



# APPLICATION

## FOR PERCOLATION TESTING AND SITE EVALUATION

TEST DATE(S) \_\_\_\_\_ TEST TIME \_\_\_\_\_ A/P \_\_\_\_\_

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

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 0 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) Gary & Celeste Segal

DAYTIME PHONE 410 506 5044 CELL 410 868 5978 FAX \_\_\_\_\_

MAILING ADDRESS 3630 Church Road Ellicott City MD 21043  
STREET CITY/TOWN STATE ZIP

APPLICANT Same

DAYTIME PHONE \_\_\_\_\_ CELL \_\_\_\_\_ FAX \_\_\_\_\_

MAILING ADDRESS \_\_\_\_\_  
STREET CITY/TOWN STATE ZIP

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

PROPERTY LOCATION owner  
SUBDIVISION/PROPERTY NAME 36 n/a LOT NO. \_\_\_\_\_

PROPERTY ADDRESS 3630 Church Rd Ellicott City, MD 21043  
STREET TOWN/POST OFFICE

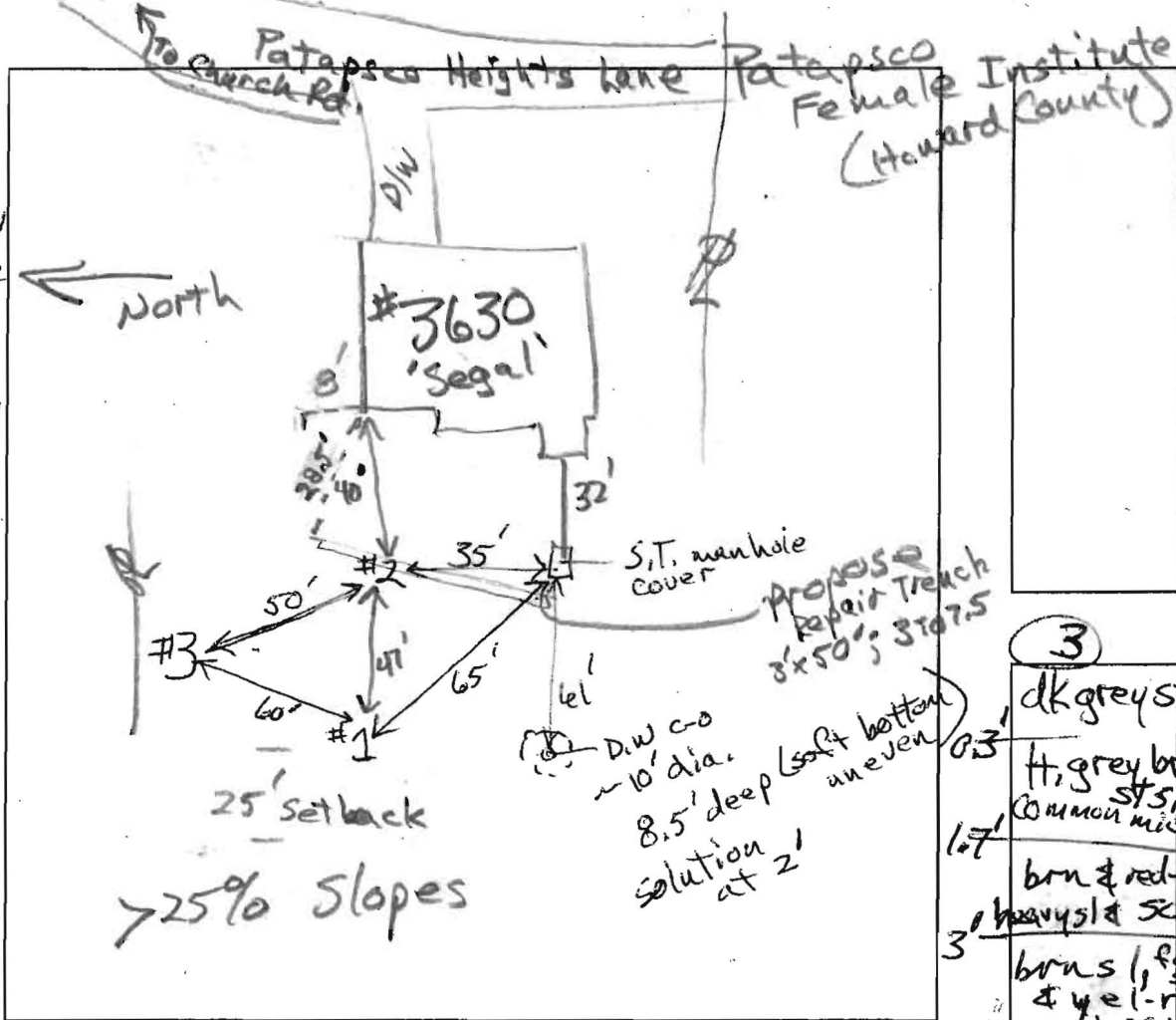
TAX MAP PAGE(S) \_\_\_\_\_ GRID \_\_\_\_\_ PARCEL(S) \_\_\_\_\_ PROPOSED LOT SIZE \_\_\_\_\_

