

APPLICATION

FOR PERCOLATION TESTING AND SITE EVALUATION

TEST DATE(S) _____ TEST TIME _____

AP 551393-B

AGENCY REVIEW: _____

DATE 9-30-15

DO NOT WRITE ABOVE THIS LINE

I HEREBY APPLY FOR THE NECESSARY TESTING/EVALUATION PRIOR TO ISSUANCE OF SEWAGE DISPOSAL SYSTEM PERMIT(S) TO:

CHECK AS NEEDED:

- CONSTRUCT NEW SEPTIC SYSTEM(S)
- REPAIR/ADD TO AN EXISTING SEPTIC SYSTEM
- REPLACE AN EXISTING SEPTIC SYSTEM

CHECK AS NEEDED:

- NEW STRUCTURE(S)
- ADDITION TO AN EXISTING STRUCTURE
- REPLACE AN EXISTING STRUCTURE

CHECK ONE:

- CREATE NEW LOT(S)
- BUILD ON AN EXISTING LOT IN A SUBDIVISION
- BUILD ON AN EXISTING PARCEL OF RECORD

IS THE PROPERTY WITHIN 2500' OF ANY RESERVOIR?

- YES
- NO

THE TYPE OF STRUCTURE IS:

- RESIDENTIAL WITH UNKNOWN PROPOSED BEDROOMS IN THE COMPLETED STRUCTURE (NOTE UNKNOWN IF APPROPRIATE)
- COMMERCIAL (PROVIDE DETAIL OF NUMBERS AND TYPES OF EMPLOYEES/ CUSTOMERS ON ACCOMPANYING PLAN)
- INSTITUTIONAL/GOVERNMENT (PROVIDE DETAIL OF NUMBERS AND TYPES OF EMPLOYEES/USERS ON ACCOMPANYING PLAN)

PROPERTY OWNER(S) PATRICIA SULLIVAN

DAYTIME PHONE 443-717-2856 CELL _____ FAX _____

MAILING ADDRESS 3010 N RIDGE RD, UNIT C703 ELLICOTT CITY, MD 21043
STREET CITY/TOWN STATE ZIP

APPLICANT ROBERT H. VOGEL ENGINEERING, INC

DAYTIME PHONE 410-461-7606 CELL _____ FAX 410-461-8961

MAILING ADDRESS 8407 MAIN STREET ELLICOTT CITY MD 21043
STREET CITY/TOWN STATE ZIP

APPLICANT'S ROLE: DEVELOPER BUILDER BUYER RELATIVE/FRIEND REALTOR CONSULTANT

PROPERTY LOCATION
SUBDIVISION/PROPERTY NAME SULLIVAN PROPERTY LOT NO. 3

PROPERTY ADDRESS 13185 & 13183 HIGHLAND ROAD HIGHLAND 20777
STREET TOWN/POST OFFICE

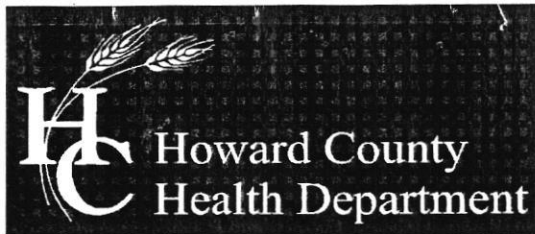
TAX MAP PAGE(S) 0034 003 0237 PARCEL(S) _____ PROPOSED LOT SIZE 46740SF
GRID

AS APPLICANT, I UNDERSTAND THE FOLLOWING: THE SYSTEM INSTALLED SUBSEQUENT TO THIS APPLICATION IS ACCEPTABLE ONLY UNTIL PUBLIC SEWERAGE IS AVAILABLE. THIS APPLICATION IS COMPLETE WHEN ALL APPLICABLE FEES AND A SUITABLE SITE PLAN HAVE BEEN RECEIVED. I ACCEPT THE RESPONSIBILITY FOR COMPLIANCE WITH ALL M.O.S.H.A. AND "MISS UTILITY" REQUIREMENTS. APPROVAL IS BASED UPON SATISFACTORY REVIEW OF A PERC CERTIFICATION PLAN.

