

Bureau of Environmental Health
 8930 Stanford Boulevard, Columbia, MD 21045
 Main: 410-313-2640 | Fax: 410-313-2648
 TDD 410-313-2323 | Toll Free 1-866-313-6300
www.hchealth.org
 Facebook: www.facebook.com/hocohealth

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

RECEIPT DATE: 2-18-25 **ONSITE SEWAGE DISPOSAL SYSTEM** P 587961

APPROVAL DATE: 3/25/2025 **PERMIT: NEW CONSTRUCTION** A _____

PROPERTY ADDRESS: 13048 Highland Road

SUBDIVISION: McDaniel Property LOT: 1 TAX ID: _____

CONTRACTOR: Hatfields Equipment EMAIL: ken@hatfields.com

CONTRACTOR ADDRESS: P.O. Box 517 Annapolis, Junction, MD 20701 PHONE: 301-490-4289

PROPERTY OWNER: John McDaniel EMAIL: _____

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: _____ APPLICATION RATE: _____

TRENCHES:	LINEAR FEET REQUIRED: <u>158</u>	INLET DEPTH: <u>4</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>8</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>11</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>4</u>
LOCATION:	SYSTEM TO BE STAKED BY DESIGNER AND VERIFIED BY APPROVING AUTHORITY DURING PRE-CONSTRUCTION INSPECTION.	
NOTES:		

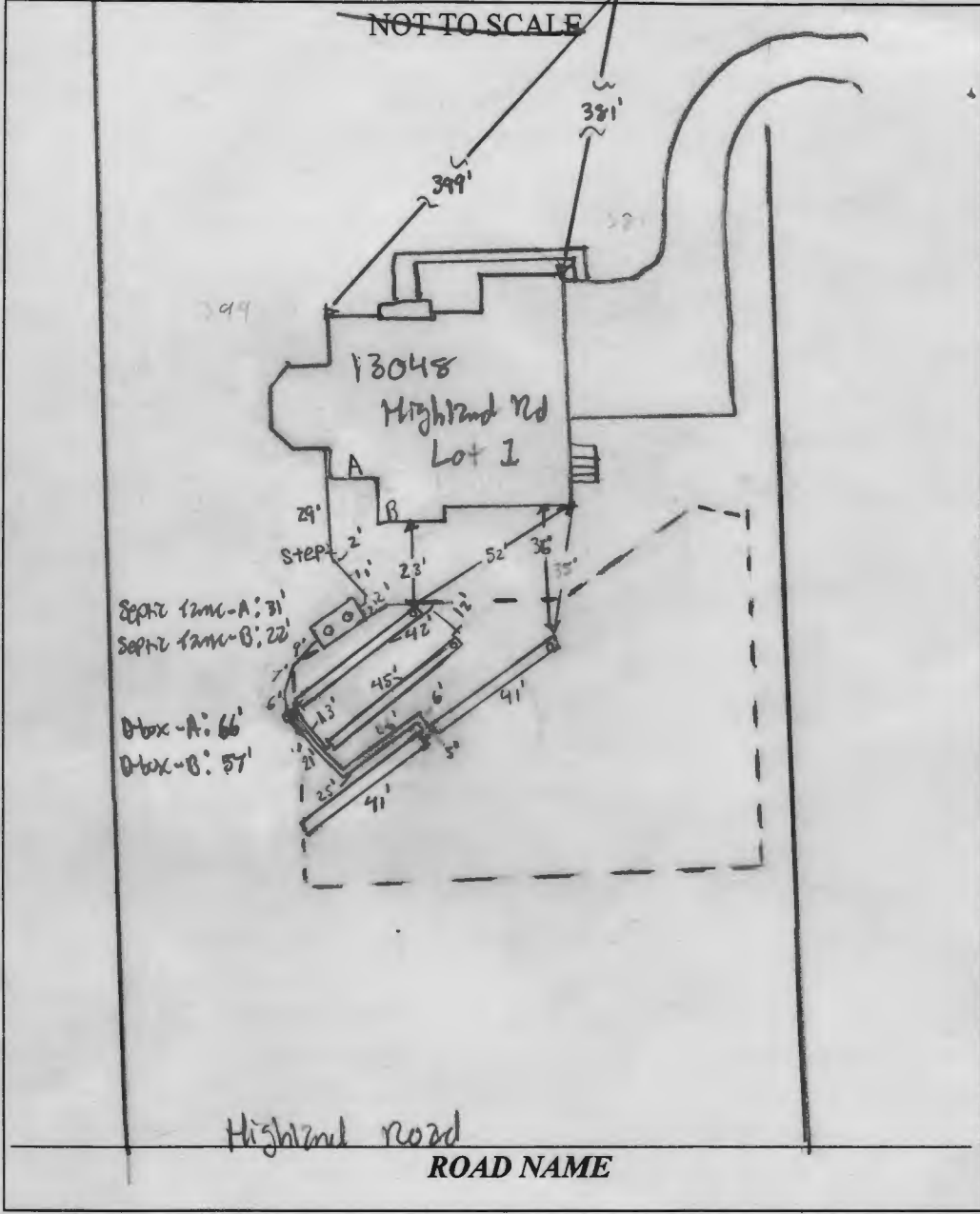
ISSUED BY: [Signature] ISSUE DATE: 2-18-25 EXPIRATION DATE: 2-18-26

- 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 DOWNGRADE 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 WARRANT 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' (W) HO-95-2650

NOT TO SCALE



TRENCH/DRAINFIELD DATA		
WIDTH	INLET	BOTTOM
3	3.5	8'
NUMBER OF TRENCHES		4
TOTAL LENGTH		169'
ABSORPTION AREA		507 sq ft + 84
DISTRIBUTION BOX LEVEL		yes
DISTRIBUTION BOX BAFFLE		yes
DISTRIBUTION BOX PORT		yes

SEPTIC TANK DATA	
SEPTIC TANK 1 LEVEL	yes
MANUFACTURER	Babylon
CAPACITY	200 GAL
SEAM LOC	top
TANK LID DEPTH	3'-1'
BAFFLES	4" baffle + 6" front
BAFFLE FILTER	
MANHOLE LOC	Front + back
6" PORT LOC	
WATERTIGHT TEST	
SLOTTED	yes
DATE ON LID	3/10/2025
PUMP/SEPTIC TANK LEVEL	N/A
MANUFACTURER	
CAPACITY	
SEAM LOC	
TANK LID DEPTH	
BAFFLES	
BAFFLE FILTER	
MANHOLE LOC	
6" PORT LOC	
WATERTIGHT TEST	
SLOTTED	
DATE ON LID	

SEPTIC CONTRACTOR ONSITE INSTALLING SYTEM: John Gray
 SEPTIC CONTRACTOR ONSITE LICENSED WITH THE STATE OF MD: YES/NO

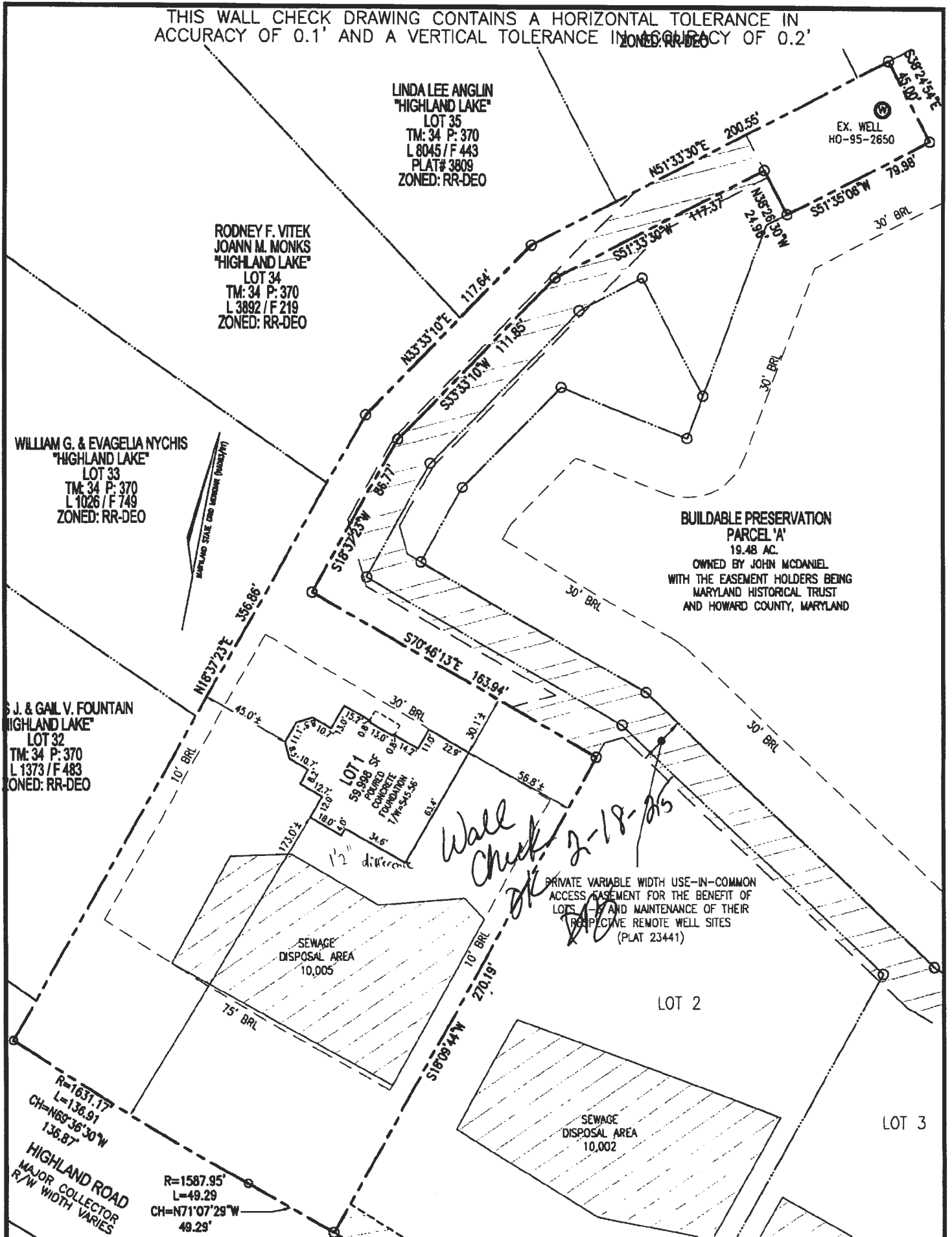
PRE-CONSTRUCTION NOTES:
 3/16/25 - installer onsite for pre-con. tank not out of house yet tank & sba around tank 20' from house per plan. describes on contour within 20'. Distance between trenches 14'. OK to start work. SP/MS

