



# APPLICATION

## FOR PERCOLATION TESTING AND SITE EVALUATION

TEST DATE(S) June 25, 2014 TEST TIME 9:30 am **AP** 546376  
 AGENCY REVIEW: \_\_\_\_\_ DATE 5/27/14

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 5 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) Zack and Kerry Brendel

DAYTIME PHONE 410-984-1430 CELL \_\_\_\_\_ FAX \_\_\_\_\_

MAILING ADDRESS 15555 Union Chapel Rd Woodbine MD 21797  
STREET CITY/TOWN STATE ZIP

APPLICANT Neil Mulloy, Mulloy Builders, LLC  
E-Mail: neil@mulloybuilders.com office/CELL 410-984-4643 FAX 443-920-3978

MAILING ADDRESS P.O. Box 207 West Friendship MD 21794  
STREET CITY/TOWN STATE ZIP

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

PROPERTY LOCATION  
SUBDIVISION/PROPERTY NAME Tax Map 13 / Grid 3 / Parcel 237 LOT NO. N/A

PROPERTY ADDRESS 2157 Woodbine Rd Woodbine, MD 21797  
STREET TOWN/POST OFFICE

TAX MAP PAGE(S) 13 GRID 3 PARCEL(S) 237 <sup>Existing</sup> PROPOSED LOT SIZE 24.49 Ac.

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. \_\_\_\_\_  
SIGNATURE OF APPLICANT

HOWARD COUNTY HEALTH DEPARTMENT, BUREAU OF ENVIRONMENTAL HEALTH, WELL AND SEPTIC PROGRAM  
7178 COLUMBIA GATEWAY DRIVE COLUMBIA, MARYLAND 21046 (410) 313-2640 FAX (410) 313-2648  
TDD (410) 313-2323 TOLL FREE 1-877-4MD-DHMH

AP

1

0.9' dk brn ch sil, 2 fskb  
 1.2' brn ch sil, 1 fskb  
 2.2' brn ch L, 2 fskb  
 2.2' yel-red vch sil, ss  
 3.5' yellow ch sil, 1 msbk  
 4.2' brn, red & pale yellow sil, dense  
 5' yellow & yellow-red sil  
 7.8' yel-brn ch sil  
 12.5' 1 fpl (fzd (pale yellow) 7.8'-8.8')

2

0.8' dk brn sil, 2 fskb  
 0.8' dk brn sil, 1 fskb  
 1.5' brn sil, 2 fskb  
 2.7' brn sil, 2 msbk  
 2.7' brn L, 2 fskb  
 4.5' dense  
 4.5' yellow red & pale brn ch sil  
 7.3' yellow & pale brn v f sil (40% rock)  
 9' x f sil, > 65% rock

3

0.5' dk brn sil, 3 fskb  
 0.9' brn sil, 1 fskb  
 2.8' brn L, 2 msbk  
 4.5' brn & red f sil, dense, 2 fskb  
 5' red f sil, 2 fskb  
 12' brn f sil, 1 msbk, 2 fskb, few channers



4

0.2' dk brn sil, 2 fskb, 1 to 1 fskb  
 1.1' brn sil, 2 fskb  
 2' brn L, 2 msbk  
 2' yel-red ch sil, 2 msbk  
 4' mzp (blk)  
 4' red & brn sil, 10% channers  
 5.5' red & brn ch sil

5

0.4' dk grey brn sil, 2 fskb  
 0.8' dk brn L, 2 fskb  
 2.5' brn L, 2 fskb  
 4.5' red-yel sil, dense, 1-few channers

6

9' pale brn v f sil, 40-45%  
 10' x f sil, 65% rock

DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2ND INCH	P/F/H
6/25/14	1	6.5' / 12.5'	10:21	10:23	10:26	3	P
6/25/14	2	5' / 9'	10:42	11:02			F
	3	5.5' / 12'	11:06	11:13	11:24	11	P
	4	12'	Visual	Sidewall 4'-8" 0.8 gpd / ft <sup>2</sup>			P
	5	10'	Visual	Sidewall 4.5'-6" 0.8 gpd / ft <sup>2</sup>			P
	6	5.5' / 12.5'	12:46	12:50	1:01	11	P

