

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: 4/5/18 **ONSITE SEWAGE DISPOSAL SYSTEM** P 562950-C
 APPROVAL DATE: 4/19/18 sec **PERMIT: CONSTRUCTION** A _____

PROPERTY ADDRESS: 13880 Old Frederick Road

SUBDIVISION: Five Hills Farm LOT: 1 TAX ID: _____

CONTRACTOR: South Carroll Backhoe EMAIL: scbackhoe@comcast.com

CONTRACTOR ADDRESS: 4410 Salem Bottom Road, Westminster, MD 21157 PHONE: 410-596-3618

PROPERTY OWNER: Joe and Jennifer Hill EMAIL: _____

OWNER ADDRESS: P.O. Box 189, Woodbine, MD 21797 PHONE: 410-339-7583

SEPTIC TANK SIZE (GALLONS): 2000 TANK MANUFACTURER: Babylon Vault or equivalent

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

DISTRIBUTION SYSTEM: GRAVITY PRESSURE DOSED BEDROOMS: 6 APPLICATION RATE 0.8

TRENCHES:	LINEAR FEET REQUIRED: <u>156</u>	INLET DEPTH: <u>4</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>8</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>11</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>4</u>

LOCATION: **PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND TANK LOCATIONS MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.**

NOTES: May need pump tank of elevations are different from plan.

ISSUED BY: Robert Freemon ISSUE DATE: 4/5/18 EXPIRATION DATE: 4/5/19

- 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 DOWNGRADIENT 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.**

NOT TO SCALE

See attached sheet
for as-built drawing

ROAD NAME

TRENCH/DRAINFIELD DATA

WIDTH	INLET	BOTTOM
3'	4'	8'
NUMBER OF TRENCHES		3
TOTAL LENGTH		155'
ABSORPTION AREA		465' + SIDEWALL
DISTRIBUTION BOX LEVEL		YES
DISTRIBUTION BOX BAFFLE		YES
DISTRIBUTION BOX PORT		YES

SEPTIC TANK DATA

SEPTIC TANK I LEVEL YES

MANUFACTURER BABYLON

CAPACITY 2000 GAL

SEAM LOC TOP

TANK LID DEPTH 2.5'

BAFFLES YES

BAFFLE FILTER NO

MANHOLE LOC FRONT + REAR

6" PORT LOC NONE

WATERTIGHT TEST NO

SLOTTED YES

DATE ON LID 2-28-18

~~PUMP/SEPTIC TANK LEVEL~~

~~MANUFACTURER _____~~

~~CAPACITY _____ GAL~~

~~SEAM LOC _____~~

~~TANK LID DEPTH _____~~

~~BAFFLES _____~~

~~BAFFLE FILTER _____~~

~~MANHOLE LOC _____~~

~~6" PORT LOC _____~~

~~WATERTIGHT TEST _____~~

~~SLOTTED _____~~

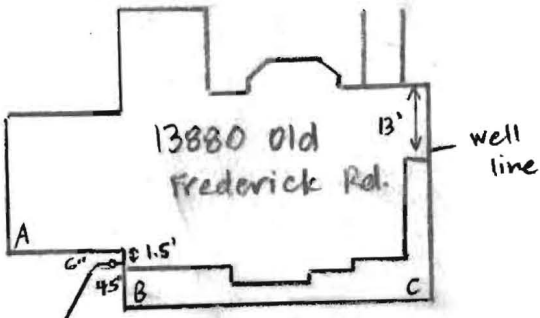
~~DATE ON LID _____~~

PRE-CONSTRUCTION:

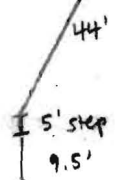
4/9/18 Met S. Carroll on site for layout. SDA corners staked, tank stake on large pile of dirt. Pile must be removed prior to tank install. Shot elevations, fall ~2% to tank in sewer line from house. Need two pine trees removed before trench layout. (SC) 4/9/18 Met S. Carroll, homeowner Jennifer, + John from JMB Homes on site. Shot contour of trenches - okay for upper trench to be 55', lower to be 49' to remove only one tree. Dirt pile moved, okay to set tank. (SC) 4/12/18 Tree removed.

INSTALLATION: shot contour + laid out 3 trenches @ 52' +/- 3'. (SC) 4/12/18 Sewer line run from house to tank. Need house connection. (SC) 4/13/18 T1-T3 finished + left open @ ends for inspection. 3' wide, 3.5' to stone. S. Carroll digging T2, using laser to check depths. 3' wide, 8' bottom (SC) 4/17/18 D-box set and connected to tank + trenches. Levelled spread levelers in D-box. Need house connection. (SC) 4/19/18 House connection made. (SC)

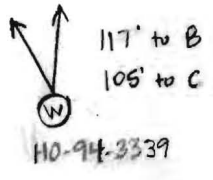
FINAL INSPECTOR Sarah Collins DATE OF APPROVAL 4/19/18



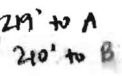
1" ≈ 40'



71'

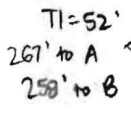


71'

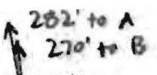


2.5'

3.5'



38'



29.5'



T2=54'

T3=49'

NOT TO SCALE

Freemon, Robert

To: Stephanie Tuite
Subject: RE: 13880 Old Frederick Rd.
Attachments: 13880 Frederick Rd2.pdf

Here are my comments on the septic system.

