

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

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

RECEIPT DATE: 7/18/17 **ONSITE SEWAGE DISPOSAL SYSTEM**

P PS16538

APPROVAL DATE: 8/18/17 **PERMIT: CONSTRUCTION**

A _____

PROPERTY ADDRESS: 5453 Harris Farm Lane

SUBDIVISION: Nichols Property PAR LOT: 5 TAX ID: 05-408555

CONTRACTOR: Farm and Home Excavating EMAIL: _____

CONTRACTOR ADDRESS: 901 Drive Rd, Marriottsville, MD 21104 PHONE: 410-984-0889

PROPERTY OWNER: Valerie Nichols EMAIL: B33nichols@gmail.com

OWNER ADDRESS: 7610 Oldfield Lane, Ellicott City, MD 21043 PHONE: 301-943-2803

SEPTIC TANK SIZE (GALLONS): 1500 TANK MANUFACTURER: MAYER BROTHERS, INC.

PUMP MODEL: N.A. PUMP SIZE N.A. PUMP TANK CAPACITY: N.A.

DISTRIBUTION SYSTEM: GRAVITY PRESSURE DOSED BEDROOMS: 4 APPLICATION RATE: 0.6

TRENCHES:	LINEAR FEET REQUIRED: <u>188</u>	INLET DEPTH: <u>4</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>8</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>5.5</u>
LOCATION:	PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND TANK LOCATIONS MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.	
NOTES:		

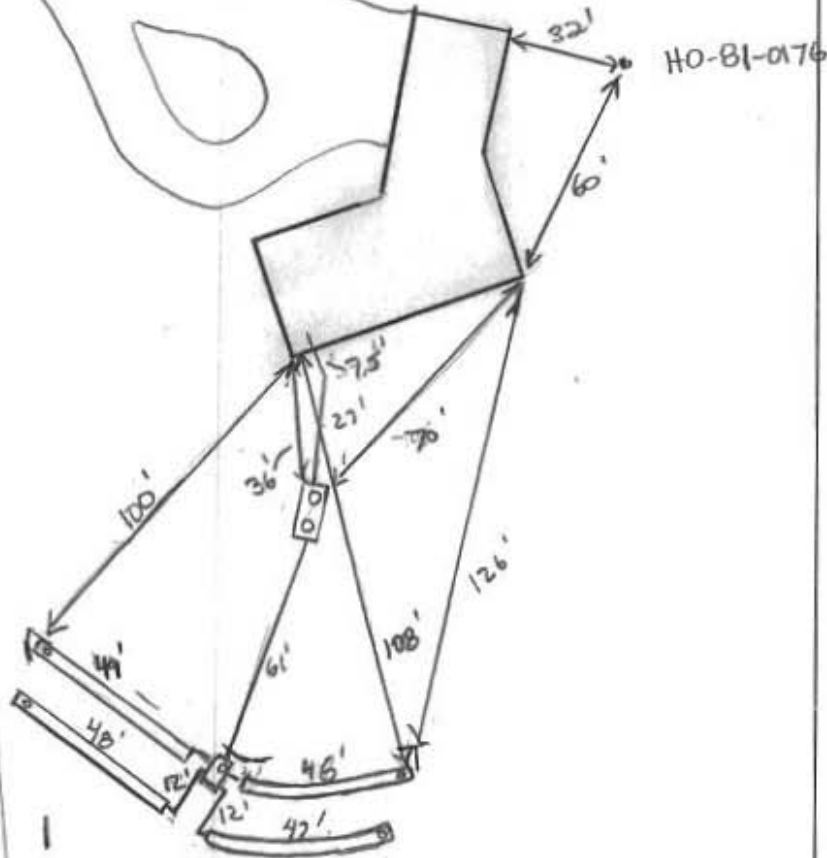
ISSUED BY: Robert Freemon ISSUE DATE: 7/18/17 EXPIRATION DATE: 7/18/18

- NOTE: CONTRACTOR MUST SCHEDULE A PRE-CONSTRUCTION INSPECTION PRIOR TO BEGINNING ANY INSTALLATION
- NOTE: CONTRACTOR MUST SCHEDULE AN INSPECTION AND GAIN APPROVAL OF ALL COMPONENTS PRIOR TO COVERING
- NOTE: STONE MUST BE APPROVED BY HEALTH DEPARTMENT AND GRAVEL TICKET MUST BE AVAILABLE FOR REVIEW.
- NOTE: WATERTIGHT TANKS REQUIRED
- NOTE: ALL PARTS OF SEPTIC SYSTEM SHALL BE AT LEAST 100 FEET DOWNGRAIENT FROM ANY WATER WELL
- NOTE: MANHOLE RISERS REQUIRED ON ALL SEPTIC TANKS AND PUMP CHAMBERS
- NOTE: AN ELECTRICAL PERMIT IS REQUIRED FOR INSTALLATION OF ANY ELECTRICAL COMPONENTS OF THE SYSTEM
 ELECTRICAL PERMIT ISSUED E N.A.
- NOTE: MDE RECOMMENDS SEPTIC TANKS, BAT, AND OTHER PRETREATMENT UNITS BE PUMPED AT A FREQUENCY ADEQUATE TO ENSURE THAT SOLIDS ARE NOT DISCHARGED TO THE DISPOSAL AREA

**NEITHER THE HOWARD COUNTY COUNCIL NOR THE HEALTH DEPARTMENT IS RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM.
PERMITTEE RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT.
CALL 410-313-1771 TO SCHEDULE INSPECTIONS.**

1" = 50'

