



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

July 1, 2011

To: Bruce Burton, LDE, Inc.
bburton@ldeinc.net

RE: **Perc Cert Comment, Tax Map 28, Parcel 13, Parcel 'A'; A534508**

For further consideration by the Approving Authority, the following plan amendment and two (2) notes must be added to the referenced Percolation Certification Plan:

1. Show the path of the waterline from the well line to the clubhouse.

PRIOR TO HEALTH DEPARTMENT APPROVAL OF A BUILDING PERMIT FOR A TENANT HOUSE, THE WELL LINE CONNECTION AT THE CLUBHOUSE FOUNDATION SLEEVE AND AT THE WHC, AND THE SEWER LINE CONNECTIONS AT THE CLUBHOUSE FOUNDATION AND AT THE CONNECTION WITH THE SHC, MUST ALL BE INSPECTED AND APPROVED BY AN ENVIRONMENTAL SANITARIAN. THE WELL LINE MUST BE 3 FEET DEEP, SLEEVED FOR AT LEAST 5 FEET FROM THE CLUBHOUSE FOUNDATION, AND SLEEVED A MINIMUM OF 10 FEET FROM CROSSING WITH THE SHC, IF IT IS NOT 1 FOOT OR MORE ABOVE THE SHC.

THE APPROVING AUTHORITY APPROVES SHARED USE FOR THE CLUBHOUSE AND THE PRIMARY RESIDENCE OF THE WELL AND THE EXISTING SEPTIC SYSTEM. THE PRIMARY RESIDENCE SEPTIC SYSTEM IS DESIGNED FOR 450 GALLONS PER DAY DISCHARGE. THE OWNER DESCRIBES THE USE OF THE CLUBHOUSE AS FOLLOWS: "...OPEN 7 DAYS A WEEK, WITH HUNTS SCHEDULED TWICE DAILY...THE NORMAL HUNTING PARTY AVERAGES 3-4 HUNTERS PER SESSION".

If you have any questions regarding these requirements for the Percolation Certification Plan, please contact me at the above address or by calling (410) 313-2691.

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

Copy: File

Muth Family LLC
c/o Phil Muth
13825 Howard Rd
Dayton, MD 21036
443-463-8901

May 24, 2011

Mr. Robert Bricker, R.S.
Howard County Health Department
7178 Columbia Gateway Drive
Columbia, MD 21046

Re: Howard County Game Farm
13825 Howard Road

Dear Mr. Bricker,

Per your request, Howard County Game Farm is pleased to provide the following information regarding our operation.

The Game Farm is located on 150 acres of grassed and farmed fields in Dayton, Maryland. We offer guided hunts of our farm-raised pheasants during the hunt season, October 1st through April 30th. From June through September, the Game Farm is closed to hunters while normal agricultural farming occurs.

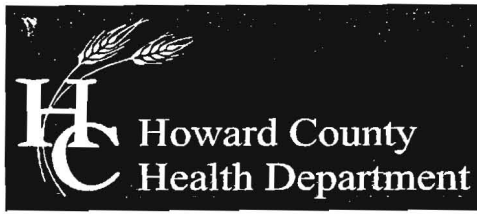
During season, the Game Farm is open 7 days a week, with hunts scheduled twice daily (9am – noon and 2pm – 5pm/closing). The normal hunting party averages 3-4 hunters per session, with the option of being guided.

The clubhouse is open during the hunt season, providing our clients with a heated gathering area, restroom facilities, cold bottled beverage service and hot coffee. The clubhouse does not provide any on-site food preparation or service.

Should you have any questions, please call me.


J. Philip Muth, Owner

cc. Bruce Burton -LDE



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

May 6, 2011

To: Bruce Burton, LDE, Inc.
bburton@ldeinc.net

RE: **Perc Test Report, Tax Map 28, Parcel 13, Parcel 'A'; A534508**

Percolation testing was conducted on the referenced property on April 27, 2011. The purpose for conducting these percolation tests was to delineate a septic reserve area for an anticipated new tenant house, and for potential expansion of the existing septic reserve to accommodate discharge from a described 'clubhouse' use on the subject property.

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. Soil conditions either satisfactory or unsatisfactory for onsite wastewater disposal were observed at the specified test locations. Areas that may be included in a septic reserve are represented by test locations having satisfactory soil conditions. The area of the septic reserve must be at least 10,000 square feet, though Howard County Code [3.805.A.2.X] requires that the area be large enough to accommodate an initial drainfield and two repair drainfields for the planned residence.

For the proposed tenant house, test holes were dug near staked locations #1, #2, #3, #4 and #5. The soil materials tested and observed at these locations have textures of sandy loam, loamy fine sand, and loamy sand, all with few stones. Satisfactory soils conditions for wastewater treatment and disposal occurred at all five locations. The percolation rate for the entire area is moderately-rapid below 4 feet depth.

Three holes, #7, #8 and #9, were dug near the septic reserve area that is intended to serve the existing residence (13825 Howard Road) on Parcel 'A'. The soil materials tested were fine sandy loams, generally occurring below 3 feet depth and having a moderately-rapid to moderate percolation rate. Satisfactory soils conditions for wastewater treatment and disposal occurred at all three locations.

A non-permitted conduit to convey wastewater discharge from a structure described by the owner as a "clubhouse" has been joined to the residence SHC. The location of this connection is required on the subsequent Percolation Certification Plan, and an inspection of the pipe connections at the structure and at the SHC may be required.

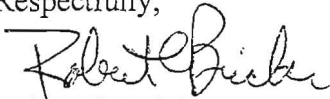
The owner is required to submit to the Health Department, a signed written description of how the clubhouse is utilized, including a summary of activities and the maximum number of persons that may be expected to utilize the facility on any given day.

The Health Department will determine if the residential and 'clubhouse' uses may continue to share the same septic tank, distribution trenches and septic reserve area, or if the uses must be separated. At the very least the owner may expect that additional distribution trench (i.e. additional soil absorption area) will be required to accommodate the current and expected discharges.

Field data collected are shown on two Percolation Test Worksheets 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. The values for the drainfield parameters will be established during the Percolation Certification Plan process, and then maintained in the Health Department file for the subject property.

Additional field review of well or septic system conditions may be required at any time during this process. If you have any questions regarding this evaluation or requirements for the Percolation Certification Plan or Site Plan, please contact me at the above address or by calling (410) 313-2691.

Respectfully,



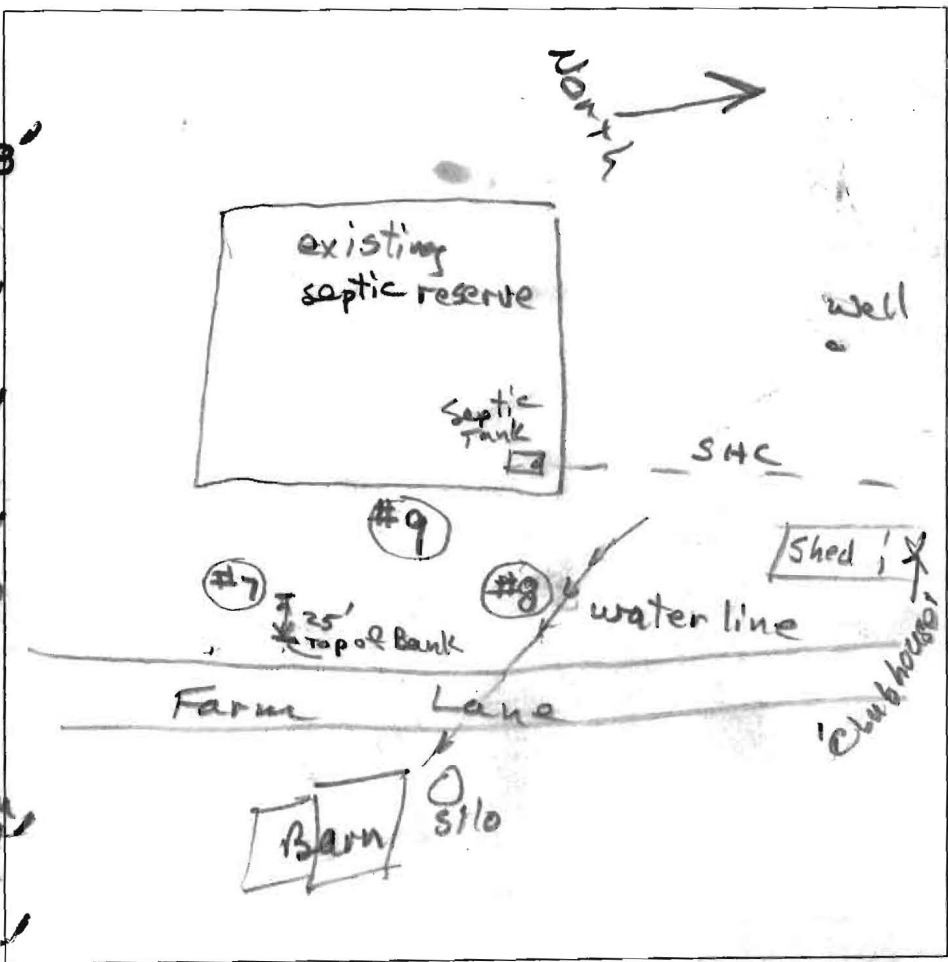
Robert C. Bricker, CPSS, REHS/RS
Environmental Sanitarian Supervisor
Well and Septic Program

Copy: Phil Muth, Muth Family LLC
File

AVP

#7
 dk brn loam 20.8'
 brn fs/ heavy 3'
 grey-brn fs/ many mica 5'
 yel-red sl 7.5'
 grey-brn sil micaceous 11'
 grey chsl Mn coatings water seeps 11.5'
 12'

#9
 dk brn loam
 brn ch loam common mica 3.5'
 yel-red & grey brn fs/ 10% channers many fine mica few boulders brn fs/ micaceous 10% channers 12'



