

OSE/PE Report for:

Construction Permit Certification Letter Subdivision Approval

Property Location:
 911 Address: 919 Gilbert Lane City: Victoria
 Lot _____ Section _____ Subdivision _____
 GPIN or Tax Map # _____ Health Dept ID # _____
 Latitude 36°53'7.61"N Longitude 78°18'34.73"W

Applicant or Client Mailing Address:
 Name: Marianne Copper
 Street: 919 Gilbert Lane
 City: Victoria State VA Zip Code 23974

Prepared by:
 OSE Name Brian H. Neal License # 1940-001181
 Address PO Box 218
 City Blackstone State VA Zip Code 23824
 PE Name: _____ License # _____
 Address _____
 City _____ State _____ Zip Code _____

Date of Report 06/10/20 Date of Revision #1 _____
 OSE/PE Job # Copper Job Date of Revision #2 _____

Contents/Index of this report (e.g., Site Evaluation Summary, Soil Profile Descriptions, Site Sketch, Abbreviated Design, etc.)
 Page 1: OSE Cover Sheet _____ Page 7-8: Soil Descriptions/Soil Information Pages _____
 Page 2-3: Drainfield / Well Construction Specifications _____
 Page 4-5: Construction Drawings _____
 Page 6: Construction Notes Page _____



Certification Statement
 I hereby certify that the evaluations and/or designs contained herein were conducted in accordance with the Sewage Handling and Disposal Regulations (12 VAC5-610), the Private Well Regulations (12 VAC5-630) and all other applicable laws, regulations and policies implemented by the Virginia Department of Health. I further certify that I currently possess any professional license required by the laws and regulations of the Commonwealth that have been duly issued by the applicable agency charged with licensure to perform the work contained herein.

The work attached to this cover page has been conducted under an exemption to the practice of engineering, specifically the exemption in Code of Virginia Section 54.1-402.A.11

I recommend that a (select one): construction permit certification letter subdivision approval
 be (select one) issued denied .

OSE/PE Signature Brian H. Neal Date 6/10/20



DRAINFIELD & WELL CONSTRUCTION SPECIFICATIONS & CALCULATIONS

New Repair Expanded

Date: 06/09/20

Owner(s): Marrienne Copper
Address: 919 Gilbert Lane
Victoria, VA 23974

For a Type **II Conventional Drainfield**
which is to be constructed on/at: 919 Gilbert Lane, Victoria VA

DRAINFIELD DESIGN INFORMATION:

Conveyance Line: 4" SCH 40 Pipe

Building Sewer: 4" I.D. PVC 40, or equivalent. Slope 1.25" per 10' (minimum).

Septic Tank: Capacity 1000 gal tanks. (minimum).

Tank must meet the July 2000 Regs.

Inlet-Outlet structure: 4" tees PVC 40, or equivalent

Distribution Box: Precast concrete with 8+ ports

Header Lines: 4" I.D. 1500 lb. Crush strength plastic or equivalent from distribution box to 2' into absorption trench.

Percolation lines: Gravity 4" plastic 1,000 lb. Per-foot bearing load or equivalent, Slope 2"-4" per 100' or as specified

Effluent Filter: N/A

Pump station: _____

Pump: N/A

Force Mains: N/A I.D. PVC 40

Stilling Basin N/A

Horizontal Pump Distance approx.(feet): _____

Vertical Pump Distance approx. (feet): _____

Anticipated Flow approx. (gpm): _____

Control Panel: _____

* SYSTEM MUST BE INSTALLED ONLY DURING DRY CONDITIONS.

* Cover with soil up to bottom of module lids. (Lids must remain exposed).

* Contractor is responsible for stabilization (grading & seeding) upon completion of installation to promote drainage away from site.

PROPOSED USE: Residential 1 bedroom dwelling

DESIGN LAYOUT: ___ PAD SYSTEM X TRENCH SYSTEM

Soil percolation rate: 45 min/in. at 60 " deep (Estimated). Texture Group: II.

Soil percolation rate used for design: 45 mpi.

Separation distance required 18 in. Limited depth: 78".
 Number of Bedrooms: 1 Design Flow: 150 gpd
 Drainfield Square Footage Required: 344 sq. ft.

TRENCH DESIGN LAYOUT:

Loading Rate: 344 sqft/bedroom

Design layout for primary drainfield:

150 gpd: 2 lines x 60 ft. in length x 3 ft. wide = 360 sq. ft.

Depth of aggregate: 12" of #57 stone Center to center spacing: 9".

Depth of trenches: 60" in.

Reserve drainfield required: Yes No ; 0% available.

Proposed reserve drainfield: _____

Soil percolation rate: _____ mpi

NOTES: System must be installed on contour.

There will be a \$200.00 Inspection and completion Fee due at the time of Inspection to be paid by the contractor.

