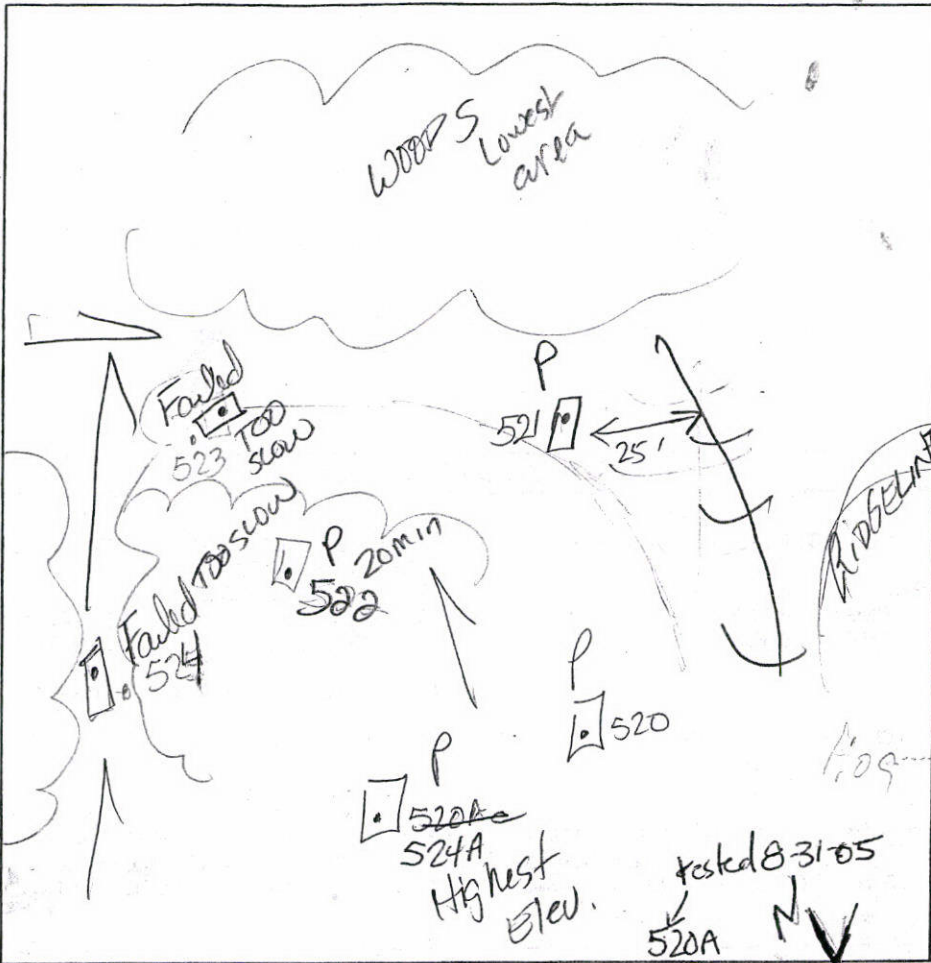


AVP
 522
 wkrd
 brn
 SCL
 2 1/2' ±
 wk rd
 brn
 hvy loam
 6'
 brn
 loam
 R_x
 ~10-15%
 Bottom

524/523
 strong org
 compact
 heavy
 loam
 6 1/2' ±
 2 pl
 strong org
 compact
 SL/L
 chert
 frags
 14' bottom
 11' bottom

520/520
 strong
 compact
 SCL
 4 1/2' L
 4 1/2'
 brn
 micac
 SAND
 R_x <10%
 Bottom
 10'



521
 str brn
 wk org
 brn
 micac
 CL
 1 pl
 5'
 lt brn
 micac
 SL
 saprolite
 ~20%
 sm frags
 11' Bottom

524A
 wk rd
 CL
 R_x ~10%
 5'
 SANDY
 Loam
 R_x ~15%
 11' Bottom

520A
 4 brn CL
 2'
 compact
 hvy L
 5'
 wkrd,
 brn L
 sg. c.w.
 trace R_x
 13' Bottom

DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2nd INCH	P/F/H
8-10-05	522	5 1/2' / 10'	?	1:05	1:25	20	P
	523	5'	1:03	1:12	Did not move off 2nd peg in 20 min		
	524	6' 3"	1:00	1:00	1:26 - STILL NOT TO 2nd peg		F
	520	5' / 10'	1:09	1:12	1:19	7 min	P
	521	too close to SW all moved stake			Mr. Webster & then dug		
DUG 25' off	521	5' 3"	12:14	12:18	12:24	6	P
swale	524A	5 1/2'	1:28	1:33	1:40	7	P
8-31	520A	6'	11:30	11:32	11:34	2+	P

