

# APPLICATION

## FOR PERCOLATION TESTING AND SITE EVALUATION

TEST DATE(S) \_\_\_\_\_ TEST TIME \_\_\_\_\_

APP 534418  
DATE 12/13/10

AGENCY REVIEW: \_\_\_\_\_

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 3 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) Bernadette Braun

DAYTIME PHONE 410-489-4607 CELL 443-418-8897 FAX \_\_\_\_\_

MAILING ADDRESS 421 Woodbine Rd. Woodbine MD 21797  
STREET CITY/TOWN STATE ZIP

APPLICANT ~~Ronnie Neaps / J M Contracting LLC~~ Ruffall

DAYTIME PHONE ~~443-277-7522~~ CELL SAME FAX ~~410-552-2815~~

MAILING ADDRESS ~~425 6 Burch Rd. Sykesville MD 21784~~  
STREET CITY/TOWN STATE ZIP

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

PROPERTY LOCATION  
SUBDIVISION/PROPERTY NAME 421 Woodbine Rd LOT NO. \_\_\_\_\_

PROPERTY ADDRESS Woodbine MD 21797  
STREET TOWN/POST OFFICE

TAX MAP PAGE(S) \_\_\_\_\_ GRID \_\_\_\_\_ PARCEL(S) \_\_\_\_\_ PROPOSED LOT SIZE \_\_\_\_\_

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]  
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



A 1.7-6.7'

AP  
A

many coarse roots  
2' med in roots

Ch brn loam  
2fsbk

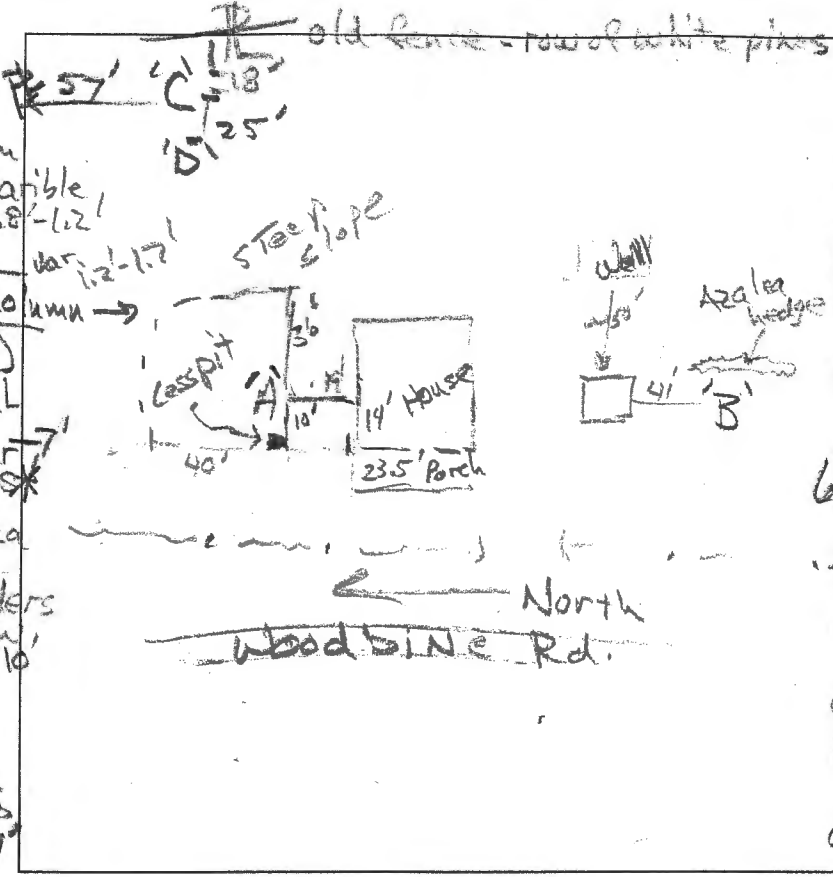
dk brn loam - old 'A'

