



- ### Notes
- This plan is to be used only for the approval and installation of a sewage disposal system and is not to be used for any other purpose.
 - All construction and components shall conform to Massachusetts State Environmental Code TITLE V and Local Board of Health Requirements.
 - This design does not warrant the location of underground pipes, wires, utilities or other underground structures. The installer shall be responsible for locating and relocating these objects as necessary.
 - No garbage grinder is allowed with this system.
 - Any portion of this system subject to vehicular traffic shall be capable of H-20 loading.
 - An observation pipe shall be placed as shown and capped at grade so as to allow monitoring of liquid level in the leaching system. Place re-rod flush at each to aid in relocating with metal detector.
 - All access covers are to weigh at least 150 lbs. or screwed down.
 - Leaching Chambers shall consist of Infiltrator high capacity, ADS high capacity biodiffuser or an approved equivalent.
 - Any clean sand fill required by this design is to have less than 4% passing the No. 100 sieve.
 - No wells could be found within 150' of the proposed leaching facility.
 - The engineer (AND the local approving authority) is to inspect and approve the installation and placement of all septic components before final backfilling.
 - A letter certifying satisfactory construction of this system is to be provided to the owner and the Board of Health by the Engineer.
 - This facility is designed to dispose of grey-water only from kitchen/cooking facility.

Design Criteria

Design Hydraulic Loading:
180 GPD take-out restaurant (gray-water only)

Gray-water filter provided: 1,000 gal. tank

Leaching Capacity Provided (gray-water only):
Enviro-Septic Leaching Bed "Basic Serial System"

Enviro-Septic Pipe = 72 linear ft
Area of Enviro-Septic Bed = 150 sq.ft.
150 sq.ft. x 1.67 x 0.74 GPD/sq.ft. = 185 GPD

Leaching Capacity Limited by Total Pipe Length= 72 ft. (144 GPD)

Soil evaluator: Reid G. Silva, P.E. SOIL DATA

Deep Observation Hole 1.
Date: February 22, 2021
Surface elevation = 10.9

Depth	Horizon	Texture
0"-72"		Fill
72"-104"	B	Silt Loam
104"-132"	C	Loamy Sand

Perc. rate < 5 mpi. @ 104"
Groundwater found at 104" (Elev. = 2.2)

Proposed Septic System Upgrade on Land in Chilmark, Mass.

Designed for: Robert and Sarah Nixon

Street Address: #29 Basin Road

Assessor No.: 21-81

Lot Area: ± 2.8 Acres

Designed By: Cody Coutinho

Checked By: R.G.S.

Date: March 16, 2022

Revised: 4/4/2022 - add barrier and H-20 tank

Reid G. Silva
Professional Engineer
April 4, 2022

Lot Lies within the FEMA flood zone AE (Elev 12)

Chilmark Board of Health Variances Required

- Leaching facility to wetland separation; 100' required - 25' proposed
- Leaching facility to surface water separation; 150' required - 101'
- Leaching facility to property line separation; 30' required - 0.5', 6' proposed
- Leaching facility to groundwater separation; 5' required - 4' proposed
- Septic tank to wetland separation; 50' required - 12' proposed
- Septic Tank to property line separation; 10' required - 1' proposed

Title 5 Local Upgrade Approval Waivers

- Leaching facility to wetland separation; 50' required - 25' proposed
- Leaching facility to property line separation; 10' required - 0.5', 6' proposed
- Leaching facility to waterline separation; 10' required - 1' proposed
- Septic tank to wetland separation; 25' required - 12' proposed
- Septic Tank to property line separation; 10' required - 1' proposed
- Reduction in leaching facility flow provided: 180 GPD req. - 144 GPD provided (80%)

LEGEND

--- PROPOSED CONTOUR
--- EXISTING CONTOUR
+100.7 EXISTING SPOT ELEVATION
--- W --- WATER SERVICE LINE
--- TEST HOLE LOCATION