

516084

COUNTY #

SOIL PROFILE

30E X 30-C

Strong org brn
gravelly
SCL Lm
micaceous
3 1/2' 4"
micaceous
gravelly
Lm
Rx ~ 10%

beige
lt tan
Sand
Rx ~ 5%
60-c saprolite
(@ 10' 10-15%)

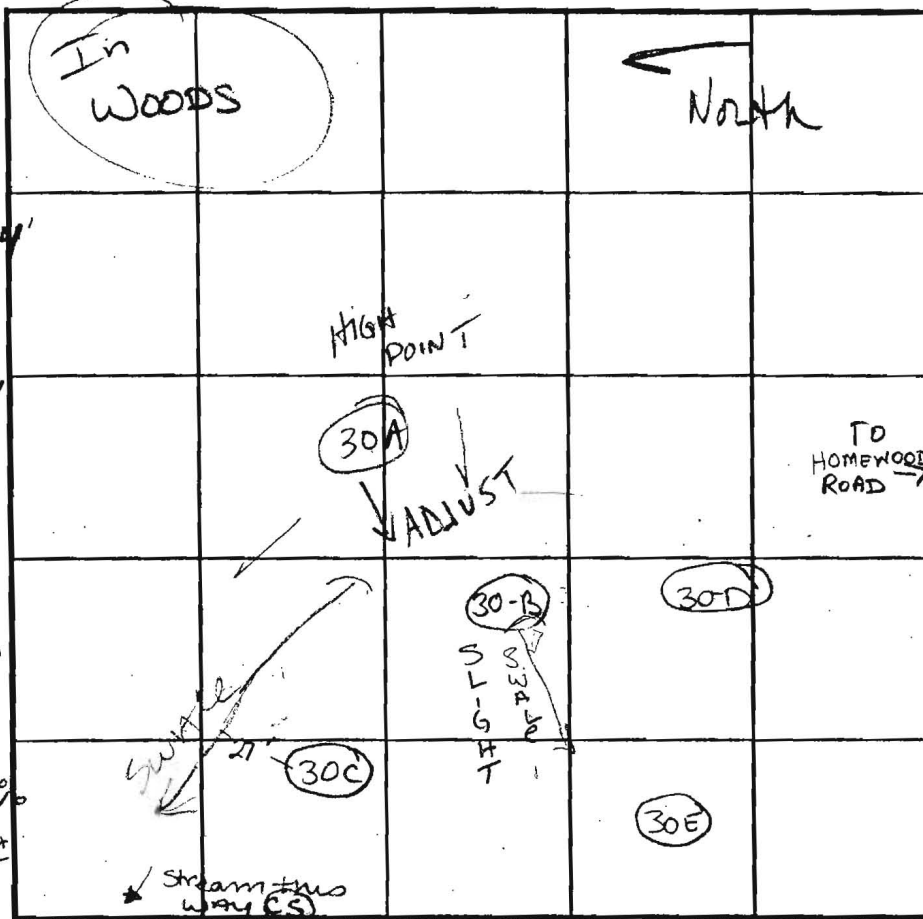
30B

str. org brn
y brn
gravelly
SCL Lm
loose struct
3 1/2' 1"
brn, beige
micaceous
Lm
Rx

Trace
TIGHTLY
PACKED
MASSIVE
STRUCTURE
8'
SAND
micaceous
Saprolite Rx
5-10%

30D

Dense
SCL Lm
gravelly
strong brn
brn
POCKETS OF CLAY
AVG
5 1/2'
beige
lt tan
SAND
Rx
5-10%



SOIL PROFILE

30-A

DK brn
gravelly
SCL Lm
15-20% gravel
pocket ~ 35%

4 1/2'
Dense
CLAY
pockets
N
E
wall

8'
Strong brn
micaceous
Sand Lm
Rock 5-10%

11-12'
14'
lt brn
tan
SAND
Rx 5-10%
pebbles

30-C

Saprolite %
10-15%

INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE.

