|       | à |     | 6 |  |
|-------|---|-----|---|--|
| Page_ | 1 | of_ | 2 |  |

|  | SE/PE REPORTION.   |   |
|--|--|---|
| Construction Repair Permit Permit  | Voluntary Upgrade<br>Permit  | Certification Subdivision Approval              |
| Property Location:   |  |   |
| 911 Address:   |  | City:   |
| Lot D Section  | Subdivision  |   |
| GPIN or Tax Map # 9-45   | Health Dept ID   | #   |
| Latitude   |  |   |
| Applicant or Client Mailing Address:   |  |   |
| Name: George Pettie  |  |   |
| Street: 1010 Massachusetts Ave NE  |  |   |
| Washington   | State DC   | Zip Code 20002                                  |
| City: Washington   | State DC   |   |
| Prepared by:   |  |   |
| OSE Name Thomas G. Hogge   | Lice   | nse # 1940-001091                               |
| PO Box 418   |  |   |
|  | State VA   | Zip Code 22968                                  |
| City Ttackers Time   | State  |   |
| PE Name  | Licen  | nse #   |
|  |  |   |
| Address  |  | Zip Code  |
| , ,  |  |   |
| Date of Report 7/8/16  | Date of  | Revision #1                                     |
| OSE/PE Job #   | Date of  | Revision #2                                     |
|  | a up Cl. Descial   | Site Sketch Abbroviated Design etc.)            |
| Contents/Index of this report (e.g., Site Evalua   | tion Summary, Soil Profile Description   | ons, Site Sketch, Abbreviated Design, etc.,     |
| 2,3-Site and Soil Evaluation Report  |  |   |
| 4-Site Sketch  | - Control of the Cont |   |
| 5-Design Calculations  |  |   |
|  |  |   |
| Certification Statement I hereby certify that the evaluations and/or designs                         | s contained herein were conducted i  | n accordance with the applicable provisions of  |
| the Sewage Handling and Disposal Regulations (12<br>Alternative Onsite Sewage Systems (12VAC5-613) a | VACS-610) the Private Well Regulat   | ions (12 vacs-630), the regulations for         |
| Donartment of Health   further certify that   current  | ntly possess any professional license  | required by the laws and regulations of the     |
| Commonwealth that have been duly issued by the   | applicable agency charged with licer   | nsure to perform the work contained nerein.     |
| The work attached to this cover page has the exemption in Code of Virginia Section                   | s been conducted under an exemption 54.1-402.A.11  | on to the practice of engineering, specifically |
| I recommend that a (select one): construction per repair permit                                      | mit certification letter subd  | ivision approval be (select one) Issued Denied  |
| OSE/PE Signature   | ( Alexandon D  | ate 7/8/16                                      |

This form contains personal information subject to disclosure under the Freedom of Information Act.

Revised 12/1/2014

## **Site and Soil Evaluation Report**

|         | <b>VDH</b> Use Only |  |
|---------|---------------------|--|
| HDIN: _ |                     |  |

