



**Howard County  
Health Department**

**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: 2/18/25 **ONSITE SEWAGE DISPOSAL SYSTEM** P 587962

APPROVAL DATE: 3/21/2025 **PERMIT: NEW CONSTRUCTION** A \_\_\_\_\_

PROPERTY ADDRESS: 13040 Highland Road

SUBDIVISION: McDaniel Property LOT: 3 TAX ID: \_\_\_\_\_

CONTRACTOR: Hatfield Equipment EMAIL: Ken@hatfields.com

CONTRACTOR ADDRESS: P.O. Box 517 Annapolis Junction, MD PHONE: 301-470-4289

PROPERTY OWNER: John P McDaniel EMAIL: 20701

OWNER ADDRESS: 13032 Highland Road, Highland, MD 20777 PHONE: 443-367-0422

SEPTIC TANK SIZE: 2000 PUMP SIZE: \_\_\_\_\_ PUMP TANK CAPACITY: \_\_\_\_\_

DISTRIBUTION SYSTEM:  GRAVITY  PRESSURE DOSED BEDROOMS: 6 APPLICATION RATE: 1.2

TRENCHES:	LINEAR FEET REQUIRED: <u>106</u>	INLET DEPTH: <u>3.5</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>7.5</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>3.5</u>
LOCATION:	<b>SYSTEM TO BE STAKED BY DESIGNER AND VERIFIED BY APPROVING AUTHORITY DURING PRE-CONSTRUCTION INSPECTION.</b>	
NOTES:		

ISSUED BY: D Bernard ISSUE DATE: 2-18-25 EXPIRATION DATE: 2-18-26

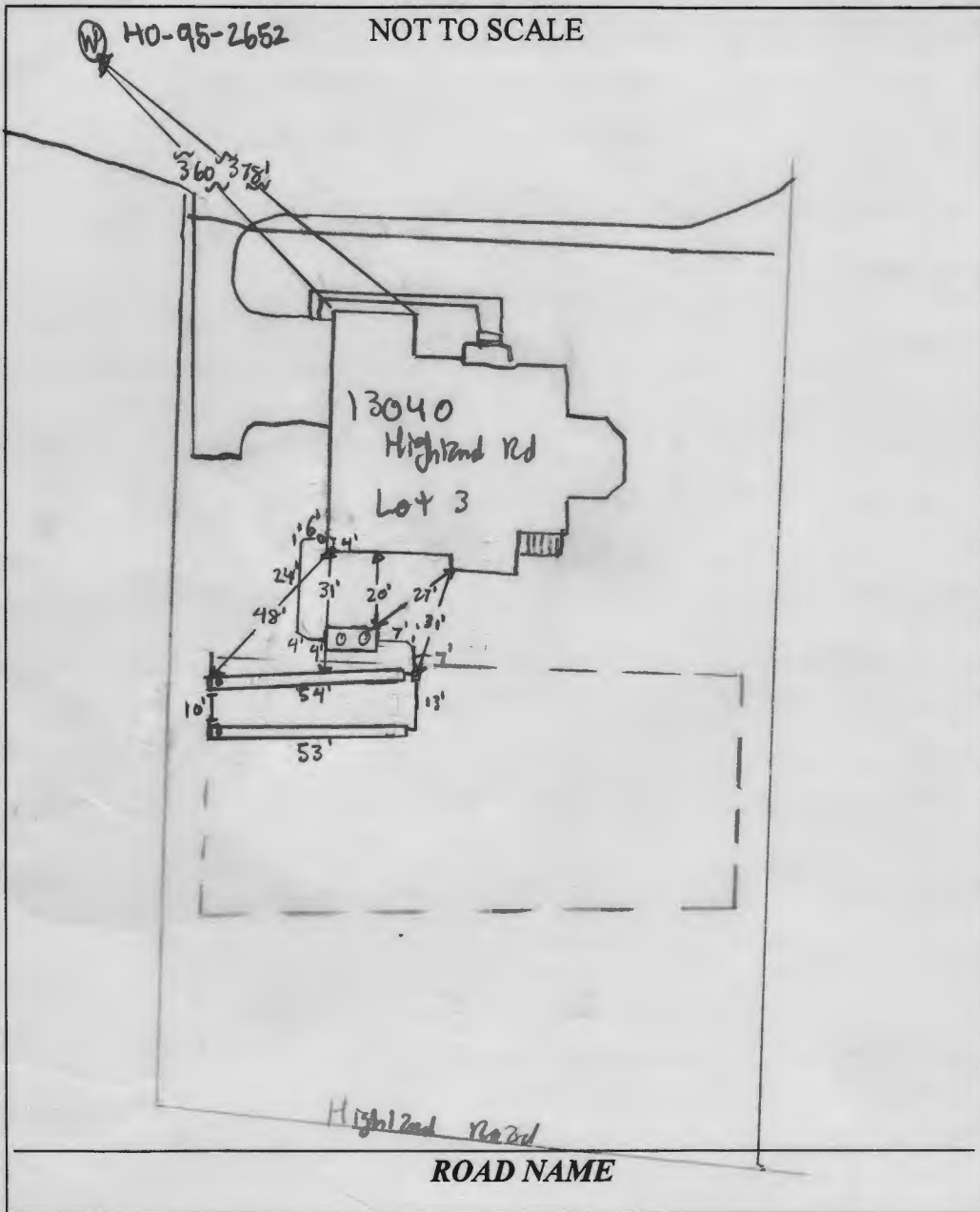
- NOTE: CONTRACTOR MUST SCHEDULE A PRE-CONSTRUCTION INSPECTION PRIOR TO BEGINNING ANY INSTALLATION
- NOTE: CONTRACTOR REGISTERED WITH THE STATE OF MD ON-SITE WASTEWATER PROFESSIONALS BOARD: CONFIRMED
- NOTE: CONTRACTOR MUST SCHEDULE AN INSPECTION AND GAIN APPROVAL OF ALL COMPONENTS PRIOR TO COVERING
- NOTE: STONE MUST BE APPROVED BY HEALTH DEPARTMENT AND GRAVEL TICKET MUST BE AVAILABLE FOR REVIEW.
- NOTE: WATERTIGHT SEPTIC 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: THE HCHD DOES NOT WARRANTY ANY SYSTEM AND CANNOT GUARANTEE THE PERFORMANCE OF THIS SYSTEM AS DESIGNED. BY ACCEPTING THIS PERMIT, THE OWNER AND/OR APPLICANT ACKNOWLEDGE THAT THE SPECIFICATIONS DETAILED IN THIS DESIGN ARE ONE POSSIBLE OPTION AND THAT THE HCHD WILL REVIEW OTHER PROPOSALS. YOU HAVE THE OPTION TO SEEK THE ADVICE OF A QUALIFIED DESIGN CONSULTANT OR PROFESSIONAL ENGINEER FOR FURTHER GUIDANCE.
- NOTE: AN INDIVIDUAL CERTIFIED BY MDE AND THE MANUFACTURER FOR BAT INSTALLATION MUST BE PRESENT AT ALL TIMES DURING BAT INSTALLATION.
- NOTE: MDE RECOMMENDS SEPTIC TANKS, BAT, AND OTHER PRETREATMENT UNITS BE PUMPED AT A FREQUENCY ADEQUATE TO ENSURE THAT SOLIDS ARE NOT DISCHARGED TO THE DISPOSAL AREA