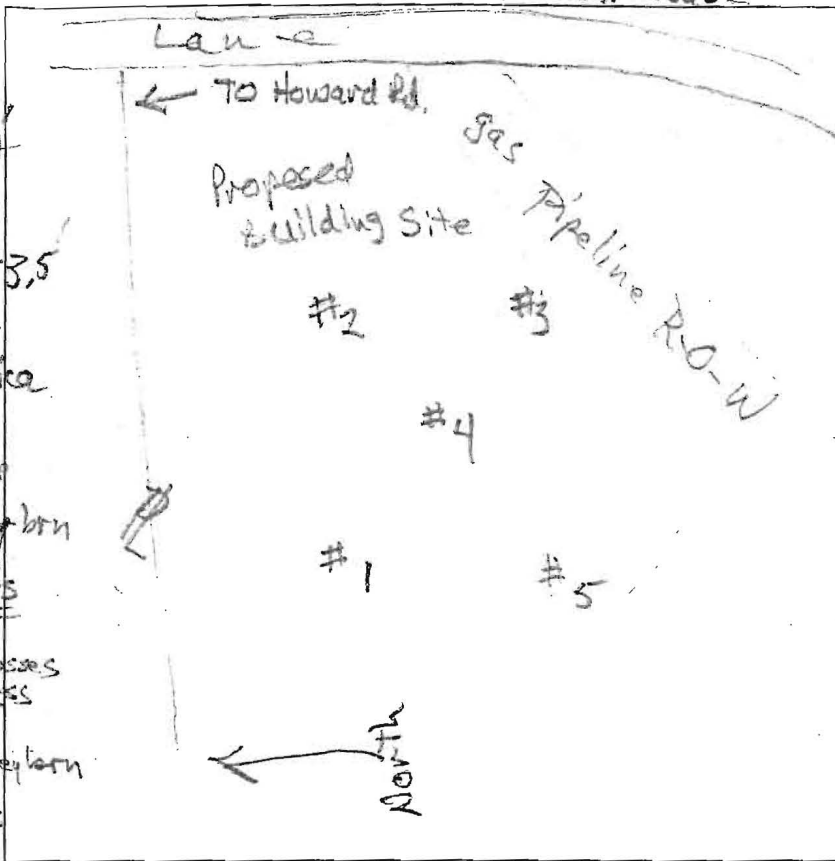
#8
 0.4' dk brn loam
 1' brn loam
 brn fs/ heavy many fine mica 2.8'
 brn fs/ few channers many mica 6.5'
 brn ch sl few large Mn soft masses 11'
 pale yellow loam few yel-red stones Mn coatings 12'

| DATE | TEST # | DEPTH | START | BREAK 1" DROP | STOP 2" DROP | TIME OF 2ND INCH | P/F/H |
|---------|--------|----------|--------|---------------|---|------------------|-------|
| 4/27/11 | 7 | 4.7' | 2:41 | 2:48 | 3:01 | 13 | P |
| 4/27/11 | 8 | 11' | Visual | | Sidewall 'ok' 0.89/d/cr ² : 3:57 | | P |
| 4/27/11 | 9 | 5.5'/12' | 3:49 | 3:52 | 3:55 | 3 | P |
| | | | | | | | |
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| | | | | | | | |

REMARKS Add area to existing septic Reserve or make 2x10,000 SF.
 SANITARIAN RB BACKHOE David OTHERS Bruce Barton
 TEST HOLES USED IN SDA all AVG. PERC TIME 3 to 13 SQ. FT/BR 125 to 1875
 TRENCH WIDTH 20.3' INLET DEPTH 3' MAX. BOT DEPTH 7 EFFECTIVE SW 4' Max.

Tenant House

AP



#3
 dk brn loam
 3.5' yel-red scl
 many fine mica
 3.5' yel & red sl
 Saprolite
 5' many fine mica
 Variegated
 ls saprolite
 7' yel-brn-lt grey brn
 Variegated
 30% top

9' yel-brn & lt grey brn
 common Mn soft masses
 & coatings
 9' yel-brn & lt grey brn
 10% channers
 & flags
 30% top

#1 & **#4**
 dk brn loam
 3.5' yel-red scl
 many fine mica

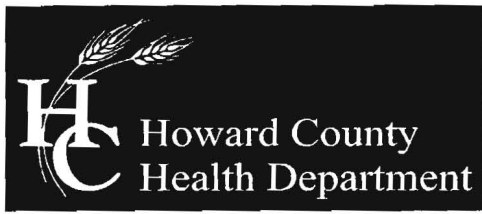
4' yel-red scl
 many fine mica
 3.5' yel & red sl
 many fine mica
 2' red ls
 many fine mica

#2
 dk brn loam
 0.7' brn cl
 2 usbk
 common mica
 2.5' yel, red, brn
 & lt grey sl
 many fine mica
 7' brn, red, yel
 & lt grey brn lfs
 common fine
 mica
 common medium
 & fine Mn soft
 masses
 9' Mn coatings
 11' platy lfs
 12'

#5
 dk brn loam
 0.7' yel-red scl
 many fine mica
 2.7' yel & red sl
 many fine mica
 7' brn & yel-brn
 ch ls platy
 5% mica schist
 stones
 10' Mn coatings
 on channers
 12'

| DATE | TEST # | DEPTH | START | BREAK 1" DROP | STOP 2" DROP | TIME OF 2ND INCH | P/F/H |
|---------|--------|--------------|---------|----------------------|-----------------|---------------------|-------|
| 4/27/11 | #1 | 5 1/2' | 1:01 | 1:04 | 1:09 | 5 | P |
| 4/27/11 | #5 | 5 1/2' | 1:06 | 1:08 | 1:10:30 | 2.5 | P |
| 4/27/11 | #3 | 5.7' 2.5' | 1:13:30 | 1:22 | 1:35 | 13 | P |
| 4/27/11 | #2 | 4.8' 12' | 1:18 | 1:19:30 | 1:22 | 2.5 | P |
| 4/27/11 | #4 | 12' | Visual | sidewalk OK, 4' - 8' | 1.2 g/d | | P |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

REMARKS slower perc time at #3 appears anomalous
 SANITARIAN RB BACKHOE David OTHERS Bruce Burton
 TEST HOLES USED IN SDA all AVG. PERC TIME 5 SQ. FT/BR 125
 TRENCH WIDTH 2' INLET DEPTH 3' MAX. BOT DEPTH 8' EFFECTIVE S/W 3'-8'



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

May 6, 2011

To: Bruce Burton, LDE, Inc.
bburton@ldeinc.net

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A non-permitted conduit to convey wastewater discharge from a structure described by the owner as a "clubhouse" has been joined to the residence SHC. The location of this connection is required on the subsequent Percolation Certification Plan, and an inspection of the pipe connections at the structure and at the SHC may be required.

Bricker, Robert

From: Bricker, Robert
Sent: Friday, June 03, 2011 12:30 PM
To: 'Bruce D. Burton'
Subject: Muth perc cert

Bruce,

These items are indentified as required edits or additions on the submitted perc cert.

1. On Sheet 1 the existing septic reserve had not been shown with the area to be added for the clubhouse use.
2. On Sheet 1 add a note astating that use of the well is shared among the primary residence and the clubhouse.
3. On Sheet 3 (and on Sheet 1) show a 'buffer' 5 ft- to- 10 ft width, between the septic reserve areas for the primary residence and the clubhouse.

Robert Bricker, REHS/RS



APPLICATION

FOR PERCOLATION TESTING AND SITE EVALUATION

TEST DATE(S) _____ TEST TIME _____ AP 5 34508

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 5

- 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) MUTH FAMILY LLC / PHIL MUTH, MANAGING MEMBER

DAYTIME PHONE 301.854.8901 CELL 443.463.8901 FAX -

MAILING ADDRESS 13825 HOWARD ROAD DAYTON MD 21036
STREET CITY/TOWN STATE ZIP

APPLICANT LDE, INC. d/b/a BRUCE BURTON, VP

DAYTIME PHONE 410.795.6391 CELL 410.274.6568 FAX 410.795.9540

MAILING ADDRESS _____
STREET CITY/TOWN STATE ZIP

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

PROPERTY LOCATION
SUBDIVISION/PROPERTY NAME THE OAKS AT BRIDLE CREEK LOT NO. PARCEL 'A'

PROPERTY ADDRESS 13825 HOWARD ROAD DAYTON, MD 21036
STREET TOWN/POST OFFICE

TAX MAP PAGE(S) 26 GRID 7 PARCEL(S) 13 PROPOSED LOT SIZE 50 AC.

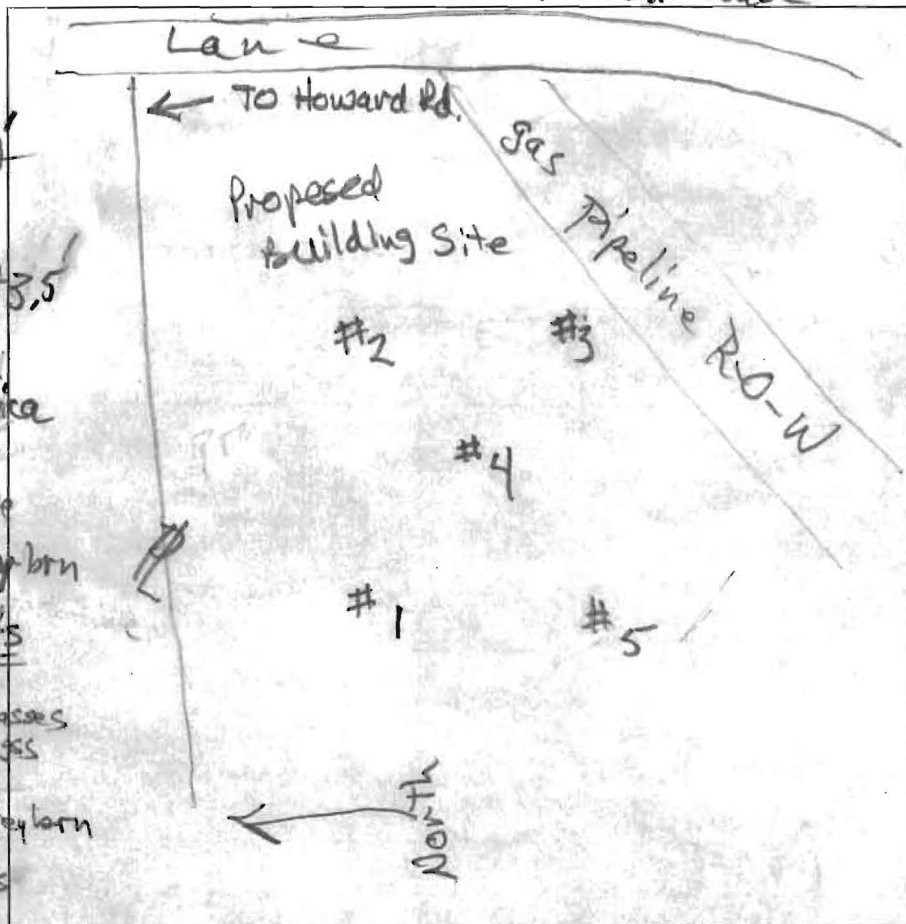
AS APPLICANT, I UNDERSTAND THE FOLLOWING: THE SYSTEM INSTALLED SUBSEQUENT TO THIS APPLICATION IS ACCEPTABLE ONLY UNTIL PUBLIC SEWERAGE IS AVAILABLE. THIS APPLICATION IS COMPLETE WHEN ALL APPLICABLE FEES AND A SUITABLE SITE PLAN HAVE BEEN RECEIVED. I ACCEPT THE RESPONSIBILITY FOR COMPLIANCE WITH ALL M.O.S.H.A. AND "MISS UTILITY" REQUIREMENTS. APPROVAL IS BASED UPON SATISFACTORY REVIEW OF A PERC CERTIFICATION PLAN.