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

INSTALLATION NOTES:
 3/24/2025 - installer onsite for inspection. 2000 gal tank installed w/ 3'-1" of cover. 32" dia x 4" thick baffle installed. 6" pipe from tank to dbox installed w/ 11' run. D box installed. back right tank installed w/ inlet @ 3.5' x 1.5" @ 41" soil with good heavy sand. Distributor with split pipe to manhole installed. all to Babylon 24 work. Reinspect for four days, four baffle x 3 manhole.
 3/25/2025 - installer onsite for inspection. Adequate run from house to tank. 6" baffle installed. D box reworked under another trench inlets @ 3.5'. Spacing between trenches 10'-12'. trench lengths ≈ 90'. OK to reinspect all work. SP

FINAL INSPECTOR S. Pise DATE OF APPROVAL 3/26/2025

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



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.
PROPERTY LINE SURVEYOR

1/3/25
DATE

LICENSE NO. 267
EXP. DATE: JULY 28, 2026



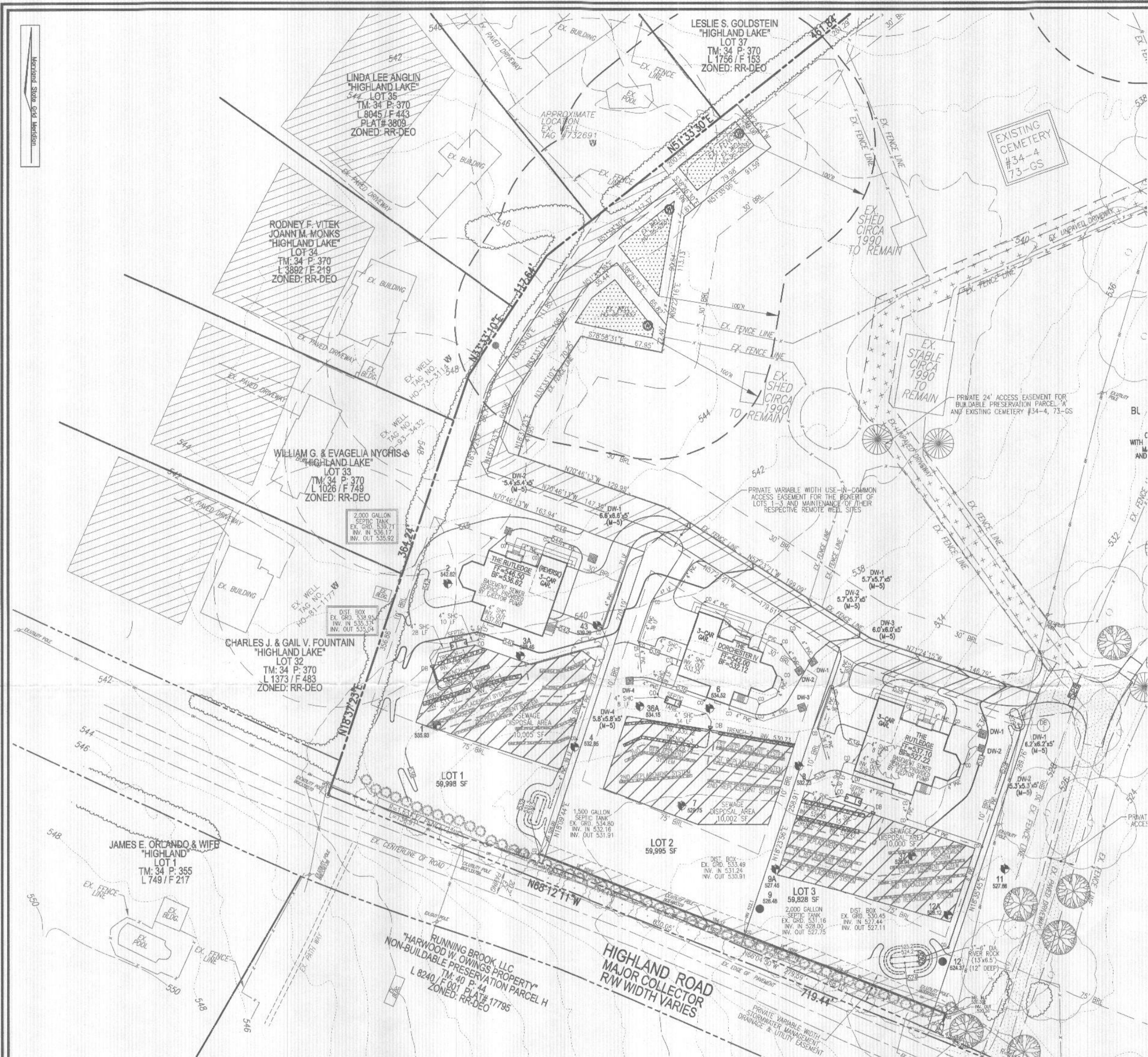
SCALE 1" = 60'	DATE 12/31/2024
DRAWN BY J.M.M.	CHECKED BY T.M.H.
PLAT NUMBER 23440-23442	JOB NUMBER 08-43.00

VOGEL ENGINEERING

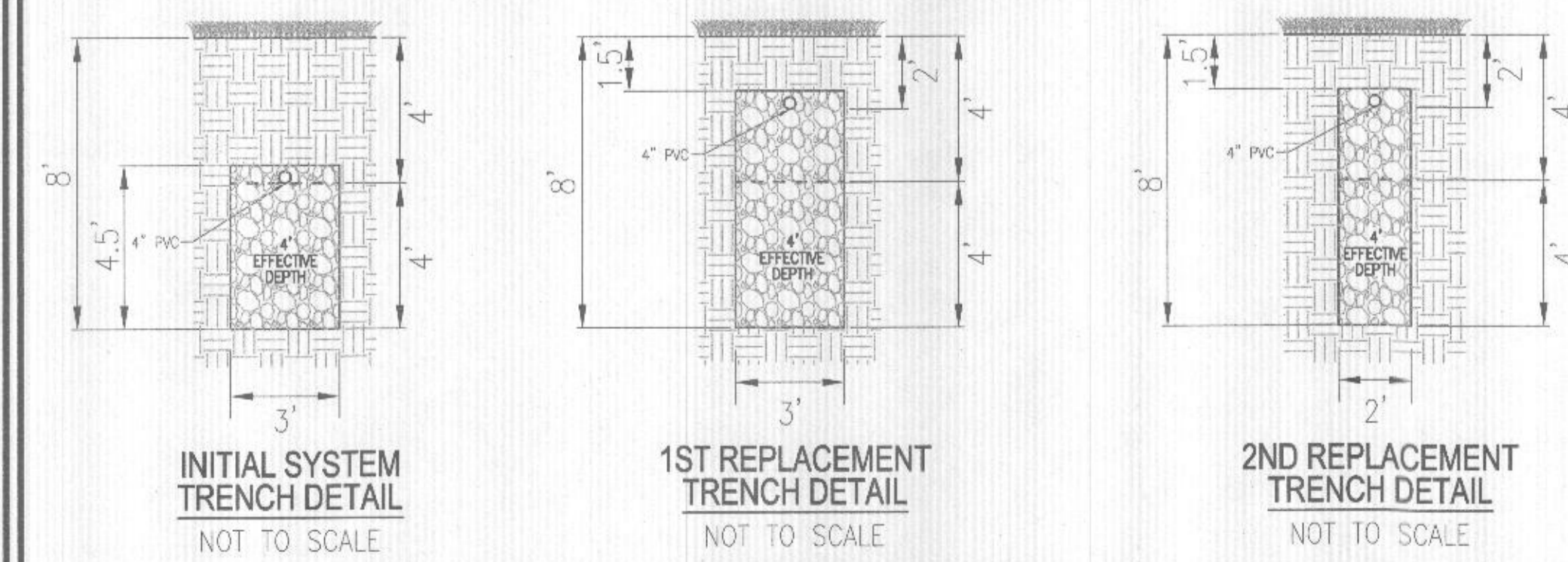
TIMMONS GROUP

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

WALL CHECK DRAWING
13048 HIGHLAND ROAD
LOT 1
MCDANIEL PROPERTY
PLAT NO. 23441
FIFTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND



