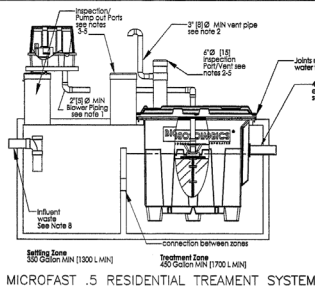
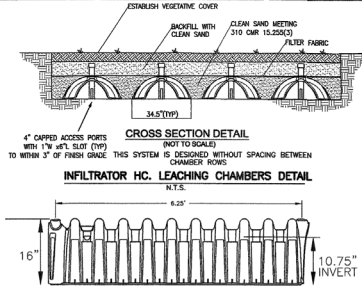
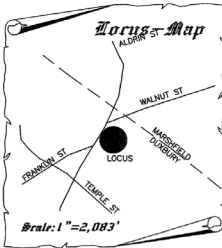




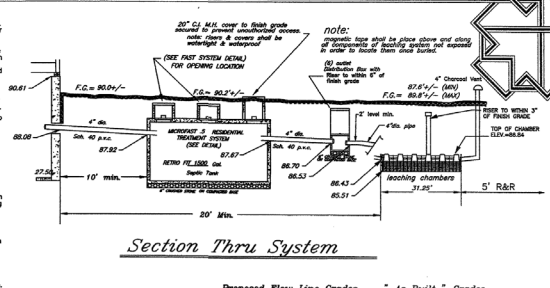
Underground Septic Tanks & Pump Chambers

- 1.) Tanks shall be structurally sound and to withstand the super imposed loads.
- 2.) Tanks shall be watertight and waterproof.
- 3.) Tanks shall be pre cast concrete, or approved equivalent.
- 4.) Manufacturers of septic tanks shall implement a quality control/quality assurance program in conformity with ASTM standard C-1257-81. Tanks shall be embossed with a seal stamp that the ASTM standard has been met. Tanks not embossed with a seal shall be rejected.
- 5.) Tanks shall be accessible for inspection and maintenance. No structures shall be located directly upon, above, or near the tanks which may interfere with performance, access, inspection, and pumping or repair.
- 6.) Inlet and outlet tees shall be of cast iron, schedule 40 pipe, or approved equal.



NOTES

1. All piping to FABRI may not exceed 100 ft (30m) total length and flow in maximum of a 1/2 inch in the piping system. For distances greater than 100 ft (30m) consult factory. Slope shall be located above floor level of a concrete base 2\"/>
- 2. Vent to located location and cover opening with a vent grate with a 1/2\"/>
- 3. All appearance to FABRI (e.g. tanks, access ports, electrical, etc.) must conform to applicable county, state, provincial, and local standards and applicable codes. Pump out access shall be constructed to thoroughly clean out both tanks to prevent accidental or unauthorized access.
- 4. All inspection, viewing and pump out ports must be secured to prevent accidental or unauthorized access.
- 5. Tank piping, control, etc. are provided by others. Slover control system by Bio-Microcos, Inc. See Infiltration Manual.
- 6. If less than the specified minimum are installed, consult factory for guidance.
- 7. All piping and ancillary equipment installed other than FAST must not impinge or restrict flow of effluent.
- 8. The tanks shall be designed to prevent off passage between the infiltration zone and the treatment zone and preventing an off load. Infiltration occurs a bottle will be added to the top of treatment zone shall be with a pipe cap. Consult factory for guidance.
- 9. Infiltration zone in FABRI system is not capable of withstanding a 1500 lb (700 kg) load. Any installation in which a 150 lb (70 kg) buried deeper than 1 foot, or where additional loading conditions may occur, a professional engineer must be consulted. FABRI with their opinion must be incorporated. Refer to Infiltration Manual for more details.
- 10. Specified treatment levels may require specific features to be incorporated into the design. Consult factory for guidance.



- 7.) Septic tanks shall be provided with at least three (3) 20\"/>
- 8.) INSTALLATION:
 - A) Tanks shall be installed true to grade on a level stable base that has been mechanically compacted and on which six inches of crushed stone has been placed to assure stability and to prevent settling.
 - B) The inlet and outlet tees shall be installed to the grades shown on the drawings. The tees shall extend a minimum six inches above the floor line of the septic tank and shall be on the center line of the septic tank and located directly under the access manhole. Check-restrictor riser handles shall not be used as substitutes for inlet or outlet tees.
 - C) FOR REPAIRS: Contractor SHALL, when connecting a new septic tank to an existing sewer line, bury sewer line a 50th 40 or 61 in good condition or it shall be replaced. Step sheet, all out flow pipes from building run through septic tank, and inrs. are correct prior to any excavating. All work in conformance with Mass. State Plumbing Code.