TEST RESULTS WILL BE MAILED TO APPLICANT. BRUCE D. BURTON
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

Tenant House

AP



#3
 dk brn loam
 3.5' 2' usbk
 yel-red scl many fine mica
 3.5' yel & red sl Saprolite
 5' many fine mica
 5' Variegated ls saprolite
 7' yel-brn-lt grey brn
 7' variegated ls
 30% fcp
 yel-brn & lt grey brn common Mn soft masses & coatings
 9' yel-brn & lt grey brn lfs 10% channers & f lgs 30% fcp
 12.5'
#1 & #4
 dk brn loam
 0.5' yel-red scl
 to yel-red loam, common mica
 3.5'
 4.5' yel & red heavy f lgs
 yel & red sl many fine mica
 7' red lfs
 many fine mica
 12'

#2
 dk brn loam
 0.7' brn cl 2 usbk common mica
 2.5' yel, red, brn & lt grey fsl many fine mica
 7' brn, red, yel & lt grey brn lfs common fine mica
 common medium & fine Mn soft masses
 9' Mn coatings
 11' platy lfs
 12'
#5
 0.7' dk brn loam
 yel-red scl many fine mica
 2.7' yel & red sl many fine mica
 7' brn & yel-brn ch lfs platy 5% mica schist stones
 10' Mn coatings on channers
 12' ↓ 12'

| DATE | TEST # | DEPTH | START | BREAK 1" DROP | STOP 2" DROP | TIME OF 2ND INCH | P/F/H |
|---------|--------|--------------|---------|------------------------------|--------------|------------------|-------|
| 4/27/11 | #1 | 5' 1/2' | 1:01 | 1:04 | 1:09 | 5 | P |
| 4/27/11 | #5 | 5' 1/2' | 1:06 | 1:08 | 1:10:30 | 2.5 | P |
| 4/27/11 | #3 | 5.7' / 12.5' | 1:13:30 | 1:22 | 1:35 | 13 | P |
| 4/27/11 | #2 | 4.8' / 12' | 1:18 | 1:19:30 | 1:22 | 2.5 | P |
| 4/27/11 | #4 | 12' | Visual | sidewall bk, 1.2' 3' / 4' 8' | | | P |
| | | | | | | | |
| | | | | | | | |
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| | | | | | | | |

REMARKS: slower perc time of #3 appears anomalous
 SANITARIAN: RB BACKHOE: David OTHERS: Bruce Burton
 TEST HOLES USED IN SDA: all AVG. PERC TIME: ~5 SQ. FT/BR: 125
 TRENCH WIDTH: 2' INLET DEPTH: 3' MAX. BOT DEPTH: 8' EFFECTIVE SW: 3'-8'



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

August 16, 2011

To: Bruce Burton, LDE, Inc.
bburton@ldeinc.net

RE: **Perc Cert Comment, Tax Map 28, Parcel 13, Parcel 'A'; A534508**

For further consideration by the Approving Authority, the referenced Percolation Certification Plan must be amended with the following corrections, deletions or additions.

1. Sheet 1, LEGEND:
 - a. Delete entry for 'well box', as there are no well boxes being proposed on Parcel 'A'.
 - b. Correct the symbol for "existing well".
 - c. Correct the symbol for "proposed tenant house".
 - d. Correct the symbol for "proposed primary well".
2. Sheet 1, tenant house location on plan: delete "well box" label.
3. Sheet 1, Note 4: suggest more clarity in wording, e.g., wells and septic systems within 100 feet of the proposed project area have been shown.
4. Sheet 1, Note 7: delete.
5. Sheet 2, LEGEND:
 - a. Add the term "-PASS" to 'percolation test location' entry.
 - b. Delete entry for 'well box'.
 - c. Delete entry for "existing well".
 - d. Correct the symbol for "proposed tenant house".
 - e. Correct the symbol for "proposed primary well".
6. Sheet 2, plan: Delete "well box" label.
7. Sheet 3, LEGEND:
 - a. Add the term "-PASS" to 'Percolation Test Location (5/2007)' entry.
 - b. Edit the "Water Test Location" as follows,

- i. Change initials in symbol from "W T" to 'F'
 - ii. Change entry to Percolation Test Location
 - iii. Add the term "-FAIL".
 - c. Add the term "-PASS" to 'Percolation Test Location (4/27/11)' entry.
 - d. Add an entry for "Percolation Test Location Not Completed", and utilize a symbol different than the other three perc test entries.
 - i. Apply this symbol to location labeled "Not Dug"
 - ii. Change the label to NOT COMPLETED (HIT WATER LINE)
 - e. Delete the entry for well box as these were approved as discrete proposed alternate well locations and existing well location.
 - f. Delete the entry for "proposed primary well".
8. Sheet 3, plan: Delete "ex well box" label and symbol (re: lines, triangle).

If you have any questions regarding these requirements for the Percolation Certification Plan, please contact me at the above address or by calling (410) 313-2691.

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

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

August 30, 2011

To: Bruce Burton, LDE, Inc.
bburton@ldeinc.net

RE: **Legend issues on Perc Cert. The Oaks at Bridle Creek Parcel 'A' Tenant House and Clubhouse; A534508**

Issues remain concerning the LEGEND on the referenced Percolation Certification Plan. The following corrections, additions, or deletions are needed.

SHEET 1

1. 'Proposed Sewage Disposal easement': a different symbol is used on the plan than in the legend; the symbol in the proposed area on the plan is oriented in a different direction.
2. 'Existing sewage disposal area': Make symbol in legend and on the plan to match accurately. (The symbol in the Legend appears to be dashed lines with periodic solid lines, whereas on the plan the lines are all dashed.)
3. 'Soil Divide': re-title as "Soil Survey Delineation".
4. 25-foot contour
 - a. appears to be presented as a solid line in the legend and as a dashed line on the plan.
 - b. confusing, probably unnecessary as the 10-foot contours are presented in conjunction with the required 2-foot contours.
5. "Existing 5' contours": Also confusing as the symbol is very similar to the required 2' contours presented on the plan. Probably not needed.
6. Existing 10' contour, add this as a LEGEND entry with the proper symbol.
7. Existing 2' contour, add this as a LEGEND entry with the proper symbol.
8. 'Existing well': an open circle is shown in the Legend, and on the plan the circle is filled in. Correct entry for accuracy and consistency.

SHEET 2

9. 'Proposed Sewage Disposal easement': two different symbols are used on the plan, and both differ from the example in the legend as the symbols in the proposed areas on the plan are oriented in a different direction.
10. 'Existing sewage disposal area': DELETE, none shown.

11. 'Soil Divide': re-title as "Soil Survey Delineation".
12. 'Existing 10' contour', correct the number in the Legend symbol.
13. 'Existing 2' contour', delete the number in the Legend symbol.
14. 'Building Restriction Line': correct the symbol in the Legend to more closely match the symbol on the plan.

SHEET 3

15. 'Existing sewage disposal area': the symbol in the legend is oriented in a different direction than the symbol on the plan in the existing area shown on the plan.
16. 'Soil Divide': re-title as "Soil Survey Delineation".
17. 'Existing 10' contour', correct the number in the Legend symbol.
18. 'Existing 2' contour', delete the number in the Legend symbol.
19. 'Existing well': maintain consistency with the symbols on SHEET 1.
20. 'Building Restriction Line': correct the symbol in the Legend to more closely match the symbol on the plan and label the delineation on the plan as 'BRL'.
21. SHEET 3 plan: eliminate (re: delete) the term 'existing' from label for dry well, leaving "dry well previously abandoned".

If you have any questions regarding these requirements for the Percolation Certification Plan, please contact me at the above address or by calling (410) 313-2691.

Respectfully,
Robert C. Bricker, CPSS, REHS/RS
Environmental Sanitarian Supervisor
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For further consideration by the Approving Authority, the referenced Percolation Certification Plan must be amended with the following corrections, deletions or additions.

1. Sheet 1, LEGEND:
 - a. Delete entry for 'well box', as there are no well boxes being proposed on Parcel 'A'.
 - b. Correct the symbol for "existing well".
 - c. Correct the symbol for "proposed tenant house".
 - d. Correct the symbol for "proposed primary well".
2. Sheet 1, tenant house location on plan: delete "well box" label.
3. Sheet 1, Note 4: suggest more clarity in wording, e.g., wells and septic systems within 100 feet of the proposed project area have been shown.
4. Sheet 1, Note 7: delete.
5. Sheet 2, LEGEND:
 - a. Add the term "-PASS" to 'percolation test location' entry.
 - b. Delete entry for 'well box'.
 - c. Delete entry for "existing well".
 - d. Correct the symbol for "proposed tenant house".
 - e. Correct the symbol for "proposed primary well".
6. Sheet 2, plan: Delete "well box" label.
7. Sheet 3, LEGEND:
 - a. Add the term "-PASS" to 'Percolation Test Location (5/2007)' entry.
 - b. Edit the "Water Test Location" as follows,

- i. Change initials in symbol from "W.T" to 'F'
 - ii. Change entry to Percolation Test Location
 - iii. Add the term "-FAIL".
 - c. Add the term "-PASS" to 'Percolation Test Location (4/27/11)' entry.
 - d. Add an entry for "Percolation Test Location Not Completed", and utilize a symbol different than the other three perc test entries.
 - i. Apply this symbol to location labeled "Not Dug"
 - ii. Change the label to NOT COMPLETED (HIT WATER LINE)
 - e. Delete the entry for well box as these were approved as discrete proposed alternate well locations and existing well location.
 - f. Delete the entry for "proposed primary well".
8. Sheet 3, plan: Delete "ex well box" label and symbol (re: lines, triangle).

If you have any questions regarding these requirements for the Percolation Certification Plan, please contact me at the above address or by calling (410) 313-2691.

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

Copy: File



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

July 1, 2011

To: Bruce Burton, LDE, Inc.
bburton@ldeinc.net

RE: Perc Cert Comment, Tax Map 28, Parcel 13, Parcel 'A'; A534508

For further consideration by the Approving Authority, the following plan amendment and two (2) notes must be added to the referenced Percolation Certification Plan:

1. Show the path of the waterline from the well line to the clubhouse.

PRIOR TO HEALTH DEPARTMENT APPROVAL OF A BUILDING PERMIT FOR A TENANT HOUSE, THE WELL LINE CONNECTION AT THE CLUBHOUSE FOUNDATION SLEEVE AND AT THE WHC, AND THE SEWER LINE CONNECTIONS AT THE CLUBHOUSE FOUNDATION AND AT THE CONNECTION WITH THE SHC, MUST ALL BE INSPECTED AND APPROVED BY AN ENVIRONMENTAL SANITARIAN. THE WELL LINE MUST BE 3 FEET DEEP, SLEEVED FOR AT LEAST 5 FEET FROM THE CLUBHOUSE FOUNDATION, AND SLEEVED A MINIMUM OF 10 FEET FROM CROSSING WITH THE SHC, IF IT IS NOT 1 FOOT OR MORE ABOVE THE SHC.

THE APPROVING AUTHORITY APPROVES SHARED USE FOR THE CLUBHOUSE AND THE PRIMARY RESIDENCE OF THE WELL AND THE EXISTING SEPTIC SYSTEM. THE PRIMARY RESIDENCE SEPTIC SYSTEM IS DESIGNED FOR 450 GALLONS PER DAY DISCHARGE. THE OWNER DESCRIBES THE USE OF THE CLUBHOUSE AS FOLEOWS: "...OPEN 7 DAYS A WEEK, WITH HUNTS SCHEDULED TWICE DAILY... THE NORMAL HUNTING PARTY AVERAGES 3-4 HUNTERS PER SESSION".

If you have any questions regarding these requirements for the Percolation Certification Plan, please contact me at the above address or by calling (410) 313-2691.

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

Copy: File



APPLICATION

FOR PERCOLATION TESTING AND SITE EVALUATION

TEST DATE(S) _____ TEST TIME _____

APP. 534508

AGENCY REVIEW: _____

DATE 3-17-11

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) MUTH FAMILY LLC / PHIL MUTH, MANAGING MEMBER

DAYTIME PHONE 301.854.8901 CELL 443.463.8901 FAX -

MAILING ADDRESS 13825 HOWARD ROAD DAYTON MD 21036
STREET CITY/TOWN STATE ZIP

APPLICANT LDE, INC. of BRUCE BURTON, VP

DAYTIME PHONE 410.795.6391 CELL 410.274.6568 FAX 410.795.9540

MAILING ADDRESS _____
STREET CITY/TOWN STATE ZIP

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

PROPERTY LOCATION
SUBDIVISION/PROPERTY NAME THE OAKS AT BRIDLE CREEK LOT NO. PARCEL 'A'

PROPERTY ADDRESS 13825 HOWARD ROAD DAYTON, MD 21036
STREET TOWN/POST OFFICE

TAX MAP PAGE(S) 26 GRID 7 PARCEL(S) 13 PROPOSED LOT SIZE 50 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.