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

1" = 50'

NOT TO SCALE

HO-95-2652



TRENCH/DRAINFIELD DATA		
WIDTH	INLET	BOTTOM
3	3.5'	7.5'
NUMBER OF TRENCHES		2
TOTAL LENGTH		107'
ABSORPTION AREA		321 sq'
DISTRIBUTION BOX LEVEL		yes
DISTRIBUTION BOX BAFFLE		yes
DISTRIBUTION BOX PORT		yes

SEPTIC TANK DATA	
SEPTIC TANK 1 LEVEL	yes
MANUFACTURER	Bzbylon
CAPACITY	2000 GAL
SEAM LOC	Top
TANK LID DEPTH	2.5'-3'
BAFFLES	6" Front & 4" back
BAFFLE FILTER	
MANHOLE LOC	Front & Back
6" PORT LOC	
WATERTIGHT TEST	
SLOTTED	yes
DATE ON LID	1/24/2025
PUMP/SEPTIC TANK LEVEL	N/A
MANUFACTURER	
CAPACITY	GAL
SEAM LOC	
TANK LID DEPTH	
BAFFLES	
BAFFLE FILTER	
MANHOLE LOC	
6" PORT LOC	
WATERTIGHT TEST	
SLOTTED	
DATE ON LID	

SEPTIC CONTRACTOR ONSITE INSTALLING SYTEM: Tom Tracy  
 SEPTIC CONTRACTOR ONSITE LICENSED WITH THE STATE OF MD: YES/NO

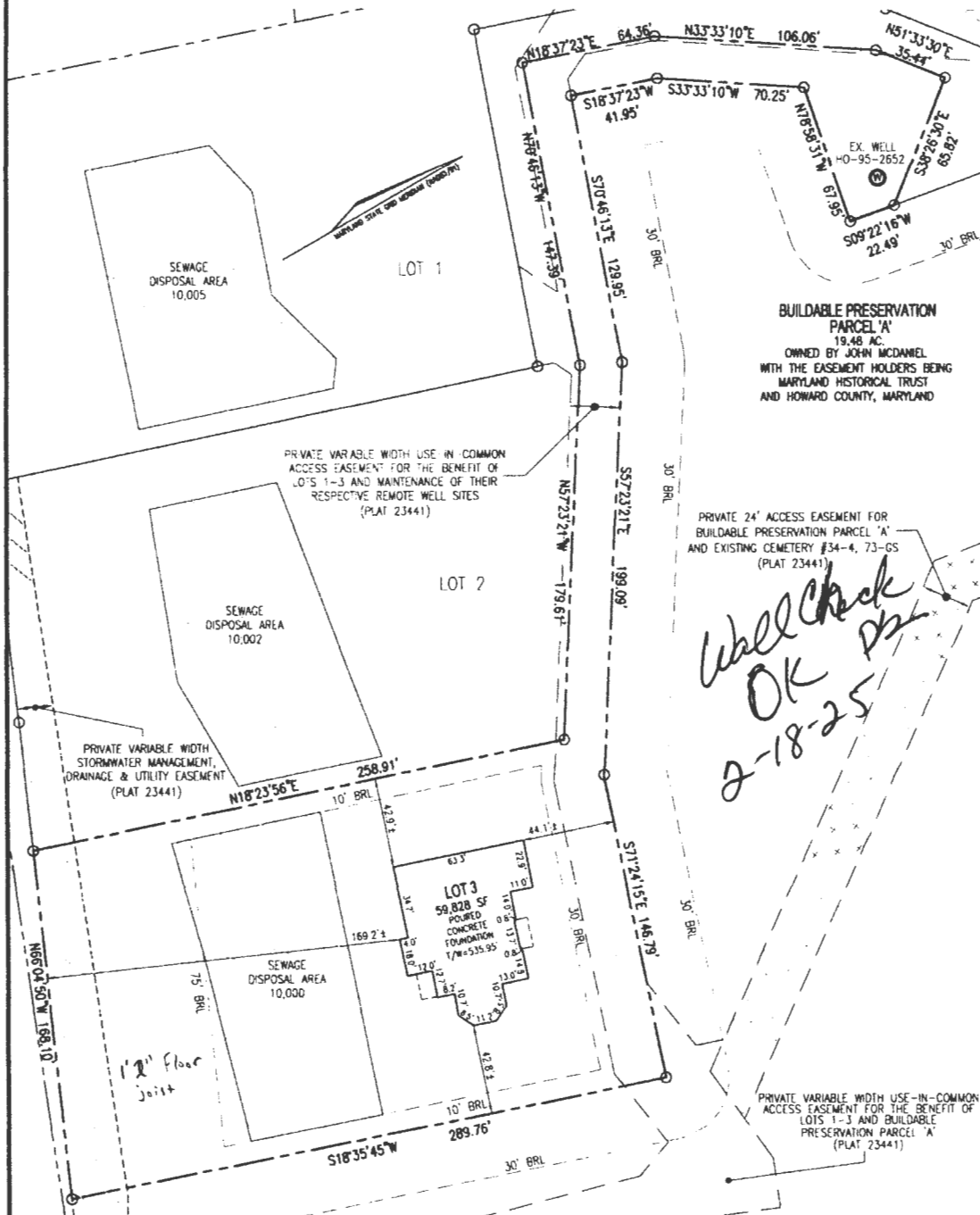
PRE-CONSTRUCTION NOTES:  
3/6/2025 - Installer onsite for pre-con. Safer not out of house. Tank & SPA  
started, took 20' from house per plan. trenches on center within 2", distance between trenches 11'  
OK to start work SPRING

