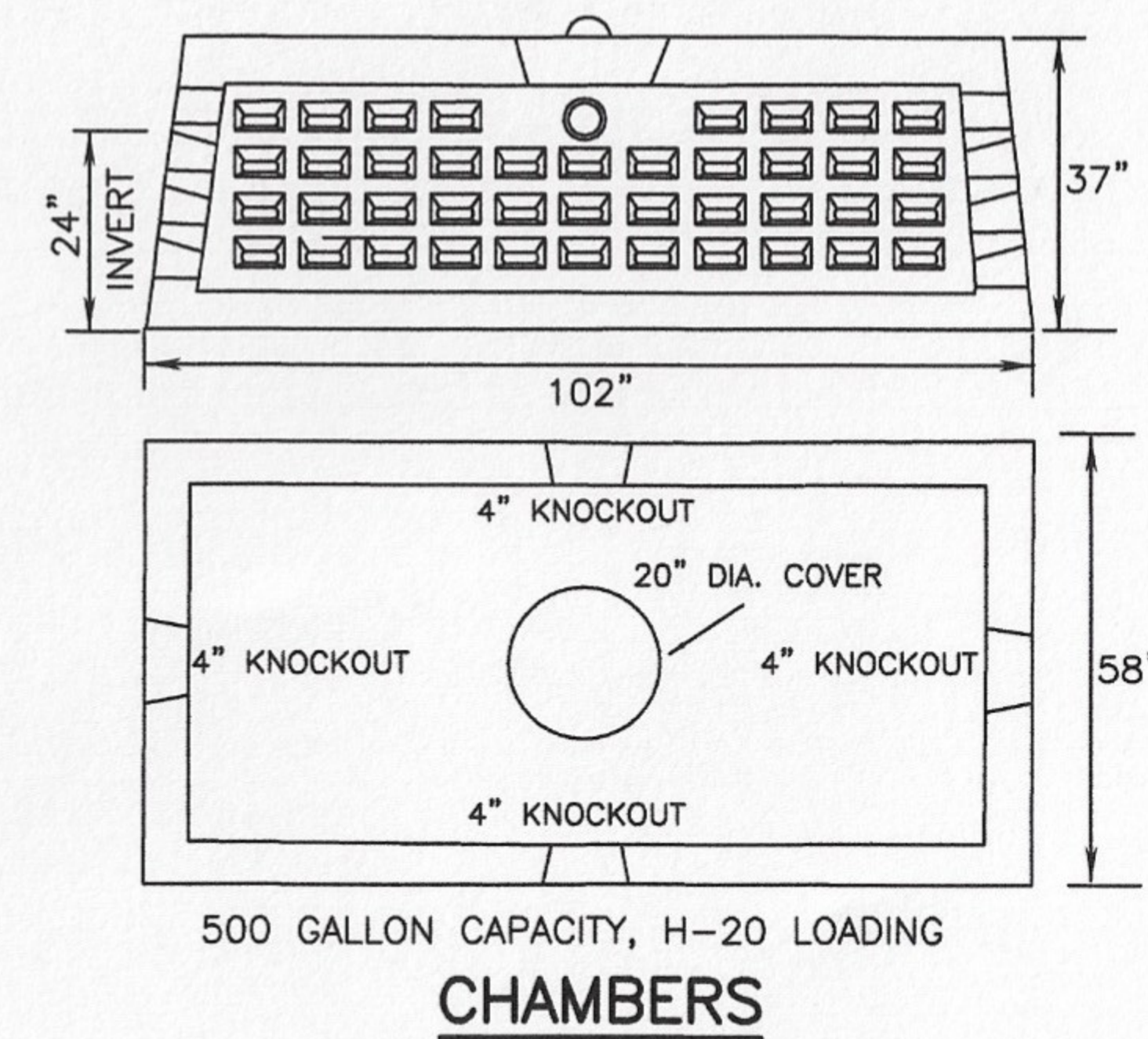


**SEPTIC SYSTEM PROFILE**

NOTE: TO PREVENT BREAKOUT, THE PROPOSED FINISH GRADE SHALL NOT BE < EL. 96.1 FOR A DISTANCE OF 15' AROUND THE PERIMETER OF THE S.A.S.



**SEPTIC LAYOUT**



**CHAMBERS**

**DESIGN CRITERIA**

NUMBER OF BEDROOMS: 3 BEDROOMS  
 SOIL TEXTURAL CLASS: CLASS 1 (LOADING RATE=0.74 GPD/SF)  
 DESIGN PERCOLATION RATE: <2 MIN/IN  
 DAILY FLOW: 330 GPD  
 DESIGN FLOW: 330 GPD  
 GARBAGE GRINDER: NO-not allowed with design  
 LEACHING AREA REQUIRED: (330 GPD) = 445.9 SF  
 .74 GPD/SF  
 PROPOSED SEPTIC TANK: 1500 GALLON CAPACITY  
 PROPOSED D-BOX: 1 INLET, 3 OUTLET (MIN.), H-10 RATED

**USE 2-500 GALLON LEACHING CHAMBERS IN SERIES WITH STONE AROUND AND BETWEEN CHAMBERS (10.8' x 29.0')**

SIDEWALL AREA: 2(10.8' + 29.0') x 2 = 159.2 SF  
 MINUS SIDEWALL ADJACENT TO TANK: 10' x 2 = -20.0 SF  
 BOTTOM AREA: 10.8' x 29.0' = 313.2 SF  
 TOTAL AREA: 452.4 SF

DESIGN FLOW PROVIDED: 0.74 GPD/SF(452.4 SF) = 334.8 GPD

**SOIL LOG**

DATE: MAY 12, 2021  
 SOIL EVALUATOR: PETER McENTEE SE#1542  
 WITNESS: TERRI GUARINO R.S. HEALTH AGENT

ELEV.	TP-1	DEPTH
100.5	FILL	0"
98.5	A LOAMY SAND 10YR 4/2	24"
98.0	B LOAMY SAND 10YR 5/4	30"
96.7	C	46"
90.5	M-C SAND 2.5Y 6/6 COBBLES	120"

PERC RATE <2 MIN/IN. "C" HORIZON  
 NO GROUNDWATER ENCOUNTERED

**PROPOSED SEPTIC SYSTEM UPGRADE PLAN**

**64 WILLIAMS AVENUE, POCASSET, MA**

Prepared for: Mark Carchidi, 370 Cotuit Road, Sandwich, MA 02563

Engineering by:  
**Engineering Works, Inc.**  
 12 West Crossfield Road, Forestdale, MA 02644  
 (508) 477-5313

SCALE	DRAWN	JOB NO.
N.T.S.	P.T.M.	139-21
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6/1/21	P.T.M.	2 of 2