WELL LOCATION CERTIFICATION:
THE EXISTING WELL SHOWN ON THIS PLAN (H0-35-2850) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN



INITIAL SYSTEM TRENCH DETAIL NOT TO SCALE
1ST REPLACEMENT TRENCH DETAIL NOT TO SCALE
2ND REPLACEMENT TRENCH DETAIL NOT TO SCALE

PLAN VIEW
SCALE: 1"=50'

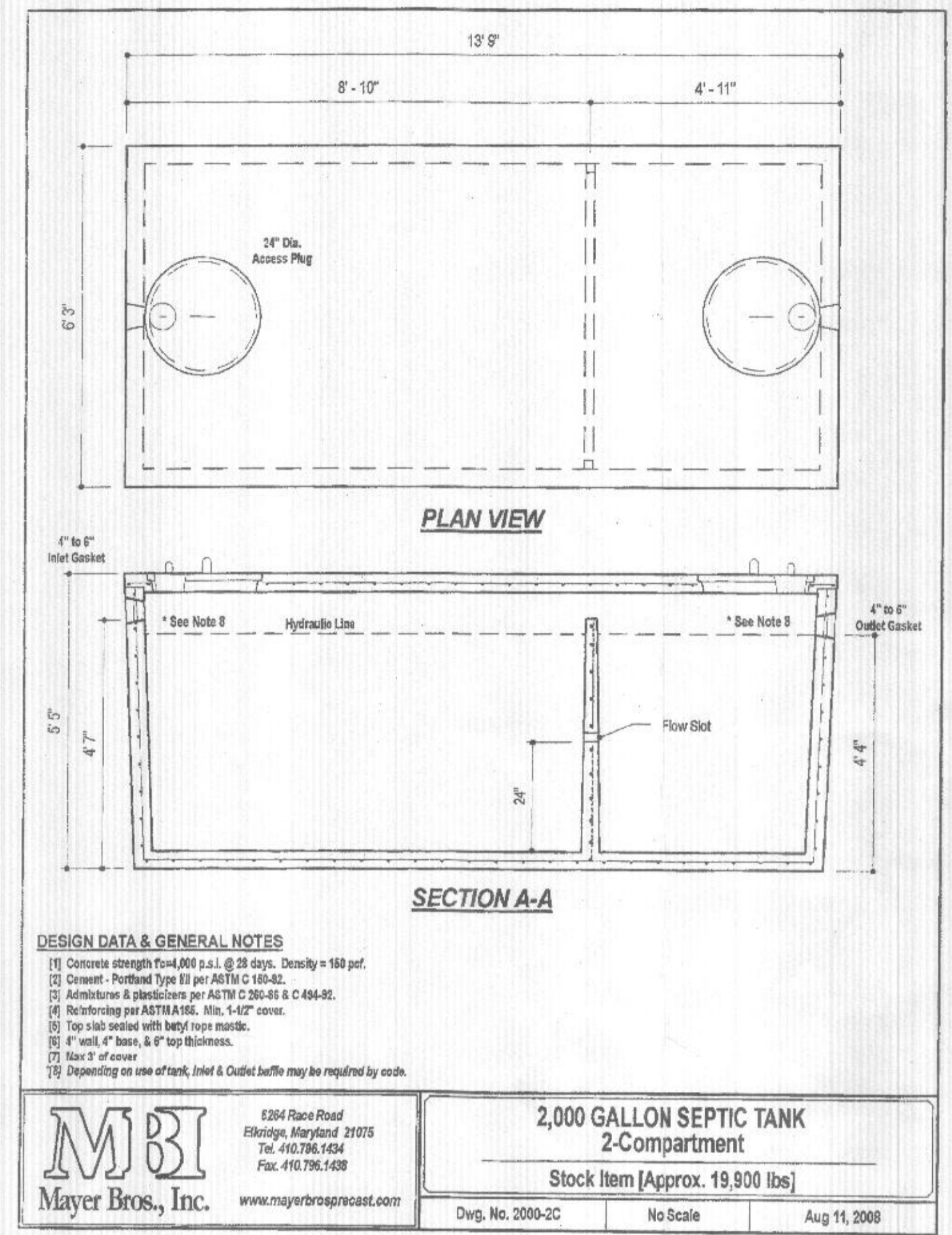
TRENCH INFO (INITIAL)				
TRENCH	LENGTH	TRENCH	TRENCH	EXISTING GROUND
1	40'	534.96	530.96	538.98
2	40'	534.19	530.19	538.19
3	40'	533.31	529.31	537.31
4	40'	533.26	529.26	537.28

SYSTEM CALCULATIONS:

INITIAL SYSTEM
6 BEDROOMS AT 900gpd / 0.8 ABSORPTION RATE = 1,125 SQ. FT.
1,125 SQ. FT. / 3 (TRENCH WIDTH) x .42 (SIDEWALL REDUCTION) = 158 LINEAR FEET
160 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE INITIAL SYSTEM.
(4 TRENCHES OF 40' IN LENGTH)

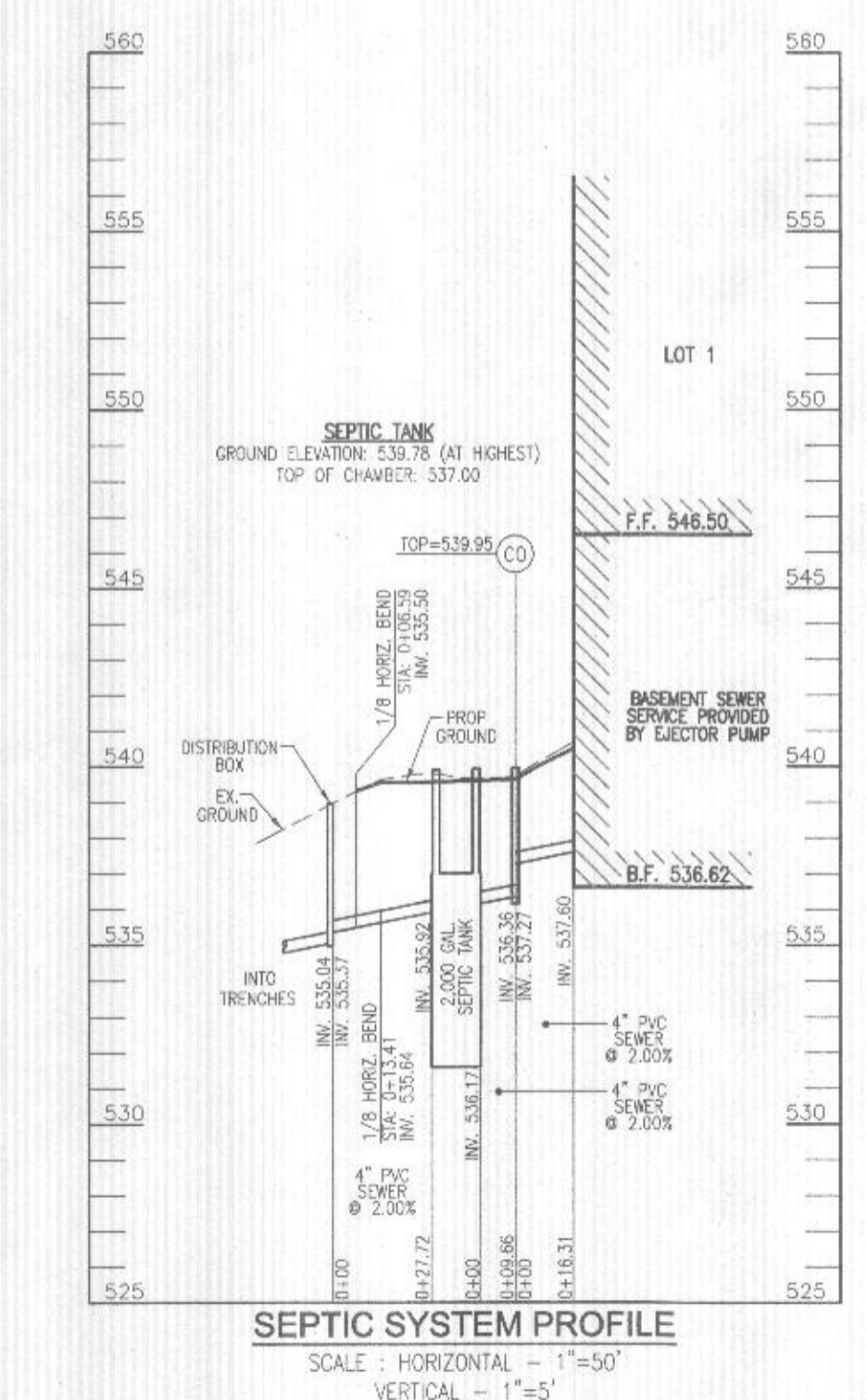
FIRST REPLACEMENT SYSTEM:
6 BEDROOMS AT 900gpd / 0.8 ABSORPTION RATE = 1,125 SQ. FT.
1,125 SQ. FT. / 3 (TRENCH WIDTH) x .42 (SIDEWALL REDUCTION) = 158 LINEAR FEET
160 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE FIRST REPLACEMENT SYSTEM.
(4 TRENCHES OF 40' IN LENGTH)