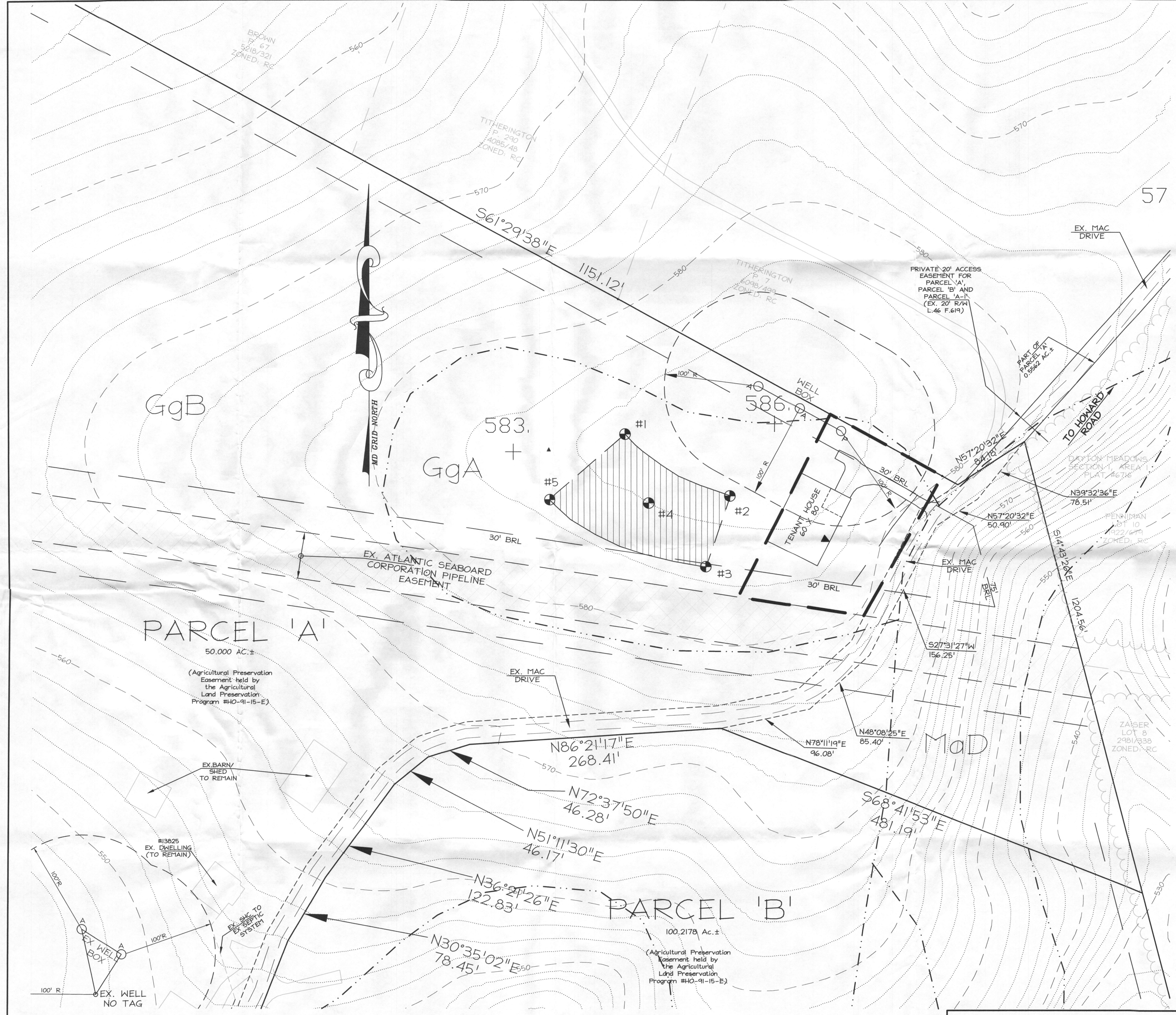
BRUCE D. BURTON
SIGNATURE OF APPLICANT

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

B825 Howard Road

FILE INQUIRY NOTES

| DATE | RESULTS OF REVIEW FOR FILE |
|--------|---|
| 4/5/11 | <p>Approx. 9:20 am. Arrived at site of perc test for Tenant House. Nobody at staked location so I called Engineer Bruce Burton, and owner Phil Muth. Mr. Muth said to come to "the clubhouse" while he and his helper prepared to bring an excavator to the proposed perc area. Michael Johnson, Trainee, went with me to 'clubhouse' which is next to Mr. Muth's residence. <small>a modified outbuilding</small></p> |
| | <p>At the 'clubhouse' plumbing has been installed for a toilet and for an area apparently used for food preparation. During course of ensuing conversation Mr. Muth reveals that the discharge from the clubhouse is joined to the discharge from his residence and that he had instructed a 'plumber' to do the work. I informed Mr. Muth that he had violated code as he needed to have a Minor Septic Repair permit for that type of work on the septic system. I also informed him that additional perc tests may be necessary to define a septic reserve for the 'clubhouse' or to expand the septic reserve which was recently approved to serve the 3-bedroom residence.</p> |
| | <p><small>2 within past 2-3 years</small></p> |



SOILS LEGEND

| SYMBOL | NAME | SLOPE CHARACTERISTICS |
|--------|---------------------------|-------------------------|
| GaC | Gaia Loam | 8 to 15 Percent Slopes |
| GgA | Glenelg Loam | 0 to 3 Percent Slopes |
| GgB | Glenelg Loam | 3 to 8 Percent Slopes |
| GmB | Glenville Silt Loam | 3 to 8 Percent Slopes |
| GnB | Glenville-Baile Silt Loam | 0 to 8 Percent Slopes |
| Mac | Manor Loam | 8 to 15 Percent Slopes |
| MaD | Manor Loam | 15 to 25 Percent Slopes |

NOTE: Soil types shown on this legend reflect mapping units taken from the Web Soil Survey, National Cooperative Soil Survey.

This area designates a private sewage easement of at least 10,000 square feet as required by the Maryland Department of the Environment for individual sewage disposal. Improvements of any nature in this area are restricted until public sewage is available. These easements shall become null and void upon connection to a public system. The County Health Officer shall have the authority to grant adjustments to the private sewage easement. Recordation of a modified sewage easement shall not be necessary.

LEGEND

| | |
|--|---|
| | PROPOSED SEWAGE DISPOSAL EASEMENT |
| | EXISTING SEWAGE DISPOSAL EASEMENT |
| | SOIL DIVIDE |
| | EXISTING 10' (INDEX) CONTOURS |
| | EXISTING 2' CONTOURS |
| | EXISTING TREELINE |
| | PROPOSED PERC TEST LOCATION |
| | WELL BOX FOR PROPOSED POTABLE WATER SOURCE |
| | EXISTING WELL |
| | PROPOSED TENANT HOUSE |
| | PROPOSED PRIMARY WELLS |
| | PROPOSED ALTERNATE WELLS |
| | BUILDING RESTRICTION LINE |
| | AREA APPROVED BY AGRICULTURAL LAND PRESERVATION PROGRAM FOR PROPOSED TENANT HOUSE |

PERC CERTIFICATION
 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 my knowledge and belief.

Bruce D. Burton, Professional Engineer Date
 MD Reg. NO. 19184

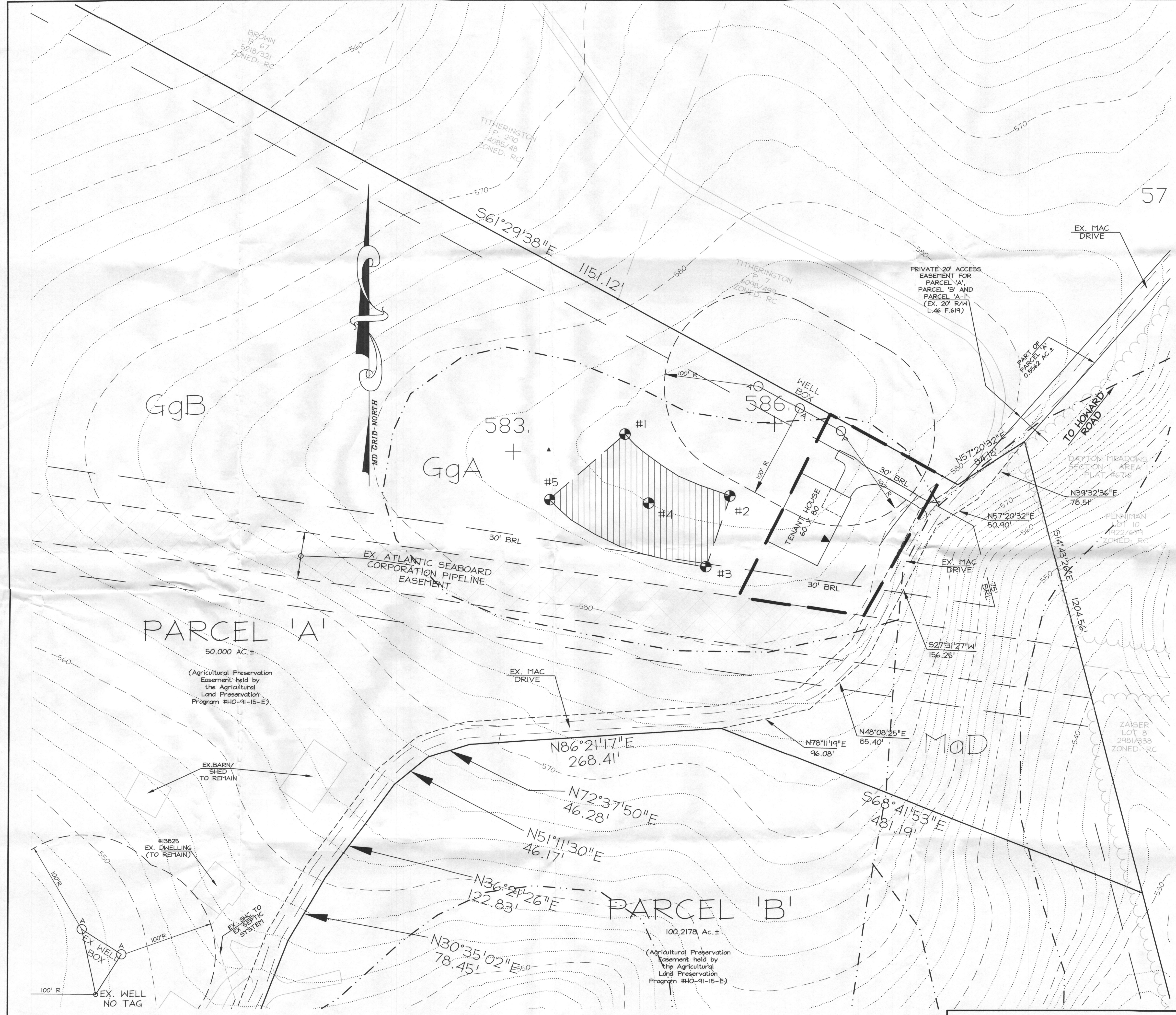
Approved: For Private Water and Private Sewerage
 Howard County Health Department
 Howard County Health Officer DATE