See Right column →

6" Fe-Mn layer (Co<sub>2</sub>)  
pale yellow chl

7' 1/2 flaggy layer  
water seeps  
brn chsl  
common mica  
moist

9' few boulders  
water low



1.7' yel bunchl  
3 yel bunchl  
2fsbk

2.5' yel bunchl  
3 yel bunchl  
1msbk

4.2' brn vchl  
common mica

6.7'

C

dk brn loam  
few fine roots

0.7'

brn loam  
many roots

1.6'

yel-brn  
chcl

2.5'

brn vchl loam  
50% mica

5.5'

brn vchl loam  
few boulders

40% rock

yel-red  
flsl

20-25% rock

R

DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2ND INCH	P/F/H	
5/11/11	A	3' / 7'	10:17	10:24	10:36	12	P	
5/11/11	B	1.9' / 11'	11:43	11:48	12:08	20	P	
5/11/11	C	5.5' / 11'	1:27	1:29	1:33	4	P	
5/11/11	D	8.5'	Visual, no restrictions to 8.5', very flaggy below 8.5'; not bedded					P

B

dk brn loam  
2fsbk  
many fine & v. fine roots

0.5'

dk brn loam  
2fsbk  
many fine roots

0.8'

yel brn chl  
1msbk  
common coarse & medium roots

2.5' yel brn vchl  
common mica

4' bouldery layer

4.8'

yel-brn fl loam

5.5'

yel brn vchl  
45% rock

6' yel brn vchl  
60% rock  
increasing

D

dk brn loam

brn loam to brn chl

4.5'

yel-red  
ch loam

c. mica

8'

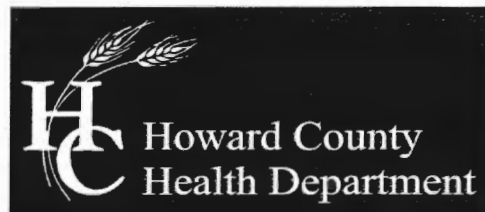
yel-red  
140%

8.5' yel-red  
140%  
not bedded

REMARKS C, 2.5 to 4.5' - 0.89% ss; D' is observation downslope - check for flow restriction

SANITARIAN RB/TW BACKHOE Ronnie Heaps OTHERS Woody

TEST HOLES USED IN SDA \_\_\_\_\_ AVG. PERC TIME \_\_\_\_\_ SQ. FT/BR \_\_\_\_\_  
TRENCH WIDTH 3' INLET DEPTH 1' MAX. BOT DEPTH A, 3' B, 2.5' EFFECTIVE SW A, 2' B, 1.5'



Bureau of Environmental Health  
7178 Columbia Gateway Drive, Columbia, MD 21046-2147  
(410) 313-2640 Fax (410) 313-2648  
TDD (410) 313-2323 Toll Free 1-866-313-6300  
website: www.hchealth.org

---

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

May 20, 2011

To: Bernadette Braun, owner  
421 Woodbine Road, Woodbine, MD 21797

RE: Perc Test Report, 421 Woodbine Road; A534418

Percolation testing was conducted on the referenced property on May 11, 2011. The purpose for conducting these percolation tests was to define area(s) suitable for a drainfield to replace the failing septic system now serving the residence. 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. Field data collected are shown on the Percolation Test Worksheet enclosed with this letter. Recommended Inlet and Trench Bottom depths, and Usable Sidewall all are based on observed soil properties and characteristics at respective test locations as well as the particular soils materials tested.

Three locations were tested, 'A', 'B', and 'C'. In addition, location 'D' was observed and described for assurance that a layer restricting vertical flow was not present on the slope below location 'C'. Location 'A' represents the area immediately north of the residence; 'B' represents the area south of the garage; 'C' and 'D' represent the area at the northeast, above a section of very steep slopes.

The soil materials tested and observed at these locations have loamy textures with rock fragments (re: channers) ranging from 20 percent to 30 percent of the soil volume. Satisfactory soils conditions for wastewater treatment and disposal occurred at all four locations tested or observed. The percolation rates varied by location.

Septic system drainfields having a 4-foot soil buffer (to water table) may be designed at locations 'A' and 'C', while at location 'B' the soil buffer can be no more than 3.5 feet. The Health Department recommends that the owner choose between locations 'A' and 'C' for the site of the replacement drainfield. Effluent will have to be pumped to either site from the treatment tank which will probably be located slightly downhill of the existing 'cesspit'. For either location, the drainfield will be designed by the Health Department.