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
<https://www.howardcountymd.gov/Departments/Health/Environmental-Health/Well-and-Septic>

From: Stephanie Tuite [<mailto:Stephanie@fcc-eng.com>]
Sent: Wednesday, June 07, 2017 1:30 PM
To: Freemon, Robert
Subject: RE: 13880 Old Frederick Rd.

What exactly do you mean by the septic system layout is unacceptable? Hard to know what you are looking for. Please call to discuss if it is easier.

Steph

Stephanie Tuite, RLA, PE, LEED AP BD&C
FISHER, COLLINS & CARTER, INC.

From: Freemon, Robert [<mailto:rfreemon@howardcountymd.gov>]
Sent: Monday, June 05, 2017 4:37 PM
To: Stephanie Tuite <Stephanie@fcc-eng.com>
Subject: 13880 Old Frederick Rd.

Here are my comments on the septic plan. If you have any questions let me know.

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
<https://www.howardcountymd.gov/Departments/Health/Environmental-Health/Well-and-Septic>

Transmittal

Via: Fax Mail Messenger E-Mail To Be Picked Up
 Fax (original to follow via U.S. Mail)

To: Bureau of Environmental Health 8930 Stanford Blvd Columbia, MD 21046-4544	Attn: Robert Freemon Fax: (410) 313-2648 Phone: (410) 313-2640
--	---

From: Stephanie Tuite	CC:
------------------------------	-----

Re: Five Hills Farm, Lot 1 - Septic Plan	W.O.# 14001-6001
Date: 05/25/17	Pages: Page(s) Including this cover

We are forwarding: <input checked="" type="checkbox"/> Prints <input type="checkbox"/> Copy of Letter <input type="checkbox"/> Specifications <input type="checkbox"/> Shop drawings <input checked="" type="checkbox"/> Other
<input type="checkbox"/> Urgent <input type="checkbox"/> For your use <input type="checkbox"/> As requested <input type="checkbox"/> For Review & Comment

Remarks:

Attached please find three copies of the Septic Plan for Permit # B17001552, 13880 Old Frederick Road.

Please call with any questions.

Stephanie Tuite, RLA, PE, LEED AP BD&C
Fisher, Collins & Carter, Inc.

CONFIDENTIALITY NOTICE

This transmission contains confidential information which may be legally privileged, and is intended only for the use of the individual named above. If you are not the intended recipient, you are hereby notified that any distribution (except to the intended recipient), copying, or disclosure of this transmission is strictly prohibited.



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

MEMORANDUM

TO: Fisher, Collins & Carter, Inc.
10272 Baltimore National Pike
Ellicott City, MD 21042

FROM: Robert Freemon *RF*
Well & Septic Program

RE: Five Hills Farm, Lot 1
13880 Old Frederick Rd.
Sykesville MD, 21784
"Septic System Comments"

DATE: 6/12/2017

- Designing the systems main line (house to tank) to span over 240ft with 1% fall leaves little to no room for error during installation. If during installation the designed fall cannot be achieved a pump tank or heavy load bearing tank may be required. It is recommended the fall be increased to 2%. One possible way to increase fall could be to ask the builder if a hung sewer could be placed on the Southeast side of the house. If the decision is to keep the septic line as is the following note must be added to the plan, "If the house elevation and/or field elevations change from the designed septic plan a new septic plan will be required."
- The D-box needs to be closer to the edge of the SDA and not in the middle. Having the D-box closer to the septic tank could allow for more fall between the D-Box and trenches.
- The "Ex. Ground at Septic Tank" is not 559.14' based off of the Septic Profile.
- The "Ex. Ground at Distribution Box" is not 561.9' based off of the Septic Profile.
- The trenches are miss labeled or inconsistent in there labeling.
- The pool needs to be labeled and indicated whether it is to remain or to be removed.

**FISHER, COLLINS
& CARTER, INC.**

**CIVIL ENGINEERING CONSULTANTS
and LAND SURVEYORS**

Terrell A. Fisher, P.E., L.S.
Earl D. Collins, P.E.
Charles J. Crovo, Sr., P.E., L.S.

Paul W. Kriebel, P.E.
Mark L. Robel, P.L.S.
Aldo M. Vitucci, P.E.

Frank Manalansan II, L.S.
Stephanie Tuite, RLA, P.E., LEED AP BD&C

June 13, 2016

Mr. Robert Freemon
Howard County Health Dept
8930 Stanford Blvd
Columbia, MD 21046

RE: Five Hills Farm, Lot 1
13880 Old Frederick Road
Bldg Permit #B17001552
Septic Plan

Dear Mr. Freeman:

On behalf of our client, Joe Hill, we provide the following point by point response to comments in your letter dated June 5, 2017:

1. Vicinity Map has been revised.
2. Note has been added as requested.
3. Note has been added as requested.
4. Note has been added as requested.
5. Note has been added as requested.
6. Old well label has been revised as requested.
7. Detail has been revised to show 4" label as requested.
8. Legend has been revised as requested.
9. Clarification was requested.

**FISHER, COLLINS
& CARTER, INC.**

**CIVIL ENGINEERING CONSULTANTS
and LAND SURVEYORS**

Terrell A. Fisher, P.E., L.S.
Earl D. Collins, P.E.
Charles J. Crovo, Sr., P.E., L.S.

Paul W. Kriebel, P.E.
Mark L. Robel, P.L.S.
Aldo M. Vitucci, P.E.