INSTALLATION NOTES:  
3/20/2025 - installer onsite for inspection. lower trench finished. stone & fabric with lower trench inlet @ 3.5' x length @ 33' but perforated  
steps 3' before trench ends. checked manhole for tank to 20' in. tank holes OK before it was set. tank lid 2.5'-3' of concrete to bottom. (P)  
3/21/2025 - installer onsite for inspection. solid pipe from house to tank to ditch to trenches installed. adequate fall on each pipe.  
set to 40 @ 6" PVC used. set 6" front & 4" back baffle & 5' in inside tank. check levelled while onsite. OK to backfill. all work (P)

CONTROL PANEL DATA	
CONTROL PANEL HEIGHT	
(MIN 30")	
INSPECTION DATE	
INSPECTION: PASS/FAIL (CIRCLE ONE)	

FINAL INSPECTOR S. Pose DATE OF APPROVAL 3/21/2025

THIS WALL CHECK DRAWING CONTAINS A HORIZONTAL TOLERANCE IN ACCURACY OF 0.1' AND A VERTICAL TOLERANCE IN ACCURACY OF 0.2'



*Wall Check  
OK  
2-18-25*

I HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF THAT THE IMPROVEMENTS ARE LOCATED AS SHOWN AND THAT THERE ARE NO ENCROACHMENTS EXCEPT AS SHOWN; THAT THIS DOCUMENT WAS 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.

*Thomas M. Hoffman Jr.*  
 THOMAS M. HOFFMAN JR. DATE  
 PROPERTY LINE SURVEYOR  
 LICENSE NO. 267  
 EXP. DATE: JULY 28, 2026



SCALE 1" = 60'	DATE 12/20/2024
DRAWN BY J.M.M.	CHECKED BY T.M.H.
PLAT NUMBER 23440-23442	JOB NUMBER 08-43.00

**VOGEL ENGINEERING**  
  
**TIMMONS GROUP**  
 3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043  
 P: 410.461.7666 F: 410.461.8961 www.timmons.com

WALL CHECK DRAWING  
 13040 HIGHLAND ROAD  
 LOT 3  
 MCDANIEL PROPERTY  
 PLAT NO. 23441  
 FIFTH ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND



Bureau of Environmental Health
8930 Stanford Blvd | Columbia, MD 21045
410.313.2640 - Voice/Relay
410.313.2648 - Fax
1.866.313.6300 - Toll Free

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 Williamsburg Group L.L.C. ("the Owner").

WHEREAS, the Owner owns a tract of land at street address 13040 Highland Rd Highland MD 20777 and the deed and subdivision plat of the property is recorded among the Land Records of Howard County, Maryland, Tax Map #0034, Block #, Parcel # 00117, Deed Reference #22405100282 and Tax Account #05-598724 ("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-95-2652 that has been tested by the Health Department (or a private laboratory certified to perform testing) for radionuclide particles. The results of the tests have shown that the gross alpha particle content and/or the gross beta particle content and/or the combined radium 226/228 levels exceeds the standards of 15 picocuries per liter (pCi /L), 4 millirems per year (mrem/yr) and/or 5pCi/L respectively.

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 maximum contaminate levels (MCL's) for radionuclides.

WHEREAS, MDE has determined that radium can be effectively removed from the drinking water by the use of treatment devices (e.g., ion exchange or 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 radionuclides.

