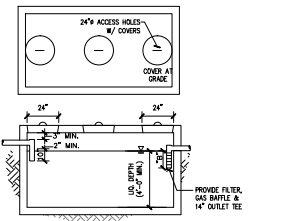
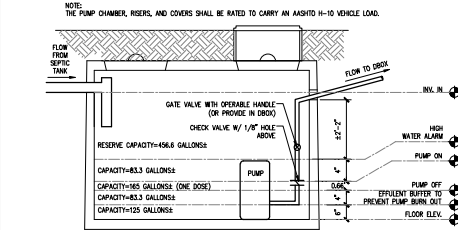


- NOTES:**
1. A = LIQUID DEPTH
  2. B = 1" FOR 4" LIQUID DEPTH
  3. C = 1" FOR 6" LIQUID DEPTH
  4. D = 1" FOR 8" LIQUID DEPTH
  5. E = 1" FOR 10" LIQUID DEPTH
  6. ANY CONSTRUCTION SHALL CONFORM TO 310 CDR.
  7. TANK SHALL BE CAPABLE OF CARRYING H-10 WHEEL LOAD WITH PRO. DRAINWAY
  8. COVER SHALL BE CAPABLE OF CARRYING H-10 WHEEL LOAD WITH PRO. DRAINWAY
  9. PROVIDE RISERS WITH LOCKABLE, INTERLOCK COVERS TO GRADE OVER BOTH SIDES.