- 11.) The design of this system does not allow for the use of a garbage disposal.
- 12.) Grease trap, if applicable, shall be inspected every month, and shall be cleaned every 2 months or until the level of grease is 25% of the effective depth of the trap.
- 13.) The design of this system conforms with the following minimum distances from the proposed sanitary system:
 - A.) Surface water supply or gravel packed wells.....400 ft.
 - B.) Surface public wells.....250 ft.
 - C.) Private potable wells.....100 ft.
 - D.) Non potable / irrigation wells.....100 ft.
 - E.) Other sanitary soil absorption system.....10 ft.
 - F.) Wetlands.....70 ft.

DESIGN CRITERIA

- 14.) No structures shall be located upon, above, or within 20' of the leaching facility. The reserve area (100% expansion) is considered to be the same as the leaching facility.
- 15.) The top of all system components, including the septic tank, distribution box or dosing chamber and soil absorption system, shall be installed no more than 36\"/>

Leaching Chambers Area

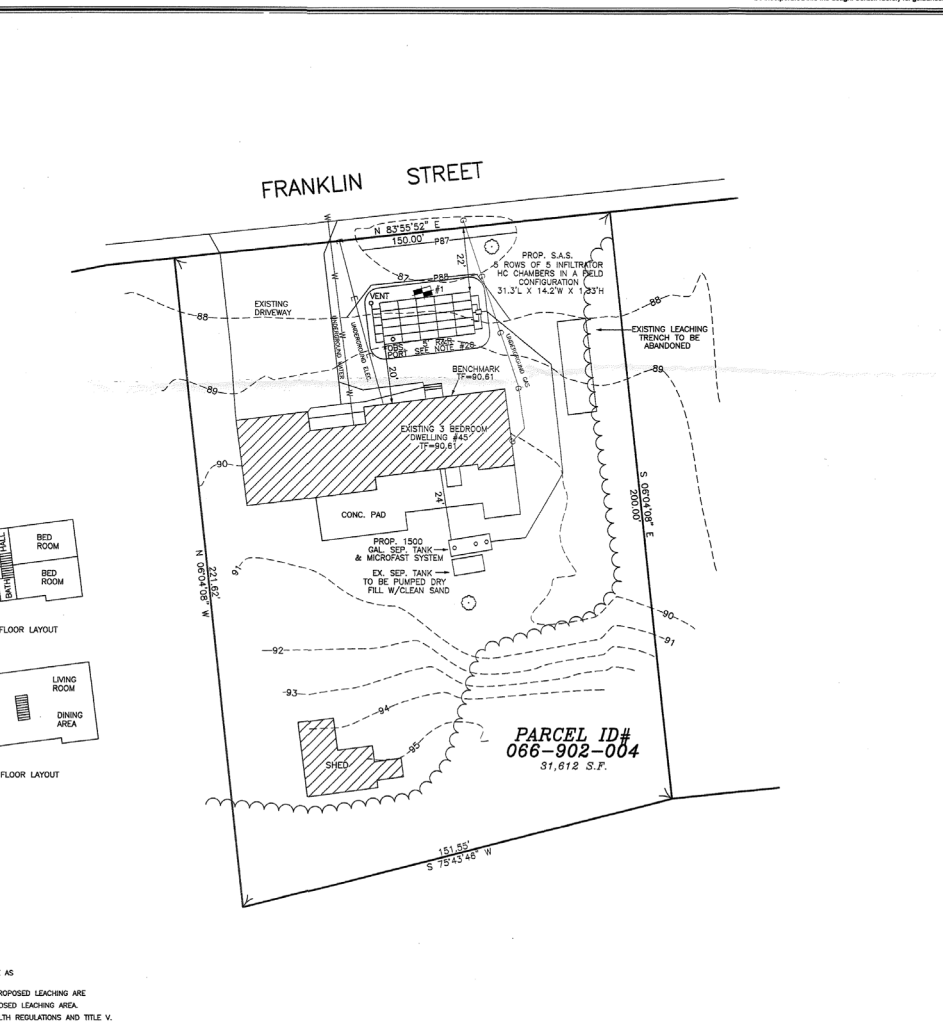
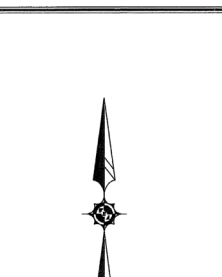
- 16.) Leaching chamber shall be an INFILTRATOR HC LEACHING chamber, or engineer approved equal.
- 17.) All installations shall be true to line and grade.
- 18.) All piping shall be PVC SCH. 40
- 19.) Distribution pipe(s) shall have a minimum diameter of 4\"/>
- 20.) All unsuitable material including top soil and sub soil shall be removed as follows:
 - a.) 18\"/>
 - b.) 18\"/>
 - c.) 18\"/>
 - d.) When existing ground elevations are changed a finished ground elev. "subsoil" shall be required prior to certificate of compliance being issued.

