#### **OSE/PE Report For:**

Construction Repa	Supplyision	
Property Location:		
911 Address:	City:	
Lot B Section	Subdivision	
GPIN or Tax Map # 227-A-49B p	art Health Dept ID #	
Latitude	Longitude	
Applicant or Client Mailing Addres Name: David Gregg and Julia	s:	
Street: P.O. Box 1294		
City: Bedford	State VA Zip Code 24523	
Prepared by:		
OSE Name Clifton D. Overstree	t License # 1104	
Address 1684 Magnolia Dr.		
City Bedford	<sub>State</sub> VA <sub>Zip Code</sub> 24523	
DE M		
PE Name	License #	
Address		
City	State Zip Code	
Date of Report 6-17-2024	Date of Revision #1	
OSE/PE Job #	Date of Revision #2	
	Evaluation Summary, Soil Profile Descriptions, Site Sketch, Abbreviated Design, etc.)	
2. Soil Information Summary	5. Site Sketch	
Abbreviated Design Information     Sail Profile	6. Well Addendum	
4. Soil Profile		
Alternative Onsite Sewage Systems (12VAC5 Department of Health. I further certify that I Commonwealth that have been duly issued to The potential for both conventional and alternative Sewage 120 Department of Health.	lesigns contained herein were conducted in accordance with the applicable irrevisions of ns (12 VAC5-610), the Private Well Regulations (12 VAC5-630), the Regulations for 613) and all other applicable laws, regulations and policies implemented by the Virginia currently possess any professional license required by the laws and regulations of the by the applicable agency charged with licensure to perform the work contained herein. The consideration on the practice of engineering, specifically section 54.1-402.A.11	
	on permit  certification letter  subdivision approval  be (select one) Issued	

Page Z of 6.

## Environmental Concepts, LLC

1684 Magnolia Dr. Bedford, VA 24523

PHONE: (540) 815-2954 EMAIL: Doug.Overstreet@gmai.com M.A.O.S.E. #1104

**DATE:** June 17, 2024

SUBMITTED TO: Bedford County Health Department

APPLICANT: David M. Gregg and Julia Manley

P.O. Box 1294 Bedford, VA 24523

LOCATION: New Parcel B; 1.5 acres; Smith Mountain Lake Parkway; Bedford County, Virginia

PROPOSED USE: New Single Family Residence

3 Bedroom (450 gallons/day)

WATER SUPPLY: New Private Class III B Well, Deep Drilled

PROPOSED INSTALLATION: New Type I, In-Ground Septic Tank Effluent Drainfield System

(Conventional Gravity trenches)

#### **SOIL INFORMATION SUMMARY:**

Parent Material: Soils are residual, weathered rocks of the Piedmont Physiographic Province.

Position in landscape satisfactory: Yes X No \_\_\_.

Description of landscape: <u>Upland sideslope</u>, <u>linear-linear topo</u>, <u>Agricultural Field Sideslope</u>.

Slope: 6 % Depth to Cr or rock: Max. 58" Min. None Depth to impervious strata (\_): Max. >15' Min. >5' None X. Depth to Redox mottles: N/A in. Depth to Chroma 2 mottles: N/A in.

Free water present: Yes \_\_\_\_ No \_X Range \_N/A in.

Soil percolation rate: 60 min/in. (Estimated). Texture Group: III.

Site Evaluated By Doug Overstreet #1104 Date of Evaluation: May 29, 2024

#### WATER SUPPLY CONSTRUCTION SPECIFICATIONS:

Proposed Water Supply: Class IIIB Cased: 50'+ Grouted: 50'+

This is not a Drainfield Construction Permit. This report is to certify that an area exists for the permitting of a drainfield and well. This report is valid only if presented to the local VDH office for their approval. For this approval the report must be accompanied by an application, fee and stamped plat showing the survey located drainfield area. Once approved this Letter of Certification does not expire and is transferable. When the permit is needed the local VDH or an AOSE must return to the property to complete the design. The actual type and design of the drainfield and well to be constructed will be determined at that time, based on site conditions and the regulations current during that visit. If the proposed drainfield area must be cleared before the permit has been issued, follow the provided clearing instructions.