REMARKS RAINING, Holes dug per plan except #521, 520A
 SANITARIAN Race BACKHOE M. Johnson OTHERS _____
 TEST HOLES USED IN SDA _____ AVG. PERC TIME _____ SQ. FT/BR _____
 TRENCH WIDTH 3 INLET DEPTH 4 MAX. BOT DEPTH 6 EFFECTIVE SW 2'

Oswald, Hank

From: Oswald, Hank
Sent: Wednesday, April 04, 2018 9:57 AM
To: 'Tony Fertitta'
Subject: Perc Cert_Westland Farm Estates Lot 8
Attachments: PERC CERT Memo To FCC_2018_.pdf

Hi Tony:

Attached, please find a memo regarding the revised perc cert for Westland Farm Estates, Lot 8

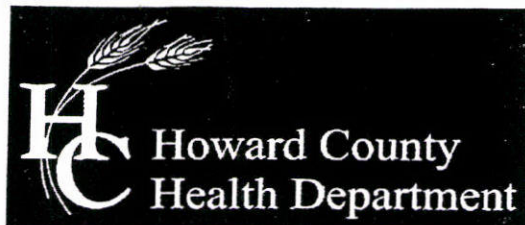
Thanks,

Hank

Hank Oswald
Licensed Environmental Health Specialist
Howard County Health Department
Bureau of Environmental Health
Well & Septic Program
8930 Stanford Boulevard
Columbia, MD 21045
410.313.1786 (Office)
hoswald@howardcountymd.gov

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Bureau of Environmental Health

8930 Stanford Boulevard, Columbia, MD 21045

Main: 410-313-2640 | Fax: 410-313-2648

TDD 410-313-2323 | Toll Free 1-866-313-6300

www.hchealth.org

Facebook: www.facebook.com/hocohealth

Twitter: HowardCoHealthDep

Maura J. Rossman, M.D., Health Officer

SEWAGE DISPOSAL SYSTEM SPECIFICATIONS WORKSHEET

Address: _____

Subdivision: Westland Farm Estates Lot: 8

Initial system: Application rate: 0.8 Effective area beginning depth: 5 Bottom maximum depth: 7

1st Replacement: Application rate: 0.8 Effective area beginning depth: 4 1/2 Bottom maximum depth: 6

2nd Replacement: Application rate: 0.8 Effective area beginning depth: 5 1/2 Bottom maximum depth: 6

Design Flow = 150 gallons per day per bedroom

Design flow ÷ application rate = square footage of drainfield required

Linear length of trench required = drainfield square footage x sidewall reduction percentage ÷ trench width

Sidewall reduction credit formula:

$$\frac{W + 2}{W + 1 + 2D} \times 100 = \text{Percent of length of standard trench where } W = \text{trench width and } D = \text{depth between effective area beginning depth and trench bottom.}$$