DATE	TEST NO.	DEPTH	PRE-WET		TEST - 1' DROP		TIME	
			START	STOP	START	STOP		
4-23-02	30E	4' S	12:21:45	12:25:16	12:25:16	12:30:41	5+ min	OK
		7' S	12:19:50	12:20:38		12:21:45	10	
	Repour	7' S 14' 8" V	12:28:50	12:31:08	12:31:08	12:33:25	2+ min	
	30-D	4' S 14'	12:39:57	12:40:21	12:40:57	12:40:57	15	OK
		6' S 15 1/2" V	12:42:14	12:44:52	12:44:52	12:49:43	5 min	
	30-B	4' 10" S 6' 6" S	SLOW? 12:57:51	12:59:06	12:59:06	1:01:02	2 min	OK
		14' V						
	30 A	4' 8" 6' 8"	1:14:28 1:11	1:15:28 1:13:50	1:15:28 1:13:50	1:17:10 1:16:30	2+ 3+	OK
		14' V						
	30-C	4' S 14' V	1:45:30	1:49:44	1:49:44	1:55:04	6 1/2+	OK
		6' S	1:50:34	1:51:41		1:53:27	2+	

REMARKS Holes per plan

TYPE OF SOIL

TESTED BY KGL/BB ALSO PRESENT Clark Sperry Roberto

TRENCH DESIGN DATA: AVERAGE PERCOLATION TIME TRENCH WIDTH

INLET DEPTH MAXIMUM BOTTOM DEPTH SQ. FT./BEDROOM

strange rock

516084

COUNTY #

3.5' - Little Movement in 10 minutes - Slow
 7.0' - 4 minutes
 5.0' - 1/2" in 20 minutes - Slow

OK

SOIL PROFILE
 31-C

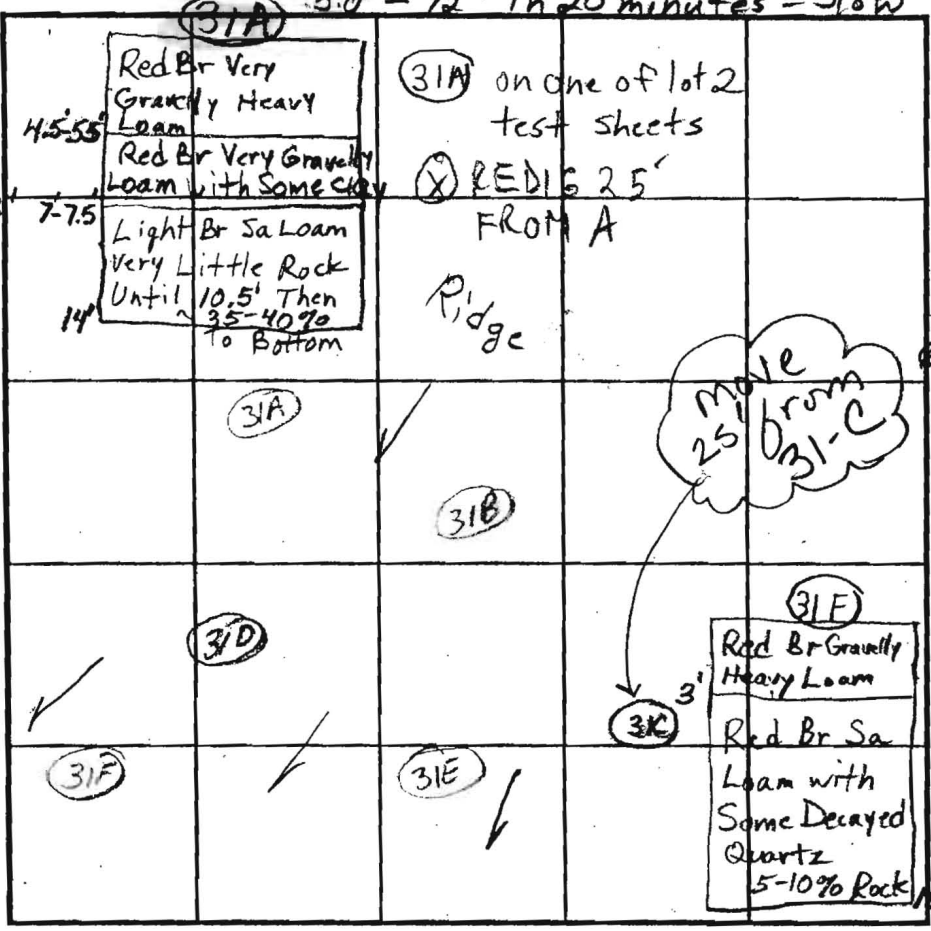
0' Tan Cl Loam
 2'-3' Or Red Loam Very Micaceous ~5% Rock
 6.5' Or Red Sa Loam ~5% Rock
 16'

31E

Yellow Br Si Cl Loam
 3' Or Br Sa Loam - Some Clay ~5% Rock
 5' Light Br Sa Loam ~5% Rock
 15.5'

31D

Red Br Heavy Loam
 3.5'-4' org brn brn silm R_x 5-10% pebbles
 1 1/2' tan org brn sand R_x 5-10%



SOIL PROFILE
 31B

0' Red Br Gravelly Heavy Loam
 3.5' Or Red Br Sa Loam ~5% Rock
 6.75' Light Br Sa Loam Pockets of ~30-40% Rock ~25% Rock Average
 14.5'

INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE.