NOT TO SCALE



TRENCH/DRAINFIELD DATA		
WIDTH	INLET	BOTTOM
3'	4'	8'
NUMBER OF TRENCHES	4	
TOTAL LENGTH	192'	
ABSORPTION AREA	576'± SW	
DISTRIBUTION BOX LEVEL	Level	
DISTRIBUTION BOX BAFFLE	Yes	
DISTRIBUTION BOX PORT	Yes	

SEPTIC TANK DATA	
SEPTIC TANK 1 LEVEL	Yes
MANUFACTURER	Babylon
CAPACITY	1500 GAL
SEAM LOC	TP
TANK LID DEPTH	2'
BAFFLES	Yes
BAFFLE FILTER	-
MANHOLE LOC	Front/Rear
6" PORT LOC	None
WATERTIGHT TEST	-
SLOTTED	Yes
DATE ON LID	7/9/17
PUMP/SEPTIC TANK LEVEL	
MANUFACTURER	
CAPACITY	
SEAM LOC	
TANK LID DEPTH	
BAFFLES	
BAFFLE FILTER	
MANHOLE LOC	
6" PORT LOC	
WATERTIGHT TEST	
SLOTTED	
DATE ON LID	

PRE-CONSTRUCTION:

7/21/17 Met Bill from Farm - Home on site for layout. Tank staked, SDA stakes present. D-box + trenches staked. Shot contour @ trench stakes + moved ends of T2 + T4 down hill 4' to stay on contour. All other stakes within a few inches from start to end. (SC)

INSTALLATION:

8/10/17 Stayed onsite until contractor finished trenches. Need to install and secure riser to tank. D box needs to be level. (and) Pipes secured to tank baffles verified. D box leveled. OK to cover all work.

FINAL INSPECTOR K. King DATE OF APPROVAL 8/18/17

FOUNDATION LOCATION DRAWING
5453 HARRIS FARM ROAD
VALERIE NICHOLS PROPERTY
 DEED REFERENCE: LIBER 16138, FOLIO 376
 TAX MAP 28 GRID 20 PARCEL 389
 5th ELECTION DISTRICT HOWARD COUNTY, MD
 SCALE: 1" = 60' DATE: 5/1/2017
 DATE OF LATEST FIELD WORK: 4/28/2017

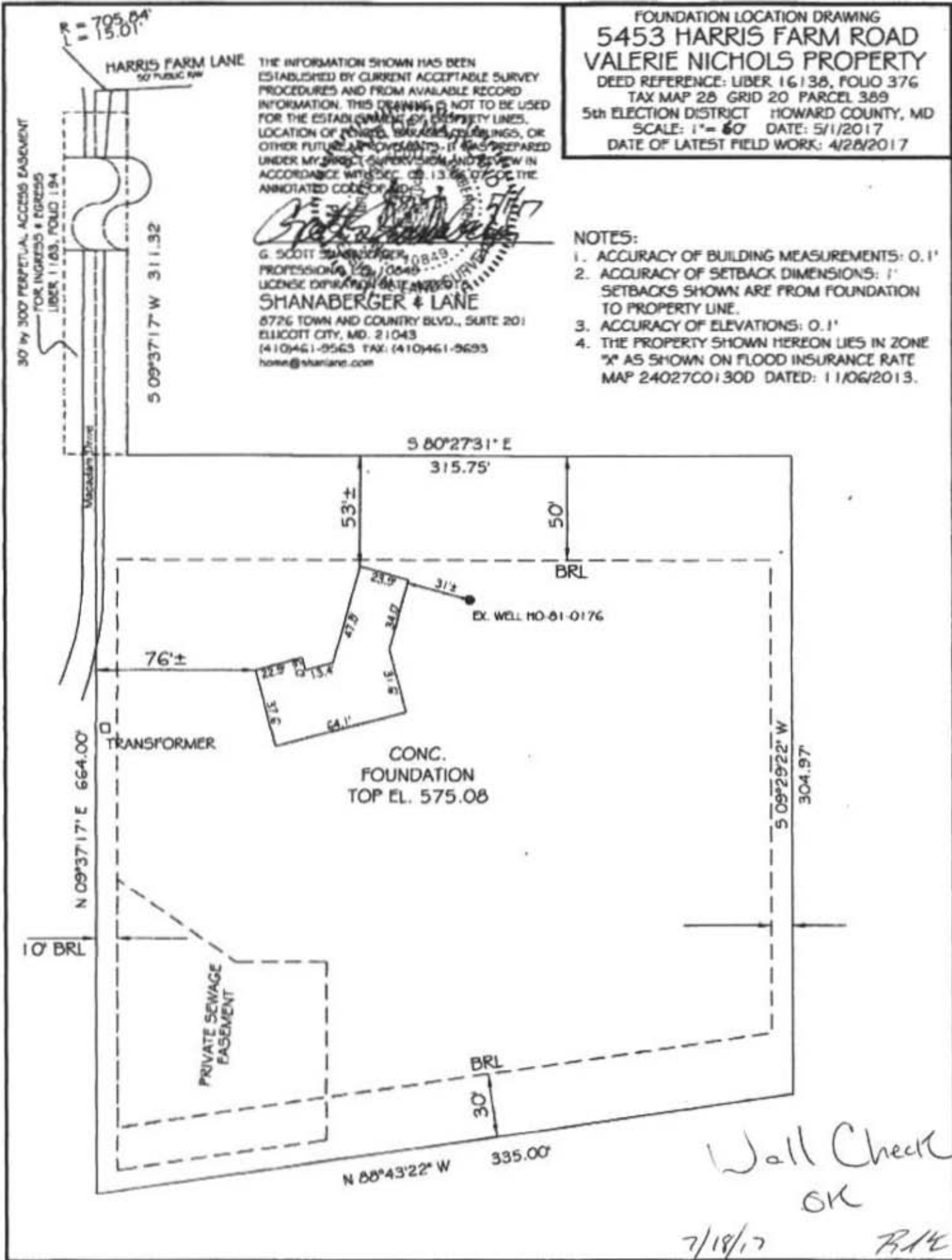
THE INFORMATION SHOWN HAS BEEN ESTABLISHED BY CURRENT ACCEPTABLE SURVEY PROCEDURES AND FROM AVAILABLE RECORD INFORMATION. THIS DRAWING IS NOT TO BE USED FOR THE ESTABLISHMENT OF PROPERTY LINES, LOCATION OF EASEMENTS, BARABERS, BUILDINGS, OR OTHER FUTURE IMPROVEMENTS. IT WAS PREPARED UNDER MY DIRECT SUPERVISION AND REVIEW IN ACCORDANCE WITH SEC. 13.07 OF THE ANNOTATED CODE OF MARYLAND.