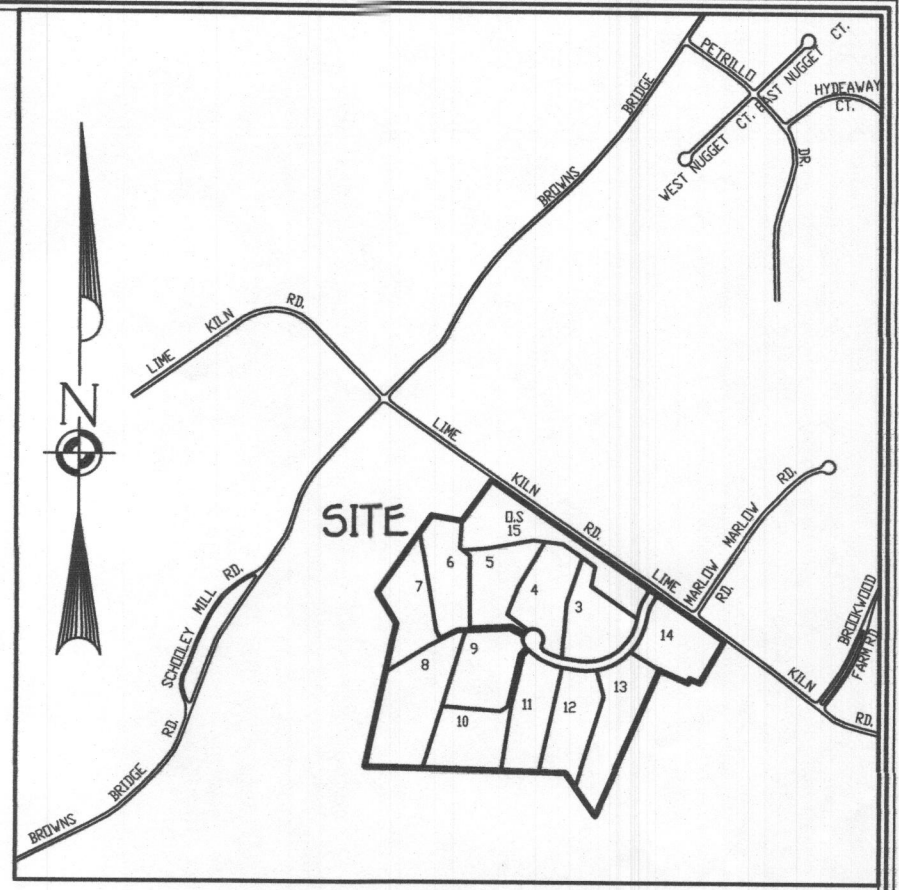
Standard design requirements:

- All trenches must be equal length unless low pressure dosed
- All trenches must be on contour
- Minimum trench spacing: 10' for all trenches utilizing sidewall reduction credit. Additional spacing may be necessary for any trench using over 3.5' of effective sidewall. In those cases, the spacing formula is $2D + W$ up to a maximum spacing of 18'.
- Minimum trench spacing for trenches with no sidewall credit (bottom area only) is 6' for a 2' wide trench and 9' for a 3' wide trench (spacing is measured edge to edge)
- Maximum trench length is 100'
- Maximum pipe depth is 4'

Additional requirements:

Approved: Hank Oswald Date: 5/18/15

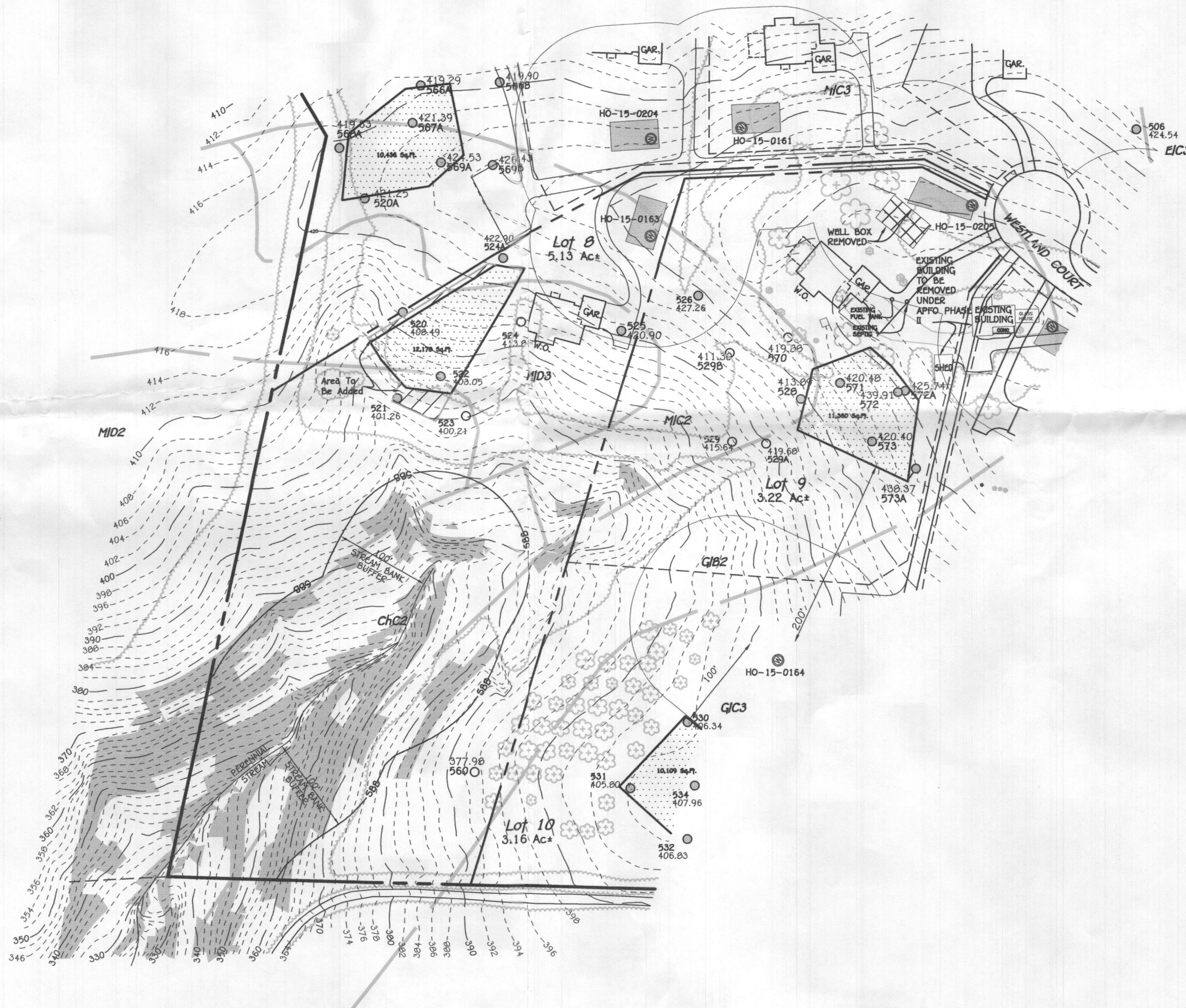
- LEGEND**
- EXISTING 2' CONTOURS
 - EXISTING 10' CONTOURS
 - EXISTING TREE LINE
 - SOIL LINES AND TYPES
 - ⊙ DENOTES EXISTING WELL
 - DENOTES FAILED PERC
 - DENOTES PASSED PERC
 - ⊠ DENOTES PROPOSED HOUSE
 - DENOTES 25% AND GREATER SLOPE
 - ⊙ DENOTES 1500 Sq.Ft. WELL RESERVE AREA



