

**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](http://www.hchealth.org)  
 Facebook: [www.facebook.com/hocohealth](http://www.facebook.com/hocohealth)

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

RECEIPT DATE: 2-1-18 **ONSITE SEWAGE DISPOSAL SYSTEM** P 562419

APPROVAL DATE: 7/12/18 SEC **PERMIT: CONSTRUCTION** A \_\_\_\_\_

PROPERTY ADDRESS: 13900 Old Frederick Road

SUBDIVISION: Five Hills Farm LOT: 3 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 0.9

TRENCHES:	LINEAR FEET REQUIRED: <u>156 <del>169</del> 171 160'</u>	INLET DEPTH: <u>4.5' 3.5'</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>8</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>11</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>4.5' 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:	<u>3 x 57' trenches Install 5 x 32' trenches.</u>	

ISSUED BY: Robert Freemon ISSUE DATE: 2/1/18 EXPIRATION DATE: 2/1/19

- 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.**

7/9/18 TIE dug and left NOT TO SCALE open for inspection. 3' wide, 3' to stone.

Babylon on site to move tank to new location. New line run from house to tank. (SC) 7/10/18 TID dug + partially stored,

3' wide, 3.5' inlet, 8' bottom. S. Carroll digging TIA, 3' wide, 3.5' inlet, 8' bottom.

Transit set up to check depths. (SC)

7/10/18 TIC dug, 3' wide + 8' bottom. S. Carroll adding stone to TID. (SC)

7/11/18 TIB finished, left

open for inspection. 3' wide, 3-3.5' to stone. S. Carroll adding stone to TIC. (SC)

7/12/18 D-box installed + connected to tank and trenches. Levelled speed levelers in D-box. Line from D-box to tank avoids trenches of 2<sup>nd</sup> replacement system. (SC)

See attached sheet for as-built drawing

ROAD NAME

#### TRENCH/DRAINFIELD DATA

WIDTH	INLET	BOTTOM
3'	3.5'	8'
NUMBER OF TRENCHES	5	
TOTAL LENGTH	161'	
ABSORPTION AREA	403' + 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	1.5'	
BAFFLES	YES	
BAFFLE FILTER	NO	
MANHOLE LOC	FRONT + REAR	
6" PORT LOC	NONE	
WATERTIGHT TEST	NO	
SLOTTED	YES	
DATE ON LID	2-9-18	

#### ~~PUMP/SEPTIC TANK LEVEL~~

<del>MANUFACTURER</del>	<del>_____</del>	
<del>CAPACITY</del>	<del>_____</del>	<del>GAL</del>
<del>SEAM LOC</del>	<del>_____</del>	
<del>TANK LID DEPTH</del>	<del>_____</del>	
<del>BAFFLES</del>	<del>_____</del>	
<del>BAFFLE FILTER</del>	<del>_____</del>	
<del>MANHOLE LOC</del>	<del>_____</del>	
<del>6" PORT LOC</del>	<del>_____</del>	
<del>WATERTIGHT TEST</del>	<del>_____</del>	
<del>SLOTTED</del>	<del>_____</del>	
<del>DATE ON LID</del>	<del>_____</del>	

#### PRE-CONSTRUCTION:

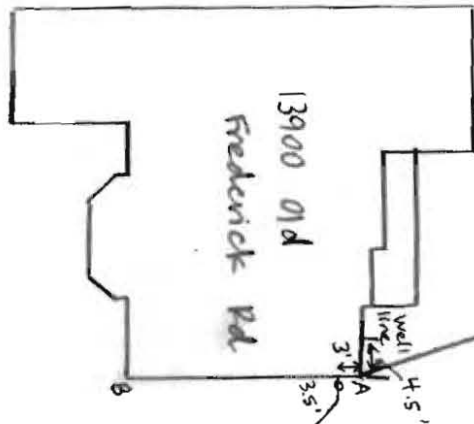
3/1/18 Met S. Carroll on site for layout. SDA corner stakes and forest conservation stakes present. Shot contour + laid out 3x57' trenches, length increased slightly b/c sidewall started @ 5' at closest perc hole. Keep tank inside SDA to be outside of 100' Arc from well box. (SC) 4/11/18 Met S. Carroll on site for layout. 3x57' trenches staked out from 3/1 layout. OK to make T1 a few ft shorter + add length to T2 or T3 to get pipes along SDA edge. (SC)

INSTALLATION: 3/5/18 Call from S. Carroll - pipe @ house comes out under footer. Site visit to check elevations: 93.5" to bottom of pipe @ house, 45.5" grade @ tank inlet, 56" grade @ T1. Tank would have 46" cover w/ 1% fall in line from house. Stop work and return plans to engineer for revisions. (SC) 4/23/18 Sewer line run from house to tank location w/ 1% fall. House connection made. (SC) 4/24/18 Tank set + connected to sewer line. (SC) 5/7/18 Call from contractor - cannot make fall to 5' inlet @ T1. Will need revised septic plan. (SC) 7/3/18 Met S. Carroll on site for layout. All 3 systems, tank, + future pump tank staked. Shot contour + starts/ends of initial system trenches are close in elevation. OK for 1A + 1D to be 2' shorter, 1B + 1C to be 2' longer to

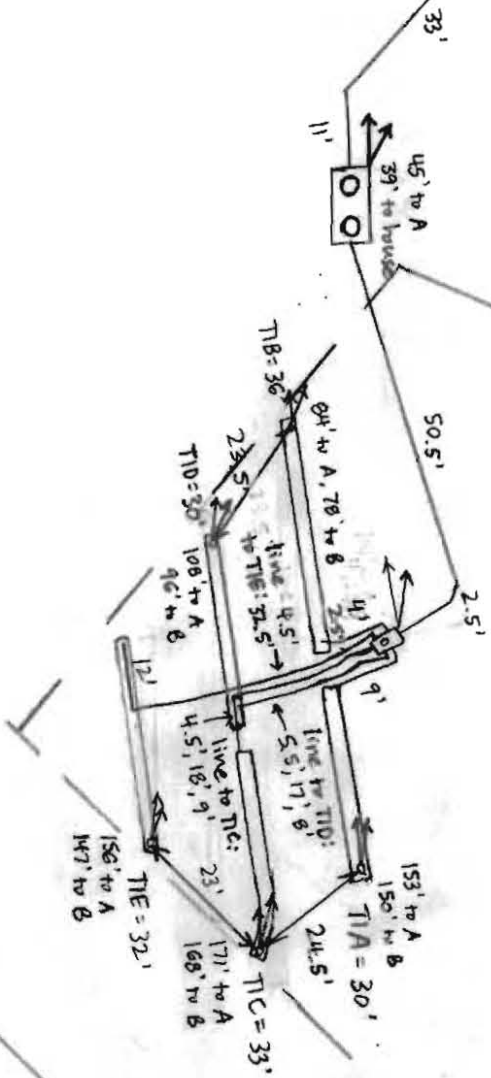
FINAL INSPECTOR Sarah Collins DATE OF APPROVAL 7/12/18

stay off trees. (SC)

HO-15-0398



NOT TO SCALE



1" ≈ 30'

$$\frac{6 \times 150}{0.9} \div 3 = 375'$$

$$3' SW \rightarrow 187.5'$$

$$3 \times 62.5'$$

$$3.5' SW \rightarrow 168.5' \quad 3 \times 51'$$



## Bureau of Environmental Health

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Twitter: [HowardCoHealthDep](https://twitter.com/HowardCoHealthDep)

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

### **AGREEMENT FOR APPROVAL OF AN INDIVIDUAL DRINKING WELL WITH AN ON-SITE TREATMENT SYSTEM**

This agreement is entered into by and between the Howard County Health Department ("the Health Department") and Christopher Oscar Esposito and Molly Hannah Fredette ("the Owner").

WHEREAS, the Owner owns a tract of land at street address 13900 Old Frederick Road, Sykesville, MD 21784 and the deed and subdivision plat of the property is recorded among the Land Records of Howard County, Maryland, Tax Map # 0009 Block # 0007, Parcel # 0117, Deed Reference # 17607/00042 and Tax Account # 04-599674 ("the Property").

WHEREAS, the Property lacks an available public drinking water source and is required to have and individual well as the source of drinking water for the residence of the property.

WHEREAS, the Owner has installed a residential drinking well under well permit HO.15.0398 that has been tested by the Health Department (or a private laboratory certified to perform testing) for Nitrate-nitrogen. The results of the tests have shown that the Nitrate level meets or exceeds the Maximum Contaminant Level (MCL) of 10 milligrams per liter.

WHEREAS, The Maryland Department of the Environment (MDE) has promulgated rules and regulations under which a Certificate of Potability may be issued and has delegated the authority to issue such Certificate to the Health Department.

WHEREAS, MDE regulations permit the Health Department to issue as a special condition, a permanent deviation to the Certificate of Potability for individual wells where treatment has been installed to meet the MCL for Nitrate.

WHEREAS, MDE has determined that Nitrate can be effectively removed from the drinking water by the use of treatment devices (e.g. reverse osmosis).

WHEREAS, the Owner is requesting that the Health Department issue a Certificate of Potability contingent upon installation and maintenance of a water treatment device to reduce Nitrate.

WHEREAS, neither the Owner nor the Health Department has knowledge of an alternative safe source of water for the Property.

NOW THEREFORE, the parties have agreed to the following terms and conditions:

1. The Owner will record this Agreement among the Land Records of Howard County, Maryland and provide confirmation to the Health Dept.
2. The Owner agrees to install and maintain a water treatment device, which effectively reduces the Nitrate below the MCL. The Health Department shall verify that the treatment device is

Clerk of the Circuit Court for  
Howard County  
Land Records/Licensing

The Thomas Dorsey Building  
9250 Bendix Road  
Columbia, MD 21045  
410-313-5850

=====  
LR - Agreement Recording Fee  
1x 20.00 20.00

Name: fredette  
Ref: 3

LR - Agreement Surcharge  
1x 40.00 40.00

=====  
SubTotal: 60.00  
Total: 60.00

=====  
CRD-Credit 60.00  
Credit Card Confirmation : 4125d

07/26/2018 09:37 CC13-LH  
#10730766/1247/109  
\*\*\*\*\* DUPLICATE #001 \*\*\*\*\*

07/26/2018 09:39 CC13-LH  
Thank you for visiting us today

operating effectively and the Owner agrees to allow access to the Health Department to collect a follow-up sample(s).

3. The Health Department shall issue a Certificate of Potability for the well once follow-up sampling shows acceptable Nitrate levels.
4. The Owner agrees that there shall be no liability on part of the Health Department for any immediate or long term impacts to health or property, under any circumstance or including, but not limited to, treatment device failure, improper maintenance or installation, or defect. The Health Department does not warranty or guarantee that the device will adequately or properly function and the Owner agrees to implement and pay for any necessary changes or corrections.
5. The Owner acknowledges and agrees that neither the Health Department nor any of its agents or employees, either officially or individually, underwrites the operation of any system or treatment device.
6. This Agreement shall not be construed to limit any authority of the Health Department to protect the public health, safety or enjoyment of property or to issue any other orders to take any other action, which is now or may hereafter be within its authority.
7. This agreement contains the entire agreement and understanding between the Health Department and the Owner. There are no additional terms other than as contained in this Agreement. This Agreement may not be modified except in writing signed by each of the parties or their authorized representatives.
8. The Agreement shall run with the land and binds the Owner, his heirs, successors, and assigns. The owner agrees to provide a copy of this agreement to any purchaser or lessee of the property.
9. The laws of the State of Maryland govern the provisions of all transactions.

The parties have signed this Agreement on the dates set forth below.

Philip Ben Espada 07/24/18 \_\_\_\_\_  
Owner Date Buyer Date

Mary H. Fudgett 07/24/18 \_\_\_\_\_  
Owner Date Buyer Date

Bert Wilson 7/26/2018  
Howard County Health Department Date

HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
Division of Land Development

DATE: March 28, 2017

DPZ File No. WP-17-102

Department of Planning and Zoning

- 1 Transportation Planning
- 1 Resource Conservation (Historic/Ag Pres)
- Public Service and Zoning Administration
- 1 Research
- Address Coordinator

- 1 Comprehensive & Community Planning
- 2 Development Engineering Division
- Other
- 1 File

**See: F-16-031**

Agencies

- 1 Soil Conservation District
- 1 Department of Inspections, Licenses & Permits
- 1 Department of Fire and Rescue Services
- 1 State Highway Administration
- 1 Health Department
- 1 Public School System
- 1 Recreation and Parks
- WSSC (Non-Residential Only)
- MD Aviation Administration

- Tax Assessment
- Verizon
- BGE
- Cable TV
- Police
- MTA
- Finance
- 1 DPW, Real Estate Services
- DPW, Construction and Inspection
- DPW, Bureau of Utilities

RE: Five Hills Farm, Lot 3

ENCLOSED FOR YOUR  Signature Approval  Review & Comments  Files

THE ENCLOSED =  Original  Pre-Packaged Plan Set

Plans # of Plans

- Sketch Plan
- Prel Equiv Sketch Plan
- Preliminary Plan
- Final Plat/Plat of Easement/RE Plat
- Final Constr Plans (RDS)
- Final Development Plan
- Site Development Plan
- Landscape Plan/Supplemental Plan
- Grading Plan
- House Type Revision/Walk-Thru Red-Line
- Water and Sewer Plan

Supplemental Documents

- Wetlands Report
- Soils/Topo Map/Drain Area Map
- FSD/FCP/Worksheet and Application
- Declaration of Intent (Forest Cons)
- Drainage and/or Computation/Pond Safety Comps
- Preliminary Road Profiles
- APFO Roads Test/Mitigation Plan/Traffic Study
- Noise Study
- Sight Distance Analysis/Speed Flow Study
- Floodplain Study
- Stormwater Management Comps/Geo-Tech Report
- Industrial Waste Survey (DPW)
- Road Poster Form Letter
- Justification Letter
- Perc Plat
- Scenic Road Exhibits
- Deeds
- Photographs
- Retaining Wall Comps/Details
- Poster/Community or HDC Meeting Information
- Route 1 Details/Summary

Applications

- 15 Alternative Compliance Application
- Planning Board Application
- ASDP/CSDP Application
- DED Application/Checklist
- DED Fee Receipt/Deeds/Cost Estimate
- Overall Scaled Composite
- Water & Sewer Plans
- List of Street Names

WAS:  Received  Tentatively Approved  Recorded

Received and Revised  Approved On March 28, 2017

COMMENTS: \_\_\_\_\_ **Due- 17 Working Days: 4/21/17**

*Loge* Check, initial and return to the Department of Planning and Zoning if plan is approved with no comments.

DPZ STAFF INITIALS: JS

Howard County Department of Planning and Zoning  
Division of Land Development

# ALTERNATIVE COMPLIANCE APPLICATION

*[Alternative Compliance from Subdivision and Land Development Regulations]*

Date Submitted/Accepted 3/28/17 DPZ File Number WP-17-102

**I. Site Description**

Subdivision Name/Property Identification: Five Hills Farm  
Location of property: 13900 Old Frederick Road  
(Street Address and/or Road Name)

Residential <small>(Existing Use)</small>	Residential <small>(Proposed Use)</small>
9 <small>(Tax Map No.)</small>	7 <small>(Grid/Block No.)</small>
RC-DEO <small>(Zoning District)</small>	117 <small>(Parcel No.)</small>
	Fourth <small>(Election District)</small>
	3.12 acres <small>(Total Site Area)</small>

Provide a brief site history including reference to all previously submitted or currently active plans on file with the County (subdivision plans, Board of Appeals petitions, alternative compliance petitions, etc.)  
ECP-16-023; F-16-031; WP-16-109

**II. Alternative Compliance Request**

In accordance with Section 16.104 of the Howard County Subdivision and Land Development Regulations, the Department of Planning and Zoning, in conjunction with the Subdivision Review Committee **may grant alternative compliances or modifications to the minimum requirements stipulated within the Regulations if it is determined that extraordinary hardships or practical difficulties may result from strict compliance with the regulations, or if it is determined that the regulations may be served to a greater extent by an alternative proposal.**

In the area below, the petitioner shall enumerate the specific numerical section(s) from the Subdivision and Land Development Regulations for which an alternative compliance is being requested and provide a brief summary of the regulation. Attach a separate sheet if additional information is appropriate.

<u>Section Reference No.</u>	<u>Summary of Regulation</u>
1. <u>16.120(b)(4)(iii)(b)</u>	Residential lots shall be designed to be usable in terms of not being encumbered by environmentally sensitive features.....
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____

### III. *Justification*

All alternative compliance requests must be fully justified by the petitioner. Incomplete or inadequate justification may result in rejection of the application at the time of submission. Justification must be specific to the subject property. The justification provided by the petitioner should include all factors which rationalize or substantiate the request in accordance with the following criteria:

- a. Summarize any extraordinary hardships or practical difficulties which may result from strict compliance with the Regulations.
- b. Verify that the intent of the Regulations will be served to a greater extent through the implementation of the alternative proposal.
- c. Substantiate that approval of the alternative compliance will not be detrimental to the public interests.
- d. Confirm that approval of the alternative compliance will not nullify the intent of the Regulations.

**PLEASE ATTACH A SEPARATE LETTER OF JUSTIFICATION TO SUPPORT THE ALTERNATIVE COMPLIANCE REQUESTS.**

### IV. *Pre-Submission Meeting Requirements*

- a. **Community Meeting Requirement** - If no previous subdivision plans and/or zoning or conditional use petitions were processed, a pre-submission community meeting is required for the initial plan submittal of all new residential development and for new non-residential development located within 200 feet of a residential zoning district or an existing non-residential development which is located within 200 feet of a residential zoning district and proposed for a floor area expansion of more than 25% in accordance with Sections 16.156(b) and 16.128 of the Subdivision and Land Development Regulations for alternative compliance of the site development plan requirement. [See DPZ policy memo dated 3/22/04 for existing lots/parcels]. The property owner/developer must provide 3 weeks advance notice regarding the community meeting's date, time and location to all adjoining property owners identified in the records of the State Department of Assessments and Taxation and any community association that represents the geographic area of the subject property by first class mail; and sent electronically to any community association registered with the County for projects in a certain geographic area; the Howard County Council, and DPZ, which will place the meeting notice on the DPZ's website. The developer shall send a copy of the minutes and written responses to the meeting attendees and DPZ, either electronically or by first class mail. **A certification that meeting notices were mailed, contact information for the attendees and a copy of the minutes and a written response with a dated return mail receipt or dated email attached to all of the major comments recorded at the meeting must be submitted to DPZ along with the initial plan application. The meeting minutes, including a written response to all questions, shall be sent to all meeting attendees within 60 days of the meeting either electronically or by first class mail [Council Bill 8-2011].**
- b. **HPC Meeting Requirement** - A pre-submission advisory meeting with the Historic Preservation Commission is required for new development located within a Historic District or if the site contains a historic structure (50 years or older) in accordance with Section 16.603A of the Howard County Code. Verify this requirement by checking the Historic Sites Inventory list and maps available at the DPZ public service desk or checking with the Resource Conservation Division. The property owner/developer must contact the DPZ, Resource Conservation Division for the HPC scheduling process and procedures. **The property owner/developer must submit a copy of the minutes from the HPC Advisory Meeting to DPZ along with the initial subdivision or site development plan application.**
- c. **MAA Meeting Requirement** - For all proposed subdivisions or developments located within the BWI Airport Noise Zone or the Airport Zoning District (4 mile radius from the center of the airport), the review and approval by the Maryland Aviation Administration is required prior to signature approval of final plan road and SWM construction drawings, and/or site development plans, or alternative compliance approval of SDP. Please contact the MAA at P O. Box 8766, BWI Airport, Maryland, 21240-0766, or (410) 859-7100. A copy of the MAA approval letter must accompany the submission of the final road/SWM construction plan original drawings, and/or site development plan original or alternative compliance application.

- d. **Design Advisory Panel (DAP)** – A pre-submission advisory meeting with the Design Advisory Panel is required for sketch and preliminary equivalent sketch plans that are submitted on or after November 3, 2008 for new development or redevelopment projects on parcels located in the U.S. Route 1 corridor that are zoned 'CE', 'CAC' or 'TOD' or that adjoin the Route 1 right-of-way and that are subject to the Route 1 Design Manual; on parcels located within the U.S. Route 40 corridor that are zoned 'TNC' or that are subject to the Route 40 Design Manual; on parcels which age-restricted adult housing is to be constructed pursuant to a conditional use; on redevelopment parcels located in the New Town Village Centers with boundaries proposed by a property owner or established by the Zoning Board or County Council; and for revitalization and redevelopment of Downtown Columbia in accordance with Sections 16.1501 and 16.1504 of the Howard County Code. The property owner/developer must contact the DPZ, Division of Comprehensive and Community Planning to verify this requirement and for information concerning the DAP meeting scheduling process and procedures. **The property owner/developer must submit a copy of the DAP project design recommendations to DPZ along with the initial subdivision plan application.**

V. **Plan Exhibit**

A. **Number of Copies Required**

The alternative compliance application must be accompanied by copies of a detailed plot plan, subdivision plat or site development plan (**15 sets of the completed alternative compliance application and plan exhibit if the subject property adjoins a County road; 19 sets for properties adjoining a State road**). In instances where the alternative compliance request concerns an approval extension or if an associated plan is in active processing, only 2 sets of plans are required along with 15 or 19 copies of the application form. **Plans must be folded to a size no larger than 7-1/2" x 12". The pre-packaging of plans and supplemental reports by SRC agency will be permitted by DPZ provided that each package contains a cover letter which itemizes all plans, reports and documents included in the package.**

**Please be advised that all plan application submissions are ACCEPTED BY APPOINTMENT ONLY. All plan submission appointments must be scheduled with the Division of Land Development at (410) 313-2350.**

Plan applications are available on the DPZ website at <https://howardcountymd.gov/Departments/Planning-and-Zoning/Land-Development>.

B. **Plan Requirement Checklist**

The detailed alternative compliance exhibit, plot plan, subdivision plan or site development plan must indicate the following required information relevant to the alternative compliance request to ensure acceptance of the alternative compliance application for processing.

Legend:	<input type="checkbox"/> Information Provided	<input checked="" type="checkbox"/> Information Not Provided, Justification Attached
	<input type="checkbox"/> NA Not Applicable	

- \_\_\_ 1. Vicinity map scale 1" = 2,000' indicating and identifying the total boundary of the property, exact site location, vicinity roads and north arrow
- \_\_\_ 2. Bearings and distances of property boundary lines for the entire tract and size of tract area
- \_\_\_ 3. North arrow and scale of plan.
- \_\_\_ 4. Location, extent, boundary lines and area of any proposed lots.
- \_\_\_ 5. Any existing or proposed building(s), structures, points of access, driveways, topography, natural features and other objects and/or uses on the subject and adjacent properties which may be relevant to the petition; i.e. historic structures, cemeteries or environmentally sensitive areas.
- \_\_\_ 6. Delineation of building setback lines.
- \_\_\_ 7. Delineation of all existing public road and/or proposed street systems.
- \_\_\_ 8. Identification and location of all easements.
- \_\_\_ 9. Approximate delineation of floodplain, streams, wetland and forested areas, if applicable, and/or



VII. **Owner's/Petitioner's Certification**

I/WE the undersigned fee simple owner(s) hereby make application to the Howard County Department of Planning and Zoning to provide an alternative compliance request of the minimum requirements of the Howard County Subdivision and Land Development Regulations. The undersigned hereby certifies the information supplied herewith is correct and complete, confirms that the regulations and policies as referred to in the attached are understood, and authorizes periodic on-site inspections by the Howard County Subdivision Review Committee agencies. **\*If the applicant is the owner's agent, written documentation from owner granting that authority is required at the time of the submission.**

*Molly H. Fredette*  Owner's authorization attached \*

*Christopher D. Esposito*      3/24/17  
(Signature of Property Owner)      (Date)  
(Fee Simple Owner Only)

Molly H. Fredette  
Christopher D. Esposito  
(Name of Property Owner)

13605 Frederick Road  
(Address)

West Friendship, MD 21794  
(City, State, Zip Code)

E-Mail cespos2@gmail.com

410-381-2259      (Telephone)      (Fax)

Contact Person: Christopher Esposito

*Stephanie Tuite*      3/26/17  
(Signature of Petition Preparer) \*      (Date)

Fisher, Collins & Carter, Inc.  
(Name of Petition Preparer, Surveyor/Engineering/Architect  
or Agent/Developer)

10272 Baltimore National Pike  
Address)

Ellicott City, Maryland 21042  
(City, State, Zip Code)

E-Mail stephanie@fcc-eng.com

410-461-2855      410-750 -3784  
(Telephone)      (Fax)

Contact Person: Stephanie Tuite

Howard County Department of Planning and Zoning  
Division of Land Development

**INITIAL SUBMISSION  
ALTERNATIVE COMPLIANCE WORKSHEET  
(For DPZ Use Only)**

Project Name Five Hills Farm, Lot 3 DPZ File No. \_\_\_\_\_  
DPZ Plan Reviewer \_\_\_\_\_ Submission Date \_\_\_\_\_  
Plan Consultant Representative \_\_\_\_\_ Time \_\_\_\_\_

- I. **Application Requirements** *Indicate Yes, No or N/A*
- a. Application is complete \_\_\_\_\_
  - b. Required number of plans and applications are provided. \_\_\_\_\_  
    \_\_\_ Plans (15 sets on County Road or  
    \_\_\_ Applications 19 sets on State Road)
  - c. Supplemental Information is provided \_\_\_\_\_
  - d. Certification of pre-submission community meeting and summary of community comments with dated responses to all meeting attendees within 60 days is provided and three week notice given to DPZ and County Council, if applicable \_\_\_\_\_
  - e. Certification of pre-submission HPC advisory meeting for new projects in Historic District or listed in Historic Sites Inventory \_\_\_\_\_
  - f. Photographs of existing structures (for Historic Preservation Review) \_\_\_\_\_
  - g. MAA Approval Letter (if applicable) \_\_\_\_\_
  - h. Written summary of Route 1 Manual/Route 40 Design Manual compliance (if applic) \_\_\_\_\_
  - i. DAP project design recommendation for Route 1/Route 40 projects \_\_\_\_\_

- II. **Fee Computation** **Fee**
- Number of alternative compliance sections requested \_\_\_\_\_
- \* Base Fee for first two alternative compliance sections (**\$450**) \_\_\_\_\_
- Fee for each additional alternative compliance section (\_\_\_ additional alternative compliances x **\$50** each) \_\_\_\_\_
- \* (Maximum fee of **\$350** for Agricultural Preservation parcels)

**TOTAL** \_\_\_\_\_

III. **Certification**

Cash Receipt No. \_\_\_\_\_ Amount \_\_\_\_\_

**SAP Acct 1000000000-3000-3000000000-PWPW000000000000-432530**

Check issued by \_\_\_\_\_

\_\_\_ Alternative Compliance application is accepted for processing.