TEST RESULTS WILL BE MAILED TO APPLICANT.

Megan Ruggeri
SIGNATURE OF APPLICANT

HOWARD COUNTY HEALTH DEPARTMENT, BUREAU OF ENVIRONMENTAL HEALTH, WELL AND SEPTIC PROGRAM
1718 COLUMBIA GATEWAY DRIVE COLUMBIA, MARYLAND 21046 (410) 313-2640 FAX (410) 313-2648
TDD (410) 313-2323 TOLL FREE 1-877-4MD-DHMH



Bureau of Environmental Health

8930 Stanford Boulevard, Columbia, MD 21045

Main: 410-313-2640 | Fax: 410-313-2648

TDD 410-313-2323 | Toll Free 1-866-313-6300

www.hchealth.org

Facebook: www.facebook.com/hocohealth

Twitter: [HowardCoHealthDep](https://twitter.com/HowardCoHealthDep)

Maura J. Rossman, M.D., Health Officer

November 19, 2015

To: Pat Sullivan prsjfs@gmail.com

Mike Sullivan mike.sullivan@cbre.com

Robert H. Vogel Engineering, LLC rvogel@vogeleng.com

RE: Percolation Test Report; 13183 & 13185 Highland Road

Percolation tests were conducted at 13183 & 13185 Highland Road (Tax Map 34, Parcel 188 & 237) on November 17-18, 2015. Tests and/or profile descriptions were documented for 21 locations (100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 112, and new test hole B (133). Test holes 122 – 125, 128 and 129 were not tested because they were either located within or immediately adjacent to wet season soil. Test hole #121 and newly proposed test holes A, C, D, and E weren't considered good candidates for testing because they were either located downslope or in between previously tested holes that did not pass.

Percolation test holes 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 127 and 130 **passed**. Percolation test holes 117, 118, 119, 120, 131 and B **failed** due to poor soil profiles (i.e. rock and high clay content) and/or slow percolation rates.

All percolation tests conducted were standard tests, measuring rate of fall for a pre-wet period followed by measurement and recordation of the time required for the water level to drop 1 inch. Areas that may be included in the sewage disposal area are represented by test locations having satisfactory soil condition. The area must be large enough to accommodate 3 systems for the planned residence.

The next step in the process is to have an engineer/consultant submit a percolation certification plan to confirm the design of the septic reserve area.

Should you have any questions regarding this evaluation please contact me. I may be reached at (410) 313-1786 or by email hoswald@howardcountymd.gov

