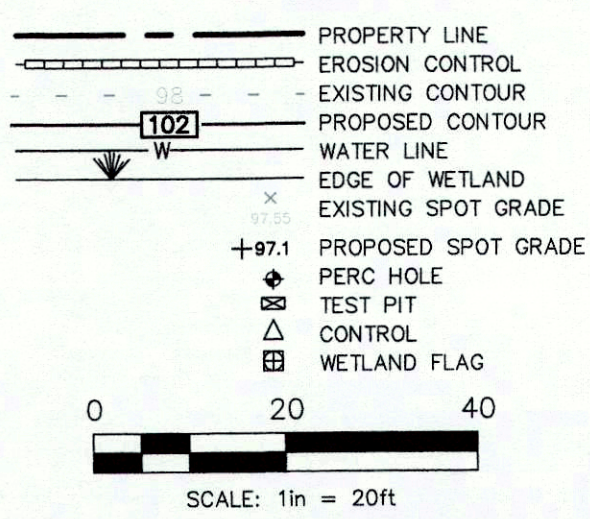


THIS SYSTEM REQUIRES THE FOLLOWING LOCAL UPGRADE APPROVALS TO TITLE 5 AND/OR LOCAL REGULATIONS:

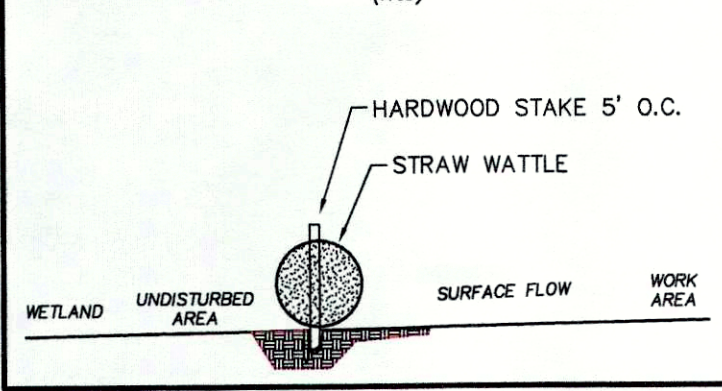
1. VARIANCE TO 310 CMR 15.029 (1) THE PROPOSED WELL DOES NOT MEET THE REQUIRED SETBACK FROM A SEPTIC TANK. 50 FEET REQUIRED, 15 FEET PROVIDED. (n/f DINNEN)
2. VARIANCE TO 310 CMR 15.029 (1) THE PROPOSED WELL DOES NOT MEET THE REQUIRED SETBACK FROM A SEPTIC TANK. 50 FEET REQUIRED, 15 FEET PROVIDED. (n/f OWNER)
3. VARIANCE TO 310 CMR 15.211 (1) THE PROPOSED HOLDING TANK DOES NOT MEET THE REQUIRED SETBACK FROM A PROPERTY LINE. 10 FEET REQUIRED, 5.5 FEET PROVIDED. (PRIVATE ROAD)

NOTE:
MAGNETIC MARKING TAPE OR AN APPROVED
EQUAL SHALL BE PLACED OVER ALL
COMPONENTS AND PIPES IN THE SYSTEM

LEGEND



PROPOSED STAKED STRAW WATTLE BARRIER
(nts)

