

TIE-DOWN STRAPS (2, 8000lb CAPACITY) — NOTE: INLET & OUTLET COVER (24" DIA.) BROUGHT TO FINISHED GRADE.



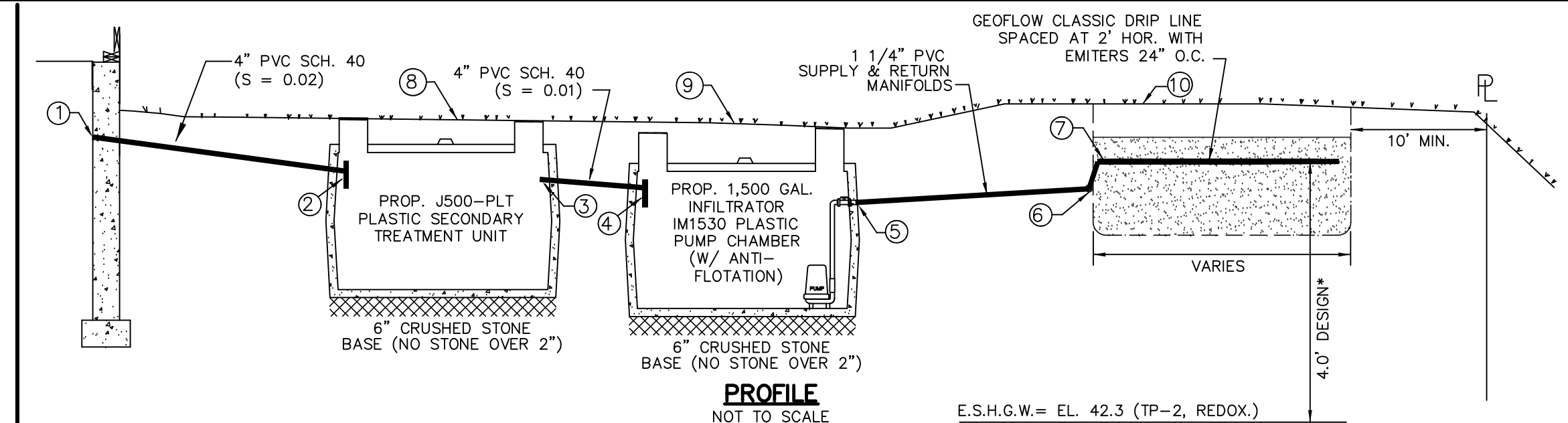
1. USE SUBMERSIBLE EFFLUENT PUMP: ORENCO PF1005 (1/2 HP) OR APPROVED EQUAL CAPABLE OF ATTAINING: TDS=63.5 FT. @ 7.5 GPM. CONTRACTOR TO CONSULT WITH ENGINEER WITH PUMP SELECTION SPEC SHEET PRIOR TO INSTALLATION.
2. INSTALL HIGH AND LOW WATER MERCURY FLOATS IN PUMP CHAMBER AND PUMP. CONTRACTOR TO PANEL AND WIRE ALARMS. ALARMS PANEL LOCATION TO BE ON EXTERIOR OF BUILDING. COORDINATE LOCATION WITH HOMEOWNER. PUMP POWER SHALL BE LOCATED ON SEPARATE INDEPENDENT CIRCUIT FROM THE ALARM CIRCUIT. ALL ELECTRICAL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICIAN AND INSPECTED BY THE TOWN OF SITUATE WIRING INSPECTOR.
3. TANK TO BE MADE WATERPROOF IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS.
4. ANTI-CORROSION TO BE PROVIDED TO MITIGATE BOUYANCY ISSUES WITH HIGH ESQHW.



SOIL TESTING AND EVALUATION BY: PAUL GUNN, SE#14392
SOIL TESTING WITNESSED BY: RALPH H. COLE, P.L.S.
DATE: OCTOBER 6, 2020