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:

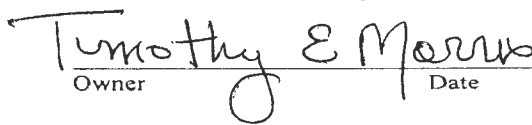
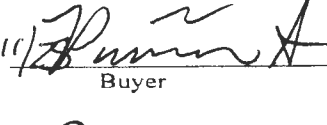
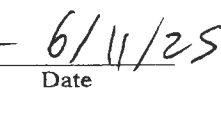
- 1. The Owner will record this Agreement among the Land Records of Howard County, Maryland and provide confirmation to the Health Dept.
2. The Owner agrees to install and maintain a water treatment device, which effectively reduces the gross alpha, gross beta and radium levels to below their respective MCL. The Health Department shall verify that the treatment device is 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 gross alpha, gross beta (short and long term) and radium 226 / 228 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.

Owner: Williamsburg Group L.L.C.

Buyers: Patrick Schrader and Olivia Schrader

Owner

Date

Buyer

Date

Owner

Date

Buyer

Date

Howard County Health Department      Date

MCKORY RIDGE FARM LOT 3  
13040 HIGHLAND ROAD

Clerk of the Circuit Court for  
Howard County  
9250 Judicial Way  
Ellicott City, MD 21043  
410-313-2111

Receipt Ref# 0612251304001002  
Terminal: 13PRD479 Operator: 37  
06/12/2025 09:12:29

Agreement Recording Fee \$60.00  
Name: WILLIAMSBURG GROUP  
Ref: 7  
Fee Amount: \$20.00  
Agreement Surcharge: \$40.00

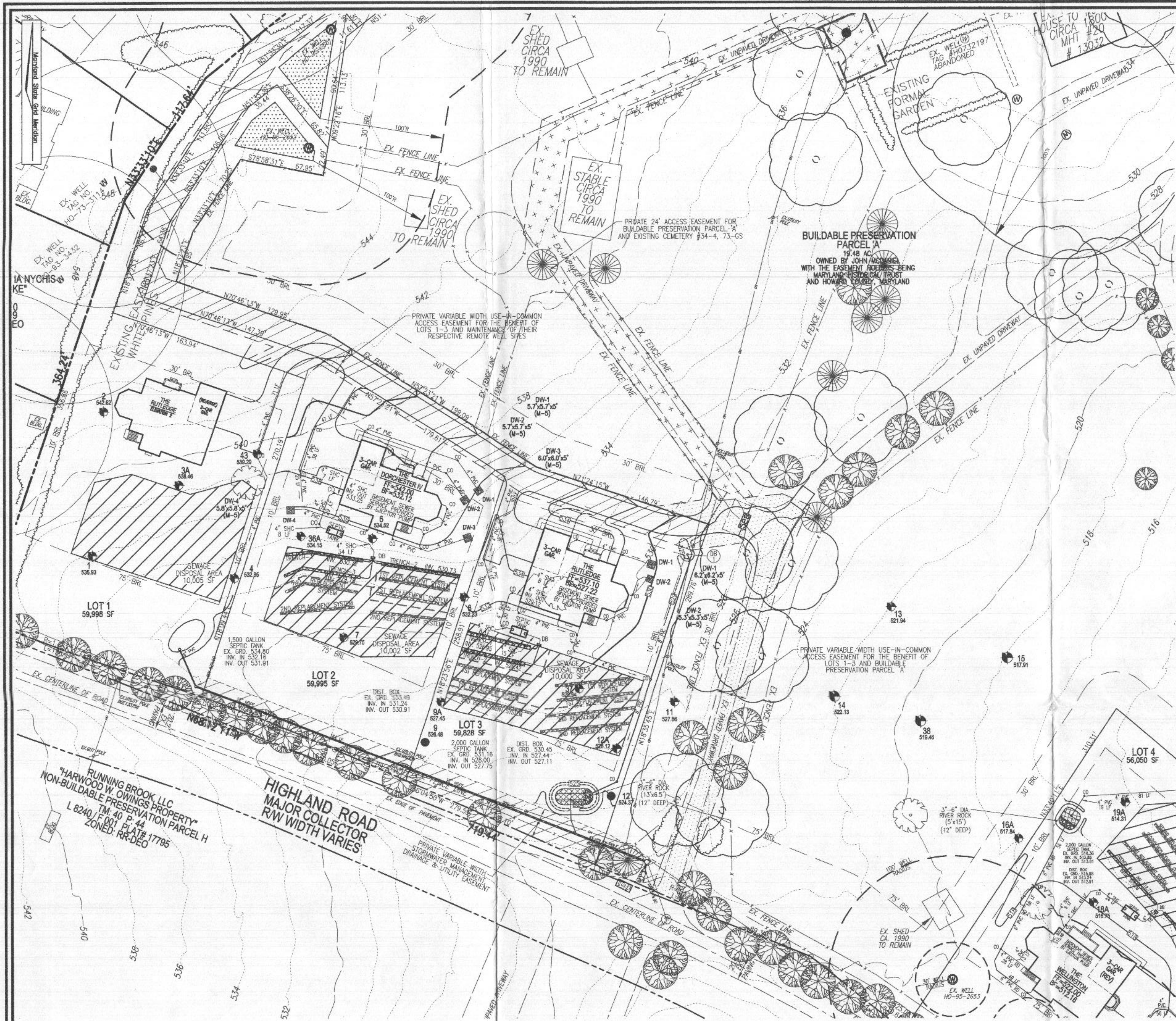
Payments

Credit Card \$60.00  
Card Type: VISA  
CC #: 5897  
Authorization #: 06830G  
Order Id: 74281110  
AID: A0000000031010  
ARC: 3030  
AD: 06011203A00000

