

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: 1/8/20 **ONSITE SEWAGE DISPOSAL SYSTEM** P 567267
 APPROVAL DATE: 2/5/20 (ST) **PERMIT: CONSTRUCTION** A 561429
 PROPERTY ADDRESS: 2920 RT 32, WEST FRIENDSHIP, MD 21794
 SUBDIVISION: TAX MAP 15, PARCEL 160 LOT: ----- TAX ID: 03-290883
 CONTRACTOR: HATFIELDS EQUIPMENT, INC. EMAIL: ken@hatfieldsequipment.com
 CONTRACTOR ADDRESS: P.O. BOX 519, ANNAPOLIS JUNCTION, MD 20701 PHONE: (410)490-4289
 PROPERTY OWNER: ANDREW WETTEN and KIMBERLY A DRNEC EMAIL: _____
 OWNER ADDRESS: 2920 RT 32, WEST FREIENDSHIP, MD 21794 PHONE: (443)415-9969
 SEPTIC TANK SIZE (GALLONS): 1500 TANK MANUFACTURER: MAYER BROS., INC.
 PUMP MODEL: n.a. PUMP SIZE n.a. PUMP TANK CAPACITY: n.a.

DISTRIBUTION SYSTEM: GRAVITY PRESSURE DOSED BEDROOMS: 5 APPLICATION RATE: 1.2

TRENCHES:	LINEAR FEET REQUIRED: <u>86.8</u>	INLET DEPTH: <u>2.5</u> ✓
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>8.0</u> ✓
	MINIMUM SPACE BETWEEN TRENCHES: <u>11</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>4.0</u>
LOCATION:	PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND TANK LOCATIONS MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.	
NOTES:	SHC FROM BACK OF HOUSE TO BE JOINED TO SHC FROM FRONT OF HOUSE. CHECK POTENTIAL TO MAINTAIN GRAVITY FLOW BEFORE DIGGING TANK HOLE. Two (2) existing septic tanks must be properly abandoned for Final Approval of this permit.	

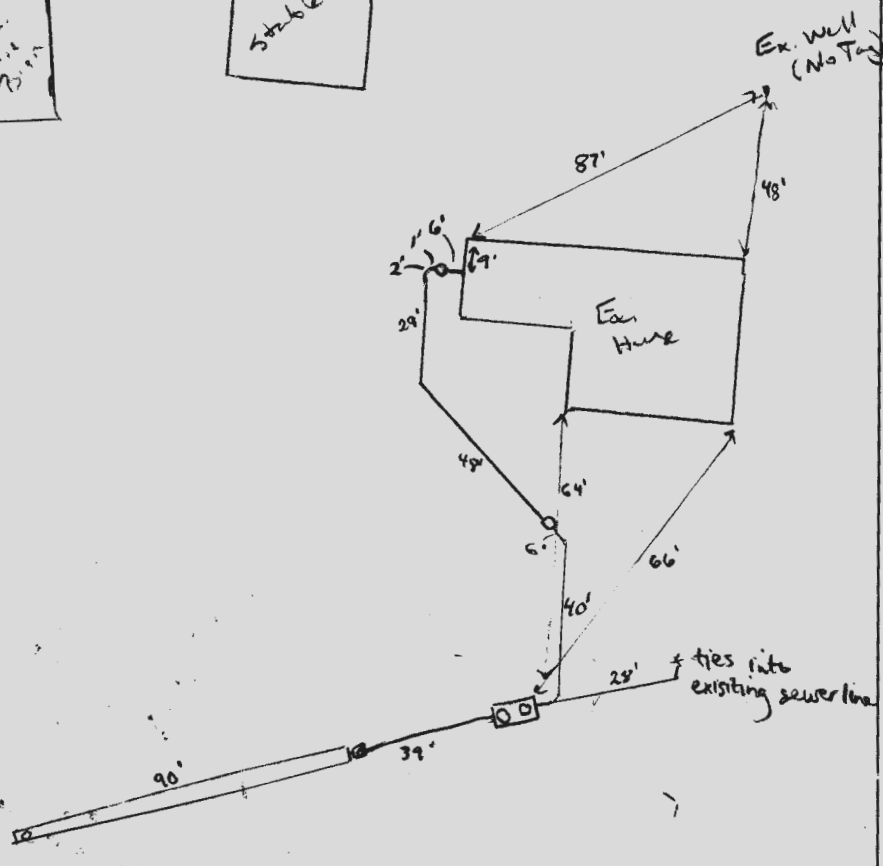
ISSUED BY: R BRICKER ISSUE DATE: 1/8/20 EXPIRATION DATE: 1/8/21

- 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.**

Ex. Well (No Top)