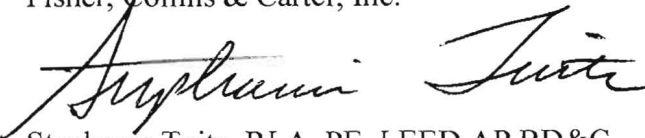
Frank Manalansan II, L.S.
Stephanie Tuite, RLA, P.E., LEED AP BD&C

The following point by point response to comments in your letter dated June 12, 2017:

1. System has been modified to show piping at 1.44% to gain some flexibility. Note regarding possible change in field elevations has been added as requested since desire is to not pump the system.
2. Distribution box has been moved to the easement edge as requested.
3. Existing ground at septic tank has been revised.
4. Existing ground at distribution box has been revised.
5. Labeling of trenches has been revised.
6. Pool has been labeled to be removed.

Thanks for your time and consideration of this submission. If you should have any questions, please feel free to call.

Very truly yours,
Fisher, Collins & Carter, Inc.


Stephanie Tuite, RLA, PE, LEED AP BD&C

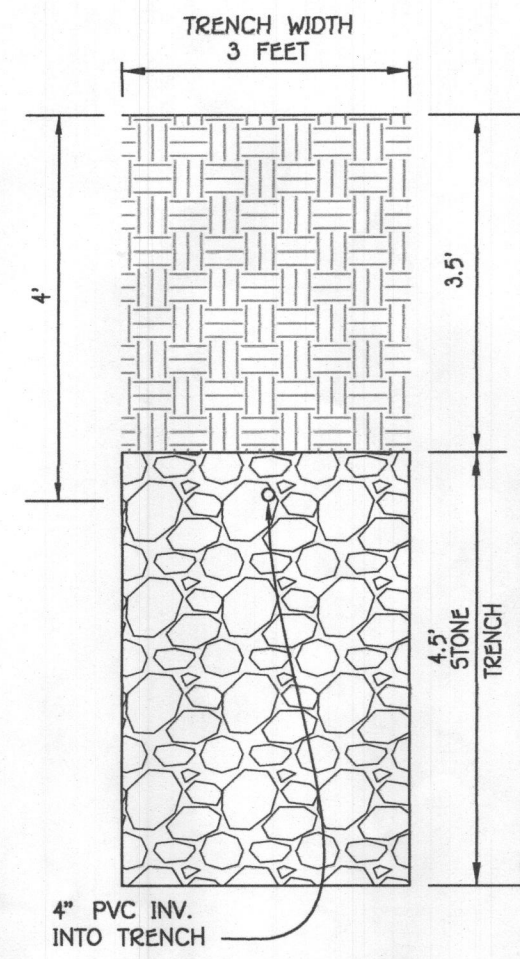
WO #14001-6002

G9B

SOILS LEGEND			
SOIL	NAME	CLASS	K FACTOR
G9B	Glennly loam, 3 to 8 percent slopes	B	0.20
G9C	Glennly loam, 0 to 15 percent slopes	B	0.20

NOTE:

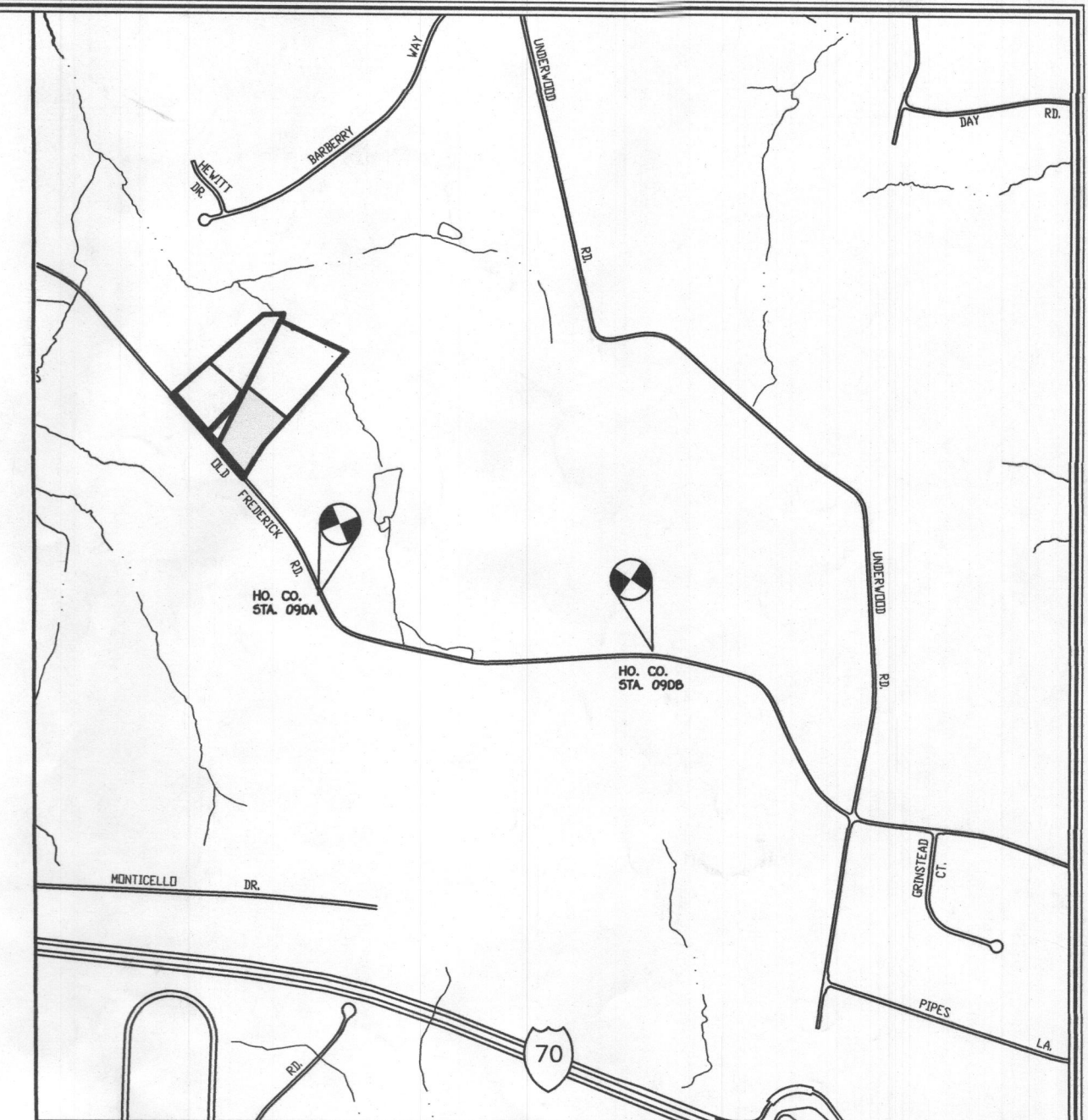
- THE EXISTING WELLS SHOWN ON THIS PLAN, HO-94-3339 HAS BEEN FIELD LOCATED BY FISHER, COLLINS & CARTER, INC., PROFESSIONAL LAND SURVEYORS AND IS ACCURATELY SHOWN.
- IF THE HOUSE ELEVATION AND/OR FIELD ELEVATIONS CHANGE FROM THE DESIGNED SEPTIC PLAN, A NEW SEPTIC PLAN WILL BE REQUIRED.