\_\_\_ Scheduled SRC meeting date.

\_\_\_ Alternative Compliance application is rejected.

Reason: \_\_\_\_\_

\_\_\_ Resubmission is accepted. Date \_\_\_\_\_ Staff initials \_\_\_\_\_

Comments/Notes \_\_\_\_\_  
\_\_\_\_\_

**Five Hills Farm, Lot 3**  
**Alternative Compliance Justification**

On behalf of our client, John Berger, builder for the property at 13900 Old Frederick Road, Sykesville, Maryland, 21784 (Lot 3), we are requesting alternative compliance to the following Section of the Howard County Subdivision and Land Development Regulations (Regulations):

**Section 16.120(b)(4) Usable design:** Residential lots shall be designed to be usable in terms of:

- (iii) Not being encumbered by environmentally sensitive features:
  - (b) For a lot or buildable preservation parcel of 10 acres or greater in size floodplains, wetlands, streams, their buffers, and forest conservation easements for afforestation, reforestation, or retention may be located on the lot or parcel if the building envelope is no closer than 35 feet from these environmental features, provided that a deck may project 10 feet beyond the building envelope.

Five Hills Farm was a subdivision of four (4) proposed lots. Old Frederick Road, along the property frontage, is a Major Collector Scenic Road. A single common driveway was proposed for access onto Old Frederick Road. Lot 3 is one of the two pipestem lots to the rear. This lot is currently vacant. No historic structures or cemeteries exist on-site. 100-year floodplain, stream, stream buffer, wetland, wetland buffers, and forested area exist on the lot. The floodplain, wetlands, wetland buffer, stream, and stream buffers on the property, are included within the forest conservation easement at the rear of Lot 3.

As a result of WP-16-109, the creation of forest conservation easements was permitted on these 3-acre plus lots in the subdivision. As a condition of the waiver approval (see attached), the "forest conservation easements will not be permitted within 100 feet of the proposed houses to avoid future encroachments and to allow for usable yards." None of the environmental features on this lot will be disturbed by construction of the new house and the new house is proposed to be located far from the existing wetlands, stream, and floodplain which are located within the forest conservation easement at the rear of the lot.

Justification for the waiver from Section 16.120(b)(4)(iii)(b) is as follows:

- a. "Summarize any extraordinary hardships or practical difficulties which may result from strict compliance with the Regulations."

The property is currently zoned RC-DEO. The new owners of the lot would like to build the house shown on the Alternative Compliance Exhibit, which is not the same footprint as the 2,300-squar-foot box previously shown on the subdivision plans, here shown in red. The new property owners are aware of the easements located on the property. The 100 foot has been maintained at the rear of the house which is the area typically considered to be the usable yard. The setback from the forest conservation easement in the front of the house is 72 feet for the garage and 83 feet for the main portion of the house. A well box reserved for placement of alternate wells exists in between the garage and the forest conservation easement, which should afford some additional protection for the forest conservation. The front of the house is a less likely area for encroachments, since the forested area is desirable to be retained as a buffer between the two lots.

Five Hills Farm, Lot 3 Alternative Compliance Justification (continued)

Reasonable use of the lot has been maintained with the proposed siting of the house.

For these reasons, we feel that strict compliance with the regulations would create a hardship. As stated, there is reasonable area to construct the new home without encroachment into the existing forest conservation easements and the property owner building the home on Lot 3 is aware of the conditions associated with the forest conservation requirements.

b. “Verify that the intent of the Regulations will be served to a greater extent through the implementation of the alternative proposal.”

Although the intent of the regulations is to not include environmental features on lots less than 10 acres, the properties are over 3 acres in size, which creates the ability to retain these features on the lot and still have reasonable use of the lot. As stated previously, a 35-foot environmental setback for structures will be maintained from the environmental features, therefore there will be no impact to them. Allowing the existing forest conservation easement to remain at less than 100 feet from the front of the proposed house will not be detrimental to the intent of the prior granting of the waiver, since the new property owner is aware of the easement's existence and the proposed house to be built will be no closer than 72 feet for the garage and 83 feet for the house as shown on the Exhibit, not to mention that 100 feet is being maintained from the rear of the house which is typically referred to as the usable yard area.

c. “Substantiate that approval of the waiver will not be detrimental to the public interests.”

This alternative compliance will not be detrimental to the public interest since the environmental features will still be protected on the lot.

d. “Confirm that approval of the waiver will not nullify the intent of the Regulations.”

As stated above, the intent of the regulations and the prior granting of WP-16-109, which allowed the creation of the forest conservation easements on the lots, would be better served since a 35-foot environmental setback for structures will be more than maintained with the proposed house being located no closer than 72 feet from the forest conservation easements located on the lot. Therefore, this should not be seen as a nullification of the intent of the Regulations. See attached exhibit.

W.O. 14001-6002



# HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

3430 Courthouse Drive

Ellicott City, Maryland 21043

410-313-2350

Voice/Relay

Valdis Lazdins, Director

FAX 410-313-3467

April 11, 2016

Joe and Jennifer Hill  
PO Box 189  
Woodbine, MD 21797

RE: WP-16-109 Five Hills Farm

Dear Mr. and Mrs. Hill:

The Director of the Department of Planning and Zoning considered your request for a waiver from the Howard County Subdivision and Land Development Regulations.

As of the date of this letter, the Planning Director **approved** your request to waive **Section 16.120(b)(4)(iii)(b)** of the Subdivision & Land Development Regulations, which states that a lot or buildable preservation parcel must be 10 acres or greater in size in order to allow floodplains, wetlands, streams, their buffers and forest conservation easements to be located on the lot or parcel.

Approval is subject to the following conditions:

1. No grading, removal of vegetative cover and trees, paving or new structures will be permitted within the limits of 100-year floodplain, wetlands, streams or their required buffers in accordance with Section 16.116 of the Subdivision and Land Development Regulations. The building restriction lines must be established as 35 feet from the edge of any environmental buffer or feature located within the lot.
2. Forest conservation easements will not be permitted within 100 feet of the proposed houses to avoid future encroachments and to allow for usable yards.
3. The proposed reforestation easements shall be located adjacent to the environmental features in the rear of the property. No easements for reforestation or afforestation will be permitted in the areas of the property where development is proposed. Relocate the proposed reforestation easements to encompass the stream and wetland buffers and to provide a contiguous forested riparian buffer along the rear of the property.

Our decision was made based on the following:

Extraordinary Hardships or Practical Difficulties:

Strict compliance with the regulations would create a hardship for the developer. The stream, floodplain, wetlands and buffers will be located along the northern property line at least 260 feet from the proposed houses. This will provide for protection of the environmental resources and will help to reduce any negative effects from the proposed construction activities. Forest conservation easements are proposed onsite instead of paying a fee-in-lieu or purchasing credits in an offsite forest bank in order to fulfill the forest conservation obligation. The property is located along a scenic road and preservation of existing forest along the road is highly desirable. The lots are large enough in size to accommodate the forest easements while still providing for usable space in the lawn areas surrounding the houses. A 35-foot environmental setback will help to minimize encroachments into the easement areas.

Not Detrimental to the Public Interest

The proposal will not be detrimental to the public interest because the environmental features will be protected through forest easements and substantial buffers from the proposed development. The preservation of existing wooded areas on the property will help to maintain the scenic nature of this section of Old Frederick Road. The existing topography and proposed forest conservation easements located along the roadway will help to maintain the aesthetics and to screen the proposed development from the road.

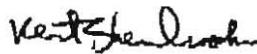
Will not nullify the intent or purpose of the regulations

Approval of this waiver will not nullify the intent or purpose of the regulations. The intent of the regulations is to protect the environmental resources and to minimize the potential for encroachments into these areas. A 35-foot environmental setback will be maintained from the proposed structures to the environmental areas and forest easements. This will allow for usable space in the lawn areas of the lots. The floodplain, stream buffer, wetlands and wetland buffer will be further protected by placing these areas into forest conservation easements.

Indicate this waiver petition file number, request, section of the regulations, action, conditions of approval, and date on all related plats, and site development plans, and building permits. This requested waiver will remain valid for one year from the date of this letter or as long as this subdivision remains in active processing.

If you have any questions, please contact Eric Buschman at (410) 313-2350 or email at [ebuschman@howardcountymd.gov](mailto:ebuschman@howardcountymd.gov).

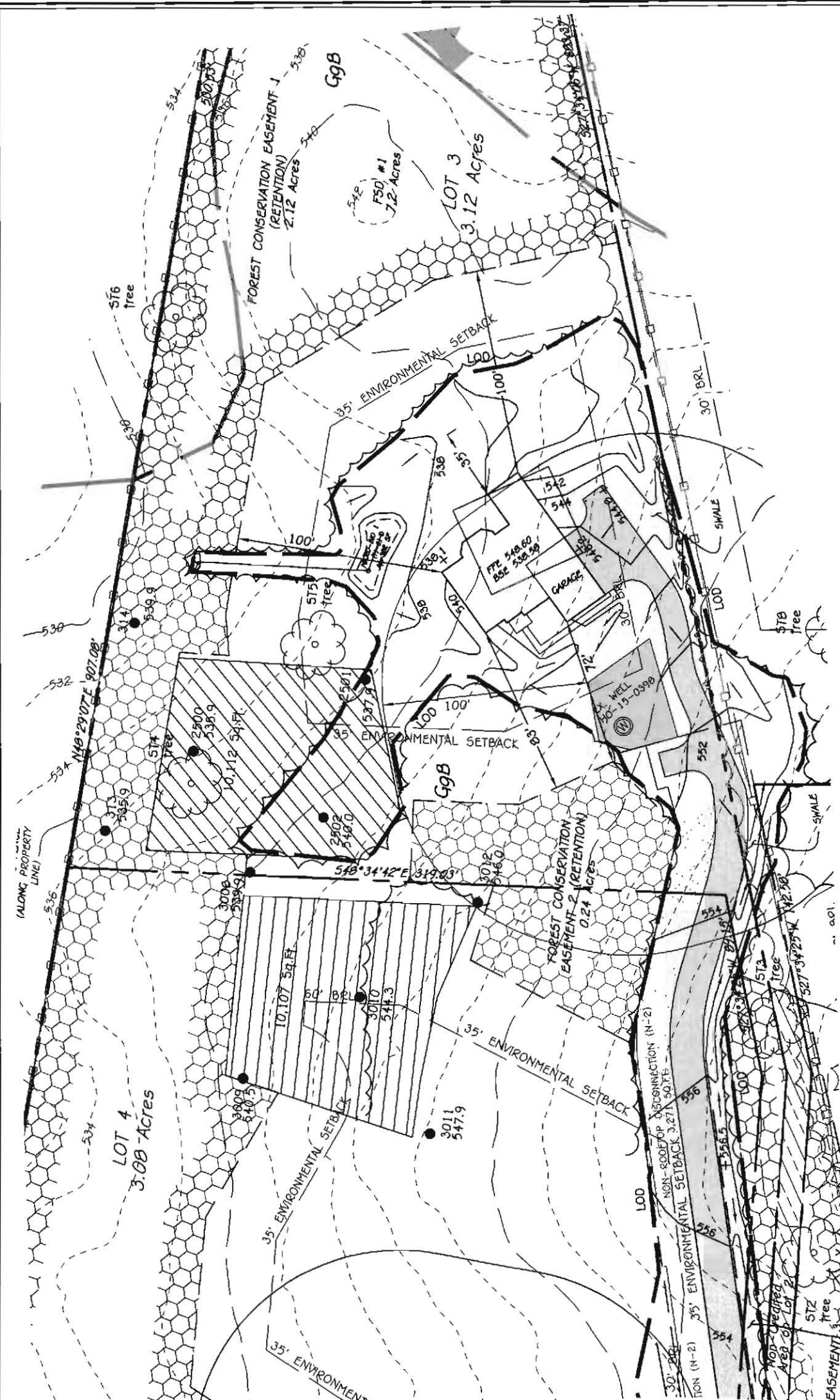
Sincerely,



Kent Sheubrooks, Chief  
Division of Land Development

KS/eb

cc: Research  
DED  
Real Estate Services  
FCC



**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE  
 ELLICOTT CITY, MARYLAND 21042  
 (410) 461 - 2855

ALTERNATIVE COMPLIANCE EXHIBIT  
**FIVE HILLS FARM**  
 LOTS 1 THRU 4  
 ZONED: RC-DEO  
 TAX MAP #9 GRID# 7 PARCEL #117  
 FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
 SCALE: 1"=60' DATE: MARCH, 2017

**Freemon, Robert**

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**From:** Freemon, Robert  
**Sent:** Thursday, June 14, 2018 2:31 PM  
**To:** 'Stephanie Tuite'  
**Subject:** 13900 Old Frederick Rd.  
**Attachments:** 13900 Old Frederick SP3.pdf

Stephanie,

Attached are my comments for the septic plan. If you have any questions let me know.

**Robert "Spencer" Freemon**

**Howard County Health Department**

**8930 Stanford Blvd. Columbia, MD 21045**

**Bureau of Environmental Health**

**Well and Septic Program**

**Phone: 410-313-6357**

**Email: [rfreemon@howardcountymd.gov](mailto:rfreemon@howardcountymd.gov)**

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



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

Facebook: [www.facebook.com/hocohealth](https://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 3  
13900 Frederick Rd.  
Sykesville, MD 21784  
"OSDS Comments"

DATE: 6/14/2018

---

After review of the on-site sewage disposal system plan here are my comments.

- Add the note: "All septic system components including the future pump tank and replacement trenches must be staked prior to installation."
- Raise the inlet of the initial trenching system to 3.5ft below grade. Placing the inlet higher allows for more efficient use of the effective sidewall.
- The FFE and BSE on the site plan are not consistent with the listed elevations.
- The dbox outlet elevation shown in the septic profile is not consistent with the listed elevation.

## Williams, Jeffrey

---

**From:** Williams, Jeffrey  
**Sent:** Tuesday, May 29, 2018 9:18 AM  
**To:** Stephanie Tuite (Stephanie@fcc-eng.com)  
**Cc:** Collins, Sarah; Freemon, Robert  
**Subject:** five hill farm lot 3

In looking at the emailed plan and discussing the field conditions with Sarah, it seems like there is still a disconnect between what is being shown on the plan and what the reality is on the ground. The actual depth of the tank lid in the ground out there was measured at 5', while the plan shows a tank lid depth of 4'. Furthermore, the contractor informed us that he was unable to achieve a 5' top trench depth from the installed d-box. The plan shows the top trench moved down the hill ½ foot and achieving a 4.5' inlet, which is not possible under the actual field conditions.

Based on what we know about the actual depths from the house to the tank and d-box, it looks to me like the only option is to design a plan with a tank down the hill and pumped up to a d-box that is installed at a shallower depth with trenches up as high as possible (not overlapping the hole from the original tank install). Keep in mind that a tank location must be 25' from a rain garden and pipe outfall.

Jeff Williams  
Program Supervisor, Well & Septic Program  
Bureau of Environmental Health  
Howard County Health Dept.  
410-313-4261  
[jewilliams@howardcountymd.gov](mailto:jewilliams@howardcountymd.gov)

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Bureau of Environmental Health

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

Facebook: [www.facebook.com/hocohealth](https://www.facebook.com/hocohealth)

Twitter: [HowardCoHealthDep](https://twitter.com/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 *RIF*  
Well & Septic Program

RE: Five Hills Farm, Lot 3  
13900 Old Frederick Rd.  
Sykesville, MD 21784  
*(Septic Plan Comments)*

DATE: 5/21/2018

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After review of the septic plan here are my comments.

- The 2<sup>nd</sup> replacement set of trenches may be used for the initial system. Regardless of the design (gravity or pump) a pump tank must still be shown on the site plan to prove one can fit in an effective manner for the remaining systems. The pump tank must meet the setback of 25' to the bio retention area and the end of discharge pipe. Add the note beside the pump, "For Future Replacement Systems"
- If a gravity system cannot be achieved the pump system must feed into the trenching system highest in elevation.
- Add the note, "If replacement area is needed a pump tank will be required."
- Add the note, "All trenching systems must be staked out prior to installation." We want to make sure all systems will fit since everything is packed very tightly.

**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 X<sub>1</sub> ON THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP OF HOWARD COUNTY, MARYLAND, COMMUNITY PANEL No. 24027C00550, 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-17002601.

**Legend**

- Public Forest Conservation Easement (Retention)
- 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

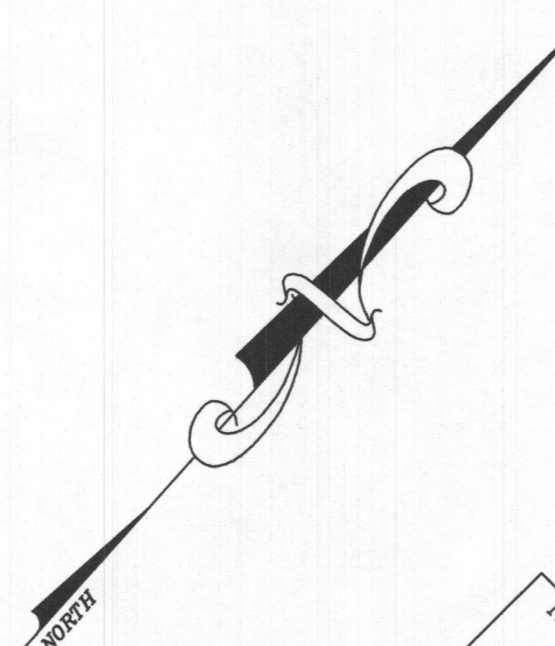
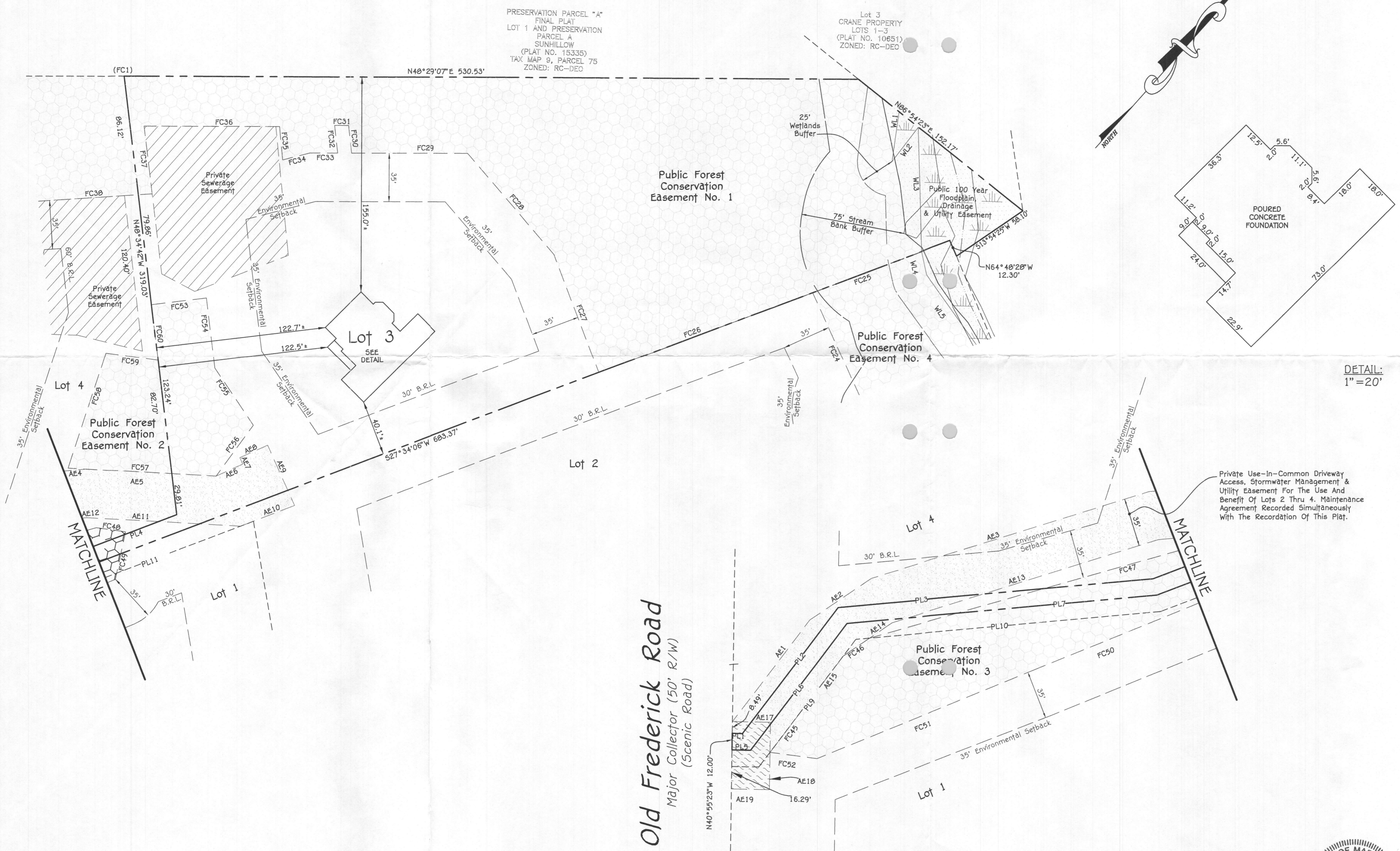
Property Line Line Table	
Sym.	Bearing & Distance
PL1	N 49°04'37" E 7.41'
PL2	N 04°35'22" W 114.42'
PL3	N 42°59'42" E 228.49'
PL4	N 27°34'06" E 96.15'
PL5	N 49°04'37" E 13.48'
PL6	N 04°35'22" W 115.20'
PL7	N 42°59'42" E 224.82'
PL8	N 49°04'37" E 19.55'
PL9	N 04°35'22" W 115.98'
PL10	N 42°59'42" E 221.16'
PL11	N 27°34'06" E 142.58'

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°57'28" E 47.10'
WL18	S 78°30'56" E 19.73'
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°09'49" 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°32'00" 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°09'49" W 42.73'
AE15	S 04°35'22" E 87.71'
AE16	N 40°52'23" W 21.79'
AE17	S 49°04'37" W 27.42'
AE18	S 40°52'23" E 26.98'
AE19	S 49°04'37" W 27.42'

Public Forest Conservation Easement Line Table	
Sym.	Bearing & Distance
FC1	N 48°29'07" E 831.05'
FC2	N 86°54'23" E 21.71'
FC3	S 53°37'44" E 64.00'
FC4	S 48°35'36" E 35.78'
FC5	N 88°30'46" E 15.19'
FC6	S 66°07'54" E 28.25'
FC7	S 76°44'19" E 21.48'
FC8	S 82°58'28" E 14.08'
FC9	S 72°39'51" E 14.37'
FC10	S 62°29'53" E 24.18'
FC11	S 08°31'48" E 28.05'
FC12	S 28°37'39" E 23.59'
FC13	S 48°57'03" E 5.16'
FC14	N 56°11'52" E 36.74'
FC15	S 64°48'28" E 124.26'
FC16	S 66°00'44" E 253.37'
FC17	S 41°28'30" W 176.95'
FC18	N 28°35'22" W 174.87'
FC19	N 62°25'38" W 142.54'
FC20	S 81°21'54" W 85.22'
FC21	N 07°07'09" W 35.00'
FC22	N 81°21'24" E 28.98'
FC23	N 19°24'23" W 11.77'
FC24	N 66°02'53" W 144.62'
FC25	N 27°34'06" E 85.57'
FC26	S 27°34'06" W 250.64'
FC27	N 62°25'54" W 91.54'
FC28	N 81°19'38" E 95.80'
FC29	S 48°30'09" W 84.21'
FC30	N 47°57'41" W 20.10'

Public Forest Conservation Easement Line Table	
Sym.	Bearing & Distance
FC31	S 48°29'07" W 10.06'
FC32	S 47°57'41" E 20.10'
FC33	S 48°30'09" W 20.28'
FC34	S 33°54'17" W 19.99'
FC35	N 47°07'22" W 24.12'
FC36	S 48°29'07" W 97.82'
FC37	S 48°34'42" E 49.16'
FC38	S 44°36'18" W 109.99'
FC39	S 32°36'09" E 27.02'
FC40	S 69°06'39" W 69.87'
FC41	S 43°58'30" W 83.43'
FC42	S 17°54'37" E 64.44'
FC43	S 48°36'09" W 35.00'
FC44	N 41°26'39" W 129.69'
FC45	N 04°35'22" W 87.71'
FC46	N 14°09'49" E 22.96'
FC47	N 32°29'51" E 239.43'
FC48	N 56°33'13" E 21.13'
FC49	S 29°46'44" E 39.07'
FC50	S 26°06'43" W 136.13'
FC51	S 25°59'37" W 168.54'
FC52	S 55°44'23" W 34.21'
FC53	N 41°25'18" E 21.13'
FC54	S 48°34'42" E 21.13'
FC55	S 75°35'09" E 49.89'
FC56	S 05°35'03" E 45.51'
FC57	S 51°31'47" W 107.01'
FC58	N 23°29'58" W 87.42'
FC59	N 26°07'18" E 37.91'
FC60	N 48°34'42" W 40.53'



DETAIL: 1" = 20'

Private Use-In-Common Driveway Access, Stormwater Management & Utility Easement For The Use And Benefit Of Lots 2 Thru 4. Maintenance Agreement Recorded Simultaneously With The Recording Of This Plat.