At 'A' a low-pressure-dosed (LPD) distribution system will be required. A 10-foot setback to the house foundation will be observed and the drainfield will be 30 feet wide from the base of the very steep slope to a 5-foot setback from the existing 'cesspit'.

The distribution pipe Inlet will be at 1 foot, and the Trench Bottoms can be no deeper than 3 feet.

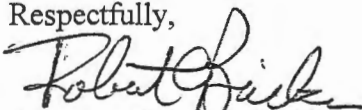
At location 'C', the effluent will be pumped to a distribution box and drain to 2 50-foot long trenches. The Inlet on these trenches should be no deeper than 2.5 feet and the Trench Bottom can be no deeper than 7 feet.

Variances from MDE will be required for either 'A' or 'C'. The variances required for 'A' are for reduction of the regulated setbacks to stream and to slopes greater than 25 percent. At 'C', a variance is needed for reduction of setback distance to slopes greater than 25 percent. The Health Department will express recommendation to MDE to grant the variance(s) respective of the location you select.

For the Health Department to complete design of a system at location 'A' (near the residence), precise measurements of the available area are needed. These data will be obtained by Health Department personnel when the following information is provided by a contractor: a) the location of treatment tank (and if necessary, the pump tank) in relation to the house foundation; b) the route of the sewer line from the house to the treatment tank, with distances referenced to the house foundation; c) the elevation of the pump inside the treatment tank or pump tank. The required information should be provided to the Health Department in the format of a plan, drawn by the contractor whom you select to install the treatment tank.

The Health Department will contact you should additional field review of well or septic system conditions be required at any time during this process. If you have any questions regarding this evaluation and requirements, please contact myself at the above address or by calling (410) 313-2691, or Jeff Williams (410)313-4261.

Respectfully,



Robert C. Bricker, CPSS, REHS/RS  
Environmental Sanitarian Supervisor  
Well and Septic Program

Copy:

File



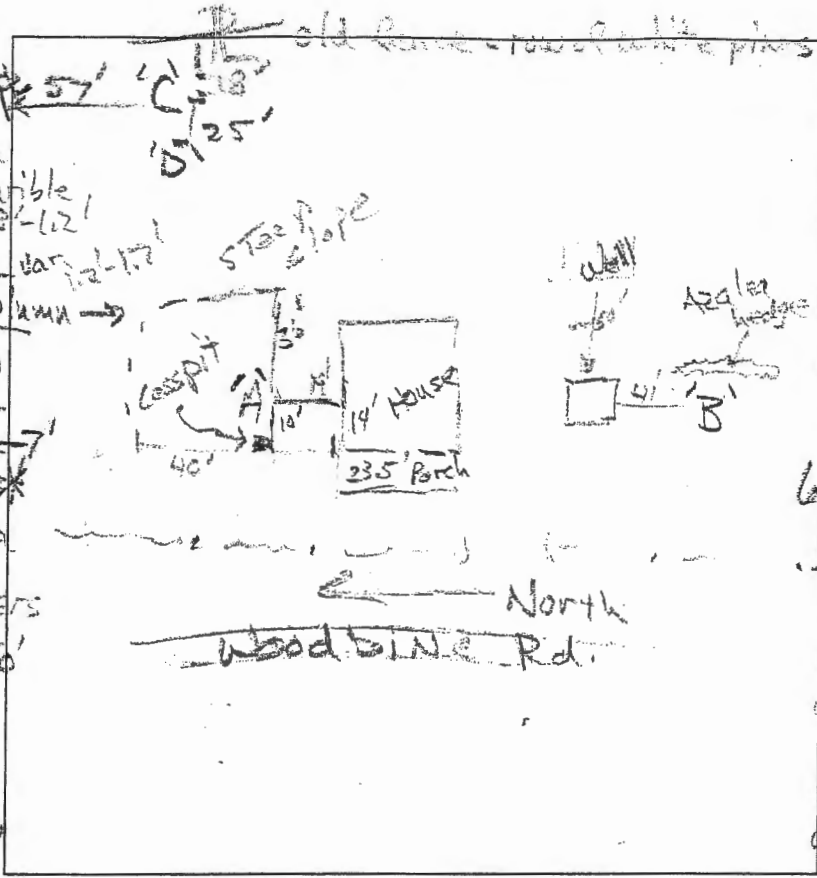
A 1.7-6.7'