INITIAL TRENCH DETAIL
SCALE: 1" = 2'

LEGEND

- EXISTING 2' CONTOURS
- EXISTING 10' CONTOURS
- EXISTING TREE LINE
- SOIL LINES AND TYPES
- W DENOTES EXISTING WELL
- 2511 DENOTES PASSED PERC HOLE
2511 POINT NUMBER
563.1 ELEVATION
- 1500 DENOTES 1500 Sq.Ft. ALTERNATE WELL SITE



VICINITY MAP
SCALE: 1" = 1200'

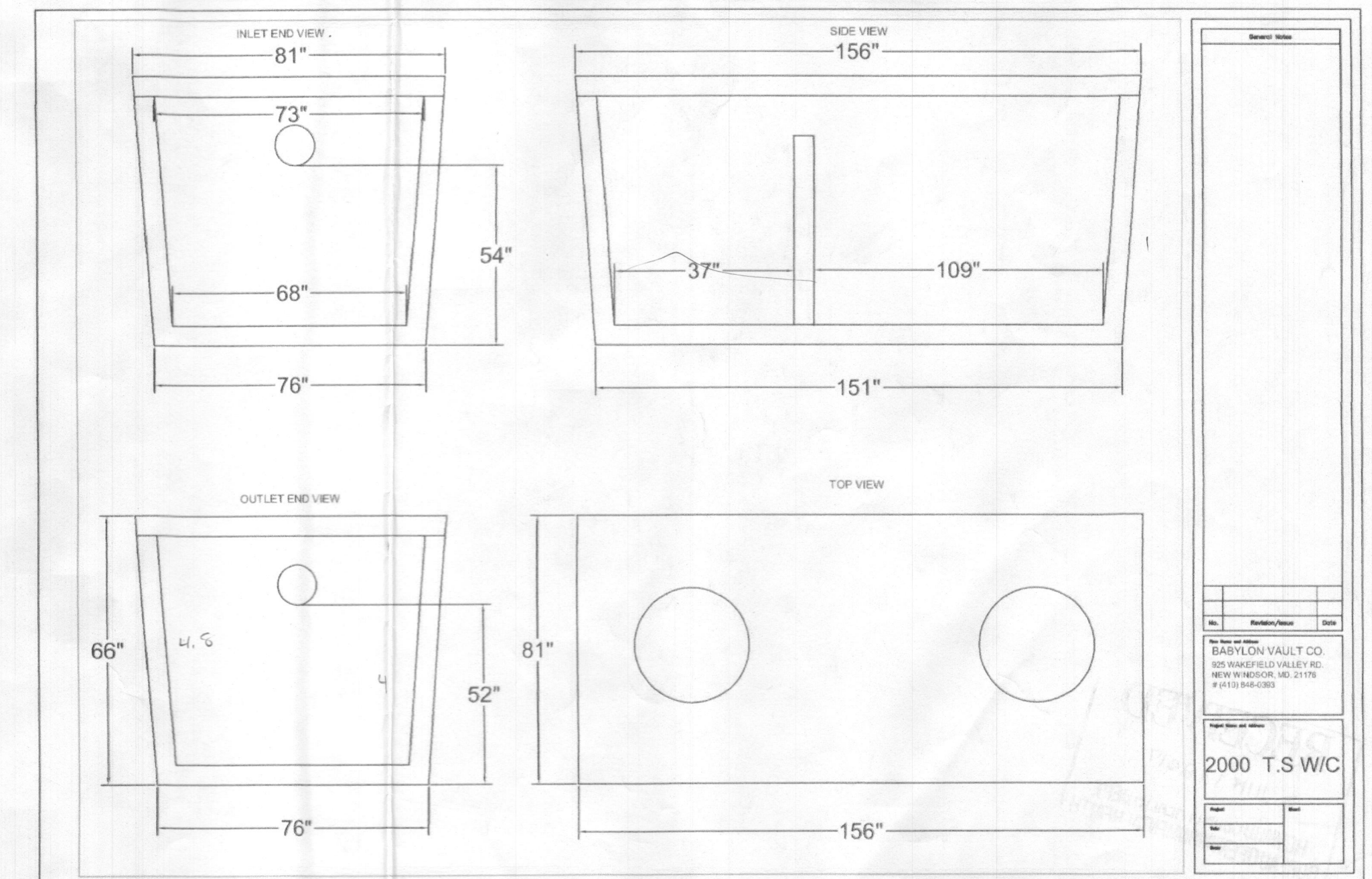
FFE 574.70
BSE 565.18
INV. OUT OF HOUSE = 562.05
PROP. GROUND AT CLEANOUT = 569.9
INV. INTO CLEANOUT = 561.04
INV. OUT OF CLEANOUT = 561.74
PROP. GROUND AT CLEANOUT = 560.9
INV. INTO CLEANOUT = 560.73
INV. OUT OF CLEANOUT = 560.63
PROP. GROUND AT CLEANOUT = 564.5
INV. INTO CLEANOUT = 559.62
INV. OUT OF CLEANOUT = 559.52
EX. GROUND AT SEPTIC TANK = 564.0
TOP OF SEPTIC TANK = 560.00
INV. INTO SEPTIC TANK = 559.00
INV. OUT OF SEPTIC TANK = 558.03
EX. GROUND AT DISTRIBUTION BOX = 563.0
INV. INTO DISTRIBUTION BOX = 558.6
INV. OUT OF DISTRIBUTION BOX = 558.5