G. Scott Shanaberger
 G. SCOTT SHANABERGER
 PROFESSIONAL SURVEYOR
 LICENSE NUMBER 10849

SHANABERGER & LANE
 8726 TOWN AND COUNTRY BLVD., SUITE 201
 ELICOTT CITY, MD. 21043
 (410)461-9563 FAX: (410)461-9693
 home@shanelane.com

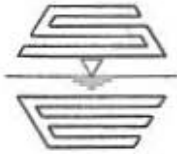
NOTES:

1. ACCURACY OF BUILDING MEASUREMENTS: 0.1'
2. ACCURACY OF SETBACK DIMENSIONS: 1'
SETBACKS SHOWN ARE FROM FOUNDATION TO PROPERTY LINE.
3. ACCURACY OF ELEVATIONS: 0.1'
4. THE PROPERTY SHOWN HEREON LIES IN ZONE "X" AS SHOWN ON FLOOD INSURANCE RATE MAP 24027C0130D DATED: 11/06/2013.



Wall Check
 OK
 7/18/17
 RAL

8593



11130 Dovedale Court, Suite 200
Marriottsville, MD 21104
Website: www.sillengineering.com

Office: 443-325-5076
Fax: 410-696-2022
Email: info@sillengineering.com
Civil Engineering for Land Development

SILL ENGINEERING GROUP, LLC

March 3, 2017

**Howard County Health Department
Bureau of Environmental Health
Well and Septic Program
8930 Stanford Boulevard
Columbia, Maryland 21045**

Attn: Mr. Robert Freemon

Re: 5453 Harris Farm Lane
OSDS Plan

Dear Mr. Freeman:

In response to your comment letter dated March 1, 2017 please find attached a revised Onsite Sewage Disposal System Plan and this point-by-point response letter.

1. Please find a detail of the Mayer Bros., Inc 1,500 gallon (Non-Traffic) 2-Compartment tank on the plans.
2. The elevations have been corrected.
3. The replacement trenches have been added to the Plan View.

Thank you for your review of this submission. Should you have any questions or comments regarding this matter, please do not hesitate to contact this office.

Sincerely,
SILL ENGINEERING GROUP, LLC


Anita E. Allen

Freemon, Robert

From: Anita Allen <anita@sillengineering.com>
Sent: Friday, March 03, 2017 9:42 AM
To: Freemon, Robert
Cc: Bricker, Robert; Paul Sill
Subject: FW: 5453 Harris Farm Lane
Attachments: 5453 Harris Farm Lane.pdf

Good Morning Robert,

I am addressing your comments for 5453 Harris Farm Lane. In regards to the comment requiring a detail of the septic tank: our office was told by Robert Bricker that these details were only necessary for pretreatment or pump chamber tanks on OSDS plans. Our office has been excluding them on the OSDS gravity system plans. Has something changed and are we required to show them now?

Thanks,
Anita

Anita E. Allen
Sill Engineering Group, LLC
11130 Dovedale Court, Suite 200
Marriottsville, MD 21104
Office: 443-325-5076 Ext: 104
Fax: 410-696-2022
Cell: 443-897-3046
Website: www.sillengineering.com

From: Paul Sill
Sent: Wednesday, March 1, 2017 4:25 PM
To: Anita Allen <anita@sillengineering.com>
Subject: FW: 5453 Harris Farm Lane

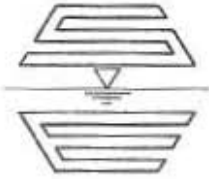
Comments for you.

From: Freemon, Robert [<mailto:rfreemon@howardcountymd.gov>]
Sent: Wednesday, March 01, 2017 3:44 PM
To: Paul Sill <paul@sillengineering.com>
Subject: 5453 Harris Farm Lane

Hey Paul,
Here are my comments for the Nichols Property. Let me know if you have any questions.