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.

Gary Segal  
SIGNATURE OF APPLICANT

HOWARD COUNTY HEALTH DEPARTMENT, BUREAU OF ENVIRONMENTAL HEALTH, WELL AND SEPTIC PROGRAM  
7178 COLUMBIA GATEWAY DRIVE COLUMBIA, MARYLAND 21046 (410) 313-1771 FAX (410) 313-2648  
TDD (410) 313-2323 TOLL FREE 1-877-4MD-DHMH



- ①
- 0.3' olive sl heavy mica many fine mica
  - 1.5' few flags many mica brn hvy sl
  - 2.5' yel-red hvy sl many mica 2 csbk
  - 4' br grey-brn sl
  - 7' brn-grey sl few stones
  - 10' brn-grey ls few stone

- ②
- 0.5' dk grey sl
  - 2.5' brn heavy sl few stones
  - 5' brn sl many mica & yel-red sl
  - 8' dk brn & dk grey sl
  - 11' brn grey sl & ls few stones
  - 11.5' pale yellow & lt grey ls

- ③
- 0.3' dk grey sl
  - 1.7' lt grey brn sl common mica
  - 3' brn & red-brn heavy sl
  - 4.5' brn sl few stones & yel-red heavy sl common mica
  - 7' yel-red & brn sl (heavy) common mica
  - 11' yellow & lt grey sl few stones

| DATE     | TEST # | DEPTH  | START | BREAK 1" DROP | STOP 2" DROP | TIME OF 2ND INCH | P/F/H |
|----------|--------|--------|-------|---------------|--------------|------------------|-------|
| 3/6/2009 | 1      | 5.5/14 | 0     | 4.5           | 12           | 7.5              | P     |
| 3/6/2009 | 2      | 5/11.5 | 0     | 2             | 6            | 4                | P     |
| 3/6/2009 | 3      | 7/11.0 | 0     | 10            | 27           | 17               | P     |
|          |        |        |       |               |              |                  |       |
|          |        |        |       |               |              |                  |       |
|          |        |        |       |               |              |                  |       |
|          |        |        |       |               |              |                  |       |
|          |        |        |       |               |              |                  |       |
|          |        |        |       |               |              |                  |       |

Repair required; dry well failure imminent  
 No evidence of impedence to percolating water in profiles  
 REMARKS Gary Segal  
 SANITARIAN RB BACKHOE Ronnie Heap OTHERS Charles Jenkins  
 TEST HOLES USED IN SDA 1, 2 & 3 AVG. PERC TIME each SQ. FT/BR  
 TRENCH WIDTH 3 INLET DEPTH 3 MAX. BOT DEPTH 7.5 EFFECTIVE SW 4.5  
 Deeper at end of septic tank