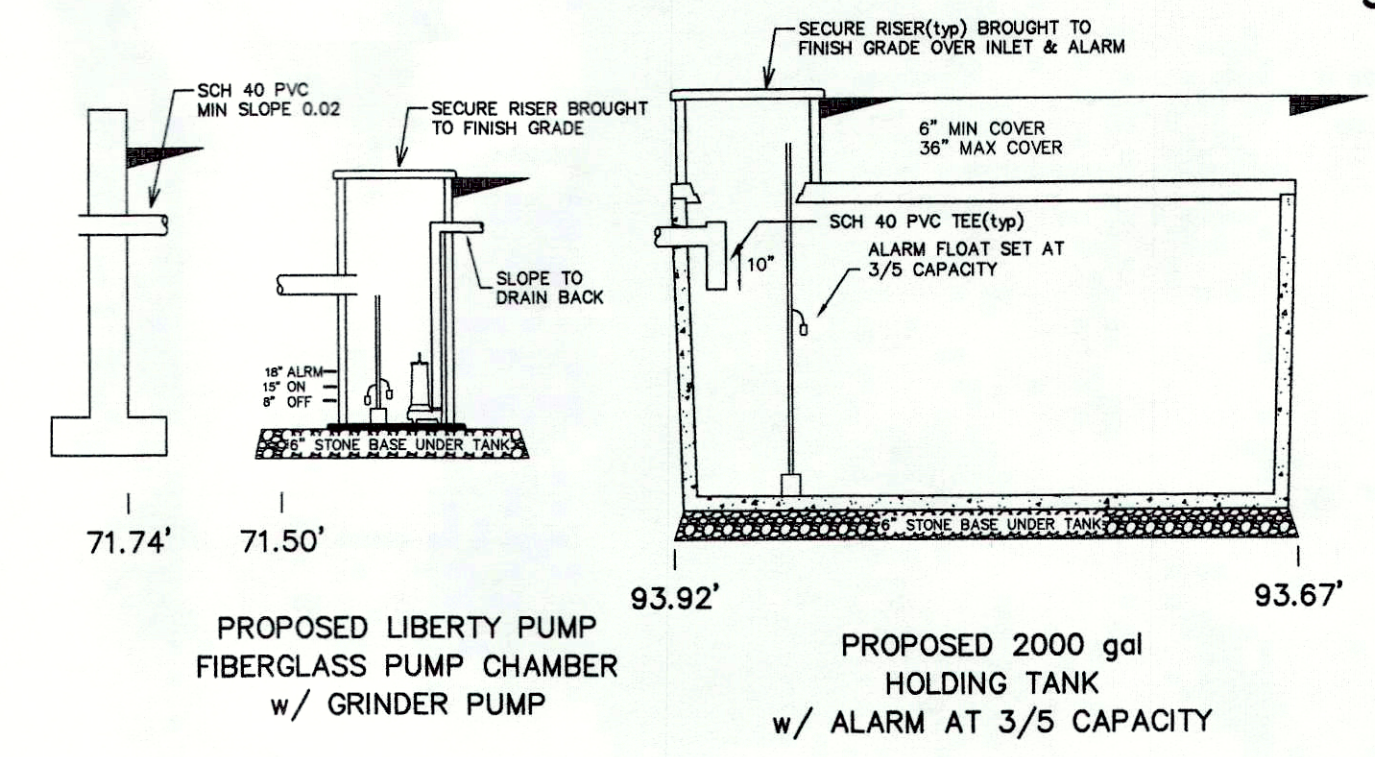


WETLAND PROTECTION MEASURES:

- 1) STAKED STRAW WATTLES SHALL BE INSTALLED AS SHOWN ON THE PLAN. THEY SHALL BE INSPECTED BY THE LOCAL CONSERVATION COMMISSION, IF REQUIRED, BEFORE CONSTRUCTION.
- 2) WITHIN THE 100ft BUFFER ZONE ALL DISTURBING OF SOIL SHALL BE MINIMIZED.
- 3) ALL DISTURBED AREAS SHALL BE LOAMED, SEEDED AND MULCHED AS SOON AS POSSIBLE.
- 4) NO WORK OR STORAGE OF MATERIAL SHALL BE DOWN HILL OF THE STRAW WATTLES.
- 6) ALL NECESSARY PERMITS SHALL BE OBTAINED BEFORE WORK COMMENCES.
- 7) OWNER AND CONTRACTOR SHALL ADHERE TO ANY ORDERS ISSUED BY THE LOCAL CONSERVATION COMMISSION.

