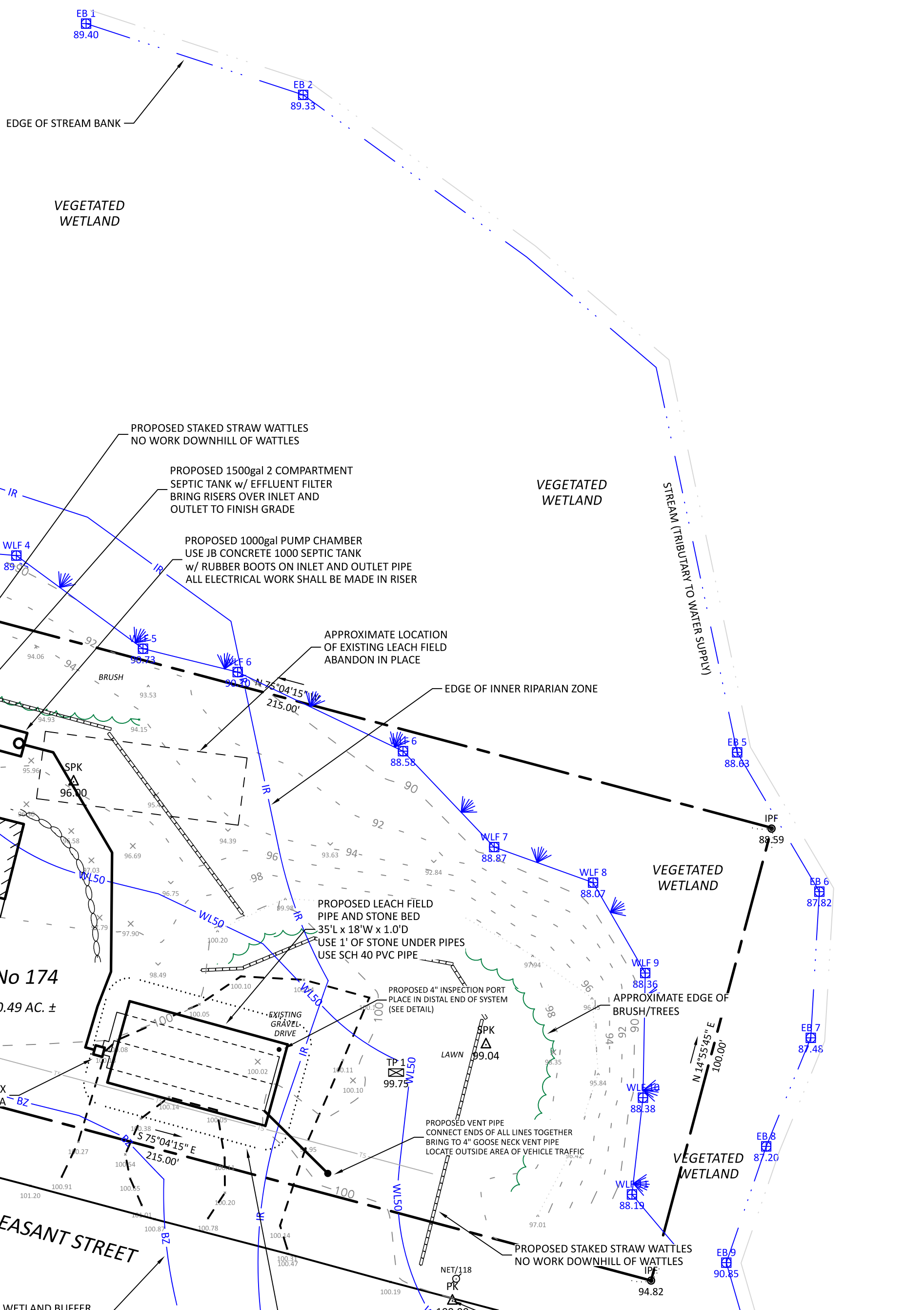


- WETLAND PROTECTION MEASURES:**
- 1) STAKED STRAW WATTLES SHALL BE INSTALLED AS SHOWN ON THE PLAN. THEY SHALL BE INSPECTED BY THE LOCAL CONSERVATION COMMISSION, IF REQUIRED, BEFORE CONSTRUCTION.
  - 2) WITHIN THE 100' BUFFER ZONE ALL DISTURBING OF SOIL SHALL BE MINIMIZED.
  - 3) ALL DISTURBED AREAS 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.