Robert Freemon
Howard County Health Department
8930 Stanford Blvd. Columbia, MD 21045
Well and Septic Program
Bureau of Environmental Health
Phone: 410-313-6357
Email: rfreemon@howardcountymd.gov

Letter of Transmittal



11130 Dovedale Court, Suite 200
 Marriottsville, MD 21104
 Website: www.sillengineering.com
 Civil Engineering for Land Development

Office: 443-325-5076
 Fax: 410-696-2022
 Email: info@sillengineering.com

SILL ENGINEERING GROUP, LLC

To: Mr. Jeff Williams
 Howard County Health Department
 Bureau of Environmental Health
 8930 Stanford Boulevard
 Columbia, MD 21045

Date:	February 22, 2017
Attention:	Robert Freedmon
Re:	12348 Howard Lodge Drive OSDS Plan 5453 Harris Farm Ln
Project #:	15-020

We are sending you

<input checked="" type="checkbox"/> Attached	Under Separate Cover Via Mail the following:	
Letter	Originals	Other:
<input checked="" type="checkbox"/> Plans	Computations	

Quantity	Description	Quantity	Description
3	OSDS Plan		

These are transmitted as checked below

<input checked="" type="checkbox"/> For Approval	As Requested	Please Return After Using
<input checked="" type="checkbox"/> For Review	For Your Use	As Approved

Comments:

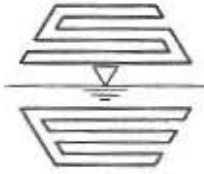
Copy To:

Signed:

Anita E. Allen
 Anita E. Allen

Received by:

Date Received:



11130 Dovedale Court, Suite 200
 Marriottsville, MD 21104
 Website: www.sillengineering.com
 Civil Engineering for Land Development

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SILL ENGINEERING GROUP, LLC

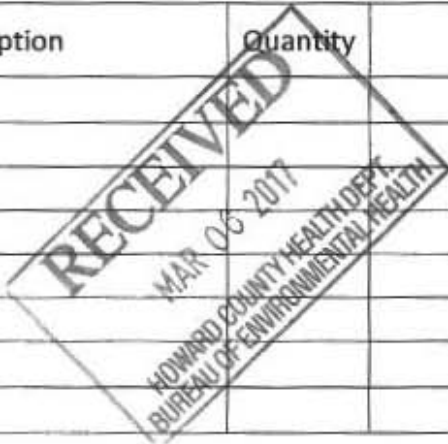
To: Mr. Jeff Williams
 Howard County Health Department
 Bureau of Environmental Health
 8930 Stanford Boulevard
 Columbia, MD 21045

Date:	March 3, 2017
Attention:	Robert Freemon
Re:	5453 Harris Farm Lane OSDS Plan
Project #:	15-020

We are sending you

<input checked="" type="checkbox"/> Attached	Under Separate Cover Via Mail the following:	
Letter	Originals	Other:
<input checked="" type="checkbox"/> Plans	Computations	

Quantity	Description	Quantity	Description
3	OSDS Plan		
1	Response Letter		



These are transmitted as checked below

<input checked="" type="checkbox"/> For Approval	As Requested	Please Return After Using
<input checked="" type="checkbox"/> For Review	For Your Use	As Approved

Comments:

Copy To:

Received by:

Signed: *Anita E. Allen*
 Anita E. Allen

Date Received:

SOILS LEGEND			
SYMBOL	NAME / DESCRIPTION	GROUP	'K' FACTOR
GgA	GLENELG LOAM, 0 TO 3 PERCENT SLOPES	B	0.28
GgB	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	C	0.28

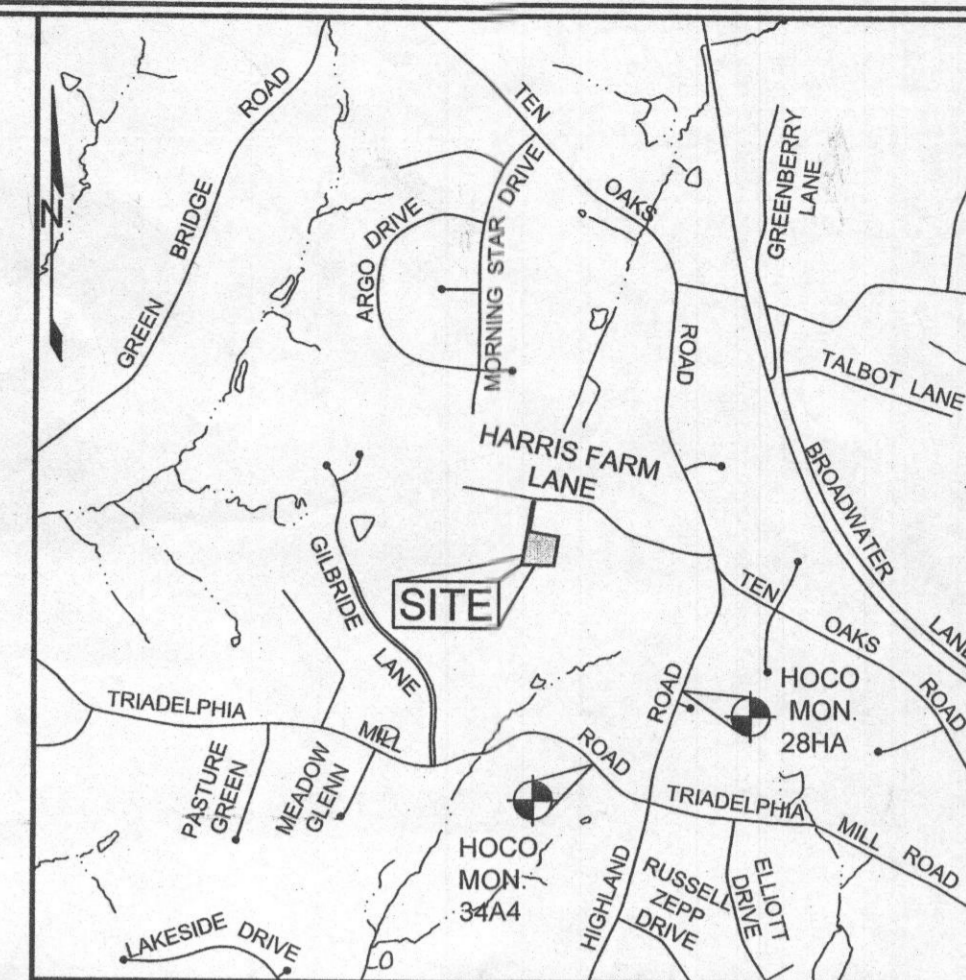
BENCHMARKS				
NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
28HA	565,347.964	1,319,266.364	587.879	29.0' NORTH OF C&P #6 BGE 334368 14.2' EAST OF ED OF HIGHLAND ROAD
34AA	564,448.261	1,318,324.971	582.515	72.4' NORTH OF C&P #31 G&E 816087 16.9' EAST OF CL OF TRIADDELPHIA MILL DR