CLIFTON D. OVERSTREET
Lic. No. 1104

ON-SITE SON

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## Environmental Concepts, LLC

### 1684 Magnolia Dr. Bedford, VA 24523

PHONE: (540) 815-2954 EMAIL: Doug.Overstreet@gmai.com M.A.O.S.E. #1104

LOCATION: New Parcel B; 1.5 acres; Smith Mountain Lake Parkway; Bedford County, Virginia

#### ABBREVIATED DESIGN INFORMATION:

Proposed Primary Drainfield: Type I, In-Ground Septic Tank Effluent Drainfield System

(Conventional Gravity trenches)

Soil percolation rate: 60 min/in. (Estimated). Texture Group: III .

Separation distance required: 18 in. Limiting depth (Rock): 58 in.

Minimum installation depth required by system and/or slope: 18 in.

Depth from ground surface to bottom of trench: 36 in.

Square ft. required per bedroom: 452.

Total square ft. required for drainfield: 3 bedroom 1356.

Design layout for primary drainfield

 $\underline{5}$  lines x  $\underline{92}$  ft. in length x  $\underline{3}$  ft. wide =  $\underline{1380}$  sq. ft.

Center-to-Center spacing proposed adjusting for slope: 9 ft.

Area needed for design: 39' x 92' (3588 sq. ft.)

Area documented: 75' x 92' (6900 sq. ft.)

Depth of Aggregate: 13" of clean 1-1.5" stone

Proposed Reserve Drainfield: Type II, In-Ground Advanced Pretreatment Drainfield System

(TL-3 Treatment to Gravity Trench)

Soil percolation rate: 60 min/in. (Estimated). Percent Reserve: 100%.

Minimum installation depth required by system and/or slope: 0 in.

Separation distance required: 12 in. Limiting depth ( Rock ): 48 in.

Depth from ground surface to bottom of trench: 36 in.

Gallons per day: 450

Gallons per square ft.: 0.64

Total square ft. required for drainfield: 704.

Possible design layout for primary drainfield: trenches

3 bedroom: 3 lines x 92 ft. in length x 3 ft. wide = 828 sq. ft

Area documented: 21' x 92' (1932 sq. ft.)

Area documented: 75' x 92' (6900 sq. ft.)



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## Environmental Concepts, LLC

# 1684 Magnolia Dr. Bedford, VA 24523 PHONE: (540) 815-2954 EMAIL: Doug.Overstreet@gmai.com

PHONE: (540) 815-2954 M.A.O.S.E. #1104

LOCATION: New Parcel B; 1.5 acres; Smith Mountain Lake Parkway; Bedford County, Virginia

#### **SOIL PROFILE:**

HOLE# I	HORIZON	DEPTH INCHES	DESCRIPTION OF SOIL CHARACTERISTICS	TEXTURE
#4 CDO Pit	A Bt1 BC CB	0-3 3-28 28-46 46-58 58	7.5YR ¾ dark brown; friable; loam 2.5YR 5/6 red; clay loam 2.5YR 5/6 red with yellowish red; light clay loam light mica 2.5YR 5/6 red with yellowish red; micaceous; loam Pit terminated on Quartz	GROUP II III III II
#5 CDO Pit	A Bt1 BC C	0-3 3-30 30-44 44-65+	7.5YR ¾ dark brown; friable; loam 2.5YR 5/6 red; clay loam 2.5YR 5/6 red with yellowish red; light clay loam light mica 2.5YR 5/6 red with yellowish red and brown; micaceous; loam	II III III
#6 CDO Pit	A Bt1 BC C	0-3 3-36 36-46 46-78+	7.5YR 3/4 dark brown; friable; loam 2.5YR 5/6 red; clay loam 2.5YR 5/6 red with yellowish red; light clay loam light mica 2.5YR 5/6 red with yellowish red and brown; micaceous; loam	II III III II