Stake



* 90' sight line from EOT to house b/c of trees

ROAD NAME

TRENCH/DRAINFIELD DATA

WIDTH	INLET	BOTTOM
3'	2.5'	8'
NUMBER OF TRENCHES 1		
TOTAL LENGTH 90'		
ABSORPTION AREA 270 sq ft + sidewall		
DISTRIBUTION BOX LEVEL -		
DISTRIBUTION BOX BAFFLE yes		
DISTRIBUTION BOX PORT -		

PRE-CONSTRUCTION:

SEPTIC TANK DATA

SEPTIC TANK 1 LEVEL	42'
MANUFACTURER	Babylon
CAPACITY	1500 GAL
SEAM LOC	top
TANK LID DEPTH	1.5
BAFFLES	front + back
BAFFLE FILTER	
MANHOLE LOC	front + back
6" PORT LOC	
WATERTIGHT TEST	-
SLOTTED	yes
DATE ON LID	12-23-19

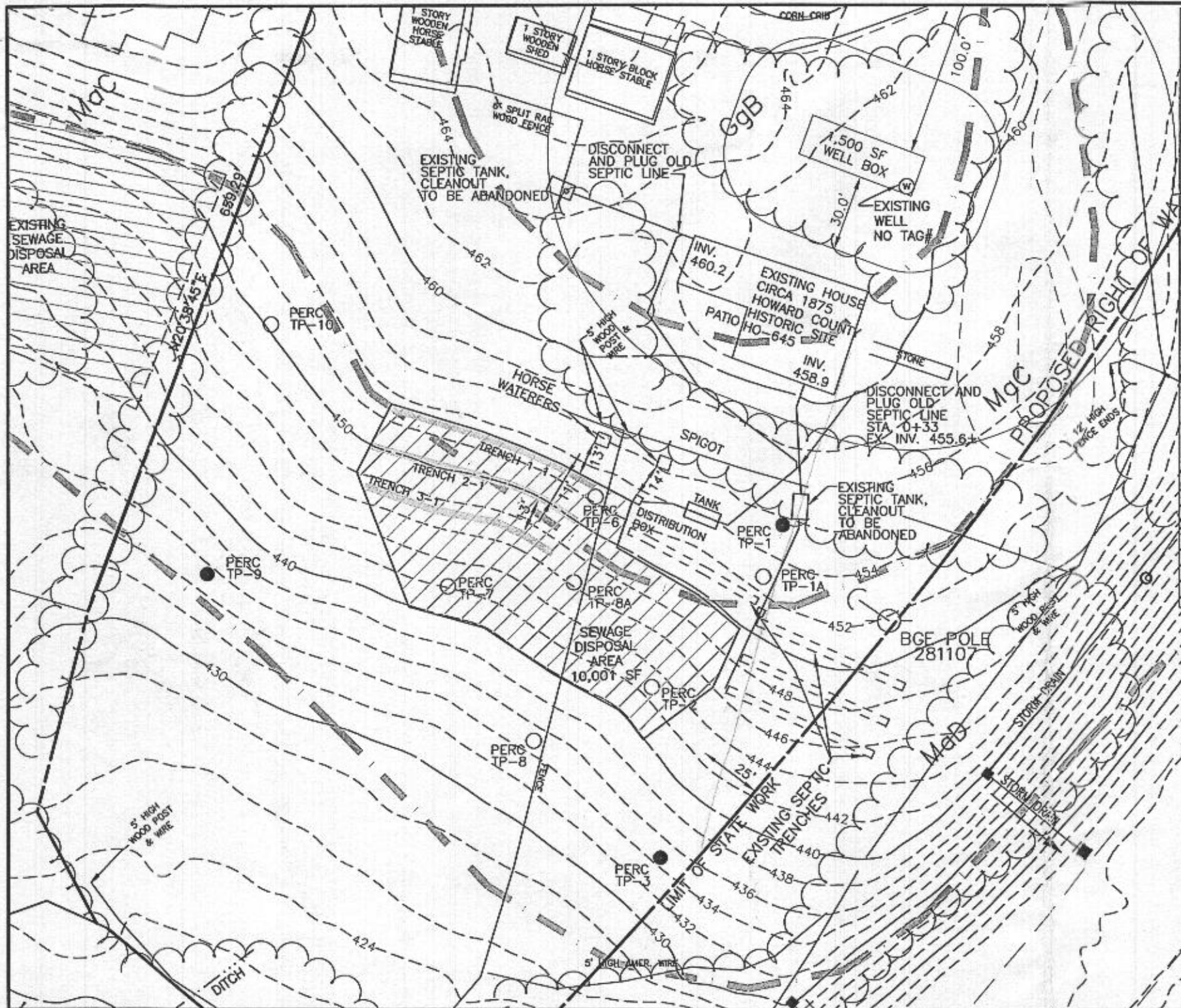
PUMP/SEPTIC TANK LEVEL

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

1/30/20 on site w/ contractor. SDA stakes not correct. Located nearby septic tanks, contacted engineer but did not answer left message. Need to be re-staked (KMM) 2/4/20 SDA staked. shot deviation per plan. Install 1x 86 trench as staked in field per plan. New tank loc staked also. D box to be set in front of tank.

INSTALLATION: 2/5/20 Sewer line connected into both existing lines on either side of house. Tank, d-box and one 90' trench installed. Existing tanks will be abandoned tomorrow. (ST)

FINAL INSPECTOR Susan Thomas DATE OF APPROVAL 2/5/2020



LEGEND

SOILS CLASSIFICATION MaD

SOILS DELINEATION

EXISTING CONTOURS (HOWARD COUNTY GIS CONFIRMED BY BENCHMARK ENGINEERING, INC. 11/19)