NOTES:
 1) SOIL INFORMATION HAS BEEN TAKEN FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, WEB SOIL SURVEY.
 2) HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR 'K' GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT.

Approved Septic System Plan
 Howard County Health Department
 Signature: *[Signature]* Date: 3/22/17

LEGEND

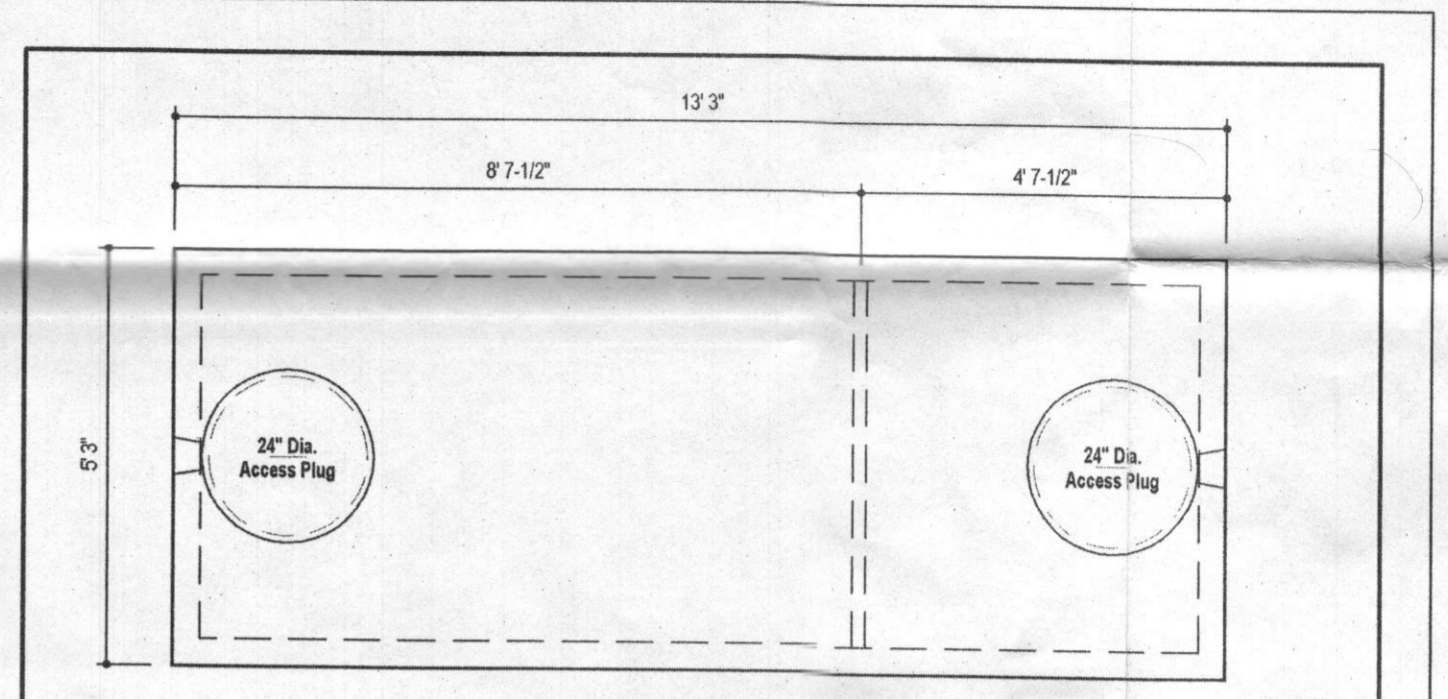
- EXISTING CONTOUR
- PROPOSED CONTOUR
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- DIRECTION OF FLOW
- EXISTING TREELINE
- PROPOSED TREELINE
- SOIL BOUNDARY
- PROP. PERCOLATION TEST HOLE STANDARD, PASSED
- EX. APPROXIMATE WELL LOCATION
- PROPOSED APPROXIMATE WELL LOCATION



