

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: 3-28-24 **ONSITE SEWAGE DISPOSAL SYSTEM** P 58627

APPROVAL DATE: 5/8/2024 (SP) **PERMIT: NEW CONSTRUCTION** A _____

PROPERTY ADDRESS: 13010 Highland Road

SUBDIVISION: McDaniel Property LOT: 4 TAX ID: 05-598725

CONTRACTOR: Hatfields Equipment EMAIL: ken@hatfieldsequipment.com

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

PROPERTY OWNER: John P. McDaniel EMAIL: _____

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

SEPTIC TANK SIZE: 2000gal PUMP SIZE: N/A PUMP TANK CAPACITY: N/A

DISTRIBUTION SYSTEM: GRAVITY DRIP DISPERSAL BEDROOMS: 6 APPLICATION RATE: 1.2

TRENCHES:	LINEAR FEET REQUIRED: <u>116</u>	INLET DEPTH: <u>3</u>
	TRENCH WIDTH: <u>2</u>	MAXIMUM BOTTOM DEPTH: <u>8</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>12</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>3</u>
LOCATION:	SYSTEM TO BE STAKED BY DESIGNER AND VERIFIED BY APPROVING AUTHORITY DURING PRE-CONSTRUCTION INSPECTION.	
NOTES:	Install system per approved design plan	

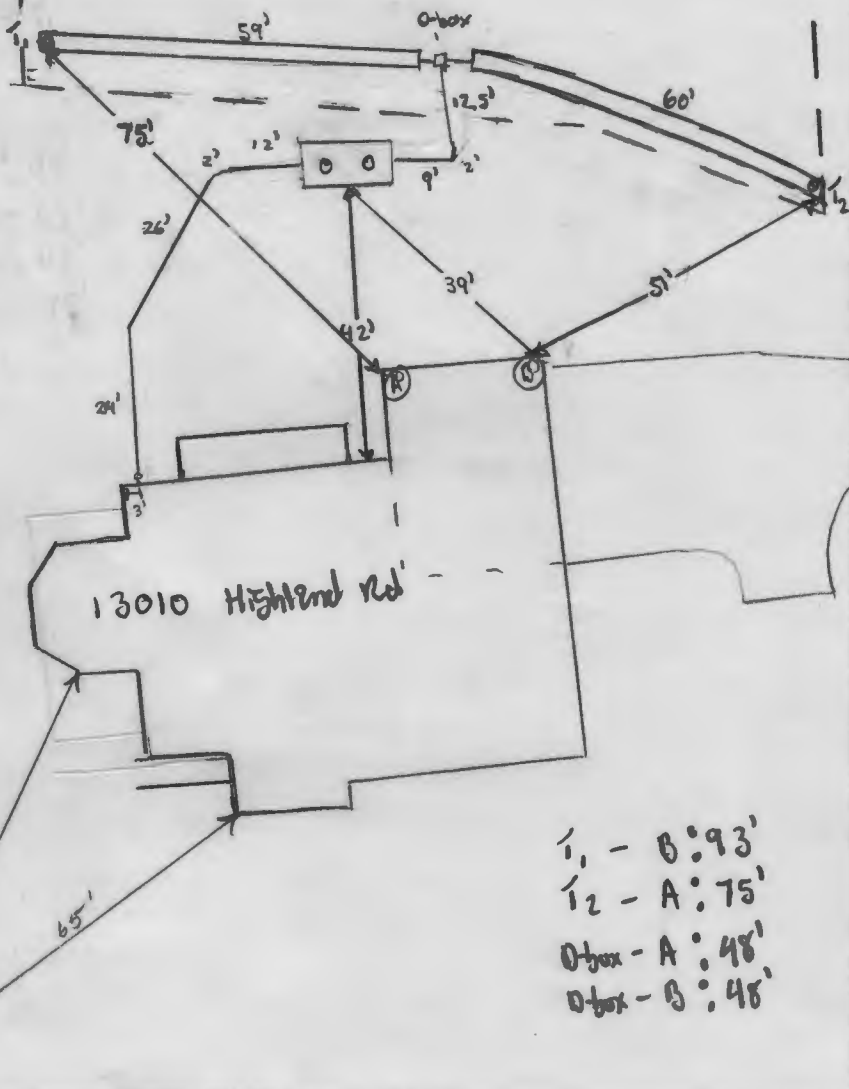
ISSUED BY: S. Freedom Krue ISSUE DATE: 4/2/2024 EXPIRATION DATE: 3-28-25