Old Frederick Road  
Major Collector (50' R/W)  
(Scenic Road)



#13900 OLD FREDERICK ROAD  
B.R.L. = BUILDING RESTRICTION LINE  
TOP OF FOUNDATION ELEVATION = 547.4'

Mark J. Bolal 10/20/17  
PROPERTY LINE SURVEYOR DATE  
REG. # 339

LOT 3  
FIVE HILLS FARM  
LOTS 1 THRU 4  
PLAT NOS. 24111 THRU 24113  
FOURTH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

HOUSE LOCATION DRAWING  
FOUNDATION LOCATION: 10/11/17  
FINAL LOCATION: \_\_\_\_\_  
BOUNDARY SURVEY: \_\_\_\_\_  
SCALE: 1"=40'  
DATE: 10/20/17  
DRAWN BY: JMB  
CHECKED BY: MJB  
PROJECT NO.: 14001-6002

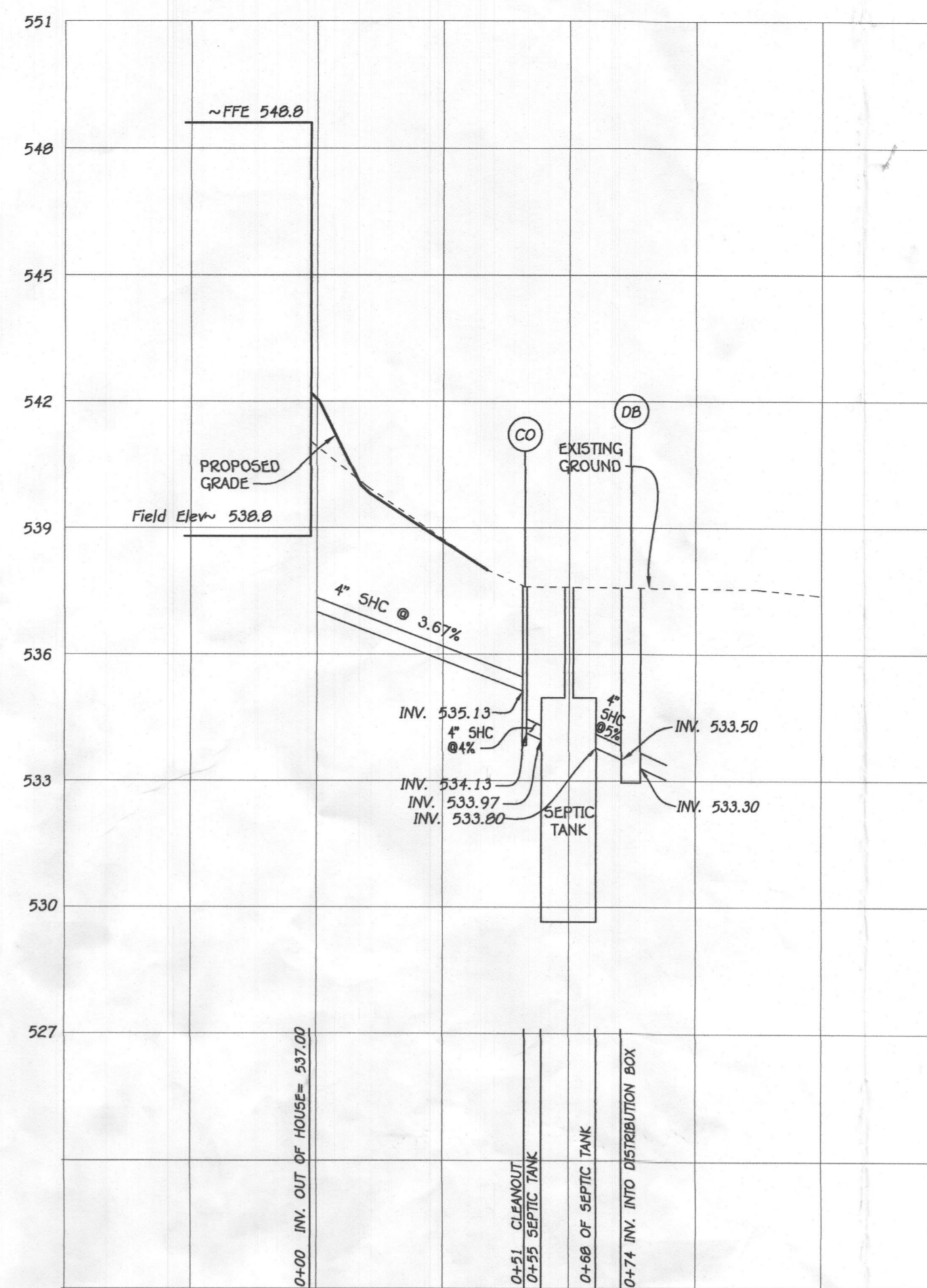
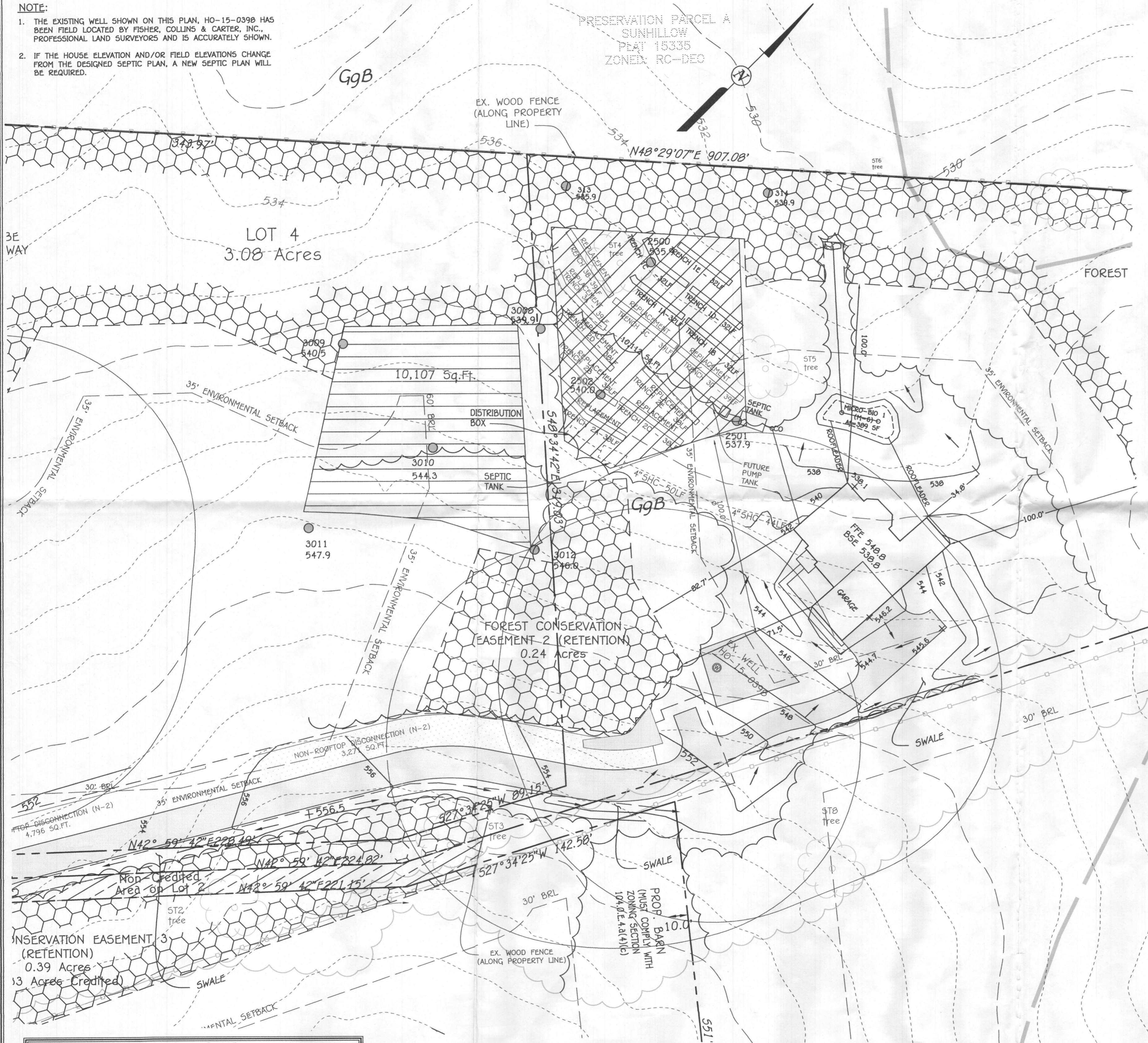
- GENERAL NOTES:**
1. ANY CHANGE TO THE LOCATIONS OR DEPTHS TO ANY COMPONENTS MUST BE APPROVED BY THE ENGINEER AND THE HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO INSTALLATION. A REVISED SITE PLAN MAY BE REQUIRED.
  2. THE MAXIMUM EARTH COVER OVER THE TANK IS 3 FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY BEARING TANK.
  3. ALL WELLS AND SEPTIC SYSTEMS LOCATED WITHIN 100 FEET OF THE PROPERTY BOUNDARIES AND 200 FEET DOWNSLOPE OF ANY WELLS AND/OR SEPTIC SYSTEMS HAVE BEEN SHOWN.
  4. THE FOREST CONSERVATION EASEMENTS SURROUNDING THE SEWAGE DISPOSAL AREA MUST BE PROFESSIONALLY STAKED BY A LICENSED SURVEYOR AND VERIFIED BY THE HEALTH DEPT PRIOR TO INSTALLATION.
  5. ALL SEPTIC SYSTEM COMPONENTS INCLUDING THE FUTURE PUMP TANK AND REPLACEMENT TRENCHES MUST BE STAKED PRIOR TO INSTALLATION.

FFE 540.0  
BSE 530.0  
INV. OUT OF HOUSE = 537.0  
EX. GROUND AT CLEANOUT = 537.5  
INV. INTO CLEANOUT = 535.13  
INV. OUT OF CLEANOUT = 534.13  
EX. GROUND AT SEPTIC TANK = 537.5  
TOP OF SEPTIC TANK = 534.97  
COVER OVER SEPTIC TANK = 2.53 FT  
INV. INTO SEPTIC TANK = 533.97  
INV. OUT OF SEPTIC TANK = 533.80  
EX. GROUND AT DISTRIBUTION BOX = 537.5  
INV. INTO DISTRIBUTION BOX = 533.5  
INV. OUT OF DISTRIBUTION BOX = 533.3

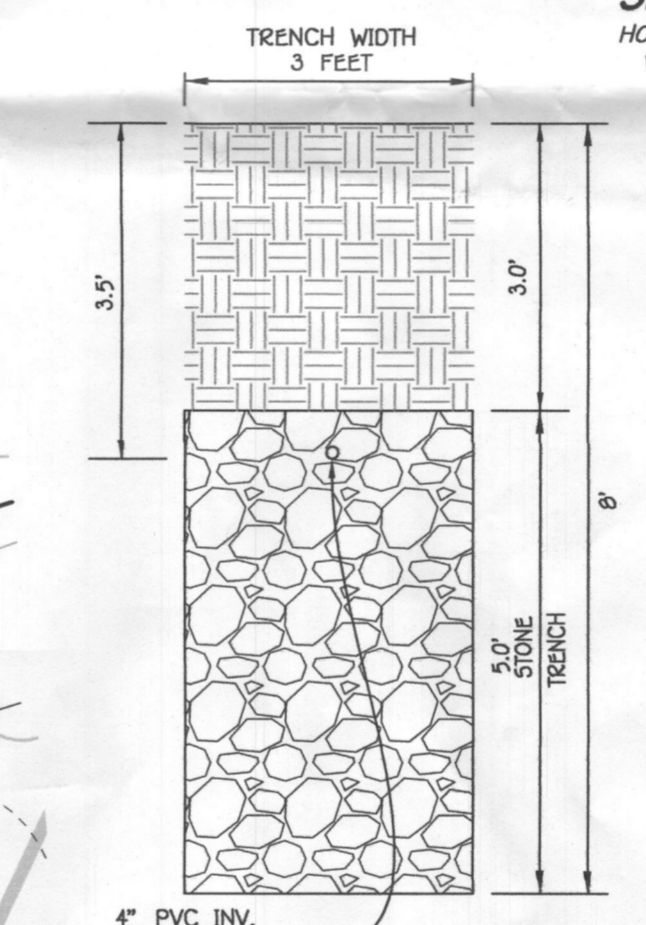
**SEWAGE DISPOSAL SYSTEM DATA (INITIAL SYSTEM)**  
6 BEDROOMS  
LOADING RATE = 6 BEDROOMS X 150 GPD/BEDROOM = 900 GPD  
APPLICATION RATE = 0.8  
EFFECTIVE SIDEWALL BEGINS AT 4 FEET  
TRENCH DEPTH = 8 FEET  
TRENCH WIDTH (W) = 3 FEET  
EFFECTIVE DEPTH (D) = 4 FEET  
SF OF DRAINFIELD = 900 GPD / 0.8 = 1125 SF  
COEFFICIENT OF REDUCTION OF TRENCH LENGTH =  $(W+2)/(W+1+2D) = (3+2)/(3+1+(2 \times 4)) = 0.416$   
TRENCH LENGTH = 1125 SF x 0.416 / 3 = 156 FEET (USE 160 FT)  
TRENCH SPACING = 20+W = ((2x4) + 3) = 11 USE 11'

**SEWAGE DISPOSAL SYSTEM DATA (FIRST REPLACEMENT SYSTEM)**  
6 BEDROOMS  
LOADING RATE = 6 BEDROOMS X 150 GPD/BEDROOM = 900 GPD  
APPLICATION RATE = 0.8  
EFFECTIVE SIDEWALL BEGINS AT 5 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 =  $(W+2)/(W+1+2D) = (3+2)/(3+1+(2 \times 3)) = 0.5$   
TRENCH LENGTH = 1125 SF x 0.5 / 3 = 187.5 FEET (USE 190 FEET)  
TRENCH SPACING = 20+W = ((2x3) + 3) = 9 USE 10'

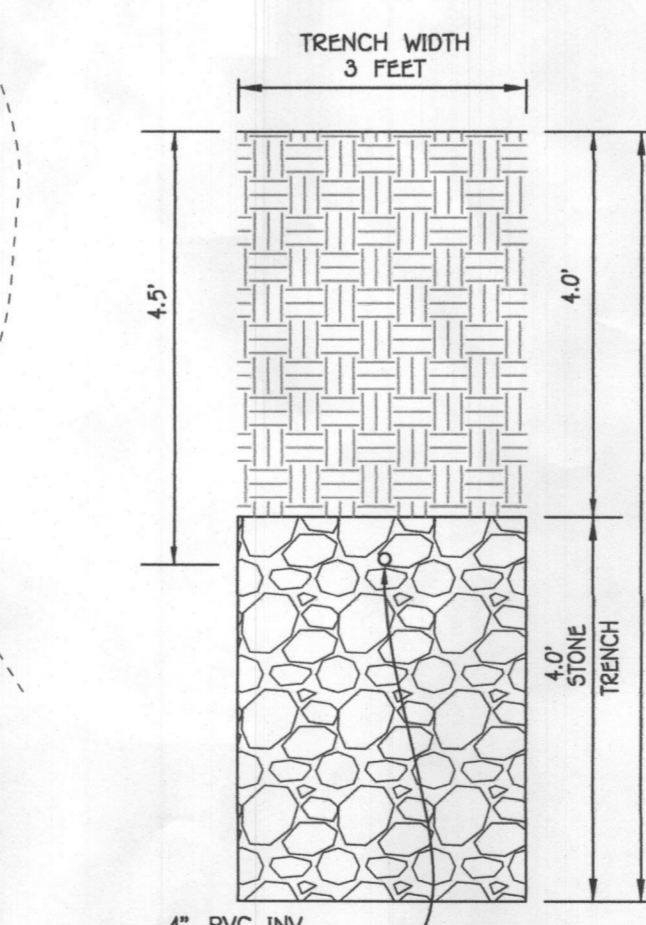
- NOTE:**
1. THE EXISTING WELL SHOWN ON THIS PLAN, HO-15-0390 HAS BEEN FIELD LOCATED BY FISHER, COLLINS & CARTER, INC., PROFESSIONAL LAND SURVEYORS AND IS ACCURATELY SHOWN.
  2. IF THE HOUSE ELEVATION AND/OR FIELD ELEVATIONS CHANGE FROM THE DESIGNED SEPTIC PLAN, A NEW SEPTIC PLAN WILL BE REQUIRED.



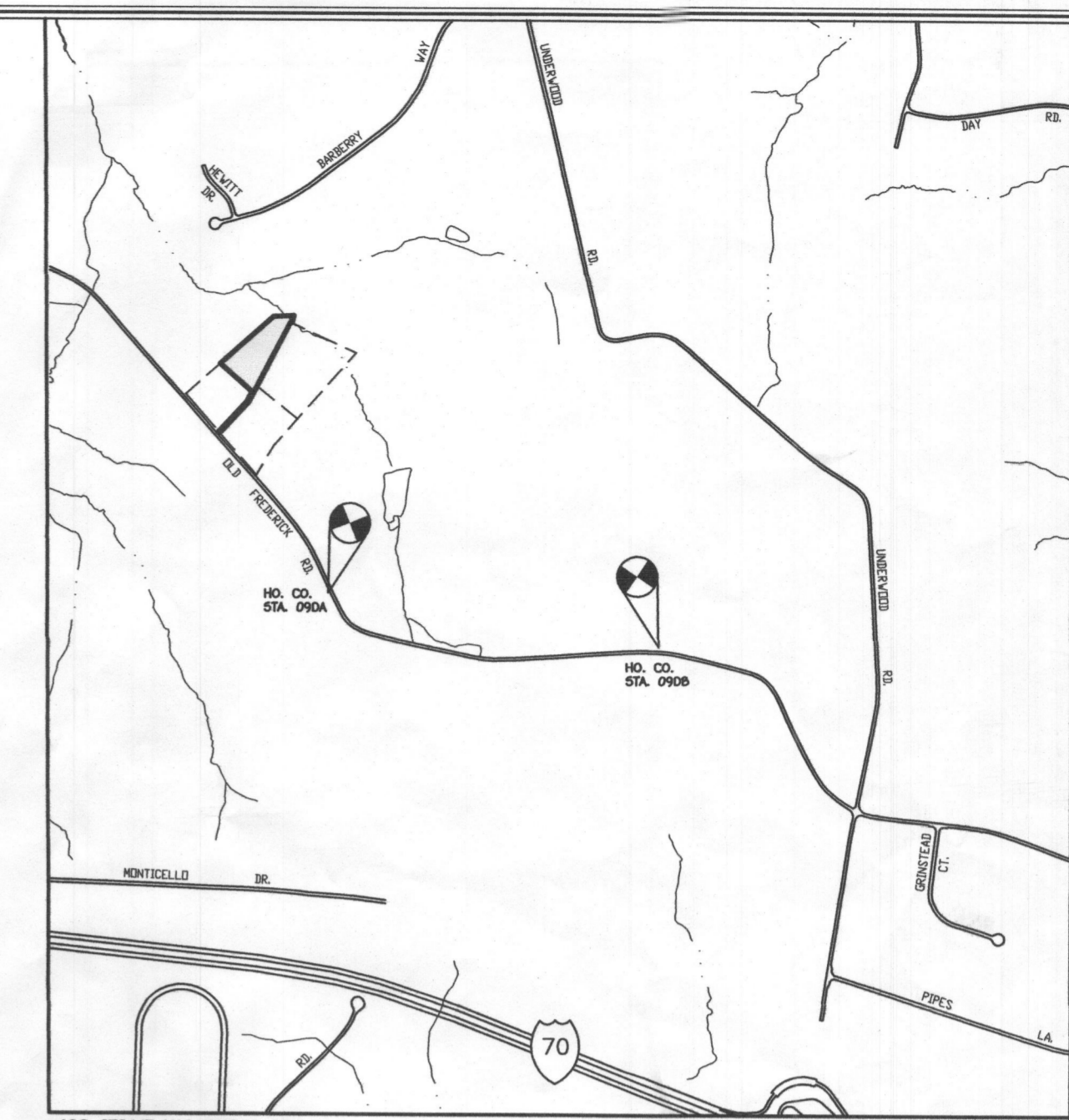
**SEPTIC PROFILE**  
HORIZONTAL SCALE: 1"=30'  
VERTICAL SCALE: 1"=3'



**INITIAL TRENCH & SECOND REPLACEMENT TRENCH DETAIL**  
SCALE: 1"=2'



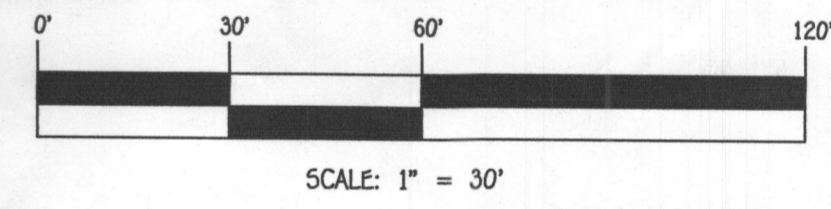
**FIRST REPLACEMENT TRENCH DETAIL**  
SCALE: 1"=2'



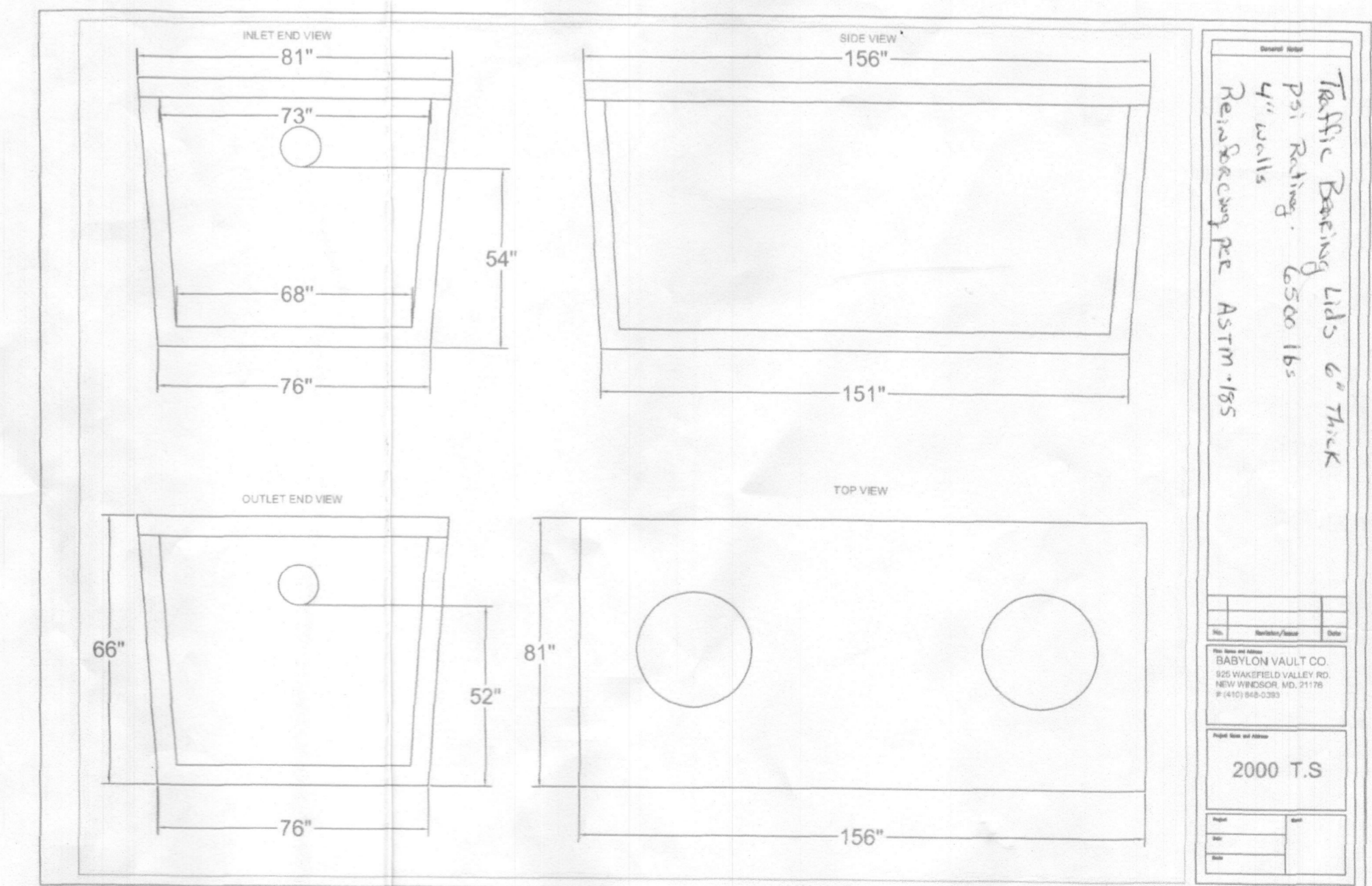
**LEGEND**

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

Approved Septic System Plan  
Howard County Health Department  
Signature: [Signature] Date: 6/15/2018



**SEWAGE DISPOSAL SYSTEM DATA (SECOND REPLACEMENT SYSTEM)**  
6 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) = 4 FEET  
SF OF DRAINFIELD = 900 GPD / 0.8 = 1125 SF  
COEFFICIENT OF REDUCTION OF TRENCH LENGTH =  $(W+2)/(W+1+2D) = (3+2)/(3+1+(2 \times 4)) = 0.416$   
TRENCH LENGTH = 1125 SF x 0.416 / 3 = 156 FEET  
TRENCH SPACING = 20+W = ((2x4) + 3) = 11 USE 11'



**SOILS LEGEND**

SOIL	NAME	CLASS	K FACTOR
GgB	Glenelg loam, 3 to 8 percent slopes	B	0.20
GgC	Glenelg loam, 8 to 15 percent slopes	B	0.20

**TRENCH DESIGN**

TRENCH	GROUND ELEV.	TOP OF STONE ELEV.	PIPE INVERT ELEV.	DEPTH TO STONE FROM GROUND	DEPTH OF TRENCH (FT)	BOTTOM OF TRENCH ELEV.	EFFECTIVE DEPTH STARTS AT	EFFECTIVE DEPTH (D)	WIDTH OF TRENCHES (W)	TRENCH SPACING
1A	536.3	533.3	532.8	3.0'	5.0	528.3	4.0'	4.0'	3.0'	11'
1B	536.3	533.3	532.8	3.0'	5.0	528.3	4.0'	4.0'	3.0'	11'
1C	535.5	532.5	532.0	3.0'	5.0	527.5	4.0'	4.0'	3.0'	11'
1D	535.5	532.5	532.0	3.0'	5.0	527.5	4.0'	4.0'	3.0'	11'
1E	534.5	531.5	531.0	3.0'	5.0	526.5	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. 38386, EXPIRATION DATE: 01/12/2020.