EXISTING WOODS LINE

EXISTING STRUCTURE

EXISTING SEPTIC DISPOSAL AREA

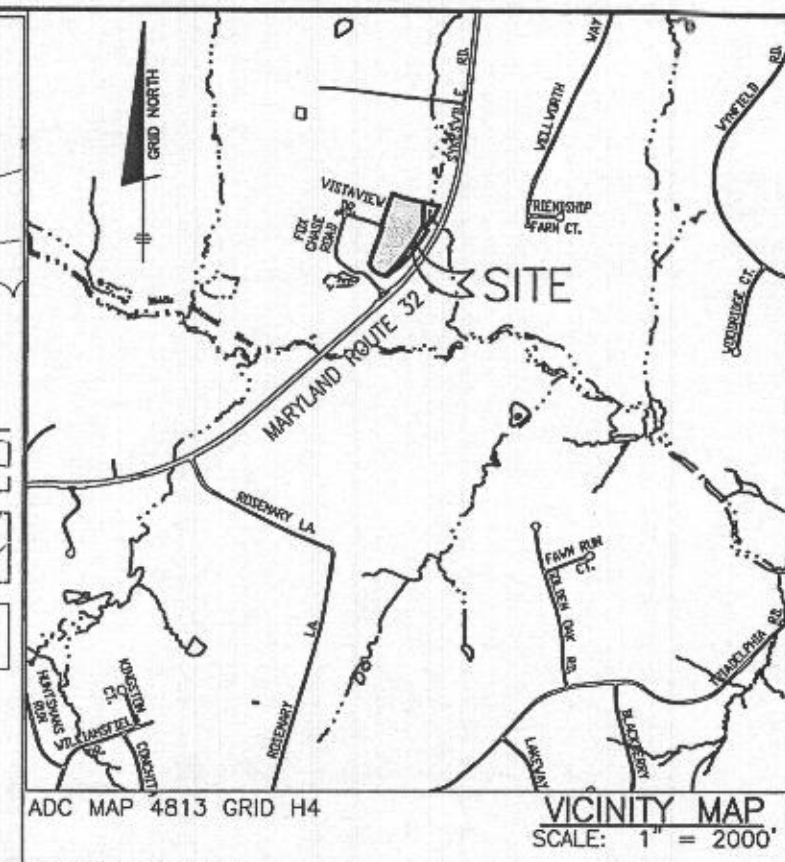
SEPTIC DISPOSAL AREA

1,500 SF WELL BOX

PERCOLATION TEST PASSED

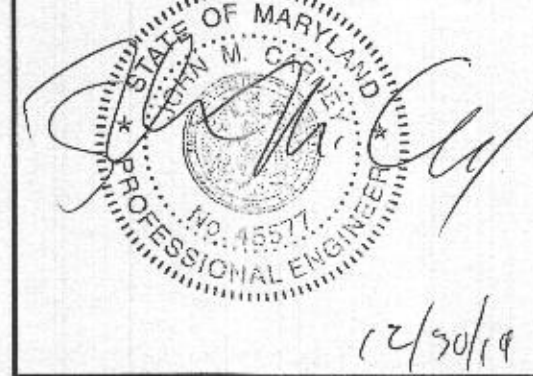
PERCOLATION TEST FAILED

EXISTING FIELD LOCATED WELL



- ONSITE SEWAGE DISPOSAL PLAN NOTES:**
1. THE PARCEL SHOWN HEREON WAS TRANSFERRED TO THE OWNERS BY DEED RECORDED AMONG THE LAND RECORDS OF HOWARD COUNTY MARYLAND, RECORDED AS LIBER 9907 FOLIO 195 AND DATED MARCH 17, 2006. REFER TO THE DEED DESCRIPTION AND TITLE REPORT FOR LOT DIMENSIONS, LOT AREAS, ALL EASEMENTS AND CONDITIONS.
 2. SEDIMENT AND EROSION CONTROLS WILL BE APPROVED BY HOWARD SOIL CONSERVATION
 3. TOPOGRAPHY SHOWN HEREON IS TAKEN FROM THE APPROVED CONSTRUCTION PLANS AND TOPOGRAPHIC INFORMATION PROVIDED BY RUMMEL, KLEPPER & KAHL, LLP. THE TOPOGRAPHY WAS FIELD CHECKED BY BENCHMARK ENGINEERING, INC., ON OR ABOUT NOVEMBER, 2019, THE ELEVATIONS OF THE FIELD SHOTS MATCHED THE INFORMATION PROVIDED.
 4. ALL SEDIMENT AND EROSION CONTROL FEATURES USED ON THIS SITE SHALL COMPLY WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
 5. ALL DRAINAGE AND STORMWATER MANAGEMENT FEATURES USED ON THIS SITE MUST COMPLY WITH THE APPROVED ROAD CONSTRUCTION PLANS EXCEPT AS WAIVED.
