

### DESIGN CALCULATIONS

DESIGN CRITERIA:  
SINGLE FAMILY HOME NO GARBAGE DISPOSAL  
DESIGN PERC RATE: 10 mpl  
LOADING RATE: 0.6 gpd/ft<sup>2</sup>  
DESIGN FLOW:  
(3 BEDROOM(S)) (110 gpd/BEDROOM) = 330 gpd  
SEPTIC TANK:  
1500 gal REQUIRED - 1500 gal 2 COMPARTMENT PROVIDED  
SOIL ABSORPTION SYSTEM (SAS):  
REQUIRED: (330 gpd) / (0.60 gpd/ft<sup>2</sup>) = 550 ft<sup>2</sup>  
PROVIDED: PIPE AND STONE BED  
1 BED(S) 40 ft L x 18 ft W x 1 ft D  
(1) 40 ft x 18 ft = 720 ft<sup>2</sup>

### 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, experience and experience described in 310 CMR 15.017.  
Signature: *Mark Farrell* Date: 9/24/19

### SOIL TESTING RESULTS

DATE OF TEST: 18 JUNE 2019  
SOIL EVALUATOR: MARK FARRELL  
WITNESS: KEN LACEY  
PERC RATE #1 9 mpl PERC RATE #2 7 mpl  
ALTERNATIVE TO THE PERC TEST RESULTS:

SOIL LOGS:		ESHW ELEVATION: 110.38'	
TP5 ELEVATION: 113.38'			
DEPTH	HRZ	TXI	COLOR
0 - 6 in	A	SL	10YR 3/2
6 - 30 in	Bw	SL	10YR 5/6
30 - 84 in	C	SL	2.5Y 6/4
COMMON 10YR 6/8036 in			

### 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 FROM 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 ENGINEER'S ONLY WARRANTY IS THE SYSTEM IS DESIGNED ACCORDING TO TITLE V UNLESS OTHERWISE NOTED.

