



Howard County
Health Department

APPLICATION

FOR PERCOLATION TESTING AND SITE EVALUATION

TEST DATE(S) _____ TEST TIME _____

AP 530296

AGENCY REVIEW: _____

DATE 2/5/07

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 ONE:

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

CHECK AS NEEDED:

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

IS THE PROPERTY WITHIN 2500' OF ANY RESERVOIR?

- ☐ YES
- ☒ NO

THE TYPE OF STRUCTURE IS:

- ☐ RESIDENTIAL WITH _____ 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) Lois and Leroy Peters

DAYTIME PHONE (443)-266-7372 CELL _____ FAX _____

MAILING ADDRESS 13009 Twelve Trees Ct. Clarksville MD 21029-0241
STREET CITY/TOWN STATE ZIP

APPLICANT Same as Owners

DAYTIME PHONE _____ CELL _____ FAX _____

MAILING ADDRESS _____
STREET CITY/TOWN STATE ZIP

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

PROPERTY LOCATION

SUBDIVISION/PROPERTY NAME _____ LOT NO. _____

PROPERTY ADDRESS 6636 Cedar Lane Columbia MD 21044
STREET TOWN/POST OFFICE

TAX MAP PAGE(S) 35 GRID 16 PARCEL(S) 154 PROPOSED LOT SIZE 2.00 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.

Lois Peters

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

Not to Scale

P-7

\downarrow
 $\sim 3.5'$

brn scl
1msbk
15% cher +

brn fls
↓
yellow brn
fls many
mica Saprolite

↓
born ls

P-1

fill &
garbage,
debris

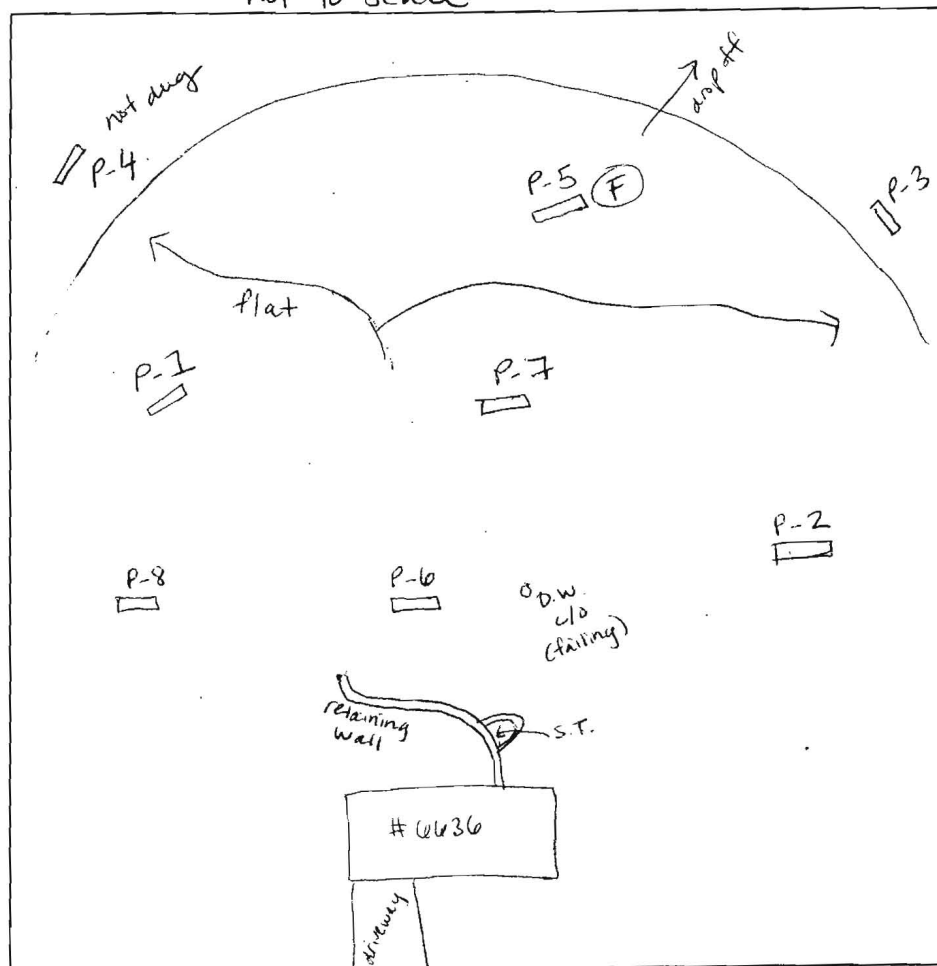
$\sim 5'$

org brn
sl 25%
channers

yellowish brn
fsl saproinite
many mica
brn fsl

p-5

fill &
debris
(~40%
asphalt)
to
~9.5'
stopped
digging



P-3

fill &
trash
↓
yellow
brn sl
(still few
traces of fl)

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many nice
brn fsl
saponite
(similar to
P1 + P7)

$\rho - \gamma$

Fill
to 2.5' -
3'