 6. THE EXISTING WELL SHOWN ON THIS PLAN, NO TAG, HAS BEEN FIELD LOCATED BY RUMMEL, KLEPPER & KAHL, LLP, AND IS ACCURATELY SHOWN.
 7. THERE ARE NO EXISTING WELLS OR SEPTIC SYSTEMS WITHIN 100' OF THIS PROJECT'S BOUNDARY EXCEPT AS NOTED.
 8. ANY CHANGES TO A PRIVATE SEWAGE DISPOSAL AREA OR WELL BOX SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
 9. STORMWATER MANAGEMENT IS NOT REQUIRED FOR THIS PARCEL. THE NEW ROADWAY WILL HAVE STORMWATER MANAGEMENT PROVIDED BY MICRO-BIORETENTION FACILITIES. NO STORMWATER MANAGEMENT FACILITIES ARE WITHIN 25' OF THE SEWAGE DISPOSAL AREA OR WITHIN 100' OF THE WELL BOX.
 10. THE SEPTIC TANK WILL BE A 1500 GALLON, 2 COMPARTMENT TANK.
 11. ANY CHANGES TO THE LOCATIONS OR DEPTHS OF ANY COMPONENTS MUST BE APPROVED BY THE ENGINEER AND THE HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO INSTALLATION. A REVISED SITE PLAN MAY BE REQUIRED.
 12. THE MAXIMUM EARTH COVER OVER THE TANK IS 3 FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
 13. 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.
 14. THE EXISTING SEPTIC TANKS ARE TO BE PROPERTY ABANDONED AND THE SEPTIC LINES ARE TO BE PLUGGED WHERE THE NEW SEWER HOUSE CONNECTIONS JOIN THE LINES FROM THE HOUSE.