Respectfully,

Hank Oswald

Hank Oswald, L.E.H.S
Bureau of Environmental Health
Well & Septic Program

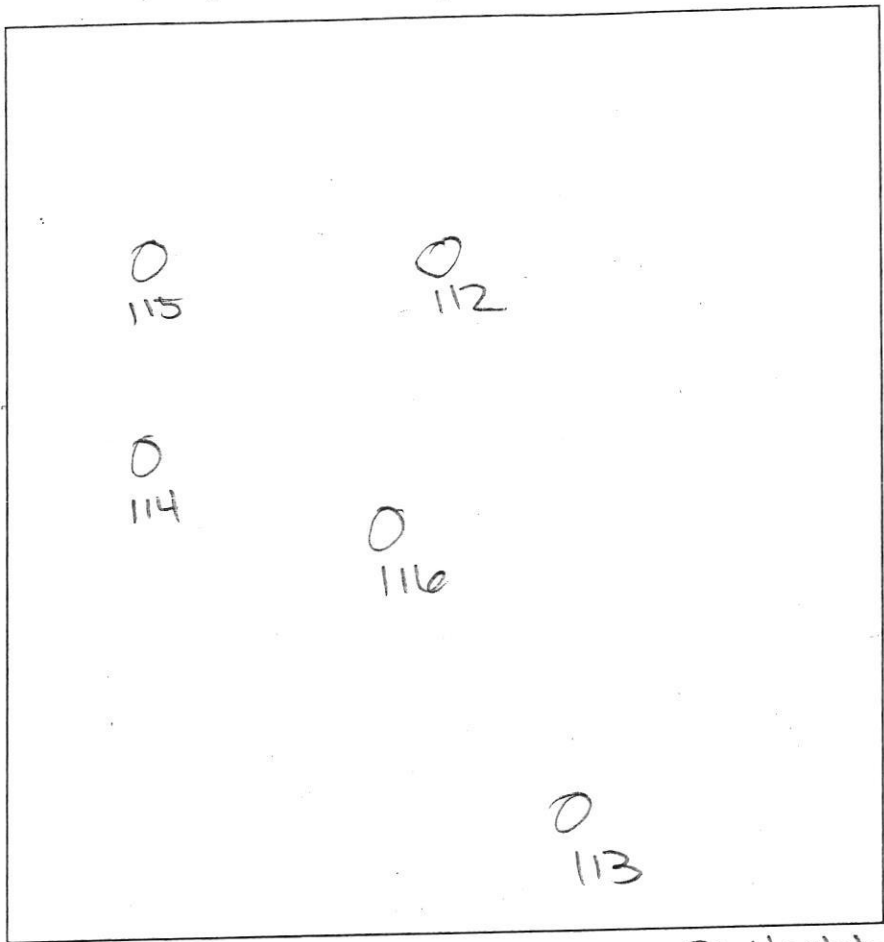
Hole #116

0.4' brn L
 or scl mica
 4' pale red sl plat shale
 12' dry

Hole #113

0.8' brn L
 or scl mica
 3.5' tan sl
 6' pale red plat shale
 12' dry

[Empty box for Hole #113]



A/P _____

Hole #112

0.5' dr brn L
 brn L
 1.3' or scl
 4.6' tan sl many mica
 6' pale red & shale
 12' dry

Hole #115

0.6' brn L
 or scl
 3.5' 4 sl
 8.5' pale red sl platy
 12' dry

Hole #114

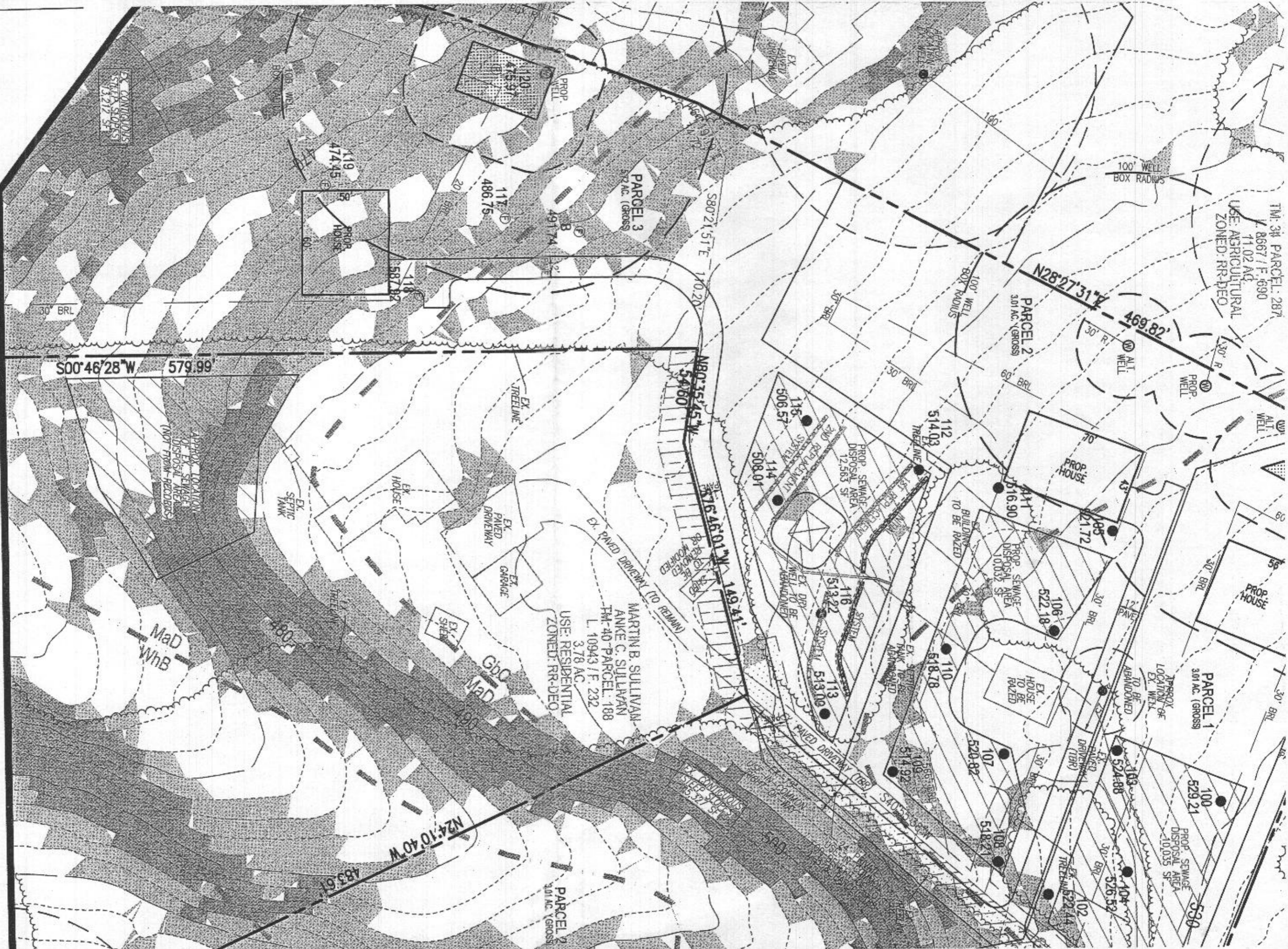
0.7' brn L
 or scl mica
 3.8' 4 sl mica
 7' pale red plat shale
 12' dry