- 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 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" = 30'

NOT TO SCALE



i₁ - B: 93'
 i₂ - A: 75'
 D-box - A: 48'
 D-box - B: 48'

TRENCH/DRAINFIELD DATA		
WIDTH	INLET	BOTTOM
2'	2.5'	8'
NUMBER OF TRENCHES		2
TOTAL LENGTH		119'
ABSORPTION AREA		238 ft ²
DISTRIBUTION BOX LEVEL		yes
DISTRIBUTION BOX BAFFLE		yes
DISTRIBUTION BOX PORT		yes

SEPTIC TANK DATA	
SEPTIC TANK 1 LEVEL	yes
MANUFACTURER	Baylor
CAPACITY	2000 GAL
SEAM LOC	Top
TANK LID DEPTH	2-1.5'
BAFFLES	6" front & 9" back
BAFFLE FILTER	---
MANHOLE LOC	front & back
6" PORT LOC	---
WATERTIGHT TEST	---
SLOTTED	yes
DATE ON LID	3/6/2024
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	---

HO-95-2653

ROAD NAME

SEPTIC CONTRACTOR ONSITE INSTALLING SYTEM: Kenny Hatfield
 SEPTIC CONTRACTOR ONSITE LICENSED WITH THE STATE OF MD: YES/NO

PRE-CONSTRUCTION NOTES:
5/8/2024 Emissions shot on field. Slotted trenches
 upfill close to upper SAA edge to conserve area. SAA staked. Tank
 base staked. OK to continue. (C)

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

INSTALLATION NOTES:
5/8/2024 - Installer onsite for inspection. Tank set, d-box set, 1, dug & being staked. Pipe to tank
 to SCH40 40 & has enough fall, no seam near house. Tank OK, matches plan. Manhole white 3/4" front & 9" back
 baffle installed. on to backup up to d-box (C)
5/8/2024 - Installer onsite for inspection. Both trenches finished. width @ 2', inlet @ 2.5'. D-box
 levelled while onsite. OK to backupfill all work. (C)