TP-1	APPROX. GRADE	EL. 47.0	TP-2	APPROX. GRADE	EL. 45.3	TP-3	APPROX. GRADE	EL. 45.2
	FILL			FILL			FILL	
EL. 44.0	A HORIZON SANDY LOAM 10YR 3/4	36"	EL. 43.5	A HORIZON SANDY LOAM 10YR 3/4	22"	EL. 43.5	A HORIZON SANDY LOAM 10YR 3/4	20"
EL. 43.4	B HORIZON SANDY LOAM 10YR 5/4	43"	EL. 43.1	B HORIZON SANDY LOAM 10YR 5/4	26"	EL. 43.0	B HORIZON SANDY LOAM 10YR 5/4	26"
EL. 42.3	C HORIZON SANDY LOAM 2.5Y 5/6	56"	EL. 42.1	C HORIZON SANDY LOAM 2.5Y 5/6	38"	EL. 42.0	C HORIZON SANDY LOAM 2.5Y 5/6	38"
EL. 37.0		120"	EL. 35.3		120"	EL. 35.2		120"
WEEDING OBSERVED: NONE MOTTLING OBSERVED: 56" PERC. RATE: NONE (40-58") ESHGW: 56" (EL. 42.3)			WEEDING OBSERVED: NONE MOTTLING OBSERVED: 38" PERC. RATE: 75% (40-58") ESHGW: 38" (EL. 42.3)			WEEDING OBSERVED: NONE MOTTLING OBSERVED: 38" PERC. RATE: NONE ESHGW: 38" (EL. 41.9)		

ELECTRICAL CONDUIT TO CONTROL PANEL (SIMPLEX OR EQUAL)
MOUNTED INSIDE BUILDING. PUMP POWER CABLE AND FLOAT
CONTROL TO BE PLACED IN CONDUIT IN
ACCORDANCE WITH LOCAL BUILDING AND
ELECTRICAL CODES.