Lane → Highland

DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2ND INCH	P/F/H
11/18/15	112	5.7/12	9:27	9:39	9:51	12	P
11/18/15	115	4.5/12	9:41	9:56	10:16	20	P
11/18/15	114	4.4/12	9:53	9:58	10:04	6	P
11/18/15	116	4.7/12	10:11	10:13	10:17	3	P
11/18/15	113	4.6/12	10:28	10:31	10:36	5	P

REMARKS Lot # 3
 SANITARIAN H. Osimilt BACKHOE Freedom OTHERS Scottie owners & son
 TEST HOLES USED IN SDA _____ AVG. PERC TIME _____ SQ. FT/BR _____
 TRENCH WIDTH _____ INLET DEPTH _____ MAX. BOT DEPTH _____ EFFECTIVE SW _____

N 552550



TM: 3A PARCEL: 287
 8667 / F: 690
 11.02 AC
 USE: AGRICULTURAL
 ZONED: RR-DEO

PARCEL 1
 3.01 AC (GROSS)

PARCEL 2
 3.01 AC (GROSS)

PARCEL 3
 3.7 AC (GROSS)

MARTIN B. SULLIVAN
 ANKE C. SULLIVAN
 TM-40 PARCEL: 188
 L 10943 / F: 232
 USE: RESIDENTIAL
 ZONED: RR-DEO

APPROX. LOCATION
 OF EX. SEWAGE
 DISPOSAL AREA
 (NOT FROM RECORDS)

PLAN SCALE

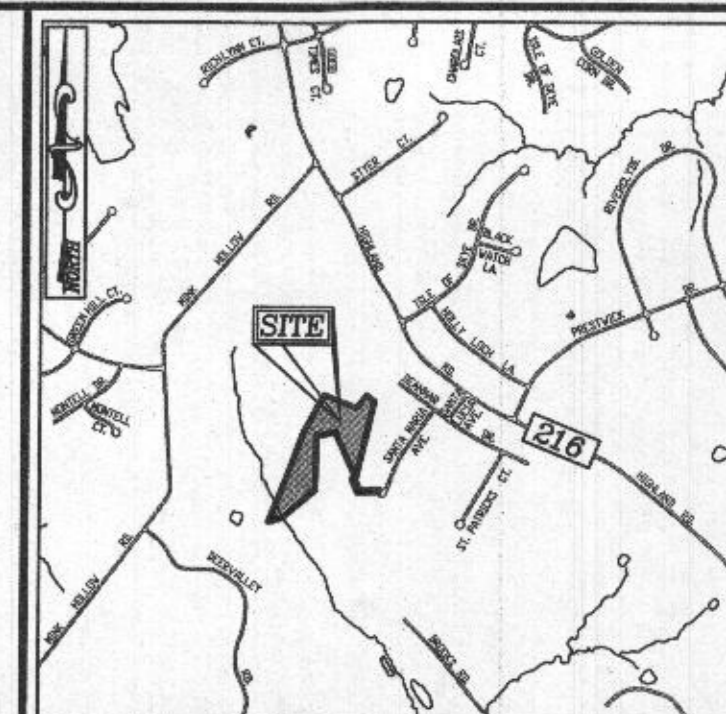
SCALE: 1"=50'