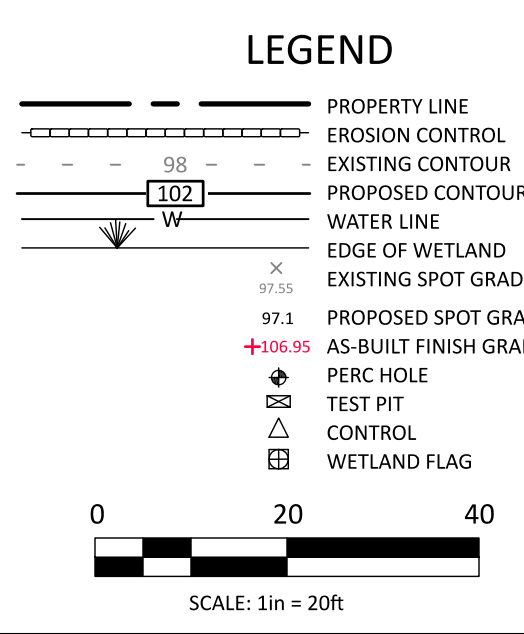


PRIOR TO ANY EXCAVATION THE CONTRACTOR SHALL NOTIFY DIG SAFE

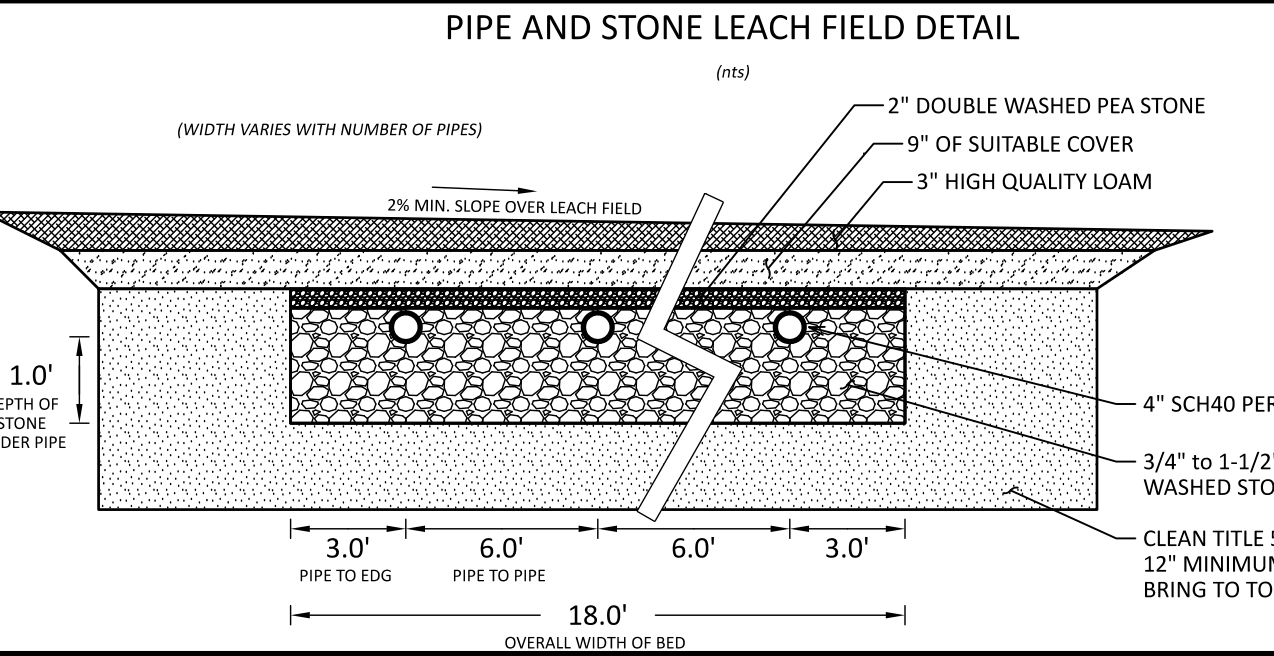
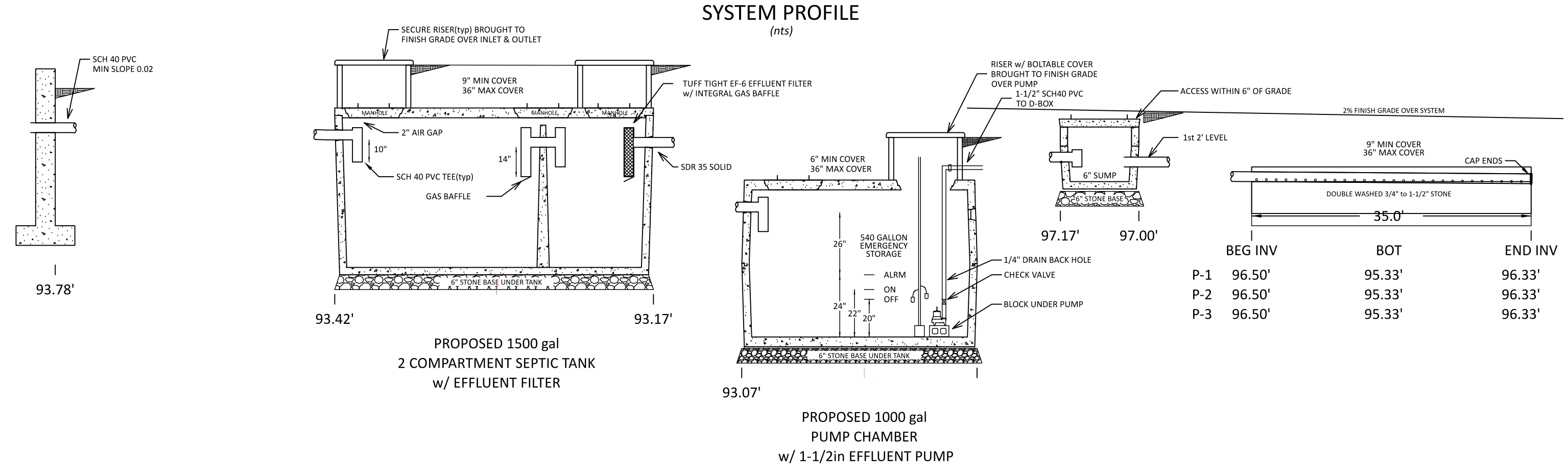
THIS SYSTEM REQUIRES THE FOLLOWING LOCAL UPGRADE APPROVALS TO TITLE 5 AND/OR LOCAL REGULATIONS:

1. VARIANCE TO 310 CMR 15.211 (1) THE PROPOSED SAS DOES NOT MEET THE REQUIRED SETBACK FROM A TRIBUTARY TO A SURFACE WATER SUPPLY. 200 FEET REQUIRED, 110 FEET PROVIDED.
2. VARIANCE TO 310 CMR 15.211 (1) THE PROPOSED SEPTIC TANKS DO NOT MEET THE REQUIRED SETBACK FROM A TRIBUTARY TO A SURFACE WATER SUPPLY. 200 FEET REQUIRED, 140 FEET PROVIDED.
3. VARIANCE TO 310 CMR 15.211 (1) THE PROPOSED SAS DOES NOT MEET THE REQUIRED SETBACK FROM A WETLANDS BORDERING SURFACE WATER SUPPLY OR TRIBUTARY THERETO. 100 FEET REQUIRED, 60 FEET PROVIDED.
4. VARIANCE TO 310 CMR 15.211 (1) THE PROPOSED SEPTIC TANKS DO NOT MEET THE REQUIRED SETBACK FROM A WETLANDS BORDERING SURFACE WATER SUPPLY OR TRIBUTARY THERETO. 100 FEET REQUIRED, 30 FEET PROVIDED.

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

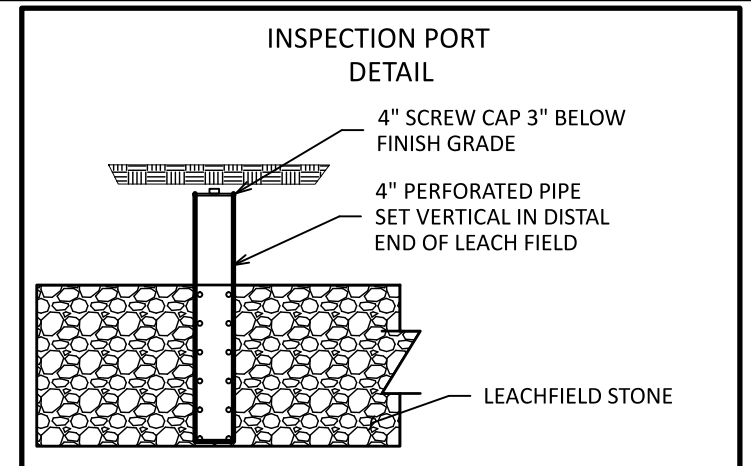


THERE ARE NO WELLS WITHIN 100' OF THE PROPOSED SEPTIC SYSTEM.