Signature: [Signature] Date: 6/15/18

**SEPTIC PLAN**  
**FIVE HILLS FARM, LOT 3**  
ZONED RC-DEO  
TAX MAP No. 9 GRID No. 7 PARCEL No. 117  
FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
SCALE: A5 SHOWN DATE: JUNE, 2018  
SHEET 1 OF 1

**FISHER, COLLINS & CARTER, INC.**  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTENNIAL SQUARE OFFICE PARK - 10272 BALDWIN NATIONAL PIKE  
ELLSWORTH CITY, MARYLAND 21042  
(410) 461-2895

**OWNER / DEVELOPER**  
MOLLY FREDETTE & CHRISTOPHER ESPOSITO  
13605 FREDERICK ROAD  
WEST FRIENDSHIP MD 21794  
410-381-2259

**GENERAL NOTES:**

1. 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.
2. THE MAXIMUM EARTH COVER OVER THE TANK IS 3 FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY BEARING TANK.
3. 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.
4. THE FOREST CONSERVATION EASEMENTS SURROUNDING THE SEWAGE DISPOSAL AREA MUST BE PROFESSIONALLY STAKED BY A LICENSED SURVEYOR AND VERIFIED BY THE HEALTH DEPT PRIOR TO INSTALLATION.

FFE 548.8  
BSE 538.8  
INV. OUT OF HOUSE = 537.0  
EX. GROUND AT CLEANOUT = 537.5  
INV. INTO CLEANOUT = 535.13  
INV. OUT OF CLEANOUT = 534.13  
EX. GROUND AT SEPTIC TANK = 537.5  
TOP OF SEPTIC TANK = 534.97  
COVER OVER SEPTIC TANK = 2.53'  
INV. INTO SEPTIC TANK = 533.97  
INV. OUT OF SEPTIC TANK = 533.80  
EX. GROUND AT DISTRIBUTION BOX = 537.5  
INV. INTO DISTRIBUTION BOX = 533.5  
INV. OUT OF DISTRIBUTION BOX = 533.3

**SEWAGE DISPOSAL SYSTEM DATA (INITIAL SYSTEM)**

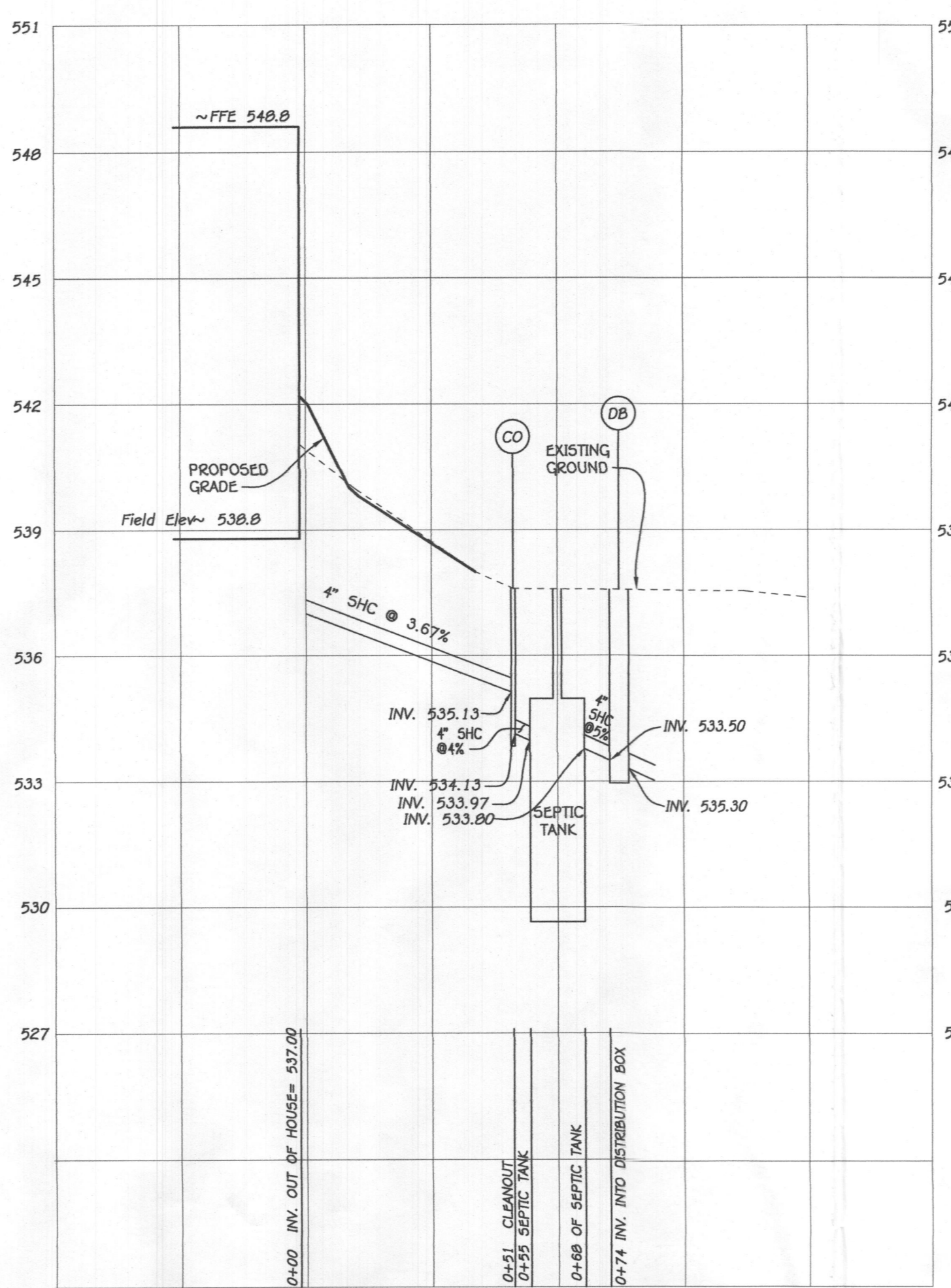
6 BEDROOMS  
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APPLICATION RATE = 0.8  
EFFECTIVE SIDEWALL BEGINS AT 4 FEET  
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TRENCH WIDTH (W) = 3 FEET  
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SF OF DRAINFIELD = 900 GPD / 0.8 = 1125 SF  
COEFFICIENT OF REDUCTION OF TRENCH LENGTH =  $(W+2)/(W+1+2D) = (3+2)/(3+1+(2*4)) = 0.416$   
TRENCH LENGTH = 1125 SF x 0.416 / 3 = 156 FEET (USE 160FT)  
TRENCH SPACING = 2D+W = ((2\*4) + 3) = 11 USE 11'

**SEWAGE DISPOSAL SYSTEM DATA (FIRST REPLACEMENT SYSTEM)**

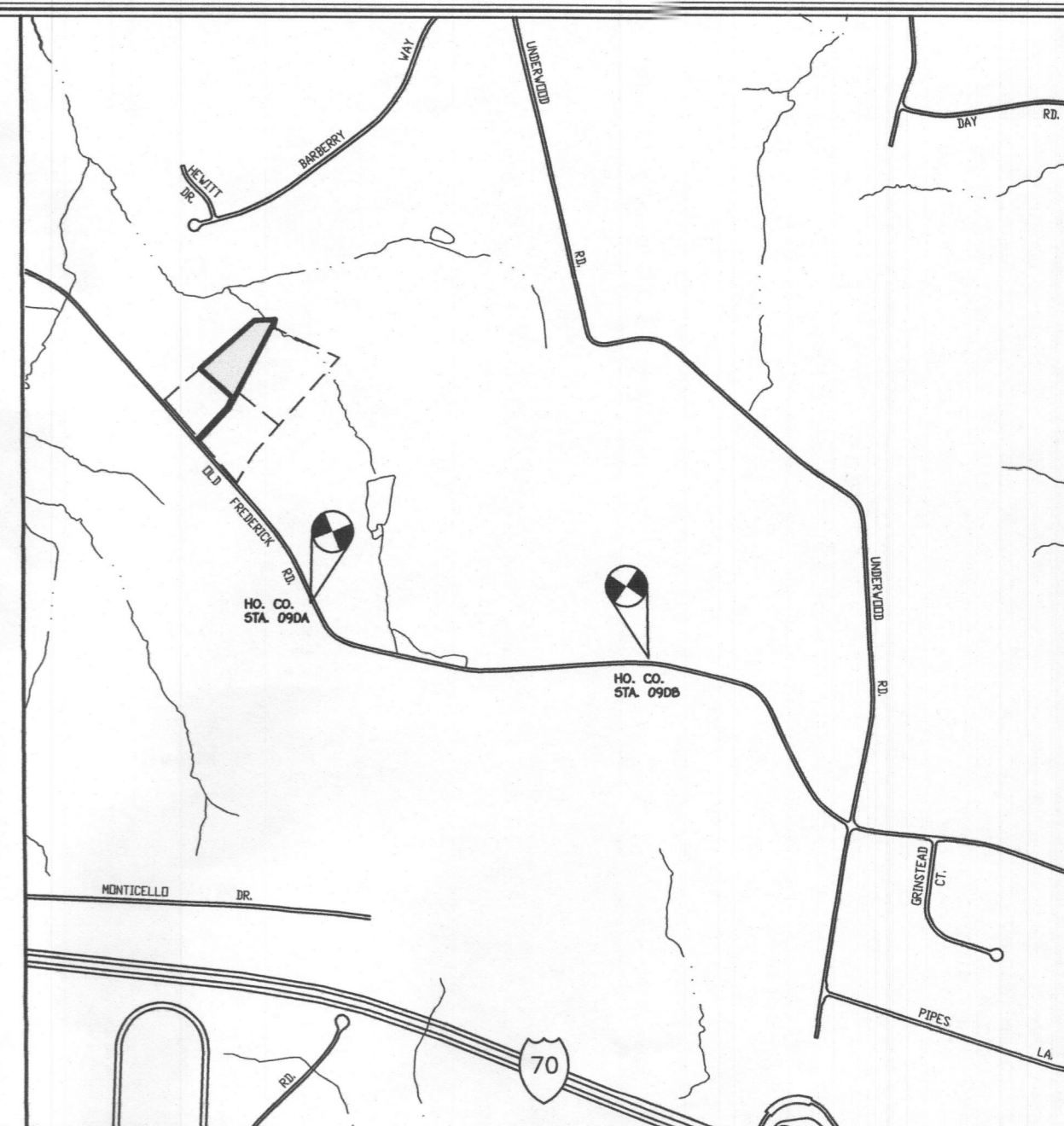
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TRENCH SPACING = 2D+W = ((2\*3) + 3) = 9 USE 10'

**NOTE:**

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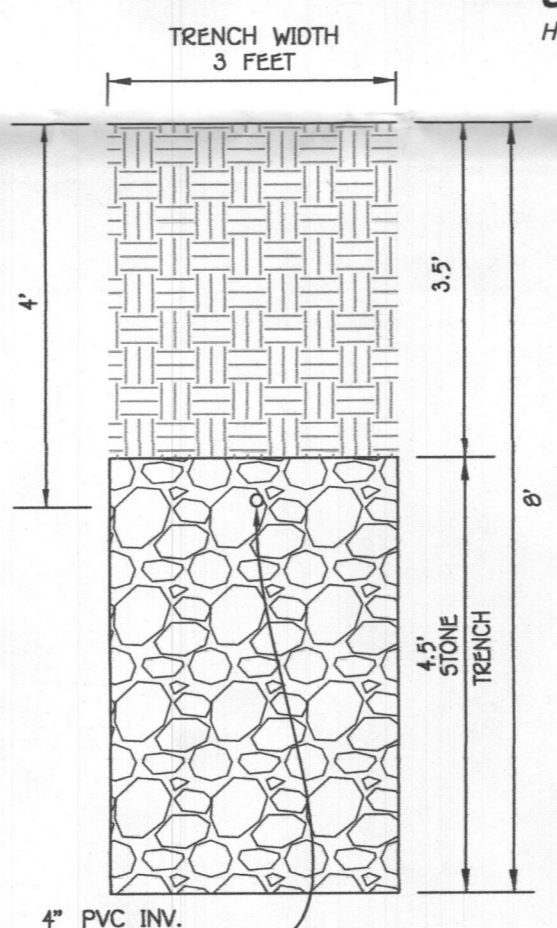


**SEPTIC PROFILE**  
HORIZONTAL SCALE: 1"=30'  
VERTICAL SCALE: 1"=3'

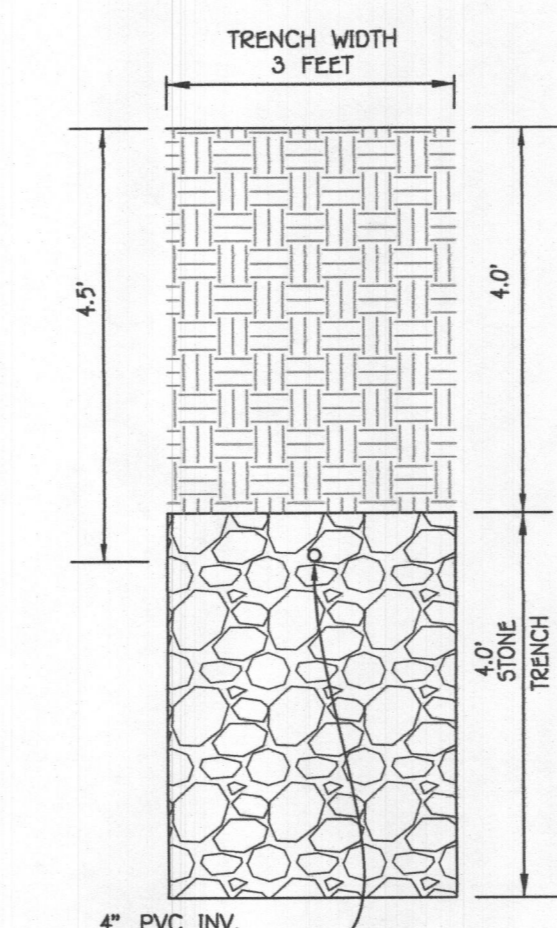


**VICINITY MAP**  
SCALE: 1" = 1200'

- LEGEND**
- - - - - EXISTING 2' CONTOURS
  - - - - - EXISTING 10' CONTOURS
  - - - - - EXISTING TREE LINE
  - - - - - SOIL LINES AND TYPES
  - (W) DENOTES EXISTING WELL
  - (P) DENOTES PASSED PERC HOLE
  - (2511) DENOTES 2511 POINT NUMBER
  - (563.1) DENOTES 563.1 ELEVATION
  - (1500) DENOTES 1500 SQ.FT. ALTERNATE WELL SITE

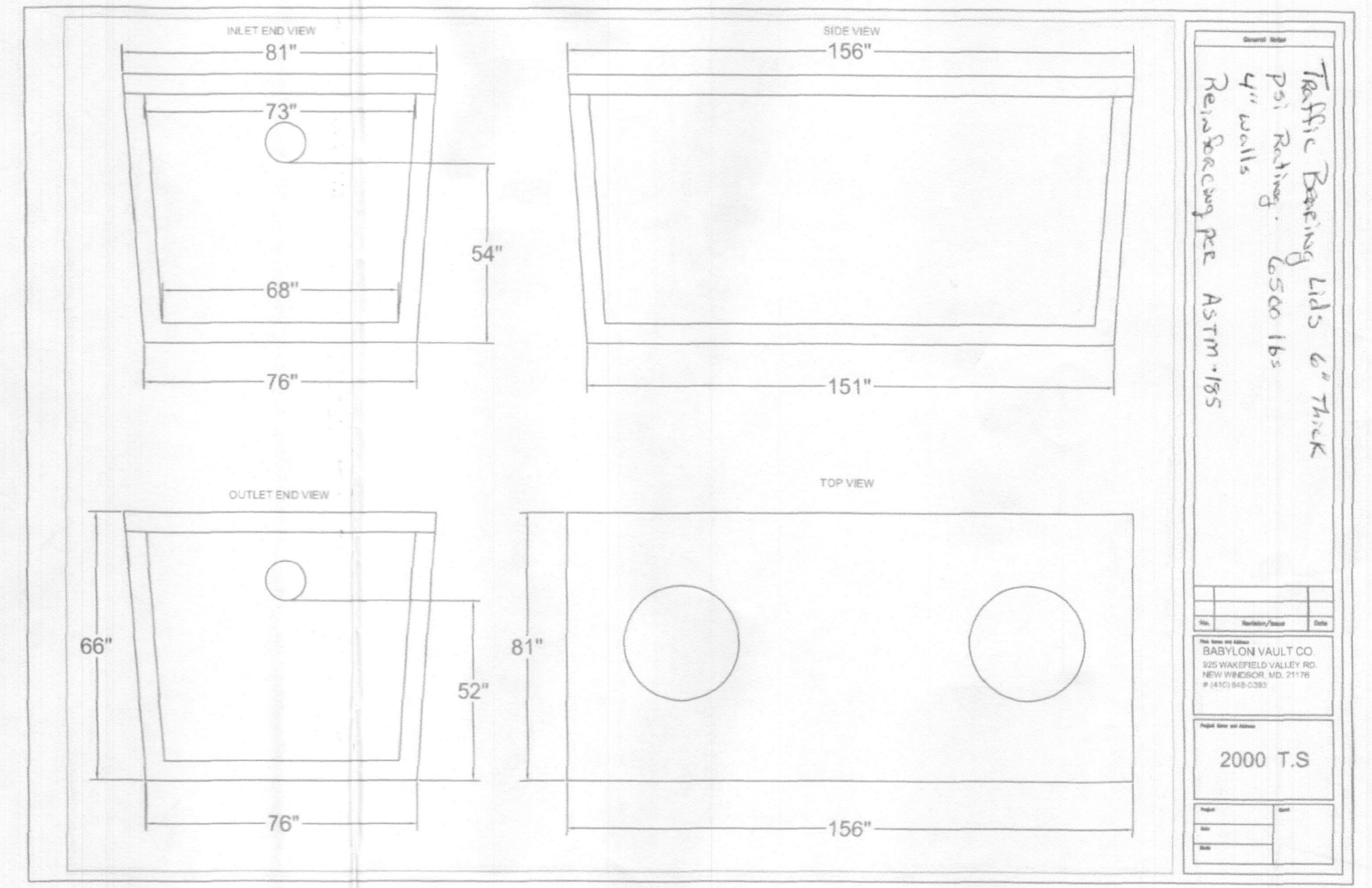
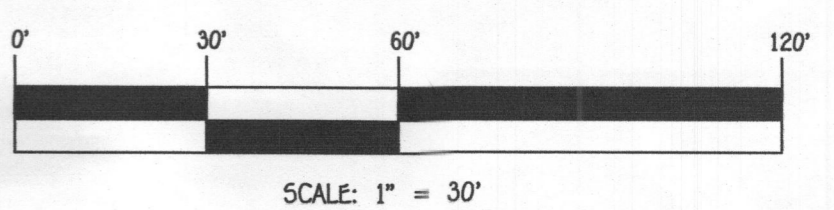


**INITIAL TRENCH & SECOND REPLACEMENT TRENCH DETAIL**  
SCALE: 1"=2'



**FIRST REPLACEMENT TRENCH DETAIL**  
SCALE: 1"=2'

**SEWAGE DISPOSAL SYSTEM DATA (SECOND REPLACEMENT SYSTEM)**  
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APPLICATION RATE = 0.8  
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TRENCH SPACING = 2D+W = ((2\*4) + 3) = 11 USE 11'



Talkie Bearing Lids 6" Thick  
PVC Railing 4" x 4" x 1/2"  
Reinforced per ASTM-185  
2000 T.S.