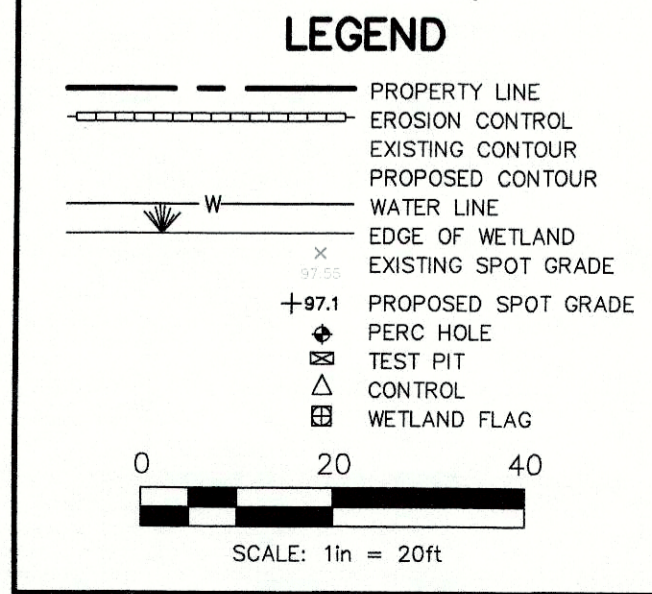
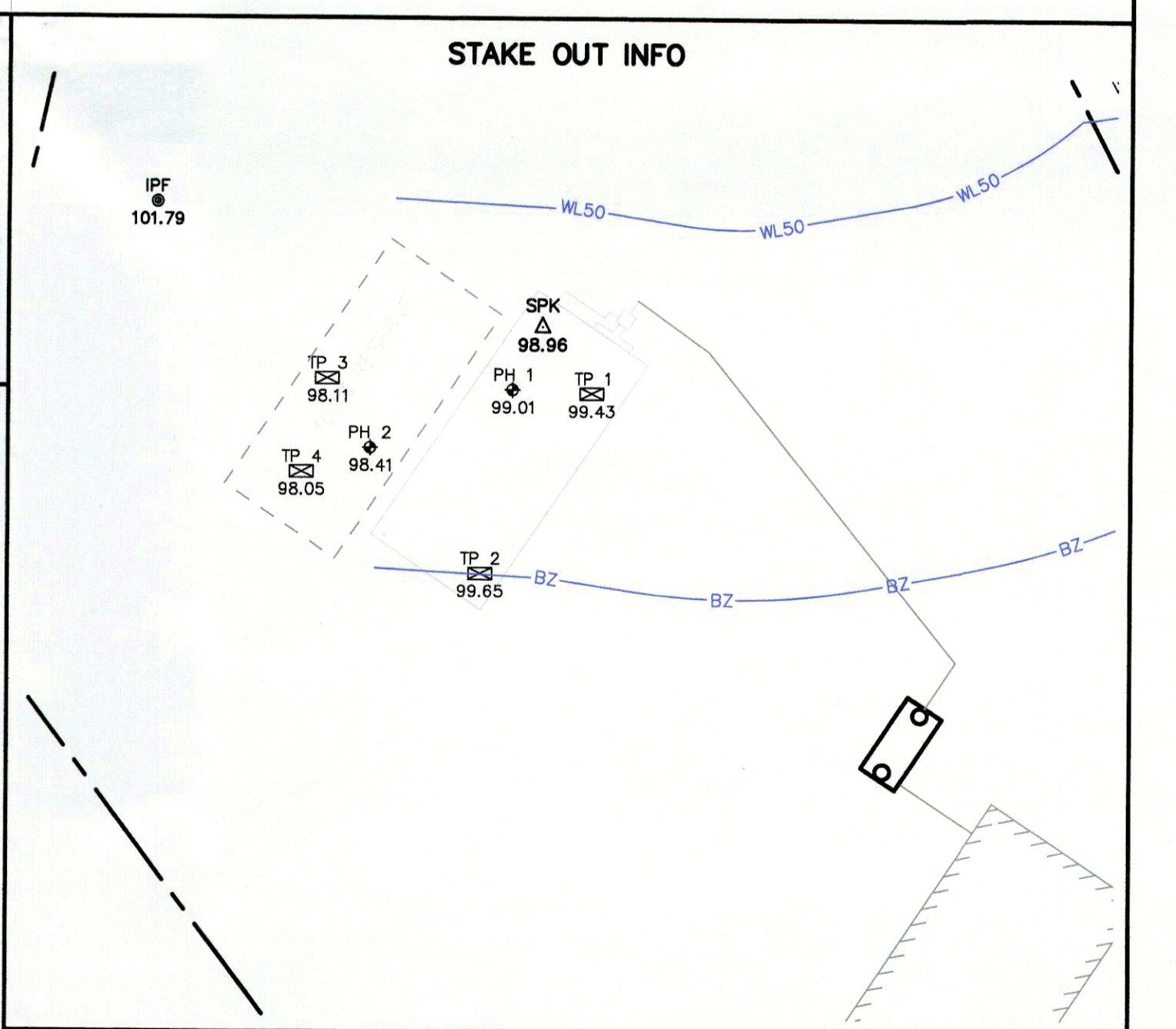
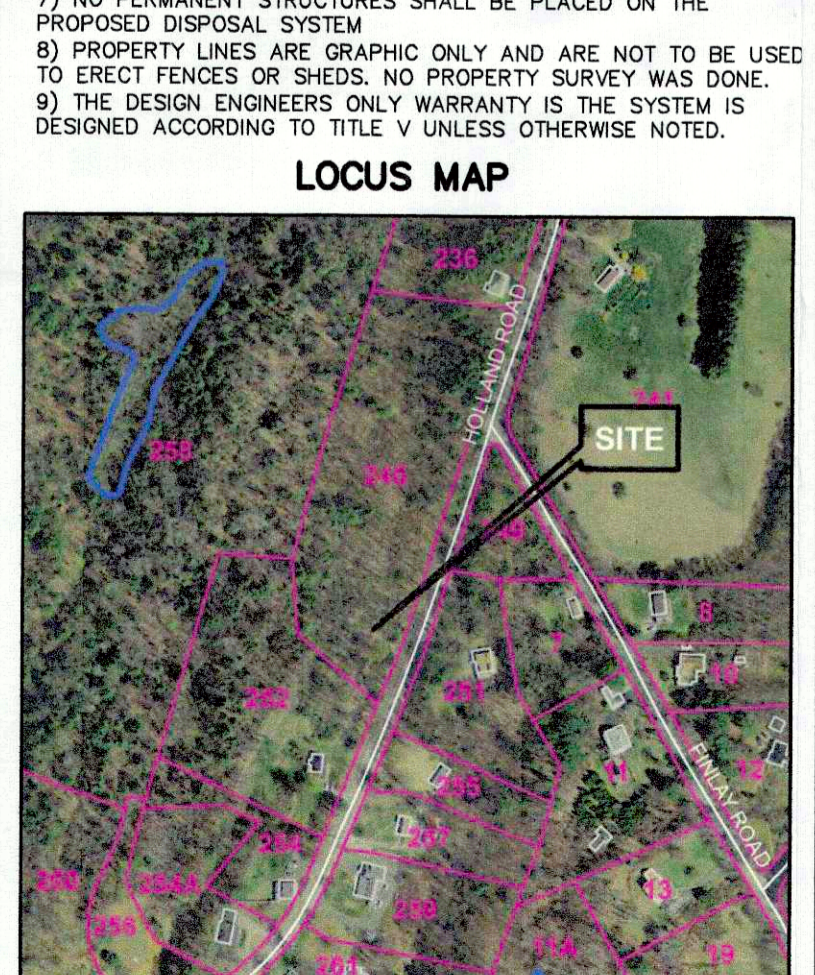
SOIL LOGS:		ESHW ELEVATION: 112.31'	
TP6 ELEVATION: 115.31'			
DEPTH	HRZ	TXI	COLOR
0 - 6 in	A	SL	10YR 3/2
6 - 30 in	Bw	SL	10YR 5/6
30 - 84 in	C	SL	2.5Y 6/4
COMMON 10YR 6/8036 in			