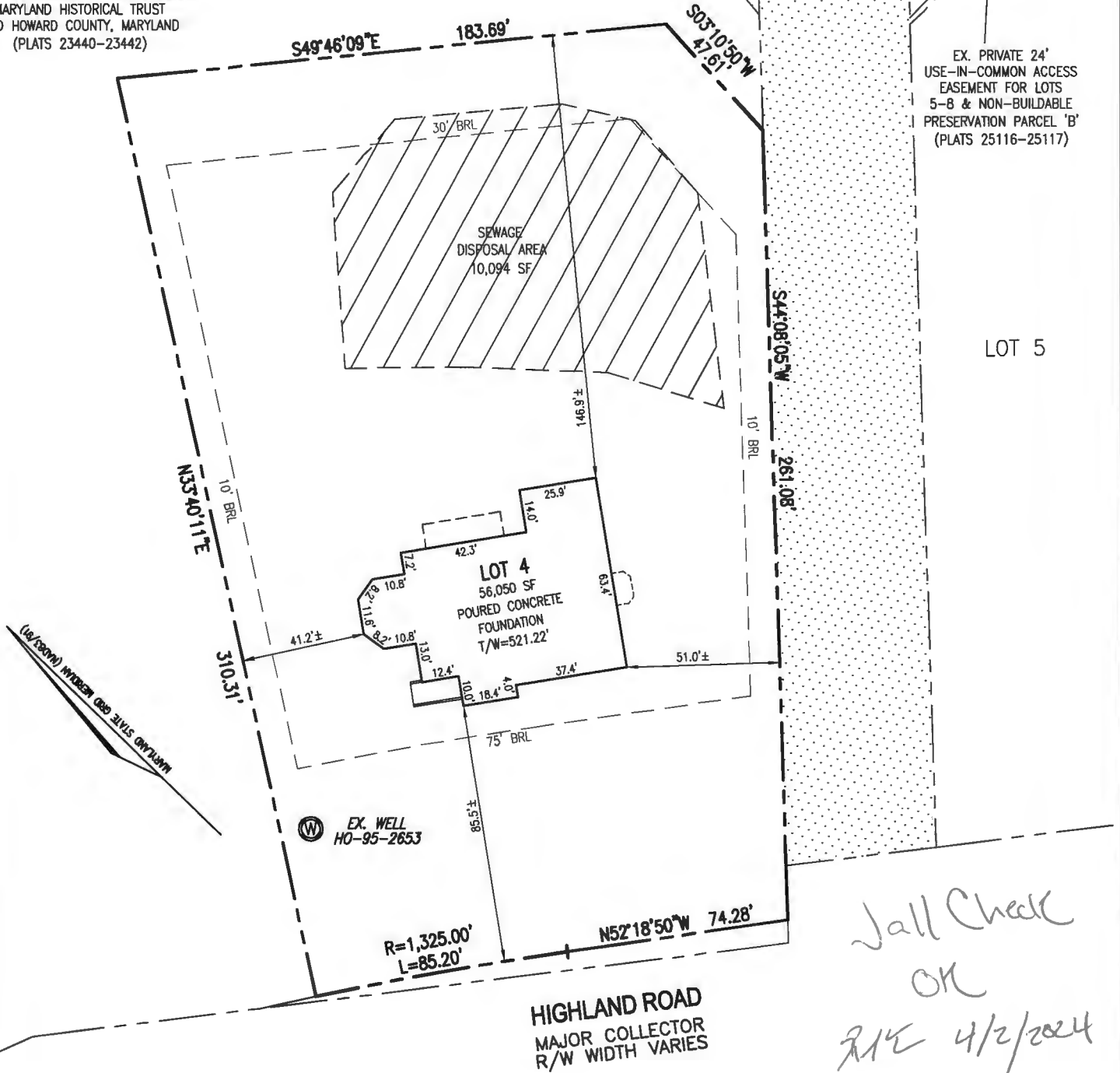
FINAL INSPECTOR S. Puse DATE OF APPROVAL 5/8/2024

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

EX. PRIVATE VARIABLE WIDTH
USE-IN-COMMON ACCESS
EASEMENT FOR LOTS 4-8
BUILDABLE PRESERVATION PARCEL 'A'
NON-BUILDABLE PRESERVATION PARCEL 'B'
& LOT 1 - KOANDAH GARDENS ESTATES (PLAT #6700)
(PLATS 23440-23442)

BUILDABLE PRESERVATION
PARCEL 'A'
19.48 AC.
OWNED BY JOHN MCDANIEL
WITH THE EASEMENT HOLDERS BEING
MARYLAND HISTORICAL TRUST
AND HOWARD COUNTY, MARYLAND
(PLATS 23440-23442)

EX. PRIVATE 24'
USE-IN-COMMON ACCESS
EASEMENT FOR LOTS
5-8 & NON-BUILDABLE
PRESERVATION PARCEL 'B'
(PLATS 25116-25117)



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.