| General Information  |   |   |  |
|--|---|---|--|
| Date: 7-8-16   | Madison   | County Health Department  |  |
| Owner: George Pettie   | Phone: (703) 405-   | 0326  |  |
| Owner: George Pettie Owner Address: 1010 Massachusetts   | Ave NE, Washington, DC 20   | 0002  |  |
| Property Address:  |   |   |  |
| Tax Map/GPIN #: 9-45   |   |   |  |
| Subdivision:   | Section:  | Block: Lot: D   |  |
|  | Soil Information Summary  |   |  |
| <ol> <li>Position in landscape satisfactory: ■ Y</li> <li>Slope: 14 %</li> <li>Depth to rock/impervious strata: Max.</li> <li>Free Water Present: □ Yes ■ No</li> <li>Depth to seasonal water table (gray mo</li> <li>Soil percolation rate estimated: ■ Yes Texture Group: □ I ■ II ■ III</li> <li>Percolation test performed: □ Yes ■ Name and title of evaluator: Thomas G</li> <li>Signature: □ Site approved: Absorption trenches</li> <li>Septic tank effluent (proposed level of</li> </ol> | Range in inches:  ttling or gray color):  I liv  No If yes, provide additional daraham Hogge, OSE  (describe dispersal area, e. | S Not observed  O min/in at 36 inches depth  ata on percolation test results.  g. absorption trenches) dispersing |  |
| site designated on permit. Site provides a   | total of 3000 square f  | eet of absorption area for primary and  |  |
| reserve (if applicable).   |   |   |  |
| ☐ Site disapproved: Reasons for rejection  |   |   |  |
| <ul><li>2. ☐ Insufficient depth of suitable</li><li>3. ☐ Insufficient depth of suitable</li></ul>  | soil to seasonal water table.   | 1.  |  |
| <ul><li>4. □ Rates of absorption too slow</li><li>5. □ Insufficient area of acceptable</li></ul>   | le soil for required absorption area  | a, and/or reserve area  |  |
| 6. □ Proposed system too close to 7. □ Other (specify)   |   | ng maxim 01 10002 10 41 VIII  |  |

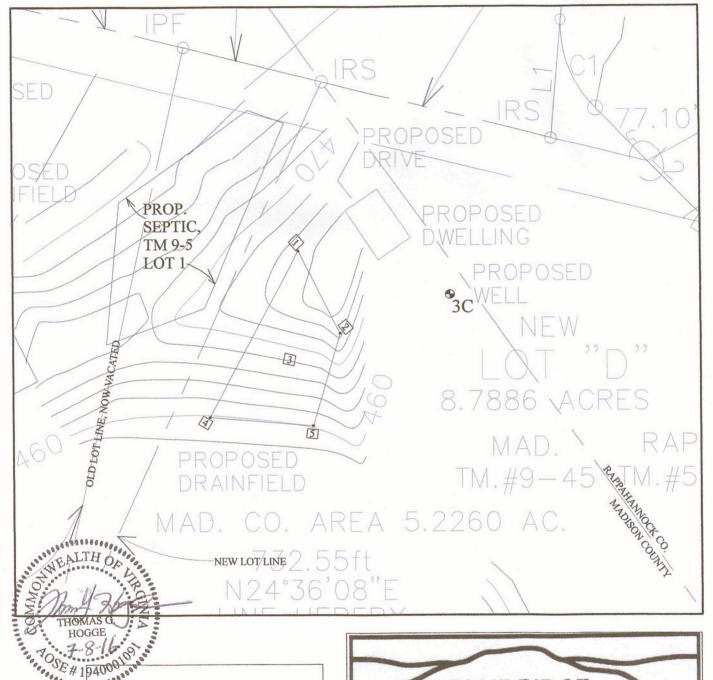
|       | 1       | -  | Partie. |
|-------|---------|----|---------|
| Page  | 9       | of | -       |
| 1 agu | SCHOOLS | OI | - All   |

| Date of Evaluation: 4-21-16 | Profile Description    |
|-----------------------------|------------------------|
|                             | SOIL EVALUATION REPORT |
| Property ID. TM 9-45: Lot D |                        |

Where the local health department conducts the soil evaluation the location of profile holes may be shown on the schematic drawing on the construction permit or the sketch submitted with the application. If soil evaluations are conducted by a private Onsite Soil Evaluator or Professional Engineer, location of profile holes and sketch of the area investigated including all structural features (i.e. sewage disposal systems, wells, etc.) within 100 feet of the site and reserve site shall be shown on