SOIL LOGS:		ESHW ELEVATION: 108.53'	
TP7 ELEVATION: 112.53'			
DEPTH	HRZ	TXI	COLOR
0 - 6 in	A	SL	10YR 3/2
6 - 30 in	Bw	SL	10YR 5/6
30 - 84 in	C	SL	2.5Y 6/4
COMMON 10YR 6/8036 in			

SOIL LOGS:		ESHW ELEVATION: 110.13'	
TP8 ELEVATION: 113.16'			
DEPTH	HRZ	TXI	COLOR
0 - 6 in	A	SL	10YR 3/2
6 - 30 in	Bw	SL	10YR 5/6
30 - 84 in	C	SL	2.5Y 6/4
COMMON 10YR 6/8036 in			



### 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.
- 5) ALL NECESSARY PERMITS SHALL BE OBTAINED BEFORE WORK COMMENCES.
- 6) OWNER AND CONTRACTOR SHALL ADHERE TO ANY ORDERS ISSUED BY THE LOCAL CONSERVATION COMMISSION.
- 7) OWNER AND CONTRACTOR SHALL ADHERE TO ANY ORDERS ISSUED BY THE LOCAL CONSERVATION COMMISSION.

THERE ARE NO WELLS WITHIN 100ft OF THE PROPOSED SEPTIC SYSTEM.

**GREEN HILL  
ENGINEERING**

PERC TESTING SEPTIC DESIGN WETLAND PERMITTING ENVIRONMENTAL CONSULTING

10 MAIN STREET  
STURBRIDGE, MA 01566  
508-347-5226 (W)  
508-347-9857 (F)

**PROPOSED SEPTIC SYSTEM**  
NEW CONSTRUCTION  
JAMES HARRITY  
LOT 2 - 246 HOLLAND RD  
STURBRIDGE MA  
11 SEPTEMBER 2019

MAP 32 PAR 246 (portion of)