Total Due \$60.00  
Total Received \$60.00

X \_\_\_\_\_  
Signature

~Thank you for printing on Recycled Paper~



**WELL LOCATION CERTIFICATION:**  
THE EXISTING WELL SHOWN ON THIS PLAN (HO-95-2852) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN

**PLAN VIEW**  
SCALE: 1"=50'

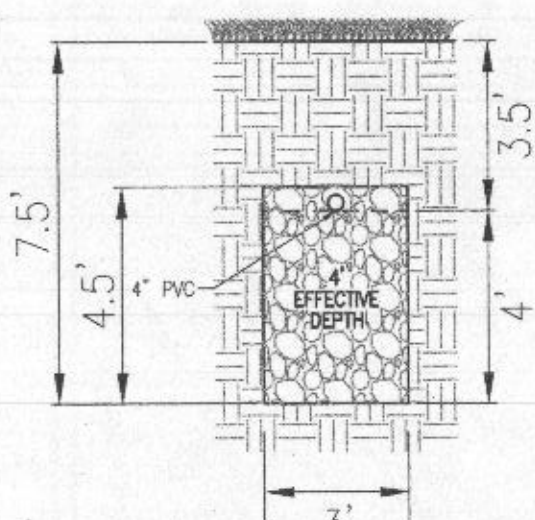
TRENCH INFO. (INITIAL)			
TRENCH	TRENCH LENGTH	TRENCH DEPTH	TRENCH WIDTH
1	53'	52.8-55	52.7-95
2	53'	52.8-42	52.2-42

**SYSTEM CALCULATIONS:**

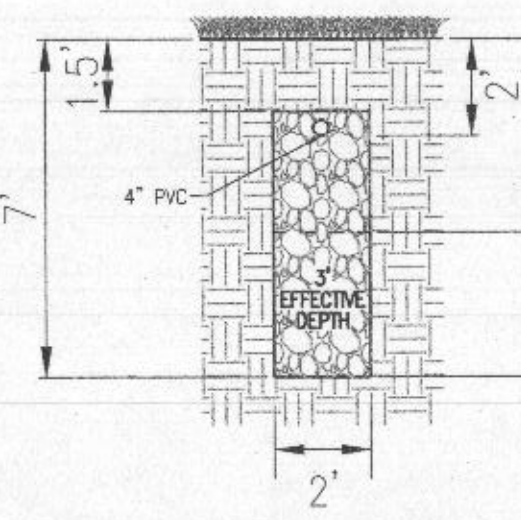
**INITIAL SYSTEM:**  
6 BEDROOMS AT 900gpd / 1.2 ABSORPTION RATE = 750 SQ. FT.  
750 SQ. FT. / 3 (TRENCH WIDTH) x .42 (SIDEWALL REDUCTION) = 105 LINEAR FEET  
106 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE INITIAL SYSTEM.  
(2 TRENCHES OF 53' IN LENGTH)

**FIRST REPLACEMENT SYSTEM:**  
6 BEDROOMS AT 900gpd / 0.8 ABSORPTION RATE = 1,125 SQ. FT.  
1,125 SQ. FT. / 2 (TRENCH WIDTH) x .44 (SIDEWALL REDUCTION) = 248 LINEAR FEET  
248 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE FIRST REPLACEMENT SYSTEM.  
(4 TRENCHES OF 62' IN LENGTH)

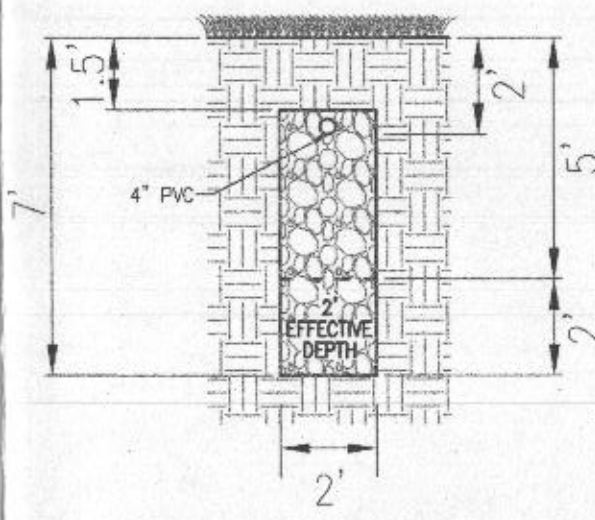
**SECOND REPLACEMENT SYSTEM:**  
6 BEDROOMS AT 900gpd / 1.2 ABSORPTION RATE = 750 SQ. FT.  
750 SQ. FT. / 2 (TRENCH WIDTH) x .57 (SIDEWALL REDUCTION) = 214 LINEAR FEET  
216 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE SECOND REPLACEMENT SYSTEM.  
(3 TRENCHES OF 72' IN LENGTH)