RECEIVED

MAY 27 2014

HOWARD COUNTY HEALTH DEPARTMENT  
 BUREAU OF ENVIRONMENTAL HEALTH

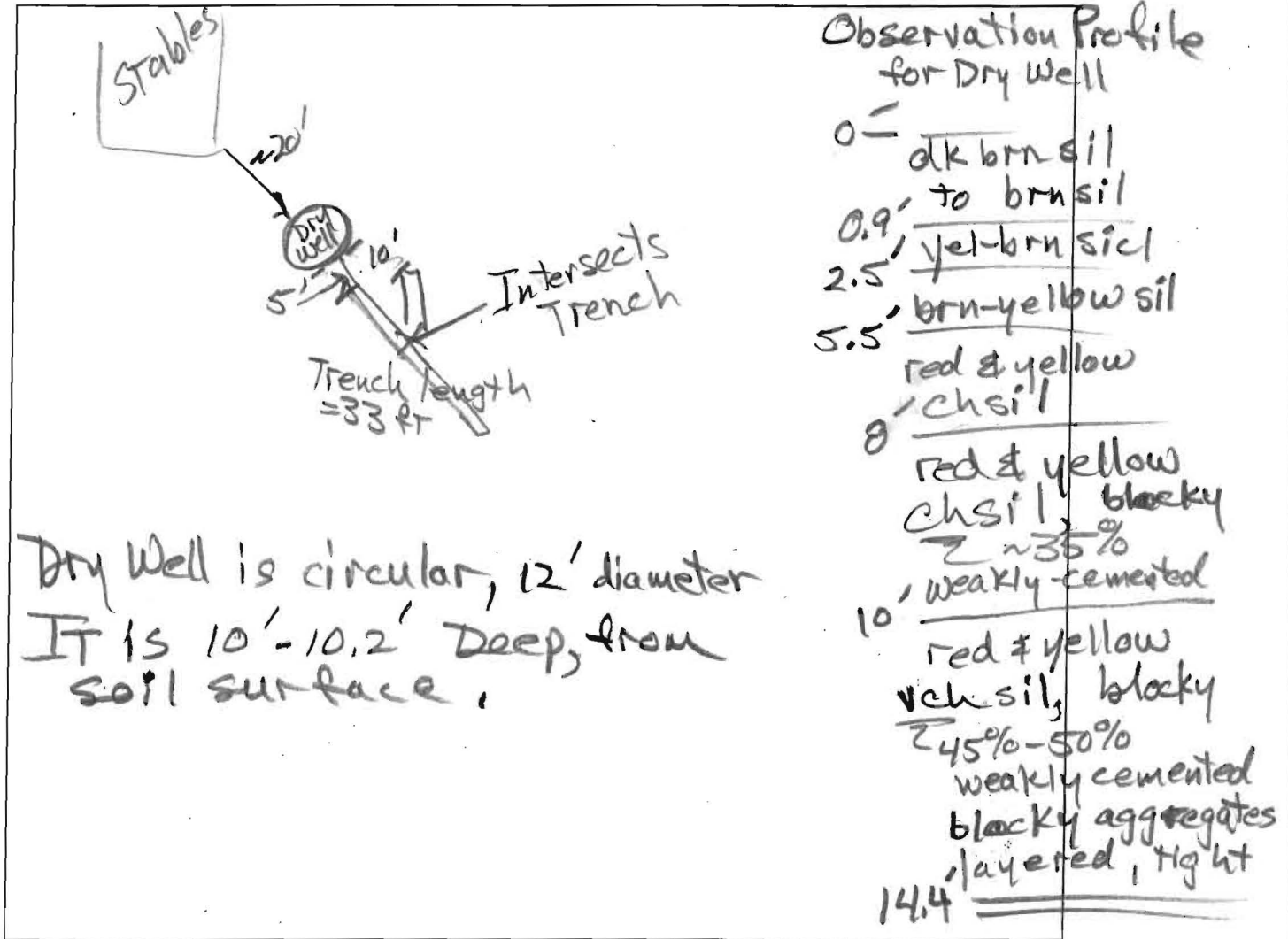
REMARKS: Steve Heiss present.  
 SANITARIAN: R. Bricker BACKHOE: Zach Breda OTHERS:  
 TEST HOLES USED IN SDA: \_\_\_\_\_ AVG. PERC TIME: \_\_\_\_\_ SQ. FT/HR: \_\_\_\_\_  
 TRENCH WIDTH: \_\_\_\_\_ INLET DEPTH: \_\_\_\_\_ MAX. BOT DEPTH: \_\_\_\_\_ EFFECTIVE SW: \_\_\_\_\_

0.3' dk grey brn sil, 2 fskb  
 0.7' dk brn sil, 2 fskb  
 1' brn L, 2 fpl  
 2.2' brn sil, 2 fskb, ss  
 3' brn ch sil, 1 fskb  
 3' brn sil, 2 fskb, dense  
 4' yellow & yel-red ch sil  
 8' brn f sil  
 10' pale brn v f sil  
 12.5' x f sil, 40% flags

SITE INSPECTION SHEET

OWNER: Zach & Kerry Brendel PHONE #: \_\_\_\_\_  
 ADDRESS: 2175 Woodbine Road CONTRACTOR: \_\_\_\_\_  
 \_\_\_\_\_ WELL TAG #: \_\_\_\_\_  
 SUBDIVISION: \_\_\_\_\_ LOT: \_\_\_\_\_ COUNTY #: \_\_\_\_\_  
 PROPOSAL: Observe 4-foot soil buffer beneath level of Dry well bottom.

LOCATION DIAGRAM



Dry Well is circular, 12' diameter  
 It is 10'-10.2' Deep, from soil surface.

COMMENTS: Trench Encountered during excavation.  
Pipe Invert at 4'; Bottom at ~10 feet.

(potable) Well: HO-73-1523; steel case, 12" above soil; 1-pc. cap, loose; conduit in cap port  
 DATE: 6/25/14 INSPECTOR: R. Buckner

(submitted by  
Plumber)

Pictures of well line

4/28/15






Bureau of Environmental Health  
7178 Columbia Gateway Drive, Columbia, MD 21046-2147  
Main: 410-313-2640 | Fax: 410-313-2648  
TDD 410-313-2323 | Toll Free 1-866-313-6300  
[www.hchealth.org](http://www.hchealth.org)  
Facebook: [www.facebook.com/hocohealth](https://www.facebook.com/hocohealth)  
Twitter: HowardCoHealthDep

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

**MEMORANDUM**

*Sent via email to [neilemulloybuilders.com](mailto:neilemulloybuilders.com) on 7/24/2014*

**TO:** Attn: Neil Mulloy

**FROM:** Kevin M. Wolf, R.E.H.S./R.S., LEHS   
HCHD, Well & Septic Program  
Groundwater Mgmt. Sec.

**DATE:** July 24, 2014

**RE:** **2175 Woodbine Road**  
Woodbine Road, MD  
M. 13, G.03 P. 237- 24.4900 AC  
(Demolition of existing structure – rebuild new SFD)

**This is to advise that the Howard County Health Department recommends issuance of the demolition permit for the above referenced property.**

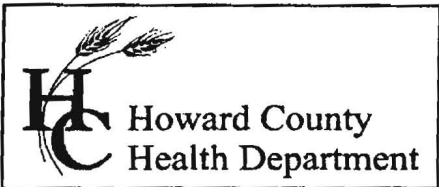
The existing pit well that was utilized for the above referenced property has been located and upgraded to current construction standards. Documentation was submitted by the owner that this task was completed. This well will be utilized for the new house. Protective devices must be kept in place during demolition and construction phases so that the well does not get damaged. Potability testing on this well will need to occur prior to use and occupancy.

The existing septic system on this property was pumped out by Freedom Septic. A Confirmation invoice and letter was received by our office and reviewed for compliance. This tank will need to be watertight tested to current ASTM standards to verify structural integrity. If it does not meet watertight testing standards, the tank must be collapsed and a new septic tank will be installed for the new dwelling.

Current utility records show this parcel does not have access to public utilities. If you plan to re-build on this parcel, you will need to install the well and septic per Howard County specifications and regulations (i.e. percolation certification plan).