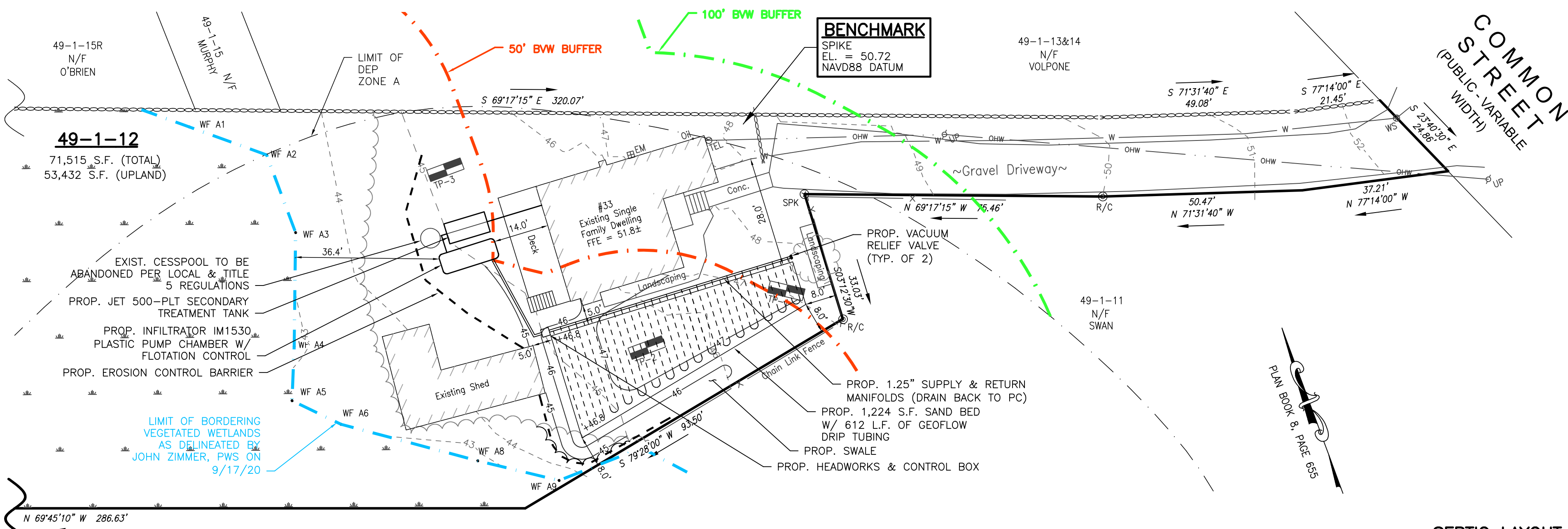
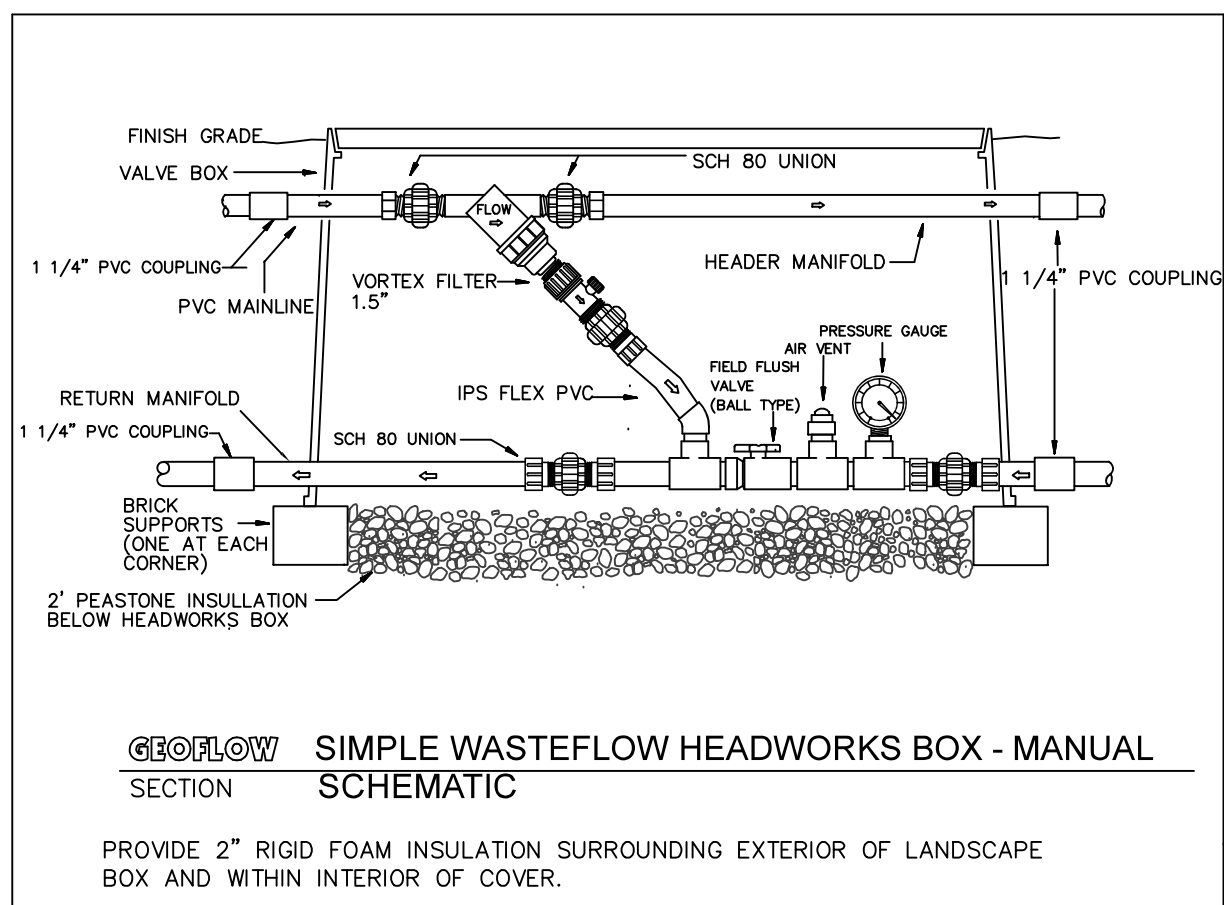