the reverse side of this page or prepared on a separate page and attached to this form. ☐ See Construction Permit ☐ See sketch on reverse side or page attached to this form. ☐ See application sketch Texture Horizon Depth Description of color, texture, etc. Hole# Group (Inches) 11 7.5 YR 5/6 strong brown loam 1 Ap 0-8 11 Bw 8-20 10 YR 5/6 yellowish brown loam pit 1 C 20-75 10 YR 8/2 very pale brown; friable fine loamy sand saprolite, variegated w/ 10 YR 6/8 brownish yellow w/ angular blue quartz grains, 7.5 YR 5/8 strong brown; weathered gneiss 7.5 YR 4/4 brown loam 11 0-6 Ap 111 pit Ct 6-35 friable schist silt loam saprolite: 10 YR 2/1 black Mn stains, 2.5 Y 7/4 pale brown, variegated w/ 2.5 YR 5/8 red, 10 YR 5/8 yellowish brown 111 friable, schist silt loam saprolite: 10 YR 2/1 black Mn stains, 2.5 Y 7/4 pale brown, C 35-54 variegated w/ 2.5 YR 5/8 red, 10 YR 5/8 yellowish brown; grinds to silt loam w/ little difficulty 11 10 YR 4/5 dark yellowish brown loam 0-8 3 Ap 11 Bw 8-20 7.5 YR 6/4 light brown; friable sandy clay loam to loam pit 2.5 Y 6/3 light yellowish brown; friable sandy loam, variegated w/ 10 YR 8/3 very pale brown, 11 C 20-66 7.5 YR 6/8 reddish yellow 11 4 0-8 10 YR 4/6 dark yellowish brown loam Ap 111 7.5 YR 5/6 strong brown; light friable, silty clay loam; sub-angular blocky (SBK), Bt 8-28 pit 2.5 YR 5/3 light olive brown silt loam; friable schist saprolite, variegated w/ III C 28-62 2.5 Y 4/2 dark grayish brown, 7.5 YR 5/8 strong brown 111 7.5 YR 5/4 brown sandy clay loam 0-8 5 Ap 7.5 YR 5/6 strong brown clay loam; friable SBK, scattered angular blue quartz pebbles 111 Bt 8-38 pit 11 2.5 Y 5/3 light olive brown loam; friable, variegated w/ 2.5 YR 8/4 pale brown, C 38-69 10 YR 5/6 yellowish brown **REMARKS:** 

SITE SKETCH SHOWING PROPOSED PRIMARY AND RESERVE SEPTIC AND PRIVATE WELL, PROPOSED DIVISION OF TAX MAP # 9-45 MADISON COUNTY, VA, SCALE: 1" = 100'



#### **LEGEND**

- 3 Backhoe Pit
- 3C Proposed Well Spot
  - Drainfield/Reserve Corner Stake

### **BLUE RIDGE**

SOIL CONSULTING, INC.

AUTHORIZED ONSITE SOIL EVALUATORS (AOSEs)

P.O. Box 418 Ruckersville, VA 22968 (434) 985-2780

# Design Calculations Proposed Division of Tax Map 9-45 "Lot D" Madison County, VA

#### **Design Basis**

9 2 . 50

| A. Estimated Percolation Rate (Minutes per inch)  | 50   | @ 36"  |
|---|------|--|
| B. Trench bottom square feet Required per Bedroom (from Table 5.4) based on  ✓ Gravity ☐ LPD ☐ other: | 376  |  |
| C. Number of Bedrooms   | 4    |  |
| Area Calculations:  |      |  |
| D. Length of Trench (ft.)   | 100  |  |
| E. Length of Available Area (ft.)   | 100  |  |
| F. Width of Trench (ft.)  | 3    |  |
| G. Number of Trenches   | 6    |  |
| H. Center-to-center spacing (ft.)   | 10   |  |
| I. Width required (ft.)   | 93   | (Including reserve)  |
| J. Width of available area (ft.)  | 100  |  |
| K. Total square footage required  | 1504 |  |
| L. Square footage in design   | 1800 |  |
| M. Is a reserve area required?  | yes  | Using GMP 135.A and an approved gravelless system, only 282 square feet per bedroom is required, or 1128 total. There is room for an additional 4-100' lines (3' wide) within the designated footprint, so 100% reserve is provided. |