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Scl

beige/bm
fse 15%
cher+

sl
saponite
decomposing
quartz

P-6 + P-2

fill
to
~2'

many
mica /
brn sl

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micaceous
beige fs

20% quartz
channels

DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2ND INCH	P/F/H
2-20-09	P-7	13'	visual				OK
	P-1	6' 1/2.5'	11:07	too slow (reshelfed)			
	P-1	7.5' / 14'	11:53	11:57	12:04	7	P
	P-5	FILL to	9.5'				F
	P-3	6' / 13'	11:10	11:18	11:22	4	P
	P-8	4.8' / 13'	10:43	10:52	11:09	17	P
	P-6	5.5' / 13'	10:48	10:49	10:51 ²²	2	P
	P-2	6' / 13'	10:52	10:56	11:00	4	P
	P-4	DATA NOT DUG		DATA			DATA

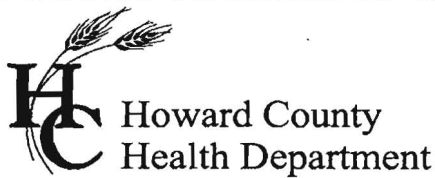
REMARKS original grade is ~ 7-9' starting @ contour 316 (approx.)

SANITARIAN HS/KW BACKHOE Hatfields OTHERS _____

TEST HOLES USED IN SDA 60 AVG. PERC TIME 6.8 SQ. FT/BR

TRENCH WIDTH 2' INLET DEPTH 2' MAX. BOT DEPTH 9' EFFECTIVE S/W 2'-3'

* poured H_2O @ bottom of P-6 < 5 min. \rightarrow to account for cell 1, see next cell
 " " " P-1 < 10 min.



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

February 23rd, 2009

Lois & Leroy Peters
13009 Twelve Trees Ct.
Clarksville, MD 21029

Re: PERCOLATION TEST RESULTS
Receipt # - A530296
6636 Cedar Lane (Aastoria II Assisted Living)

Dear Applicant,

Percolation testing was conducted at the above referenced property on February 20th, 2009 in response to a Notice of Violation issued by the Health Dept. on 1/22/09. Results indicate satisfactory and unsatisfactory soil conditions for onsite wastewater disposal. Hole P-5 failed due to fill observed at approx. 9.5 feet, original grade could not clearly be indentified but is estimated at 10-11 feet making this location unsuitable for septic reserve area.. Hole P-4 was not dug due to poor location and deep fill anticipated at this location. Uniform soils consisting of deep, sandy loams were identified in all other test holes below the layers of fill. Field data collected is shown on the Percolation Test Worksheets enclosed with this letter. Acceptable ranges for recommended inlet and trench bottom depth, and usable sidewall have been provided, and may be confirmed at the time of installation.

The existing septic system is currently at the point of failure. A complete septic upgrade will be required to address this issue and to accommodate the increase in capacity at your facility. In the interim the septic system shall be pumped as often as necessary to prevent further overflows. Further review of this project is contingent upon submission of a Percolation Certification Plan by a registered surveyor/engineer demonstrating adequate septic area for the number of beds proposed at your facility. The septic upgrade shall be completed following approval of the Percolation Certification Plan.

If you have any questions regarding this evaluation or requirements for the Percolation Certification Plan, please contact me at (410) 313-6287.

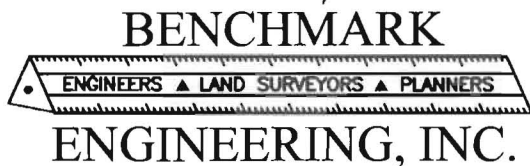
Sincerely,

Heidi Scott
Well & Septic Program

Cc:

File

John Carney (sent via fax; Benchmark Engineering)



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

Ellicott City, MD Middletown, MD
410-465-6105 301-371-3505
410-465-6644 Fax 301-371-3506 Fax

June 17, 2009

Heidi Scott
Well & Septic Program
Howard County Health Department
7178 Columbia Gateway Drive
Columbia, MD 21046

Re: **6636 Cedar Lane**
Percolation Certification Plan
#A530296

Dear Ms. Scott,

Transmitted herewith are 3 revised Percolation Certification Plans. All comments submitted to us by your letter dated June 6, 2009 have been addressed in accordance with the following responses. If you have any questions or concerns feel free to contact me by phone at 410-465-6105.

Comment No.

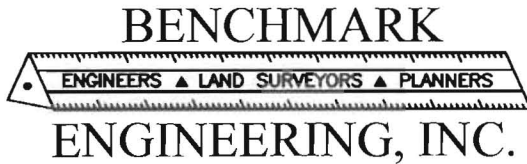
Response

1. Test hole #4 has been removed as it was not tested.
2. General note #4 has been revised to reflect that the filed topography was verified by Benchmark Engineering, Inc.
3. The SRA has been revised as requested. It was necessary for us to extend the SRA to within 5 feet of the common property line of the subject property and lands owned by Hazel Wise. A revised variance request letter is attached.
4. General note #11 has been added to address the possible need for a low pressure dose system.
5. Minimum spacing calculations have been included in the tables for each cell.
6. The revised variance is attached.
7. The need for a future pump tank has been included as general note #12 and is also included in the variance letter.