Repair System 1

$$\begin{array}{r} 375 \\ 1.2 \overline{) 450} \\ \underline{36} \\ 90 \\ \underline{84} \end{array}$$

375

.5 125

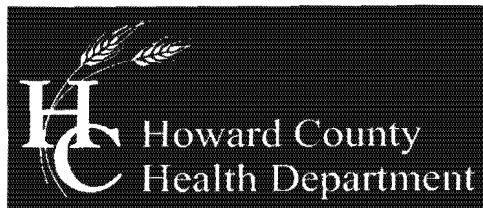
|    | 2'  | 3'         |                         |
|----|-----|------------|-------------------------|
| 3' | .44 | .5         |                         |
| 4' | .36 | <u>.42</u> | $125 \times .42 = 52.5$ |
| 5' | .31 | <u>.39</u> | $\times 125 = 48.75$    |
| 6' | .27 | <u>.31</u> |                         |

## Setbacks

House Found. 20'

Trench or easement to  $\Phi$  10'

to slopes > 25% 25'



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](http://www.hchealth.org)

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

March 10, 2009

To: Gary and Celeste Segal, owners

From: Robert Bricker, CPSS, RS  
Environmental Sanitarian  
Well and Septic Program

RE: 3630 Church Road, Ellicott City, Maryland, A530323

Dear Mr. & Mrs, Segal,

Percolation testing was conducted on the referenced property on March 6, 2009. 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. Percolation Test Results indicate soils' conditions that are satisfactory for onsite wastewater disposal. Subsequently, the area of your property represented by these observations may be designated as a septic easement.

Three test holes were dug for profile description and standard percolation tests. All three locations 'Passed' (at specific depths). Each location differs to some degree from the other two. Generally locations #1 and #2 have similar, location #2 having a more shallow depth (11.5 ft.) to unusable soil parent materials. Location #3 differed from the other two in that a finer textured soil occurs there, and as a result a much slower rate of permeability is characteristic of the soils along your north property line that the location represents. The extent of the suitable area in the downhill (westerly) direction is limited by a regulated 25-foot setback to slopes greater than 25 percent.

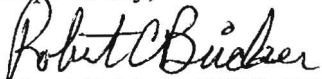
The measured permeability at each of the test locations affects the size of the drainfield that may be approved in the immediate vicinity of the respective test locations. At location #1, a moderately rapid rate of infiltration was observed in moderately deep subsoil. Therefore the drainfield in the vicinity of #2 need only be 50 feet long to accommodate the discharge from the 3-bedroom residence. While location #1 had only a moderate rate of permeability, there is at least 2.5 feet more of subsoil depth suitable for use, and a drainfield for the existing residence would require trench ranging 60 to 80 feet depending on depth of gravel installed under the distribution pipe. Along the north property line the soil permeability is moderately slow-to-slow and the soil profile is limited by consolidated materials at 11 feet depth. A drainfield installed along the north property boundary would have a minimum total trench length of 105 feet.

The potential of the area that may be defined as a septic easement meets the Howard County Code (3.805.A.2.X) requirement for an initial system and 2 replacement systems. During field evaluation, the existing dry well was found to not meet current construction requirements and to be near failure. Though no surface seeps were noticeable, the solution level in the dry well was at about 2 feet below soil surface, above the level of the Inlet. Also the drainpipe between the septic tank and dry well was damaged during exploration. An immediate replacement for the dry well was required. A 50-foot trench was installed per specifications (P530326) and approved on March 9, 2009. Additionally, the outlet baffle was replaced and a manhole was installed on the existing septic tank, meeting Howard County Code requirements [3.810.D] implemented in January 2007.

Field data collected are shown on the Percolation Test Results Worksheet. Subsequent recommendations are based on observed soil properties and characteristics at respective test locations as well as the particular soils materials tested. The 'initial' system has been installed (March 9, 2009). The detailed specifications for the designated replacement systems will be documented and stored in the Health Department file for the subject property.