PRIOR TO ANY EXCAVATION THE CONTRACTOR SHALL NOTIFY DIG SAFE

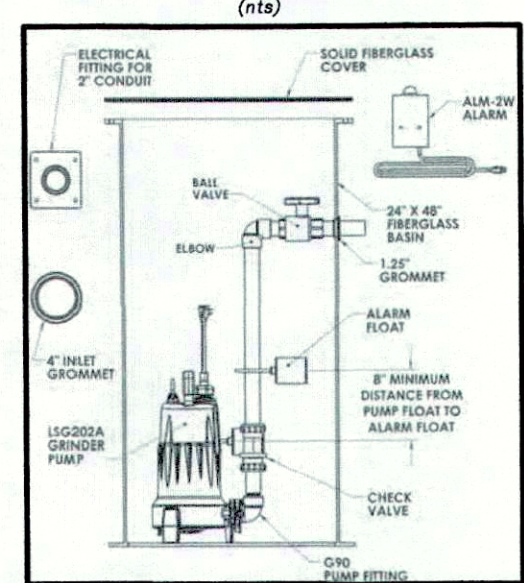
SYSTEM PROFILE
(nts)



OPERATION AND MAINTENANCE PLAN

1. ALARM SHALL BE SET AT 3/5 OF TANK CAPACITY.
2. ACCESS TO TANK SHALL BE MAINTAINED AT ALL TIMES WHEN THE FACILITY IS BEING USED.
3. A LICENSED SEPTAGE HAULER SHALL BE CONTACTED WHEN THE ALARM IS ACTIVATED.
4. THE SEPTAGE HAULER SHALL INSPECT THE TANK FOR LEAKS OR ILLEGAL OUTLETS AT TIME OF PUMPING AND SHALL NOTIFY THE BOARD OF HEALTH OF ANY PROBLEMS.
5. THE SEPTAGE SHALL BE BROUGHT TO A MUNICIPAL TREATMENT PLANT LICENCED TO ACCEPT SEPTAGE, TREATED AND DISCHARGED INTO THE LOCAL RIVER.
6. THE ALARM SHALL BE INSPECTED AND TESTED EACH TIME THE TIGHT TANK IS PUMPED OUT.

GRINDER PUMP DETAIL
(nts)



SCHEDULE OF INVERTS
(nts)

	BEG INVERTS		END INVERTS	
	PROP.	AS-BUILT	PROP.	AS-BUILT
HSE INV	71.74'		93.67'	
HLD TNK	93.92'			
PC TANK				
D-BOX				
PIPE 1				
PIPE 2				
PIPE 3				
PIPE 4				
PIPE 5				
PIPE 6				
PIPE 7				
PIPE 8				

DESIGN CALCULATIONS

DESIGN CRITERIA:
DESIGN PERC RATE: 10 mpl
LOADING RATE: 0.6 gpd/ft²
DESIGN FLOW:
(2 BEDROOM(s)) (110 gpd/BEDROOM) = 2200 gpd
HOLDING TANK:
2000 gal REQUIRED - 2000 PROVIDED

DESIGNER CERTIFICATIONS

I certify that in June of 1994 I passed the soil evaluator examination by the Department of Environmental Protection and that the above analysis was performed by me consistent with the required training, expertise and experience described in 310 CMR 15.017.
Signature Mark Farnell Date 3/28/19