Thank you for your time reviewing this submission. If you should have any questions or concerns please feel free to contact me at 410-465-6105 or email me at jcarney@bei-civilengineering.com.

Sincerely,

John M. Carney
For Benchmark Engineering, Inc.
Project Manager



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

Ellicott City, MD Middletown, MD
410-465-6105 301-371-3505
410-465-6644 Fax 301-371-3506 Fax

May 27, 2009

Heidi Scott
Well & Septic Program
Howard County Health Department
7178 Columbia Gateway Drive
Columbia, MD 21046

Re: **6636 Cedar Lane**
Percolation Certification Plan
#A530296

Dear Ms. Scott,

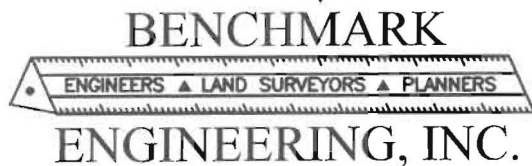
Transmitted herewith are 3 revised Percolation Certification Plans. All comments submitted to us by your letter dated April 6, 2009 have been addressed in accordance with the following responses. If you have any questions or concerns feel free to contact me by phone at 410-465-6105.

<u>Comment No.</u>	<u>Response</u>
1.	The SRA has been revised as requested. It was necessary for us to extend the SRA to within 5 feet of the common property line of the subject property and lands owned by Howard County. A variance request letter is attached.
2.	We have applied the application rate as requested. It was necessary for us to modify the trench width and effective sidewall calculations in order to provide adequate treatment. We did this in accordance with Howard County Private Sewage Disposal Code section 16.9.1.
3.	The design of the trenches has been adjusted to have a width of 3 feet and an effective depth of 2 feet. This, along with the application rate, resulted in 417' of required trench per system. We have shown a tank layout that will require pumping in order to get the effluent to the third system.
4.	The tank detail should be provided with the building permit.

Thank you for your time reviewing this submission. If you should have any questions or concerns please feel free to contact me at 410-465-6105 or email me at jcarney@bei-civilengineering.com.

Sincerely,

John M. Carney
For Benchmark Engineering, Inc.
Project Manager



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

Ellicott City, MD Middletown, MD
410-465-6105 301-371-3505
410-465-6644 Fax 301-371-3506 Fax

March 18, 2009

Heidi Scott
Well & Septic Program
Howard County Health Department
7178 Columbia Gateway Drive
Columbia, MD 21046

Re: **6636 Cedar Lane**
Percolation Certification Plan
#A530296

Dear Ms. Scott,

Transmitted herewith are 3 revised Percolation Certification Plans. All comments submitted to us by your letter dated March 16, 2009 have been addressed in accordance with the following responses. If you have any questions or concerns feel free to contact me by phone at 410-465-6105.

Comment No.

Response

1. General note #6 has been revised as requested.
2. General note #9 was added to address the need for repair before building permit issuance.
3. The existing septic tank is no longer going to be utilized in the final design.
4. The 0.8 application rate has been included in the calculation for the absorption area.
5. The side wall absorption has been changed to 2.5 feet in calculations for the absorption area.
6. The septic area has been modified to be 20' from the retaining wall. There are vertical constraints that may limit the use of this area.

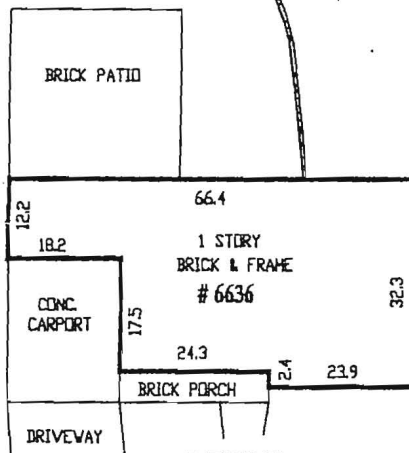
Thank you for your time reviewing this submission. If you should have any questions or concerns please feel free to contact me at 410-465-6105 or email me at jcarney@bei-civilengineering.com.

Sincerely,

John M. Carney
For Benchmark Engineering, Inc.
Project Manager

Area 5/6 (10'
except pkg
Use = 20'

-  - Trees
-  - Shrubs
-  - Flower Bed
-  - Septic Tank
-  - Septic Field
-  - Parking Space



DETAIL
SCALE: 1"=30'