VICINITY MAP
SCALE : 1" = 1200'

SOILS LEGEND		
SOIL	NAME	CLASS
ChC2	Chester silt loam, 0 to 15 percent slopes, moderately eroded	B
ElC3	Elloak silty clay loam, 0 to 15 percent slopes, moderately eroded	B
GIB2	Glenelg loam, 3 to 0 percent slopes, moderately eroded	B
GIC3	Glenelg loam, 0 to 15 percent slopes, severely eroded	B
MIC2	Manor loam, 0 to 15 percent slopes, moderately eroded	B
MIC3	Manor loam, 0 to 15 percent slopes, severely eroded	B
MID2	Manor loam, 15 to 25 percent slopes, moderately eroded	B
MID3	Manor loam, 15 to 25 percent slopes, severely eroded	B

NON-BUILDABLE
AGRICULTURAL PARCEL 'A'
THOMPSON PROPERTY
Lot 1 and Non-Buildable Parcels A & B
PLAT NO. 13315



GENERAL NOTES:

1. THIS AREA DESIGNATES A PRIVATE SEWAGE AREA OF AT LEAST 10,000 SQUARE FEET AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THESE AREAS SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWAGE AREA. RECONSTRUCTION OF A MODIFIED SEWAGE AREA SHALL NOT BE NECESSARY.
2. THE LOT SHOWN HEREON COMPLIES WITH THE MINIMUM OWNERSHIP, WIDTH, AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
3. EXISTING WELLS, SEPTIC SYSTEMS, AND SEWAGE DISPOSAL AREAS WITHIN 100' OF THE PROPERTY AND THOSE WELLS WITHIN 200' DOWN GRADIENT OF EXISTING OR PROPOSED SEPTIC SYSTEMS OR SEWAGE DISPOSAL AREAS HAVE BEEN SHOWN.
4. TOPOGRAPHY SHOWN IS FROM HARFORD AERIAL ON OR ABOUT JANUARY, 2006 AND SUPPLEMENTED WITH FIELD RUN TOPOGRAPHY BY FISHER, COLLINS AND CARTER, INC. ON OR ABOUT APRIL, 2006 AND IS ACCURATE TO 1' VERTICALLY.
5. ANY CHANGES TO A PRIVATE SEWAGE AREA SHALL REQUIRE A REVISED PERC CERTIFICATION PLAN.
6. BOUNDARY SURVEY PREPARED BY FISHER, COLLINS & CARTER, INC. ON OR ABOUT OCTOBER 23, 1991.
7. PLAT REFERENCE 23985 THRU 23987
8. THE WELL HO-15-0163 HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN.
9. SEPTIC FIELD WILL NEED TO BE STAKED PRIOR TO INSTALL.