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. 19184, EXPIRATION DATE: 6/30/11.
 SIGNED BRUCE D. BURTON DATE

| LDE Inc. Engineers • Surveyors • Planners Historic Carriage House • 7520 Main Street • Suite 203 • Sykesville, Maryland • 21784 (410)795-6391 • (410)795-6392 • FAX(410)795-9540 • www.Landsurveyormd.com | | |
|---|--------|-------------------------------|
| DESIGNED | EDS | SCALE |
| DRAWN | EDS | 1" = 50' |
| CHECKED | BDB | DRAWING |
| DATE | 3/2011 | 2 OF 2 |
| DEVELOPER MUTH FAMILY, LLC 13825 Howard Road Dayton, MD 21036 410-531-7001 | | JOB NO. 10-013 FILE NO. |

100,2178 Ac. ±
 (Agricultural Preservation Easement held by the Agricultural Land Preservation Program #HO-91-15-E)

50,000 Ac. ±
 (Agricultural Preservation Easement held by the Agricultural Land Preservation Program #HO-91-15-E)



SOILS LEGEND

| SYMBOL | NAME | SLOPE CHARACTERISTICS |
|--------|---------------------------|-------------------------|
| GaC | Gaia Loam | 8 to 15 Percent Slopes |
| GgA | Glenelg Loam | 0 to 3 Percent Slopes |
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| GnB | Glenville-Baile Silt Loam | 0 to 8 Percent Slopes |
| Mac | Manor Loam | 8 to 15 Percent Slopes |
| MaD | Manor Loam | 15 to 25 Percent Slopes |

NOTE: Soil types shown on this legend reflect mapping units taken from the Web Soil Survey, National Cooperative Soil Survey.

This area designates a private sewage easement of at least 10,000 square feet as required by the Maryland Department of the Environment for individual sewage disposal. Improvements of any nature in this area are restricted until public sewage is available. These easements shall become null and void upon connection to a public system. The County Health Officer shall have the authority to grant adjustments to the private sewage easement. Recordation of a modified sewage easement shall not be necessary.

LEGEND

| | |
|--|---|
| | PROPOSED SEWAGE DISPOSAL EASEMENT |
| | EXISTING SEWAGE DISPOSAL EASEMENT |
| | SOIL DIVIDE |
| | EXISTING 10' (INDEX) CONTOURS |
| | EXISTING 2' CONTOURS |
| | EXISTING TREELINE |
| | PROPOSED PERC TEST LOCATION |
| | WELL BOX FOR PROPOSED POTABLE WATER SOURCE |
| | EXISTING WELL |
| | PROPOSED TENANT HOUSE |
| | PROPOSED PRIMARY WELLS |
| | PROPOSED ALTERNATE WELLS |
| | BUILDING RESTRICTION LINE |
| | AREA APPROVED BY AGRICULTURAL LAND PRESERVATION PROGRAM FOR PROPOSED TENANT HOUSE |

PERC CERTIFICATION
 I certify that the information shown herein is based on field work performed by me or under my direct supervision, and is correct, to the best of my knowledge and belief.

Bruce D. Burton, Professional Engineer Date
 MD Reg. NO. 19184

Approved: For Private Water and Private Sewerage
 Howard County Health Department

 Howard County Health Officer DATE

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. 19184, EXPIRATION DATE: 6/30/11.
 SIGNED _____ DATE _____
 BRUCE D. BURTON

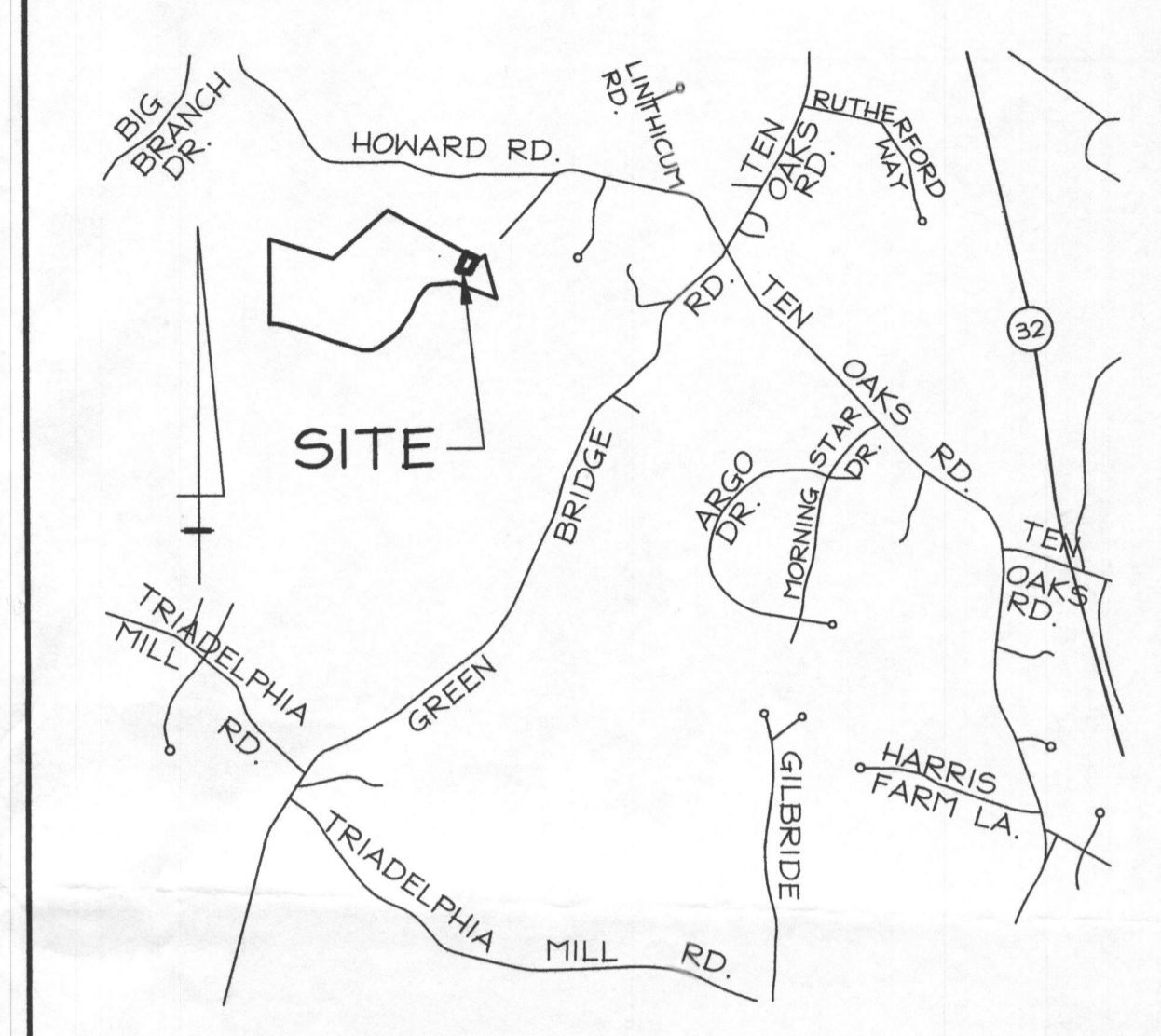
| LDE Inc. Engineers • Surveyors • Planners Historic Carriage House • 7520 Main Street • Suite 203 • Sykesville, Maryland • 21784 (410)795-6391 • (410)795-6392 • FAX(410)795-9540 • www.Landsurveyormd.com | | |
|---|--------|-------------------------------|
| DESIGNED | EDS | SCALE |
| DRAWN | EDS | 1" = 50' |
| CHECKED | BDB | DRAWING |
| DATE | 3/2011 | 2 OF 2 |
| DEVELOPER MUTH FAMILY, LLC 13825 Howard Road Dayton, MD 21036 410-531-7001 | | JOB NO. 10-013 FILE NO. |

100,2178 Ac. ±
 (Agricultural Preservation Easement held by the Agricultural Land Preservation Program #HO-91-15-E)

50,000 Ac. ±
 (Agricultural Preservation Easement held by the Agricultural Land Preservation Program #HO-91-15-E)

3/16/2011 4:29:09 PM
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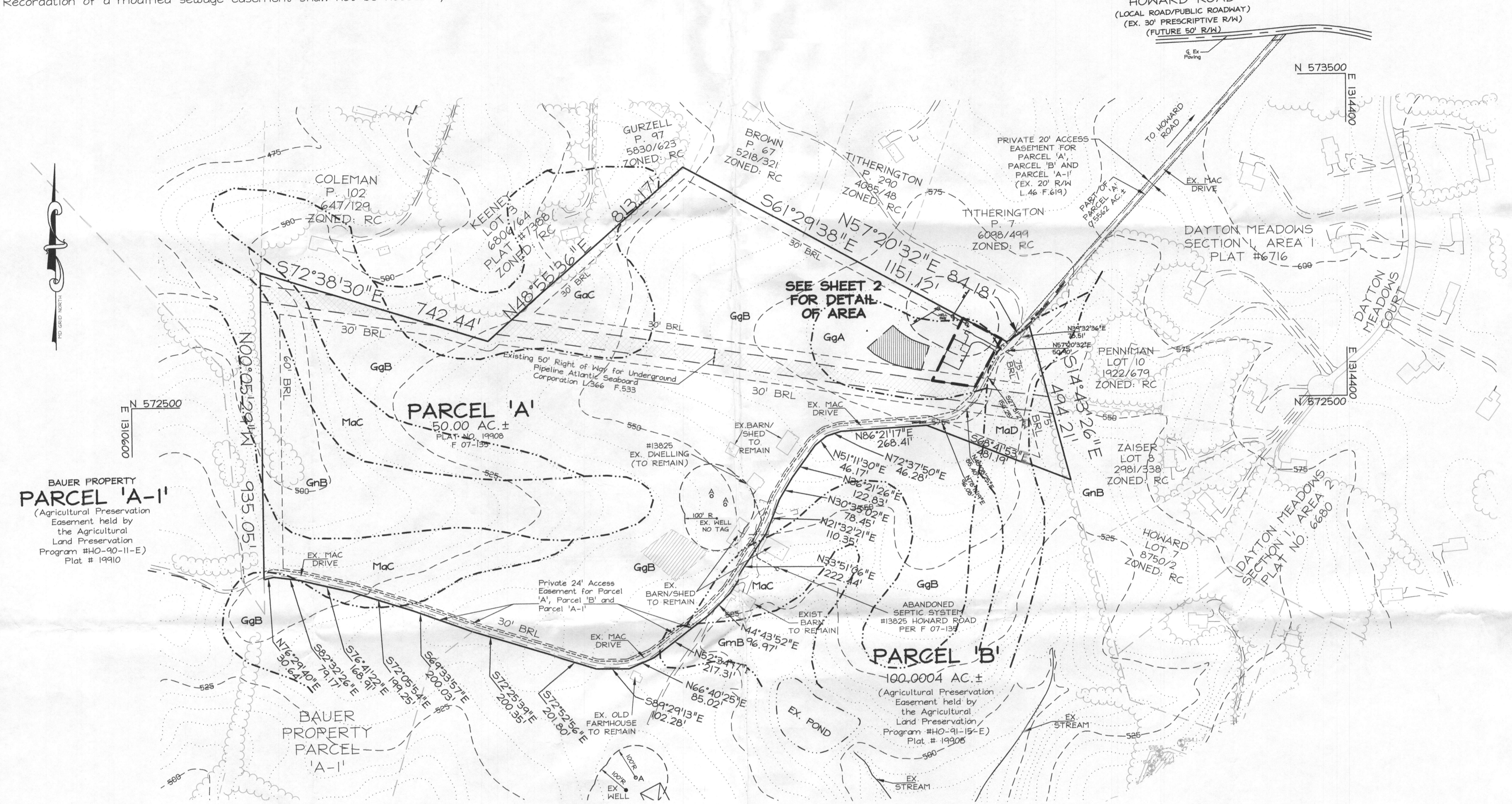
This area designates a private sewage easement of at least 10,000 square feet as required by the Maryland Department of the Environment for individual sewage disposal. Improvements of any nature in this area are restricted until public sewage is available. These easements shall become null and void upon connection to a public system. The County Health Officer shall have the authority to grant adjustments to the private sewage easement. Recordation of a modified sewage easement shall not be necessary.