SOILS LEGEND				
SYMBOL	NAME / DESCRIPTION	GROUP	K-FACTOR	ERODIBLE
G6B	GLAUCONITE LOAM, 0 TO 3 PERCENT SLOPES	A	.28	NO
G6C	GLAUCONITE LOAM, 8 TO 15 PERCENT SLOPES	A	.28	NO
G6D	GLENNVILLE SILT LOAM, 3 TO 9 PERCENT SLOPES	C	.43	YES
M4D	MANOR LOAM, 15 TO 25 PERCENT SLOPES	B	.28	YES
W4A	WILTSHIRE SILT LOAM, 0 TO 3 PERCENT SLOPES	C	.20	NO
W4B	WILTSHIRE SILT LOAM, 3 TO 8 PERCENT SLOPES	C	.20	NO

SOILS INFORMATION FROM USDA WEB SOIL SURVEY WEBSITE
 -HOWARD COUNTY SOILS MAP NUMBER 22 - CLARKSVILLE SW

NOTE:
 HEAVILY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR K GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT

- GENERAL NOTES**
- THIS SUBJECT PROPERTY IS ZONED RR-DEO.
 - PROPERTY OUTLINE SHOWN HEREON IS BASED ON A DEED PLOT PREPARED BY ROBERT H. VOGEL ENGINEERING, INC., DATED APRIL, 2015.
 - DEED REFERENCES: LIBER 441 FOLIO 611
LIBER 5903 FOLIO 137
LIBER 10943 FOLIO 232
LIBER 15527 FOLIO 137
 - THE EXISTING TOPOGRAPHY IS TAKEN FROM CURRENT HOWARD COUNTY GIS DATA AND FIELD VERIFIED TO BE ACCURATE.
 - SOIL TYPES SHOWN HEREON ARE FROM THE USDA WEB SOIL SURVEY.
 - ALL WELLS AND SEPTIC SYSTEMS WITHIN 100' FROM THE PROPERTY BOUNDARIES HAVE BEEN SHOWN.
 - ANY CHANGE TO A PRIVATE SEWERAGE EASEMENT SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
 - ADJUSTMENT TO THE SEPTIC EASEMENT AREA IS NOT PERMITTED WITHOUT ADDITIONAL TESTING.
 - THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
 - EXISTING WELLS AND/OR SEWERAGE EASEMENTS WITHIN 100 FEET OF THE PROPERTY HAVE BEEN SHOWN FROM THE BEST AVAILABLE INFORMATION.
 - ALL BUILDING SITES SHOWN COMPLY WITH MINIMUM BUILDING RESTRICTION REGULATIONS.
 - THE PURPOSE OF THIS PERCOLATION CERTIFICATION PLAN IS TO CREATE AND DEFINE AN PRIVATE SEPTIC EASEMENT FOR THE PROPERTY / PROJECT IN ACCORDANCE WITH THE STATE AND COUNTY CODES.
 - THE TRENCH DESIGN SHOWN ON LOT 3 IS PRELIMINARY AND IS BASED ON A 4-BEDROOM HOUSE. TRENCH DESIGN ON LOT 3 IS SUBJECT TO CHANGE WITH THE BAT PLAN AT BUILDING PERMIT PHASE.
 - ALL WELLS MUST BE DRILLED PRIOR TO RECORDATION OF ADJOINER TRANSFER DEEDS (RECONFIGURED PARCELS). THERE MAY BE PRACTICAL DIFFICULTIES DRILLING THE WELL FOR LOT 3 DUE TO SLOPE. IF A NEW WELL AREA IS NEEDED, THEN A REVISED PERCOLATION CERTIFICATION WILL BE REQUIRED.
 - MOE HAS APPROVED A VARIANCE TO ALLOW THE SEWERAGE DISPOSAL AREAS ON LOTS 2 AND 3 TO BE UP-GRADEMENT OF THE WELL LOCATIONS ON LOT 3 SUBJECT TO THE FOLLOWING CONDITIONS:
 A) A PRETREATMENT UNIT UTILIZING BEST AVAILABLE TECHNOLOGY FOR NITROGEN REDUCTION MUST BE INSTALLED ON THE SEWERAGE DISPOSAL SYSTEMS FOR LOTS 2 AND 3.
 B) THE WELL ON LOT 3 MUST BE CONSTRUCTED USING STEEL CASING EXTENDING TO A MINIMUM DEPTH OF 50 FEET, OR 10 FEET INTO COMPETENT BEDROCK, WHICHEVER IS GREATER.