THE PURPOSE OF THIS REVISED PERC CERT IS TO
REVISED SEPTIC LOCATION ON LOT 8

PERC CERTIFICATION
I certify that the locations shown on field locations done under my direct supervision and are correct for professional knowledge and belief.
Signature of Professional Land Surveyor: *Terrell A. Fisher*
Terrell A. Fisher, Professional Land Surveyor, No. 10692 Expires 12/13/19
Date: 4/4/18

APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS,
HOWARD COUNTY HEALTH DEPARTMENT.
Signature of County Health Officer: *Maureen Rossman*
COUNTY HEALTH OFFICER
Date: 4/19/2018

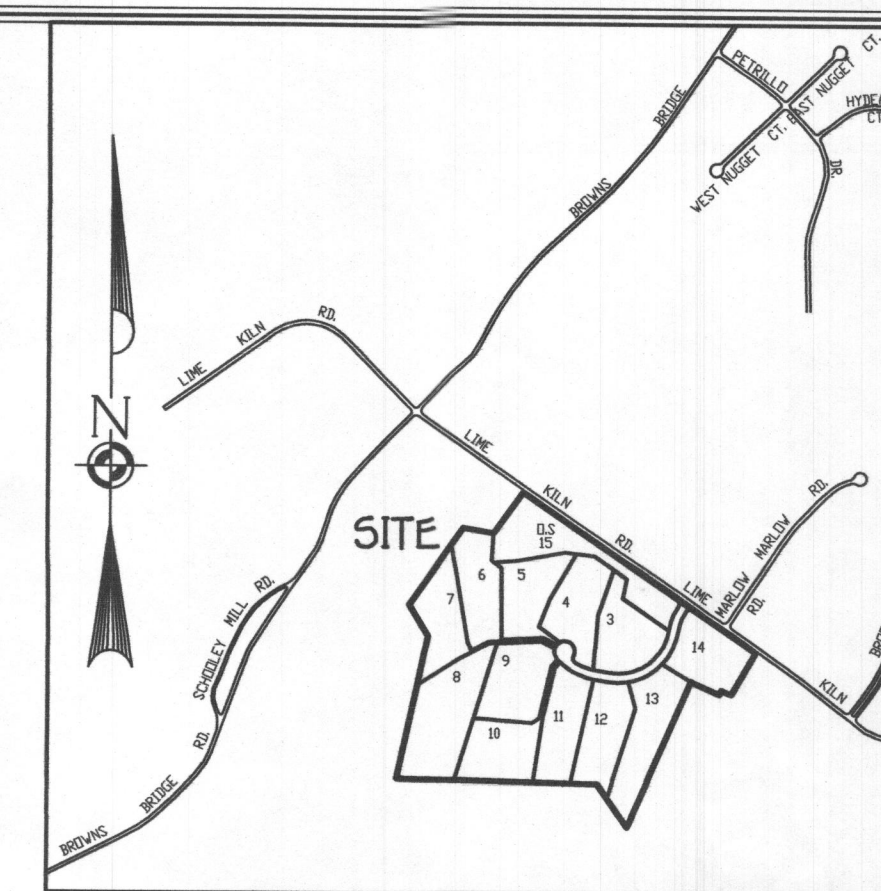
FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10276 BALTIMORE NATIONAL FIVE
ELLSWORTH CITY, MARYLAND 21042
(410) 861 - 2999

OWNER AND DEVELOPER
PERRY AND BARBARA WESTLAND
PO BOX 143
FULTON MD, 20759

AMENDED PERC CERTIFICATION PLAN
PROPERTY OF
WESTLAND FARM ESTATES
PHASE 2
LOT 8

TAX MAP #45 ZONED: RR-DEO PARCEL: 28
3RD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: 1" = 100' DATE: APRIL 4, 2017