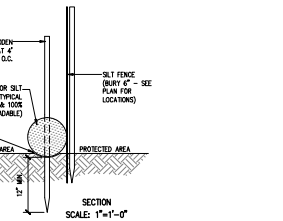


**PROPOSED 1,500 GALLON SEPTIC TANK H-10 LOADING DETAIL**  
SCALE: NOT TO SCALE

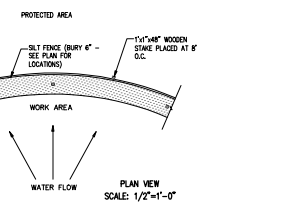


**PROPOSED PUMP CHAMBER DETAIL & NOTES**  
SCALE: 1/2"=1'-0"

- PUMP CHAMBER NOTES:**
1. PUMP CHAMBER SHALL BE A 1,000 GALLON REINFORCED CONCRETE TANK AS IN MANHOLE PRECAST MODEL C31-1000 OR EQUAL, TANK BAKING NOT BE ACCEPTED.
  2. PUMP CHAMBER SHALL HAVE A MINIMUM FLOOR AREA OF 43.5 SF AND SHALL HAVE A MINIMUM 4" LIFT TO DRAIN.
  3. THE PUMP CHAMBER SHALL BE CAPABLE OF WITHSTANDING A H-10 WHEEL LOADING UNDER THE PROPOSED SOIL CONDITIONS.
  4. THE TANK SHALL BE EQUIPPED WITH ONE SINGLE PHASE, SIMPLY STARTED PUMP AND IN LIBERTY FL-30 MODEL (OR APPROVED EQUAL). PUMP SHALL PUMP AT A RATE OF 20 GALLONS PER MINUTE AT A HEAD OF APPROXIMATELY 12' FEET. CONTRACTOR SHALL GUARANTEE THAT THE PUMP CAN PHYSICALLY FIT INTO THE PUMP CHAMBER. THE CONTRACTOR SHALL CLOSE THE GATE VALVE (AS NECESSARY) TO LIMIT THE FLOW THROUGH THE CHAMBER TO THE DESIGN FLOW.
  5. CONTRACTOR SHALL INSURE THAT THE PUMP STATION IS COMPLETELY WEATHERED.
  6. PUMP SHALL BE EQUIPPED WITH CONTROL SYSTEM BATTERY CASE PUMP TO OPERATE UPON SENSING 'PUMP ON LEVEL' AND SHUTS PUMP OFF UPON SENSING 'PUMP OFF LEVEL' AND SHALL PROVIDE A LOW AND HIGH LEVEL ALARM DETECTION AND ANNUNCIATION SYSTEM.
  7. ALARM DETECTION SHALL BE INDICATED BY A FLASHING LIGHT AND AN AUDIBLE SIGNAL. HOSE OF THE BUILDING AND SHALL BE ON A SEPARATE ELECTRICAL CIRCUIT.
  8. A GONG SHALL BE MOUNTED ADJACENT TO THE FLASHING LIGHT AND AUDIBLE SIGNAL STATING THAT THE ALARM CONDITION IS A RESULT OF THE WATER EFFLUENT PUMP FAILURE.
  9. A LICENSED ELECTRICIAN SHALL INSTALL THE POWER SUPPLY TO THE PUMPS WITH A SEPARATE CIRCUIT IN THE BUILDING ELECTRICAL SYSTEM AND SHALL INSTALL ALL WIRING, CONTROL AND ALARM CONNECTIONS. ALL ELECTRICAL WORK AND MATERIALS SHALL CONFORM TO THE LOCAL, STATE, AND NATIONAL ELECTRICAL CODES AND THE RECOMMENDATIONS OF THE MANUFACTURER.
  10. DISCHARGE PIPES SHALL HAVE A 1/8" HOLE DRILLED ALONG THE CHECK VALVE TO DRAIN THE FORCE MAIN TO DRAIN.
  11. PUMP STATION ELECTRICAL PANEL SHALL BE LOCATED NEAR THE BUILDING IN A LOCATION AT THE DISCRETION OF THE BUILDING OWNER.
  12. PUMPS SHALL BE EQUIPPED WITH A HAND PUMP FOR PUMP REPAIR.
  13. PROVIDE A CONCRETE OR NEPE RISER TO BRING THE ACCESS COVER TO GRADE.