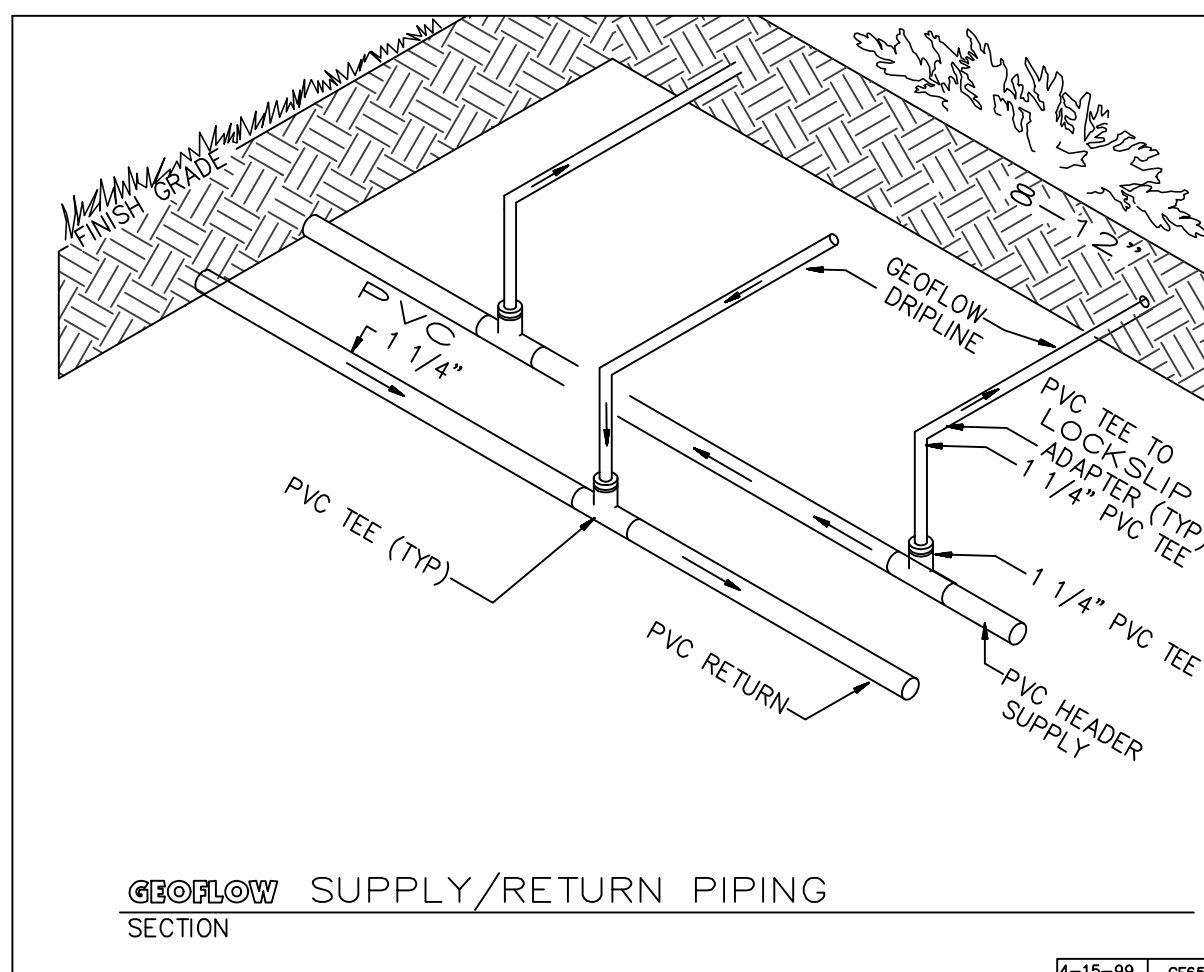