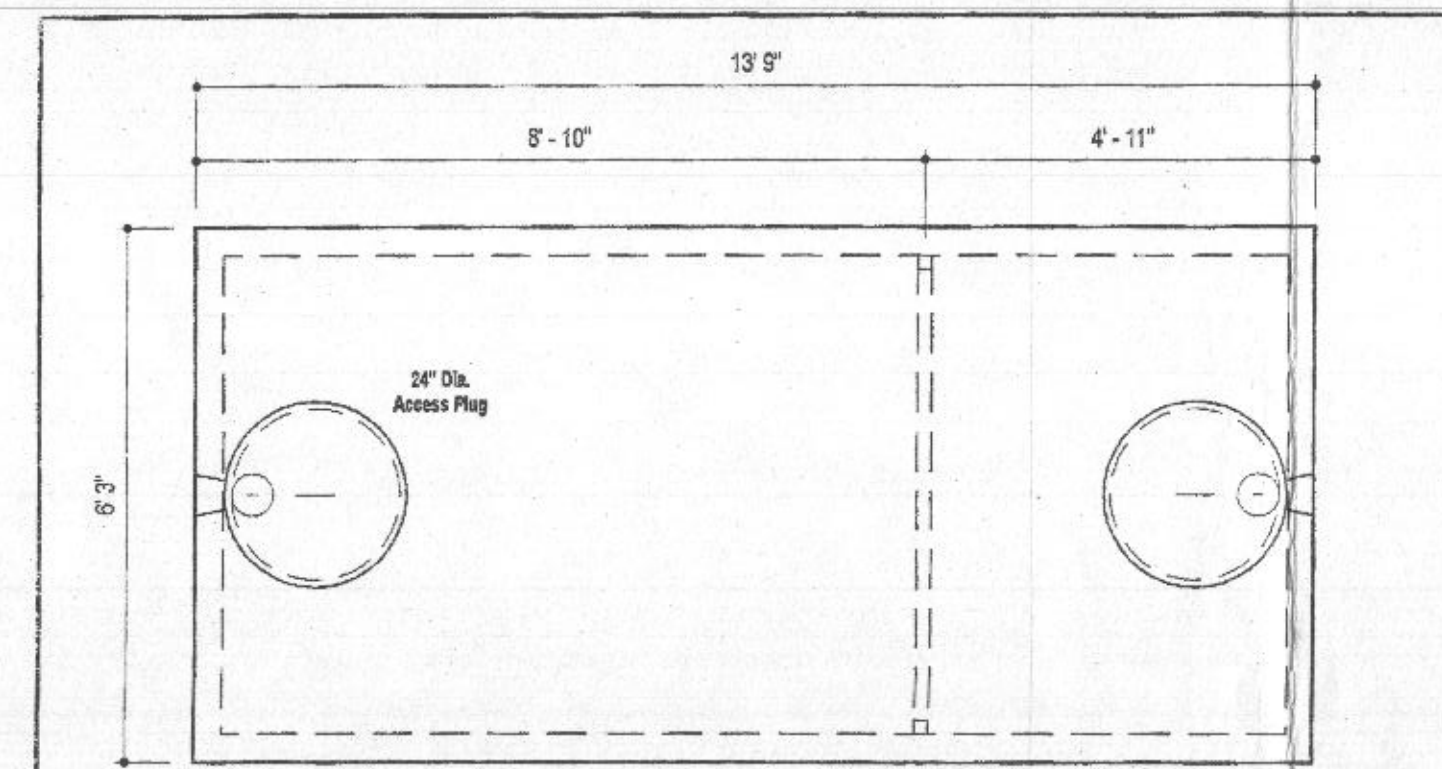
**INITIAL SYSTEM TRENCH DETAIL**  
NOT TO SCALE



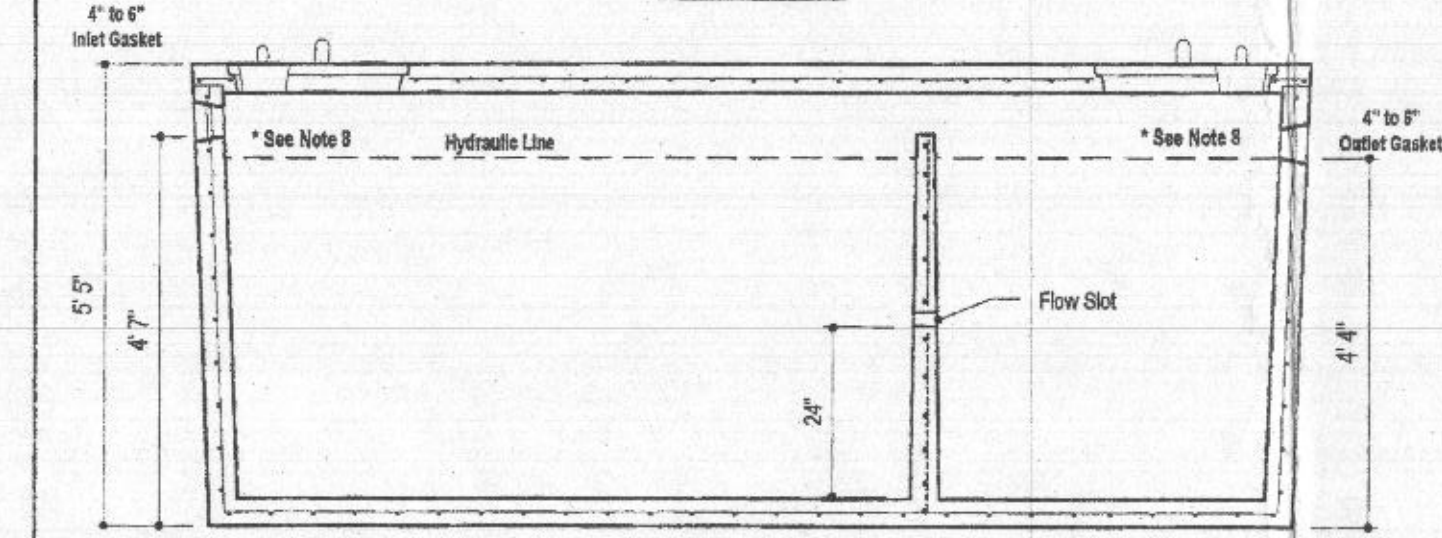
**1ST REPLACEMENT TRENCH DETAIL**  
NOT TO SCALE



**2ND REPLACEMENT TRENCH DETAIL**  
NOT TO SCALE



**PLAN VIEW**



**SECTION A-A**

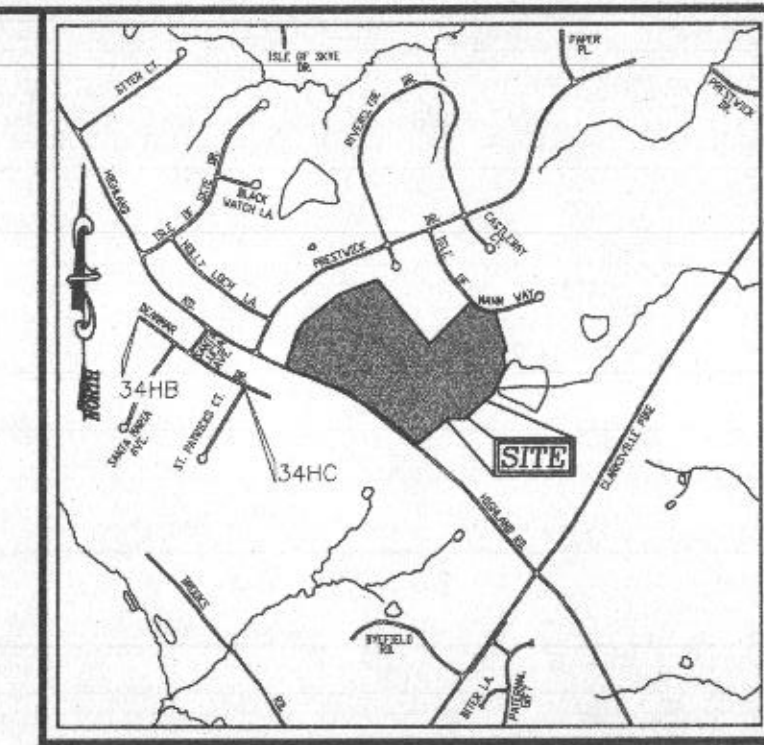
**DESIGN DATA & GENERAL NOTES**

- (1) Concrete strength: F<sub>cm</sub> 4,000 p.s.i. @ 28 days. Density = 140 pcf.
- (2) Cement - Portland Type III per ASTM C 150-82.
- (3) Aggregate & plasticizers per ASTM C 260-88 & C 484-92.
- (4) Reinforcing per ASTM A 618, 601, 603, 605.
- (5) Top slab sealed with butyl rope mastic.
- (6) 4" wall, 4" base, & 6" top thickness.
- (7) Max 3" of cover.
- (8) Depending on use of tank, Inlet & Outlet baffles may be required by code.

**MBI**  
Mayer Bros., Inc.  
6284 Race Road  
Elkridge, Maryland 21075  
Tel: 410.796.5424  
Fax: 410.796.1438  
www.maybrospros.com

**2,000 GALLON SEPTIC TANK**  
**2-Compartment**  
Stock Item [Approx. 19,900 lbs]

Dwg. No. 2000-2C No Scale Aug 11, 2008



**VICINITY MAP**  
SCALE: 1"=2000'  
ADC MAP COORDINATE: 31, A5

**LEGEND:**

- BOUNDARY LINE
- RIGHT-OF-WAY LINE
- EXISTING EDGE OF PAVING
- EXISTING UTILITY POLE
- EXISTING FENCE LINE
- EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
- EXISTING TREES
- PRIVATE VARIABLE WIDTH USE-IN-COMMON ACCESS EASEMENT
- PROP. ALTERNATE WELL LOCATION
- EX. WELL LOCATION
- FAILED PERC. TEST
- PASSED PERC. TEST
- APPROVED SEPTIC AREA