**If any wells or septic systems are found during site work, you must notify this office immediately!**

KMW  
*Cc: File*



Bureau of Environmental Health  
 7178 Gateway Drive Columbia, MD 21046  
 (410) 313-2640 Fax (410) 313-2648  
 TDD (410) 313-2323 Toll Free 1-866-313-6300  
 website: www.hchealth.org

Dr. Peter Beilenson, M.D., M.P.H., Health Officer

**DEMOLITION REQUEST FORM**

(Please fill in all blanks)

**Information of Property to be Demolished:**

ZACK BRENOEL  
 Current Owner's Name

2175 WOODBINE RD, WOODBINE MD  
 Property Address

Subdivision (if applicable)

Lot #

All Prior Owners' Names (if requested or known)

13 237  
 Tax Map Parcel # Tax ID #

HOME HAS BURNED DOWN  
 Purpose/Reason for Demolition

RE-BUILD NEW HOUSE  
 Future plans of property after demo (i.e. subdivision, parking lot, re-build new house, etc...)

If a subdivision, SDP# \_\_\_\_\_ Has the structure(s) been deemed unsafe by DILP  YES  NO

**UTILITY RECORDS:**

Property currently connected to public water  YES  NO

Property currently connected to public sewer  YES  NO

Does the property currently have any wells and/or septic systems  YES  NO  
 → Explain: ALL WELLS AND SEPTIC HAVE BEEN INSPECTED BY HEALTH DEPT.

\*Note: Any wells and/or septic systems that are to remain may require an approved percolation certification plan under Howard County Code Sec. 3.805

\*Note: Any septic systems that are to be abandoned must be done by a septic contractor with documentation of the process.

\*Note: All abandoned wells are to be sealed by a well driller licensed by the Maryland State Board of Well Drillers COMAR Sec 26.04.04.11 Abandonment Standards D (3)

**COMMENTS:**

NEIL MULLOY  
 Applicant's Name (please print)

410-984-4643  
 Applicant's Phone #

NEILEMULLOYBUILDERS.COM  
 Applicant's Email

Applicant's Fax #

[Signature]  
 Applicant's Signature

7/24/14  
 Date

**Freedom Septic Services, Inc.**

2809 Liberty Road  
 Sykesville, MD 21784  
 Phone: 410-795-2947  
 Fax: 410-549-1163

# Invoice

DATE	INVOICE #
5/2/2014	83848

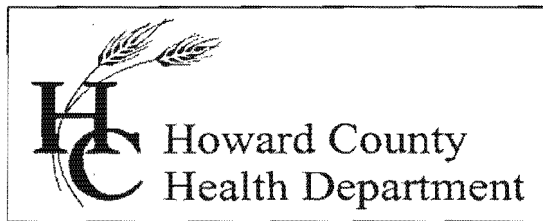
<b>BILL TO</b>
Zach Brendel 2175 Woodbine Rd Woodbine, MD 21797

P.O. NO.	TERMS	PROJECT

SERVICED	QUANTITY	DESCRIPTION	RATE	AMOUNT
4/24/2014	1	Pump Septic MD State Tax <i>(TANK WAS EMPTY)</i>	200.00 6.00%	200.00 0.00
			<b>Total</b>	<b>\$200.00</b>

<b>Balance Due</b>	<b>\$200.00</b>
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Web Site
<a href="http://www.poophappens.com">www.poophappens.com</a>



**Bureau of Environmental Health**

8930 Stanford Blvd., Columbia, MD 21045  
Main: 410-313-1771 | Fax: 410-313-2648  
TDD 410-313-2323 | Toll Free 1-866-313-6300  
[www.hchealth.org](http://www.hchealth.org)  
Facebook: [www.facebook.com/hocohealth](http://www.facebook.com/hocohealth)  
Twitter: HowardCoHealthDep

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

July 23, 2014

To: Neil Mulloy, Mulloy Builders LLC, Applicant  
[neil@mulloybuilders.com](mailto:neil@mulloybuilders.com)

RE: Percolation Test Report; 2175 Woodbine Road

Percolation tests were conducted at 2175 Woodbine Road (Tax Map 13, Parcel 237) on June 25, 2014. Tests and/or profile descriptions were documented for six locations. An additional profile observation was dug near the existing dry well.

Location 2 is FAIL as the soil profile ends at 9 feet depth and the percolation rate at 5 feet is very slow. The remaining five locations (1, 3, 4, 5, and 6) all PASS. Location 6 defines a boundary between location 2 and the area represented by the other four locations that PASS.

Locations of percolation tests that 'PASS' are used to define the sewage disposal area (SDA) proposed on the Percolation Certification Plan. The percolation test results and suitable area for wastewater discharge are certified by the Approving Authority's signature of the Percolation Certification Plan.

An excavation was dug near the existing dry well for the purpose of documenting a profile observation to 4 feet deeper than the bottom of the dry well. During excavation a trench (from the dry well) was encountered. The trench had been installed with the dry well. Gravel in the trench is clean and the distribution pipe in the trench is clean, indicating that the dry well has not yet filled with solution. The bottom of the dry well and the trench are about 10 feet from the soil surface. The soil profile at the location observed extends to more than 14 feet beneath the soil surface. The dry well and trench are serviceable with a soil buffer greater than 4 feet to water table or bedrock.

Health Department records (indexed as A519569-A) indicate the septic system was constructed in 1972 to accommodate discharge for 4 bedrooms, i.e. discharge from a 3-bedroom residence and a trailer. The septic tank installed at that time is a mid-seam tank that has a capacity of 1300 gallons. If this septic tank is to remain, it must be tested for watertight capability. If replacement is desired or needed, the replacement may occur after the Percolation Certification Plan is signed by the Approving Authority and all permitting requirements are fulfilled.

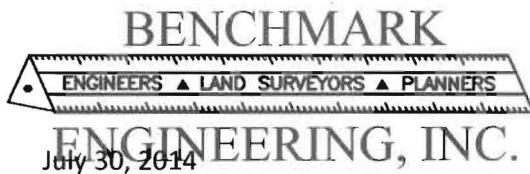
If you have any questions regarding this evaluation or requirements for a Percolation Certification Plan, please contact me by email or by calling (410) 313-2691.