Inspection Schedule

- 21.) To obtain the board of health certification, confirmation of the proper installation is required.
 - a.) After Excavation of unsuitable material
 - b.) Placement of the septic tank
 - c.) Installation of the system with all components operating for 48 hours
 - d.) When existing ground elevations are changed a finished ground elev. "subsoil" shall be required prior to certificate of compliance being issued.

Utility Notes

- 1.) LOCUS DOES LIE IN A ZONE II WELL
- 2.) LOCUS DOES NOT LIE IN A SPECIAL FLOOD HAZARD ZONE AS DETERMINED BY THE FEMA MAP.
- 3.) THERE ARE NO KNOWN WETLANDS WITHIN 150' OF THE PROPOSED LEACHING AREA
- 4.) THERE ARE NO KNOWN WELLS WITHIN 200' OF THE PROPOSED LEACHING AREA AND TITLE V.
- 5.) THIS SYSTEM CONFORMS TO THE TOWN OF DUXBURY HEALTH REGULATIONS AND TITLE V.



Proposed Flow Line Grades

As Built	"As Built" Grades
INV. AT FOUNDATION	88.08
INV. INTO SEPTIC TANK	87.82
INV. OUT OF SEPTIC TANK	87.67
INV. INTO DISTRIBUTION BOX	88.70
INV. OUT OF DISTRIBUTION BOX	88.53
INV. INTO CHAMBER BED	88.43
BOTTOM OF CHAMBER BED	88.51
WATER TABLE	NOTED @ 79.00



SOIL LOGS

PERC. RESULTS >2 MIN./INCH Present During Tests On - 3/23/23
Soil Evaluator: JOSEPH F. WEBBY JR. #2564

DESIGN CALCULATIONS

SEPTIC TANK SIZING CALCULATIONS
440' x 2' = 880 GAL. USE MICROFAST
5 GAL. (500 GAL/DAILY FLOW APPROVED)

PROPOSED SOIL ABSORPTION SYSTEM SIZING CALCULATIONS

25 (CHAMBERS) x 6.25' x 4.7' (EFFECTIVE LEACHING AREA SE/FL PER MAN. SPEC) = 743 SF

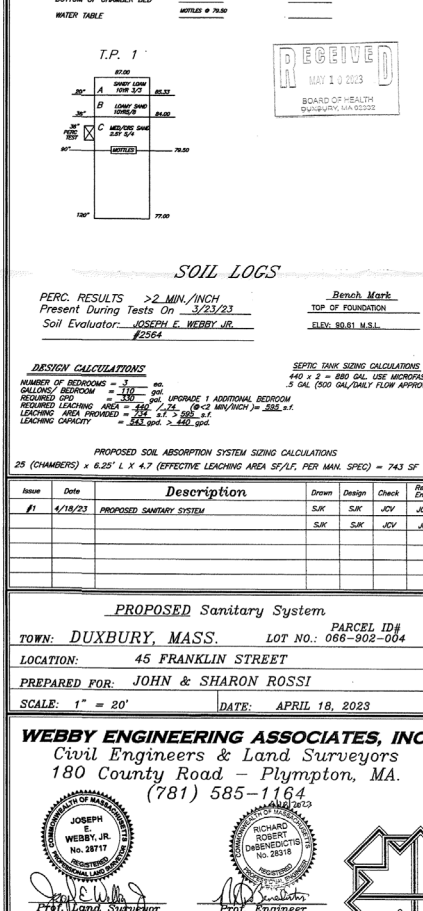
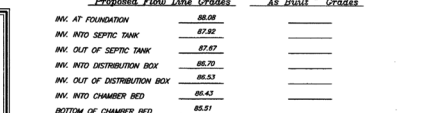
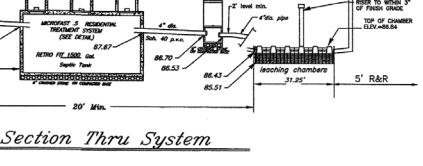
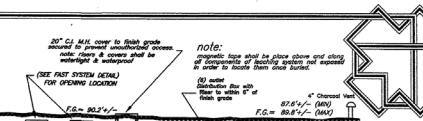
Issue	Date	Description	Drawn	Design	Check	Rev. Eng.
1	4/18/23	PROPOSED SANITARY SYSTEM	SLK	SLK	JCY	JCY

PROPOSED Sanitary System
TOWN: DUXBURY, MASS. PARCEL ID# 066-902-004
LOCATION: 45 FRANKLIN STREET
PREPARED FOR: JOHN & SHARON ROSSI
SCALE: 1" = 20' DATE: APRIL 18, 2023

WEBBY ENGINEERING ASSOCIATES, INC.
Civil Engineers & Land Surveyors
180 County Road - Plympton, MA.
(781) 585-1164

JOSEPH F. WEBBY JR.
No. 28717
Prof. Land Surveyor

RICHARD ROBERT DIBENEDETTO
No. 28318
Prof. Engineer



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