SECOND REPLACEMENT SYSTEM:
6 BEDROOMS AT 900gpd / 0.8 ABSORPTION RATE = 1,125 SQ. FT.
1,125 SQ. FT. / 2 (TRENCH WIDTH) x .36 (SIDEWALL REDUCTION) = 203 LINEAR FEET
204 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE SECOND REPLACEMENT SYSTEM.
(4 TRENCHES OF 51' IN LENGTH)

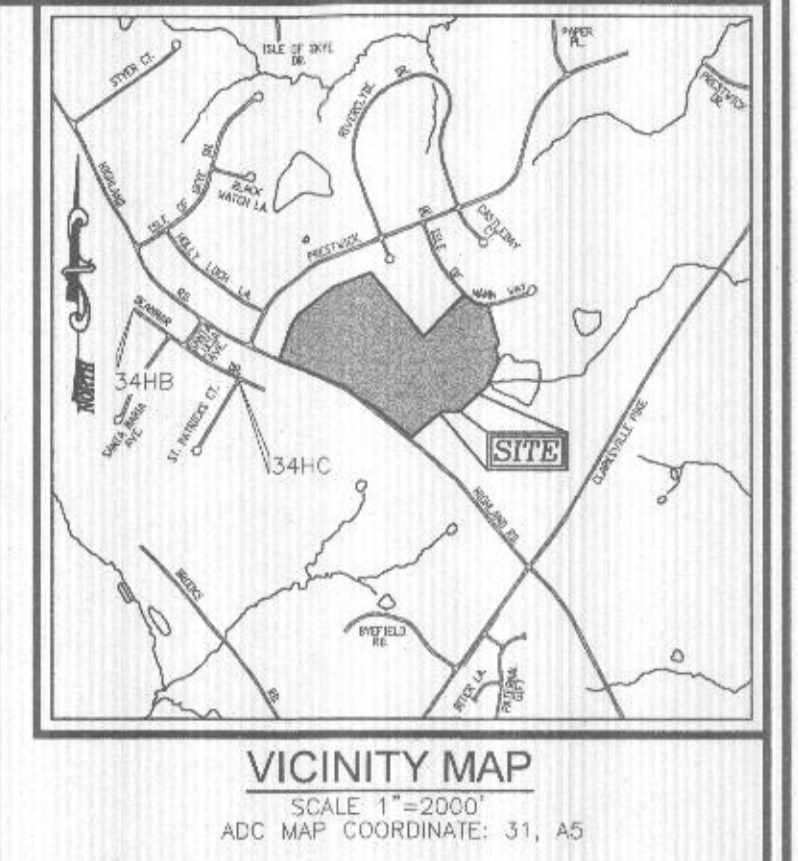


2,000 GALLON SEPTIC TANK
2-Compartment
Stock Item [Approx. 19,900 lbs]
Dwg. No. 2009-02 No Scale Aug 11, 2009

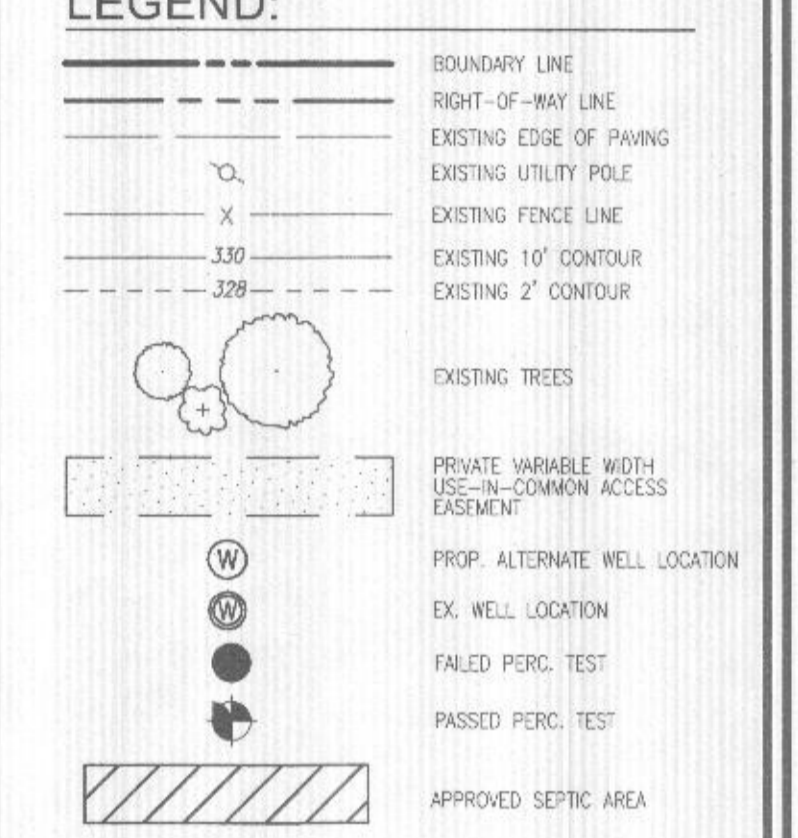
DESIGN DATA & GENERAL NOTES
 (1) Concrete strength F_{cm} = 4000 p.s.i., @ 28 days. Density = 145 pcf.
 (2) Cover - Portland Type III per ASTM C 842.
 (3) Reinforcement & plasticizers per ASTM C 200-65 & C 494-91.
 (4) Reinforcing per ASTM A 955, Min. 1/4" cover.
 (5) Top slab sealed with heavy rope mastic.
 (6) 4" wall, 4" base, & 6" top thickness.
 (7) Size 2" of cover.
 (8) Depending on use of tank, Inlet & Outlet baffles may be required by code.



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



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. RECORDED 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.
 2. THE MAXIMUM EARTH COVER OVER THE TANK IS 3 FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
 3. ELECTRICAL WORK FOR THE INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
 4. THE WELL (H0-95-2850) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN.
 5. 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.
 6. ANY CHANGE TO A PRIVATE SEWAGE DISPOSAL AREA SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
 7. ADJUSTMENT TO THE PRIVATE SEWAGE DISPOSAL AREA IS NOT PERMITTED WITHOUT ADDITIONAL TESTING.
 8. THE LOT SHOWN HEREON COMPLES 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
Signature: *Howard O'Quinn* Date: 8/19/24
OWNER/DEVELOPER
JOHN P. MCDANIEL
13032 HIGHLAND ROAD
HIGHLAND, MD 20777
ATTN: MR. JOE RUTTER
(443) 367-0422

ONSITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN

MCDANIEL PROPERTY - LOT 1
13032 HIGHLAND ROAD
HIGHLAND, MD 20777

BUILDING PERMIT # _____

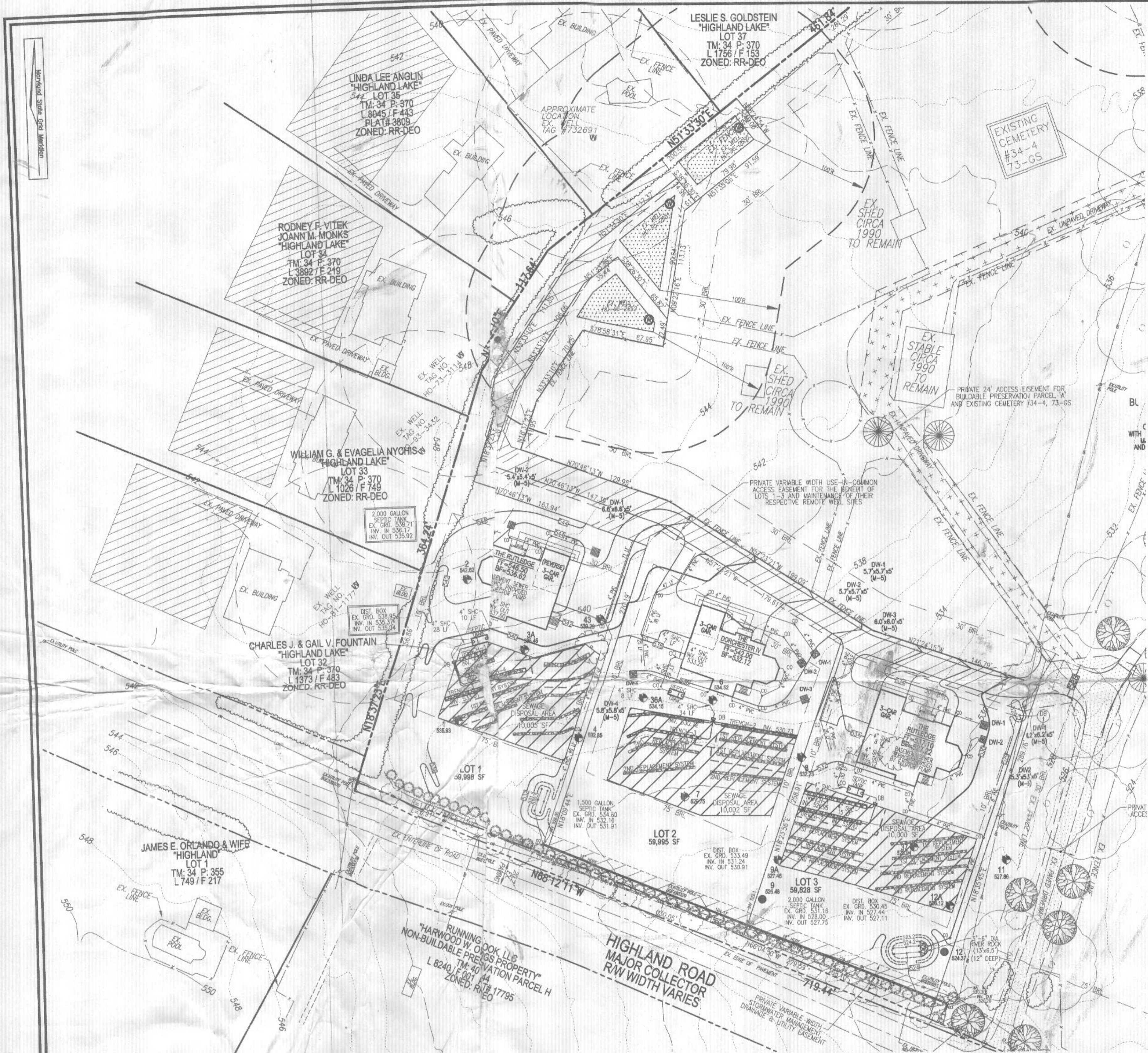
PLATS: 23440-42
TAX MAP: 34 GRD: 22
5TH ELECTION DISTRICT

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
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A QUALIFIED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 18193, EXPIRATION DATE: 08-27-2024

DESIGN BY: R-V
DRAWN BY: J-M
CHECKED BY: R-V
DATE: AUGUST 2024
SCALE: AS SHOWN
W.O. NO.: 08-43

1 SHEET OF 1



WELL LOCATION CERTIFICATION:
THE EXISTING WELL SHOWN ON THIS PLAN (HO-95-2850) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN

PLAN VIEW
SCALE: 1"=50'

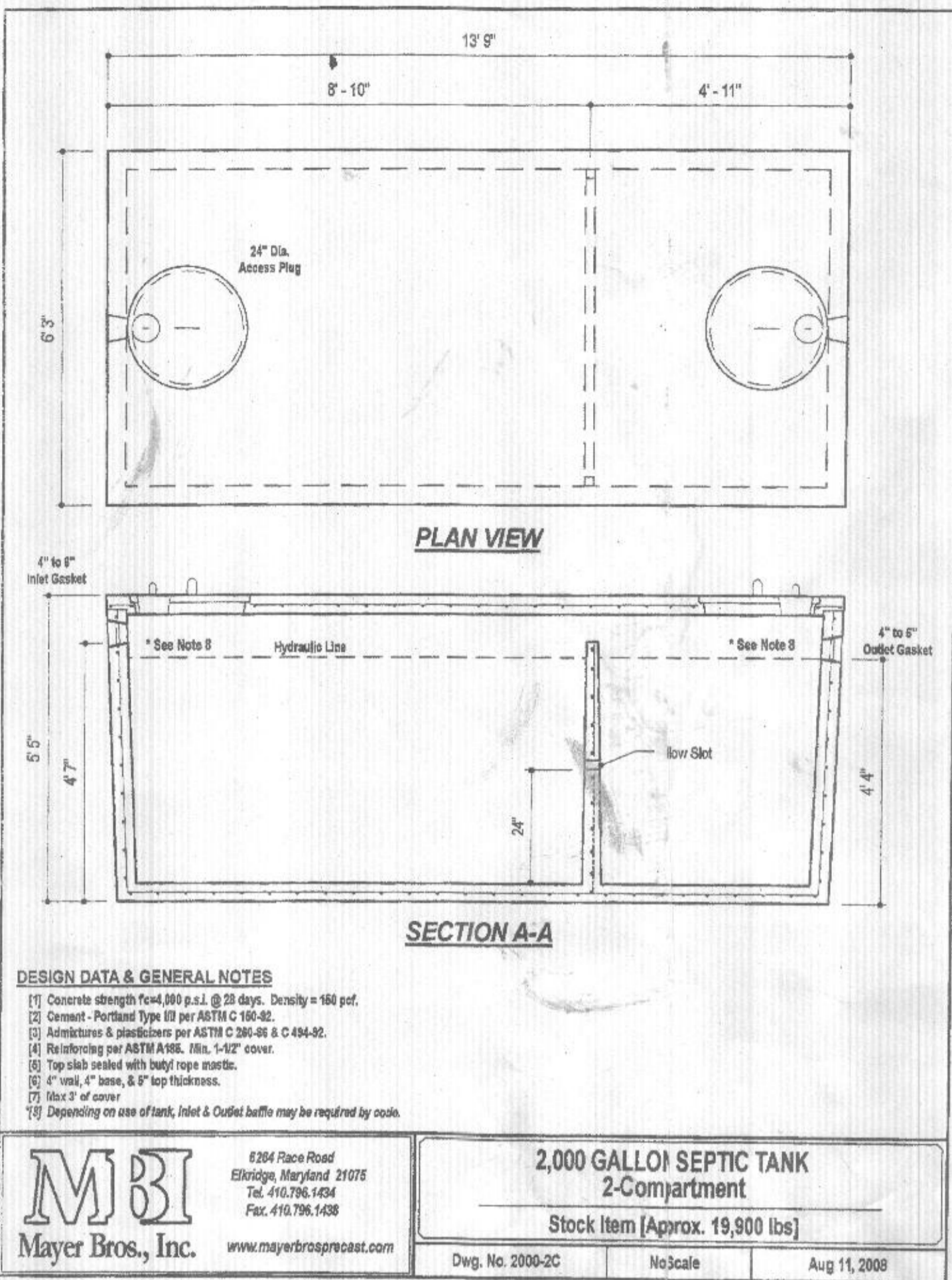
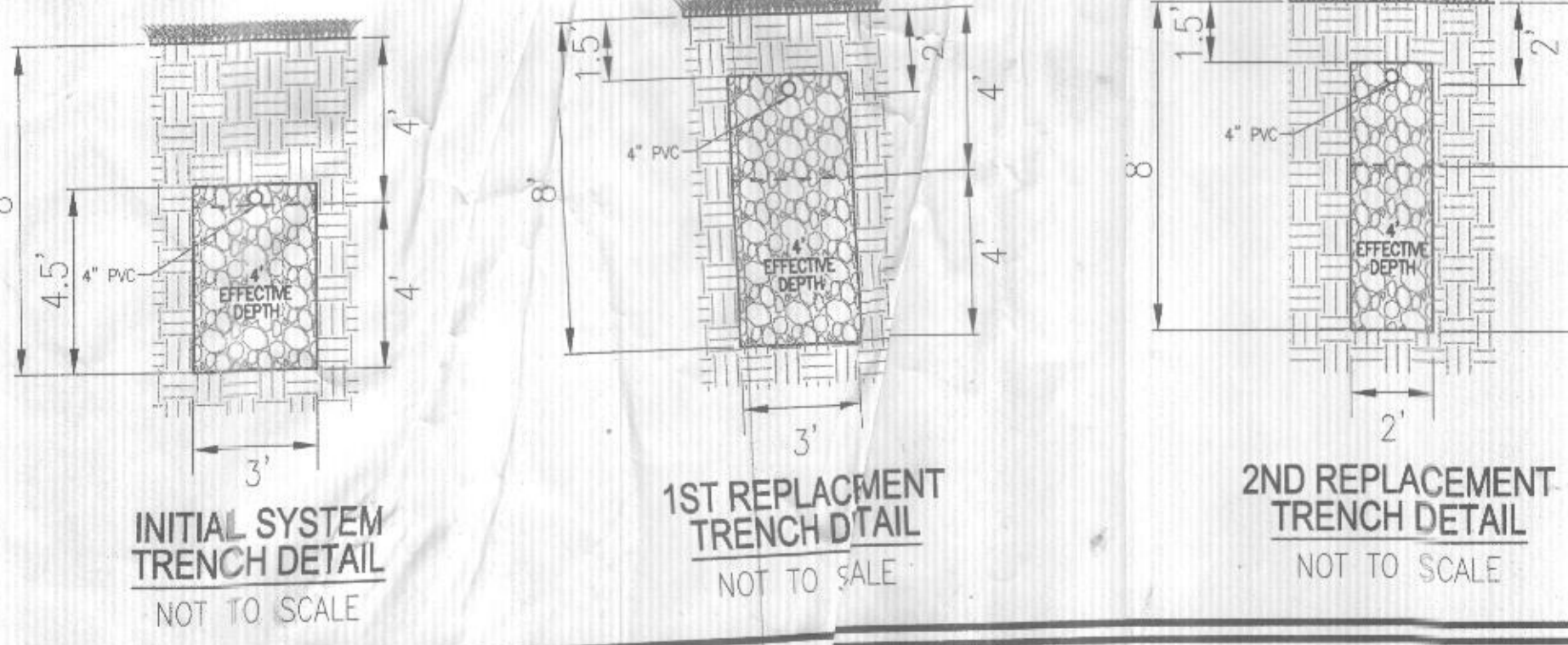
TRENCH	TRENCH LENGTH	INVERT	INVERT TO BOTTOM OF TRENCH	EXISTING GROUND
1	40'	534.95	530.95	536.95
2	40'	534.19	530.19	536.19
3	40'	533.31	529.31	537.31
4	40'	533.26	529.26	537.26