Respectfully,

Robert Bricker, CPSS, REHS/RS, L.E.H.S.  
Environmental Sanitarian II  
Well and Septic Program

Enclosures: 1 Perc Test Application with Field Worksheet and Site Inspection Sheet

Copy: Steven Heiss, Benchmark Engineering, Inc.  
file



Christopher A. Malagari, P.E., President  
Donald A. Mason, P.E., Vice President

Ellicott City, MD      Frederick, MD  
410-465-6105      301-710-5686  
410-465-6644 Fax

Mr. Robert Bricker. REHS/RS, LEHS  
Howard County Bureau of Environmental Health  
8930 Stanford Blvd.  
Columbia, MD. 21045

Re: 2175 Woodbine Road, Percolation Certification Plan

Dear Mr. Bricker,

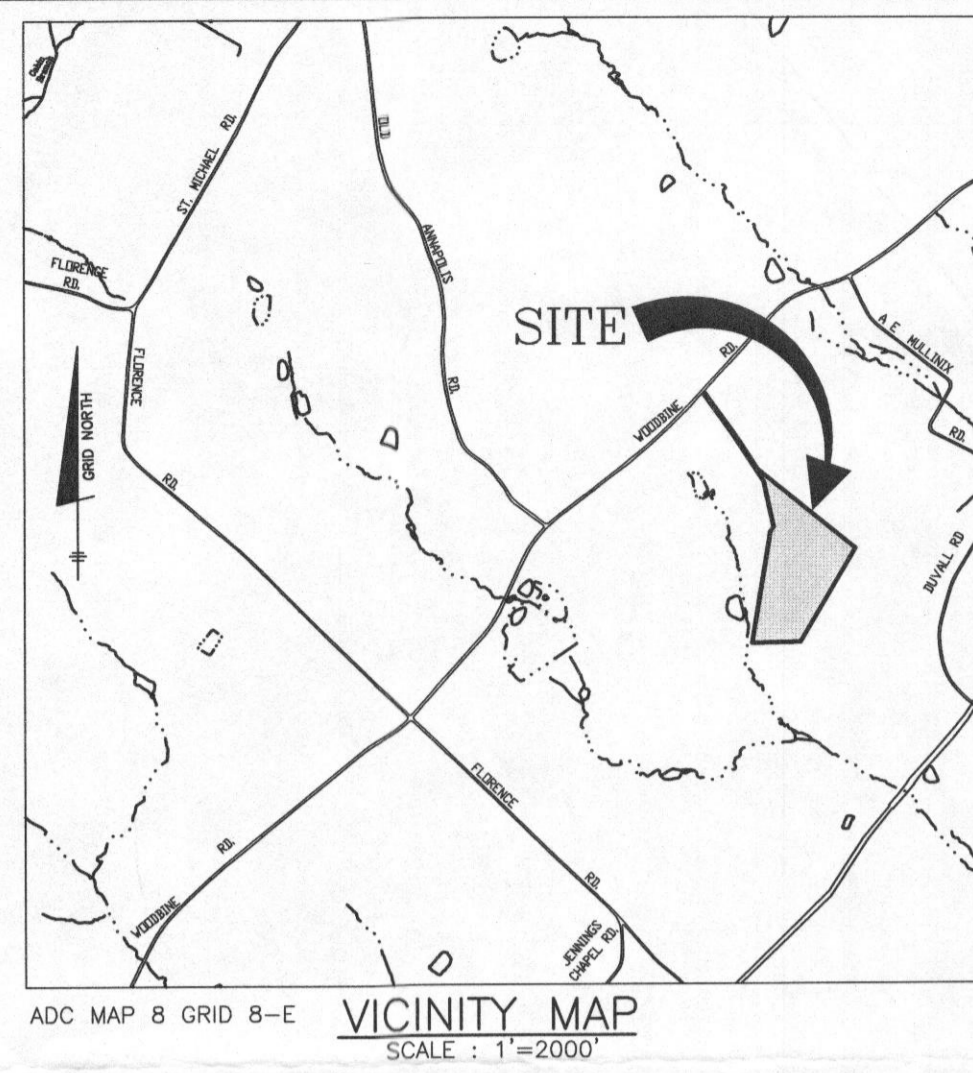
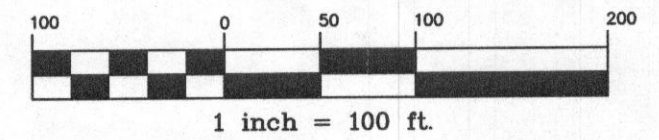
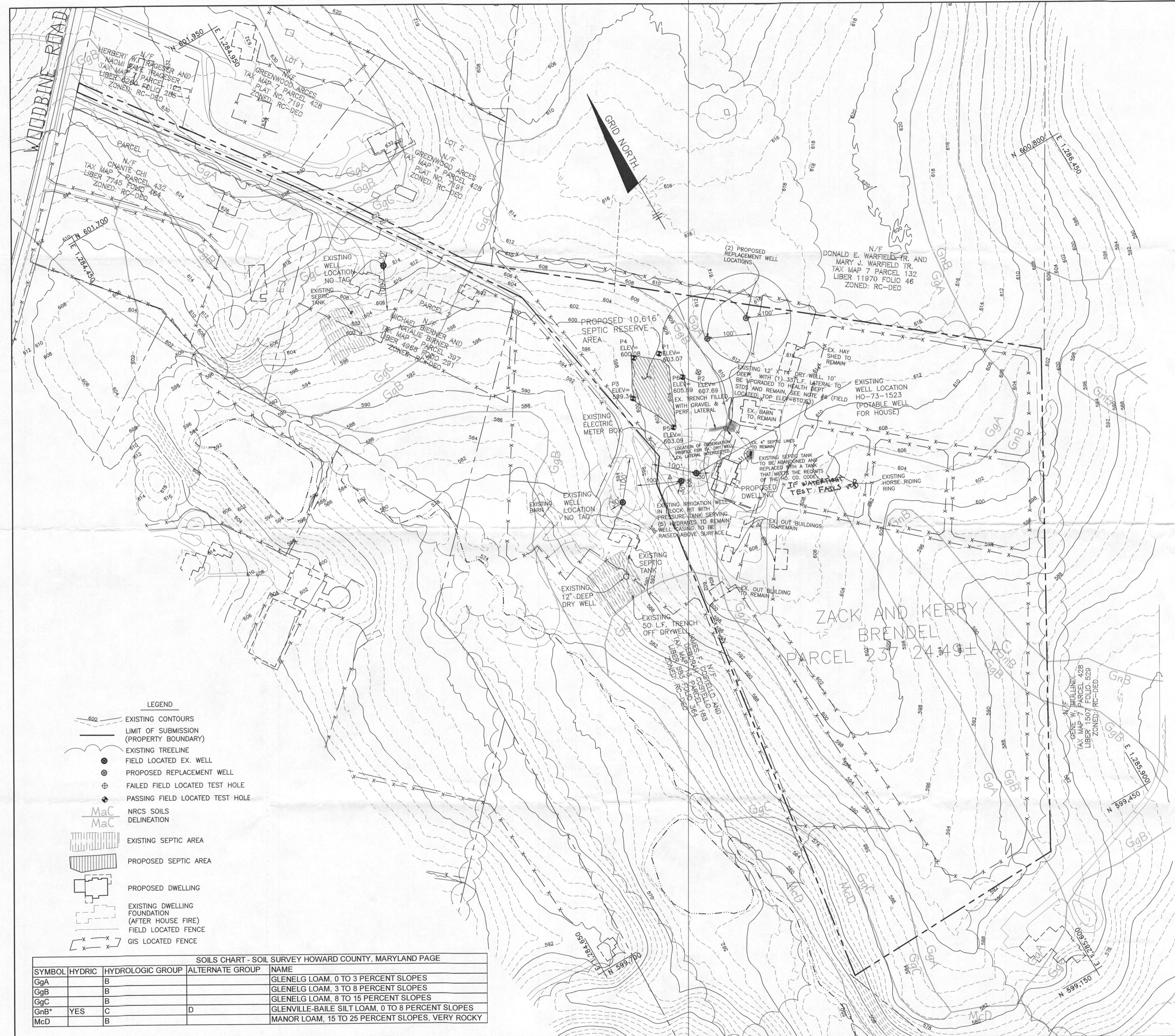
Attached are three (3) copies of the revised percolation certification plan for the above referenced project for signature approval. Below please find our response to your July 29, 2014 comments for the above referenced plan.