SEWAGE DISPOSAL SYSTEM DATA
5 BEDROOMS
LOADING RATE = 6 BEDROOMS X 150 GPD/BEDROOM = 900 GPD
APPLICATION RATE = 0.8
EFFECTIVE SIDEWALL BEGINS AT 4 FEET
TRENCH DEPTH = 8 FEET
TRENCH WIDTH (W) = 3 FEET
EFFECTIVE DEPTH (D) = 3 FEET
SF OF DRAINFIELD = 900 GPD / 0.8 = 1125 SF
COEFFICIENT OF REDUCTION OF TRENCH LENGTH =
(W+2)/(W+1+2D) = (3+2)/(3+1+(2*3)) = 0.416
TRENCH LENGTH = 1125 SF x 0.416 / 3 = 156 FEET
TRENCH SPACING = 2D+W = ((2*3) + 3) = 11 USE 11'

GENERAL NOTES:

- THE EXISTING SEPTIC SYSTEM SHALL BE ABANDONED WHEN THE NEW SEPTIC SYSTEM IS INSTALLED.
- ANY CHANGE TO THE LOCATIONS OR DEPTHS TO ANY COMPONENTS MUST BE APPROVED BY THE ENGINEER AND THE HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO INSTALLATION. A REVISED SITE PLAN MAY BE REQUIRED.
- THE MAXIMUM EARTH COVER OVER THE TANK IS 3 FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY BEARING TANK.
- ALL WELLS AND SEPTIC SYSTEMS LOCATED WITHIN 100 FEET OF THE PROPERTY BOUNDARIES AND 200 FEET DOWNGRADIENT OF ANY WELLS AND/OR SEPTIC SYSTEMS HAVE BEEN SHOWN.

Approved Septic System Plan
Howard County Health Department
Signature: *Robert J. Fisher* Date: 6/20/17

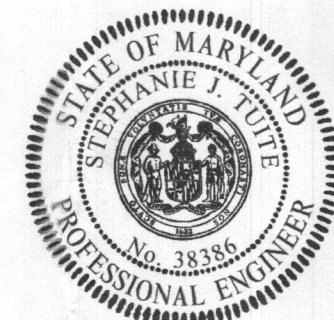


OWNER / DEVELOPER

Joe & Jennifer Hill
P.O. Box 189
Woodbine, MD 21797
410-339-7583

TRENCH DESIGN

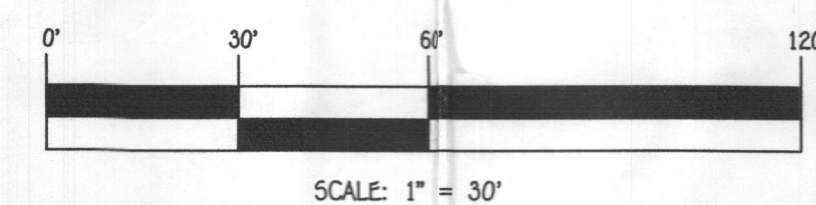
TRENCH	GROUND ELEV.	TOP OF STONE ELEV.	PIPE INVERT ELEV.	DEPTH TO STONE FROM GROUND	DEPTH OF STONE (FT)	BOTTOM OF TRENCH ELEV.	EFFECTIVE DEPTH STARTS AT	EFFECTIVE DEPTH (D)	WIDTH OF TRENCHES (W)	TRENCH SPACING
A	562.1	558.6	558.1	3.5'	4.5'	554.1	4.0'	4.0'	3.0'	11'
B	562.1	558.6	558.1	3.5'	4.5'	554.1	4.0'	4.0'	3.0'	11'
C	560.0	556.5	556.0	3.5'	4.5'	552.0	4.0'	4.0'	3.0'	11'



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. 36386, EXPIRATION DATE: 01/12/2018.