**SOILS LEGEND**

SOIL	NAME	CLASS	K FACTOR
GgB	Glenelg loam, 3 to 8 percent slopes	B	0.20
GgC	Glenelg loam, 8 to 15 percent slopes	B	0.20

**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
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**OWNER / DEVELOPER**  
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13605 FREDERICK ROAD  
WEST FRIENDSHIP MD 21794  
410-381-2259



**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. 38386, EXPIRATION DATE: 01/12/2020.  
*Signature* 6/4/18  
DATE

**SEPTIC PLAN**  
**FIVE HILLS FARM, LOT 3**  
ZONED RC-DEO  
TAX MAP No. 9 GRID No. 7 PARCEL No. 117  
FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
SCALE: AS SHOWN DATE: JUNE, 2018  
SHEET 1 OF 1

- GENERAL NOTES:**
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  2. THE MAXIMUM EARTH COVER OVER THE TANK IS 3 FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY BEARING TANK.
  3. 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.
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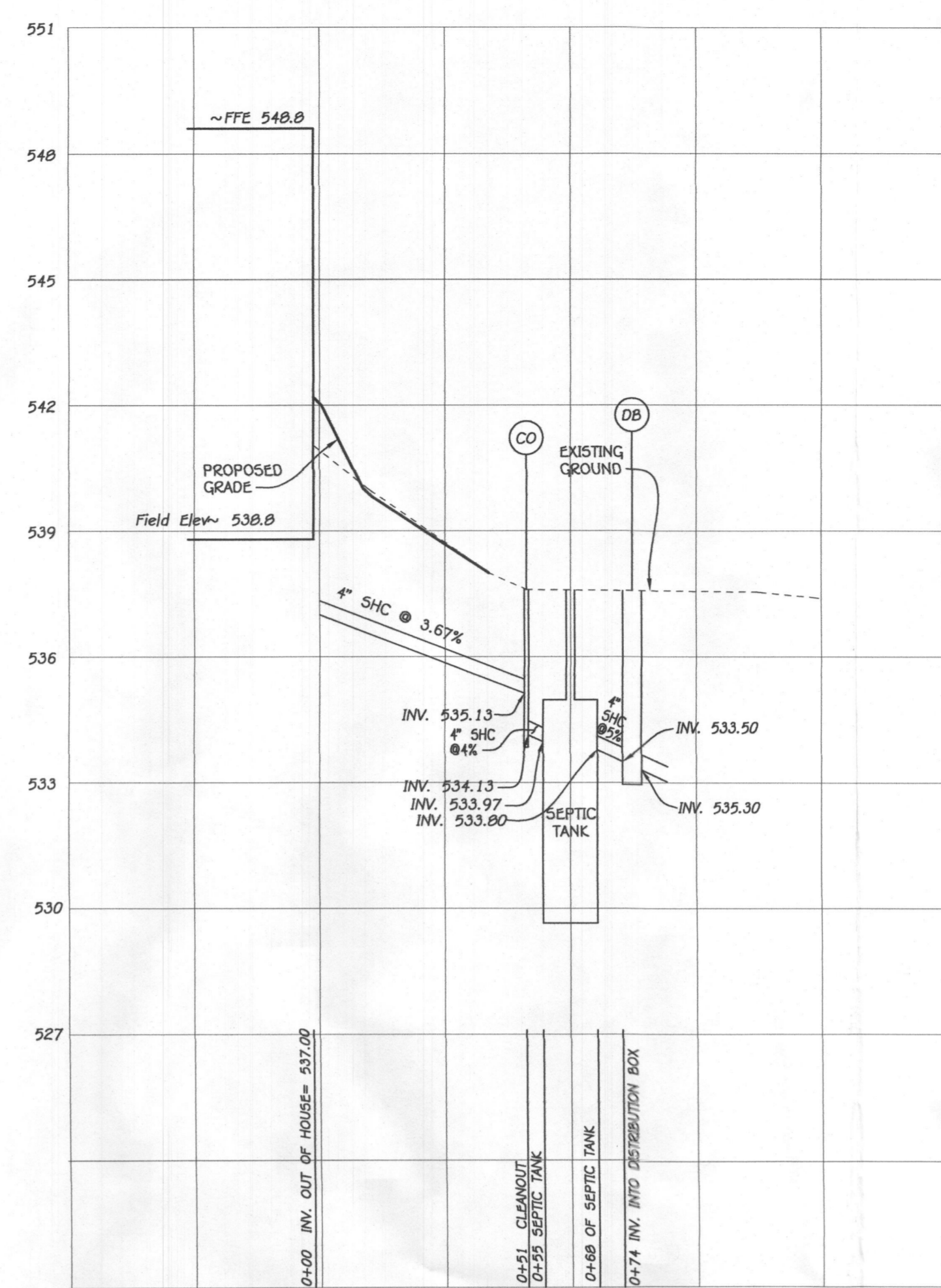
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 EX. GROUND AT SEPTIC TANK = 537.5  
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 COVER OVER SEPTIC TANK = 2.53'  
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 INV. OUT OF SEPTIC TANK = 533.80  
 EX. GROUND AT DISTRIBUTION BOX = 537.5  
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 INV. OUT OF DISTRIBUTION BOX = 533.3

**SEWAGE DISPOSAL SYSTEM DATA (INITIAL SYSTEM)**  
 6 BEDROOMS  
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 APPLICATION RATE = 0.8  
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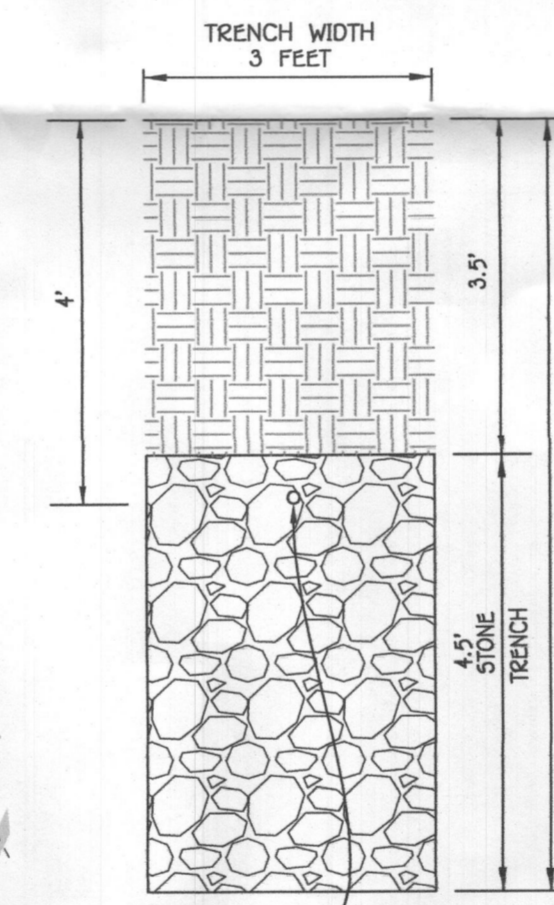
**SEWAGE DISPOSAL SYSTEM DATA (FIRST REPLACEMENT SYSTEM)**  
 6 BEDROOMS  
 LOADING RATE = 6 BEDROOMS X 150 GPD/BEDROOM = 900 GPD  
 APPLICATION RATE = 0.8  
 EFFECTIVE SIDEWALL BEGINS AT 5 FEET  
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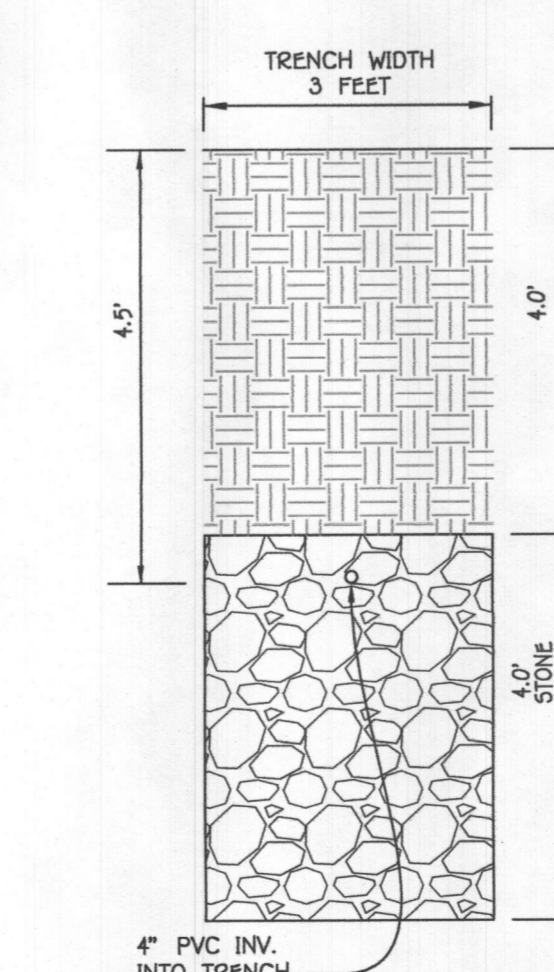
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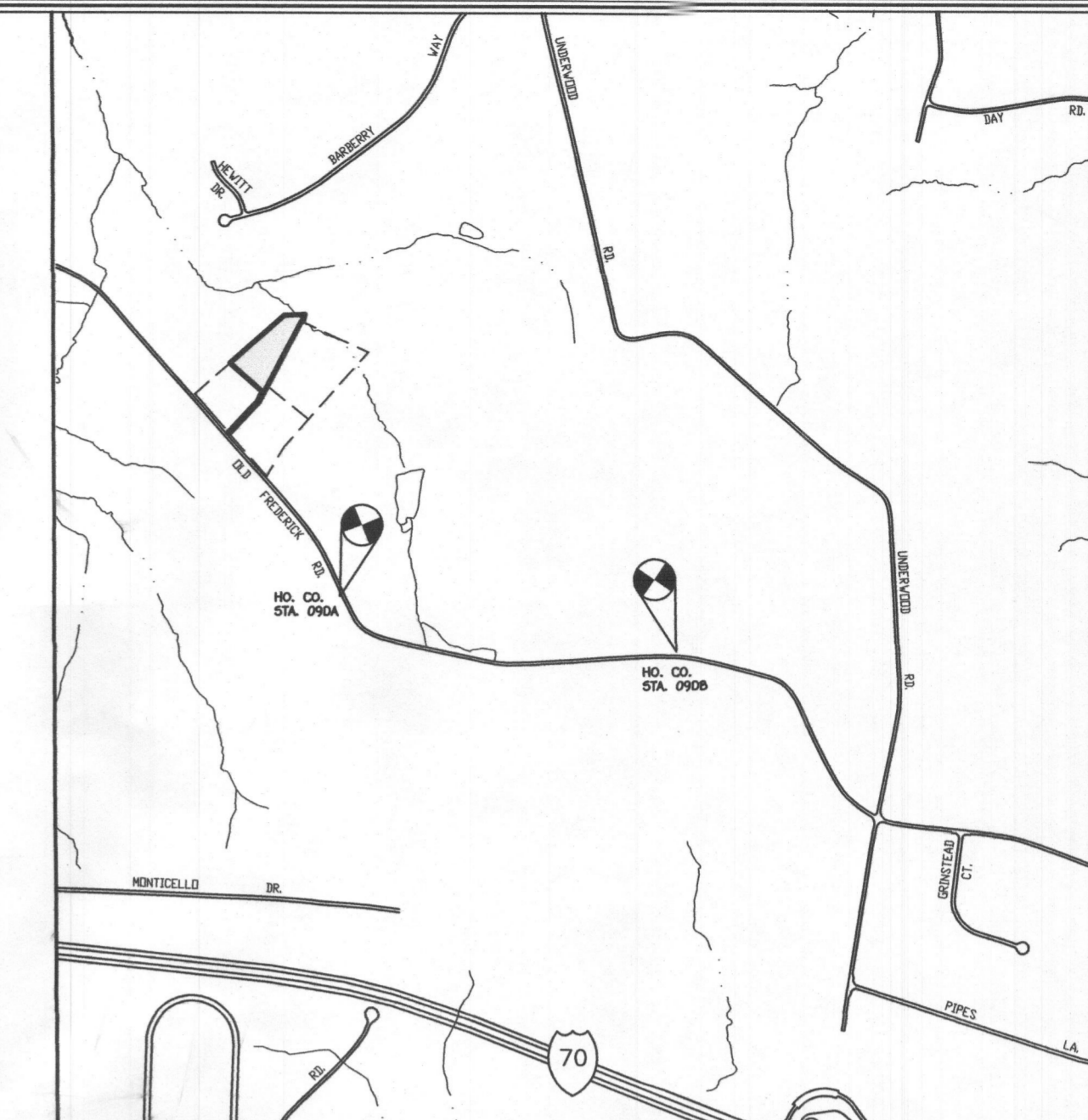
**SEPTIC PROFILE**  
 HORIZONTAL SCALE: 1"=30'  
 VERTICAL SCALE: 1"=3'



**INITIAL TRENCH & SECOND REPLACEMENT TRENCH DETAIL**  
 SCALE: 1"=2'



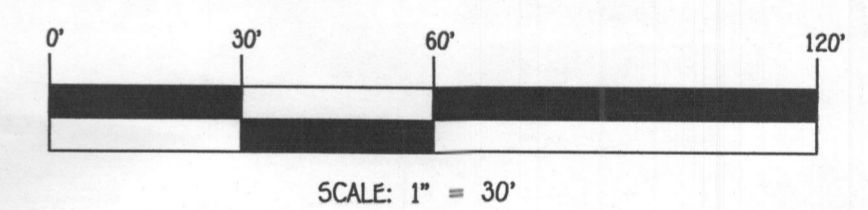
**FIRST REPLACEMENT TRENCH DETAIL**  
 SCALE: 1"=2'



**VICINITY MAP**  
 SCALE: 1" = 1200'

**LEGEND**

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



**SOILS LEGEND**

SOIL	NAME	CLASS	K FACTOR
GgB	Glenelg loam, 3 to 8 percent slopes	B	0.20
GgC	Glenelg loam, 8 to 15 percent slopes	B	0.20

**TRENCH DESIGN**

TRENCH	GROUND ELEV.	TOP OF STONE ELEV.	PIPE INVERT ELEV.	DEPTH TO STONE FROM GROUND	DEPTH OF TRENCH (FT)	BOTTOM OF TRENCH ELEV.	EFFECTIVE DEPTH STARTS AT	EFFECTIVE DEPTH (D)	WIDTH OF TRENCHES (W)	TRENCH SPACING
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 ELICOTT CITY, MARYLAND 21094  
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 Signature of Professional Engineer: *Stephen Jurek* 6/4/18  
 DATE

**SEPTIC PLAN**  
**FIVE HILLS FARM, LOT 3**  
 ZONED RC-DEO  
 TAX MAP No. 9 GRID No. 7 PARCEL No. 117  
 FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
 SCALE: AS SHOWN DATE: JUNE, 2018  
 SHEET 1 OF 1

Tablet Bearing Lids 6" Thick  
 4" walls  
 Reinforcement per ASTM-185  
 2000 T.S.

**GENERAL NOTES:**

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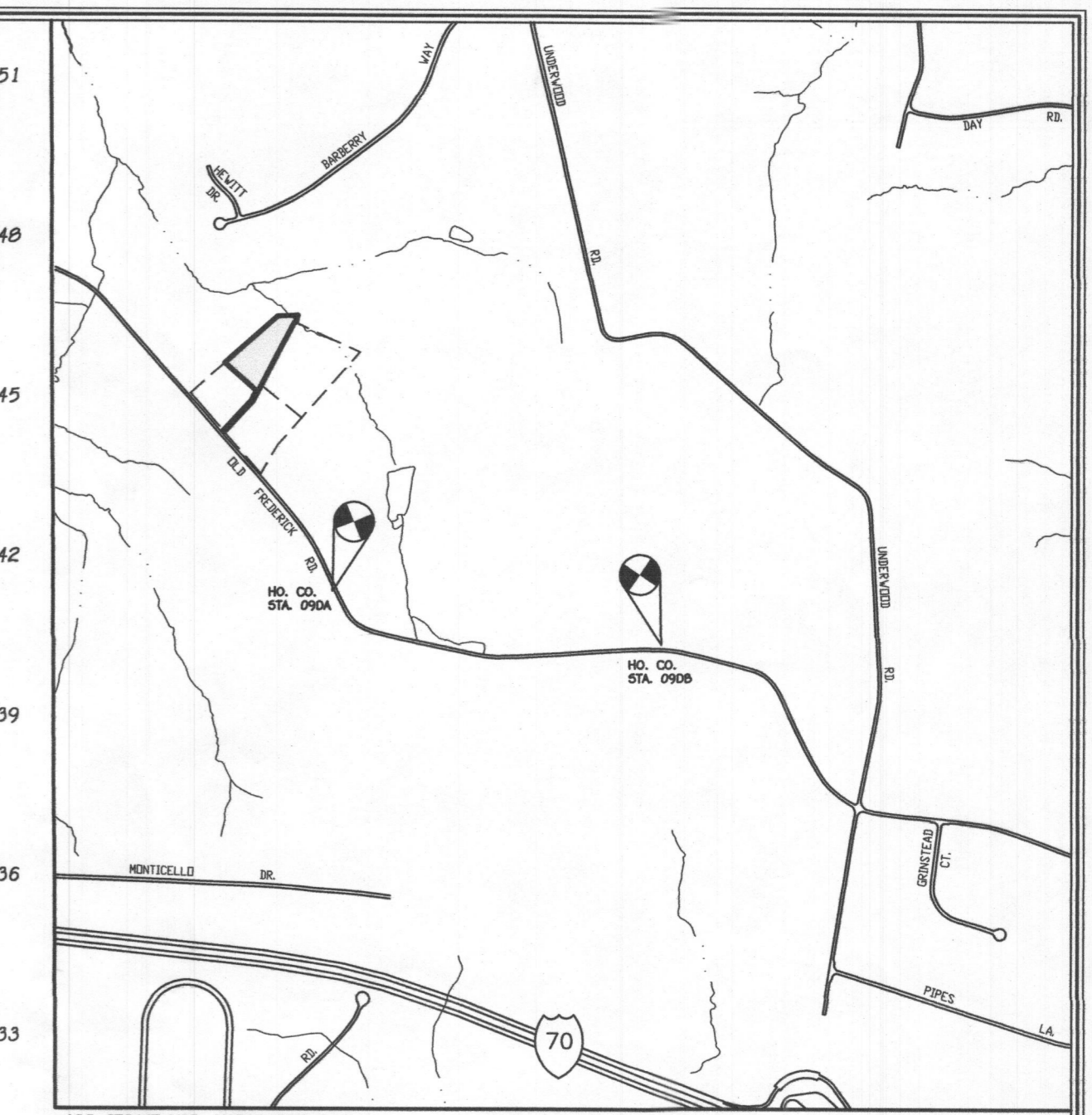
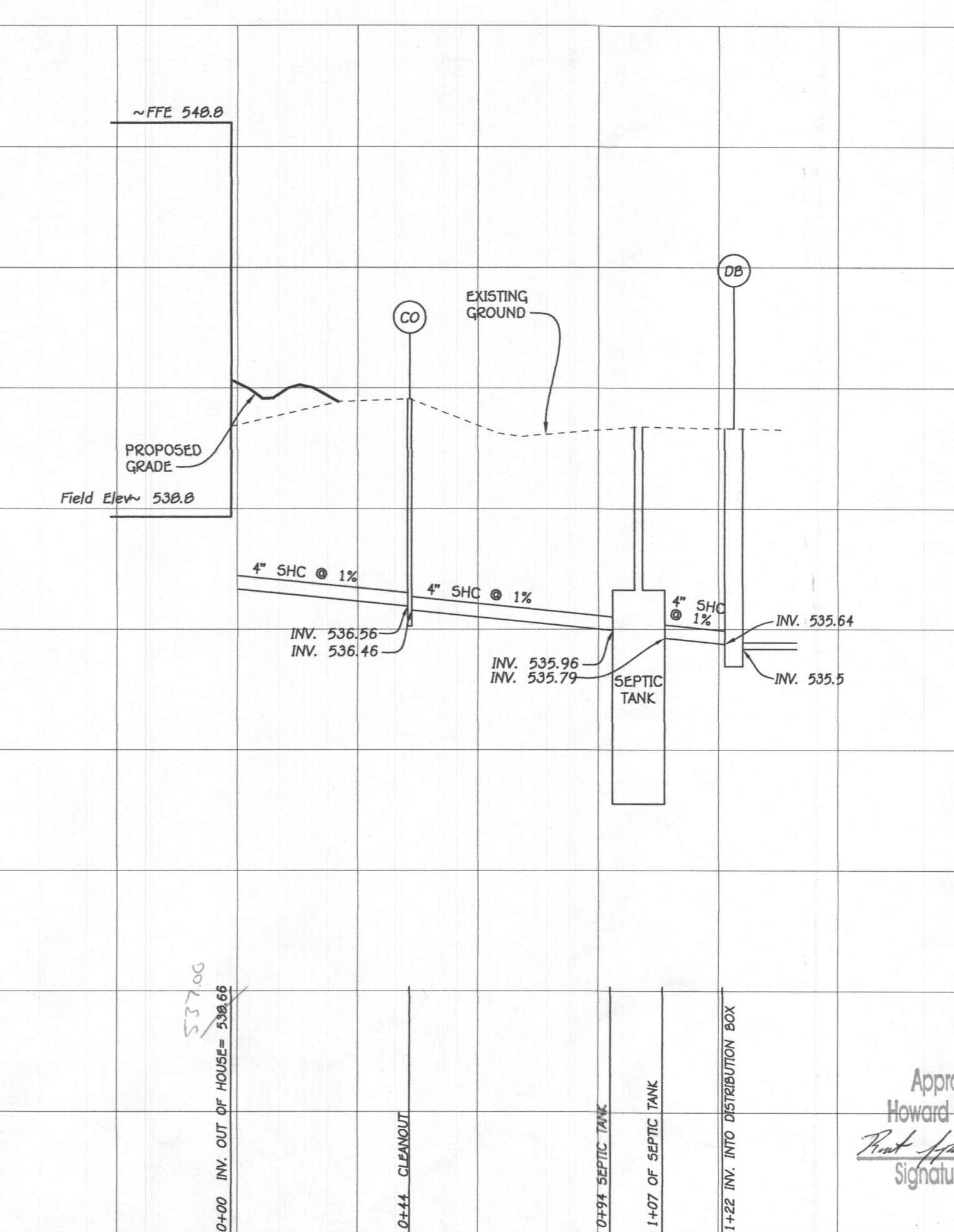
**NOTE:**

1. THE EXISTING WELL SHOWN ON THIS PLAN, HO-15-0398 HAS BEEN FIELD LOCATED BY FISHER, COLLINS & CARTER, INC., PROFESSIONAL LAND SURVEYORS AND IS ACCURATELY SHOWN.
2. IF THE HOUSE ELEVATION AND/OR FIELD ELEVATIONS CHANGE FROM THE DESIGNED SEPTIC PLAN, A NEW SEPTIC PLAN WILL BE REQUIRED.

FFE 548.8  
BSE 538.8  
INV. OUT OF HOUSE = 537.0  
PROP. GROUND AT CLEANOUT = 541.7  
INV. INTO CLEANOUT = 536.56  
INV. OUT OF CLEANOUT = 536.46  
EX. GROUND AT SEPTIC TANK = 541.0  
TOP OF SEPTIC TANK = 536.96  
COVER OVER SEPTIC TANK = 4.04'  
INV. INTO SEPTIC TANK = 535.96  
INV. OUT OF SEPTIC TANK = 535.79  
EX. GROUND AT DISTRIBUTION BOX = 541.0  
INV. INTO DISTRIBUTION BOX = 535.64  
INV. OUT OF DISTRIBUTION BOX = 535.5

**SEWAGE DISPOSAL SYSTEM DATA (INITIAL SYSTEM)**  
6 BEDROOMS  
LOADING RATE = 6 BEDROOMS X 150 GPD/BEDROOM = 900 GPD  
APPLICATION RATE = 0.8  
EFFECTIVE SIDEWALL BEGINS AT 4.5 FEET  
TRENCH DEPTH = 8 FEET  
TRENCH WIDTH (W) = 3 FEET  
EFFECTIVE DEPTH (D) = 4 FEET  
SF OF DRAINFIELD = 900 GPD / 0.8 = 1125 SF  
COEFFICIENT OF REDUCTION OF TRENCH LENGTH =  $(W+2)/(W+1+2D) = (3+2)/(3+1+(2 \times 4)) = 0.455$   
TRENCH LENGTH = 1125 SF X 0.455 / 3 = 171 FEET  
TRENCH SPACING = 2D+W = ((2 \times 4) + 3) = 11 USE 11'

**SEWAGE DISPOSAL SYSTEM DATA (FIRST REPLACEMENT)**  
6 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) = 4 FEET  
SF OF DRAINFIELD = 900 GPD / 0.8 = 1125 SF  
COEFFICIENT OF REDUCTION OF TRENCH LENGTH =  $(W+2)/(W+1+2D) = (3+2)/(3+1+(2 \times 4)) = 0.416$   
TRENCH LENGTH = 1125 SF X 0.416 / 3 = 156 FEET  
TRENCH SPACING = 2D+W = ((2 \times 4) + 3) = 11 USE 11'