1. Trench from the dry well has been shown on the plan.
2. The "profile observation" that was dug near the dry well has been shown and labeled on the plan.
3. Label has been added to the existing septic tank as "to be abandoned".
4. The proposed location for the replacement tank will be in the same location as the old tank. This has been labeled on the plan.
5. Note # 6 has been edited as requested in your comment letter dated July 29, 2014.
6. Note #7 has been edited as requested in your comment letter dated July 29, 2014.
7. Note #8 has been replaced with your requested note as indicated in your comment letter dated July 29, 2014.
8. Note #10 has been replaced with your requested note as indicated in your comment letter dated July 29, 2014.
9. Note #11 has been edited to add the phrase, "prior to building permit approval".

We believe that we have fulfilled your requirements for plan approval and signature. Once the plan is signed, please contact us so that we can obtain a copy of the approved plan. Thank you for your time and efforts in reviewing this plan.

Sincerely,

Christopher A. Malagari, P.E, NSPE  
President



**GENERAL NOTES**

1. THE LOT SHOWN HEREON COMPLIES WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
2. THIS AREA DESIGNATES A PRIVATE SEWERAGE EASEMENT OF 10,000 SQUARE FEET AS REQUIRED BY THE STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWERAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWER IS AVAILABLE. THIS EASEMENT 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. ANY CHANGES TO A PRIVATE SEWERAGE EASEMENT SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN. RECORDATION OF A MODIFIED SEWERAGE EASEMENT PLAN SHALL NOT BE NECESSARY.
3. THE TOTAL AREA OF THE SUBJECT PROPERTY IS 24.49 +/- ACRES.
4. THE TOPOGRAPHY SHOWN HEREON IS BASED ON THE LATEST HOWARD COUNTY GIS TOPOGRAPHY AT A 2' CONTOUR INTERVAL IN THE VICINITY OF THE SEPTIC DISPOSAL AREA, ESTABLISHED BY THIS PLAN, HAVE BEEN FIELD VERIFIED BY BENCHMARK ENGINEERING, INC. IN MAY, 2014.
5. THE EXISTING HOUSE FOUNDATION, ALL EXISTING ONSITE WELLS, PERCOLATION TEST HOLES AND UNCOVERED COMPONENTS OF THE EXISTING SEPTIC SYSTEM HAVE BEEN FIELD LOCATED BY BENCHMARK ENGINEERING, INC. IN JUNE OF 2014 AND ARE ACCURATELY SHOWN.
6. THE EXISTING 12' X 14' DRYWELL, 10 FT. DEEP WITH ONE (1) 3/4" L.F. LATERAL, WILL REMAIN FOR USE BY THE PROPOSED HOUSE. THE EXISTING DRYWELL AND TRENCH SHALL BE UPGRADED TO HEALTH DEPARTMENT STANDARDS PRIOR TO USE AND OCCUPANCY APPROVAL BY THE HEALTH DEPARTMENT. A SEPTIC SYSTEM INSTALLATION PERMIT MUST BE OBTAINED TO COMPLETE THIS WORK.
7. IF THE EXISTING SEPTIC SYSTEM FAILS IN THE FUTURE, THE OWNER MUST USE THE 10,616 S.F. SEWERAGE DISPOSAL AREA, ESTABLISHED BY APPROVING AUTHORITY'S SIGNATURE OF THIS PLAN. THE NEW REPLACEMENT SEPTIC SYSTEM SHALL BE REQUIRED TO COMPLY WITH CODE REQUIREMENTS AT THE TIME THE REPLACEMENT IS INSTALLED.
8. A PASSING POTABILITY TEST OF THE WELL WILL BE REQUIRED FOR THE HEALTH DEPARTMENT APPROVAL OF USE AND OCCUPANCY OF THE REBUILT RESIDENCE.
9. ANY SEDIMENT AND EROSION CONTROL MEASURES USED ON THIS SITE SHALL COMPLY WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
10. THE EXISTING SEPTIC TANK, A MID-SEAM TANK, MUST PASS A WATERTIGHT TEST TO REMAIN IN SERVICE FOR THE REBUILT RESIDENCE. THE REQUIRED WATERTIGHT TEST MUST BE OBSERVED AND DOCUMENTED BY A HOWARD COUNTY HEALTH DEPARTMENT ENVIRONMENTAL SANITARIAN. SHOULD A REPLACEMENT TANK BE REQUIRED, THAT SEPTIC TANK SHALL MEET CODE REQUIREMENTS TO SERVE A 4-BEDROOM RESIDENCE.
11. THE EXISTING WELLS, BOTH THE POTABLE WELL AND IRRIGATION WELL, WILL REMAIN TO SERVE THE PROPOSED THREE (3) BEDROOM HOUSE AND THE HORSE BARN AND OTHER EXISTING OUT BUILDINGS, RESPECTIVELY. THE IRRIGATION WELL SERVES FIVE (5) HYDRANTS. THE WELL CASING FOR THE IRRIGATION WELL IS LOCATED WITHIN AN UNDERGROUND CONCRETE VAULT WITH A PUMP. THE WELL CASING FOR THE IRRIGATION WELL MUST BE RAISED ABOVE GRADE IN ACCORDANCE WITH BUREAU OF ENVIRONMENTAL HEALTH DEPT REQUIREMENTS PRIOR TO OBTAINING THE USE AND OCCUPANCY PERMIT.
12. EXISTING WELLS AND/OR SEPTIC SYSTEMS ON ADJACENT PROPERTIES WITHIN 100 FT. OF THE BOUNDARY OF THE SUBJECT PROPERTY ARE SHOWN BASED ON INFORMATION PROVIDED BY THE HOWARD COUNTY BUREAU OF ENVIRONMENTAL HEALTH. ADDITIONALLY, THE ADJACENT HOME OWNERS CLOSEST TO THE PROPOSED SEPTIC RESERVE AREA ON THE SUBJECT PROPERTY WERE CONTACTED TO DETERMINE THE LOCATIONS OF THEIR EXISTING WELL AND SEPTIC SYSTEMS.
13. ANY CHANGES TO A PRIVATE SEWERAGE EASEMENT SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.