**SCHEDULE OF INVERTS**

HSE INV	BEG INVERTS		END INVERTS	
	PROP.	AS-BUILT	PROP.	AS-BUILT
ST TANK	93.78'		93.17'	
PC TANK	93.07'		92.82'	
D-BOX	97.17'		97.00'	
PIPE 1	96.50'		96.33'	
PIPE 2	96.50'		96.33'	
PIPE 3	96.50'		96.33'	
PIPE 4				
PIPE 5				
PIPE 6				
PIPE 7				
PIPE 8				



**DESIGN CALCULATIONS**

DESIGN CRITERIA:  
SINGLE FAMILY HOME NO GARBAGE DISPOSAL  
DESIGN PERC RATE: 20 mpi  
LOADING RATE: 0.53 gpd/ft<sup>2</sup>

DESIGN FLOW:  
13 BEDROOM(S) (110 gpd/BEDROOM) = 330 gpd

SEPTIC TANK:  
1500 gal REQUIRED - 1500 gal 2 COMPARTMENT PROVIDED

SOIL ABSORPTION SYSTEM (SAS):  
REQUIRED: (330 gpd) / (0.53 gpd/ft<sup>2</sup>) = 623 ft<sup>2</sup>  
PROVIDED: PIPE AND STONE BED  
1 BED(S) 35 ft x 18 ft w x 1 ft D  
(1) 35 ft x 18 ft = 630 ft<sup>2</sup>