SYSTEM CALCULATIONS:

INITIAL SYSTEM:
6 BEDROOMS AT 900gpd / 0.8 ABSORPTION RATE = 1,125 SQ. FT.
1,125 SQ. FT. / 3 (TRENCH WIDTH) x .42 (SIDEWALL REDUCTION) = 158 LINEAR FEET
160 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE INITIAL SYSTEM.
(4 TRENCHES OF 40' IN LENGTH)

FIRST REPLACEMENT SYSTEM:
6 BEDROOMS AT 900gpd / 0.8 ABSORPTION RATE = 1,125 SQ. FT.
1,125 SQ. FT. / 3 (TRENCH WIDTH) x .42 (SIDEWALL REDUCTION) = 158 LINEAR FEET
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(4 TRENCHES OF 40' IN LENGTH)

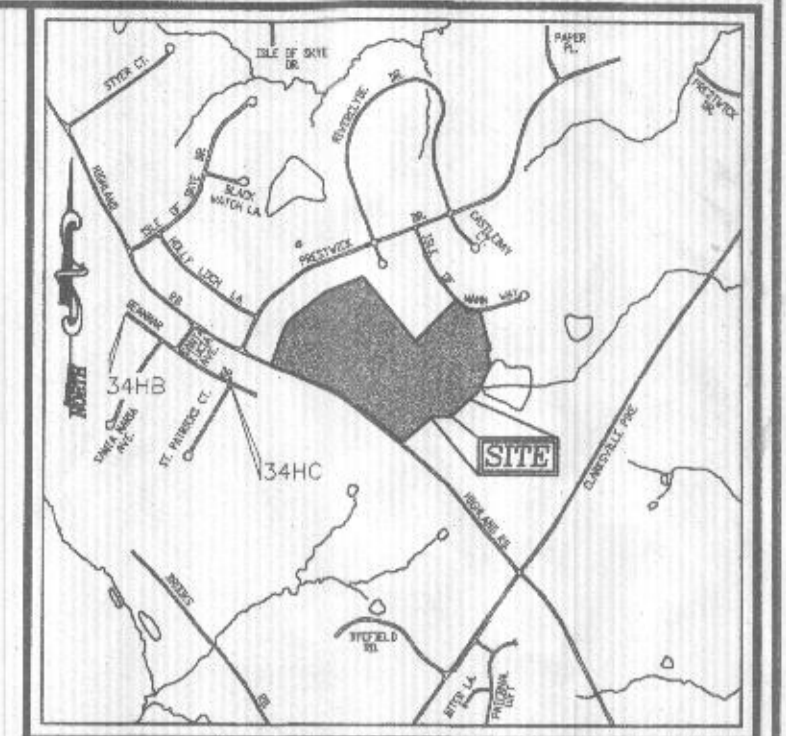
SECOND REPLACEMENT SYSTEM:
6 BEDROOMS AT 900gpd / 0.8 ABSORPTION RATE = 1,125 SQ. FT.
1,125 SQ. FT. / 2 (TRENCH WIDTH) x .36 (SIDEWALL REDUCTION) = 203 LINEAR FEET
204 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE SECOND REPLACEMENT SYSTEM.
(4 TRENCHES OF 51' IN LENGTH)



DESIGN DATA & GENERAL NOTES:
 (1) Concrete strength f'c=4,000 p.s.i. @ 28 days. Density = 150 pcf.
 (2) Cement - Portland Type II per ASTM C 150-82.
 (3) Admixtures & plasticizers per ASTM C 390-01 & C 484-02.
 (4) Reinforcing per ASTM A 618, Min. 1-1/2" cover.
 (5) Top slab finished with hinged rope manhole.
 (6) 4" vinyl, 4" base, & 5" top thickness.
 (7) Max 2" of cover.
 (8) Depending on use of tank, Inlet & Outlet baffles may be required by code.

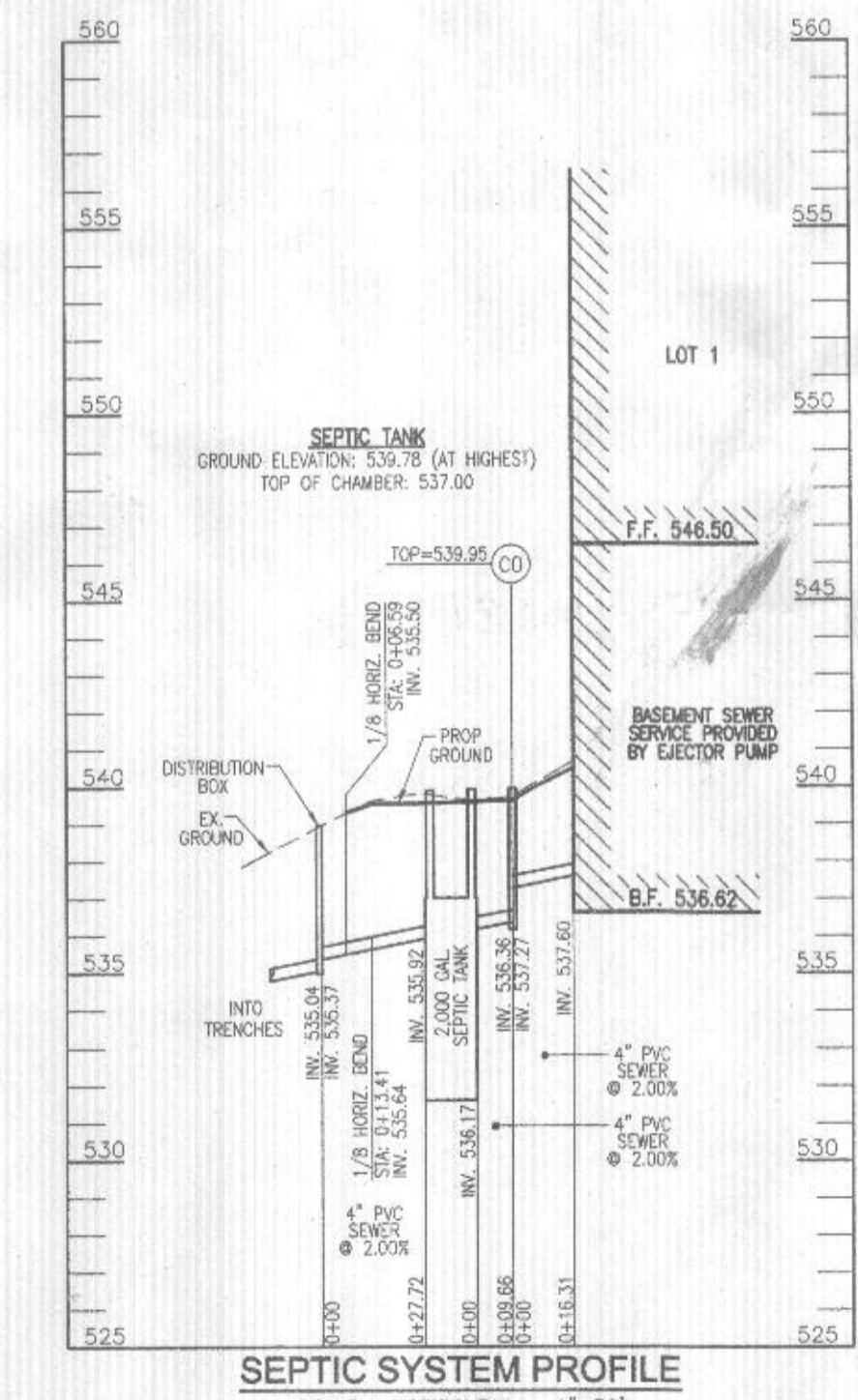
M B I
Mayer Bros., Inc. 6264 Race Road, Ellicott City, Maryland 21075
Tel: 410.796.1454 Fax: 410.796.1458
www.maybrosgroup.com