I CERTIFY THAT THE INFORMATION SHOWN HEREON IS BASED ON FIELD WORK PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, AND IS CORRECT, TO THE BEST OF KNOWLEDGE AND BELIEF.

*Chris Malagari*  
CHRIS MALAGARI FOR BENCHMARK ENGINEERING INC.  
PLAN PREPARER

APPROVED FOR PRIVATE WATER AND SEWERAGE SYSTEM  
HOWARD COUNTY HEALTH DEPARTMENT

*Balwinder Maan Bawa* 8/3/2014  
HOWARD COUNTY HEALTH OFFICER *gr RB* DATE 1790

**BENCHMARK ENGINEERING, INC.**

8480 BALTIMORE NATIONAL PIKE SUITE 315  
ELLICOTT CITY, MARYLAND 21043  
PHONE: 410-465-6105 FAX: 410-465-6644  
EMAIL: BE@BE-CIVILENGINEERING.COM

OWNER:	ZACK AND KERRY BRENDEL 15555 UNION CHAPEL ROAD WOODBINE, MARYLAND 21797 410-984-1430	PROJECT:	<b>BRENDEL PROPERTY</b> PARCEL 237 2175 WOODBINE RD WOODBINE, MD 21797
		LOCATION:	TAX MAP: 13, GRID: 3 PARCEL 237 FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
		TITLE:	PERCOLATION CERTIFICATION PLAT
DESIGN: SDH DRAFT: BD CHECK: CAM	SCALE: 1" = 100'	DATE: JUNE, 2014/REV. JULY, 14	PROJECT NO. 2629 SHEET 1 OF 1

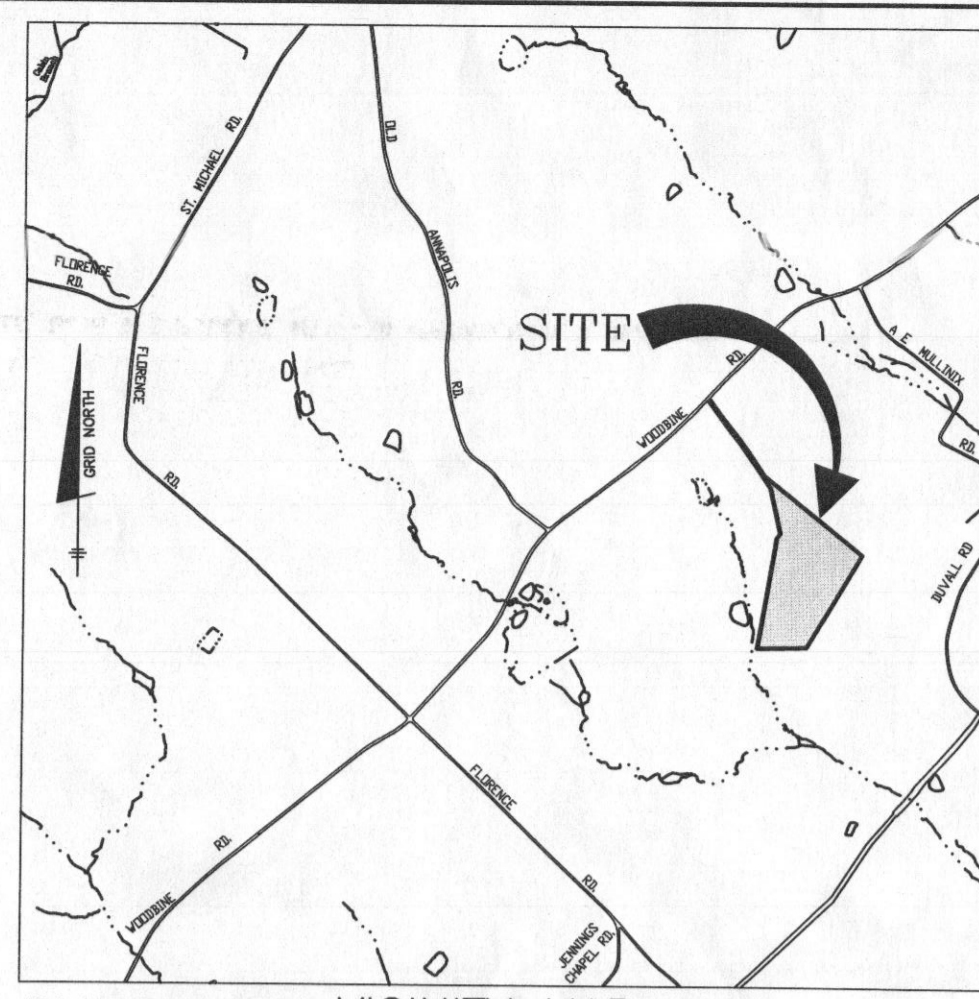
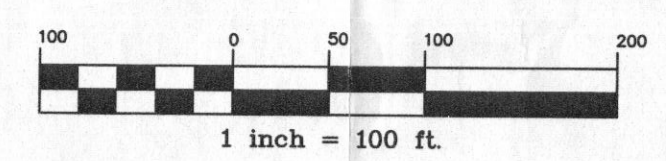
**LEGEND**