Homewood Road

DATE	TEST NO.	DEPTH	PRE-WET		TEST - 1" DROP		TIME	
			START	STOP	START	STOP		
4-23-02	31-C	4' / 16' V	10:32:30	10:38	10:38	10:57	19 min	12"x12" Retest
	RETEST	7'	10:30	10:30:20	10:30:20	10:30:50	30 sec	↑
	31E	6' 10" / 15.5' V	10:54:07	10:59:03	10:59	11:06	7 min	O.K.
		3 1/2'	10:59:19	11:05	11:05	11:18	13	
	31D	4' / 15' V	11:24:30	~1/2" in 20 minutes			Slow	OK
		7'	11:23:25	11:24:05	11:24:05	11:25:20	1 1/4	OK
		Repair	11:29:20	11:30:55	11:30:55	11:33:10	3 3/4	
	31B	4' / 14.5'	11:40	11:45	11:45	11:48:30	3 1/2	OK
		8'	11:44:15	11:45:30	11:45:30	12:47:15	1 3/4	
	31F	4' / 15' V	12:02	12:03	12:03	12:04	1	OK

REMARKS Repair 4' 12:09:20 12:10:45 12:10:45 12:12:45 2

TYPE OF SOIL 7' 12:11:10 12:11:55 12:11:55 12:13 ~1

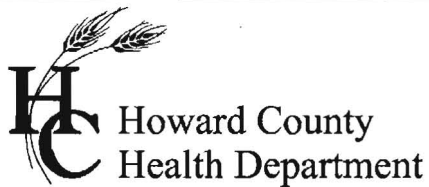
TESTED BY BB/KN Repair 7' 12:14:15 12:15:25 12:15:25 ALSO PRESENT 12:17:15 1 min 50 sec

TRENCH DESIGN DATA: AVERAGE PERCOLATION TIME TRENCH WIDTH

INLET DEPTH MAXIMUM BOTTOM DEPTH SQ. FT/BEDROOM

Copy of signed
perc plan by
H.O. 7-10-03





7178 Columbia 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

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

MEMORANDUM

TO: John Carney,
Benchmark, Engineering, Inc.

FROM: Dana Bernard
Well and Septic Program
Development Coordination Section

RE: Project Number:1950
Title: River wood Lot # 12
Percolation Certification Plan

DATE: April 6 , 2010

The following comments apply to the plan prepared Benchmark, Engineering, Inc. Applicant is advised to revise and resubmit prior to signature.

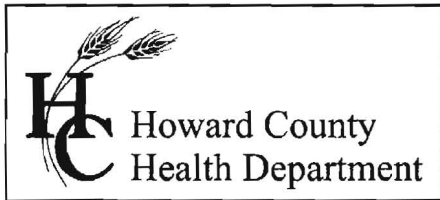
- Micro bioretention facility outfall must be 25 feet from SDA.

If you have any questions or correspondence, I can be reached at the above address or by telephone at (410) 313-2775.

Sincerely,

Dana L. Bernard

Dana L. Bernard, Sanitarian
Bureau of Environmental Health, Well and Septic Program
Phone (410) 313-2775
Fax (410) 313-2648
E-mail: DBernard@howardcountymd.gov



7178 Columbia 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

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

MEMORANDUM

TO: John Carney,
Benchmark, Engineering, Inc.

FROM: Dana Bernard
Well and Septic Program
Development Coordination Section

RE: Project Number:1950
Title: River wood Lot # 12
Percolation Certification Plan

DATE: April 1, 2010

The following comments apply to the plan prepared Benchmark, Engineering, Inc. Applicant is advised to revise and resubmit prior to signature.

- Micro bioretention facility outfall must be 25 feet from SDA.

If you have any questions or correspondence, I can be reached at the above address or by telephone at (410) 313-2775.