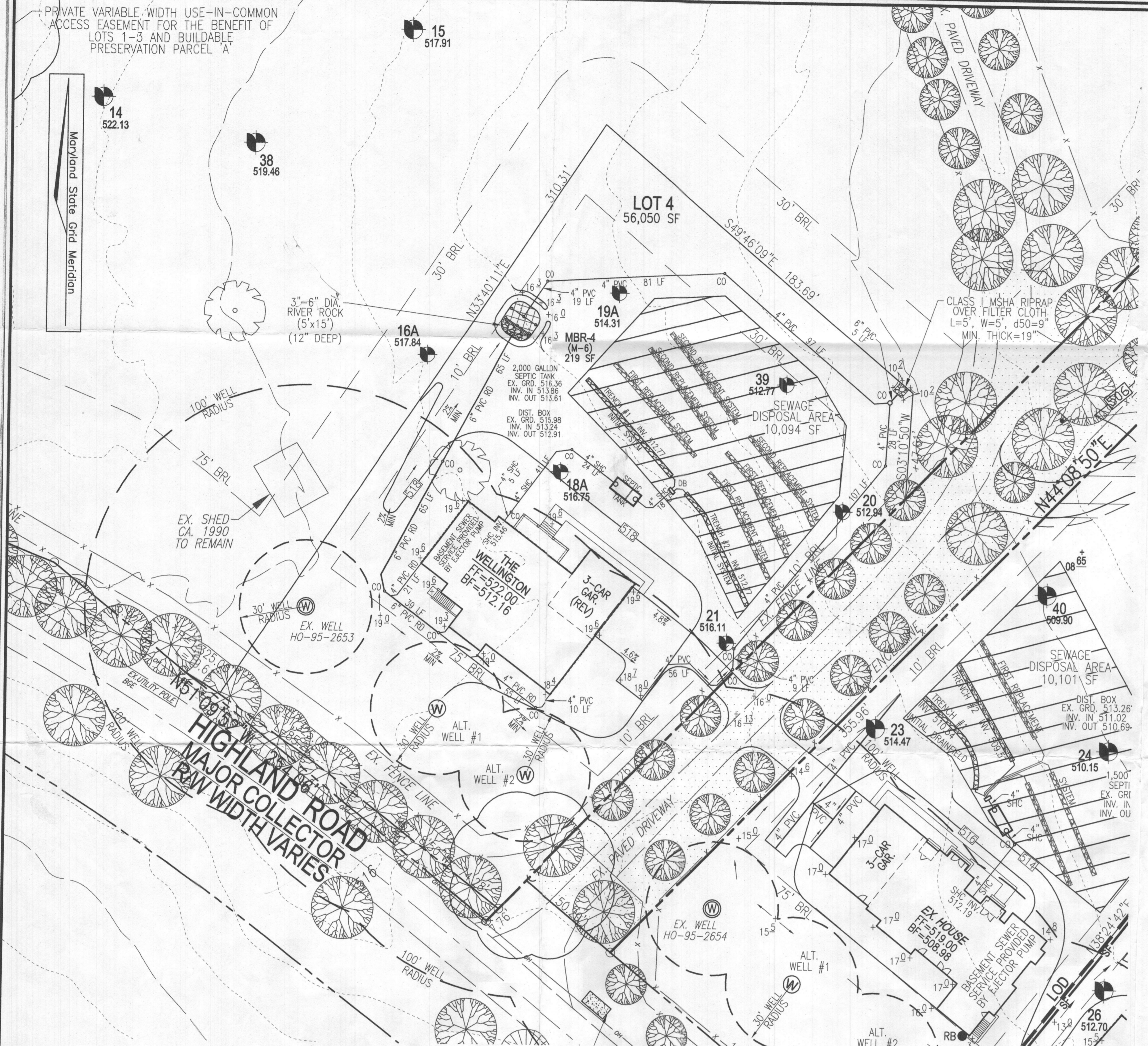
THOMAS M. HOFFMAN JR.,
PROPERTY LINE SURVEYOR
LICENSE NO. 267
EXP. DATE: JULY 28, 2024

DATE

SCALE 1" = 50'	DATE 02/07/2024
DRAWN BY J.M.M.	CHECKED BY T.M.H.
PLAT NUMBER 23440-23442	JOB NUMBER 08-43.00

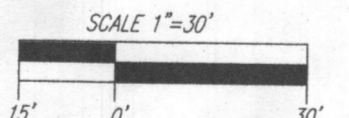
VOGEL ENGINEERING
+
TIMMONS GROUP
3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
P: 410.461.7666 F: 410.461.8961 www.timmons.com

WALL CHECK DRAWING
13010 HIGHLAND ROAD
LOT 4
MCDANIEL PROPERTY
PLAT NO. 23441
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND



PLAN VIEW
SCALE: 1"=30'

WELL LOCATION CERTIFICATION:
THE EXISTING WELL SHOWN ON THIS PLAN (HO-95-2653) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN



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 SEWAGE IS AVAILABLE. THIS AREA SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWAGE 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.