Stephanie J. Fisher 6/13/17
Signature of Professional Engineer DATE



SEPTIC PLAN
FIVE HILLS FARM, LOT 1

ZONED RC-DEO
TAX MAP No. 9 GRID No. 7 PARCEL No. 117
FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: JUNE, 2017
SHEET 1 OF 2

OLD FREDERICK ROAD
60' ROW MAJOR COLLECTOR - SCENIC ROAD

GENERAL NOTES:

- THIS LOCATION DRAWING IS PREPARED FOR THE BENEFIT OF THE CLIENT SIGNING THE HOUSE LOCATION SURVEY APPROVAL FORM INsofar AS IT IS REQUIRED BY A LENDER OR TITLE INSURANCE COMPANY OR ITS AGENTS IN CONNECTION WITH THE CONTEMPLATED TRANSFER, FINANCING OR REFINANCING OF THE PROPERTY SHOWN HEREON. UNLESS INDICATED AS BEING A BOUNDARY SURVEY, THIS LOCATION DRAWING IS NOT INTENDED FOR USE IN THE ESTABLISHMENT OF PROPERTY LINES AND IS NOT TO BE RELIED UPON FOR THE ESTABLISHMENT OR LOCATIONS OF FENCES, GARAGES, BUILDINGS OR OTHER EXISTING OR FUTURE IMPROVEMENTS. AS A RESULT, THIS LOCATION DRAWING DOES NOT PROVIDE FOR ACCURATE IDENTIFICATION OF PROPERTY LINES, BUT SUCH IDENTIFICATION MAY NOT BE REQUIRED FOR THE TRANSFER OF TITLE OR SECURING FINANCING FOR RE-FINANCING.
- SUBJECT PROPERTY IS SHOWN IN ZONE X₁ ON THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP OF HOWARD COUNTY, MARYLAND, COMMUNITY PANEL No. 24027C01550, EFFECTIVE NOV. 6, 2013.
- THE OFFSETS FROM BUILDING LINE TO PROPERTY LINE AS SHOWN ON THE PLAT HEREON ARE TO AN ACCURACY OF PLUS OR MINUS 1.0".
- NO TITLE REPORT FURNISHED. SUBJECT TO ALL EASEMENTS, RIGHTS OF WAY AND CONDITIONS OF RECORD.
- PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY ME OR UNDER MY RESPONSIBLE CHARGE, AND THAT I AM A DULY LICENSED PROPERTY LINE SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 339, EXPIRATION DATE 10/04/2018.
- BUILDING PERMIT #B-XXXX.
- IN ACCORDANCE WITH SECTION 12B(A)(1)(i) OF THE ZONING REGULATIONS (CB-2-2012) ALLOWS SUNROOMS AND ROOM EXTENSIONS TO EXTEND NOT MORE THAN 10 FEET INTO THE REAR SETBACK ALONG NOT MORE THAN 60% OF THE REAR FACE OF A DWELLING ON A LOT WHICH ADJOINS OPEN SPACE ALONG A MAJORITY OF THE REAR LOT LINE FOR R-ED LOTS RECORDED AFTER THE EFFECTIVE DATE OF (MAY 13, 2012).

Legend

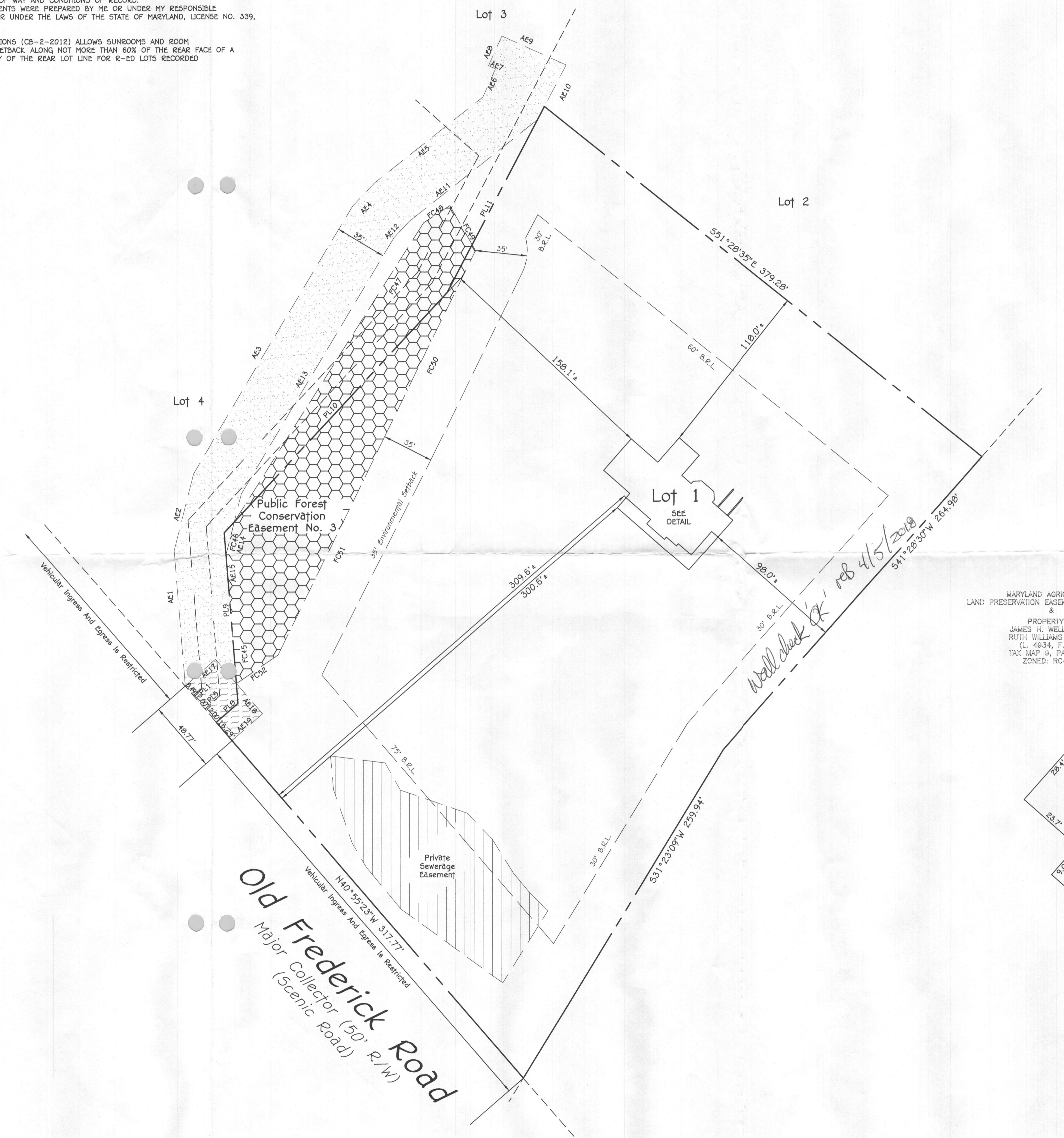
- Public Forest Conservation Easement (Retention)
- Public Forest Conservation Easement (Afforestation)
- Private Use-In-Common Driveway Access, Stormwater Management & Utility Easement For The Use And Benefit Of Lots 2 Thru 4
- Private Use-In-Common Driveway Access, Stormwater Management & Utility Easement For The Use And Benefit Of Lots 1 Thru 4