LIBER 5874

FOLIO 641

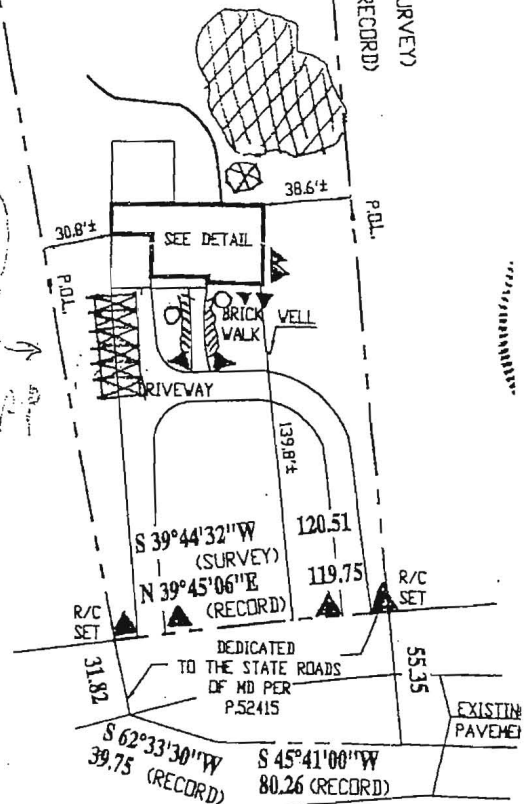
2.0002 AC. ±
87,131 S.F. ±
(RECORD)

1.8814 AC. ±
81,953 S.F. ±
(SURVEY)

S 49°48'19"E
S 49°47'40"E

563.85
619.20
(SURVEY)
(RECORD)

L.20




CEDAR LANE
(MD ROUTE 32)

PLAT OF SURVEY
INTERNATIONAL HEALTHCARE
CONSULTANTS INC. PROPERTY
LIBER 5874 FOLIO 641

HOWARD COUNTY, MARYLAND

Building Line and/or Flood Zone Information is taken from Available Sources and is Subject

SURVEYOR'S CERTIFICATE		REFERENCES		S LANE 2 Ge 301/
I HEREBY CERTIFY THAT THE INFORMATION SHOWN HEREON HAS BEEN BASED UPON THE RESULTS OF A FIELD SURVEY PURSUANT TO THE DEED OR PLAT OF RECORD. PROPERTY MARKERS HAVE BEEN RECOVERED OR PLACED IN ACCORDANCE WITH THE INFORMATION SHOWN."		PLAT BK. PLAT NO.		DATE OF LOCATIONS
Jeffrey A. Foster MARYLAND PROPERTY LINE SURVEYOR REG. NO. 597		LIBER 5874 FOLIO 641	PROP. CORS.: 10-24-02 HSE. LOC.: 08-07-02	

FOLIO 641

2.0002 AC. ±
87,131 S.F. ±
(RECORD)

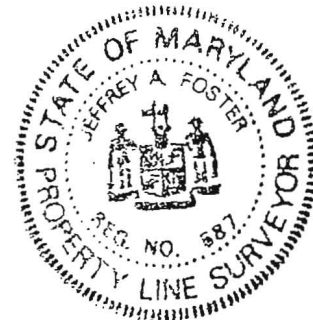
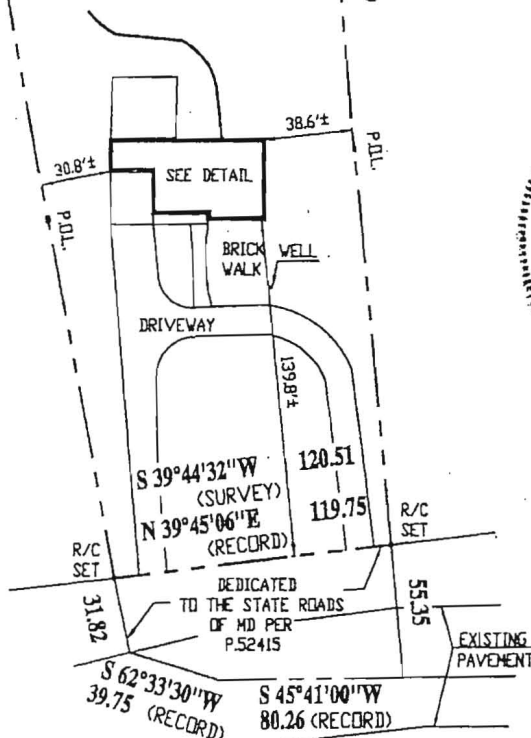
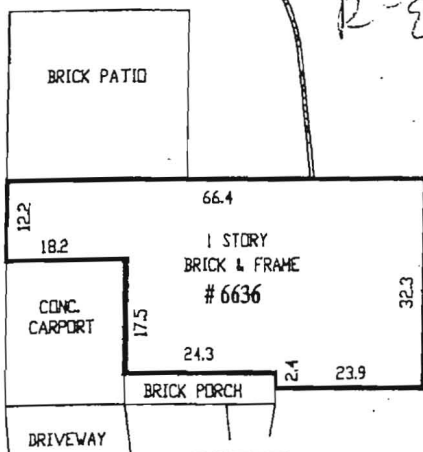
1.8814 AC. ±
81,953 S.F. ±
(SURVEY)

N/F
L.204 F.583

N/F
L.299 F.279

*Middle Portex
Native Car
6692 Cedar*

R-ED



PLAT OF SURVEY

**INTERNATIONAL HEALTHCARE
CONSULTANTS INC. PROPERTY
LIBER 5874 FOLIO 641**

HOWARD COUNTY, MARYLAND

Building Line and/or Flood Zone Information is taken from Available Sources and is Subject to Interpretation of Ordinator

SURVEYOR'S CERTIFICATE

"I HEREBY CERTIFY THAT THE INFORMATION SHOWN HEREON HAS BEEN BASED UPON THE RESULTS OF A FIELD SURVEY PURSUANT TO THE DEED OR PLAT OF RECORD. PROPERTY MARKERS HAVE BEEN RECOVERED OR PLACED IN ACCORDANCE WITH THE INFORMATION SHOWN."