SYSTEM CALCULATIONS:

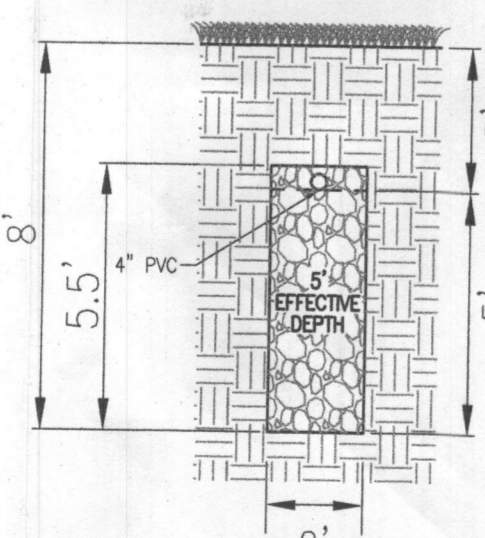
INITIAL SYSTEM:
6 BEDROOMS AT 900gpd / 1.2 ABSORPTION RATE = 750 SQ. FT.
750 SQ. FT. / 2 (TRENCH WIDTH) x .31 (SIDEWALL REDUCTION) = 116 LINEAR FEET
116 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE INITIAL SYSTEM.
(2 TRENCHES OF 58' IN LENGTH)

FIRST REPLACEMENT SYSTEM:
6 BEDROOMS AT 900gpd / 1.2 ABSORPTION RATE = 750 SQ. FT.
750 SQ. FT. / 2 (TRENCH WIDTH) x .44 (SIDEWALL REDUCTION) = 165 LINEAR FEET
165 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE FIRST REPLACEMENT SYSTEM.
(3 TRENCHES OF 55' IN LENGTH)

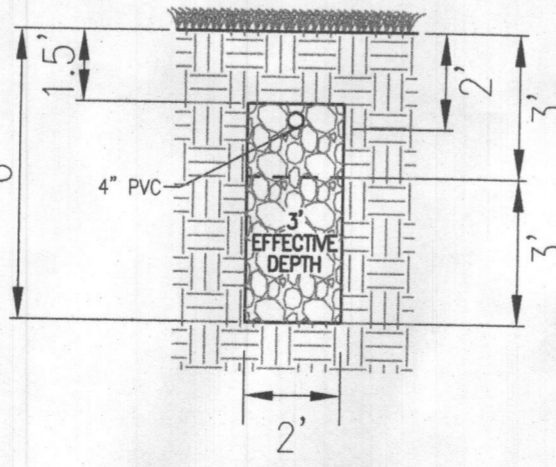
SECOND REPLACEMENT SYSTEM:
6 BEDROOMS AT 900gpd / 1.2 ABSORPTION RATE = 750 SQ. FT.
750 SQ. FT. / 2 (TRENCH WIDTH) x .40 (SIDEWALL REDUCTION) = 150 LINEAR FEET
150 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE SECOND REPLACEMENT SYSTEM.
(3 TRENCHES OF 50' IN LENGTH)

GENERAL NOTES:

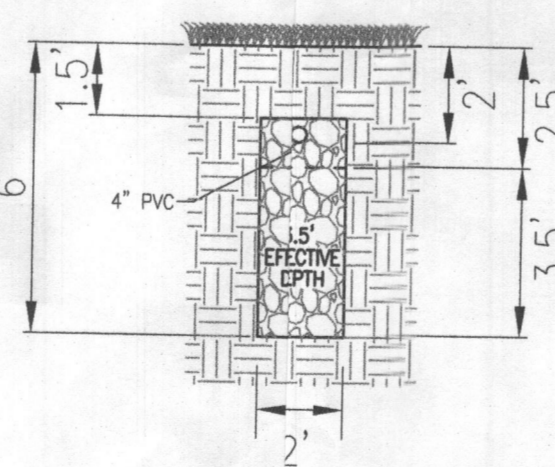
- ANY CHANGE TO THE LOCATIONS OR DEPTHS TO ANY COMPONENTS MUST BE APPROVED BY THE ENGINEER AND THE HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO INSTALLATION. A REVISED SITE PLAN MAY BE REQUIRED.
- THE MAXIMUM EARTH COVER OVER THE TANK IS 3 FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
- ELECTRICAL WORK FOR THE INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
- THE WELL (HO-95-2653) 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.