----- EXISTING 2' CONTOURS
 ----- EXISTING 10' CONTOURS
 ~~~~~ EXISTING TREE LINE  
 [Pattern] SOIL LINES AND TYPES  
 (O) DENOTES EXISTING WELL  
 (X) DENOTES FAILED PERC  
 (O) DENOTES PASSED PERC  
 [X] DENOTES PROPOSED HOUSE  
 [Pattern] DENOTES 25% AND GREATER SLOPE  
 (O) DENOTES 1500 SQ.FT. WELL RESERVE AREA



VICINITY MAP  
SCALE : 1" = 1200'

| SOILS LEGEND |                                                                   |       |
|--------------|-------------------------------------------------------------------|-------|
| SOIL         | NAME                                                              | CLASS |
| ChC2         | Chester silt loam, 0 to 15 percent slopes, moderately eroded      | B     |
| ElC3         | Elloak silty clay loam, 0 to 15 percent slopes, moderately eroded | B     |
| GIB2         | Glenelg loam, 3 to 8 percent slopes, moderately eroded            | B     |
| GIC3         | Glenelg loam, 0 to 15 percent slopes, severely eroded             | B     |
| MIC2         | Manor loam, 0 to 15 percent slopes, moderately eroded             | B     |
| MIC3         | Manor loam, 0 to 15 percent slopes, severely eroded               | B     |
| MID2         | Manor loam, 15 to 25 percent slopes, moderately eroded            | B     |
| MID3         | Manor loam, 15 to 25 percent slopes, severely eroded              | B     |
|              |                                                                   |       |
|              |                                                                   |       |
|              |                                                                   |       |

☒ THIS STATE DESIGNATES A PRIVATE SEWAGE AREA OF AT LEAST 1000 SQ FEET AS REQUIRED BY THE MARLYND STATE DEPARTMENT OF THE ENVIRONMENT. INDIVIDUAL SEWAGE DISPOSAL IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THESE AREAS SHALL BECOME NULL AND VOID FROM CONSTRUCTION OF ANY SEWAGE TREATMENT SYSTEM. THE COUNTY HEALTH OFFICE SHALL HAVE THE AUTHORITY TO MAKE ADJUSTMENTS TO THE PRIVATE SEWAGE AREA.

