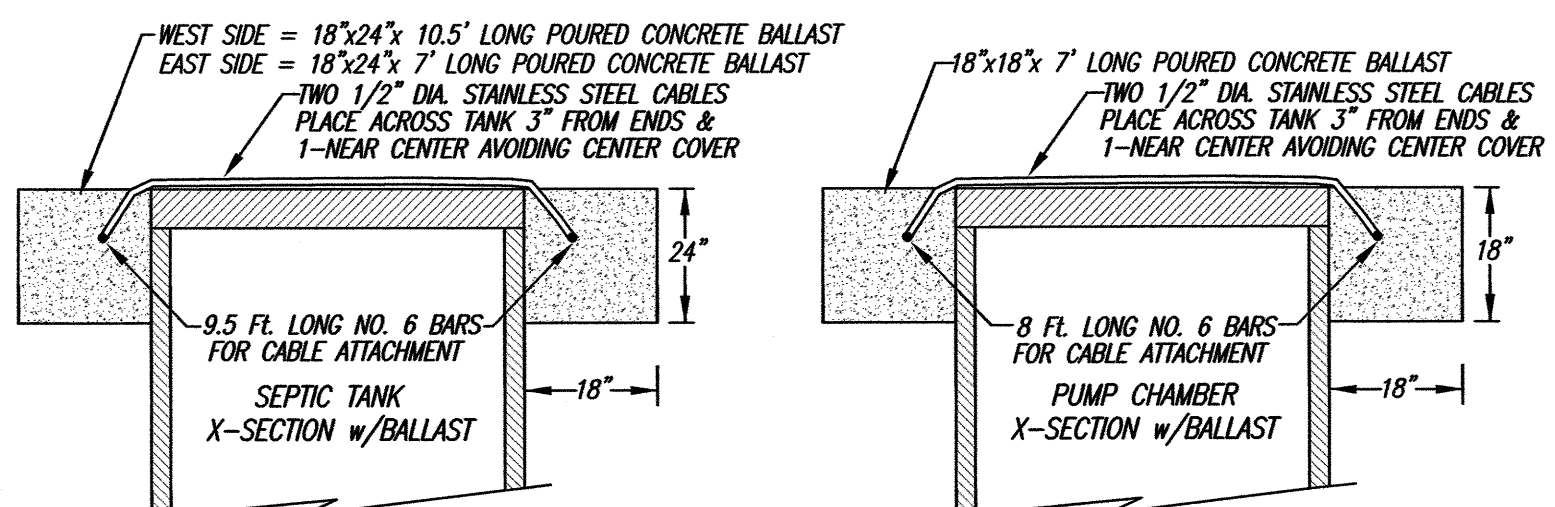
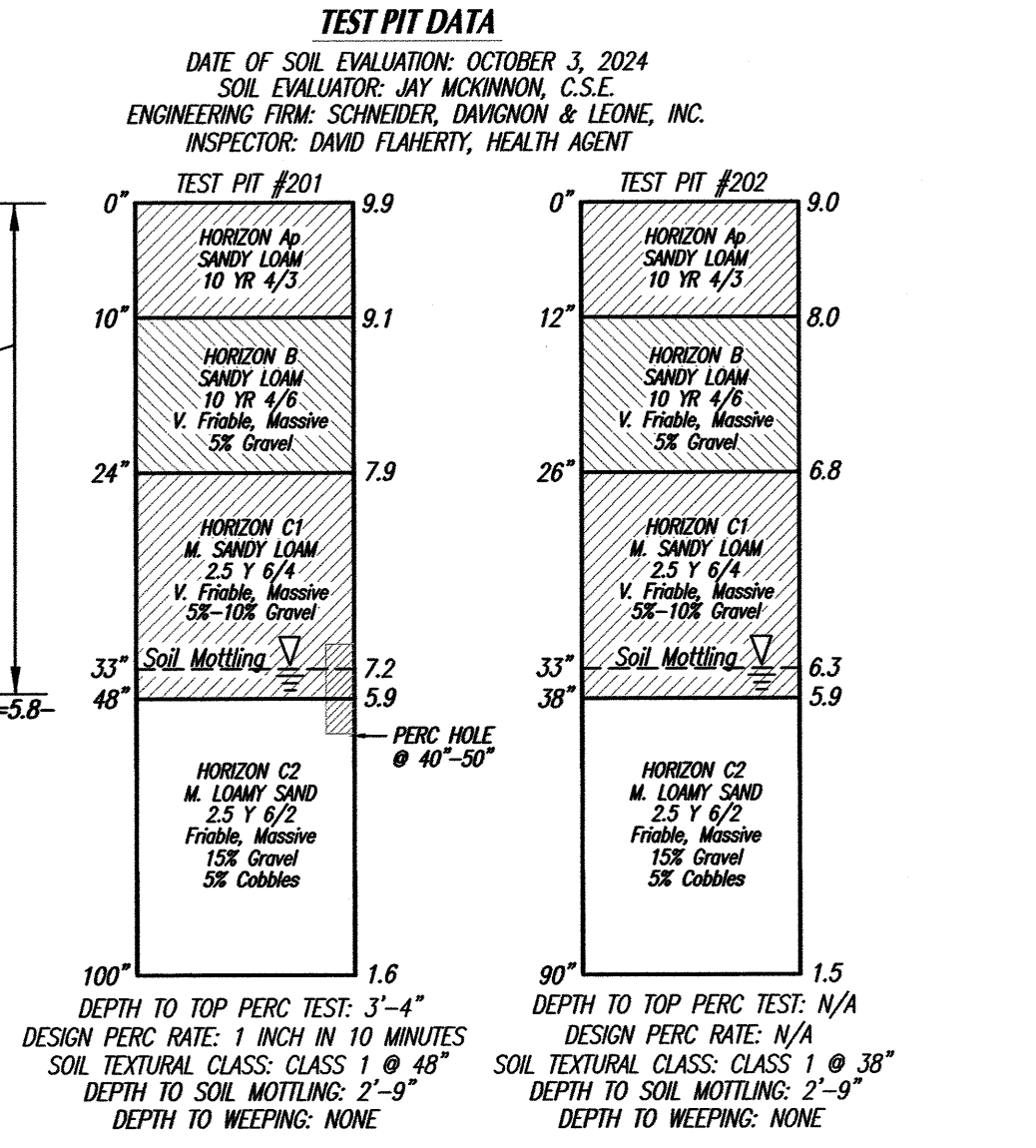