- EXISTING CONTOURS
- LIMIT OF SUBMISSION (PROPERTY BOUNDARY)
- EXISTING TREELINE
- FIELD LOCATED EX. WELL
- PROPOSED REPLACEMENT WELL
- FAILED FIELD LOCATED TEST HOLE
- PASSING FIELD LOCATED TEST HOLE
- NRCS SOILS DELINEATION
- EXISTING SEPTIC AREA
- PROPOSED SEPTIC AREA
- PROPOSED DWELLING
- EXISTING DWELLING FOUNDATION (AFTER HOUSE FIRE)
- FIELD LOCATED FENCE
- GIS LOCATED FENCE

**SOILS CHART - SOIL SURVEY HOWARD COUNTY, MARYLAND PAGE**

SYMBOL	HYDRIC	HYDROLOGIC GROUP	ALTERNATE GROUP	NAME
GgA		B		GLENELG LOAM, 0 TO 3 PERCENT SLOPES
GgB		B		GLENELG LOAM, 3 TO 8 PERCENT SLOPES
GgC		B		GLENELG LOAM, 8 TO 15 PERCENT SLOPES
GnB*	YES	C	D	GLENVILLE-BAILE SILT LOAM, 0 TO 8 PERCENT SLOPES
McD		B		MANOR LOAM, 15 TO 25 PERCENT SLOPES, VERY ROCKY

PC 546375



VICINITY MAP  
SCALE: 1"=2000'

**GENERAL NOTES**

- THE LOT SHOWN HEREON COMPLES WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
- THIS AREA DESIGNATES A PRIVATE SEWERAGE EASEMENT OF 10,000 SQUARE FEET AS REQUIRED BY THE STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWERAGE DISPOSAL IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWER IS AVAILABLE. THIS EASEMENT 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. ANY CHANGES TO A PRIVATE SEWERAGE EASEMENT SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN. RECORDATION OF A MODIFIED SEWERAGE EASEMENT PLAT SHALL NOT BE NECESSARY.
- THE TOTAL AREA OF THE SUBJECT PROPERTY IS 24.49 +/- ACRES.
- THE TOPOGRAPHY SHOWN HEREON IS BASED ON THE LATEST HOWARD COUNTY GIS TOPOGRAPHY AT A 2' CONTOUR INTERVAL. ELEVATIONS IN THE VICINITY OF THE SEPTIC DISPOSAL AREA, ESTABLISHED BY THIS PLAN, HAVE BEEN FIELD VERIFIED BY BENCHMARK ENGINEERING, INC. IN MAY, 2014.
- THE EXISTING HOUSE FOUNDATION, ALL EXISTING ONSITE WELLS, PERCOLATION TEST HOLES AND UNCOVERED COMPONENTS OF THE EXISTING SEPTIC SYSTEM HAVE BEEN FIELD LOCATED BY BENCHMARK ENGINEERING, INC. IN JUNE OF 2014 AND ARE ACCURATELY SHOWN.
- THE EXISTING 12' X 14' DRYWELL, 10 FT. DEEP WITH ONE (1) 33 L.F. LATERAL, WILL REMAIN FOR USE BY THE PROPOSED HOUSE. THE EXISTING DRYWELL AND TRENCH SHALL BE UPGRADED TO HEALTH DEPARTMENT STANDARDS PRIOR TO USE AND OCCUPANCY APPROVAL BY THE HEALTH DEPARTMENT. A SEPTIC SYSTEM INSTALLATION PERMIT MUST BE OBTAINED TO COMPLETE THIS WORK.
- IF THE EXISTING SEPTIC SYSTEM FAILS IN THE FUTURE, THE OWNER MUST USE THE 10,616 S.F. SEWERAGE DISPOSAL AREA, ESTABLISHED BY APPROVING AUTHORITY'S SIGNATURE ON THIS PLAN. THE NEW REPLACEMENT SEPTIC SYSTEM SHALL BE REQUIRED TO COMPLY WITH CODE REQUIREMENTS AT THE TIME THE REPLACEMENT IS INSTALLED.
- A PASSING POTABILITY TEST OF THE WELL WILL BE REQUIRED FOR THE HEALTH DEPARTMENT APPROVAL OF USE AND OCCUPANCY OF THE REBUILT RESIDENCE.
- ANY SEDIMENT AND EROSION CONTROL MEASURES USED ON THIS SITE SHALL COMPLY WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- THE EXISTING SEPTIC TANK, A MID-SEAM TANK, MUST PASS A WATER TIGHT TEST TO REMAIN IN SERVICE FOR THE REBUILT RESIDENCE. THE REQUIRED WATER TIGHT TEST MUST BE OBSERVED AND DOCUMENTED BY A HOWARD COUNTY HEALTH DEPARTMENT ENVIRONMENTAL SANITARIAN. SHOULD A REPLACEMENT TANK BE REQUIRED, THAT SEPTIC TANK SHALL MEET CODE REQUIREMENTS TO SERVE A 4-BEDROOM RESIDENCE.
- THE EXISTING WELLS, BOTH THE POTABLE WELL AND IRRIGATION WELL, WILL REMAIN TO SERVE THE PROPOSED THREE (3) BEDROOM HOUSE AND THE HORSE BARN AND OTHER EXISTING OUT BUILDINGS, RESPECTIVELY. THE IRRIGATION WELL SERVES FIVE (5) HYDRANTS. THE WELL CASING FOR THE IRRIGATION WELL IS LOCATED WITHIN AN UNDERGROUND CONCRETE VAULT WITH A PUMP. THE WELL CASING FOR THE IRRIGATION WELL MUST BE RAISED ABOVE GRADE IN ACCORDANCE WITH BUREAU OF ENVIRONMENTAL HEALTH DEPT REQUIREMENTS PRIOR TO OBTAINING THE USE AND OCCUPANCY PERMIT.
- EXISTING WELLS AND/OR SEPTIC SYSTEMS ON ADJACENT PROPERTIES WITHIN 100 FT. OF THE BOUNDARY OF THE SUBJECT PROPERTY ARE SHOWN BASED ON INFORMATION PROVIDED BY THE HOWARD COUNTY BUREAU OF ENVIRONMENTAL HEALTH. ADDITIONALLY, THE ADJACENT HOME OWNERS CLOSEST TO THE PROPOSED SEPTIC RESERVE AREA ON THE SUBJECT PROPERTY WERE CONTACTED TO DETERMINE THE LOCATIONS OF THEIR EXISTING WELL AND SEPTIC SYSTEMS.
- ANY CHANGES TO A PRIVATE SEWERAGE EASEMENT SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.