**SOIL TESTING RESULTS**

DATE OF TEST: 28 SEPTEMBER 2021  
SOIL EVALUATOR: MARK FARRELL  
WITNESS: WAYNE CURRAN  
PERC RATE #1 PSA PERC RATE #2

LOAMY SAND; FIRM; 0.66gpd/ft<sup>2</sup> LOADING RATE

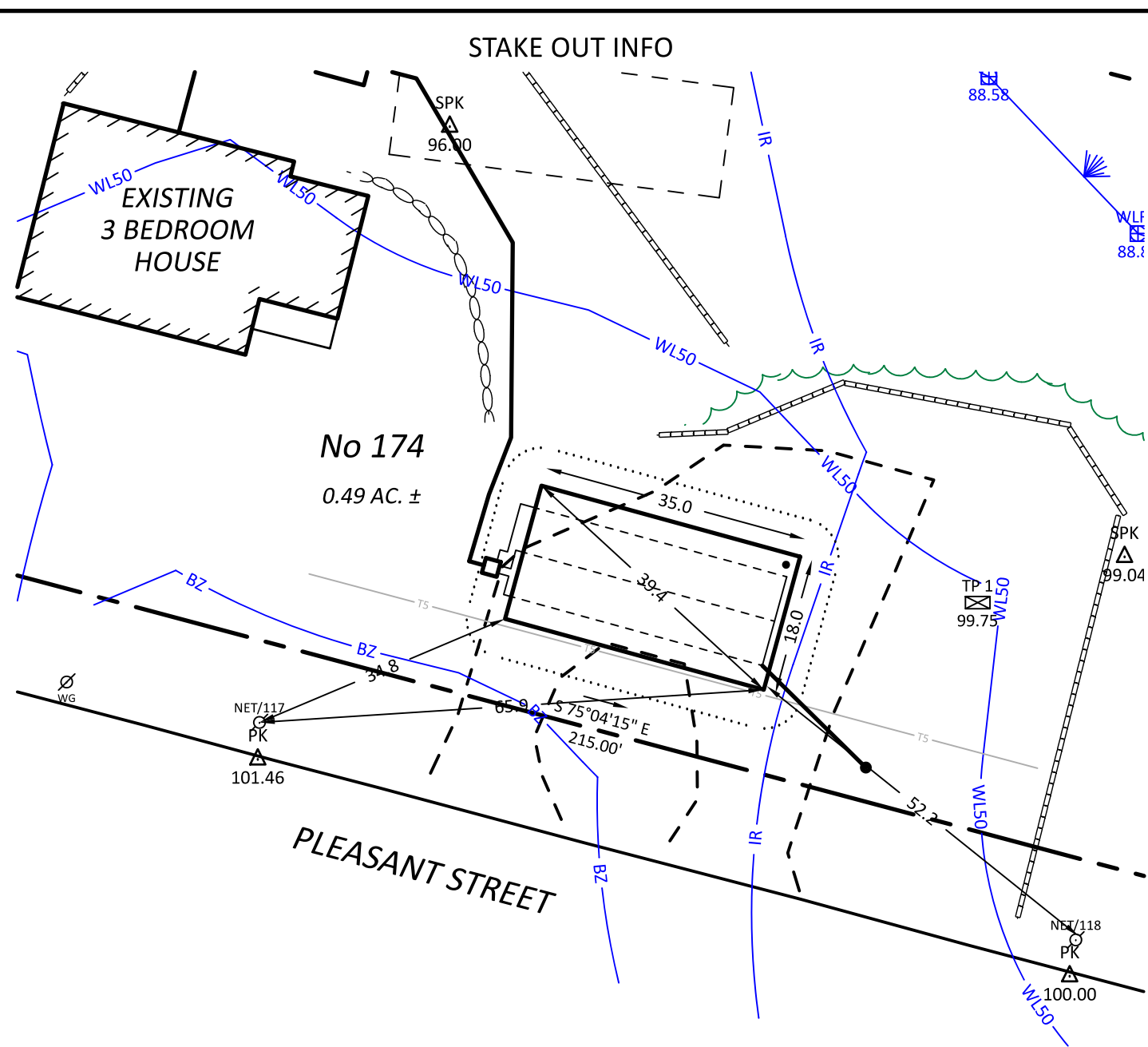
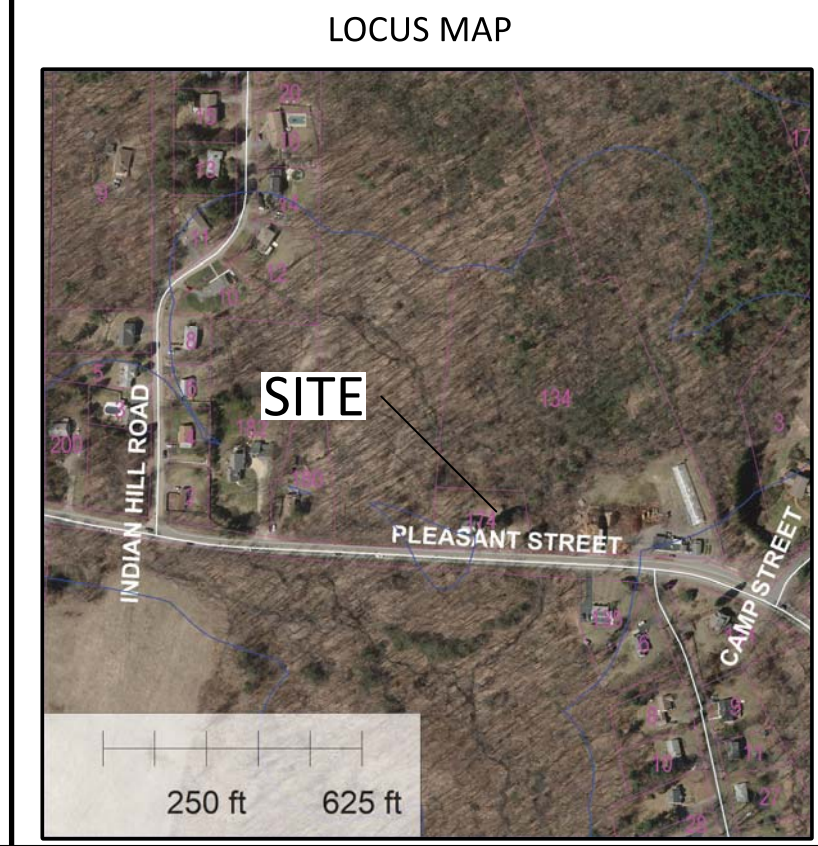
SOIL LOGS:

TP1 ELEVATION: 99.75' ESHW ELEVATION: 91.00'	
DEPTH	HRZ TXT COLOR MOTTLE/OTHER
0 - 84 in	FILL
84 - 90 in	A SL 10YR 6/8
90 - 108 in	Bw SL 5Y 5/4
108 - 132 in	C SL 5Y 5/4
	MOTTLES@105in

TP2 ELEVATION: 95.33' ESHW ELEVATION: 91.33'	
DEPTH	HRZ TXT COLOR MOTTLE/OTHER
0 - 48 in	FILL
48-84 in	C SL 5Y 5/4
	MOTTLES@48in

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



**GREEN HILL ENGINEERING**

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

WORKING TO PROTECT OUR WATER RESOURCES

PERC TESTING SEPTIC DESIGN WETLAND PERMITTING ENVIRONMENTAL CONSULTING

**PROPOSED SEPTIC SYSTEM**

REPAIR  
VICTOR LEMUS  
174 PLEASANT STREET  
PAXTON MA  
30 SEPTEMBER 2021

MAP 28 PARCEL 59

DATE: 10/24/2021 10:21 AM JOB: 2021-091