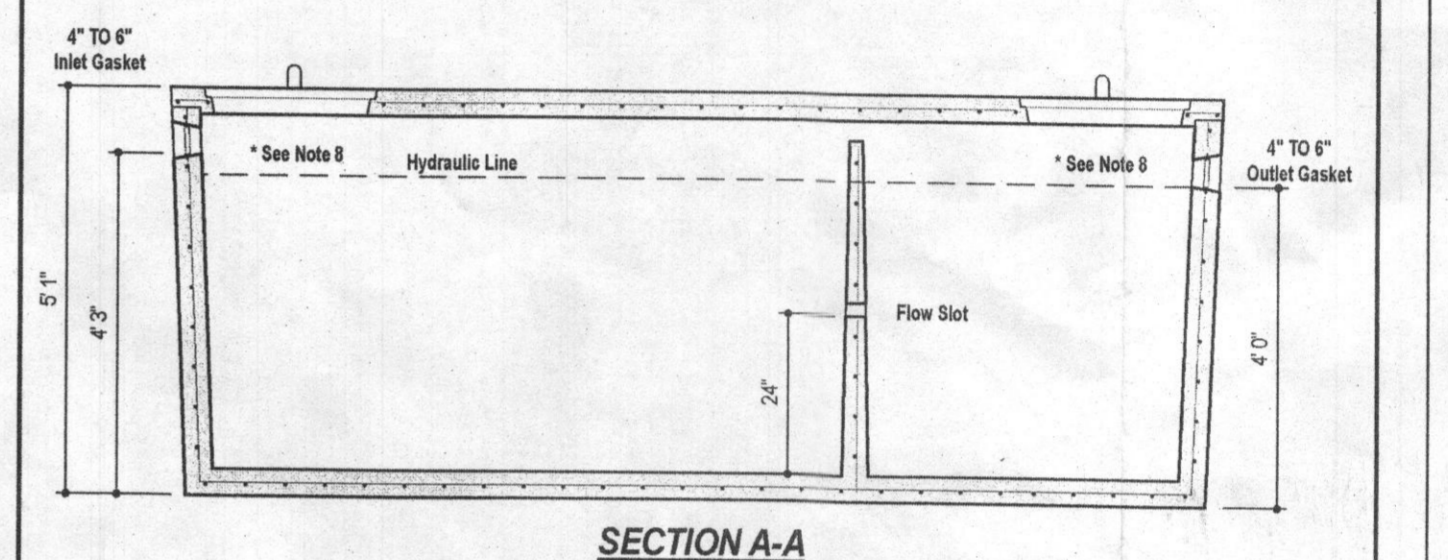
HOWARD COUNTY ADC MAP 4816 GRID A6
VICINITY MAP
 SCALE: 1"=200'

GENERAL NOTES

1. SUBJECT PROPERTY ZONED RR-DEO PER 10/06/2013 COMPREHENSIVE ZONING PLAN.
2. TOTAL AREA OF PROPERTY = 2.5973 AC.±
3. PRIVATE WATER AND PRIVATE SEWER WILL BE USED WITHIN THIS SITE.
4. THIS AREA DESIGNATES A PRIVATE SEWAGE EASEMENT, OF AT LEAST 10,000 SF AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL (COMAR 26.04.03). IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THESE EASEMENTS 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 EASEMENT. RECORDATION OF A MODIFIED SEWAGE EASEMENT SHALL NOT BE NECESSARY.
5. THE BOUNDARY SHOWN HEREON IS BASED ON A FIELD RUN BOUNDARY SURVEY PREPARED BY SHANABERGER & LANE IN AUGUST, 2015.
6. THE TOPOGRAPHY SHOWN ON THIS WAS FIELD RUN BY SHANABERGER & LANE, IN JUNE 2015 AND ACCURATELY REPRESENTS THE RELATIVE CHANGES ON THE SUBJECT PROPERTY. THE EXISTING TOPOGRAPHY SHOWN OUTSIDE THE SITE IS BASED ON HOWARD COUNTY AERIAL TOPOGRAPHY FLOWN IN 2004. ALL CONTOURS SHOWN ARE AT TWO-FOOT CONTOUR INTERVALS.
7. PROPERTY ADDRESS: 5455 HARRIS FARM LANE, CLARKSVILLE, MARYLAND 21028.
8. REFERENCES: LIBER 16138, FOLIO 376
9. THERE ARE NO EXISTING STRUCTURES ON THE PROPERTY.
10. THE LOT SHOWN HEREON COMPLIES WITH THE MINIMUM OWNERSHIP, WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT.
11. ALL OFF-SITE EXISTING WELLS, SEPTIC SYSTEMS AND SEWAGE DISPOSAL EASEMENTS WITHIN 100 FEET OF THE PROPERTY BOUNDARIES AND 200' DOWN GRADIENT OF ANY WELLS AND/OR SEPTIC SYSTEMS ARE SHOWN, AND WERE ESTIMATED PER HOWARD COUNTY HEALTH DEPARTMENT RECORDS.
12. EXISTING WELL ON-SITE (HO-81-0176) HAS BEEN FIELD LOCATED.
13. ANY CHANGES TO A PRIVATE SEWAGE EASEMENT SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
14. THIS DEVELOPMENT IS CONDITIONALLY EXEMPT FROM THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION WITH THE FILLING OF A DECLARATION OF INTENT FOR CLEARING LESS THAN 20,000 SQUARE FEET OF FOREST IN ACCORDANCE WITH SECTION 16.1202(B)(1)(i).
15. LIMIT OF DISTURBANCE: 29,999 SF.±
16. ANY CHANGE TO THE LOCATIONS OR DEPTHS TO ANY SEPTIC SYSTEM COMPONENTS MUST BE APPROVED BY THE ENGINEER AND THE HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO INSTALLATION. A REVISED SITE PLAN MAY BE REQUIRED.
17. THE MAXIMUM EARTH COVER OVER THE TANK IS 3 FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
18. THE WELL (TAG # HO-81-0176) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN.
19. SEPTIC TANK TO BE MAYER BROS. 1,500 GALLON SEPTIC TANK OR EQUIVALENT.