1. INV. OF PIPE AT FOUNDATION = 451.1± (CONTRACTOR TO VERIFY PRIOR TO CONSTRUCTION)	7. INV. OF GEO-FLOW DRIP PIPING = 46.30
2. INV. OF PIPE AT TREATMENT TANK INLET = 42.75	8. FINISHED GRADE OVER JET TANK = 44.8 (MIN) - 46.8 (MAX)
3. INV. OF PIPE AT TREATMENT TANK OUTLET = 42.50	9. FINISHED GRADE OVER PUMP CHAMBER = 44.5 (MIN) - 46.5 (MAX)
4. INV. OF PIPE AT PUMP CHAMBER INLET = 42.40	10. FINISHED GRADE GEO-FLOW PIPING = 46.8 (MIN.) - 48.8 (MAX.)
5. INV. OF PIPE AT PUMP CHAMBER OUTLET = 42.65	
6. INV. OF PIPE AT 1 1/4" SUPPLY & RETURN MANIFOLD (END) = 45.80	

1. SEPTIC SYSTEM INSTALLATION CONTRACTORS SHALL BE LICENSED BY THE BOARD OF HEALTH AND MUST COMPLY WITH ALL REQUIREMENTS OF THE BOARD OF HEALTH DISPOSAL WORKS CONSTRUCTION PERMIT AND ANY CONDITIONS, IF ISSUED BY THE CONSERVATION COMMISSION.
2. ALL CONSTRUCTION MUST COMPLY WITH TITLE 5 OF THE STATE ENVIRONMENTAL CODE 310 CMR 15 & THE ANY LOCAL BOARD OF HEALTH SUPPLEMENTAL REGULATIONS.
3. THERE SHALL BE NO CHANGES MADE IN THIS PLAN WITHOUT THE WRITTEN PERMISSION OF THE BOARD OF HEALTH AND DESIGN ENGINEER.
4. ANY CHANGE IN SITE CONDITIONS, DISCREPANCIES, ERRORS OR OMISSIONS SHALL BE BROUGHT TO THE ATTENTION OF MORSE ENGINEERING PRIOR TO THE COMMENCEMENT OF WORK.
5. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH TITLE 5 (310 CMR 15) AND THE LOCAL BOARD OF HEALTH REQUIREMENTS TO THE FULLEST EXTENT PRACTICABLE. NO GUARANTEE TO THE SYSTEMS PERFORMANCE IS EXPRESSED OR IMPLIED.
6. SOIL TEST DATA SHOWN IS LIMITED TO THE CONDITIONS EXISTING AT THE SUBJECT TEST PIT LOCATION ONLY. IF DIFFERENT SOIL CONDITIONS ARE FOUND IN THE AREA OF THE PROPOSED SOIL ABSORPTION SYSTEM THEY SHALL BE BROUGHT TO THE ATTENTION OF MORSE ENGINEERING IMMEDIATELY.

NOTES:

1. TREATMENT TANK TO BE MADE WATERPROOF AND COVERS TO GRADE MADE WATERTIGHT.
2. AERATOR MODEL 700LL MUST BE USED IN CONTINUOUS OPERATION.
3. MAXIMUM BURIAL DEPTH OF 24" FROM TOP OF TANK REQUIRED.
4. J-500 IS CAPABLE OF TREATING UP TO 500 GALLONS OF WASTEWATER WITH AN APPLIED LOADING RATE OF UP TO 0.71 LBS/BOD PER DAY.
5. LEDGE TO BE REMOVED AS REQUIRED TO PLACE TANK PROPERLY.
6. INSTALLER TO CONTACT CLEARWATER RECOVERY IN REGARDS TO PROPERT SYSTEM INSTALLATION AND OPERATION & MAINTENANCE CONTRACT.



A horizontal number line with tick marks at 0, 10', and 20'.

SCALE: 1" = 20'

310 CMR 15.405.1(b): TO ALLOW A REDUCTION OF THE SETBACK OF 10 FT. (REQ'D) TO 8.0 FT. (PROP.) BETWEEN THE SAS AND PROPERTY LINE.

310 CMR 15.405.1(b): TO ALLOW A REDUCTION OF THE SETBACK OF 50 FT. (REQ'D) TO 8.0 FT. (PROP.) BETWEEN THE SAS AND BORDERING VEGETATED WETLANDS.

1. TO ALLOW UP TO A 50% SIZE REDUCTION IN THE SAS.

CONTRACTOR TO EXCAVATE ALL UNSUITABLE MATERIAL TO A DEPTH OF 56"±
(TO C-HORIZON) & REPLACE WITH CLEAN TITLE 5 PERC SAND TO EL. = 42.1
DIRECTLY UNDER THE PROPOSED SOIL ABSORPTION SYSTEM.
(APPROX. SAND VOL. = $1.2\% \times 1,224 \text{ S.F.} \times (46.3-42.1) / 27 = 229\pm \text{ C.Y.}$)

1. BUILDING TYPE: SINGLE FAMILY DWELLING
2. NO. OF BEDROOMS: 3
3. DESIGN FLOW: 3×110 GPD / BEDROOM = 330 GPD
4. DESIGN PERCOLATION RATE: 76 MPI (TP-2, CLASS IV)
5. GARBAGE DISPOSAL: NO
6. SEPTIC TANK DISCHARGE REQUIREMENT: 200% DESIGN FLOW
 $330 \times 2 = 660$ GAL (PROVIDE NEW J-500 TREATMENT TANK)
7. LEACH AREA REQUIREMENTS GALLONS/SQ. FT.
BOTTOM: 0.15 GAL/S.F. SIDE: 0.15 GAL/S.F.
8. TOTAL LEACH AREA REQUIRED:
TITLE 5: $330 \text{ GPD} / (0.15 \text{ GPD/S.F.}) = 2,200 \text{ S.F.}$
GEO-FLOW DRIP IRRIGATION SAND BED
PROVIDED AREA: $100 \text{ S.F.} \times 20 \text{ GPD/W} / 612 \text{ L.F.} = 3.27 \text{ L.F.}$
*PROPOSED 44.4% SIZE REDUCTION OF 50% ALLOWED

INSTALLER TO BE JET & GEOFLOW CERTIFIED* *DEED RESTRICTION REQUIRED* *OPERATION & MAINTENANCE CONTRACT REQUIRED