

"SOIL LOGS"			
EL 649.00'	DTM "1"	EL 649.00'	DTM "2"
0'-12" A SL		0'-8" A SL	
EL 648.00'	10YR 3/2	EL 648.33'	10YR 3/2
		8'-24" B SL	
EL 647.00'	10YR 5/6	EL 647.00'	10YR 5/6
		24'-72" C1 SL	
		EL 643.00'	W/ 20% GRAVEL
		EL 643.00'	25Y 6/6
		72'-96" C2 SL	
EL 642.33'	25Y 6/4	EL 641.00'	W/ 20% GRAVEL
		EL 641.00'	25Y 5/4

MOTTLES @ 36"
EST. GW. @ 36"

MOTTLES @ 36"
EST. GW. @ 36"

SOIL EVALUATOR: MARGARET BACON SE '2022

I CERTIFY THAT I HAVE PASSED THE EXAMINATION APPROVED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THAT THE ABOVE ANALYSIS HAS BEEN PERFORMED BY ME CONSISTENT WITH THE REQUIRED TRAINING, EXPERIENCE, AND EXPERIENCE DESCRIBED IN 30 CMR 15.00B (2).

OTHER PERSONS ON SITE AT TESTING WHP TRUCKING (BACKHOE)

PERCOLATION RATE	9 MPI
DATE DEEP HOLE TEST	11/11/2022
DATE PERCOLATION TEST	11/11/2022
INSPECTOR	STEVE DONATELLI
TESTING APPLICANT	GORDEN WHITTEN

"CONSTRUCTION NOTES"

1. EXCAVATE ALL IMPERVIOUS MATERIAL INCLUDING TOP & SUB SOIL; SLT; CLM; ETC. TO PERVIOUS MATERIAL IN TRENCH AREA AND IN FIVE FOOT (5') GRAVEL AREA.
2. THE GRAVEL SHALL BE PLACED ACCORDING TO SEC. 15.255 SUB-SECTION 3 TO 6.
3. ELEVATION OF GRAVEL: 642.50 - 649.50
4. TRENCHES TO BE 11.33' OC
5. BOTTOM OF TRENCHES TO BE LEVEL FOR ENTIRE LENGTH OF SYSTEM 648.17'
6. ALL OUTLET PIPES FROM THE DISTRIBUTION BOX TO BE LEVEL FOR A MINIMUM OF ONE PIPE LENGTH OR 2 FEET.
7. NO SURFACE, SUBSURFACE OR OPEN DRAINS THAT INTERCEPT GROUNDWATER WITHIN 25 FEET OF THE SEPTIC TANK OR 50 FEET FROM THE LEACHING SYSTEM.
8. ENGINEER TO INSPECT BOTTOM EXCAVATION OF LEACHING AREA PRIOR TO GRAVEL PLACEMENT
9. HYDRAULIC CEMENT TO BE USED TO SEAL CONNECTIONS AT THE FOUNDATION, SEPTIC TANK, DIST. BOX, & ALL UNUSED OUTLETS.
10. LOAD & SEED ALL DISTURBED AREAS. REINFORCEMENT MATING ON SLOPES > 50%.
11. CONSTRUCTION OF SEPTIC TANK, Dosing CHAMBER & DISTRIBUTION BOX SHALL CONFORM WITH 30 CMR 15.229 THROUGH 15.226