**LEGEND**

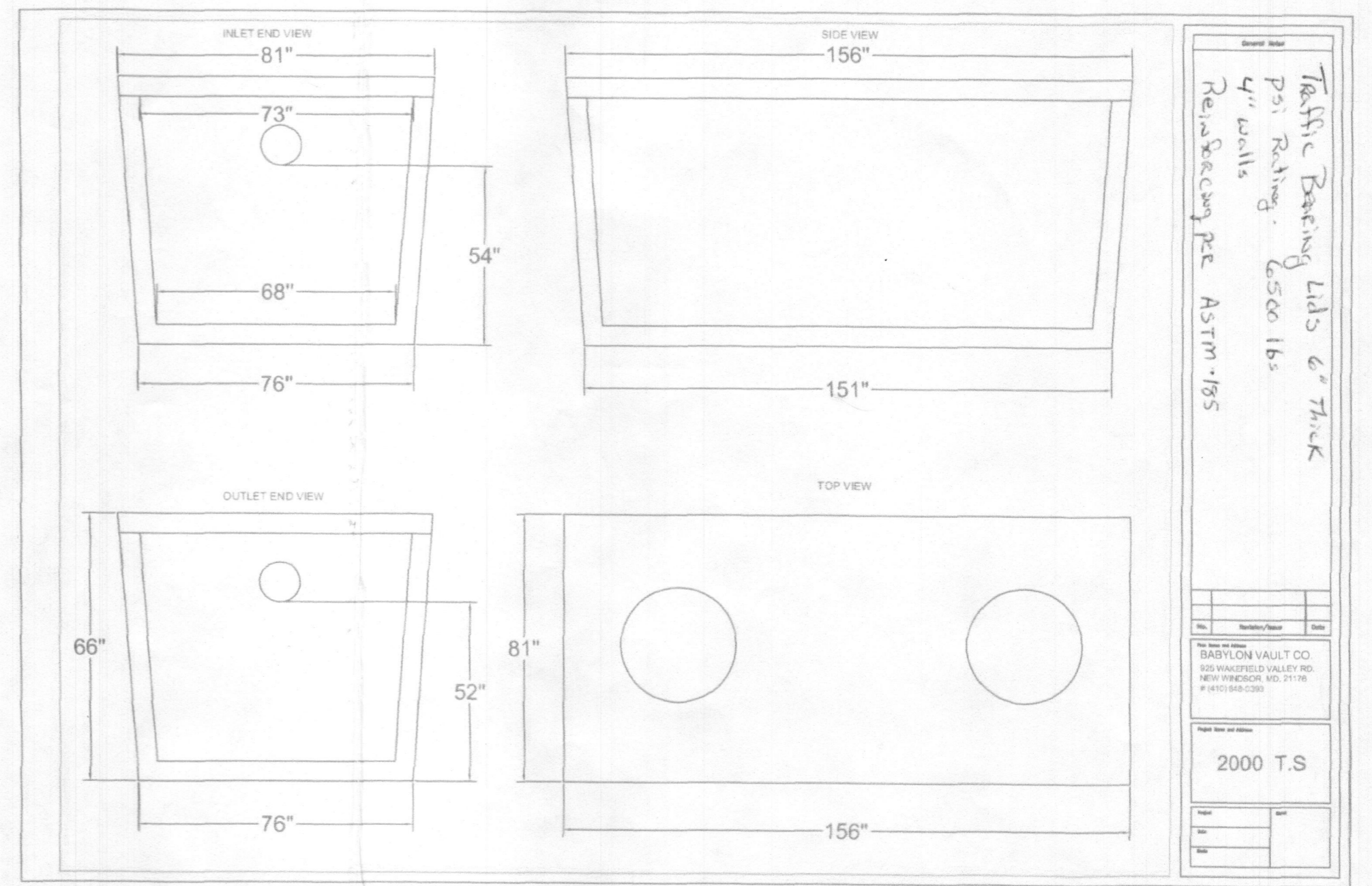
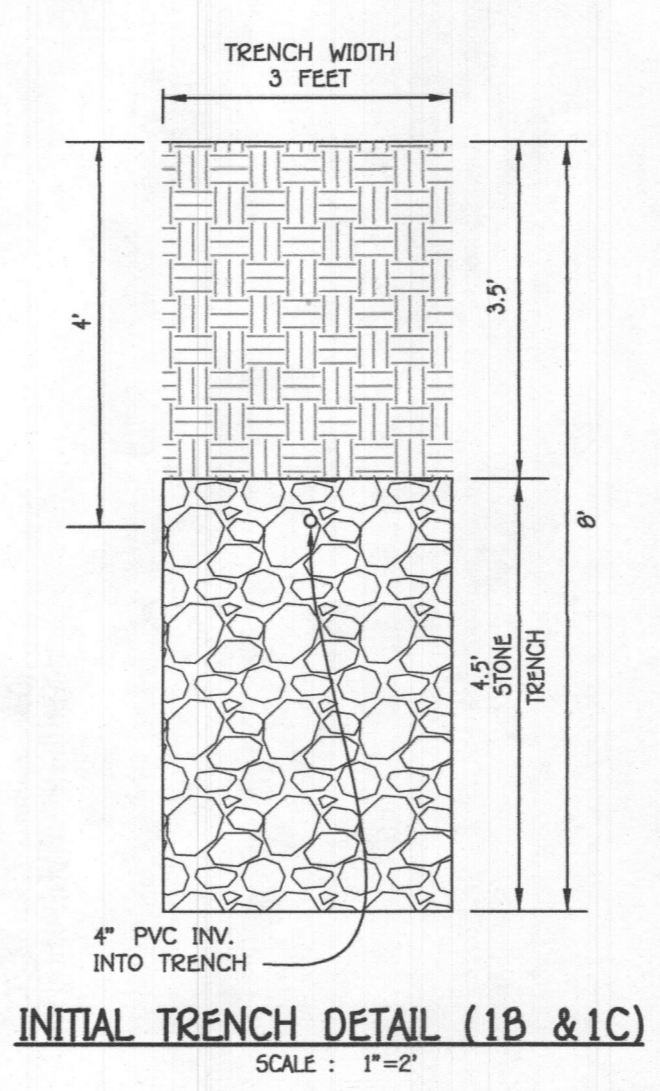
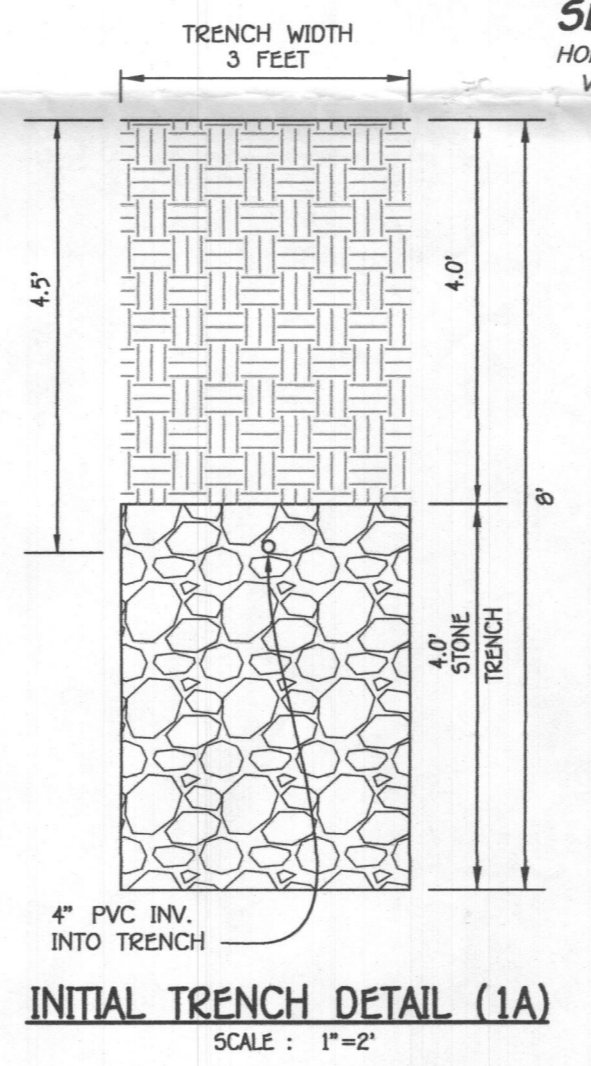
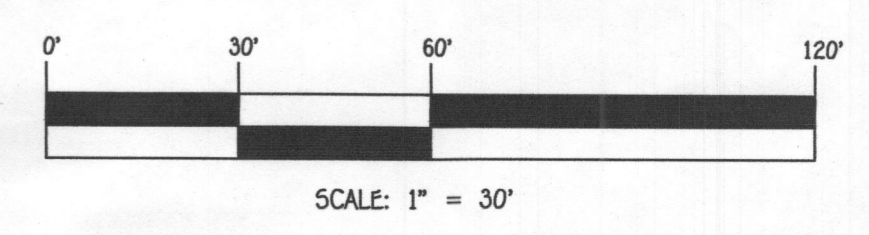
- EXISTING 2' CONTOURS
- EXISTING 10' CONTOURS
- EXISTING TREE LINE
- SOIL LINES AND TYPES
- W DENOTES EXISTING WELL
- 2511 DENOTES PASSED PERC HOLE
- 563.1 DENOTES POINT NUMBER
- 563.1 DENOTES 1500 SQ.FT. ALTERNATE WELL SITE

*- If pump system no matter what needs to pump to top trenches.*  
*- Show where pump tank sits, 25' Setback*  
*- Note about pump tank*  
*- Note about stake out*

Approved Septic System Plan  
Howard County Health Department  
Signature: [Signature] Date: 4/13/18

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

**SEWAGE DISPOSAL SYSTEM DATA (SECOND REPLACEMENT)**  
6 BEDROOMS  
LOADING RATE = 6 BEDROOMS X 150 GPD/BEDROOM = 900 GPD  
APPLICATION RATE = 0.6  
EFFECTIVE SIDEWALL BEGINS AT 4 FEET  
TRENCH DEPTH = 8 FEET  
TRENCH WIDTH (W) = 3 FEET  
EFFECTIVE DEPTH (D) = 4 FEET  
SF OF DRAINFIELD = 900 GPD / 0.6 = 1500 SF  
COEFFICIENT OF REDUCTION OF TRENCH LENGTH =  $(W+2)/(W+1+2D) = (3+2)/(3+1+(2 \times 4)) = 0.416$   
TRENCH LENGTH = 1500 SF X 0.416 / 3 = 208.5 FEET  
TRENCH SPACING = 2D+W = ((2 \times 4) + 3) = 11 USE 11'



Traffic Bearing Lids 6" Thick  
per Rating - 6500 lbs  
Reinforcing per ASTM-195

Sheet No.	2000 T.S
Scale	AS SHOWN
Date	AUGUST, 2017

**SOILS LEGEND**

SOIL	NAME	CLASS	K FACTOR
GgB	Glenelg loam, 3 to 8 percent slopes	B	0.20
GgC	Glenelg loam, 8 to 15 percent slopes	B	0.20

**TRENCH DESIGN**

TRENCH	GROUND ELEV.	TOP OF STONE ELEV.	PIPE INVERT ELEV.	DEPTH TO STONE FROM GROUND (FT)	DEPTH OF TRENCH (FT)	BOTTOM OF TRENCH ELEV.	EFFECTIVE DEPTH STAKES AT	EFFECTIVE DEPTH (D)	WIDTH OF TRENCHES (W)	TRENCH SPACING
IA	540.0	536.0	535.5	4.0'	4.0'	532.0	4.5'	3.5'	3.0'	10'
IB	539.2	535.7	535.2	3.5'	4.5'	531.2	4.0'	4.0'	3.0'	11'
IC	538.5	535.0	534.5	3.5'	4.5'	530.5	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. 38386, EXPIRATION DATE: 01/12/2018.  
Signature: [Signature] Date: 4/16/18

**SEPTIC PLAN**  
**FIVE HILLS FARM, LOT 3**  
ZONED RC-DEO  
TAX MAP No. 9 GRID No. 7 PARCEL No. 117  
FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
SCALE: AS SHOWN DATE: AUGUST, 2017  
SHEET 1 OF 1

I:\2014\14001\dwg\Plot Plans\14001\_Lot 3 Septic Plan\_Rev Aug. Septic Plan\_4/5/2018 8:51:32 PM.dwg, 1:1

- GENERAL NOTES:**
- 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.
  - THE FOREST CONSERVATION EASEMENTS SURROUNDING THE SEWAGE DISPOSAL AREA MUST BE PROFESSIONALLY STAKED BY A LICENSED SURVEYOR AND VERIFIED BY THE HEALTH DEPT PRIOR TO INSTALLATION.

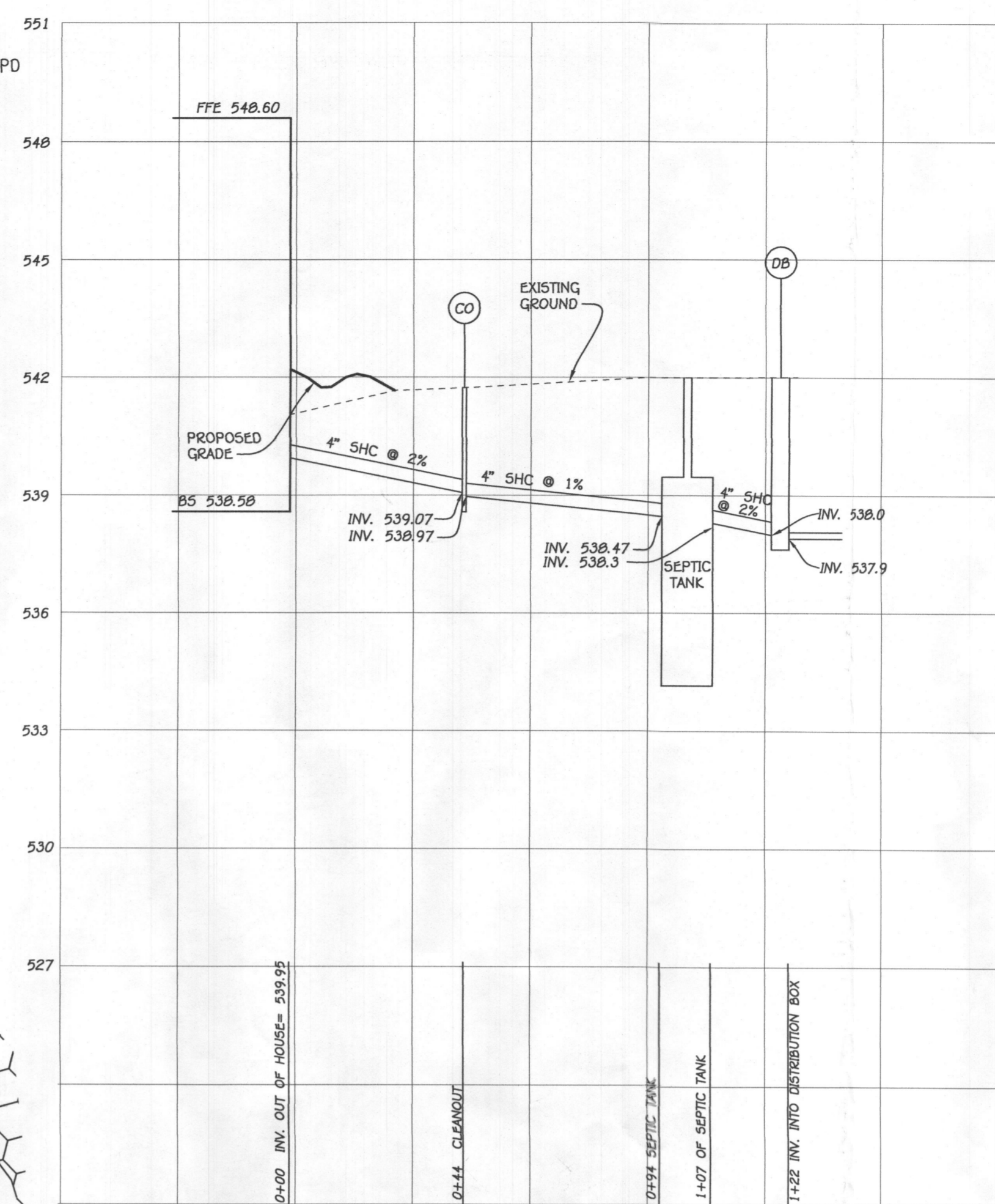
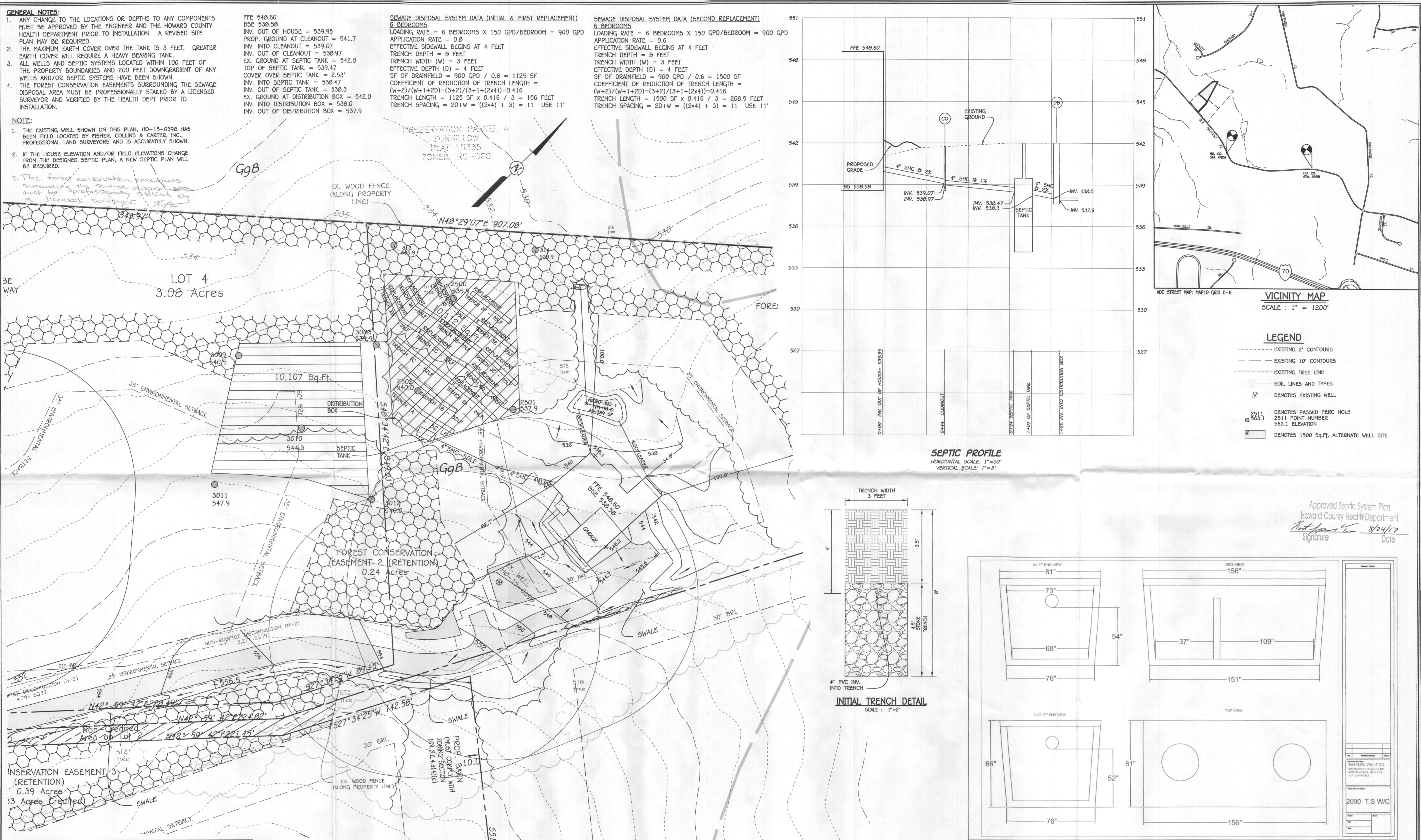
FFE 548.60  
BSE 538.58  
INV. OUT OF HOUSE = 539.95  
PROP. GROUND AT CLEANOUT = 541.7  
INV. INTO CLEANOUT = 539.07  
EX. GROUND AT SEPTIC TANK = 538.97  
TOP OF SEPTIC TANK = 539.47  
COVER OVER SEPTIC TANK = 2.53'  
INV. INTO SEPTIC TANK = 538.47  
INV. OUT OF SEPTIC TANK = 538.3  
EX. GROUND AT DISTRIBUTION BOX = 542.0  
INV. INTO DISTRIBUTION BOX = 538.0  
INV. OUT OF DISTRIBUTION BOX = 537.9

**SEWAGE DISPOSAL SYSTEM DATA (INITIAL & FIRST REPLACEMENT)**  
6 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) = 4 FEET  
SF OF DRAINFIELD = 900 GPD / 0.8 = 1125 SF  
COEFFICIENT OF REDUCTION OF TRENCH LENGTH =  $(W+2)/(W+1+2D) = (3+2)/(3+1+(2*4)) = 0.416$   
TRENCH LENGTH = 1125 SF x 0.416 / 3 = 156 FEET  
TRENCH SPACING = 2D+W = ((2\*4) + 3) = 11 USE 11'

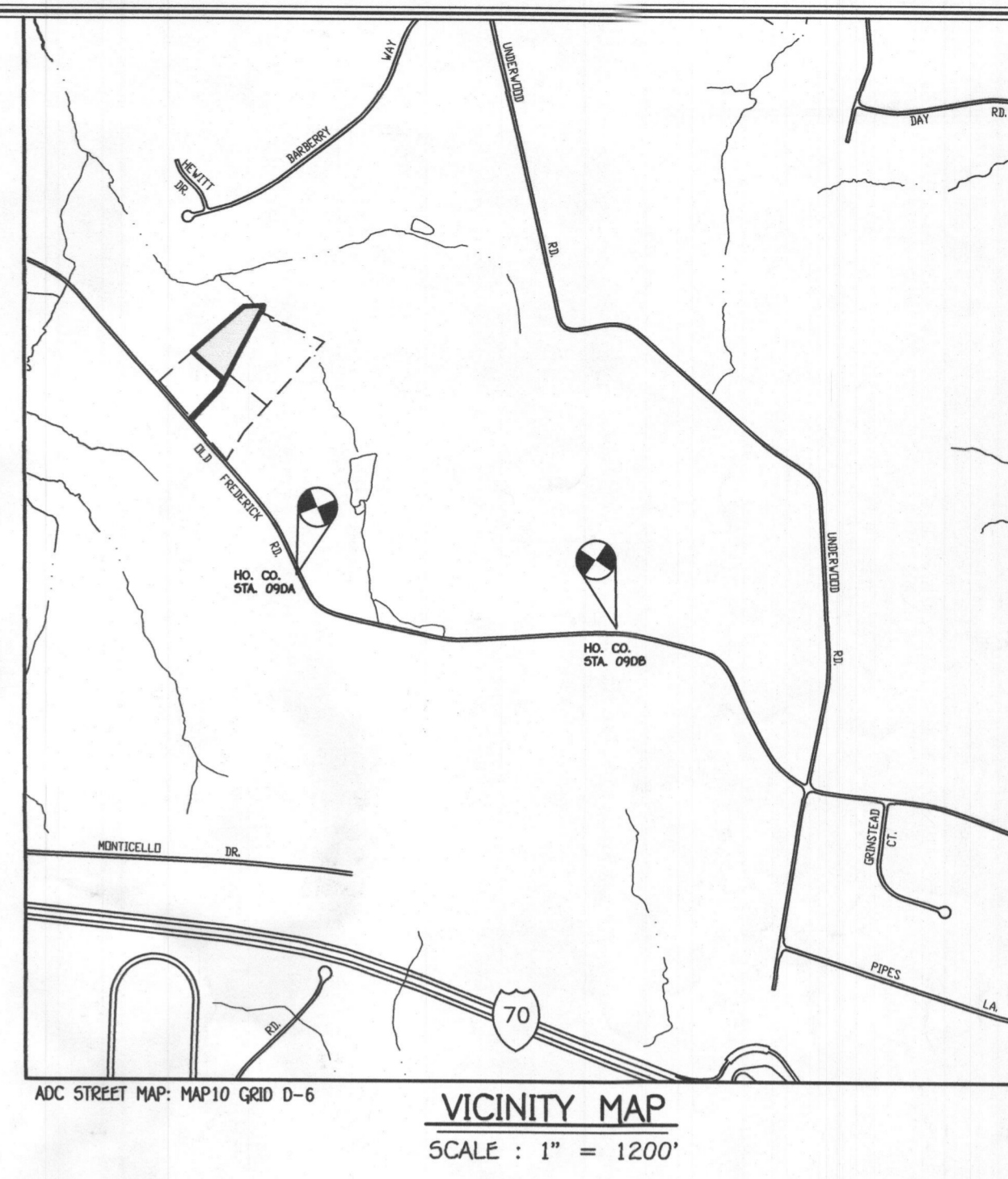
**SEWAGE DISPOSAL SYSTEM DATA (SECOND REPLACEMENT)**  
6 BEDROOMS  
LOADING RATE = 6 BEDROOMS X 150 GPD/BEDROOM = 900 GPD  
APPLICATION RATE = 0.6  
EFFECTIVE SIDEWALL BEGINS AT 4 FEET  
TRENCH DEPTH = 8 FEET  
TRENCH WIDTH (W) = 3 FEET  
EFFECTIVE DEPTH (D) = 4 FEET  
SF OF DRAINFIELD = 900 GPD / 0.6 = 1500 SF  
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TRENCH LENGTH = 1500 SF x 0.416 / 3 = 208.5 FEET  
TRENCH SPACING = 2D+W = ((2\*4) + 3) = 11 USE 11'

- NOTE:**
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  - IF THE HOUSE ELEVATION AND/OR FIELD ELEVATIONS CHANGE FROM THE DESIGNED SEPTIC PLAN, A NEW SEPTIC PLAN WILL BE REQUIRED.

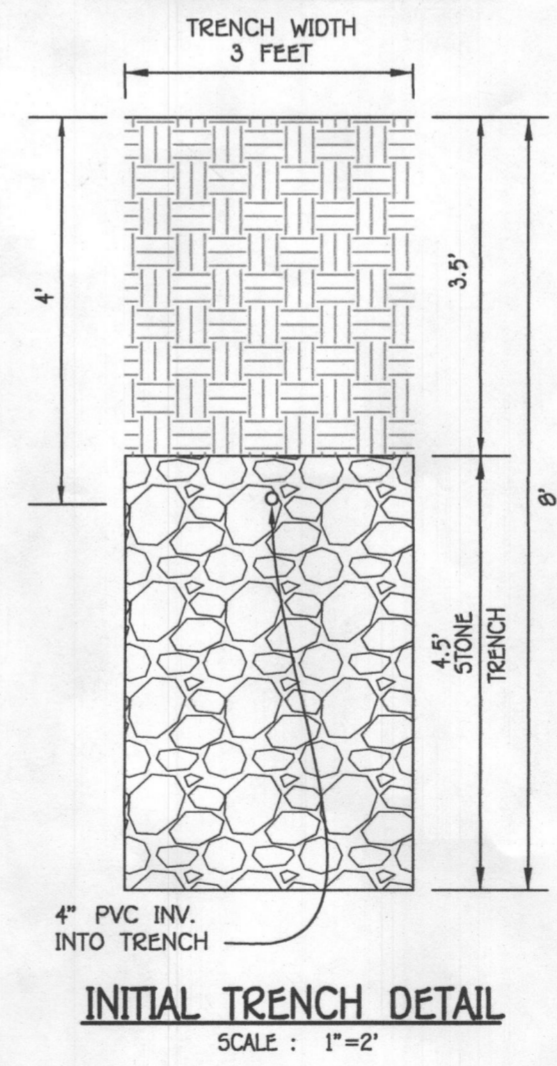
3. The forest conservation easements surrounding the sewage disposal area must be professionally staked by a licensed surveyor.