VICINITY MAP
SCALE 1"=2000'

GENERAL NOTES

- Existing Zoning: RC-DEO Rural Conservation - Density Exchange Option
- Deed References: Muth Family LLC: Liber 11117 Folio 68 Plat Reference: Plat # 19908
- Total Area of Lots: 50.000 Acres.
- Existing well and septic areas have been shown within 100 feet of the proposed Lots which affect this proposal.
- The topography shown is taken from Howard County Aerial Topography and the areas within the sewage disposal easements have been field verified.
- Soils data shown based on the Web Soil Survey, National Cooperative Soil Survey.
- All wells shall be located a minimum of 15' from the road or use-in-common R/W # 30' from houses.
- The lot shown hereon complies with the minimum lot area and ownership width as required by the Maryland Department of the Environment.
- The well for the tenant house shall be drilled prior to approval of the Building Permit. It is the Developer's responsibility to schedule the well drilling prior to Building Permit submission. It will not be considered 'government delay' if the well drilling holds up the Health Department signature of the building permit.
- Any changes to a Private Sewage Easement shall require a Revised Percolation Certification Plan.
- The existing buildings and accessory structures located on Parcel 'A' will remain.
- Under F07-135; the existing septic system for the existing residence (#13825 Howard Road) was abandoned and a new system installed as required.



SEE SHEET 2 FOR DETAILS OF AREA

LEGEND

- PROPOSED SEWAGE DISPOSAL EASEMENT
- EXISTING SEWAGE DISPOSAL EASEMENT
- SOIL DIVIDE
- EXISTING 25' (INDEX) CONTOURS
- EXISTING 5' CONTOURS
- EXISTING TREELINE
- PROPOSED PERC TEST LOCATION
- WELL BOX FOR PROPOSED POTABLE WATER SOURCE
- EXISTING WELL
- PROPOSED TENANT HOUSE
- PROPOSED PRIMARY WELLS
- PROPOSED ALTERNATE WELLS
- BUILDING RESTRICTION LINE
- AREA APPROVED BY AGRICULTURAL LAND PRESERVATION PROGRAM FOR PROPOSED TENANT HOUSE

SOILS LEGEND

| SYMBOL | NAME | SLOPE CHARACTERISTICS |
|--------|---------------------------|-------------------------|
| GqC | Gailla Loam | 8 to 15 Percent Slopes |
| GqA | Glenelg Loam | 0 to 3 Percent Slopes |
| GqB | Glenelg Loam | 3 to 8 Percent Slopes |
| GmB | Glenville Silty Loam | 3 to 8 Percent Slopes |
| GnB | Glenville-Bite Silty Loam | 0 to 8 Percent Slopes |
| MaC | Manor Loam | 8 to 15 Percent Slopes |
| MaD | Manor Loam | 15 to 25 Percent Slopes |

NOTE: Soil types shown in this legend reflect mapping units taken from the Web Soil Survey, National Cooperative Soil Survey.

PERC CERTIFICATION

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 my knowledge and belief.

Bruce D. Burton, Professional Engineer Date
MD Reg. NO. 19184

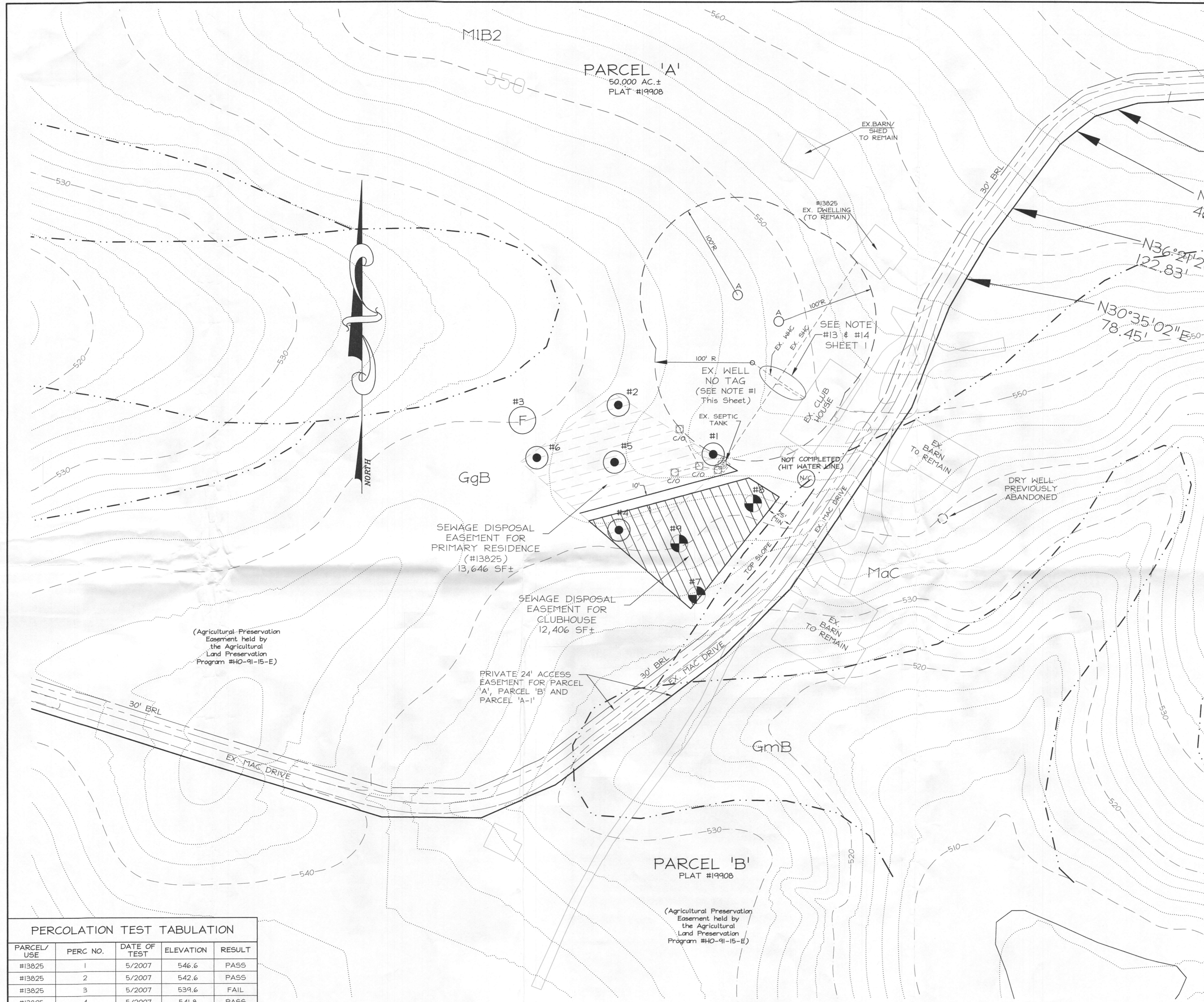
The purpose of this Percolation Application Plan is to provide an acceptable well & sewage disposal area location for a proposed tenant house as allowed in the location specified in the December 2010 approval by the Agricultural Land Preservation Program

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: 19184, EXPIRATION DATE: 6/30/11.

SIGNED BRUCE D. BURTON DATE

| No. | By | Date | Description |
|---|---|---|-------------|
| REVISIONS | | | |
| LDE Inc. Engineers • Surveyors • Planners Historic Carriage House • 7520 Main Street • Suite 203 • Sykesville, Maryland • 21784 (410)795-6391 • (410)795-6392 • FAX(410)795-9540 • www.Landsurveyormd.com | | | |
| DESIGNED | Percolation Application Plan | | SCALE |
| EDS | | | 1" = 200' |
| DRAWN | THE OAKS AT BRIDLE CREEK AGRICULTURAL LAND PRESERVATION # HO-91-15-E Parcel 'A' - Tenant House Tax Map 28 - Grid 7 - Parcel 13 5th Election District - Howard County, Maryland | | DRAWING |
| EDS | | | 1 OF 2 |
| CHECKED | | | JOB NO. |
| BDB | | | 10-013 |
| DATE | DEVELOPER | MUTH FAMILY, LLC 13825 Howard Road Dayton, MD 21036 410-531-7201 | FILE NO. |
| 3/2011 | | | |

Approved: For Private Water and Private Sewerage
Howard County Health Department
Howard County Health Officer DATE



SOILS LEGEND

| SYMBOL | NAME | SLOPE CHARACTERISTICS |
|--------|---------------------------|-------------------------|
| GgC | Galla Loam | 8 to 15 Percent Slopes |
| GgA | Glenelg Loam | 0 to 3 Percent Slopes |
| GgB | Glenelg Loam | 3 to 8 Percent Slopes |
| GmB | Glenville Silt Loam | 3 to 8 Percent Slopes |
| GmB | Glenville-Baile Silt Loam | 0 to 8 Percent Slopes |
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| MaD | Manor Loam | 15 to 25 Percent Slopes |

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LEGEND

| | |
|--|-------------------------------------|
| | PROPOSED SEWAGE DISPOSAL EASEMENT |
| | EXISTING SEWAGE DISPOSAL EASEMENT |
| | SOIL SURVEY DELINEATION |
| | EXISTING 10' (INDEX) CONTOURS |
| | EXISTING 2' CONTOURS |
| | EXISTING TREELINE |
| | PERC TEST LOCATION / PASS (5/2007) |
| | PERC TEST LOCATION / FAIL (5/2007) |
| | PERC TEST LOCATION / PASS (4/27/11) |
| | PERC TEST LOCATION / NOT COMPLETED |
| | EXISTING WELL |
| | PROPOSED ALTERNATE WELLS |
| | BUILDING RESTRICTION LINE |

NOTE
1. The use of the existing well is presently shared between the primary residence (#13825) and the clubhouse.

PERC CERTIFICATION
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 my knowledge and belief.