Map Reference 227-A-49B part

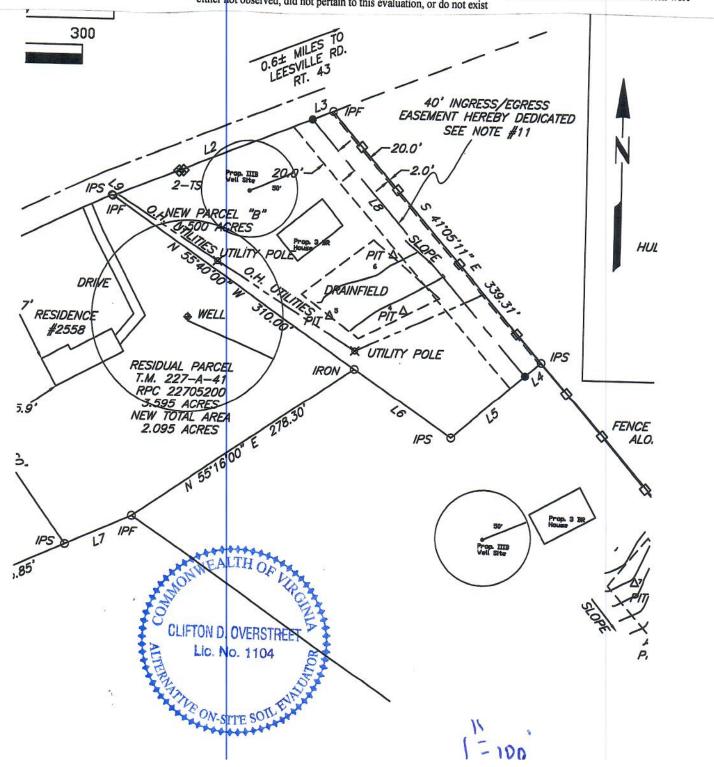
## Environmental Concepts, LLC

1684 Magnolia Dr. Bedford, VA 24523

PHONE: (540) 815-2954 EMAIL: Doug.Overstreet@gmai.com M.A.O.S.E. #1104

LOCATION: New Parcel B; 1.5 acres; Smith Mountain Lake Parkway; Bedford County, Virginia SITE SKETCH:

Included on this site sketch are existing and/or proposed property lines, primary and reserve drainfield area, proposed building location, driveway, well and soil evaluation borings with an accuracy of +- three feet. As well as any observed existing structures, wells, or drainfields within 200'+ of the proposed area. All natural geographic features such as drainways, springs, gulleys, etc. that would impact the site evaluation are also included. Any feature not shown on the site sketch were either not observed, did not pertain to this evaluation, or do not exist



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#### Addendum to AOSE/PE Certification Statement For Private Well Construction Permit

Instructions: Please check one box in 1-3 below. Statement templates for item #2 and #3 are on the following pages.

The	prop	osed well site sho	own herein,
Ø	1.	Is located a mini	mum of 50 feet from all property lines.
	2.	Is located within that the	50 feet of the adjacent property line(s) but I have determined adjacent property is <u>not</u> used for an agricultural operation.
		their pro	affirmation from the adjacent property owner(s) that perty is not used for an agricultural operation. onfirmation that land use is not an agricultural operation, pleas:
	3.	appropr	50 feet of an adjacent property line where the property is used gricultural operation. For confirmation, I have attached the ate documentation pursuant to § 32.1-176.5:2 of the <i>Code of</i> . (check one below)
		i. Written p	permission from the adjacent property owner(s) for construction.
		ii. I certify Regulation	that no other site on the property complies with the Board's ons for the construction of a private well.

CLIFTON D. OVERSTREET
Lic. No. 1104

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ON-SITE SOIL