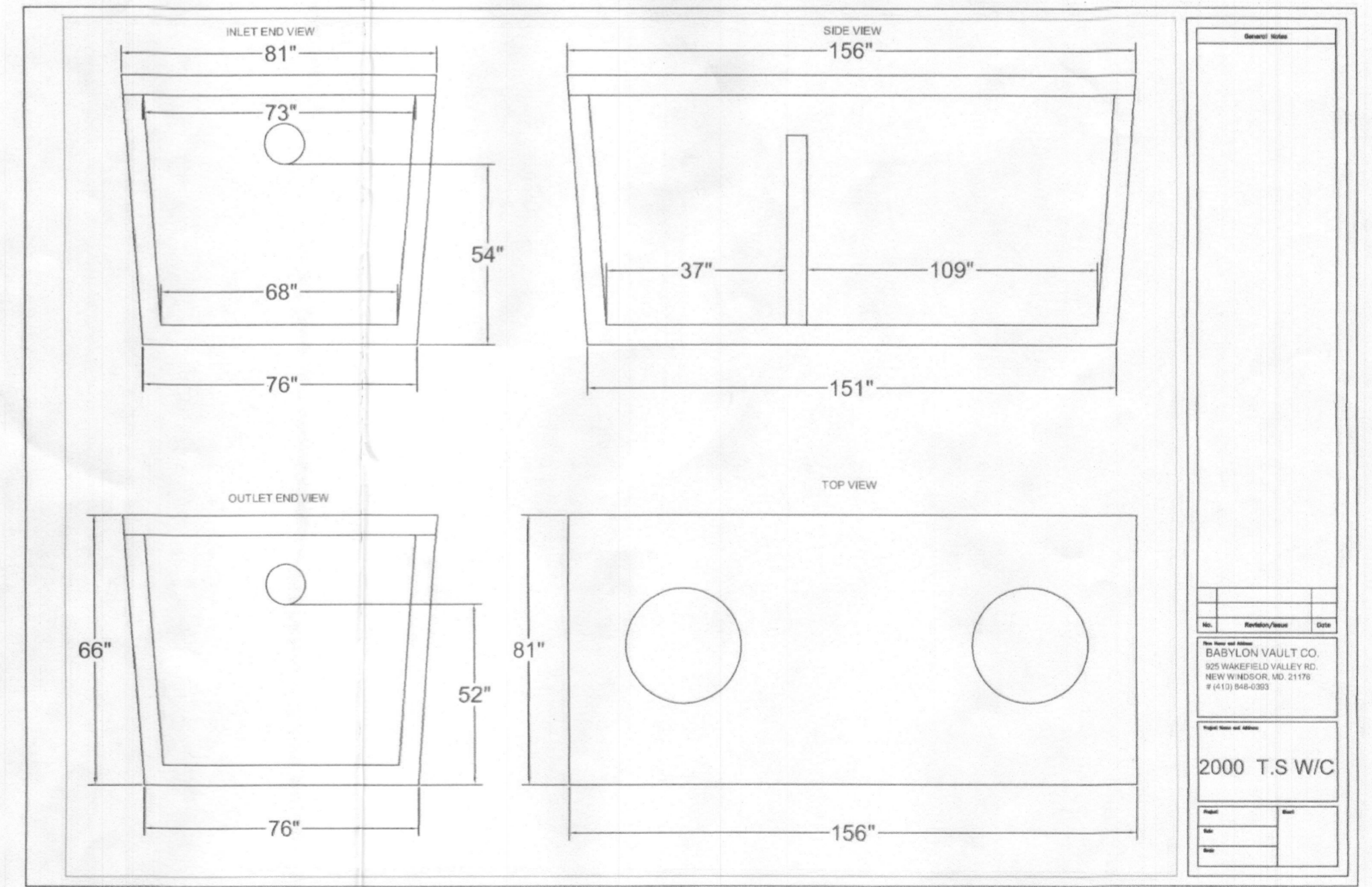
**SEPTIC PROFILE**  
HORIZONTAL SCALE: 1"=30'  
VERTICAL SCALE: 1"=3'



- 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



**INITIAL TRENCH DETAIL**  
SCALE: 1"=2'



Approved Septic System Plan  
Howard County Health Department  
Signature: [Signature] Date: 8/24/17

**SOILS LEGEND**

SOIL	NAME	CLASS	K FACTOR
GgB	Glenely loam, 3 to 8 percent slopes	B	0.20
GgC	Glenely loam, 8 to 15 percent slopes	B	0.20

**FISHER, COLLINS & CARTER, INC.**  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTRAL SQUARE OFFICE PARK - 10272 BALDORNE NATIONAL PkE  
ELICOTT CITY, MARYLAND 21042  
(410) 461-2895

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

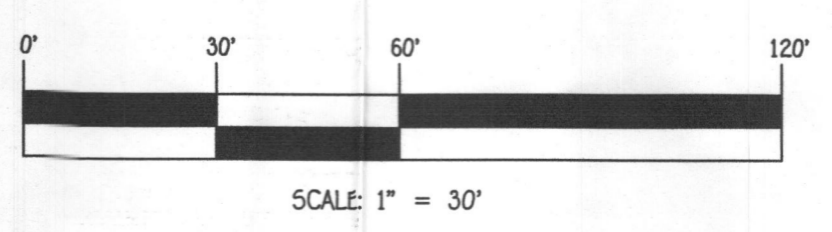
**TRENCH DESIGN**

TRENCH	GROUND ELEV.	TOP OF STONE ELEV.	PIPE INVERT ELEV.	DEPTH TO STONE FROM GROUND (FT)	DEPTH OF STONE (FT)	BOTTOM OF TRENCH ELEV.	EFFECTIVE DEPTH STARTS AT	EFFECTIVE DEPTH (D)	WIDTH OF TRENCHES (W)	TRENCH SPACING
1A	541.0	537.5	537.0	3.5'	4.5'	533.0	4.0'	4.0'	3.0'	11'
1B	540.2	536.7	536.2	3.5'	4.5'	532.2	4.0'	4.0'	3.0'	11'
1C	539.0	535.5	535.0	3.5'	4.5'	531.0	4.0'	4.0'	3.0'	11'



**PROFESSIONAL CERTIFICATION**  
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Signature: Stephen J. Tute 8/24/17  
DATE: 8/24/17



**SEPTIC PLAN**  
**FIVE HILLS FARM, LOT 3**  
ZONED RC-DEO  
TAX MAP No. 9 GRID No. 7 PARCEL No. 117  
FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
SCALE: AS SHOWN DATE: AUGUST, 2017  
SHEET 1 OF 1

## **Freemon, Robert**

---

**From:** Stephanie Tuite <Stephanie@fcc-eng.com>  
**Sent:** Thursday, April 12, 2018 7:00 PM  
**To:** Freemon, Robert  
**Subject:** RE: Five Hills Farm, Lot 3

Should be 537.00. Not sure what happened topo wise, but with discussion with Sarah I started wondering if topo was off, so we did field run again and the elevations were off by about a foot, so yes, they were based on recent field shots. If you could make the change on the profile that would be great. It is shown correctly, just not labeled right on the profile. Thanks very much.

Steph

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

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**From:** Freemon, Robert <[rfreemon@howardcountymd.gov](mailto:rfreemon@howardcountymd.gov)>  
**Sent:** Thursday, April 12, 2018 2:55 PM  
**To:** Stephanie Tuite <[Stephanie@fcc-eng.com](mailto:Stephanie@fcc-eng.com)>  
**Subject:** Five Hills Farm, Lot 3

Hi Stephanie,

I have reviewed the septic plan and I have two comments. The invert out of the house is written as 537.0 in the list of elevations and written as 538.66 in the profile section. Let me know which one is correct and I can redline it for you. Other than that I noticed the existing grade inside the SDA changed between the new and old plan by about a foot. Are these elevations on the new plan accurate to what is out in the field?

**Robert "Spencer" Freemon**  
**Howard County Health Department**  
**8930 Stanford Blvd. Columbia, MD 21045**  
**Bureau of Environmental Health**  
**Well and Septic Program**  
**Phone: 410-313-6357**  
**Email: [rfreemon@howardcountymd.gov](mailto:rfreemon@howardcountymd.gov)**  
**Website: <https://www.howardcountymd.gov/Departments/Health/Environmental-Health/Well-and-Septic>**

---

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

## MEMORANDUM

DATE: May 7, 2018

TO: JMB Homes, John Berger  
*Sent via email to [jberger@jmbhomes.com](mailto:jberger@jmbhomes.com) on 5/7/18*

FROM: Sarah Collins, L.E.H.S. SEC  
Howard County Health Department  
Well and Septic Program

RE: 13900 Old Frederick Road septic plan

---

The field conditions at 13900 Old Frederick Road differ from those shown on the septic plan. The septic contractor has installed the sewer line, tank, and distribution box, and with 1% fall in the pipe from the house to the distribution box, the distribution box is currently at 6.5' depth. The initial system requires an inlet at 4.5' or shallower in order to receive sidewall credit starting at 4.5'. It is not possible to reach the 4.5' inlet by gravity shown on the plan with the current field conditions.

There is no extra room to add any length onto the trenches in the initial system as the initial system and two replacements fill the entire sewage disposal area (SDA). The septic plan must be revised to show a septic tank and pump tank located outside the SDA with effluent pumped up to trenches with a 4' inlet.

Please contact me at 410-313-6287 or [SCollins@howardcountymd.gov](mailto:SCollins@howardcountymd.gov) with any questions.

Cc: Fisher, Collins & Carter, Stephanie Tuite ([Stephanie@fcc-eng.com](mailto:Stephanie@fcc-eng.com))  
File

**GENERAL NOTES:**

1. 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.
2. THE MAXIMUM EARTH COVER OVER THE TANK IS 3 FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY BEARING TANK.
3. ALL WELLS AND SEPTIC SYSTEMS LOCATED WITHIN 100 FEET OF THE PROPERTY BOUNDARIES AND 200 FEET DOWNGRADE OF ANY WELLS AND/OR SEPTIC SYSTEMS HAVE BEEN SHOWN.
4. THE FOREST CONSERVATION EASEMENTS SURROUNDING THE SEWAGE DISPOSAL AREA MUST BE PROFESSIONALLY STAKED BY A LICENSED SURVEYOR AND VERIFIED BY THE HEALTH DEPT PRIOR TO INSTALLATION.

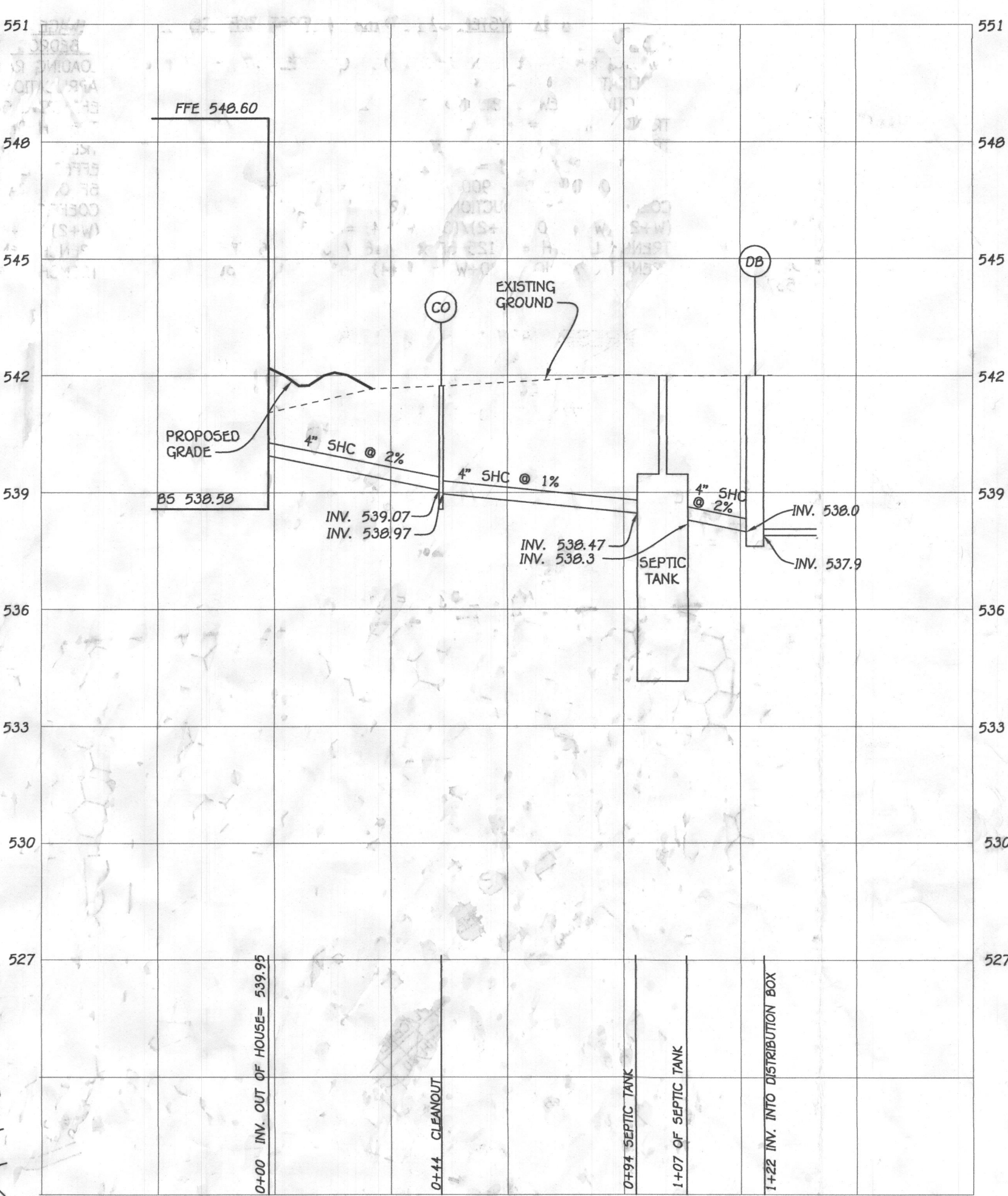
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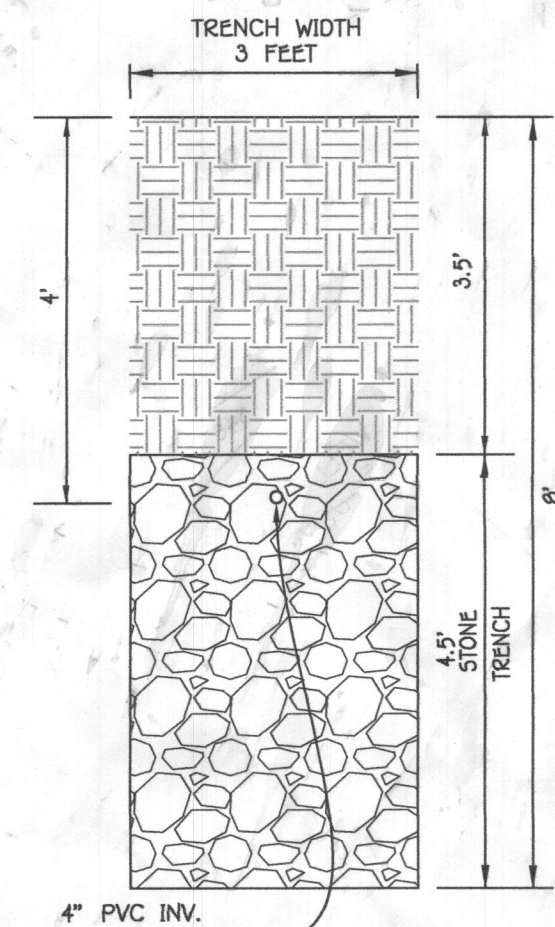
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LOADING RATE = 6 BEDROOMS X 150 GPD/BEDROOM = 900 GPD  
APPLICATION RATE = 0.6  
EFFECTIVE SIDEWALL BEGINS AT 4 FEET  
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TRENCH LENGTH = 1125 SF x 0.416 / 3 = 156 FEET  
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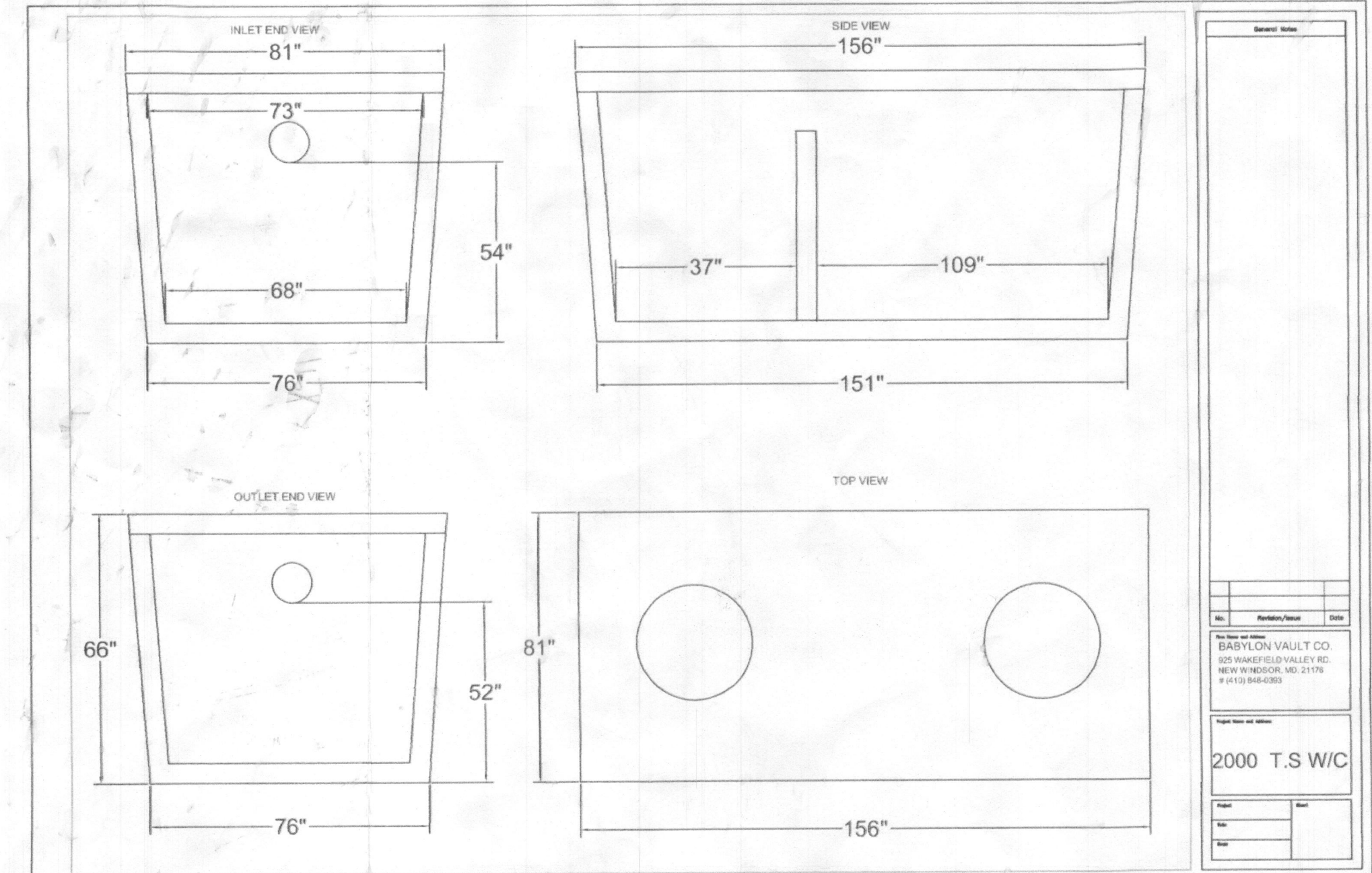
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TRENCH SPACING = 2D+W = ((2\*4) + 3) = 11 USE 11'



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



**INITIAL TRENCH DETAIL**  
SCALE: 1"=2'



**SEPTIC PLAN**  
**FIVE HILLS FARM, LOT 3**

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

**TRENCH DESIGN**

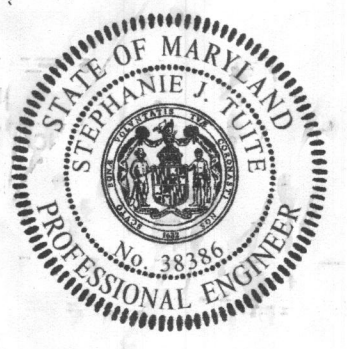
TRENCH	GROUND ELEV.	TOP OF STONE ELEV.	PIPE INVERT ELEV.	DEPTH TO STONE FROM GROUND (FT)	DEPTH OF TRENCH (FT)	BOTTOM OF TRENCH ELEV.	EFFECTIVE DEPTH STARTS AT	EFFECTIVE DEPTH (D)	WIDTH OF TRENCHES (W)	TRENCH SPACING
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1C	539.0	535.5	535.0	3.5'	4.5'	531.0	4.0'	4.0'	3.0'	11'

**SOILS LEGEND**

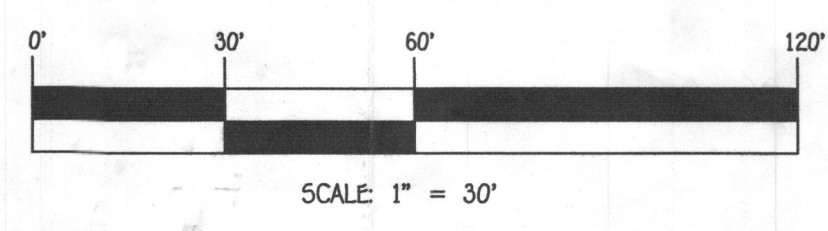
SOIL	NAME	CLASS	K FACTOR
GgB	Glenelg loam, 3 to 8 percent slopes	B	0.20
GgC	Glenelg loam, 8 to 15 percent slopes	B	0.20

**OWNER / DEVELOPER**  
Joe & Jennifer Hill  
P.O. Box 189  
Woodbine, MD 21797  
410-339-7863

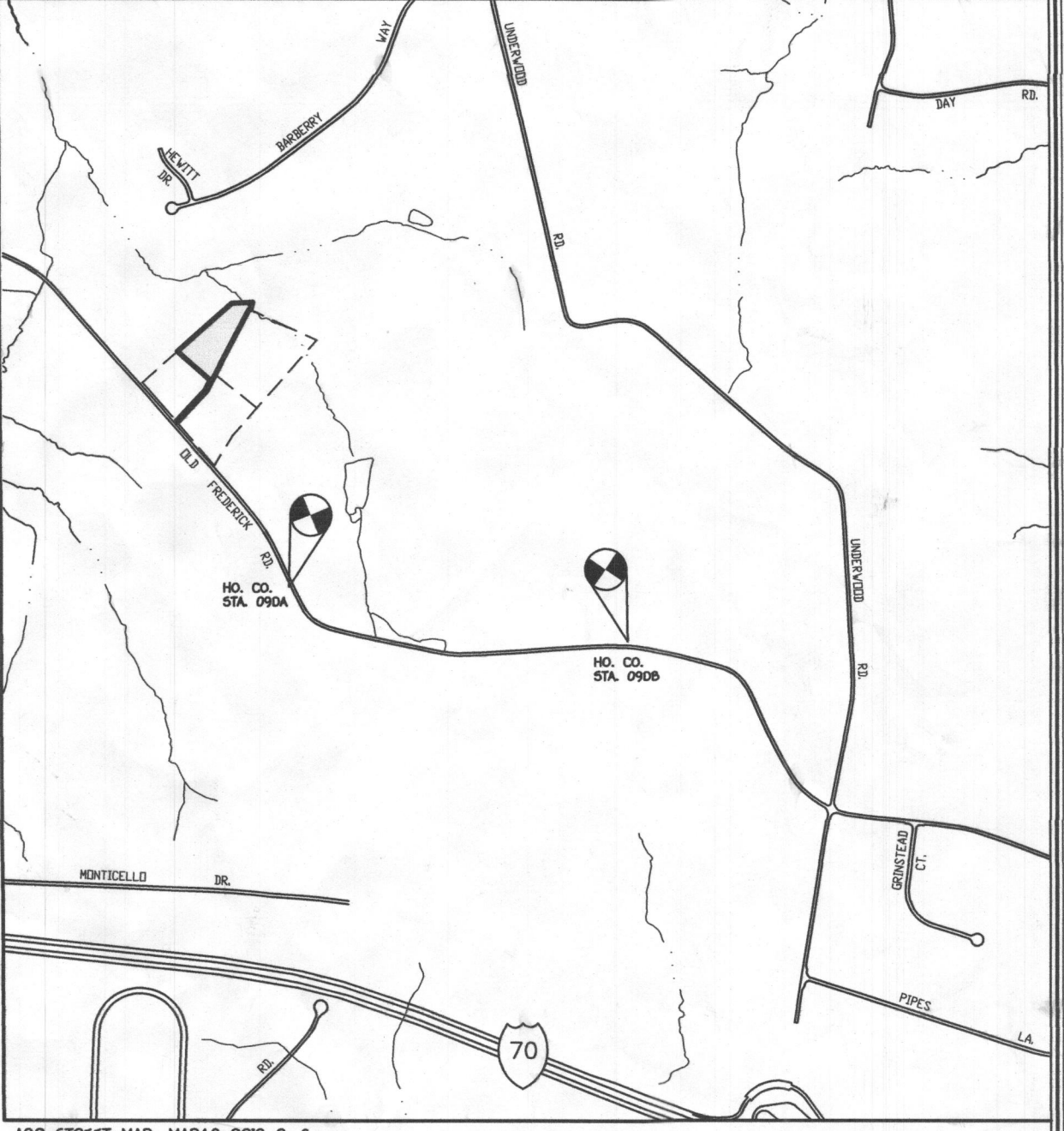
**FISHER, COLLINS & CARTER, INC.**  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CONTINENTAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PARK  
ELICOTT CITY, MARYLAND 21042  
(410) 461-2895