2,000 GALLON SEPTIC TANK 2-Compartment
Stock Item [Approx. 19,900 lbs]
Dwg. No. 2008-2C NoScale Aug 11, 2008



VICINITY MAP
SCALE: 1"=200'
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



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

- 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 LOAD BEARING TANK.
 - ELECTRICAL WORK FOR THE INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
 - THE WELL (HO-95-2850) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN.
 - 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.
 - ANY CHANGE TO A PRIVATE SEWAGE DISPOSAL AREA SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
 - ADJUSTMENT TO THE PRIVATE SEWAGE DISPOSAL AREA IS NOT PERMITTED WITHOUT ADDITIONAL TESTING.
 - 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
Hank Dwyer 8/9/24
Signature Date

OWNER/DEVELOPER
JOHN P. MCDANIEL
13032 HIGHLAND ROAD
HIGHLAND, MD 20777
ATTN: MR. JOE RUTTER
(410) 367-0422

ONSITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN

MCDANIEL PROPERTY - LOT 1
13048 HIGHLAND ROAD
HIGHLAND, MD 20777

BUILDING PERMIT # _____

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

PLATS: 25440-42 TAX MAP: 54 GRID: 22 PARCEL: 117
5TH ELECTION DISTRICT ZONED: RR-DEO HOWARD COUNTY, MARYLAND

DESIGN BY: RHV
DRAWN BY: JMR
CHECKED BY: RHV
DATE: AUGUST 2024
SCALE: AS SHOWN
W.O. NO.: Q8-43

PROFESSIONAL CERTIFICATE
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. 16192, EXPIRATION DATE 08-27-2024.

1 SHEET OF 1



PLAN VIEW
SCALE: 1"=50'

TRENCH INFO. (INITIAL)		
TRENCH LENGTH	TRENCH WIDTH	EXISTING DEPTH
1	40'	34.96'
2	40'	34.19'
3	40'	33.31'
4	40'	32.26'

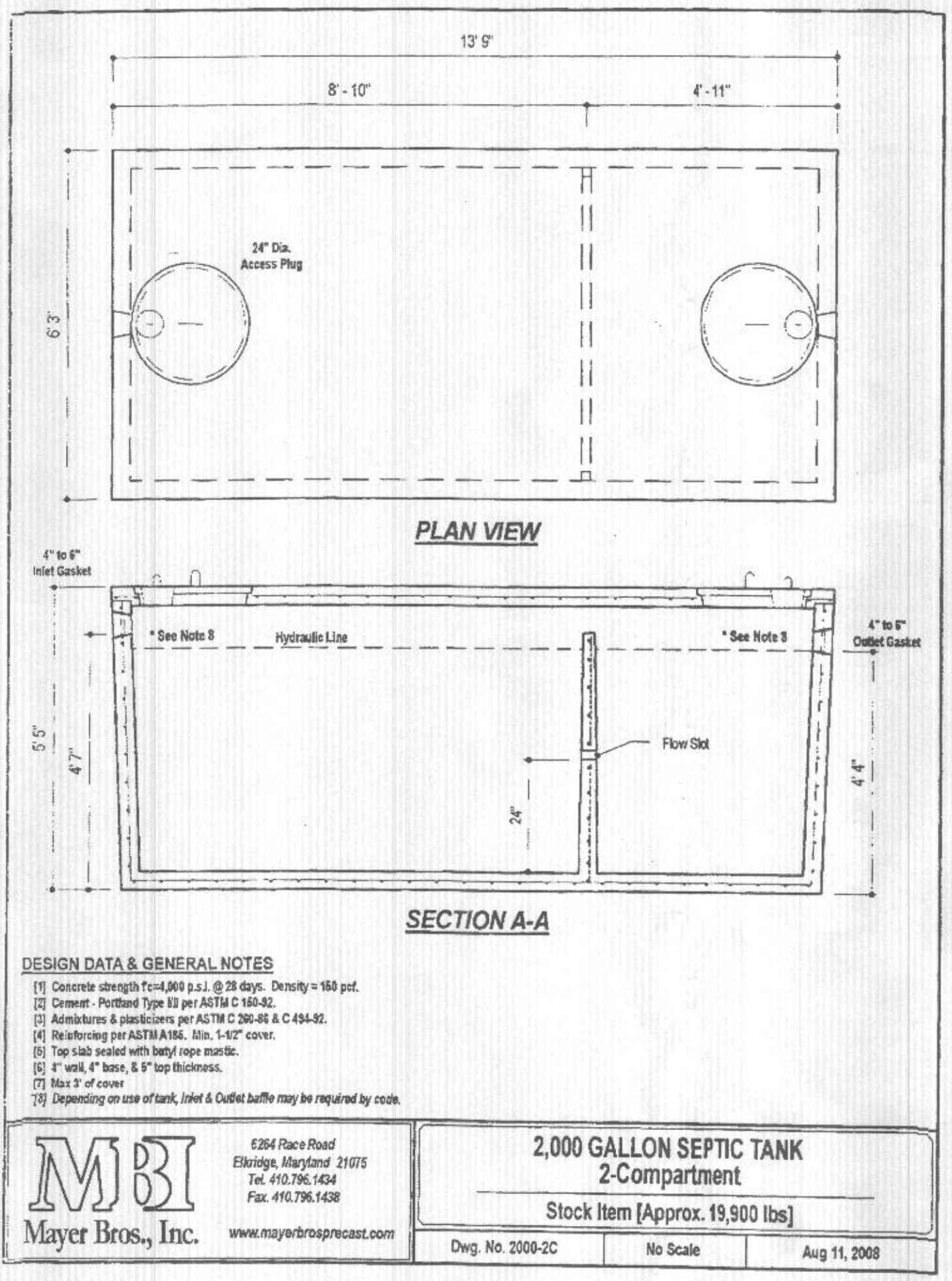
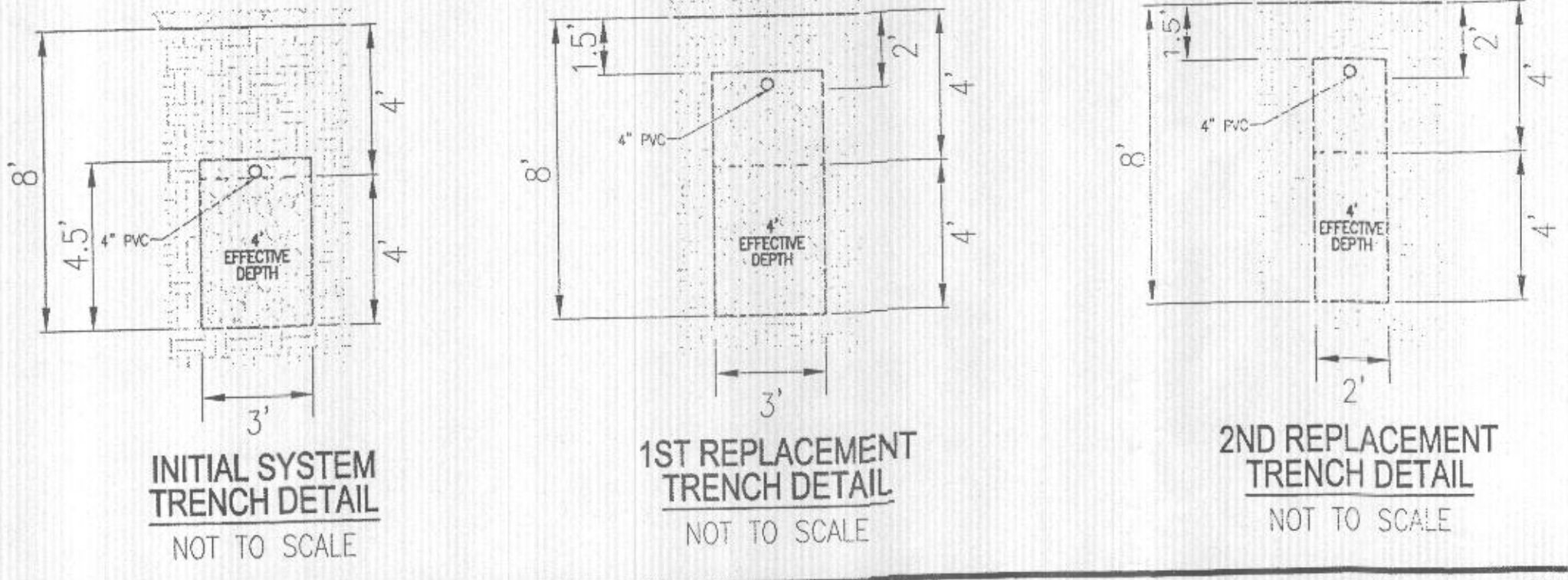
SYSTEM CALCULATIONS:

INITIAL SYSTEM:
 6 BEDROOMS AT 900 GPD / 0.8 ABSORPTION RATE = 1,125 SQ. FT.
 1,125 SQ. FT. / 3 (TRENCH WIDTH) x .42 (SIDEWALL REDUCTION) = 158 LINEAR FEET
 160 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE INITIAL SYSTEM.
 (4 TRENCHES OF 40' LENGTH)

FIRST REPLACEMENT SYSTEM:
 6 BEDROOMS AT 900 GPD / 0.8 ABSORPTION RATE = 1,125 SQ. FT.
 1,125 SQ. FT. / 3 (TRENCH WIDTH) x .42 (SIDEWALL REDUCTION) = 158 LINEAR FEET
 160 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE FIRST REPLACEMENT SYSTEM.
 (4 TRENCHES OF 40' LENGTH)

SECOND REPLACEMENT SYSTEM:
 6 BEDROOMS AT 900 GPD / 0.8 ABSORPTION RATE = 1,125 SQ. FT.
 1,125 SQ. FT. / 2 (TRENCH WIDTH) x .36 (SIDEWALL REDUCTION) = 223 LINEAR FEET
 224 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE SECOND REPLACEMENT SYSTEM.
 (4 TRENCHES OF 56' LENGTH)

WELL LOCATION CERTIFICATION:
 THE EXISTING WELL SHOWN ON THIS PLAN (HO-95-2650) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN



DESIGN DATA & GENERAL NOTES:
 (1) Concrete strength f'c=4,000 p.s.i. @ 28 days. Density = 150 pcf.
 (2) Cement - Portland Type II per ASTM C 150-82.
 (3) Reinforcing steel per ASTM A 618-82 or A 618-82C.
 (4) Rebar spacing per ASTM A 618, Min. 5-12" cover.
 (5) Top slab sealed with butyl rope mastic.
 (6) 1" wall, 4" base, 8" top thickness.
 (7) Max 2" of cover.
 (8) Depending on size of tank, inlet & outlet baffles may be required by code.

2,000 GALLON SEPTIC TANK
2-Compartment
 Stock Item [Approx. 19,900 lbs]
 Dwg. No. 2000-2C No Scale Aug 11, 2008

MBI
 Mayer Bros., Inc.
 6284 Race Road
 Ellicott City, Maryland 21075
 Tel. 410.796.1464
 Fax. 410.796.1488
 www.mayerbros.com



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

- 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 SEWERSHIP 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:
- 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.
 - ELECTRICAL WORK FOR THE INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
 - THE WELL (HO-95-2650) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN.
 - 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.
 - ANY CHANGE TO A PRIVATE SEWAGE DISPOSAL AREA SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
 - ADJUSTMENT TO THE PRIVATE SEWAGE DISPOSAL AREA IS NOT PERMITTED WITHOUT ADDITIONAL TESTING.
 - THE LOT SHOWN HEREON COMPLEES WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.

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

ONSITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN

MCDANIEL PROPERTY - LOT 1
 13048 HIGHLAND ROAD
 HIGHLAND, MD 20777

BUILDING PERMIT # _____

PLATS: 23440-42
 TAX MAP: 34 GRID: 22
 5TH ELECTION DISTRICT

PARCEL: 117
 ZONED: RR-DEO
 HOWARD COUNTY, MARYLAND

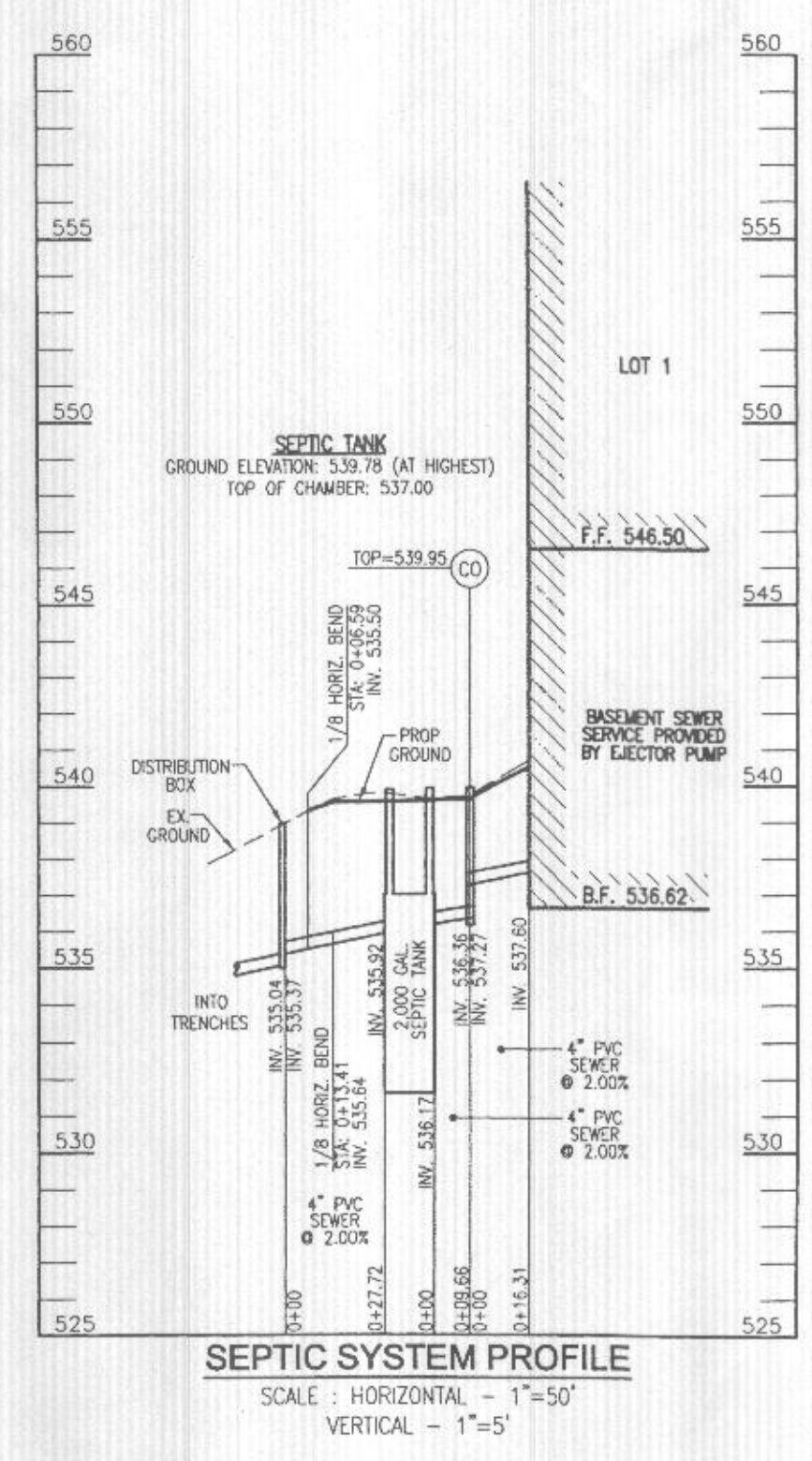
VOGEL ENGINEERING
 +
TIMMONS GROUP
 3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
 P: 410.461.7666 F: 410.461.8961 www.timmons.com

PROFESSIONAL CERTIFICATE

DESIGN BY: RHV
 DRAWN BY: JMR
 CHECKED BY: RHV
 DATE: AUGUST 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 DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16183, EXPIRATION DATE: 08-27-2024.

1 SHEET OF 1



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