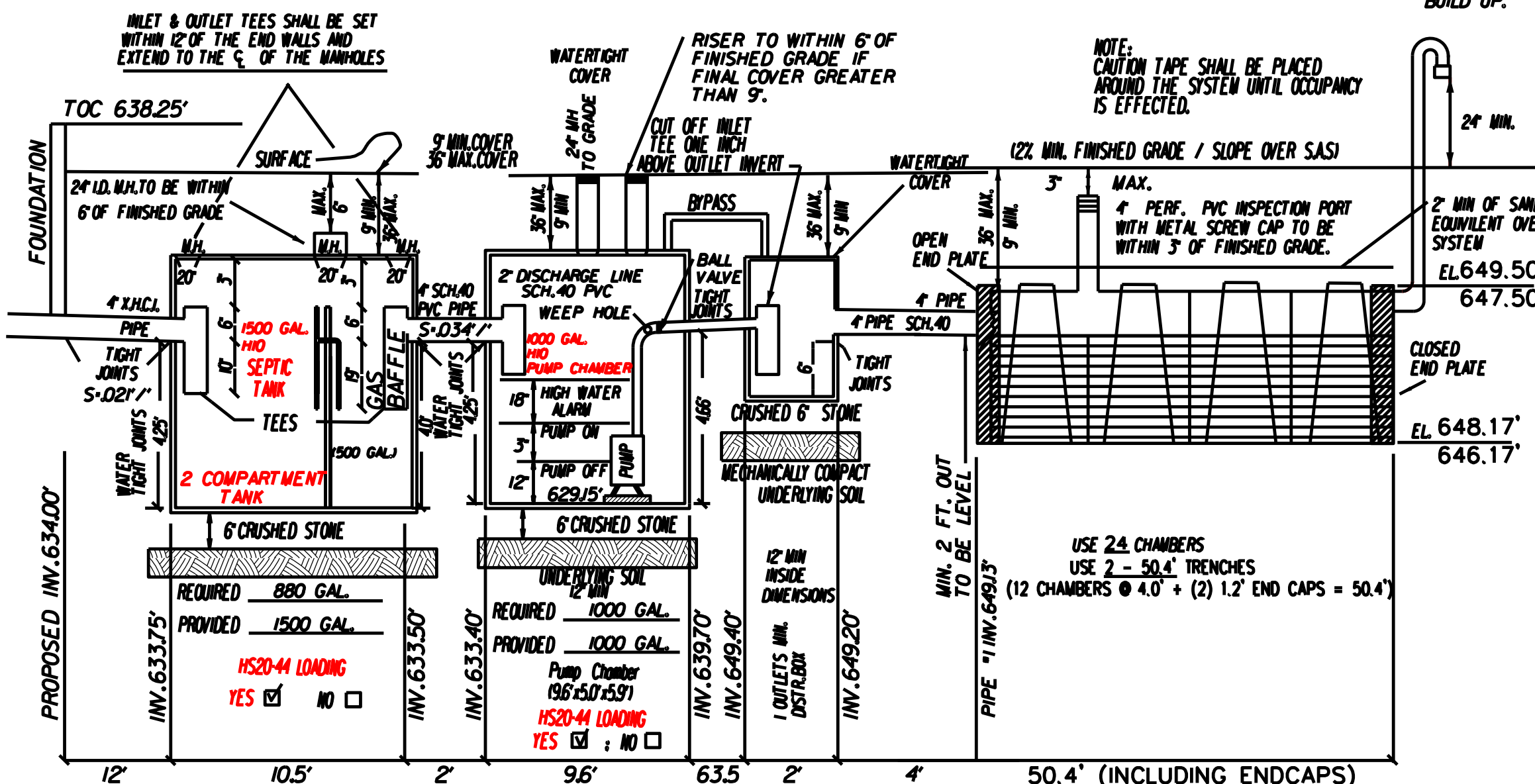
ADDITIONAL NOTES

1. TOWN PERMIT # 22-46
2. SEPTIC TANK TO BE PUMPED ANNUALLY
3. WELL TO BE TESTED EVERY TWO YEARS
4. PLAN ☐ IS. ☐ IS NOT LOCATED WITHIN A FLOOD HAZARD ZONE. PANEL #25027C09B5E
5. KNOWN EXCAVATIONS ON LOT: ☐ YES ☐ NO
6. SYSTEM LOCATED IN NITROGEN SENSITIVE AREA AS DEFINED BY THE MA DEP OR TITLE V. ☐ YES ☐ NO