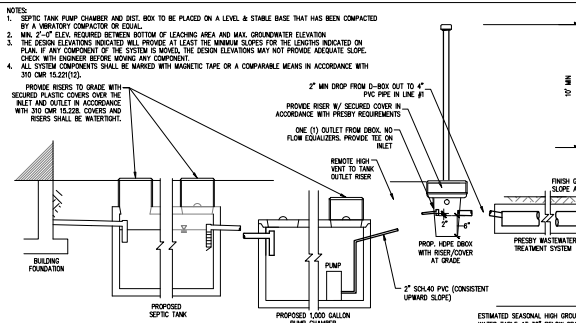


**SECTION SCALE: 1"=1'-0"**

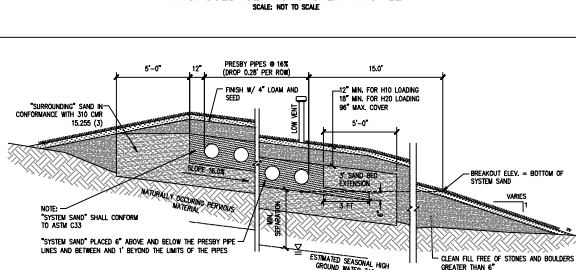


**PLAN VIEW SCALE: 1/2"=1'-0"**

**STRAW WATTLE & SILT FENCE**  
SCALE: AS NOTED



**PROPOSED SEPTIC SYSTEM PROFILE**  
SCALE: NOT TO SCALE



**PRESBY ENVIRO-SEPTIC WASTEWATER TREATMENT SYSTEM SECTION**  
SCALE: 1/4"=1'-0"

- PRESBY LEACHING SYSTEM NOTES:**
1. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE DESIGNER TO VERIFY THAT THE CONSTRUCTION PLANS ARE THE MOST CURRENT REVISION.
  2. ALL MODIFICATIONS TO THIS PLAN MUST BE APPROVED IN WRITING BY THE DESIGN ENGINEER AND THE LOCAL BOARD OF HEALTH.
  3. ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM WITH THE LOCAL BOARD OF HEALTH AND THE STATE ENVIRONMENTAL CODE TITLE 5 (310 CDR 15.00).
  4. SEVENTY-TWO HOURS PRIOR TO COMMENCING ANY EXCAVATION, THE CONTRACTOR SHALL NOTIFY DCS-AE AT 811. THE CONTRACTOR SHALL COORDINATE WITH THE LOCAL BOARD OF HEALTH (ENFORCEMENT) AND OVERSEER WITH THE APPROPRIATE UTILITY PROVIDER.
  5. EXISTING UTILITY LOCATIONS ARE APPROXIMATE AND BE FIELD VERIFIED. QUIN ENGINEERING, INC. DOES NOT WARRANT THAT ALL EXISTING UTILITIES HAVE BEEN IDENTIFIED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCAL BOARD OF HEALTH AND THE LOCAL BOARD OF HEALTH.
  6. THE INSTALLER SHALL NOTIFY QUINN ENGINEERING, INC. AT LEAST 24 HOURS IN ADVANCE OF REQUESTING INSPECTIONS. QUINN ENGINEERING, INC. SHALL CONDUCT INSPECTIONS AT THE FOLLOWING MILESTONES:
    - A. EXCAVATION COMPLETE - PRIOR TO PLACING FILL
    - B. EXCAVATION COMPLETE
    - C. FINISH GRADING COMPLETE
    - D. COMPLETE STATIONING
  7. ALL SYSTEM PIPES SHALL BE MARKED WITH MAINTENANCE MARKING TAPE IN ACCORDANCE WITH 310 CDR 15.02 (312).  
 15. THE SYSTEM OWNER SHALL BE RESPONSIBLE FOR OBTAINING A PERMIT FROM THE LOCAL BOARD OF HEALTH FOR THE SEPTIC TANK IN ACCORDANCE WITH 310 CDR 15.03. ALL COMPONENTS OF THE SYSTEM SHALL BE MAINTAINED IN ACCORDANCE WITH 310 CDR 15.03. THE SYSTEM MANUFACTURER'S REQUIREMENTS OR OTHER APPLICABLE CODES SHALL BE MAINTAINED.
  8. MACHINERY WHICH MAY OILY OR DISTURB THE PIPE SHALL NOT BE ALLOWED ON THE DISPOSAL AREA.
  9. THE CONSTRUCTION OF PERMANENT STRUCTURES UPON THE DISPOSAL SYSTEM AND/OR RESERVE AREA IS NOT ALLOWED.

- SYSTEM NOTES:**
1. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE DESIGNER TO VERIFY THAT THE CONSTRUCTION PLANS ARE THE MOST CURRENT REVISION.
  2. ALL MODIFICATIONS TO THIS PLAN MUST BE APPROVED IN WRITING BY THE DESIGN ENGINEER AND THE LOCAL BOARD OF HEALTH.
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    - A. EXCAVATION COMPLETE - PRIOR TO PLACING FILL
    - B. EXCAVATION COMPLETE
    - C. FINISH GRADING COMPLETE
    - D. COMPLETE STATIONING
  7. ALL SYSTEM PIPES SHALL BE MARKED WITH MAINTENANCE MARKING TAPE IN ACCORDANCE WITH 310 CDR 15.02 (312).  
 14. THE SYSTEM OWNER SHALL BE RESPONSIBLE FOR OBTAINING A PERMIT FROM THE LOCAL BOARD OF HEALTH FOR THE SEPTIC TANK IN ACCORDANCE WITH 310 CDR 15.03. ALL COMPONENTS OF THE SYSTEM SHALL BE MAINTAINED IN ACCORDANCE WITH 310 CDR 15.03. THE SYSTEM MANUFACTURER'S REQUIREMENTS OR OTHER APPLICABLE CODES SHALL BE MAINTAINED.
  8. MACHINERY WHICH MAY OILY OR DISTURB THE PIPE SHALL NOT BE ALLOWED ON THE DISPOSAL AREA.
  9. THE CONSTRUCTION OF PERMANENT STRUCTURES UPON THE DISPOSAL SYSTEM AND/OR RESERVE AREA IS NOT ALLOWED.