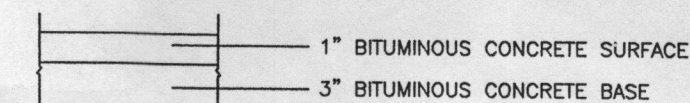
Sincerely,

Dana L. Bernard, Sanitarian
Bureau of Environmental Health, Well and Septic Program
Phone (410) 313-2775
Fax (410) 313-2648
E-mail: DBernard@howardcountymd.gov

GRID NORTH

NOTES:

1. THE LOT SHOWN HEREON WAS RECORDED ON THE PLAT FOR RIVERWOOD, PHASE 1, PLAT No. 18039. REFER TO THE PLAT FOR LOT DIMENSIONS, LOT AREAS AND ALL EASEMENTS.
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 IS 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.
3. SEDIMENT AND EROSION CONTROLS WERE APPROVED BY HOWARD SOIL CONSERVATION DISTRICT UNDER GP-05-31 AND MODIFIED FOR THIS SPECIFIC HOUSE.
4. TOPOGRAPHY SHOWN HEREON IS TAKEN FROM THE APPROVED ROAD CONSTRUCTION PLANS AND HAS BEEN FIELD VERIFIED BY J.A. RICE, INC., ON OR ABOUT SEPTEMBER 2002.
5. EXACT LENGTH OF SEPTIC TRENCHES ARE BE DETERMINED BY THE HEALTH DEPARTMENT AT THE TIME OF TRENCH LAYOUT AND INSPECTION.
6. SPOIL FROM THE TRENCHING OF THE SEPTIC AREA IS TO BE PLACED ON THE UPHILL SIDE OF THE EXCAVATION FOR EACH INDIVIDUAL LOT.
7. ALL SEDIMENT AND EROSION CONTROL FEATURES USED ON THIS SITE SHALL COMPLY WITH 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
8. ALL DRAINAGE AND STORMWATER MANAGEMENT FEATURES USED ON THIS SITE MUST COMPLY WITH THE APPROVED ROAD CONSTRUCTION PLANS.
9. SEPTIC TANK FOR THIS LOT TO BE 2,000 GALLONS.
10. THE EXISTING WELL SHOWN ON THIS PLAN, HO-94-4033, HAS BEEN FIELD LOCATED BY BENCHMARK ENGINEERING, INC. AND IS ACCURATELY SHOWN.
11. THERE ARE NO EXISTING WELLS OR SEPTIC SYSTEMS WITHIN 100' OF THIS PROJECT'S BOUNDARY EXCEPT AS NOTED.
12. ANY CHANGES TO A PRIVATE SEWERAGE EASEMENT SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
13. STORMWATER MANAGEMENT WATER QUALITY FOR THIS LOT IS PROVIDED IN ACCORDANCE WITH THE REPORT DATED MARCH, 2010 AND AS SHOWN ON THE SWM REPORT ASSOCIATED WITH THE PERMIT PLAN.
14. THE PURPOSE FOR THIS PERCOLATION CERTIFICATION PLAN IS TO RELOCATE THE WELL ENVELOPE IN ORDER TO FIT THIS PARTICULAR HOUSE AND GRADING.



FULL DEPTH BITUMINOUS CONCRETE

PAVING SECTION
NOT TO SCALE

LEGEND

- EXISTING CONTOURS ESTABLISHED UNDER F-04-082
- FIELD SURVEYED WELL LOCATION
- PASSED PERCOLATION TEST PER TEST NOTES
- EXISTING APPROVED SEPTIC RESERVE AREA
- PROPOSED DRIVEWAY

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.

John M. Carney EDD
PLAN PREPARER
JOHN M. CARNEY FOR BENCHMARK ENGINEERING, INC.

APPROVED:
FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT

W. Jeffrey Peter Brilewicz 5/7/2010
COUNTY HEALTH OFFICER 1700 DATE

BENCHMARK

ENGINEERS • LAND SURVEYORS • PLANNERS

ENGINEERING, INC.

8480 BALTIMORE NATIONAL PIKE • SUITE 418 • ELLICOTT CITY, MARYLAND 21043
(P) 410-485-6105 (F) 410-485-6644

60 THOMAS JOHNSON DRIVE • FREDERICK, MARYLAND 21702
(P) 301-371-3505 (F) 301-371-3508

WWW.BEI-CIVILENGINEERING.COM

OWNER/BUILDER:

CAMBERLEY HOMES, INC.
6905 ROCKLEDGE DRIVE
SUITE 800
BETHESDA, MD 20817
PHONE: 301-803-4800
FAX: 301-803-4929

PROJECT:

**RIVERWOOD
LOT 12**

LOCATION:

11058 HUNTERS VIEW ROAD
ELLICOTT CITY, MD 21042
TAX MAP No. 29 - BLOCK Nos. 3, 4, 9 & 10 - PARCEL No. 20
3rd ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

TITLE:

REVISED PERCOLATION CERTIFICATION PLAN

HOUSE TYPE:

GARRET - 90

DATE:

MARCH 17, 2010

PROJECT NO.

1950

DESIGN:

JMC

DRAFT:

HP

SCALE:

1" = 30'

DRAWING

1 OF 1