DESIGN INFORMATION

1. DESIGN RATE: 1.0 MPI
2. SIGNAL AREA: 60 GPD/SF BOTTOM AREA: 60 GPD/SF
3. 96' LINEAL FEET OF CHAMBER REQUIRED
4. USE 96' LINEAL FEET 4.758 GPD / LF x 96 LF = 457 GPD
5. NO GARBAGE DISPOSAL UNITS ALLOWED
6. 4 BEDROOM HOUSE; DAILY FLOW 440 GPD
7. NO OTHER WELL WITHIN 150 FEET OF THE PROPOSED SYSTEM OTHER THAN SHOWN ON PLAN.
8. WATER SOFTENERS SHALL NOT CONNECT TO SEPTIC TANK.
9. STORMWATER DRAINAGE ON SITE: YES ☐ NO ☐ NO
10. POTABLE WATER SUPPLY (PUBLIC) ON SITE: YES ☐ NO ☐ NO
11. LOT AREA: ☐ IS. ☐ IS NOT TRIBUTARY TO A PUBLIC SURFACE WATER SUPPLY AND IS NOT LOCATED IN A ZONE 2 OF PUBLIC WELLS.
12. ALL KNOWN UTILITY LOCATIONS (APPROX.) ON SITE ARE SHOWN.
13. CONTRACTOR SHALL NOTIFY DIG-SAFE AT 1-888-344-7233 PRIOR TO CONSTRUCTION.

NOTE: ALL SEWER STRUCTURES ARE ABOVE MAXIMUM GROUND WATER. YES ☐ NO ☐ SEE BUOYANCY CALCS



NOTE:
INSPECTIONS TO BE CONDUCTED
ACCORDING TO THE REGULATIONS OF
THE SUTTON BOARD OF HEALTH

INSPECTION SCHEDULE
1. BOTTOM OF EXCAVATION PRIOR TO PLACEMENT OF FILL
2. AFTER COMPLETION OF THE SYSTEM PRIOR TO BACKFILLING
3. ROUGH AND/OR FINAL GRADING
4. SLOPE STABILIZATION

JECTOR PUMP DATA

LUSE MYERS MODEL SRM 04 HP 12 SOLID/10R EQUAL
2 FLOOR OF PUMP CHAMBER ELEV. 629.15'
3. PUMP OFF 1/2" ABOVE FLOOR ELEV. 630.15'
4. PUMP ON 1/2" ABOVE FLOOR ELEV. 630.40'
5. HIGH WATER ALARM ON 13" ABOVE FLOOR ELEV. 631.90'
6. DOSE SET AT 74 GAL (3 GALLONS FLOW BACK TO P.C.)
7. 1/2" 29 MIN. RUNNING TIME @ 25 GPM (TYP @ 15')
8. ALARM SHALL BE POWERED BY A CIRCUIT SEPARATE FROM THE PUMP CIRCUIT. PROVIDE VISUAL AND AUDIO ALARM
9. FORCE MAIN TO DRAIN BACK INTO PUMP CHAMBER
10. DOSE SET APPROX. SIX TIMES ONLY