Jeffrey A. Foster

MARYLAND PROPERTY LINE SURVEYOR REG. NO. 587

REFERENCES

PLAT BK.

PLAT NO.

LIBER 5874

FOLIO 641



SNIDER & ASSOCIATES
SURVEYORS - ENGINEERS
LAND PLANNING CONSULTANTS
2 Professional Drive, Suite 216
Gaithersburg, Maryland 20879
301/948-5100, Fax 301/948-1288

DATE OF LOCATIONS

SCALE: 1" = 80'

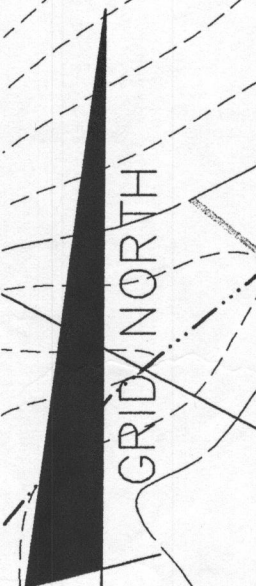
PROP. CORS.: 10-24-02

DRAWN BY: E.M.G.

HSE. LOC.: 08-07-02

JOB NO.: 2002-8174

RAYMOND WISE
PARCEL 285
LIBER 836 FOLIO 124
ZONED R-20



INV. OUT OF HOUSE = 323.24
INV. IN SEPTIC TANK 1 = 320.4
INV. OUT SEPTIC TANK 1 = 320.1
TOP OF SEPTIC TANK 1 = 321.4
GROUND OVER TANK 1 = 323.6
INV. IN SEPTIC TANK 2 = 319.7
INV. OUT SEPTIC TANK 2 = 319.4
TOP OF SEPTIC TANK 2 = 320.5
GROUND OVER TANK 2 = 323.1
INV. IN DISTR. BOX = 318.7
INV. OUT DISTR. BOX = 318.6
GROUND OVER DISTR. BOX = 321.6

HOWARD COUNTY
DEPT. OF PUBLIC WORKS
PARCEL 87
PLAT NO. 20408
ZONED R-ED

HAZEL N. WISE
PARCEL 173
LIBER 204 FOLIO 583
ZONED R-20

SEPTIC RESERVE
AREA
13,456 S.F.

P-5
O FAILED
315.6

CELL 1
CELL 2
CELL 3

20' SEPTIC SETBACK
20' SEPTIC SETBACK
20' SEPTIC SETBACK

EXISTING STRUCTURE
EXISTING WELL
EXISTING DRIVEWAY
EXISTING DWELLING TO REMAIN
EXISTING SEPTIC TANK NOT TO BE REUSED
FUTURE PUMP TANK
DISTR. BOX
TANK 2
TANK 1
EX. C-70

FF=334.18
BF=325.70

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RAYMOND WISE
PARCEL 205
LIBER #36 FOLIO 124
ZONED R-20



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GROUND OVER DISTR. BOX = 321.6

HOWARD COUNTY
DEPT. OF PUBLIC WORKS
PARCEL 87
PLAT NO. 20408
ZONED R-ED

SEPTIC RESERVE
AREA
13,456 S.F.

HAZEL N. WISE
PARCEL 173
LIBER 204 FOLIO 583
ZONED R-20

BENCH MARKS NAD'83

HO. CO. #3512
STAMPED BRASS DISK SET ON TOP OF CONC.
BASE: CEDAR LANE 0.55 MILES SOUTH OF
FREETOWN ROAD
N 555,100.826' E 1,342,733.04'
ELEV. 329.844'
HO. CO. #3511
STAMPED BRASS DISK SET ON TOP OF CONC.
BASE AT THE CORNER OF CEDAR LANE
AND FREETOWN ROAD
N 557,110.407' E 1,344,893.68'
ELEV. 400.083'

SYSTEM	SEPTIC TRENCH DESIGN		
	TRENCH DESIGNATION	LENGTH FEET	TOTAL LENGTH FEET
1	T1	66	66
	T2	63	129
	T3	62	191
	T4	61	252
	T5	60	312
2	T6	83	83
	T7	85	168
	T8	84	252
	T9	91	343
	T10	80	80
3	T11	80	160
	T12	80	240
	T13	80	320