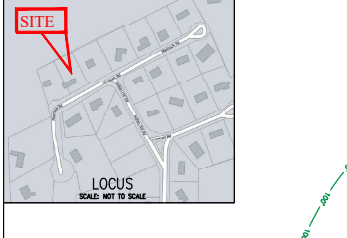
**DESIGN CRITERIA:**

RESIDENTIAL LOADING	8	BEDROOMS
WATER EQUIPMENT (LAB TESTED)	8	WATER EQUIPMENT (LAB TESTED)
SOIL GROUP	16.0	X
SYSTEM TYPE	16.0	X
GRAVITY SEPTIC / GROUND	16.0	X
ENVIRO-SEPTIC PIPE RECES	280	FT
ENVIRO-SEPTIC PIPE PROVIDED	280	FT
C/A TO C/A PIPE SPACING	1.75	FT
NUMBER OF ROWS	7	ROWS
SEASONAL HIGH GROUND WATER TABLE	60.0	FT
SYSTEM SAND LENGTH	42.0	FT
SYSTEM SAND WIDTH	16.0	FT

LEACHING AREA REQUIRED UNDER TILE IS: 440 (0.0/46.0) SQ/FT = 687 S.F.  
 C-33 SYSTEM SAND BEHIND LOWEST ROW = 1 FT  
 C-33 SYSTEM SAND BEHIND HIGHEST ROW = 1 FT  
 MATERIAL COVER OVER ENVIRO-SEPTIC PIPES = 1.75 FT  
 SYSTEM SLOPE = 1.60 S  
 CENTER-TO-CENTER SPACING = 16.0 S  
 NUMBER OF ROWS = 7  
 SEPTIC TO SEASONAL HIGH GROUND WATER SEPARATION DISTANCE TO GROUNDWATER DRAINAGE = 2.0 FT  
 DROP IN ELEVATION FROM PIPE TO PEE = 16.5 FT  
 TOTAL SYSTEM SAND WIDTH = 42 FT  
 TOTAL SYSTEM SAND LENGTH = 42 FT

**FIELD ELEVATIONS**

ROW #	1	2	3	4	5	6	7
FINISH GRADE OVER PIPE (SYSTEM SLOPE = 1.60)	100.62	100.22	100.14	100.61	100.62	100.62	100.62
TOP OF ENVIRO-SEPTIC PIPE	100.35	100.22	100.14	100.46	100.18	100.50	100.62
TOP OF INVERT 18\"/>							
BOTTOM OF ENVIRO-SEPTIC PIPE	100.35	100.60	100.32	100.04	100.18	100.40	100.20
BOTTOM OF C-33 SYSTEM SAND	100.80	100.52	100.24	100.96	100.68	100.40	100.12



**SITE**  
SCALE: NOT TO SCALE

**NOTES:**

1. PROJECT INFORMATION: DATE: 8/20/24; DRAWN BY: PATRICK ZAMBARO; CHECKED BY: PATRICK ZAMBARO; APPROVED BY: PATRICK ZAMBARO.
2. THESE RESERVE AREAS WITHIN 10' OF THE PROPOSED SEPTIC TANK SHALL BE MAINTAINED AS RESERVE AREAS WITHIN A FLOOD HAZARD ZONE AS INDICATED IN THE FLOOD HAZARD ZONE MAP. NO PORTION OF THE PROPOSED WORK SHALL BE CONSIDERED AS A FLOOD HAZARD ZONE AS INDICATED IN THE FLOOD HAZARD ZONE MAP.
3. THE SITE IS NOT LOCATED WITHIN AN OUTSTANDING RESERVE ZONE, A ZONE OF A SURFACE WATER PROTECTION AREA, ZONE OF A WETLAND, OR A ZONE OF A FLOOD HAZARD ZONE AS INDICATED IN THE FLOOD HAZARD ZONE MAP.
4. CONSERVATION APPROVAL IS REQUIRED FOR THE WORK SHOWN ON THIS PLAN.