LOADING CALCULATIONS

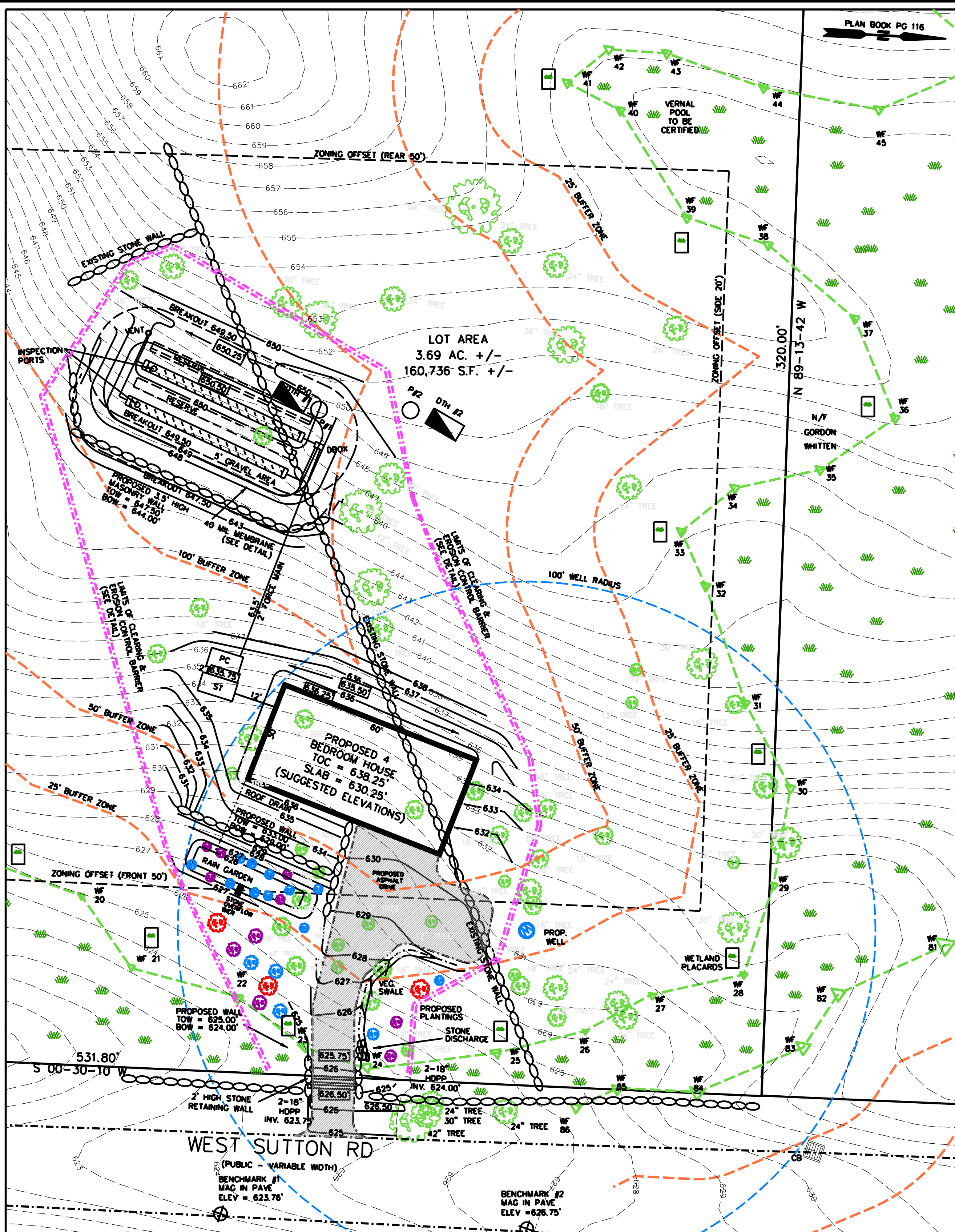
CHAMBER DIM. 34" x 53" x 16"
ELA - EFFECTIVE LEACHING AREA PER CHAMBER (7.93 SF/LF)
E.T.C. - EFFECTIVE TRENCH CAPACITY 7.93 SF/LF x 60 GPD/SF = 4.758 GPD/LF
PER TITLE V USE MIN. OF 40 SF FOR CHAMBER BOTTOM AND SIDEWALL AREA
E.T.C. 7.93 SF/LF x 60 GPD/SF = 4.758 GPD/LF
ELA - 7.93 SF/LF x 40 LF = 317.2 SF/CHAMBER
440 GPD/60 GPD/SF / (31.72 SF/CHAMBER) = 23.12 CHAMBERS REQUIRED
TRENCH LENGTH USE 24 CHAMBERS x 4.0 LF/CHAMBER = 96 LF
96' / 2 TRENCHES = 48' / TRENCH + (2.4' FOR END CAPS) = 50.4'

NO CAP (VENT PIPING SHALL SLOPE BACK FROM VENT PIPE TO END OF SYSTEM. IF SITE CONDITIONS PROHIBIT THIS, LOW POINTS MUST BE DRILLED TO PREVENT MOISTURE BUILD UP.