"REMOVE AND REPLACE" NOTE:
WHERE REQUIRED, CONTRACTOR IS TO REMOVE ALL LOAM, SLURRY AND OTHER UNSUITABLE MATERIAL IN THE AREA BENEATH AND FOR 5 FT. ON ALL SIDES OF THE LEACHING FACILITY. EXCAVATED MATERIAL IS TO BE REPLACED WITH CLEAN CONCRETE SAND FREE FROM CLAY, FINES, OR OTHER UNSUITABLE MATERIAL. IN ACCORDANCE WITH 310CMR 15.02(3) CONTRACTOR SHALL PROVIDE A SIEVE ANALYSIS OF FILL MATERIAL. THE FILL SHALL NOT CONTAIN ANY MATERIAL LARGER THAN TWO INCHES. A SIEVE ANALYSIS, USING A #4 SIEVE, SHALL BE PERFORMED ON A REPRESENTATIVE SAMPLE. UP TO 45% BY WEIGHT OF THE SAMPLE MAY BE RETAINED ON THE #4 SIEVE. SIEVE ANALYSIS ALSO SHALL BE PERFORMED ON A FRACTION OF SAMPLE PASSING THE #4 SIEVE, SUCH ANALYSIS MUST DEMONSTRATE THAT THE MATERIAL MEETS EACH OF THE FOLLOWING SPECIFICATIONS AS LISTED TO THE RIGHT:

SIEVE SIZE	% THAT PASS SIEVE
#4	100%
#10	100%-100%
#20	0%-20%
#40	0%-5%

BOTTOM OF EXCAVATION SHALL BE LEVEL AT ELEVATION 5.8 INTO HORIZON C2, MEDIUM LOAMY SAND STRATA.
(ELEVATION TO BE VERIFIED BY ENGINEER IN FIELD PRIOR TO INSTALLATION)
TOP OF FILL PER NOTE TO EXTEND TO EL= 10.97 TOP OF CHAMBERS.
APPROX. VOLUME OF TITLE 5 SAND REQUIRED = 155 Cu.Yds. (20% Compaction Allowance).
APPROX. VOLUME OF C-33 SYSTEM SAND REQUIRED = 38 Cu.Yds. (20% Compaction Allowance).



- TITLE 5 NOTES:**
- SEPTIC SYSTEM COMPONENTS SHALL BE H-20 PRODUCTS IF LOCATED UNDER DRIVEWAY, PARKING OR OTHER AREAS SUBJECT TO VEHICULAR TRAFFIC.
 - ALL OTHER SYSTEM COMPONENTS SHALL BE H-10 PRODUCTS.
 - GROUT OR CAST IN PLACE RUBBER BOOT IS TO BE USED WHERE PIPES ENTER OR LEAVE ALL CONCRETE STRUCTURES IN ORDER TO PROVIDE A WATER TIGHT SEAL.
 - USE ALL SCHEDULE 80 PIPE UNDER DRIVEWAY AND SCHEDULE 40 AS SPECIFIED.
 - THE MINIMUM SLOPE PER TITLE 5 FOR ALL 4" SOLID PIPE = 1.0%.
 - THIS SYSTEM IS NOT DESIGNED FOR A GARBAGE DISPOSAL UNIT, WATER SOFTENER OR OTHER HIGH WATER USAGES.
 - ALL SYSTEM COMPONENTS SHALL BE MARKED WITH MAGNETIC MARKING TAPE.
 - THE MINIMUM SLOPE OF THE FINISH GRADE SHALL BE 3:1.