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. 45577, Expiration Date: 06-08-2020.



Approved Septic System Plan
PLAN VIEW
 1" = 50'

Howard County Health Department
 1500-gal, 2-chamber Septic Tank
 to Gravity Distribution

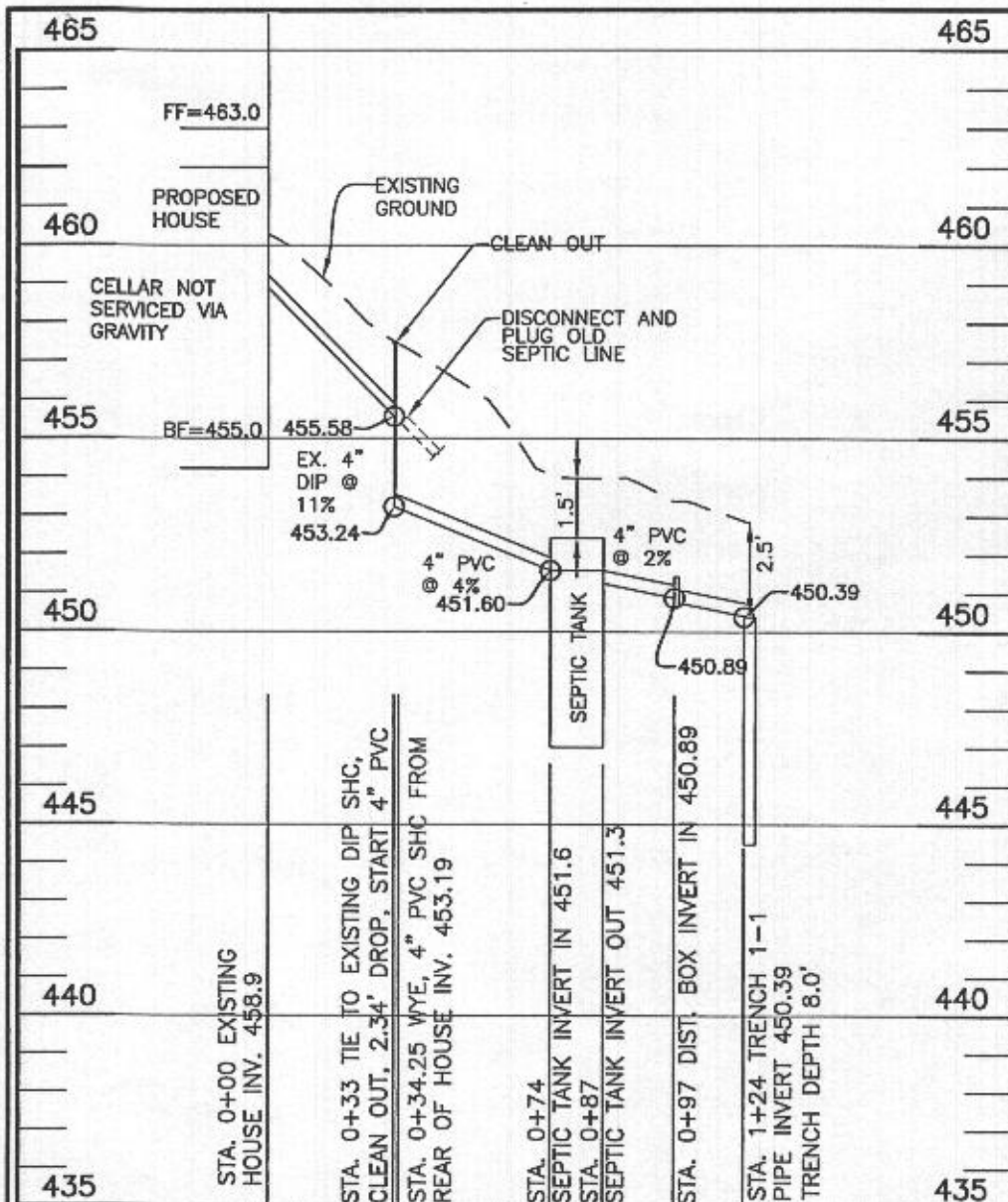
OWNER:
 ANDREW WETTEN AND
 KIMBERLY DRNEC
 2920 ROUTE 32
 WEST FRIENDSHIP, MD
 21794-9304
 443-415-9969