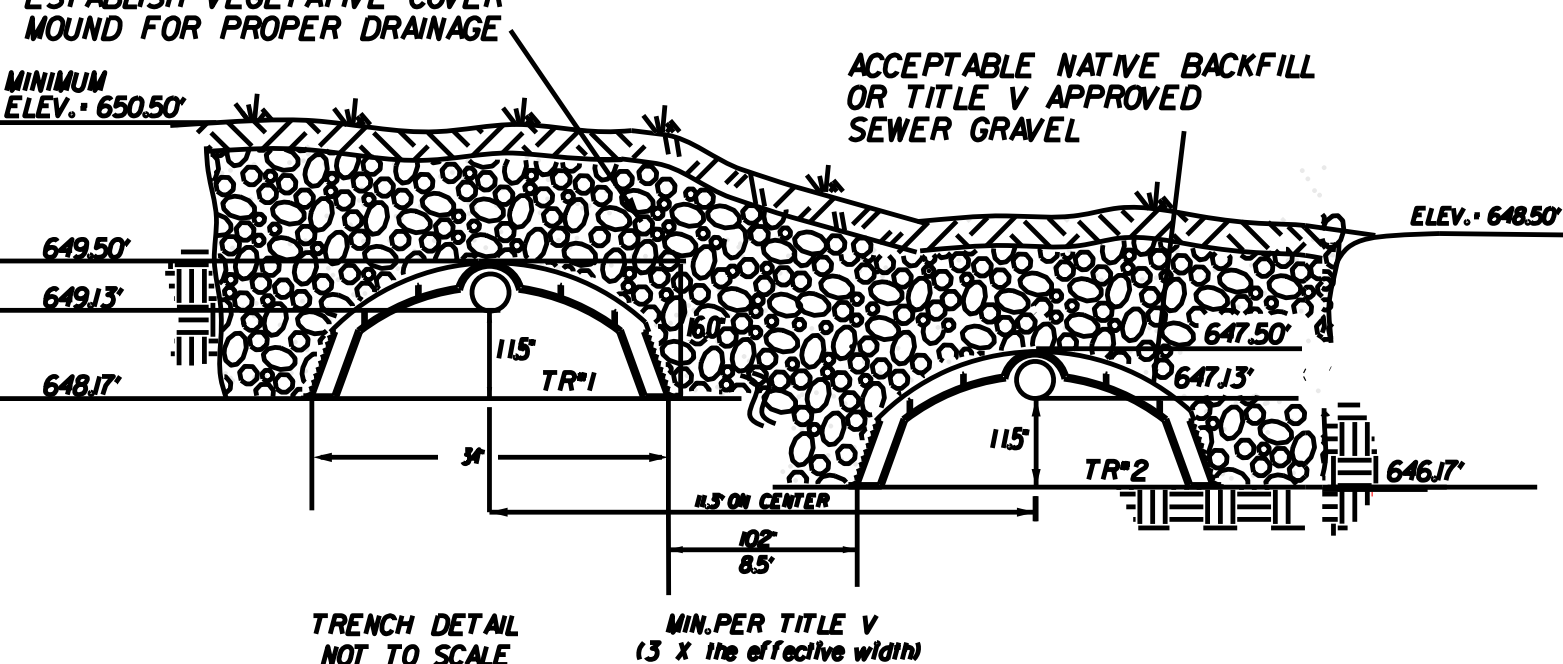
QUICK 4
HIGH CAPACITY
INFILTRATOR CHAMBER
SIZE 34"x53"x16"