Public Forest Conservation Easement Line Table		Public Forest Conservation Easement Line Table	
Sym.	Bearing & Distance	Sym.	Bearing & Distance
FC1	N 48°29'07" E 83.05'	FC31	S 48°29'07" W 10.08'
FC2	N 86°54'23" E 21.71'	FC32	S 47°57'41" E 20.10'
FC3	S 53°37'44" E 61.00'	FC33	S 48°30'05" W 20.28'
FC4	S 48°35'36" E 35.76'	FC34	S 33°54'17" W 19.99'
FC5	N 88°30'41" E 15.19'	FC35	N 47°07'22" W 24.12'
FC6	S 66°07'54" E 28.25'	FC36	S 48°29'07" W 97.88'
FC7	S 76°44'19" E 21.48'	FC37	S 48°34'42" E 49.18'
FC8	S 82°50'26" E 14.02'	FC38	S 44°36'51" W 107.99'
FC9	S 72°39'31" E 14.37'	FC39	S 32°36'09" E 27.02'
FC10	S 62°29'53" E 24.18'	FC40	S 69°06'39" W 69.87'
FC11	S 08°31'48" E 28.05'	FC41	S 43°28'30" W 83.43'
FC12	S 28°37'39" E 23.59'	FC42	S 17°54'37" E 64.44'
FC13	S 48°57'03" E 5.16'	FC43	S 48°36'02" W 35.00'
FC14	N 56°11'52" E 56.74'	FC44	N 41°26'39" W 159.69'
FC15	S 64°48'28" E 124.26'	FC45	N 04°35'22" W 87.71'
FC16	S 66°00'44" E 233.37'	FC46	N 14°09'43" E 22.96'
FC17	S 41°28'30" W 176.95'	FC47	N 38°25'51" E 239.43'
FC18	N 28°35'22" W 174.87'	FC48	N 56°33'13" E 21.13'
FC19	N 62°25'38" W 142.54'	FC49	S 29°46'44" E 35.07'
FC20	S 81°21'54" W 85.22'	FC50	S 26°06'43" W 136.13'
FC21	N 07°07'09" W 35.00'	FC51	S 25°59'57" W 188.54'
FC22	N 81°21'24" E 28.98'	FC52	S 25°44'23" W 34.21'
FC23	N 19°24'23" W 11.77'	FC53	N 41°25'18" E 40.00'
FC24	N 66°02'53" W 144.62'	FC54	S 48°34'42" E 51.13'
FC25	N 27°34'06" E 85.57'	FC55	S 75°35'09" E 49.89'
FC26	S 27°34'06" W 230.64'	FC56	S 09°35'03" E 45.51'
FC27	N 62°25'54" W 91.54'	FC57	S 51°31'47" W 107.01'
FC28	N 82°19'38" W 95.80'	FC58	N 23°29'50" W 87.42'
FC29	S 48°30'05" W 84.21'	FC59	N 56°07'18" E 37.91'
FC30	N 47°57'41" W 20.10'	FC60	N 48°34'42" W 40.53'