PLAN VIEW



SECTION A-A

DESIGN DATA & GENERAL NOTES
 (1) Concrete strength F=4,000 p.s.i. @ 28 days. Density = 150 pcf.
 (2) Cement - Portland Type III per ASTM C 150-02.
 (3) Admixtures & plasticizers per ASTM C 390-04 & C 494-02.
 (4) Reinforcing per ASTM A 618. Min. 5-02" cover.
 (5) Top slab sealed with butyl rope mastic.
 (6) 4" wall, base, & top thickness.
 (7) Min. 3-02" of cover.
 (8) Depending on use of tank, inlet & outlet baffles may be required by code.

WEIGHT = 16,750 lbs.

1,500 GALLON TANK (Non-Traffic) 2-Compartment

Stock Item

Dwg. No. 1500-2C No Scale Aug. 11, 2008



SEPTIC SYSTEM TRENCH DESIGN SPECIFICATIONS

- INITIAL SYSTEM:
 - APPLICATION RATE: 0.8
 - EFFECTIVE AREA BEGINNING DEPTH: 5.5'
 - BOTTOM MAXIMUM DEPTH: 8'
- DESIGN FLOW:
 - 4 BEDROOMS AT 150 GPD
 - 4X150 GPD = 600 GPD
- SQUARE FOOTAGE OF DRAIN FIELD REQUIRED:
 - DESIGN FLOW (600 GPD) / APPLICATION RATE (0.6) = 1,000 SF
- SIDEWALL REDUCTION CREDIT:
 - TRENCH WIDTH (W) = 3'
 - TRENCH EFFECTIVE DEPTH (D) = 2.5'
 - (W+2) (D+1+2D) X 100 = 0.59%
- LINEAR LENGTH OF TRENCH REQUIRED:
 - DRAIN FIELD SQUARE FOOTAGE (1,000) X SIDEWALL REDUCTION CREDIT (0.59%) / TRENCH WIDTH (3') = 186.7' USE 187'
- LINEAR LENGTH OF TRENCH PROVIDED = 188'
 - FOUR TRENCHES @ 47 LF
- EXISTING GRADE:
 - TRENCH 11: 567.50'
 - TRENCH 12: 567.50'
 - TRENCH 13: 567.00'
 - TRENCH 14: 567.00'
 - TRENCH 11: 563.50'
 - TRENCH 12: 563.50'
 - TRENCH 13: 563.00'
 - TRENCH 14: 563.00'
- INVERT:
 - TRENCH 11: 563.60'
 - TRENCH 12: 563.50'
 - TRENCH 13: 563.00'
 - TRENCH 14: 563.00'

OWNER/DEVELOPER
 VALERIE & BUDDY NICHOLS
 7810 OLDFIELD LANE
 ELLICOTT CITY, MARYLAND 21043

ONSITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN

NICHOLS PROPERTY

5453 HARRIS FARM LANE

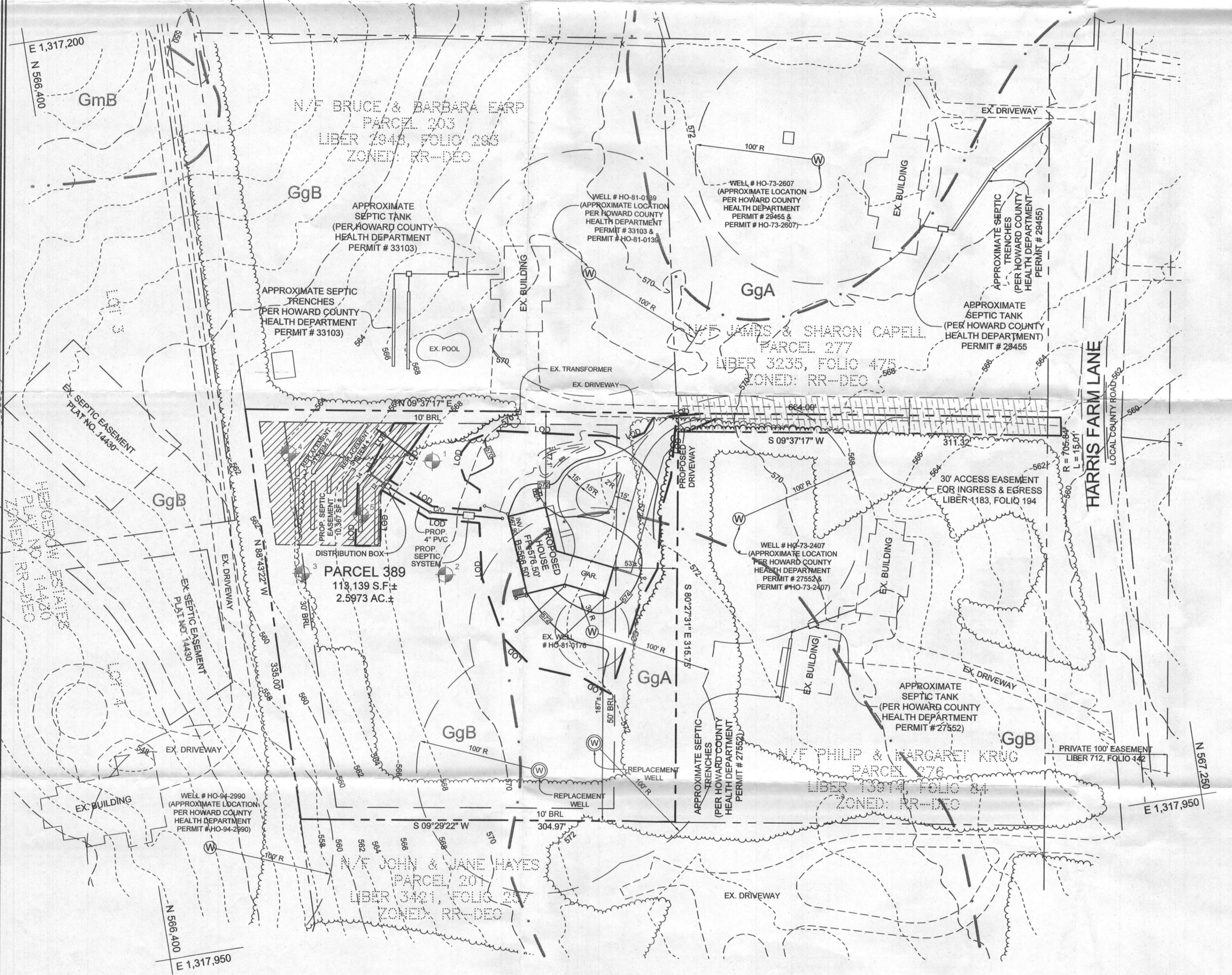
TAX MAP 28 GRID 20 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND PARCEL 389