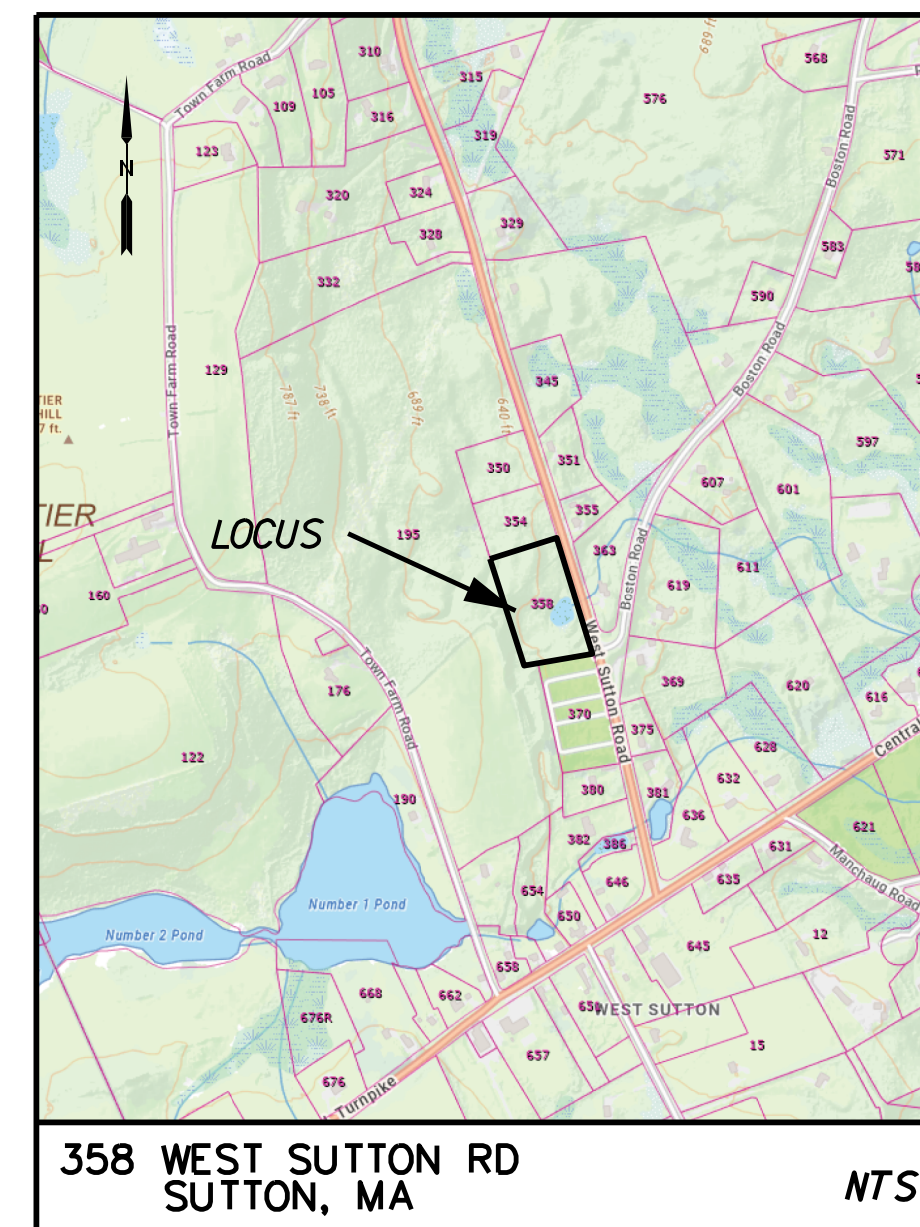
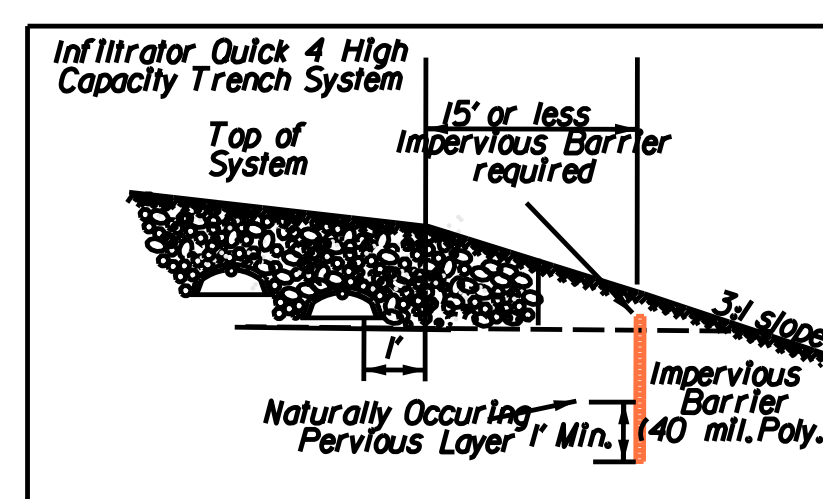
CONTRACTOR WILL
NOTIFY DIG-SAFE
PRIOR TO CONSTRUCTION