Bruce D. Burton 8/3/11
Bruce D. Burton, Professional Engineer 19184, Date MD Reg. NO. 19184

PERCOLATION TEST TABULATION

| PARCEL/USE | PERC NO. | DATE OF TEST | ELEVATION | RESULT |
|------------|----------|--------------|-----------|--------|
| #13825 | 1 | 5/2007 | 546.6 | PASS |
| #13825 | 2 | 5/2007 | 542.6 | PASS |
| #13825 | 3 | 5/2007 | 539.6 | FAIL |
| #13825 | 4 | 5/2007 | 541.8 | PASS |
| #13825 | 5 | 5/2007 | 543.8 | PASS |
| #13825 | 6 | 5/2007 | 541.5 | PASS |
| CLUBHOUSE | 7 | 4/27/2011 | 535.5 | PASS |
| CLUBHOUSE | 8 | 4/27/2011 | 541.5 | PASS |
| CLUBHOUSE | 9 | 4/27/2011 | 540.6 | PASS |

Approved: For Private Water and Private Sewerage
Howard County Health Department

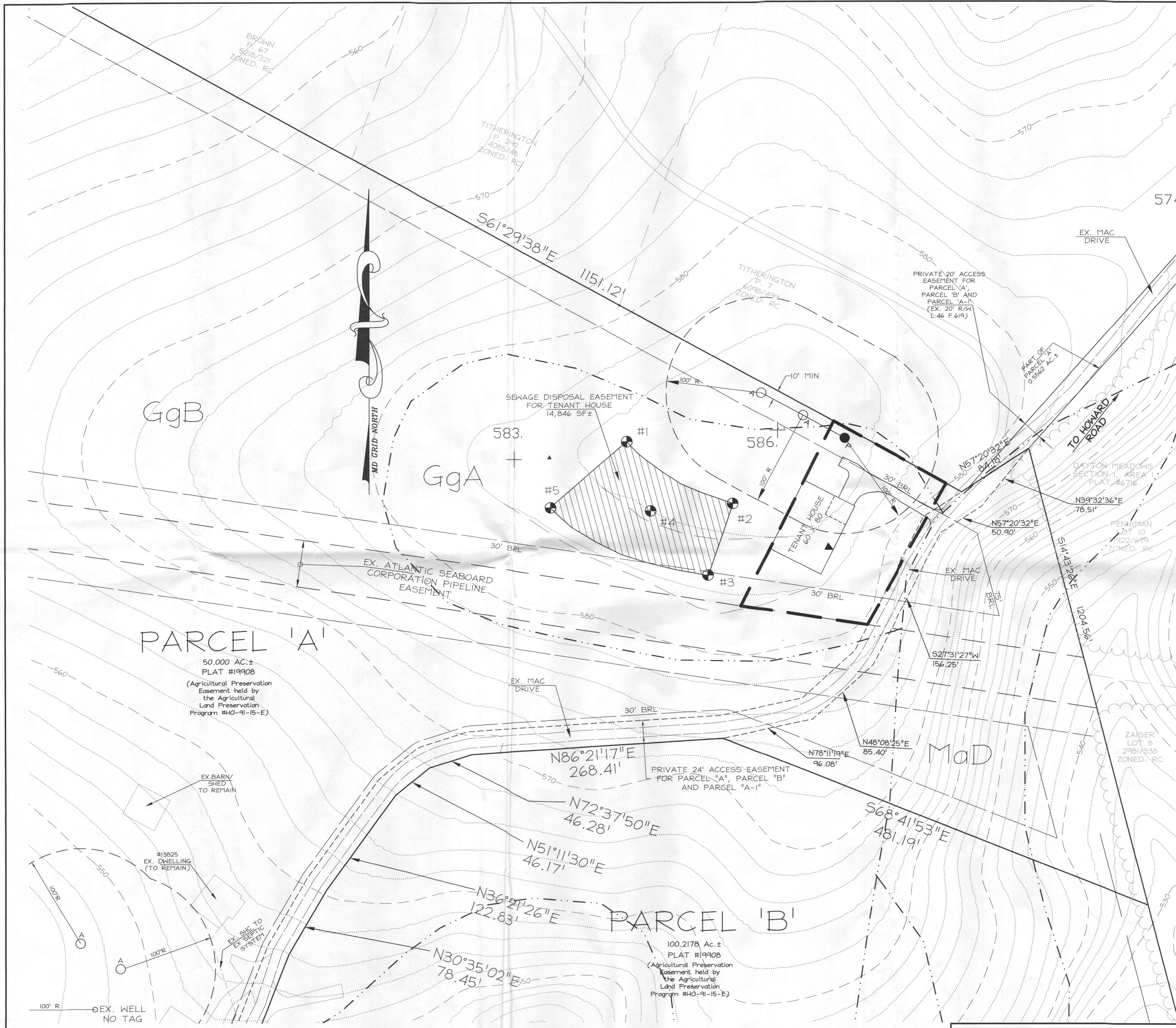
Bruce D. Burton 9/14/2011
Bruce D. Burton, Professional Engineer
Howard County Health Officer

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM AN ADMITTED LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 19184, EXPIRATION DATE: 6/30/13

SIGNED *Bruce D. Burton* 8/3/11
BRUCE D. BURTON

LDE Inc.
Engineers • Surveyors • Planners
Historic Carriage House • 7520 Main Street • Suite 203 • Sykesville, Maryland • 21784
(410)795-6391 • (410)795-6392 • FAX(410)795-9540 • www.Landsurveyormd.com

| | | |
|-----------------|---|---------------------|
| DESIGNED EDS | Percolation Certification Plan A534508 | SCALE 1" = 50' |
| DRAWN EDS | THE OAKS AT BRIDLE CREEK AGRICULTURAL LAND PRESERVATION # HO-91-15-E Parcel 'A' - Clubhouse | DRAWING 3 OF 3 |
| CHECKED BDB | Tax Map 28 - Grid 7 - Parcel 13 5th Election District - Howard County, Maryland | JOB NO. 10-013.1 |
| DATE 8/2011 | DEVELOPER MUTH FAMILY, LLC 15825 Howard Road Dayton, MD 21036 410-531-7001 | FILE NO. |



SOILS LEGEND

| SYMBOL | NAME | SLOPE CHARACTERISTICS |
|--------|---------------------------|-------------------------|
| GaC | Gailla Loom | 8 to 15 Percent Slopes |
| GgA | Glenelig Loom | 0 to 3 Percent Slopes |
| GgB | Glenelig Loom | 3 to 8 Percent Slopes |
| GmB | Glenville Silt Loom | 3 to 8 Percent Slopes |
| GrB | Glenville-Baile Silt Loom | 0 to 8 Percent Slopes |
| MaC | Manor Loom | 8 to 15 Percent Slopes |
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LEGEND

| | |
|--|---|
| | PROPOSED SEWAGE DISPOSAL EASEMENT |
| | SOIL SURVEY DELINEATION |
| | EXISTING 10' (INDEX) CONTOURS |
| | EXISTING 2' CONTOURS |
| | EXISTING TREELINE |
| | PERC TEST LOCATION / PASS (4/27/2011) |
| | PROPOSED TENANT HOUSE |
| | PROPOSED PRIMARY WELL |
| | PROPOSED ALTERNATE WELLS |
| | BUILDING RESTRICTION LINE |
| | AREA APPROVED BY AGRICULTURAL LAND PRESERVATION PROGRAM FOR PROPOSED TENANT HOUSE |
| | EXISTING WELL |

PERCOLATION TEST TABULATION

| PARCEL/USE | PERC NO. | DATE OF TEST | ELEVATION | RESULT |
|--------------|----------|--------------|-----------|--------|
| TENANT HOUSE | 1 | 4/2011 | 584.29 | PASS |
| TENANT HOUSE | 2 | 4/2011 | 585.31 | PASS |
| TENANT HOUSE | 3 | 4/2011 | 583.72 | PASS |
| TENANT HOUSE | 4 | 4/2011 | 584.72 | PASS |
| TENANT HOUSE | 5 | 4/2011 | 583.76 | PASS |

PERC CERTIFICATION
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 my knowledge and belief.

Bruce D. Burton
Bruce D. Burton, Professional Engineer
MD Reg. NO. 19184
Date: 8/31/11


LDE Inc.
Engineers • Surveyors • Planners
Historic Carriage House • 7520 Main Street • Suite 203 • Sykesville, Maryland • 21784
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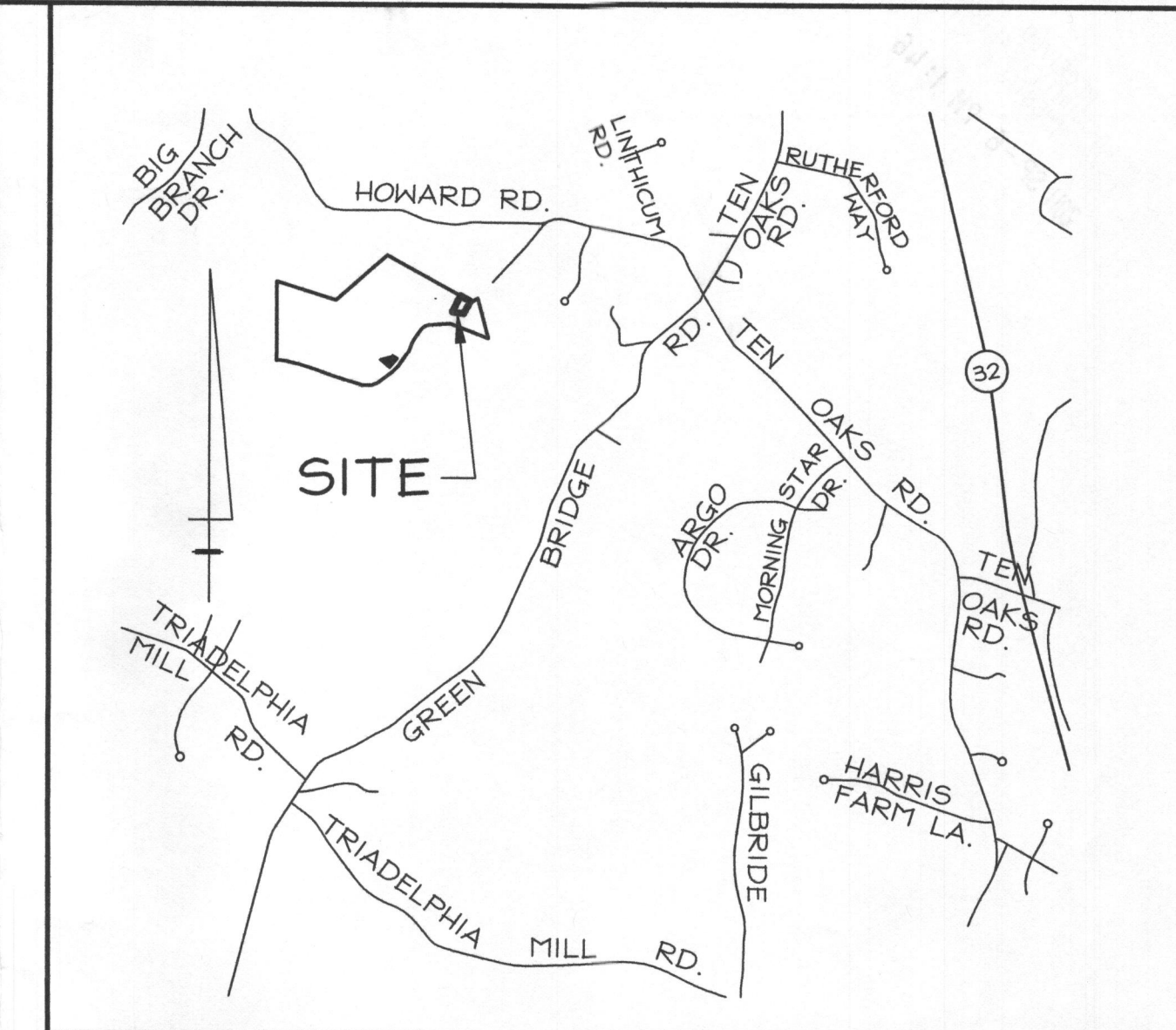
| | | | |
|----------|--|-----------|---|
| DESIGNED | Percolation Certification Plan A534508 | SCALE | 1" = 50' |
| DRAWN | THE OAKS AT BRIDLE CREEK AGRICULTURAL LAND PRESERVATION # HO-91-15-E Parcel 'A' - Tenant House | DRAWING | 2 OF 3 |
| CHECKED | Tax Map 28 - Grid 7 - Parcel 13 5th Election District - Howard County, Maryland | JOB NO. | 10-013 |
| BDD | Previous Submittals: WP06-004, F06-014, F07-134, WP08-010, F07-135 | FILE NO. | |
| DATE | 8/2011 | DEVELOPER | MUTH FAMILY, LLC 18825 Howard Road Dayton, MD 21026 410-531-7001 |

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 19184, EXPIRATION DATE: 6/30/13.