I CERTIFY THAT THE INFORMATION SHOWN HEREON IS BASED ON FIELD WORK PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, AND IS CORRECT, TO THE BEST OF KNOWLEDGE AND BELIEF.

*Chris Malagari*  
CHRIS MALAGARI FOR BENCHMARK ENGINEERING, INC.  
PLAN PREPARER

APPROVED FOR PRIVATE WATER AND SEWERAGE SYSTEM  
HOWARD COUNTY HEALTH DEPARTMENT

*B. Wilson for Maria Rosman* 8/8/2014  
HOWARD COUNTY HEALTH OFFICER DATE

**BENCHMARK**  
ENGINEERS & LAND SURVEYORS & PLANNERS  
**ENGINEERING, INC.**

8480 BALTIMORE NATIONAL PIKE & SUITE 315  
ELLICOTT CITY, MARYLAND 21043  
PHONE: 410-465-6105 & FAX: 410-465-6644  
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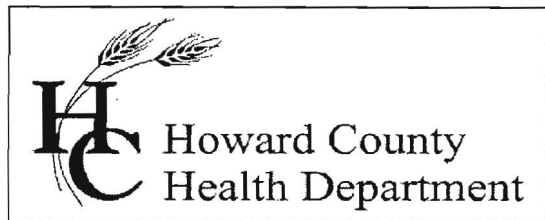
OWNER:	ZACK AND KERRY BRENDEL 15555 UNION CHAPEL ROAD WOODBINE, MARYLAND 21797 410-984-1430
PROJECT:	<b>BRENDEL PROPERTY</b> PARCEL 237 2175 WOODBINE RD WOODBINE, MD 21797
LOCATION:	TAX MAP: 13, GRID: 3 PARCEL 237 FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
TITLE:	PERCOLATION CERTIFICATION PLAT
DATE:	JUNE, 2014/REV. JULY, 14
PROJECT NO.:	2629
DESIGN: SDH	DRAFT: BD
CHECK: CAM	SCALE: 1" = 100'
SHEET	1 OF 1

**LEGEND**

- EXISTING CONTOURS
- LIMIT OF SUBMISSION (PROPERTY BOUNDARY)
- EXISTING TREELINE
- FIELD LOCATED EX. WELL
- PROPOSED REPLACEMENT WELL
- FAILED FIELD LOCATED TEST HOLE
- PASSING FIELD LOCATED TEST HOLE
- NRCS SOILS DELINEATION
- EXISTING SEPTIC AREA
- PROPOSED SEPTIC AREA
- PROPOSED DWELLING
- EXISTING DWELLING FOUNDATION (AFTER HOUSE FIRE)
- FIELD LOCATED FENCE
- GIS LOCATED FENCE

**SOILS CHART - SOIL SURVEY HOWARD COUNTY, MARYLAND PAGE**

SYMBOL	HYDRIC	HYDROLOGIC GROUP	ALTERNATE GROUP	NAME
GgA		B		GLENELG LOAM, 0 TO 3 PERCENT SLOPES
GgB		B		GLENELG LOAM, 3 TO 8 PERCENT SLOPES
GgC		B		GLENELG LOAM, 8 TO 15 PERCENT SLOPES
GnB*	YES	C	D	GLENVILLE-BAILE SILT LOAM, 0 TO 8 PERCENT SLOPES
McD		B		MANOR LOAM, 15 TO 25 PERCENT SLOPES, VERY ROCKY



**Bureau of Environmental Health**

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Facebook: [www.facebook.com/hocohealth](https://www.facebook.com/hocohealth)  
Twitter: HowardCoHealthDep

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

July 23, 2014

To: Steven Heiss, Benchmark Engineering, Inc.  
[sheiss@bei-civilengineering.com](mailto:sheiss@bei-civilengineering.com)

From: Robert Bricker, REHS/R.S., L.E.H.S.  
Environmental Sanitarian II *reb*  
Well and Septic Program

RE: 2175 Woodbine Road (Tax Map 13, Parcel 237), Percolation Certification Plan,  
comments

The following deletions, amendments or corrections are required for the submitted Percolation Certification Plan (7/1/2014):

1. Illustrate the trench which extends from the dry well.
2. Illustrate and label the 'Profile Observation' that was dug near the dry well and which intercepted the existing trench.
3. Correct the label for the existing septic tank as 'To Be Abandoned'.
4. Propose a location for a replacement septic tank.
5. Edit Note 6 (and the label for the dry well in Plan View):
  - a. Correct the dimension of the dry well as it is 12' x 14'
  - b. Depth of the dry well as 10 feet
  - c. Add phrase to the end of the note stating **PRIOR TO BUILDING PERMIT APPROVAL.**
6. Edit Note 7:
  - a. Delete the word **CURRENT**
  - b. Delete everything after **HEALTH DEPARTMENT STANDARDS.**
7. Delete Note 8.
8. Edit Note 10 as the septic tank is to be replaced. In essence,  
**THE EXISTING SEPTIC TANK SHALL BE REPLACED PRIOR TO BUILDING PERMIT APPROVAL WITH A TANK THAT MEETS THE REQUIREMENTS OF HOWARD COUNTY CODE.**
9. Edit Note 11 by adding the phrase **PRIOR TO BUILDING PERMIT APPROVAL.**