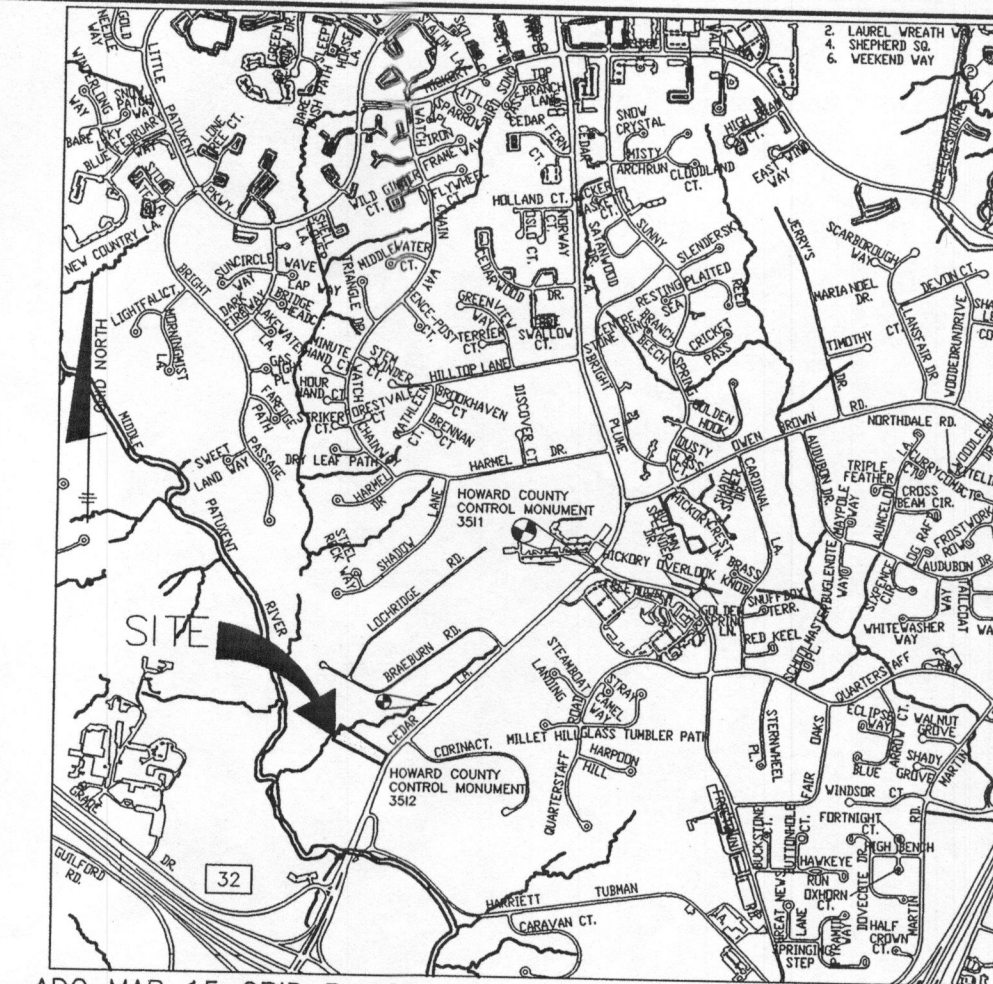
SEPTIC TANK CAPACITY =
V=1.5(1,400)
V=2,100 GALLONS
USE: INSTALL NEW 1,250 GALLON TANK AND A
NEW 1,000 GALLON TANK IN SERIES FOR A
TOTAL CAPACITY OF 2,250 GALLONS.

REQUIREMENT:
100 GALLONS/DAY/BED
14 BEDS
1,400 GALLONS/DAY
0.8 APPLICATION RATE

CELL 1: 3' WIDE TRENCH AND 3.0' OF
EFFECTIVE AREA THE REQUIRED TRENCH LENGTH
SHALL BE 292 L.F. WITH 11' SEPARATION DISTANCE.

CELL 2: 3' WIDE TRENCH AND 2.5' OF
EFFECTIVE AREA THE REQUIRED TRENCH LENGTH
SHALL BE 324 L.F. WITH 11' SEPARATION DISTANCE.

CELL 3: 3' WIDE TRENCH AND 3.0' OF
EFFECTIVE AREA THE REQUIRED TRENCH LENGTH
SHALL BE 292 L.F. WITH 9' SEPARATION DISTANCE.



ADC MAP 15 GRID B-10

VICINITY MAP

SCALE: 1" = 2000'

SOILS LEGEND

MAP SYMBOL SOIL GROUP

GgC	Glenelg loam, 8 to 15 percent slopes
GhB	Glenelg-Urban land complex, 0 to 8 percent slopes
GmB	Glenville silt loam, 3 to 8 percent slopes
GnB	Glenville-Baile silt loams, 0 to 8 percent slopes
MaC	Manor loam, 8 to 15 percent slopes