You have indicated that you plan to submit a Percolation Certification Plan later today, prior to receiving this report. If you have any questions regarding this evaluation or the Percolation Certification Plan, please contact me at the above address or by calling (410) 313-2691.

Respectfully,

  
Robert Bricker, CPSS, RS  
Well and Septic Program  
Development Coordination Section

Copy: File

Date February 3, 2009  
From: Gary and Celeste Segal  
To: Sara Sappington  
Program Supervisor  
Well and Septic Program  
Subject: Request for variance for percolation testing

Dear Ms. Sappington,

My wife and I are seeking a building permit to place a small addition onto our house (196 square feet) and add a deck (358 square feet). I am writing to request a variance from performing percolation testing on our property, 3630 Church Road, Ellicott City, MD 21043.

Here is a brief background. I have spoken at length with Mr. Robert Bricker of your department and with Mr. Don Lieu of the Bureau of Utilities to understand our options. Our house is located in the Ellicott City Historic District. Our property is actually on a public side street off of Church Road and does not abut Church Road at all.

As such, we would need to request a 375 foot sewer extension to bring the sewer line up our street to our house. I'm told that option will delay our project a minimum of 3-4 months. Additionally, it will require significant plumbing investments on our part as the current sewage line is under our house and graded downhill towards our septic tank in the rear of the house.

I am aware that as an alternative, we can do percolation testing on our property to assure that the current septic system is still fit to service our house. We would like to request a variance from performing percolation testing for the following reasons:

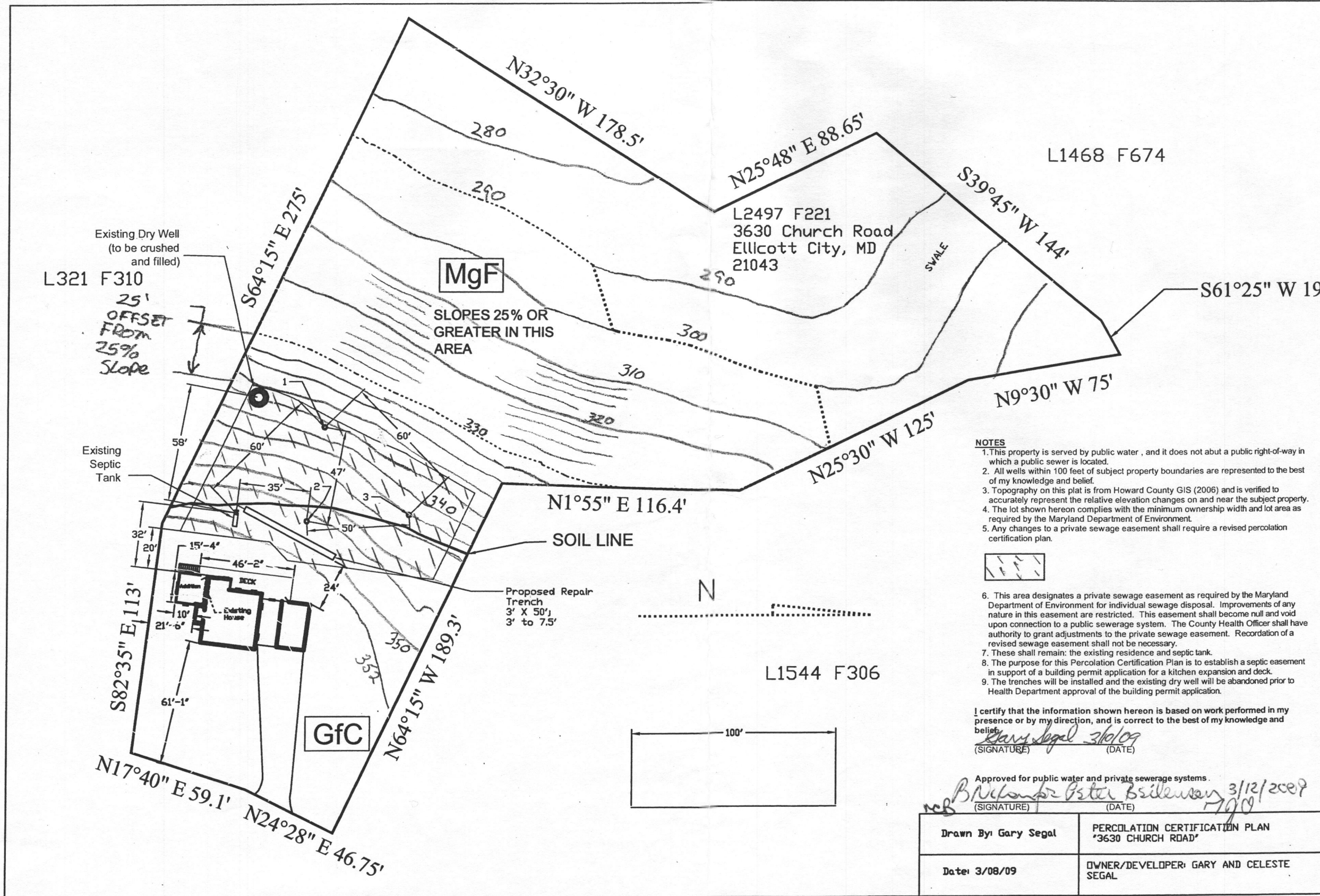
1. I believe the existing septic system to be in good working order and feel it is capable of meeting the sewage treatment needs for our house, especially considering that we are not adding bedrooms to the house. We have had the tank pumped out regularly during our 15 years in the house and see no evidence of system failure. Our water consumption is always low, as can be verified by County records, so the stress on our septic system is minimal.
2. The percolation testing process looks like it will significantly delay the start of our addition project and put our contractor out of work until the issue is resolved. His plan was to start at the end of this month. We had not allowed time for the septic issue as our contractor recently completed a 320 square foot addition on our neighbor's house at 3565 Church Road and was not required to have percolation testing performed on that site.
3. The percolation testing will result in additional financial hardship to my family, increasing the cost of our addition beyond what has been budgeted.