2. SHALL NOT BE NECESSARY.

3. SHALL COMPLY WITH THE MINIMUM OUTFALLS, WIDTH, AND LOT AREA AS REQUIRED BY THE MARLYND STATE DEPARTMENT OF THE ENVIRONMENT.

4. EXISTING WELLS, SEPTIC TANKS, OR OTHER AREAS WITHIN 100' OF THE PROPERTY AND THOSE WELLS WITHIN 200' DOWN GRADIENT OF EXISTING OR PROPOSED SEPTIC SYSTEMS OR SEWAGE DISPOSAL AREAS HAVE BEEN SHOWN.

5. A SEPTIC FIELD SHOWN IS FROM HAZFORD AREA ON OR ABOUT JANUARY, 2006 AND SUPERIMPOSED WITH FIELD RUN TOPOGRAPHY BY FISHER, COLLINS AND CARTER, INC. ON OR ABOUT 2006 AND IS ACCURATE TO 1'.

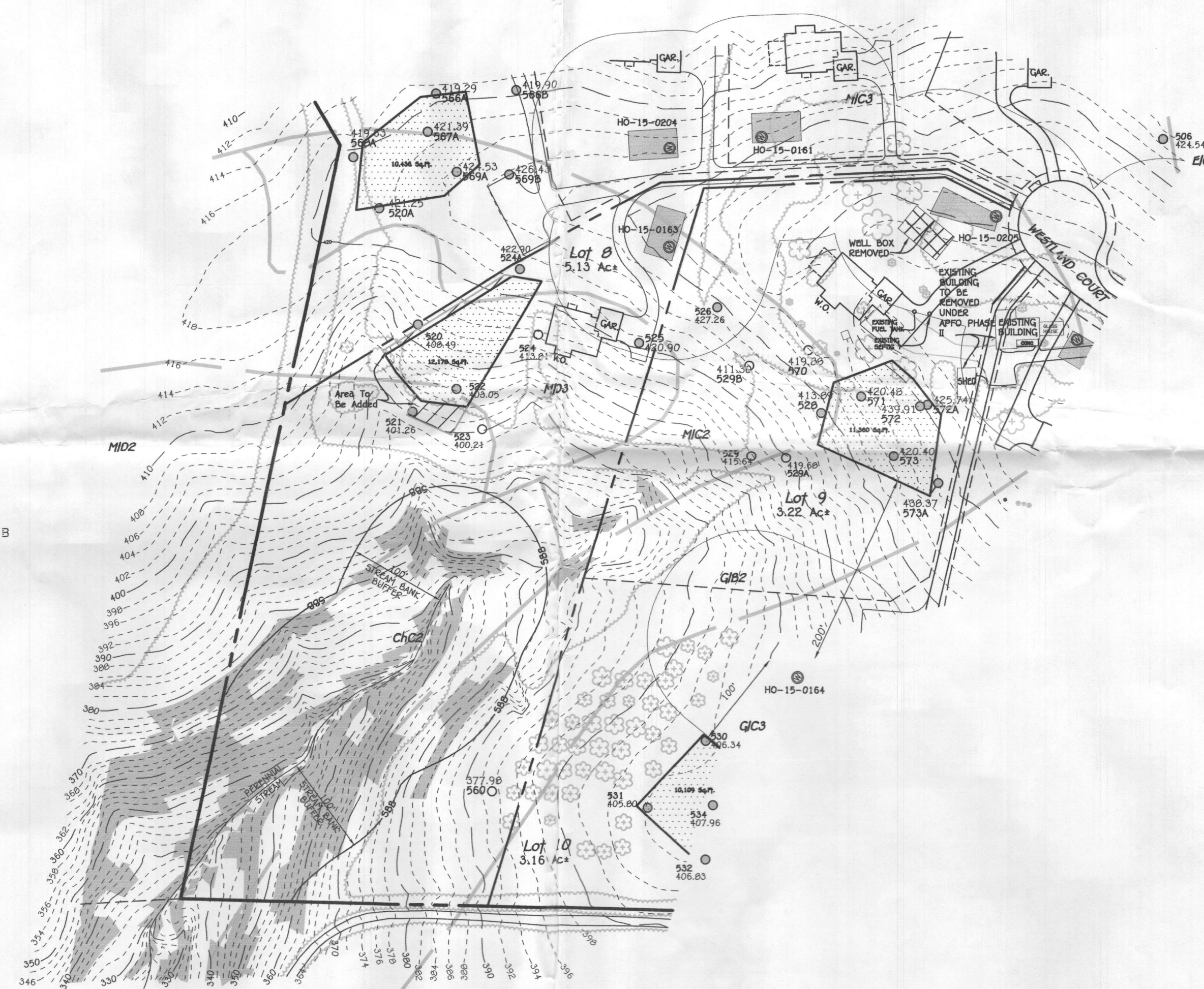
6. ANY CHANGES TO A PRIVATE SEWAGE AREA SHALL REQUIRE A REVISED PERC CERTIFICATION PLAN.

7. SEPTIC SURVEY PREPARED BY FISHER, COLLINS & CARTER, INC. ON OR ABOUT OCTOBER 23, 2009.

8. PLAN REFERENCE 2009-00000-000000

9. WELL 15-10-15-016 HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN.

10. SEPTIC FIELD WILL NEED TO BE STRIPPED



NON-BUILDABLE  
AGRICULTURAL PARCEL 'A'  
THOMPSON PROPERTY  
Lot 1 and Non-Buildable Parcels A & I  
PLAT NO. 13315

PROPERTY OF  
W.S.S.C.

THE PURPOSE OF THIS REVISED PERC CERT IS TO  
REVISED SEPTIC LOCATION ON LOT 8

PERC CERTIFICATION

I certify that the locations shown on this map are field locations done under my direct supervision and are consistent with my professional knowledge and belief.



Terrell A. Fisher 12/13/19

Signature of Professional Land Surveyor License No. 10692 Expires 12/13/19 Date

APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS,  
HOWARD COUNTY HEALTH DEPARTMENT.

*Ba Wilson for Maurea Rozman*  
COUNTY HEALTH OFFICER *u.o.*

*4/10/2018*  
DATE

PERRY AND BARBARA WESTLAND  
PO BOX 143  
FULTON MD, 20759

AMENDED PERC CERTIFICATION PLAN  
PROPERTY OF  
**WESTLAND FARM ESTATES**  
PHASE 2  
LOT 8

TAX MAP #45                      ZONED: RR-DEO                      PARCEL: 28  
3RD ELECTION DISTRICT                      HOWARD COUNTY, MARYLAND  
SCALE: 1"= 100'                      DATE: APRIL 4, 2017