SEWAGE DISPOSAL SYSTEM DESIGN DATA

FLOW REQUIREMENTS:
EXISTING NUMBER OF BEDROOMS: THREE (3)
DAILY DESIGN FLOW PER TITLE 5: 110 GALLONS/BEDROOM/DAY
TOTAL DESIGN FLOW: 110 GAL/BDRM x 3 = 330 GAL/DAY

SEPTIC TANK SIZE:
TITLE 5: 330 GAL. X 200% = 660 GALLONS
INSTALL A 1,500 GAL. MONOLITHIC 2-COMPARTMENT PRECAST CONCRETE SEPTIC TANK

PUMP CHAMBER:
INSTALL A 1,000 GAL. MONOLITHIC PRECAST CONCRETE PUMP CHAMBER

TYPICAL CHAMBER LEACHING FIELD:
DESIGN SOIL TEXTURAL CLASS: CLASS 1
DESIGN PERCOLATION RATE: 1 INCH IN 10 MINUTES
LONG TERM ACCEPTANCE RATE: 0.60

REQUIRED LEACHING AREA: 330 GAL/DAY Divided By LTR: 0.60 = 550 Sq.Ft.
LEACHING AREA PROVIDED: 4.73 Sq.Ft./Linear Ft. OF INFILTRATOR QUICK4 PLUS STANDARD LP CHAMBERS
(5 ROWS x 6 UNITS/ROW) = 30 UNITS x 4 Ft./UNIT + (10 END CAPS x 0.375 Ft./END CAP) = 123.25 LINEAR Ft. OF INFILTRATOR QUICK4 PLUS STANDARD LP CHAMBERS x 4.73 Sq.Ft./LINEAR Ft. = 585 Sq.Ft.
585 Sq.Ft. x 0.60 GAL/Sq.Ft. = 351 GAL LEACHING/DAY

TOTALS:
TOTAL NUMBER OF DISTRIBUTION LINES = FIVE (5)
TOTAL NO. OF INFILTRATOR QUICK4 PLUS STANDARD LP (INV.=3.3") CHAMBERS = 30
TOTAL LEACHING AREA = 585 > 550 Sq.Ft.
TOTAL LEACHING CAPACITY = 351 GAL/DAY >> 330 GAL/DAY

PUMP CALCULATIONS:
PROPOSED DESIGN DOSING CYCLE 86 GAL - 3 GAL OF BACKFLOW = 83 GAL/CYCLE
VERTICAL HEAD LOSS: EL 11.0 (4' Prior to D-Box Inv. In) - EL 2.8 (Pump Intake El) = 8.2 FL.
FITTING(S) LOSS IN NETWORK: 5-90 Degree ELBOWS = 5.5 FL. (5) + Check Valve = 13 FL. + Gate Valve 1.3 FL. = 42 FL.
FRICTION HEAD LOSS: (7 FL. OF 2" PVC PIPE (Inside Chamber) + 42 FL.) x 4.68 FL./100 FL. (AT 50 Gal./Min.) = 2.3 FL.
TOTAL HEAD LOSS = 8.2 FL. + 2.3 FL. + 0.8 FL. = 11.3 FL. at 50 GALLONS PER MINUTE
PUMP RUN TIME = 86 GALLON CYCLE DIVIDED BY 59 GAL./MIN. = 1.72 MINUTES
VOLUME OF DOSE = 83 GAL/351 Sq.Ft./7.48 Gal./Cu.Ft. = 0.93 FL. = 0.37 IN.
PUMP DRAW DOWN = 86 GAL/Cycle Divided By 259 Gal./Fl. = 0.33 FL. = 4 INCHES
INSTALL A "MYERS PUMP CO." SRM4 - 4/10 H.P. RESIDENTIAL SEWAGE PUMP RATED AT 50 G.P.M. AT 11.3 FL. OF HEAD
INSTALL THREE NON-MERCURY FLOAT SWITCHES, ON, OFF AND ALARM, ALARM ACTIVATION WILL INDICATE
PUMP FAILURE AND AVAILABLE STORAGE LEFT IN CHAMBER = 627 GALLONS BEFORE PUMP/OUT IS REQUIRED
ELECTRICIAN SHALL INSTALL A SIMPLEX CONTROL PANEL TO BE LOCATED INSIDE THE DWELLING.

Rev. #	DATE	BY	DESCRIPTION
1			

SEWAGE DISPOSAL SYSTEM REPAIR PLAN
FOR PROPERTY LOCATED
at 732 SCOTICUT NECK ROAD in FAIRHAVEN, MA.
PREPARED FOR
ROSO INVESTMENT REALTY TRUST

SHEET 2 OF 2 SHEETS

SCALE: 1"=20' DATE: APRIL 29, 2025

SCHNEIDER, DAVIGNON & LEONE, INC.
PROFESSIONAL CIVIL ENGINEERS & LAND SURVEYORS
P.O. Box 480, 81A COUNTY ROAD, UNIT G, MATTAPOISETT, MA 02739
1-508-758-7866

Drawn By: D.M.D. Check By: D.M.D. Job No. 3965