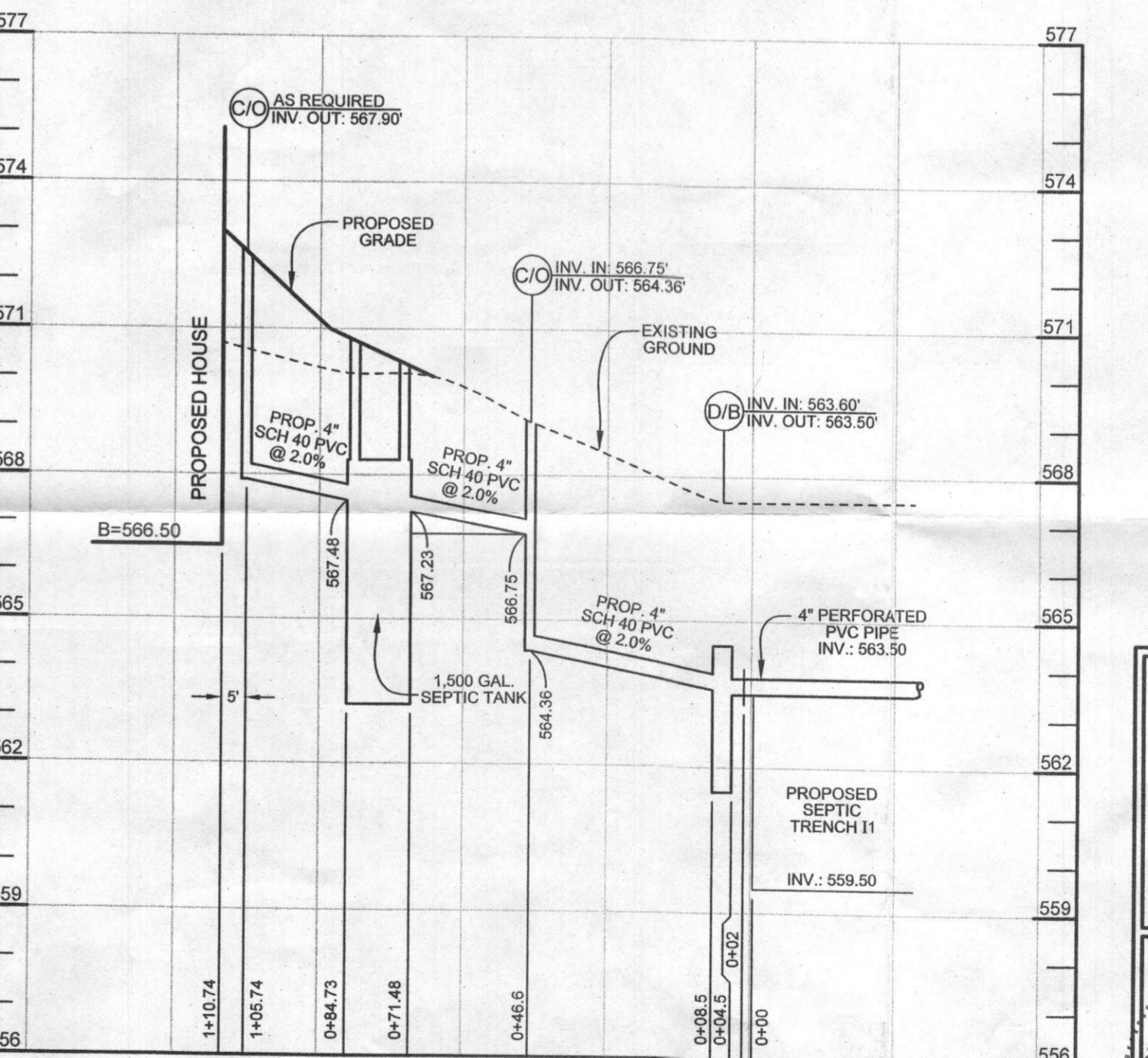
SILL ENGINEERING GROUP, LLC
 11130 Davedale Court, Suite 200
 Marriottsville, Maryland 21104
 Phone: 443.325.5076
 Fax: 410.696.2022
 Email: info@sillengineering.com
 Civil Engineering for Land Development

DESIGN BY: PS
 DRAWN BY: RA
 CHECKED BY: PS
 SCALE: AS SHOWN
 DATE: MARCH 17, 2017
 PROJECT #: 15-020
 SHEET #: 1 of 1

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. 32026, EXPIRATION DATE: JUNE 20, 2017



PLAN VIEW
 SCALE: 1"=50'



SEPTIC SYSTEM PROFILE
 HORIZONTAL SCALE: 1"=30'
 VERTICAL SCALE: 1"=3'