STAKE OUT INFO

SOIL TESTING RESULTS

GENERAL NOTES

- 1) ALL CONSTRUCTION PRACTICE AND MATERIALS MUST CONFORM TO 310 CMR 15 (TITLE 5) AS REVISED 9 SEPTEMBER 2016 AND/OR LOCAL REGULATIONS.
- 2) CONTRACTOR IS RESPONSIBLE FOR VIEWING SITE BEFORE BIDDING JOB TO BECOME FAMILIAR WITH ALL ASPECTS OF THE JOB.
- 3) CONTRACTOR SHALL VERIFY ALL INVERTS AND SETBACKS FROM WELLS, PROPERTY LINES AND WATER BEFORE BEGINNING WORK.
- 4) IF CONDITIONS IN THE FIELD DIFFER THAN THOSE SHOWN ON THE PLAN, WORK SHALL STOP, AND THE DESIGN ENGINEER AND THE BOARD OF HEALTH SHALL BE CONSULTED BEFORE WORK CONTINUES.
- 5) CONTACT THE DESIGN ENGINEER AND BOARD OF HEALTH FOR A REQUIRED BOTTOM INSPECTION BEFORE PLACING SAND OR STONE. CONTACT DESIGN ENGINEER AND BOARD OF HEALTH FOR FINAL INSPECTION BEFORE COVERING SYSTEM.
- 6) THE CONTRACTOR SHALL INSURE ALL NECESSARY PERMITS HAVE BEEN OBTAINED BEFORE INSTALLING THE SYSTEM.
- 7) NO PERMANENT STRUCTURES SHALL BE PLACED ON THE PROPOSED DISPOSAL SYSTEM.
- 8) PROPERTY LINES ARE GRAPHIC ONLY AND ARE NOT TO BE USED TO ERECT FENCES OR SHEDS. NO PROPERTY SURVEY WAS DONE.
- 9) THE DESIGN ENGINEERS ONLY WARRANTY IS THE SYSTEM IS DESIGNED ACCORDING TO TITLE V UNLESS OTHERWISE NOTED.

LOCUS MAP



PUMP NOTES

- 1) PUMP AND ALARM SHALL BE WIRED USING SEPARATE CIRCUITS. VISUAL AND AUDIBLE ALARM SHALL BE MOUNTED INSIDE DWELLING.
- 2) PIPING FROM PUMP CHAMBER TO D-BOX SHALL BE 1.25 in SCH 40 PVC PIPE OR HDPE HEAVY DUTY WELL LINE PIPE. PIPE SHALL BE LAID TO DRAIN BACK TO TANK BETWEEN CYCLES.
- 3) DISCHARGE PIPING SHALL HAVE ONE 1/2 in WEEP HOLE FOR DRAIN BACK AND A UNION INSTALLED FOR PUMP REMOVAL.
- 4) PUMP CHAMBER SHALL BE A LIBERTY PUMP 36in DIAMETER BY 48in HIGH FIBERGLASS PUMP CHAMBER. IT SHALL BE INSTALLED INSIDE THE EXISTING 500gpi STEEL SEPTIC TANK. A 4in DIAMETER INLET, A 1.25in OUTLET AND 1in ELECTRICAL CONDUIT HOLE SHALL BE FIELD CUT WITH A HOLE SAW. ALL PENETRATIONS SHALL UTILIZE LIBERTY PUMP FACTORY SUPPLIED GROMMETS TO PROTECT INTEGRITY OF TANK.
- 5) SEWAGE PUMP SHALL BE A LIBERTY PRG101A 115V GRINDER PUMP WITH 2 in NPT DISCHARGE. BUSHING SHALL BE INSTALLED 2ft ABOVE DISCHARGE TO REDUCE PIPE SIZE TO 1.25 in DIAMETER. FLOAT SWITCH SHALL BE A MECHANICAL FLOAT SWITCH. IT SHALL BE SET AS SHOWN ON THE DRAWING DETAIL.
- 6) NO SUBSTITUTIONS WITHOUT APPROVAL OF ENGINEER.

GREEN HILL
ENGINEERING

PERC TESTING SEPTIC DESIGN WETLAND PERMITTING ENVIRONMENTAL CONSULTING

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REPAIR
CLIFF & JANICE GIBSON
40 GOODRICH RD
STURBRIDGE MA
7 MARCH 2019

MAP 44 PARCEL 40
PL01:3/27/2019 3:10 PM

JOB: 2018-145