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*Stephanie Jurek* 8/4/17  
Signature of Professional Engineer DATE



Approved Septic System Plan  
Howard County Health Department  
*Stephanie Jurek* 8/24/17  
Signature Date



**VICINITY MAP**  
SCALE: 1" = 1200'

- LEGEND**
- EXISTING 2' CONTOURS
  - EXISTING 10' CONTOURS
  - - - EXISTING TREE LINE
  - SOIL LINES AND TYPES
  - ⊙ DENOTES EXISTING WELL
  - ⊙ 2511 DENOTES PASSED PERC HOLE
  - ⊙ 563.1 DENOTES 2511 POINT NUMBER
  - ⊙ 563.1 DENOTES 563.1 ELEVATION
  - ⊙ DENOTES 1500 SQ.FT. ALTERNATE WELL SITE

K:\2014\14001\dwg\Plan\_3\_Seplic\_Plan.dwg, Seplic Plan, 8/2/2017 10:13:04 PM, 1:1

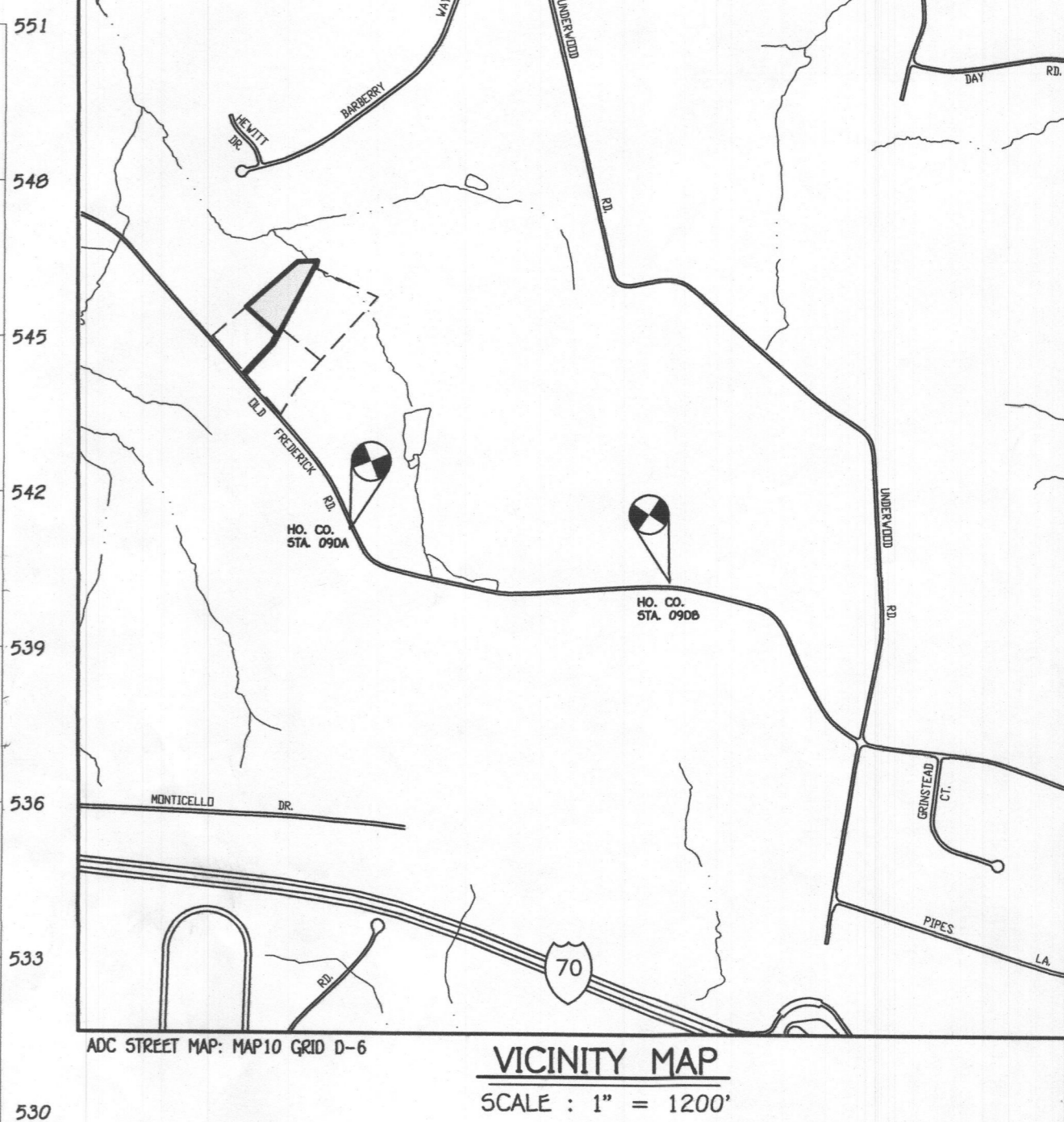
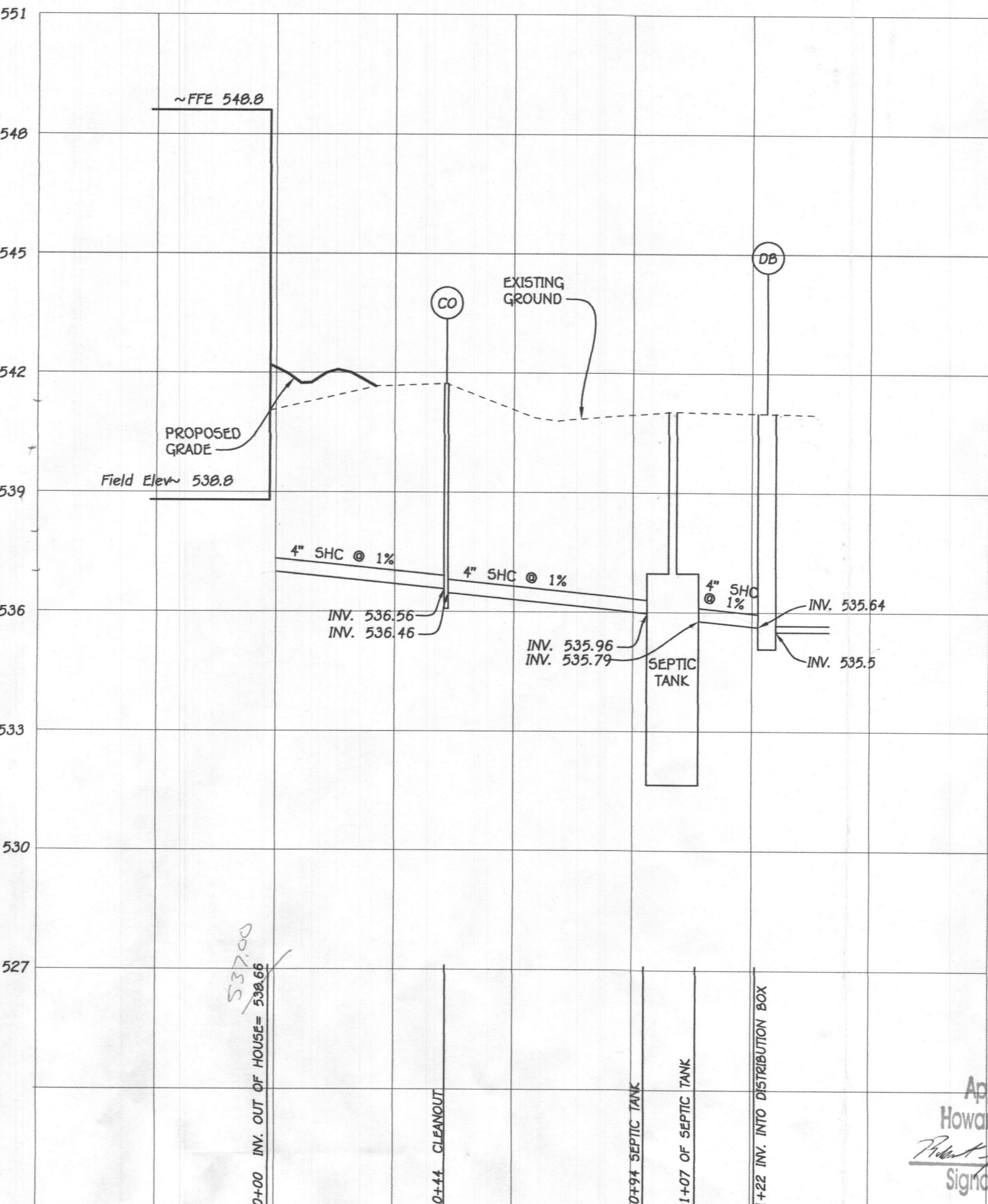
- GENERAL NOTES:**
1. ANY CHANGE TO THE LOCATIONS OR DEPTHS TO ANY COMPONENTS MUST BE APPROVED BY THE ENGINEER AND THE HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO INSTALLATION. A REVISED SITE PLAN MAY BE REQUIRED.
  2. THE MAXIMUM EARTH COVER OVER THE TANK IS 3 FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY BEARING TANK.
  3. 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.
  4. THE FOREST CONSERVATION EASEMENTS SURROUNDING THE SEWAGE DISPOSAL AREA MUST BE PROFESSIONALLY STAKED BY A LICENSED SURVEYOR AND VERIFIED BY THE HEALTH DEPT PRIOR TO INSTALLATION.

- NOTE:**
1. THE EXISTING WELL SHOWN ON THIS PLAN, HO-15-0398 HAS BEEN FIELD LOCATED BY FISHER, COLLINS & CARTER, INC. PROFESSIONAL LAND SURVEYORS AND IS ACCURATELY SHOWN.
  2. IF THE HOUSE ELEVATION AND/OR FIELD ELEVATIONS CHANGE FROM THE DESIGNED SEPTIC PLAN, A NEW SEPTIC PLAN WILL BE REQUIRED.

FFE 548.8  
BSE 538.8  
INV. OUT OF HOUSE = 537.0  
PROP. GROUND AT CLEANOUT = 541.7  
INV. INTO CLEANOUT = 536.56  
INV. OUT OF CLEANOUT = 536.46  
EX. GROUND AT SEPTIC TANK = 541.0  
TOP OF SEPTIC TANK = 536.96  
COVER OVER SEPTIC TANK = 4.04'  
INV. INTO SEPTIC TANK = 535.96  
INV. OUT OF SEPTIC TANK = 535.79  
EX. GROUND AT DISTRIBUTION BOX = 541.0  
INV. INTO DISTRIBUTION BOX = 535.64  
INV. OUT OF DISTRIBUTION BOX = 535.5

**SEWAGE DISPOSAL SYSTEM DATA (INITIAL SYSTEM)**  
6 BEDROOMS  
LOADING RATE = 6 BEDROOMS X 150 GPD/BEDROOM = 900 GPD  
APPLICATION RATE = 0.8  
EFFECTIVE SIDEWALL BEGINS AT 4.5 FEET  
TRENCH DEPTH = 8 FEET  
TRENCH WIDTH (W) = 3 FEET  
EFFECTIVE DEPTH (D) = 4 FEET  
SF OF DRAINFIELD = 900 GPD / 0.8 = 1125 SF  
COEFFICIENT OF REDUCTION OF TRENCH LENGTH =  $(W+2)/(W+1+2D) = (3+2)/(3+1+(2x3.5)) = 0.455$   
TRENCH LENGTH = 1125 SF x 0.455 / 3 = 171 FEET  
TRENCH SPACING = 2D+W = ((2x3.5) + 3) = 10 USE 10'

**SEWAGE DISPOSAL SYSTEM DATA (FIRST REPLACEMENT)**  
6 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) = 4 FEET  
SF OF DRAINFIELD = 900 GPD / 0.8 = 1125 SF  
COEFFICIENT OF REDUCTION OF TRENCH LENGTH =  $(W+2)/(W+1+2D) = (3+2)/(3+1+(2x4)) = 0.416$   
TRENCH LENGTH = 1125 SF x 0.416 / 3 = 156 FEET  
TRENCH SPACING = 2D+W = ((2x4) + 3) = 11 USE 11'

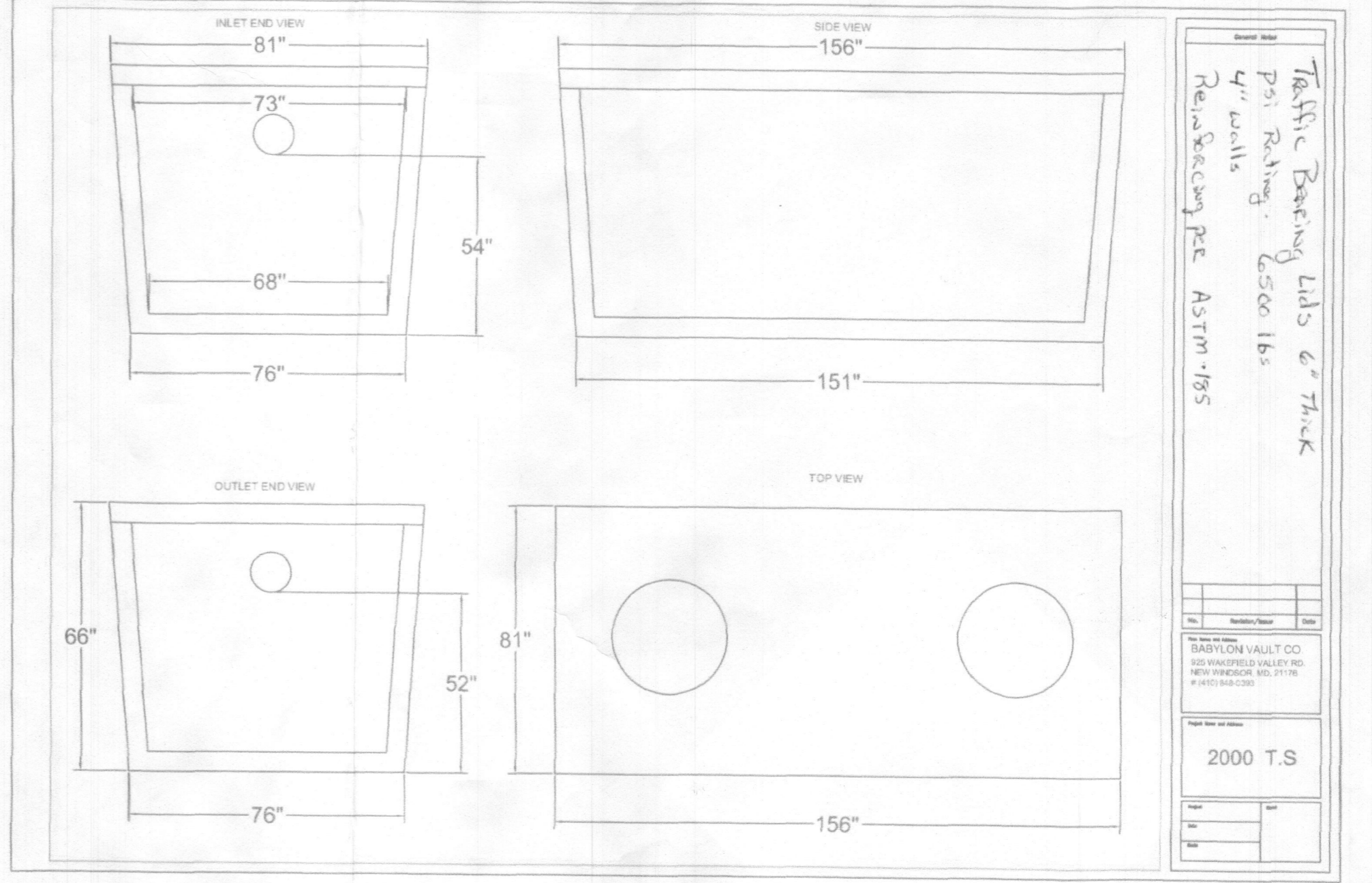
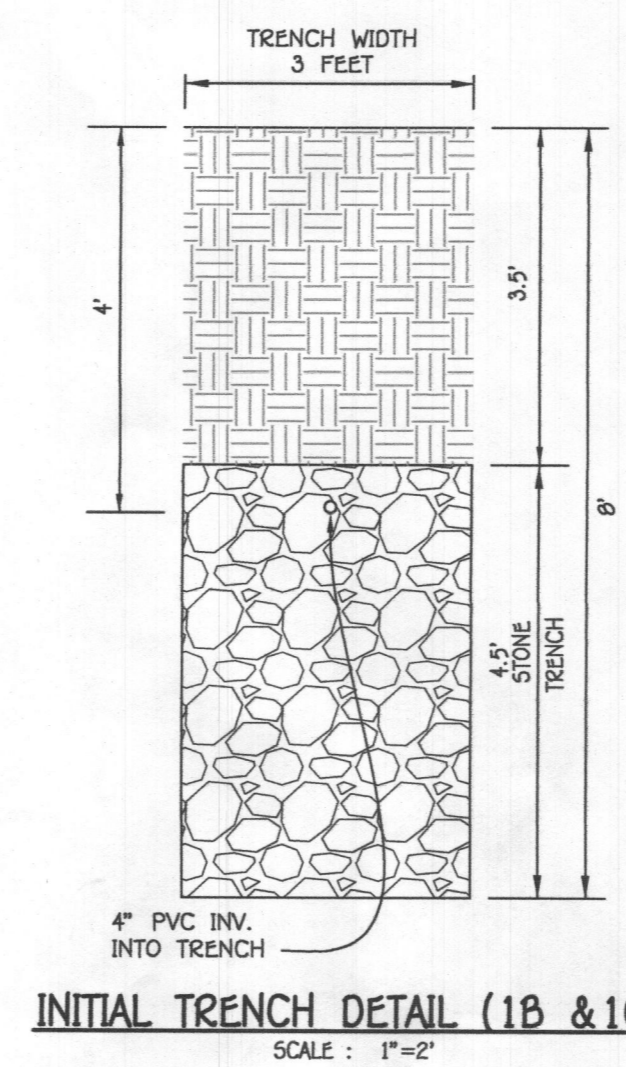
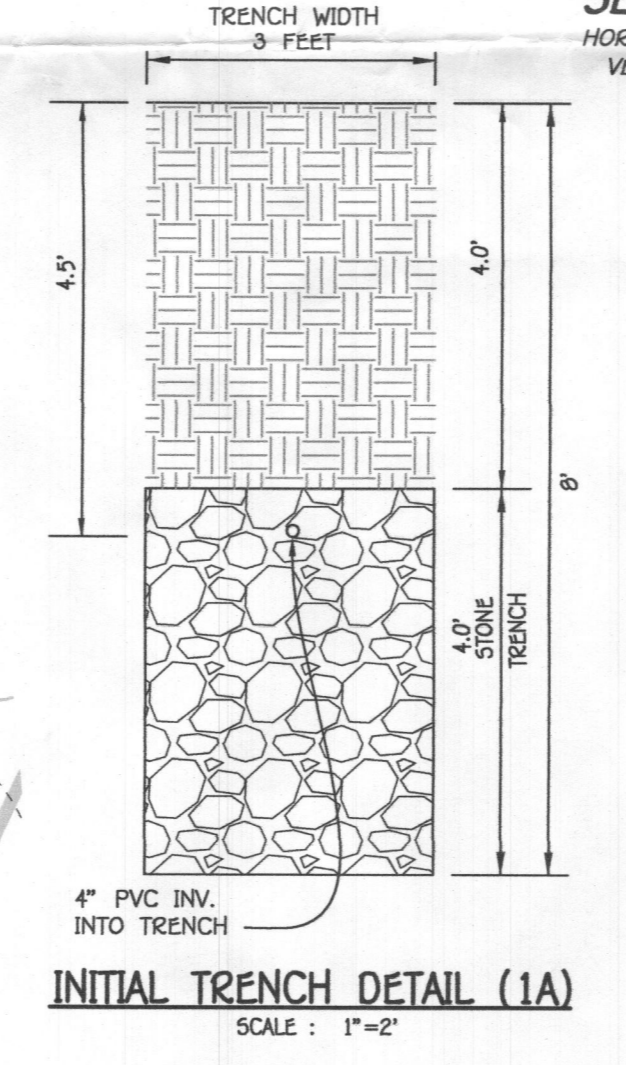
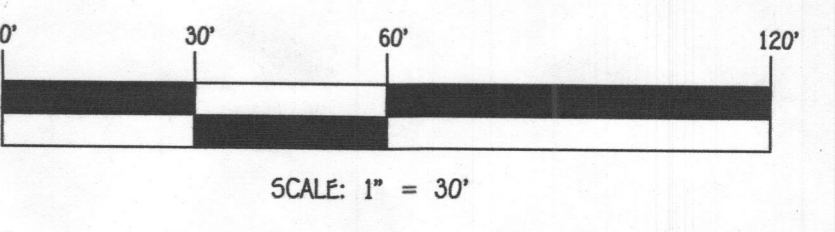


- LEGEND**
- EXISTING 2' CONTOURS
  - EXISTING 10' CONTOURS
  - EXISTING TREE LINE
  - SOIL LINES AND TYPES
  - (W) DENOTES EXISTING WELL
  - (2511) DENOTES PASSED PERC HOLE
  - (563.1) DENOTES 2511 POINT NUMBER
  - (563.1) DENOTES 563.1 ELEVATION
  - (1500) DENOTES 1500 Sq.Ft. ALTERNATE WELL SITE

Approved Septic System Plan  
Howard County Health Department  
Signature: [Signature]  
Date: 4/13/18

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

**SEWAGE DISPOSAL SYSTEM DATA (SECOND REPLACEMENT)**  
6 BEDROOMS  
LOADING RATE = 6 BEDROOMS X 150 GPD/BEDROOM = 900 GPD  
APPLICATION RATE = 0.6  
EFFECTIVE SIDEWALL BEGINS AT 4 FEET  
TRENCH DEPTH = 8 FEET  
TRENCH WIDTH (W) = 3 FEET  
EFFECTIVE DEPTH (D) = 4 FEET  
SF OF DRAINFIELD = 900 GPD / 0.6 = 1500 SF  
COEFFICIENT OF REDUCTION OF TRENCH LENGTH =  $(W+2)/(W+1+2D) = (3+2)/(3+1+(2x4)) = 0.416$   
TRENCH LENGTH = 1500 SF x 0.416 / 3 = 208.5 FEET  
TRENCH SPACING = 2D+W = ((2x4) + 3) = 11 USE 11'



Tactic Bearing lids & Thick  
Pvc Rings 6500 lbs  
Reinforcing per ASTM 1953

2000 T.S.

**SOILS LEGEND**

SOIL	NAME	CLASS	K FACTOR
GgB	Glenelg loam, 3 to 6 percent slopes	B	0.20
GgC	Glenelg loam, 6 to 15 percent slopes	B	0.20

**TRENCH DESIGN**

TRENCH	GROUND ELEV.	TOP OF STONE ELEV.	PIPE INVERT ELEV.	DEPTH TO STONE FROM GROUND (FT)	DEPTH OF STONE (FT)	BOTTOM OF TRENCH ELEV.	EFFECTIVE DEPTH STARTS AT	EFFECTIVE DEPTH (D)	WIDTH OF TRENCHES (W)	TRENCH SPACING
1A	540.0	536.0	535.5	4.0'	4.0'	532.0	4.5'	3.5'	3.0'	10'
1B	539.2	535.7	535.2	3.5'	4.5'	531.2	4.0'	4.0'	3.0'	11'
1C	538.5	535.0	534.5	3.5'	4.5'	530.5	4.0'	4.0'	3.0'	11'

**FISHER, COLLINS & CARTER, INC.**  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
10272 BALDWIN NATIONAL PIKE  
ELICOTT CITY, MARYLAND 21042  
(410) 461-2995

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



**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. 30386, EXPIRATION DATE: 01/12/2018.

Signature: [Signature]  
Date: 4/6/18

**SEPTIC PLAN**  
**FIVE HILLS FARM, LOT 3**  
ZONED RC-DEO  
TAX MAP No. 9 GRID No. 7 PARCEL No. 117  
FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
SCALE: AS SHOWN DATE: AUGUST, 2017  
SHEET 1 OF 1