A/P  
A

many coarse  
to med in roots

Ch brn loam  
2.5' sbk  
dk brn loam - old A

Variable  
0.8' - 1.2'  
Variable - 1.7'



1.7' yel brn chl  
3 yel brn chl  
2.5' sbk

2.5' yel brn chl  
3 yel brn chl  
1 msbk

4.2' brn vel chl  
common mica

B

dk brn loam  
2.5' sbk  
many fine roots

0.5' dk brn loam  
2.5' sbk  
many fine roots

0.8' yel brn chl  
1 msbk  
common coarse  
3 medium roots

2.5' yel brn vel chl  
common mica

4' boulders  
layer

4.3' yel-brn fl loam

5.5' yel-brn vbyl  
45% rock

6' yel-brn vbyl  
60% rock  
increasing

6.7' Fe-Mn layer (Coat)  
pale yellow chl  
7' flaggy layer  
upstar seeps  
brn chl  
common mica  
moist  
9' few boulders  
10' water below

C

dk brn loam  
few fine roots  
0.7'

brn loam  
many roots  
1.6'

yel-brn chl  
2.5'

brn vel loam  
50% mica  
5.5'

brn vel loam  
few boulders  
7'

yel-red fl chl  
20-25% rock  
R  
11'

D

dk brn loam  
brn loam  
to brn chl  
4.5'

yel-red ch loam  
c. mica  
8'

yel-red vst  
40%  
8.5'

yel-red vst  
not bedded  
>50%

DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2ND INCH	P/F/H
5/11/11	A	3' 7"	10:17	10:27	10:36	12	P
5/11/11	B	1.9'	11:43	11:48	12:08	20	P
5/11/11	C	5.5' 11"	1:27	1:29	1:33	4	P
5/11/11	D	8.5'	Visual, no restrictions very flaggy below 8.5'; not bedded				P

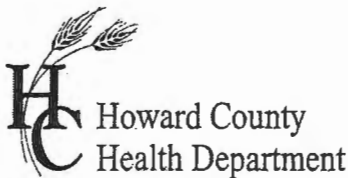
REMARKS C, 2.5 to 4.5' = 0.89 ft sec; D is observation downslope - check for flow restriction

SANITARIAN RR/TW BACKHOE Louis Hays OTHERS Woody

TEST HOLES USED IN SDA \_\_\_\_\_ AVG. PERC TIME \_\_\_\_\_ SQ. FT/BR A, 187.5'

TRENCH WIDTH 3' INLET DEPTH 1' MAX. BOT DEPTH A, 3' EFFECTIVE SW B, 2.5'

\_\_\_\_\_ B, 2.5' \_\_\_\_\_ C, 1.5'



# APPLICATION

## FOR PERCOLATION TESTING AND SITE EVALUATION

TEST DATE(S) \_\_\_\_\_ TEST TIME \_\_\_\_\_

AP 534418  
DATE 12/13/10

AGENCY REVIEW: \_\_\_\_\_

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 3 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) Bernadette Braun

DAYTIME PHONE 410-489-4607 CELL 443-418-8897 FAX \_\_\_\_\_

MAILING ADDRESS 421 Woodbine Rd. Woodbine MD 21797  
STREET CITY/TOWN STATE ZIP

APPLICANT ~~Promie Neaps / J.A. Contracting LLC~~ [Signature]

DAYTIME PHONE ~~443-277-7521~~ CELL SAME FAX ~~410-552-5815~~

MAILING ADDRESS ~~425 6 Burch Rd.~~ Sykesville MD 21784  
STREET CITY/TOWN STATE ZIP