SIGNED *Bruce D. Burton*
BRUCE D. BURTON
8/31/11

Approved: For Private Water and Private Sewerage
Howard County Health Department
Peter Bealerman
Peter Bealerman
9/14/2011
DATE

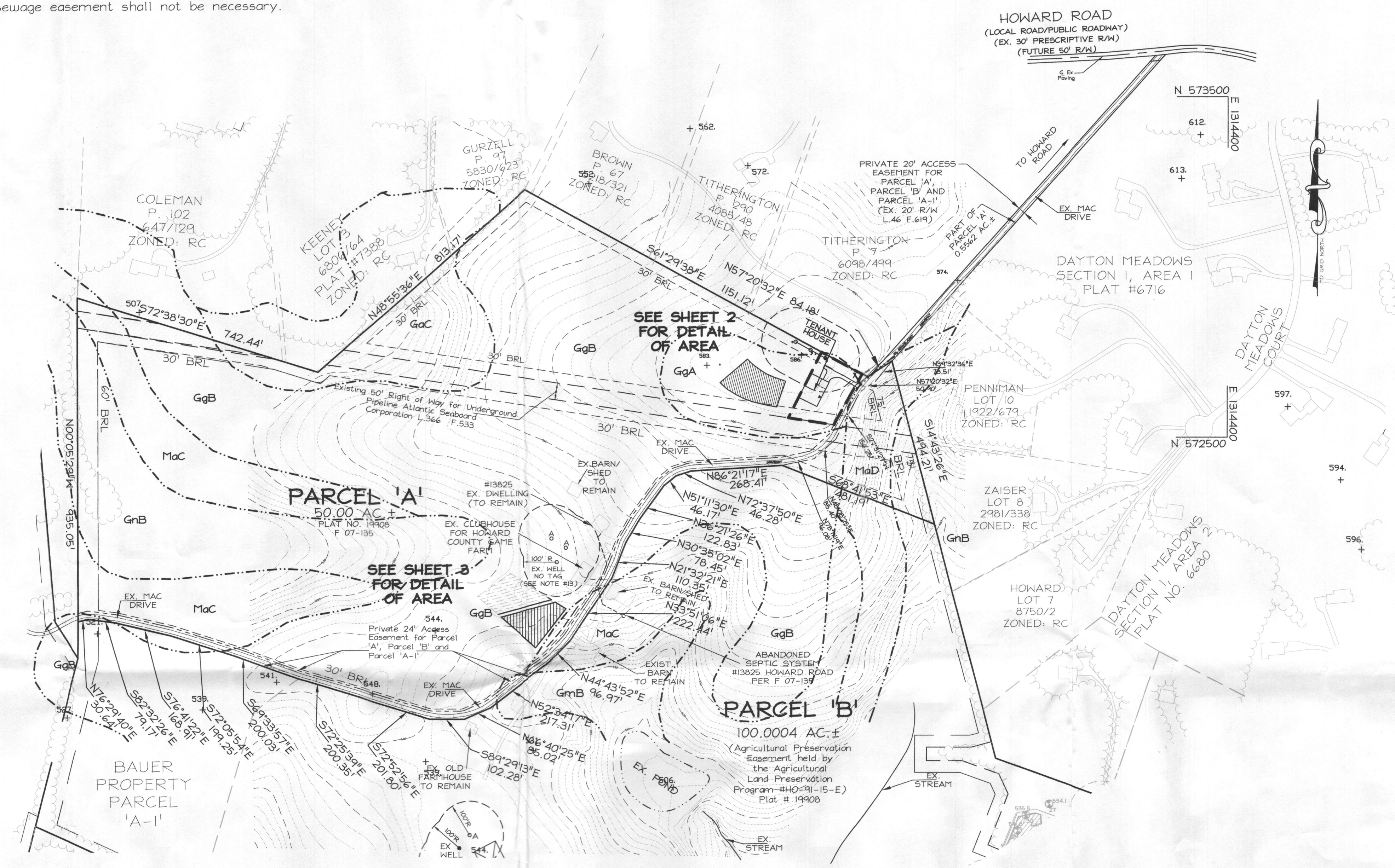
 This area designates a private sewage easement of at least 10,000 square feet as required by the Maryland Department of the Environment for individual sewage disposal. Improvements of any nature in this area are restricted until public sewage is available. These easements shall become null and void upon connection to a public system. The County Health Officer shall have the authority to grant adjustments to the private sewage easement. Recordation of a modified sewage easement shall not be necessary.



VICINITY MAP
SCALE 1"=2000'


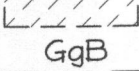
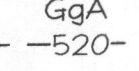
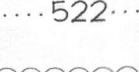

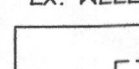
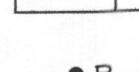

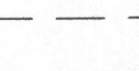



GENERAL NOTES

- Existing Zoning: RC-DEO Rural Conservation - Density Exchange Option
- Deed References: Muth Family LLC: Liber III17 Folio 68
Plat Reference: Plat # 19908
- Total Area of Lots: 50.000 Acres.
- Existing well and septic systems within 100 feet of the proposed project have been shown.
- The topography shown is taken from Howard County Aerial Topography and the areas within the sewage disposal easements have been field verified.
- Soils data shown based on the Web Soil Survey, National Cooperative Soil Survey.
- The lot shown hereon complies with the minimum lot area and ownership width as required by the Maryland Department of the Environment.
- The well for the tenant house shall be drilled prior to approval of the Building Permit. It is the Developer's responsibility to schedule the well drilling prior to Building Permit submission. It will not be considered 'government delay' if the well drilling holds up the Health Department signature of the building permit.
- Any changes to a Private Sewage Easement shall require a Revised Percolation Certification Plan.
- The existing buildings and accessory structures located on Parcel 'A' will remain.
- Under F07-135; the existing septic system for the existing residence (#13825 Howard Road) was abandoned and a new system installed as required.
- The use of the existing well is presently shared between the primary residence (#13825) and the clubhouse.
- Prior to Health Department approval of a building permit for a tenant house, the well line connection at the clubhouse foundation sleeve and at the WHC, and the sewer line connections at the clubhouse foundation and at the connection with the SHC, must all be inspected and approved by an Environmental Sanitarian. The well line must be 3 feet deep, sleeved for at least 5 feet from the clubhouse foundation, and sleeved a minimum of 10 feet from crossing with the SHC, if it is not 1 foot or more above the SHC.
- The Approving Authority approves shared use for the clubhouse and the primary residence of the well and the existing septic system. The primary residence septic system is designed for 450 gallons per day discharge. The owner describes the use of the clubhouse as follows: "open 7 days a week, with hunts scheduled twice daily...The normal hunting party averages 3-4 hunters per session."



BAUER PROPERTY
 (Agricultural Preservation Easement held by the Agricultural Land Preservation Program #HO-90-11-E) Plat # 19910

LEGEND

-  PROPOSED SEWAGE DISPOSAL EASEMENT
-  EXISTING SEWAGE DISPOSAL EASEMENT
-  SOIL SURVEY DELINEATION
-  EXISTING 10' (INDEX) CONTOURS
-  EXISTING 2' CONTOURS
-  EXISTING TREELINE
-  EXISTING WELL
-  PROPOSED TENANT HOUSE
-  PROPOSED PRIMARY WELL
-  PROPOSED ALTERNATE WELLS
-  BUILDING RESTRICTION LINE
-  AREA APPROVED BY AGRICULTURAL LAND PRESERVATION PROGRAM FOR PROPOSED TENANT HOUSE

SOILS LEGEND

| SYMBOL | NAME | SLOPE CHARACTERISTICS |
|--------|---------------------------|-------------------------|
| GgA | Gaia Loom | 8 to 15 Percent Slopes |
| GgB | Glenelg Loom | 0 to 3 Percent Slopes |
| GmB | Glenville Silt Loom | 3 to 8 Percent Slopes |
| GnB | Glenville-Baile Silt Loom | 0 to 8 Percent Slopes |
| Mac | Manor Loom | 8 to 15 Percent Slopes |
| MaD | Manor Loom | 15 to 25 Percent Slopes |

NOTE: Soil types shown on this legend reflect mapping units taken from the Web Soil Survey, National Cooperative Soil Survey.

PERC CERTIFICATION

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 my knowledge and belief.

Bruce D. Burton, Professional Engineer
 MD Reg. NO. 19184
 Date: 8/3/11

The purpose of this Percolation Certification Plan is to provide an acceptable well & sewage disposal area location for a proposed tenant house as allowed in the location specified in the December 2010 approval by the Agricultural Land Preservation Program and provide an expansion of the previously approved sewage disposal area of #13825 Howard Road residence for the Howard County Game Farm Clubhouse.

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A QUALIFIED AND LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 19184, EXPIRATION DATE: 6/30/13
 SIGNED: Bruce D. Burton, Professional Engineer
 Date: 8/3/11

Approved: For Private Water and Private Sewerage
 Howard County Health Department
 Bruce D. Burton for Peter Brilewson
 Howard County Health Officer
 Date: 9/14/2011

| No. | By | Date | Description |
|---|-----------|--|---|
| REVISIONS | | | |
| LDE Inc. Engineers • Surveyors • Planners Historic Carriage House • 7520 Main Street • Suite 203 • Sykesville, Maryland • 21784 (410)795-6391 • (410)795-6392 • FAX(410)795-9540 • www.Landsurveyormd.com | | | |
| DESIGNED | EDS | Percolation Certification Plan A534508 | |
| DRAWN | EDS | THE OAKS AT BRIDLE CREEK AGRICULTURAL LAND PRESERVATION # HO-91-15-E Parcel 'A' - Tenant House Tax Map 28 - Grid 7 - Parcel 13 5th Election District - Howard County, Maryland | |
| CHECKED | BDB | Previous Submittals: WP06-004, F06-014, F07-134, WP08-010, F07-135 | |
| DATE | 8/20/11 | DEVELOPER | MUTH FAMILY, LLC 13825 Howard Road Dayton, MD 21036 410-531-7001 |
| SCALE | 1" = 200' | | DRAWING |
| | | | 1 OF 3 |
| | | | JOB NO. |
| | | | 10-013 |
| | | | FILE NO. |