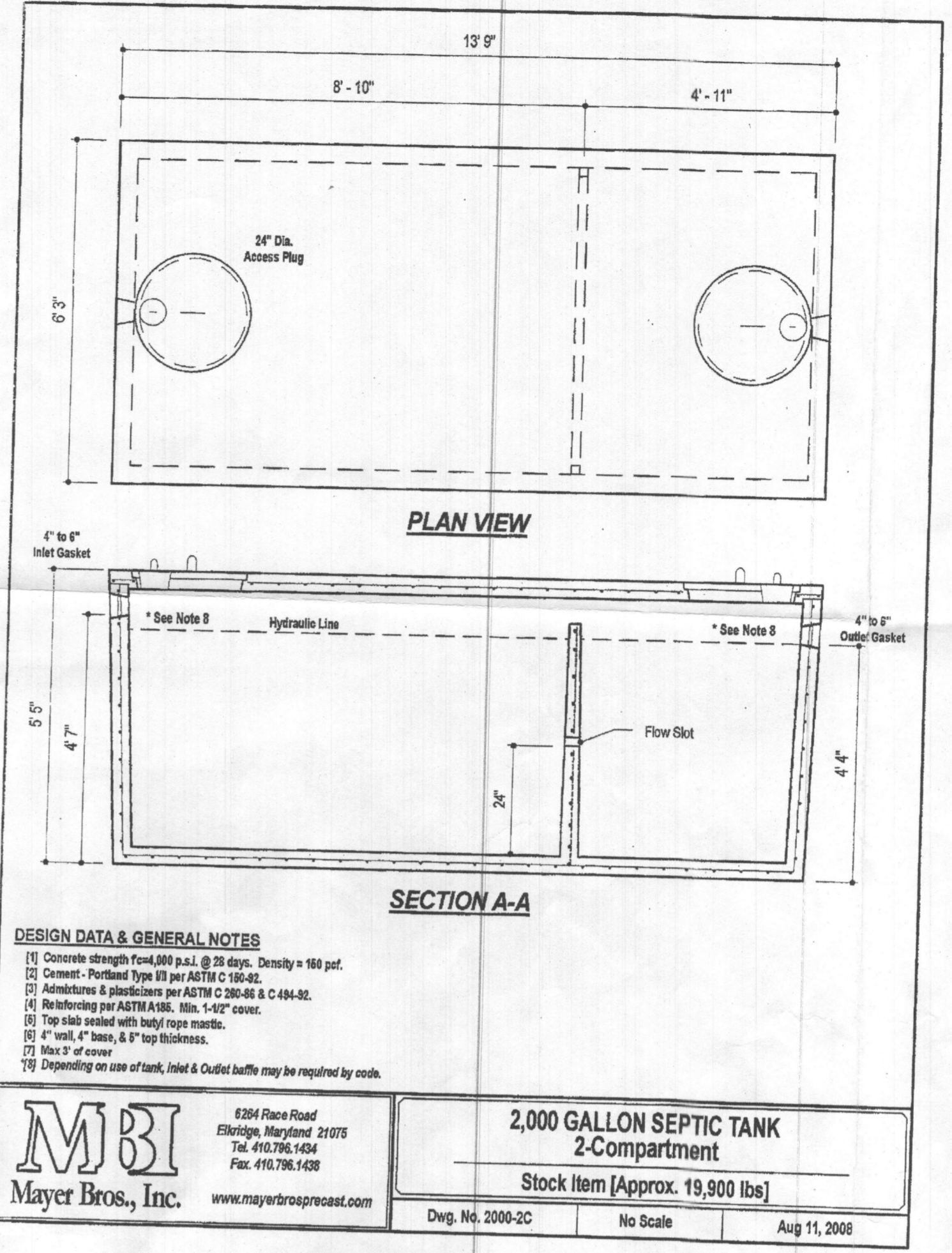
INITIAL SYSTEM
TRENCH DETAIL
NOT TO SCALE



1ST REPLACEMENT
TRENCH DETAIL
NOT TO SCALE



2ND REPLACEMENT
TRENCH DETAIL
NOT TO SCALE



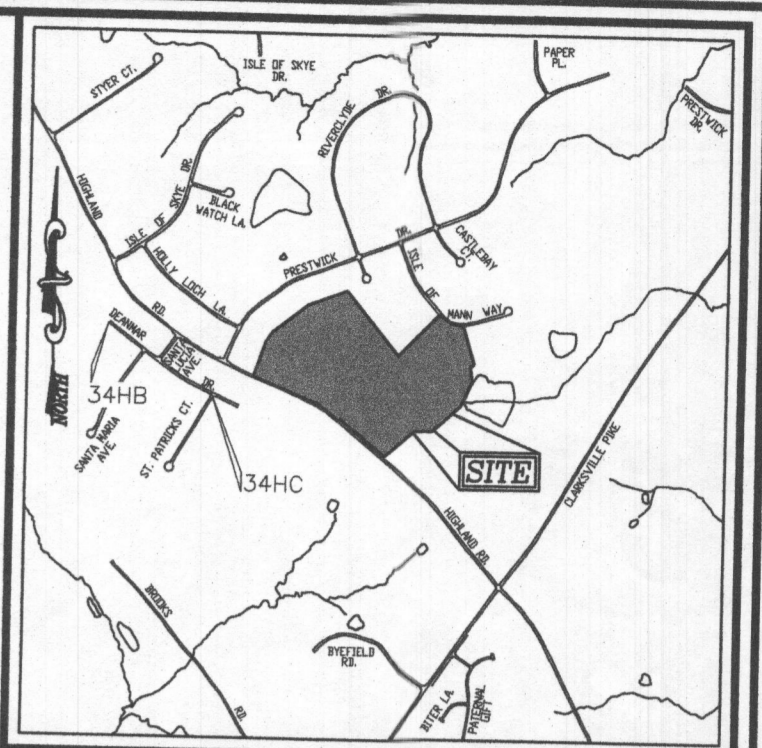
DESIGN DATA & GENERAL NOTES

- Concrete strength Form 4000 p.s.i. @ 28 days. Density = 150 pcf.
- Cement - Portland Type III per ASTM C 150-02.
- Aggregate & plasticizers per ASTM C 200-02 & C 494-02.
- Reinforcing per ASTM A 616, Size: 1/4" cover.
- Top slab sealed with butyl rope mastic.
- 4" well, 4" base, & 8" top thickness.
- Max 2" of cover.
- Depending on use of tank, Inlet & Outlet baffles may be required by code.