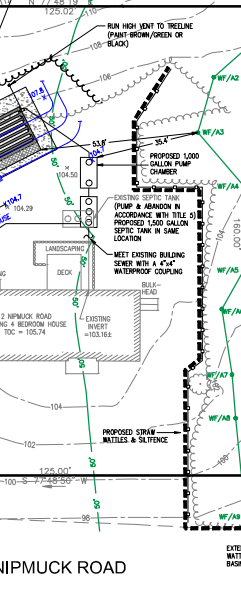
**SOIL TESTING**

DATE PERFORMED: 4/7/21  
 BY: SHELLEY HALL, ENV. #893  
 WITNESS NAME: GERRIE B. PERC. RATE: SUE. ANALYSIS CLASS 1  
 MOTTLES @ 30\"/>

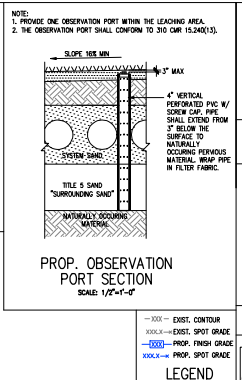
**COMPONENT ELEVATIONS**

PROPOSED INVERT AT FOUNDATION	USE EXISTING (103164)
INVERT AT TANK IN	102.00
INVERT AT TANK OUT	101.75
INVERT AT PUMP CHAMBER IN	101.50
INVERT AT PUMP CHAMBER OUT	101.25
INVERT AT DRAIN IN	101.77
INVERT AT DRAIN OUT	101.00

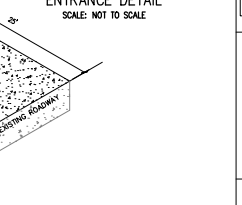
**PROPOSED SUBSURFACE SEWAGE DISPOSAL SYSTEM REPAIR PLAN**



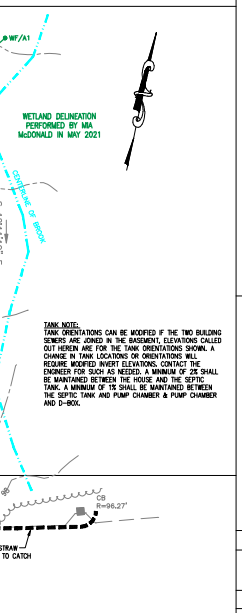
**NIPMUCK ROAD**



**PROP. OBSERVATION PORT SECTION**  
SCALE: 1/2"=1'-0"



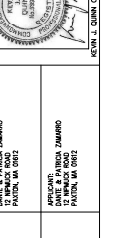
**CRUSHED STONE CONSTRUCTION ENTRANCE DETAIL**  
SCALE: NOT TO SCALE



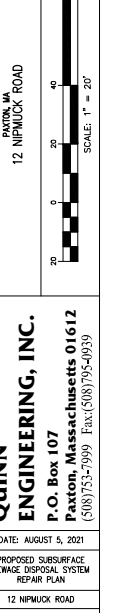
**PROPOSED SUBSURFACE SEWAGE DISPOSAL SYSTEM REPAIR PLAN**

**REVISIONS**

NO.	REVISION	DATE
1 <td>REVISED SYSTEM LENGTH</td> <td>8/19/24</td>	REVISED SYSTEM LENGTH	8/19/24



**LEGEND**



**QUINN ENGINEERING, INC.**  
P.O. Box 107  
Paxton, Massachusetts 01612  
(508)753-7999 Fax:(508)753-0939

DATE: AUGUST 5, 2021  
 PROPOSED SUBSURFACE SEWAGE DISPOSAL SYSTEM REPAIR PLAN  
 12 NIPMUCK ROAD  
 SHEET 1 OF 1