HOWARD COUNTY, MARYLAND (MD027) NATURAL RESOURCES
CONSERVATION SERVICES WEB SOIL SURVEY 2.0

GENERAL NOTES

- THE LOTS SHOWN HEREON COMPLY 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 AT LEAST 10,000 S.F. 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 SEWER IS AVAILABLE. THIS EASEMENT SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWER SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWERAGE EASEMENT. RECORDATION OF A MODIFIED SEWERAGE EASEMENT PLAT SHALL NOT BE REQUIRED.
- EXACT LENGTH OF SEPTIC TRENCHES IS TO BE DETERMINED BY THE HEALTH DEPARTMENT AT THE TIME OF TRENCH LAYOUT AND INSPECTION.
- TOPOGRAPHY SHOWN IS BASED ON HOWARD COUNTY GIS AND HAS BEEN FIELD VERIFIED BY BENCHMARK ENGINEERING, INC.
- THERE ARE NO EXISTING WELLS OR SEPTIC SYSTEMS WITHIN 100' OF THIS PROJECT'S BOUNDARY EXCEPT AS NOTED.
- PUBLIC WATER IS AVAILABLE AND IS CURRENTLY BEING INSTALLED. UPON CONNECTION TO PUBLIC WATER THE EXISTING WELL SHALL BE PROPERLY SEALED AND ABANDONED AND DOCUMENTATION SENT TO THE HEALTH DEPARTMENT PRIOR TO BUILDING PERMIT APPROVAL.
- THIS BUILDING IS DESIGNED TO BE A "HOME FOR THE AGED" WITH A REQUIREMENT FOR PROVIDING TREATMENT FOR 100 GALLONS/DAY/BED OF SEWAGE. THE SEPTIC FOR THIS BUILDING IS DESIGNED FOR 14 BEDS.
- SEPTIC TANKS SHALL TOTAL AT LEAST 2,100 GALLONS TOTAL.
- THE EXISTING SEPTIC SYSTEM SHALL BE UPGRADED PRIOR TO BUILDING PERMIT APPROVAL.
- THE SECOND REPAIR SYSTEM (CELL 3) WILL REQUIRE A PUMP TANK BE INSTALLED FOR USE OF THIS AREA.
- A LOW PRESSURE DOSE SYSTEM MAY BE REQUIRED FOR SYSTEMS THAT HAVE UNEQUAL TRENCH LENGTHS.
- THE USE OF THE REPAIR SYSTEM IN CELL 3 WILL REQUIRE A PUMP TANK TO BE PLACED AT THE LOCATION DESIGNATED. THE COST OF THIS WILL BE THE RESPONSIBILITY OF THE OWNER.

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
JOHN M. CARNEY, FOR BENCHMARK ENGINEERING, INC.
PLAN PREPARED

APPROVED FOR PRIVATE WATER AND SEWERAGE SYSTEM
HOWARD COUNTY HEALTH DEPARTMENT

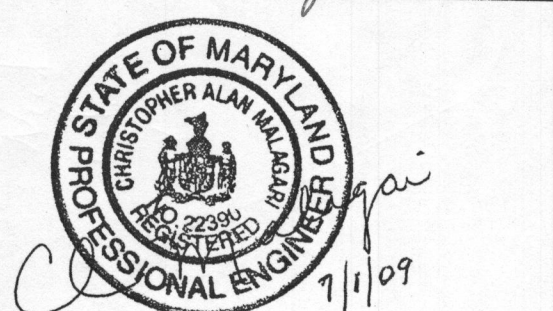
B. Wilson for Peter Brilman 7/17/2009
HOWARD COUNTY HEALTH OFFICER DATE

BENCHMARK

ENGINEERS • LAND SURVEYORS • PLANNERS

ENGINEERING, INC.

6480 BALTIMORE NATIONAL PIKE • SUITE 418
ELICOTT CITY, MARYLAND 21043
PHONE: 410-465-6105 • FAX: 410-465-6644
WWW.BEI-CIVILENGINEERING.COM



Professional Certification. I hereby certify that these
documents were prepared or approved by me, and that I am a
duly licensed professional engineer under the laws of the State
of Maryland, License No. 22810, expiration date: 6/30/11

OWNER:

LOIS E. PETERS AND LEROY
PETERS SR.
6636 CEDAR LANE
COLUMBIA, MARYLAND 21044
240-876-7443

6636 CEDAR LANE

LOCATION: TAX MAP: 35, GRID: 16
PARCEL: 154
ELECTION DISTRICT NO. 5
HOWARD COUNTY, MARYLAND

PERCOLATION CERTIFICATION PLAN

DATE: JULY, 2009 BEI PROJ. NO. 2199
SCALE: AS SHOWN SHEET 1 OF 1

DESIGN: JC DRAFT: EDD CHECK: JC

Deep Trench Calculations, Cell 1		Deep Trench Calculations, Cell 2		Deep Trench Calculations, Cell 3	
Application Rate	1400 GPD	Application Rate	1400 GPD	Application Rate	1400 GPD
Septic Flow	0.8 GPD/sf	Septic Flow	0.8 GPD/sf	Septic Flow	0.8 GPD/sf
Design Flow	1750 GPD	Design Flow	1750 GPD	Design Flow	1750 GPD
Deep Trenches		Deep Trenches		Deep Trenches	
Trench Width	36" or 3.0 ft	Trench Width	36" or 3.0 ft	Trench Width	36" or 3.0 ft
Effective Depth	36" or 3.0 ft	Effective Depth	30" or 2.5 ft	Effective Depth	36" or 3.0 ft
Percent of Std. Trench	50.00 %	Percent of Std. Trench	55.56 %	Percent of Std. Trench	50.00 %
Trench Length		Trench Length		Trench Length	
Length of Std. Trench	583 ft	Length of Std. Trench	583 ft	Length of Std. Trench	583 ft
Length of Deep Trench	292 ft	Length of Deep Trench	324 ft	Length of Deep Trench	292 ft
Depth of Trench		Depth of Trench		Depth of Trench	
Inlet depth	4 ft	Inlet depth	4 ft	Inlet depth	4 ft
Bottom Depth	8 ft	Bottom Depth	8 ft	Bottom Depth	7 ft
Trench Separation		Trench Separation		Trench Separation	
Separation Distance	11 ft	Separation Distance	11 ft	Separation Distance	9 ft
Distance Center to Center	14 ft	Distance Center to Center	14 ft	Distance Center to Center	12 ft