We appreciate your consideration in this matter. Please contact us with any questions.

Sincerely,



Gary and Celeste Segal  
H 410-461-5131  
C 410-868-5978



- NOTES**
1. This property is served by public water, and it does not abut a public right-of-way in which a public sewer is located.
  2. All wells within 100 feet of subject property boundaries are represented to the best of my knowledge and belief.
  3. Topography on this plat is from Howard County GIS (2006) and is verified to accurately represent the relative elevation changes on and near the subject property.
  4. The lot shown hereon complies with the minimum ownership width and lot area as required by the Maryland Department of Environment.
  5. Any changes to a private sewage easement shall require a revised percolation certification plan.

6. This area designates a private sewage easement as required by the Maryland Department of Environment for individual sewage disposal. Improvements of any nature in this easement are restricted. This easement shall become null and void upon connection to a public sewerage system. The County Health Officer shall have authority to grant adjustments to the private sewage easement. Recordation of a revised sewage easement shall not be necessary.
7. These shall remain: the existing residence and septic tank.
8. The purpose for this Percolation Certification Plan is to establish a septic easement in support of a building permit application for a kitchen expansion and deck.
9. The trenches will be installed and the existing dry well will be abandoned prior to Health Department approval of the building permit application.

I certify that the information shown hereon is based on work performed in my presence or by my direction, and is correct to the best of my knowledge and belief.

*Gary Segal* 3/10/09  
 (SIGNATURE) (DATE)

Approved for public water and private sewerage systems.

*B. N. [Signature]* 3/12/2009  
 (SIGNATURE) (DATE)

|                      |  |
|----------------------|--|
| Drawn By: Gary Segal | PERCOLATION CERTIFICATION PLAN<br>"3630 CHURCH ROAD" |
| Date: 3/08/09        | OWNER/DEVELOPER: GARY AND CELESTE SEGAL              |

PC530323