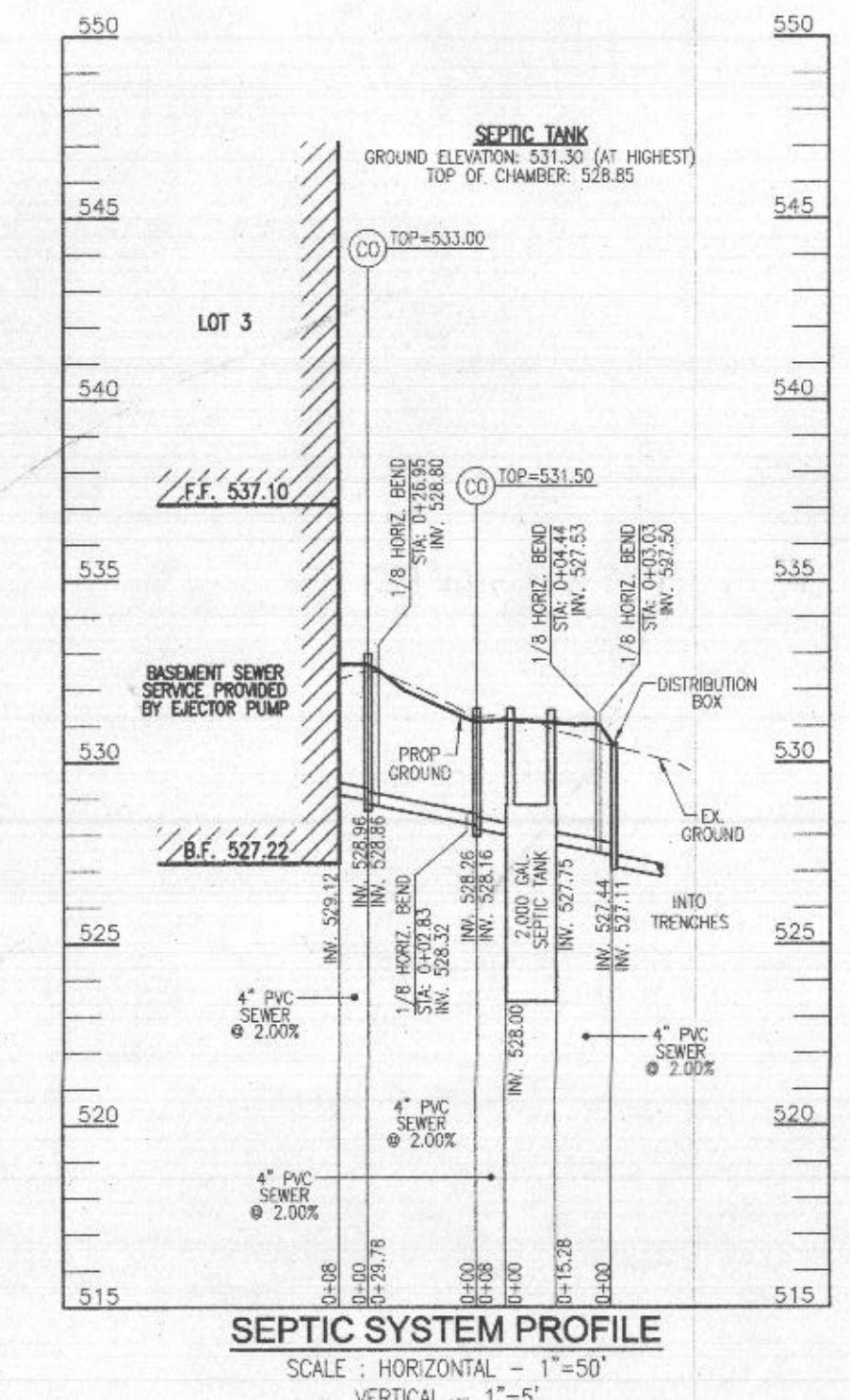
THIS AREA DESIGNATES A PRIVATE SEWAGE DISPOSAL AREA OF AT LEAST 10,000 SQUARE FEET AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THIS AREA SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWAGE DISPOSAL AREA. RECORDATION OF A MODIFIED SEWAGE DISPOSAL AREA SHALL NOT BE NECESSARY.

**GENERAL NOTES:**

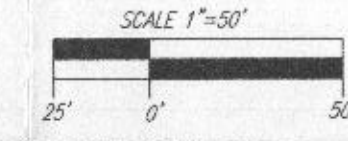
1. ANY CHANGE TO THE LOCATIONS OR DEPTHS TO ANY COMPONENTS MUST BE APPROVED BY THE ENGINEER AND THE HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO INSTALLATION. A REVISED SITE PLAN MAY BE REQUIRED. THE MAXIMUM EARTH COVER OVER THE TANK IS 3 FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
2. ELECTRICAL WORK FOR THE INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
3. THE WELL (HO-95-2852) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN.
4. ALL WELLS AND SEPTIC SYSTEMS LOCATED WITHIN 100' OF THE PROPERTY BOUNDARIES AND 200' DOWN GRADIENT OF ANY WELLS AND/OR SEPTIC SYSTEMS HAVE BEEN SHOWN.
5. ANY CHANGE TO A PRIVATE SEWAGE DISPOSAL AREA SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
6. ADJUSTMENT TO THE PRIVATE SEWAGE DISPOSAL AREA IS NOT PERMITTED WITHOUT ADDITIONAL TESTING.
7. THE LOT SHOWN HEREON COMPLEES WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.

Approved Septic System Plan  
Howard County Health Department  
Henk Oswald 7/2/21  
Signature Date

**OWNER/DEVELOPER**  
JOHN P. MCDANIEL  
13032 HIGHLAND ROAD  
HIGHLAND, MD 20777  
ATTN: MR. JOE RUITER  
(443) 367-0422



**SEPTIC SYSTEM PROFILE**  
SCALE: HORIZONTAL - 1"=50'  
VERTICAL - 1"=5'



**ONSITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN**

**MCDANIEL PROPERTY - LOT 3**  
13040 HIGHLAND ROAD  
HIGHLAND, MD 20777

PLATS: 23440-42 TAX MAP: 34 ORD: 22 ZONED: RR-003 PARCEL: 117  
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

**VOGEL ENGINEERING**

**TIMMONS GROUP**  
3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043  
P: 410.461.7666 F: 410.461.8961 www.timmons.com

PROFESSIONAL CERTIFICATE

DESIGN BY: RHW  
DRAWN BY: JMR  
CHECKED BY: RHW  
DATE: JUNE 2024  
SCALE: AS SHOWN  
W.O. NO.: 08-43

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DAILY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16193 EXPIRATION DATE: 06-27-2024

ROBERT H. VOGEL, PE No. 16193

1 SHEET OF 1