ESTABLISH VEGETATIVE COVER MOUND FOR PROPER DRAINAGE



1" = 20'
20' 0' 20' 40'



NOTES:

INSTALLER SHALL INSTALL THE SYSTEM IN ACCORDANCE WITH INFILTRATOR SYSTEM INC.'S "DESIGN AND INSTALLATION MANUAL FOR INFILTRATOR CHAMBERS IN MASSACHUSETTS", AND THE CONDITIONS AS SET FORTH IN DEPARTMENT OF ENVIRONMENTAL PROTECTION'S CERTIFICATION FOR THE QUICK 4 SYSTEM ISSUED ON JUNE 12, 2015.

MAGNETIC TAPE TO BE PLACED OVER ALL SYSTEM COMPONENTS

TOPOGRAPHIC SURVEY WAS CONDUCTED IN DECEMBER, 2022.

WETLANDS WERE DELINEATED BY ROBERT MURPHY AND ASSOCIATES.

THIS PLAN IS TO BE USED FOR A SEPTIC DESIGN PLAN ONLY. THIS PLAN IS NOT TO BE USED TO ESTABLISH PROPERTY LINES. PROPERTY INFORMATION WAS COMPILED FROM RECORDED DEEDS AND PLANS.

CONTRACTOR TO NOTIFY ENGINEER IF FIELD CONDITIONS CHANGE OR ARE DIFFERENT THAN WHAT IS REPRESENTED ON THIS PLAN.

NEITHER THE ENGINEER OR BOARD OF HEALTH CAN GUARANTEE THE LONGEVITY OF THIS SYSTEM. PROPER USE AND MAINTENANCE ARE KEY IN ENSURING THE LONG TERM FUNCTIONALITY OF THIS SYSTEM.

IT IS RECOMMENDED THAT A WATER METER BE INSTALLED TO MONITOR WATER/WASTEWATER USAGE

CONSTRUCTION TO BE PHASED

PHASE I - SEPTIC CONSTRUCTION.
PHASE II - HOUSE CONSTRUCTION.
PHASE II NOT TO START UNTIL PHASE I CONSTRUCTION IS COMPLETE AND THE AREA IS STABILIZED.
SEE ORDER OF CONDITIONS & CONSERVATION SITE PLAN WITH A REVISED DATE OF 7/29/2023

PLAN BOOK 772 PLAN 116

DEED BOOK 28664 PAGE 94

OWNER BARBARA BADI

ASSESSORS MAP # 39/12

LOT # 1

ZONE R1

REVISION #	DESCRIPTION	DATE
1	REVISED HOUSE LOCATION INCLUDES PUMP	9/19/23

PERMIT # 22-46
NEW CONSTRUCTION

SEWAGE DISPOSAL LAYOUT

FOR

BARBARA AND ROBERT BADI
358 WEST SUTTON ROAD
SUTTON, MA 01590

DATE: APRIL 7, 2023

SCALE: 1" = 20'



ENGINEERING LLC

SUITE 206

10 RIVER ROAD

UXBRIDGE, MA 01569

SITE PLANNING SEPTIC DESIGN WETLANDS

PROJ# S2221.000