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

PROPERTY LOCATION  
SUBDIVISION/PROPERTY NAME 421 Woodbine Rd LOT NO. \_\_\_\_\_

PROPERTY ADDRESS \_\_\_\_\_ Woodbine MD 21797  
STREET TOWN/POST OFFICE

TAX MAP PAGE(S) \_\_\_\_\_ GRID \_\_\_\_\_ PARCEL(S) \_\_\_\_\_ PROPOSED LOT SIZE \_\_\_\_\_

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]  
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  
7178 Columbia Gateway Drive, Columbia, MD 21046-2147  
(410) 313-2640 Fax (410) 313-2648  
TDD (410) 313-2323 Toll Free 1-866-313-6300  
website: www.hchealth.org

---

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

May 20, 2011

To: Bernadette Braun, owner  
421 Woodbine Road, Woodbine, MD 21797

RE: **Perc Test Report, 421 Woodbine Road; A534418**

Percolation testing was conducted on the referenced property on May 11, 2011. The purpose for conducting these percolation tests was to define area(s) suitable for a drainfield to replace the failing septic system now serving the residence. 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. Field data collected are shown on the Percolation Test Worksheet enclosed with this letter. Recommended Inlet and Trench Bottom depths, and Usable Sidewall all are based on observed soil properties and characteristics at respective test locations as well as the particular soils materials tested.

Three locations were tested, 'A', 'B', and 'C'. In addition, location 'D' was observed and described for assurance that a layer restricting vertical flow was not present on the slope below location 'C'. Location 'A' represents the area immediately north of the residence; 'B' represents the area south of the garage; 'C' and 'D' represent the area at the northeast, above a section of very steep slopes.

The soil materials tested and observed at these locations have loamy textures with rock fragments (re: channers) ranging from 20 percent to 30 percent of the soil volume. Satisfactory soils conditions for wastewater treatment and disposal occurred at all four locations tested or observed. The percolation rates varied by location.

Septic system drainfields having a 4-foot soil buffer (to water table) may be designed at locations 'A' and 'C', while at location 'B' the soil buffer can be no more than 3.5 feet. The Health Department recommends that the owner choose between locations 'A' and 'C' for the site of the replacement drainfield. Effluent will have to be pumped to either site from the treatment tank which will probably be located slightly downhill of the existing 'cesspit'. For either location, the drainfield will be designed by the Health Department.

At 'A' a low-pressure-dosed (LPD) distribution system will be required. A 10-foot setback to the house foundation will be observed and the drainfield will be 30 feet wide from the base of the very steep slope to a 5-foot setback from the existing 'cesspit'.



The distribution pipe Inlet will be at 1 foot, and the Trench Bottoms can be no deeper than 3 feet.

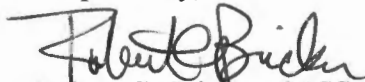
At location 'C', the effluent will be pumped to a distribution box and drain to 2 50-foot long trenches. The Inlet on these trenches should be no deeper than 2.5 feet and the Trench Bottom can be no deeper than 7 feet.

Variations from MDE will be required for either 'A' or 'C'. The variations required for 'A' are for reduction of the regulated setbacks to stream and to slopes greater than 25 percent. At 'C', a variance is needed for reduction of setback distance to slopes greater than 25 percent. The Health Department will express recommendation to MDE to grant the variance(s) respective of the location you select.

For the Health Department to complete design of a system at location 'A' (near the residence), precise measurements of the available area are needed. These data will be obtained by Health Department personnel when the following information is provided by a contractor: a) the location of treatment tank (and if necessary, the pump tank) in relation to the house foundation; b) the route of the sewer line from the house to the treatment tank, with distances referenced to the house foundation; c) the elevation of the pump inside the treatment tank or pump tank. The required information should be provided to the Health Department in the format of a plan, drawn by the contractor whom you select to install the treatment tank.

The Health Department will contact you should additional field review of well or septic system conditions be required at any time during this process. If you have any questions regarding this evaluation and requirements, please contact myself at the above address or by calling (410) 313-2691, or Jeff Williams (410)313-4261.

Respectfully,



Robert C. Bricker, CPSS, REHS/RS  
Environmental Sanitarian Supervisor  
Well and Septic Program

Copy: File

John Rouser, Maryland Housing ROB