WELL DESIGN INFORMATION:

To be installed: None

Cased: 20'+ 12" above grade

Grouted 20'+

Existing Class: III C Well

COMMENTS AND CONCERNS:

Due to the potential liability and/or responsibility of SSC for the installation and function of the drainfield, a representative of SSC must be present at an on-site preconstruction meeting with the builder and drainfield contractor. A representative of SSC must also be called for a final inspection, before the health department's final inspection. If there are any problems during installation SSC must be called immediately.

All utilities should be placed in a manor to avoid the primary and reserve area. Careful planning should be used when adding any driveway, detached garage, storage shed, swimming pool, large deck, or other permanent structures to be sure room is left available for the primary and reserve drainfield area.

If any changes to the Proposed Use, location of home site as shown on the attached sketch. Water Supply, or Proposed Installation are desired, please contact SSC as soon as possible. Also, if there are any questions concerning the Soil Information Summary, Design Information, Comments and Concerns, Detailed Soil Profile Descriptions, or Site Sketch please call SSC. Any desired changes will be considered; but not always possible. They may require a simple revision of this report, but could involve additional in-field evaluation and/or expense.

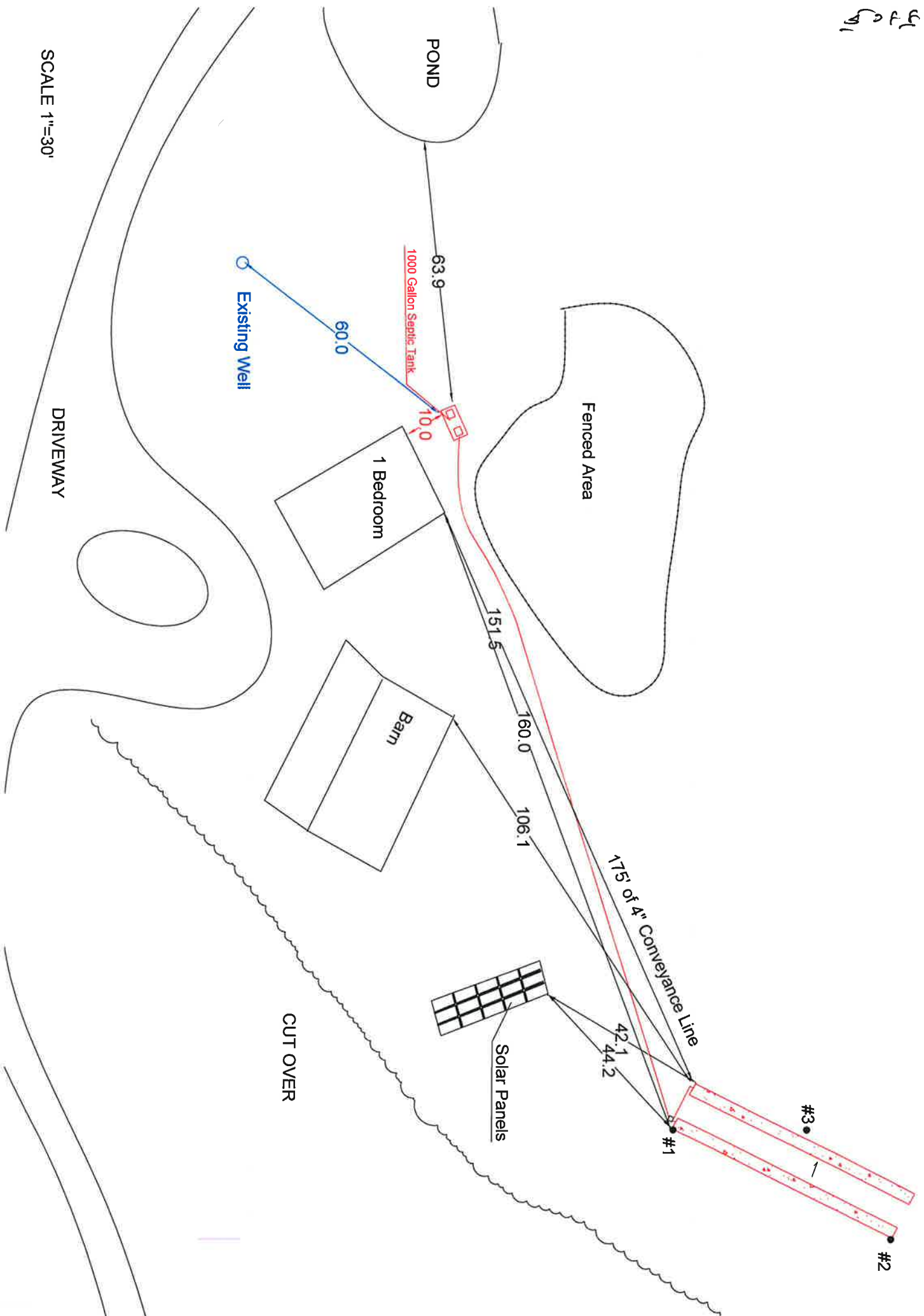
SIGNATURE:



Brian H. Neal
 OSE #1940-001181



5 of 5



SCALE 1"=30'

DRIVEWAY

CUT OVER

POND

1000 Gallon Septic Tank

Existing Well

1 Bedroom

Fenced Area

Barn

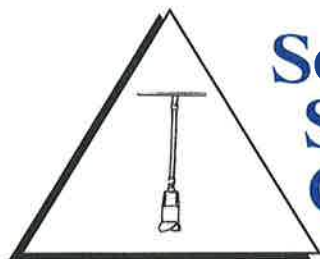
Solar Panels

17 1/2" of 4" Conveyance Line

#1

#3

#2



**SOUTHERN
SOIL
CONSULTANTS,
LLC**

Notes: The septic tank must be kept a minimum of 10 feet a foundation or 20' from the foundation if over a basement.

An Alternative termite treatment must be used on the new house due to the close proximity to the existing well. The two most common methods are flashing and Bora-Care treatment

Water Supply: Existing IIC Well

Discharge Area: 2-60' ditches @ 60" deep
Keep fall in Trenches 2" to 4" max
9' Center to Center Spacing
12" of # 57 stone

Gravel-less system Requirements: 2-60' ditches using EZ Flow 1203H gravel-less product

Septic Tank: New 1000 gallon concrete septic tank

Distribution Box: Concrete 8+ ports minimum

Conveyance Line: Approx. 175' of 4" SCH 40 pipe

System must be installed on contour and at the specified depth.

The system must be installed under dry conditions only!

A \$200.00 dollar inspection fee is due at the time of the inspection, and is to be paid by the contractor installing the system, if the fee is not paid then a completion statement will not be issued All septic contractors must be licensed by DPOR and have a valid license number before installing the sewage system.

Date: 6/10/20Location: 919 Gilbert Lane, Victoria, VA**DETAILED SOIL PROFILE DESCRIPTIONS:**

HOLE #	HORIZON	DEPTH (INCHES)	DESCRIPTION OF SOIL CHARACTERISTICS	TEXTURE GROUP
1	A	0-6	10YR 5/4 L	II
	Bt1	6-30	2.5YR 4/8 C with fine mica	IV
	Bt2	30-48	2.5YR 4/8 CL with fine mica, 7.5YR 6/8 and 7/8	III
			lithochromic colors	
	BC1	48-60	7.5YR 6/8 to 6/6 L with fine mica, 10YR 8/4, 6/8 and	II
			7.5YR 7/4 lithochromic colors	
	Ct1	60-78	10YR 8/4 to 8/6 fine L with mica, 7.5YR 6/8, and 7/4	II
		lithochromic colors		
2	A	0-6	10YR 5/4 L	II
	Bt1	6-24	2.5YR 4/8 C with fine mica	IV
	BC1	24-40	5YR 5/8 to 7.5YR 5/8 SCL with 10YR 8/4, 8/1,	II
			7.5YR 7/8 and 7/4 lithochromic colors	
	Ct1	40-78	10YR 8/4 to 8/1 SL; slightly chanery	II
3	A	0-6	10YR 5/4 L	II
	Bt1	6-30	2.5YR 4/8 C with fine mica	IV
	Bt2	30-48	2.5YR 4/8 to 5YR 5/8 CL with fine mica, 7.5YR 6/8,	III
			7/8 and 7/4 lithochromic colors	
	BC1	48-60	5YR 5/8 to 6/8 SCL with mica, 7.5YR 6/8, 7/8 and 7/6	II
			lithochromic colors	
	Ct1	60-78	7.5YR 6/8 to 7/8 fine L with 10YR 8/4 and 8/1	II
			lithochromic colors	

SOIL INFORMATION SUMMARY:Position in landscape satisfactory: Yes No Description of Landscape: Up-Land Convex Side slopeSlope: +/-4% Depth to Cr or Rock: Max. Min. None Depth to Impervious Strata: (): Max. Min. None Depth to Redox Mottles: N/A in. Depth to Chroma 2 Mottles: N/A in.Free Water Present: Yes , No , Range in.Soil Percolation Rate: 45 min/in. (Estimated). Texture Group: IISoil Percolation Rate used in design: 45 min/in. (Estimated).

referred property is in accordance to and complies with the Sewage Handling and Disposal Regulations of the Virginia Department of Health. I recommend that a permit be issued.

Note: By accepting this report the customer acknowledges that soil descriptions are an inexact science and septic systems are prone to failure from several different sources beyond our control and that liability does not necessarily follow such failure. The customer also acknowledges by acceptance of this report that the maximum liability of Southern Soil Consultants, LLC is the amount of the payment for our services.

SIGNATURE:

Brian H. Neal

Authorized Onsite Soil Evaluator #1940-001181