VICINITY MAP
 SCALE: 1"=2000'
 ADG MAP: 5051-D1

LEGEND:

---	PROPERTY LINE
- - - -	ADJACENT PROPERTY LINE
---	EXISTING EDGE OF PAVING
(W)	EXISTING WELL
---	EXISTING TREELINE
---	EXISTING 10' CONTOUR
---	EXISTING 2' CONTOUR
S&E, S&C2	SOILS
---	EXISTING STEEP SLOPES (25% SLOPES OR GREATER)
---	EXISTING MODERATE SLOPES (15% TO 24.99% SLOPES)
●	PASSED PERC. TEST
○	FAILED PERC. TEST
(W)	PROPOSED WELL LOCATION



THIS AREA DESIGNATES A PRIVATE SEWERAGE EASEMENT OF AT LEAST 10,000 SQUARE FEET AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWERAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THESE EASEMENTS SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWERAGE EASEMENT. RECORDATION OF A MODIFIED SEWERAGE EASEMENT SHALL NOT BE NECESSARY.

NO.	REVISION	DATE

PERCOLATION CERTIFICATION PLAN
SULLIVAN PROPERTY
 13185 HIGHLAND ROAD
 HIGHLAND, MD 20777
 (L. 441 / F. 611 & L. 5903 / F. 137 & L. 10943 / F. 232 & L. 15527 / F. 137)

5TH ELECTION DISTRICT
 TAX MAP: 34 GRID: 21

ZONED: RR-DEO
 PARCEL: 237
 HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERS • SURVEYORS • PLANNERS
 8407 MAIN STREET
 ELICOTT CITY, MD 21043
 TEL: 410-461-7666
 FAX: 410-461-8961

DESIGN INFORMATION		PROFESSIONAL CERTIFICATE	
DESIGN BY:	RHV	I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16193, EXPIRATION DATE 08-27-2016.	1 SHEET OF 2
DRAWN BY:	JMR		
CHECKED BY:	RHV		
DATE:	FEBRUARY 2017		
SCALE:	1"=50'		
W.O. NO.:	15-00		

APPROVED: FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS.

Eric D. Salmi
 COUNTY HEALTH OFFICER

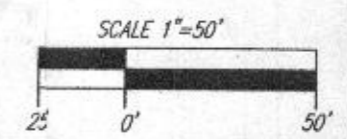
DATE: 3/6/2017

PERCOLATION CERTIFICATION:
 I CERTIFY THAT THE LOCATIONS SHOWN HEREON ARE BASED ON FIELD LOCATIONS DONE UNDER MY DIRECT SUPERVISION, AND ARE CORRECT, TO THE BEST OF MY PROFESSIONAL KNOWLEDGE AND BELIEF.

Eric D. Salmi
 ERIC D. SALMI
 PROFESSIONAL LAND SURVEYOR No. 21639

DATE: 2/28/2017

PLAN SCALE
 SCALE: 1"=50'



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