

SETEC

SOIL AND ENVIRONMENTAL TECHNOLOGY, INC
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General Information

Date: 5/31/2024 Patrick County Health Department
 Applicant: Phone #:
 Address:
 Directions to the Property: US-58 W, R on VA-8 N (10.2 mi), R on VA-40 E (4.4 mi), L on Rte 710/Woods Gap Rd (0.6 mi), R on Rte 716/Short Cut Dr, +/- 0.4 miles to property on right
 Subdivision: Short Cut Dr Lot: 4
 Tax Map ID: 4918-41-A (37.693 acre portion)

Soil Information Summary

1. Position in landscape satisfactory Yes ☒ No ☐ Describe: Sideslope
2. Slope 19 %
3. Depth to rock/imperious strata: Max. 48" Min. None
4. Depth to seasonal water table (gray mottling or gray color) No ☒ Yes ☐
5. Free water present No ☒ Yes ☐ range in inches
6. Soil percolation rate estimated Yes ☒ Texture group 3
 No ☐ Estimated rate 50 Min/inch
7. Percolation test performed Yes ☐ Number of percolation test holes
 No ☒ Depth of percolation test holes
 Average percolation rate

Name and title of evaluator: David Hall PSS/AOSE

Signature: 

- X** Site Approved: Absorption trenches dispersing septic tank effluent to be placed at 24" depth at site designated. Site provides a total of 1200 square feet of absorption area for the primary drainfield and 600 square feet for reserve.

Site Disapproved:

Reason for rejection: (check all that apply)

- 1 ☐ Position in landscape subject to flooding or periodic saturation.
- 2 ☐ Insufficient depth of suitable soil over hard rock.
- 3 ☐ Insufficient depth of suitable soil to seasonal water table.
- 4 ☐ Rates of absorption too slow.
- 5 ☐ Insufficient area of acceptable soil for required drainfield, and/or reserve area
- 6 ☐ Proposed system too close to well
- 7 ☐ Other (Specify)

PROFILE DESCRIPTION SOIL EVALUATION REPORT

Date of Evaluation: 5/16/2024

Patrick County Health Department

x See application sketch

See construction permit

Subdivision: Short Cut Dr **Lot:** 4**TM#:** 4918-41-A (37.693 acre portion on Short Cut Dr)

Hole #	Horizon	Depth (in)	Description	Texture Group
Pit 1	Oa	0-3	Dark Yellowish Brown (10YR 4/4)	-
	A	3-12	Strong Brown (7.5YR 5/6) Loam	2
	Bt	12-20	Yellowish Red (5YR 5/8) Clay Loam	3
	BC	20-48	Yellowish Red (5YR 5/8) Gravelly Clay Loam; 20% Coarse Fragments	3
Pit 2	Oa	0-3	Brown (10YR 4/3)	-
	A	3-8	Dark Yellowish Brown (10YR 4/4) Loam	2
	BA	8-14	Strong Brown (7.5YR 5/8) Loam	2
	Bt1	14-33	Strong Brown (7.5YR 5/6) Clay Loam w/ many mica flakes	3
	Bt2	33-48	Yellowish Red (5YR 5/8) Clay Loam	3
Pit 3	Oa	0-3	Dark Yellowish Brown (10YR 4/4)	-
	A	3-12	Strong Brown (7.5YR 5/6) Loam	2
	Bt	12-24	Strong Brown (7.5YR 4/6) Loam	2
	BC	24-48	Yellowish Red (5YR 5/8) Gravelly Loam; 20% Coarse Fragments	2

DRAINFIELD RECOMMENDATIONS, DESIGN BASIS, & AREA CALCULATIONS**Subdivision:** Short Cut Dr **Lot:** 4**TM#:** 4918-41-A (37.693 acre portion on Short Cut Dr)

Main DF		Reserve DF	
Type of system	Gravity	Reserve Area Required	Yes
EPR	50	Type of Reserve	Gravity
Slope %	19	EPR	50
# Bedrooms	3	Slope %	19
Gallons/Day	450	Gallons/Day	225
Width of Trench (ft.)	3	Width of Trench (ft.)	3
Total Square Ft. of Trench Bottom Required per BR	376	Total Square Ft. of Trench Bottom Required	564
Total Square Ft. of Trench Bottom per BR in Design	400	Total Square Ft. of Trench Bottom in Design	600
Total Square Ft. of Trench Bottom Required	1128	# Lines of Reserve	2
Total Square Ft. of Trench Bottom in Design	1200	Line Length (ft.)	100
# Lines Installed	4	Installed <24" from Rock or Other Impervious Strata	No
Length of Line Installed (ft.)	100	Centers (ft.)	10
Installed <24" from Rock or Other Impervious Strata	No	Width Required (ft.)	20
Centers (ft.)	10	Width in Design (ft.)	20
Width Required (ft.)	33	Installation Depth (inches into natural soil)	24
Installation Depth (inches into natural soil)	24	Amount of Backfill Required (inches)	N/A
Amount of Backfill Required (inches)	N/A	Type of Well Recommended	3C
		Amount of Casing & Grout (ft.)	20' min