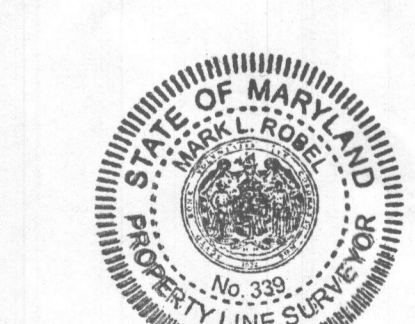
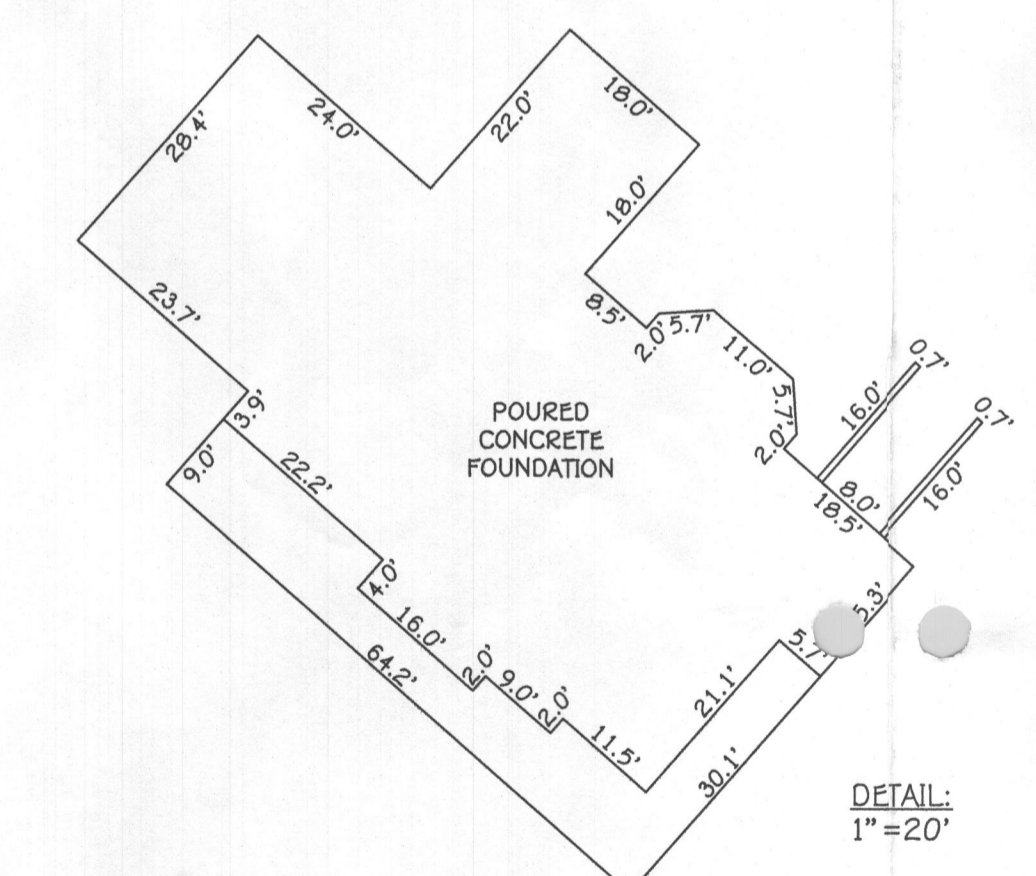
Limit Of Wetlands Line Table	
Sym.	Bearing & Distance
WL1	S 33°43'11" E 36.32'
WL2	N 04°21'57" W 31.12'
WL3	S 43°17'42" E 89.94'
WL4	S 53°55'08" E 17.07'
WL5	S 77°24'29" E 64.00'
WL6	S 66°07'18" E 20.62'
WL7	S 12°17'26" E 44.80'
WL8	S 38°38'21" E 14.77'
WL9	N 58°10'56" E 34.47'
WL10	S 60°45'56" E 40.55'
WL11	S 66°10'03" E 52.21'
WL12	S 05°34'11" W 37.48'
WL13	S 07°05'57" E 41.08'
WL14	S 44°33'22" E 27.66'
WL15	S 67°28'07" E 22.10'
WL16	S 42°14'39" E 29.03'
WL17	S 09°57'26" E 47.10'
WL18	S 76°30'58" E 19.77'
WL19	S 05°09'32" E 78.28'
WL20	S 53°57'53" E 31.33'

Private Use-In-Common Driveway Access, Stormwater Management & Utility Easement Line Table	
Sym.	Bearing & Distance
AE1	N 04°35'22" W 92.18'
AE2	N 14°09'43" E 53.66'
AE3	N 30°53'10" E 210.41'
AE4	N 43°18'17" E 21.11'
AE5	N 51°31'47" E 94.05'
AE6	N 24°08'00" E 20.93'
AE7	N 65°52'00" W 5.12'
AE8	N 24°08'00" E 22.00'
AE9	S 65°52'00" E 47.68'
AE10	S 27°34'25" W 41.80'
AE11	S 51°31'47" W 111.04'
AE12	S 43°18'17" W 14.78'
AE13	S 30°53'10" W 201.45'
AE14	S 14°09'43" W 42.73'
AE15	S 04°35'22" E 87.71'
AE16	N 40°55'23" W 21.79'
AE17	S 49°04'37" W 27.42'
AE18	S 40°55'23" E 26.98'
AE19	S 49°04'37" W 27.42'

Property Line Line Table	
Sym.	Bearing & Distance
PL8	N 49°04'37" E 19.55'
PL9	N 04°35'22" W 115.98'
PL10	N 42°59'42" E 221.16'
PL11	N 27°34'06" E 142.58'



MARYLAND AGRICULTURAL LAND PRESERVATION EASEMENT 13-82-05EX1 &
 PROPERTY OF JAMES H. WELLING AND RUTH WILLIAMS WELLING (L. 4934, F. 330) TAX MAP & PARCEL 56 ZONED: RC-DEO



Mark J. Gabel 8/18/17
 PROFESSIONAL LAND SURVEYOR DATE
 REG. #

LOT 1
 FIVE HILLS FARM
 LOTS 1 THRU 4
 PLAT NOS. 24111 THRU 24113
 FOURTH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

HOUSE LOCATION DRAWING
 FOUNDATION LOCATION: 8/15/17
 FINAL LOCATION:
 BOUNDARY SURVEY:
 SCALE: 1"=40'
 DATE: 8/18/17
 DRAWN BY: JHP
 CHECKED BY: JHP
 PROJECT No. J14001-6002 1