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

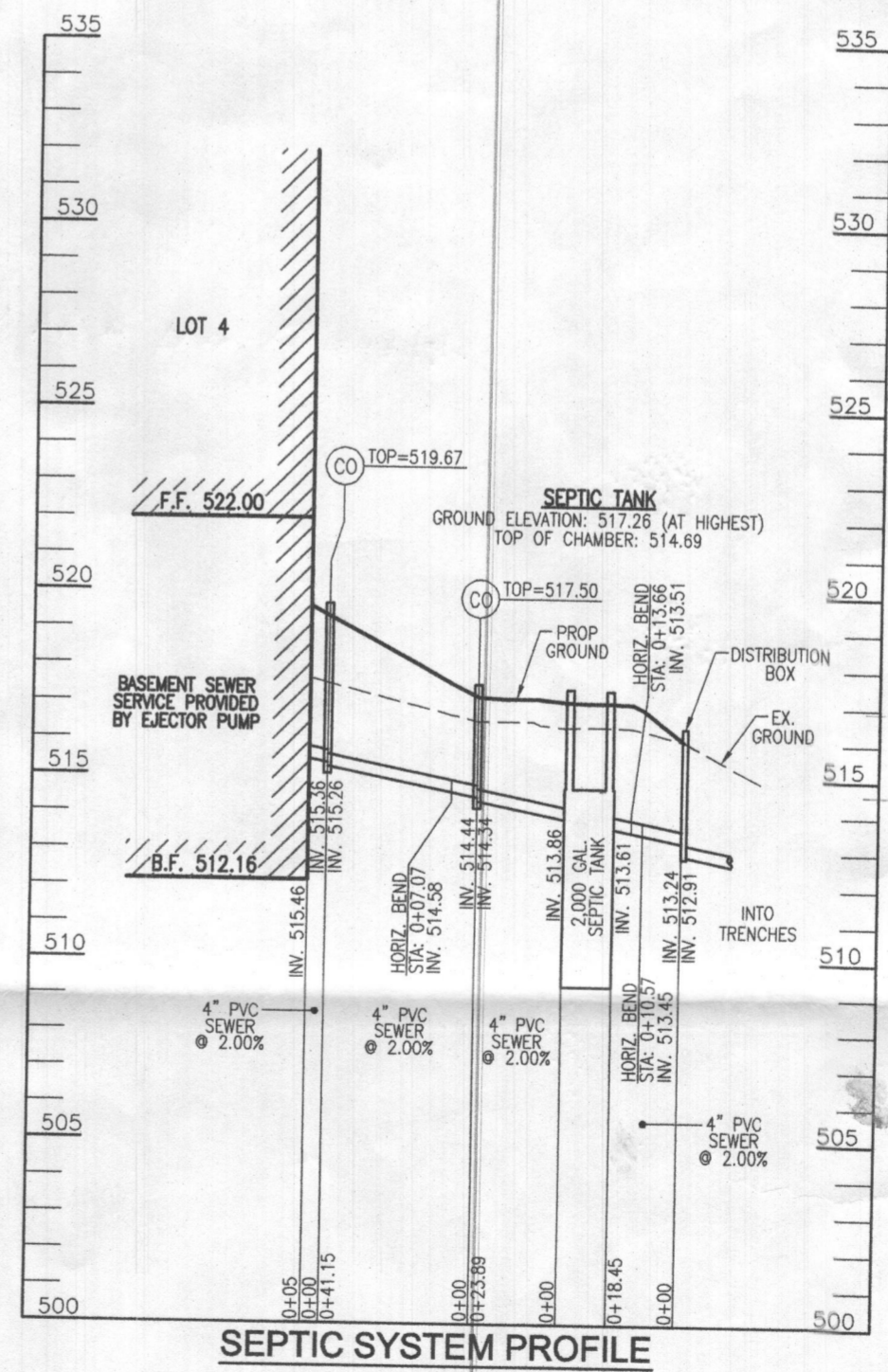
Dwg. No. 2000-2C No Scale Aug 11, 2008

MB
Mayer Bros., Inc.
6204 Race Road
Elkridge, Maryland 21075
Tel: 410.796.1424
Fax: 410.796.1428
www.mayerbrosprecast.com



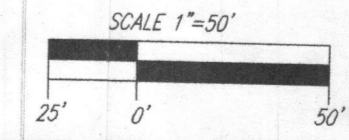
VICINITY MAP
SCALE: 1"=2000'
ADC MAP COORDINATE: 31, 45

- 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'

TRENCH	LENGTH	TRENCH 1 TRENCH	EXISTING TRENCH	GROUND
1	58'	512.77'	507.77'	515.77'
2	58'	512.77'	507.77'	515.77'



Approved Septic System Plan
Howard County Health Department
Mark O'Neil 9/19/23
Signature Date

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 4
13010 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: 23440-42
TAX MAP: 34 GRID: 22
5TH ELECTION DISTRICT

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

PROFESSIONAL CERTIFICATE

DESIGN BY: RHV
DRAWN BY: JMR
CHECKED BY: RHV
DATE: SEPTEMBER 2023
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: 09-27-2024

1 SHEET OF 1