PLAN

SCALE: 1" = 30'

LEGEND

- EXISTING CONTOURS
EXISTING CL STREAM
LIMIT OF SUBMISSION
TEST HOLE FAILED
TEST HOLE PASSED
SOILS DELINEATION
PROPOSED SEPTIC AREA



BENCH MARKS NAD'83	
HO. CO. #3512	
STAMPED BRASS DISK SET ON TOP OF CONC. BASE CEDAR LANE 0.55 MILES SOUTH OF FREETOWN ROAD	
N 555,100.826'	E 1,342,733.04'
ELEV. 329.844'	
HO. CO. #3511	
STAMPED BRASS DISK SET ON TOP OF CONC. BASE AT THE CORNER OF CEDAR LANE AND FREETOWN ROAD	
N 557,110.407'	E 1,344,893.68'
ELEV. 400.083'	



SOILS LEGEND	
MAP SYMBOL	SOIL GROUP
GgC	Glennelg loam, 8 to 15 percent slopes
GhB	Glennelg-Urban land complex, 0 to 8 percent slopes
GmB	Glennville silt loam, 3 to 8 percent slopes
GnB	Glennville-Baile silt loams, 0 to 8 percent slopes
MaC	Manor loam, 8 to 15 percent slopes

HOWARD COUNTY, MARYLAND (MD027)
NATURAL RESOURCES CONSERVATION SERVICES
WEB SOIL SURVEY 2.0

GENERAL NOTES

- 1) THE LOTS SHOWN HEREON COMPLY 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 AT LEAST 10,000 S.F. 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 SEWER IS AVAILABLE. THIS EASEMENT SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWER SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWERAGE EASEMENT. RECORDATION OF A MODIFIED SEWERAGE EASEMENT PLAY SHALL NOT BE REQUIRED.
- 3) EXACT LENGTH OF SEPTIC TRENCHES IS TO BE DETERMINED BY THE HEALTH DEPARTMENT AT THE TIME OF TRENCH LAYOUT AND INSPECTION.
- 4) TOPOGRAPHY SHOWN IS BASED ON HOWARD COUNTY GIS.
- 5) THERE ARE NO EXISTING WELLS OR SEPTIC SYSTEMS WITHIN 100' OF THIS PROJECT'S BOUNDARY EXCEPT AS NOTED.
- 6) THIS PARCEL IS SERVED BY PUBLIC WATER.
- 7) THIS BUILDING IS DESIGNED TO BE A "HOME FOR THE AGED" WITH A REQUIREMENT FOR PROVIDING TREATMENT FOR 100 GALLONS/DAY/BED OF SEWAGE. THIS BUILDING IS LIMITED TO 16 BEDS.
- 8) SEPTIC TANKS SHALL BE AT LEAST 2,400 GALLONS TOTAL.

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 2/4/09
JOHN M. CARNEY, FOR BENCHMARK ENGINEERING, INC.
PLAN PREPARER

APPROVED FOR PRIVATE WATER AND SEWERAGE SYSTEM
HOWARD COUNTY HEALTH DEPARTMENT

HOWARD COUNTY HEALTH OFFICER _____ DATE _____

BENCHMARK ENGINEERS & LAND SURVEYORS & PLANNERS ENGINEERING, INC.

8480 BALTIMORE NATIONAL PIKE & SUITE 418
ELLICOTT CITY, MARYLAND 21043
phone: 410-465-6105 & fax: 410-465-6644
WWW.BEI-CIVLENGINEERING.COM

OWNER:
LOIS E. PETERS
LEROY PETERS SR.
6636 CEDAR LANE
COLUMBIA, MARYLAND 21044
443-266-7372

6636 CEDAR LANE

LOCATION: TAX MAP: 35, GRID: 16
PARCEL: 154
ELECTION DISTRICT NO. 5
HOWARD COUNTY, MARYLAND

TITLE:
PERCOLATION TESTING PLAN

DATE: FEBRUARY, 2009 BEI PROJ. NO. 2199

SCALE: AS SHOWN SHEET 1 OF 1

DESIGN: JC DRAFT: EDD CHECK: JC

LEGEND

- EXISTING CONTOURS
- EXISTING CL STREAM
- LIMIT OF SUBMISSION
- TEST HOLE
- SOILS DELINEATION
- PROPOSED SEPTIC AREA

PLAN
SCALE: 1" = 30'

N00°00'00"W
00.00'