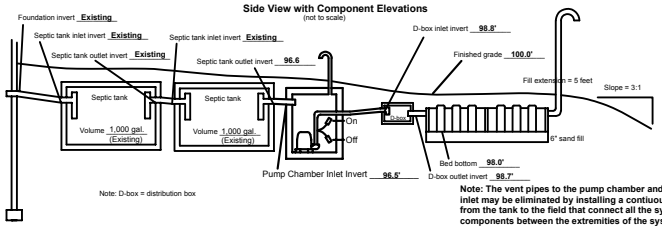
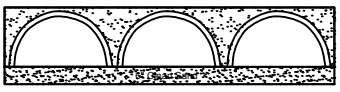
Side View with Component Elevations
(not to scale)



Note: D-box = distribution box

Note: The vent pipes to the pump chamber and field inlet may be eliminated by installing a contiuous vent from the tank to the field that connect all the system components between the extremities of the system.

End View of Field Construction
(not to scale)

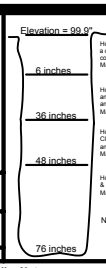


Design Intent: The bottom of the Effluent Disposal System (EDS) is constructed at 98.0' of elevation and is approximately 2.0' below ground level on the high contour side of the designed EDS.

Design Criteria: 4 bedroom house = 600 GPD @ 12 min./in. = 1,200 sq. ft. or 720 sq. ft. of chambers. This design = 768 sq. ft. of chambers. Septic tank = 1,500 gallons (minimum). 1,000 + 1,000 gal. existing.

Percolation Test: 12 minutes per inch at 24 inches of depth. (refer to "General, note #4)

Test Pit
(not to scale)



Horizon Ap: Sandy loam with a weak subangular structure. Friable with a clear boundary & many roots. 0% pebbles, stones or cobbles.
Matrix = 10YR3/2

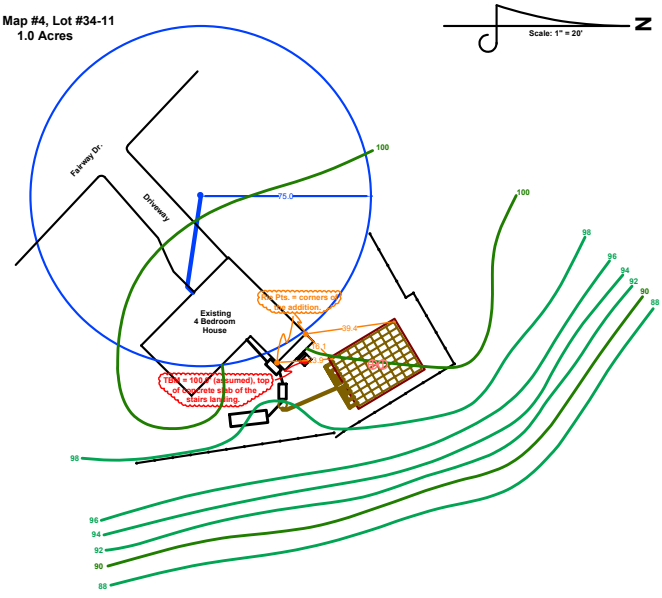
Horizon Bw1: Sandy with a granular structure. Very friable with an abrupt boundary & many roots. 2% pebbles & 0% stones and cobbles.
Matrix = 10YR5/6

Horizon Bw2: Bank run gravel from an abondoned field. Very friable! Clean, no staining or sludge residue. 2% pebbles & 95% stones 0% cobbles. and cobbles.
Matrix = N/A

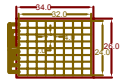
Horizon Bw3: Sandy with a granular structure. Very friable with & many roots. 0% pebbles, stones or cobbles.
Matrix = 10YR4/3

Note:
No free water observed & roots decended to 42"

Tax Map #4, Lot #34-11
1.0 Acres



Detail View of Effluent Disposal Area



Installer Notes:

1. All loam shall be removed from beneath the leaching and fill extension areas prior to construction of the leaching field.
2. Piping from the house to the septic tank shall be SDR26 or stronger pipe and must be sealed to prevent seepage.
3. Piping from the septic tank to the leaching field must be SDR 26 or stronger pipe.
4. All joints, pipe connections and seams in the septic tank shall be sealed and grouted to prevent seepage.
5. Fill used to cover the leaching field shall contain no stones larger 4" in size and no greater than 25% by volume.
6. The reserve area for the replacement of the field in case of failure, needs to be done in the same location!
7. A vented "T" shall be installed in the inlet of the distribution box as a velocity reducer for the effluent decending from the septic tank.
8. The maximum dosing volume shall be 75 gallons per cycle. The on/off float heights for the effluent pump shal be calculated and set to achieve the maximum dosing volume or less.
9. The maximum flow from the effluent pump shall be reduced to 15 gallons per minute.
10. The alarm float shall be calculated and set to turn on (alarm) at 10% of the pump chamber volume above the effluent pump float "on" position.
11. The effluent discharge pipe shall be 1 1/2" dia. seamless pipe. It shall be buried to a minimum of 4' deep unless ledge or othe buried obstructions prevent it. In the case of shallow burial, insulation shall be applied above or around the pipe to help prevent freezing.
12. The installer(s) shall only use Presby Enviro components and install them in accrodance with accepted Presby installation practices.

Notes:

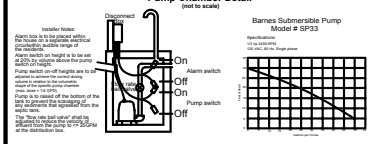
General

1. All construvtion practices shall conform to the standards set forth in the " Subdivision and Individual Sewage Disposal System Design Rules, Chapter EnvWq 1000, dated 2/9/09, the "On-Site Wastewater Installers Guidelines, NH-DES" and the manufacture's installation guidelines.
2. All elevations are referenced to the "Temporary Bench Mark" which has been assigned an assumed elevation of 100.0' for the purposes of this topographical presentation.
3. Property lines and building locations are graphic only. This plan does not represent a property boundary survey or an engineered site plan. Every attempt has been made to accur accurately identify the property lines and locate the physical features depicted on this septic design plan.
4. The Town of Amherst requires a EDA of 300 sq. ft. per bedroom (1,200 sq. ft. total). This is equal to 12 minutes per inch. This site had a 2 min./in. percolation rate.

Resident

1. Maintenance on the septic tank (septic cleaning and inspection) shouldbe performed on a periodic basis. The period for 2 persons = 3 years, 3 to 5 persons = 2 years and 6+ persons = 1 to 1 1/2 years. These periods are based on average useage. Each household will need to determine the
2. A septic tank is designedto properly digest organic waste products. Disposal of non-organic products such as caustic chemicals, plastics, sexual items, sanitary items, biocides (disinfectants), etc. is detrimental to the operationof the system and may result in the early failure of the leaching field.
3. The installation of a garbage or disposal is prohibited! The Individual Disposal System was not designed (unless otherwise noted) to accomodate the additional organic loading that these devices produce.
4. It is recommended that non-organic water sources (water conditioners & water softeners) discharge not be injected into the Disposal System. This design does not accomodate the additional volume of water that these devices generate. Current research (not yet conclusive) and our experience indicate that these discharges have contributed to a shortene operational life of the Disposal System. Refer to the NH-DES Environmental Fact Sheet #WD-WSEB-22-17 "Disposal of Backwash from Water Treatment Devices at Single Family and Duplex Residences".

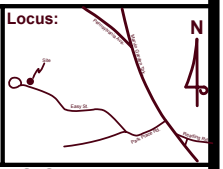
Pump Chamber Detail
(not to scale)



System Overview:

4 bedroom house
2,000 gal. septic tank (existing)
Pump-up system
In-ground leaching field
Chambered system components
> 4' separation to ESHWT

Locus:



Designed by
Timothy A. Bodwell
Bodwell Septic Service
PO Box 898
Kingston, NH 03848
Phone: 772-1475
State of New Hampshire Designer License #1679

Legend

Lines	Symbols
Contour Lines (Major)	Temp. Bench Mark
Contour Lines (Minor)	Test Pit
Dimensions	Percolation Test Pit
Leach field	Tie Points
Leach Field Components	Rock Wall/Masonry
Structures	Trees & bushes
Existing System	Well

NEW HAMPSHIRE Designer of Subsurface Disposal Systems
Timothy A. Bodwell No. 1679
Department of Environmental Services

Revisions:

	Date	Description
1.	25 March 2010	Initial drawing
2.		
3.		
4.		
5.		

SEPTIC DESIGN PLAN
for
John & Jane Doe
123 Easy St.
Metropolis, NH 03999