Signature: *R. Bride*
 Date: 1/7/2020

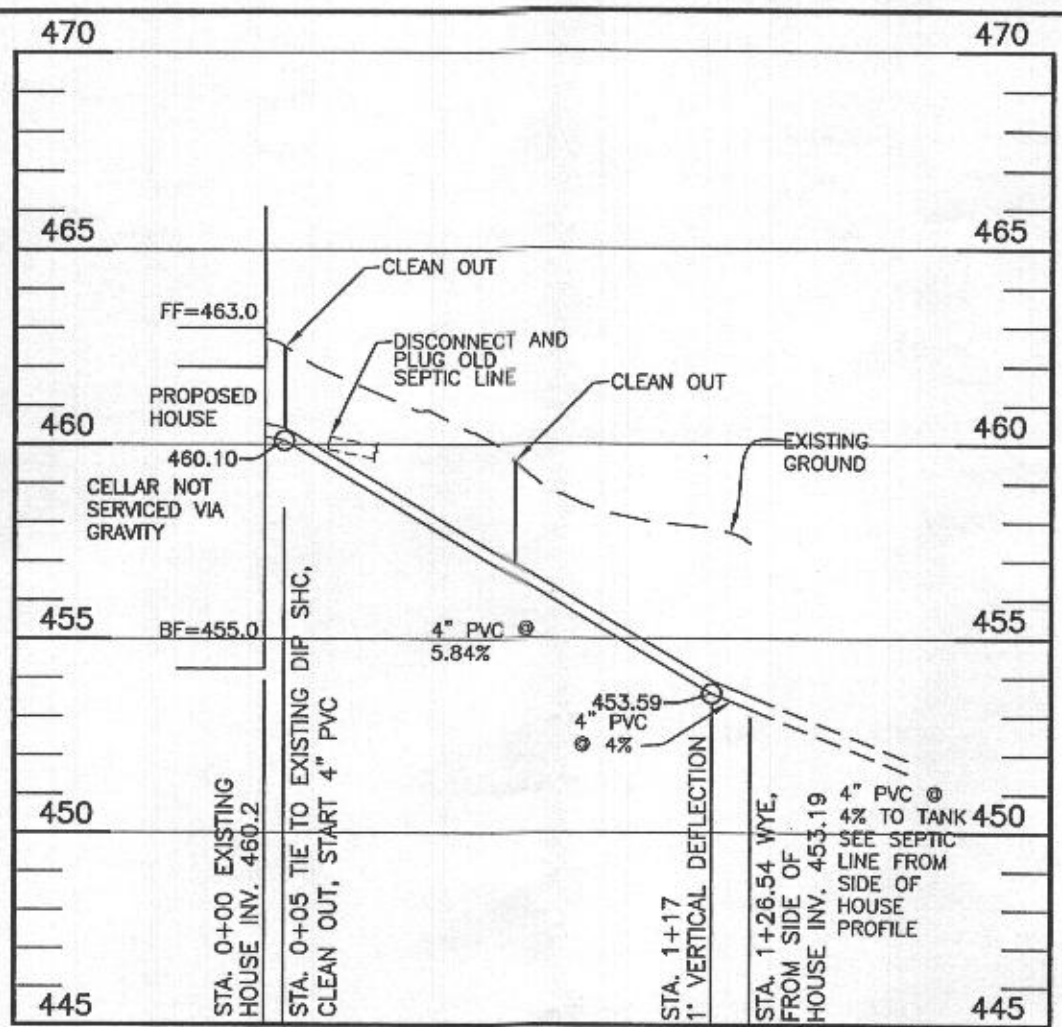
BENCHMARK
 ENGINEERS & LAND SURVEYORS & PLANNERS

ENGINEERING, INC.
 8480 BALTIMORE NATIONAL PIKE & SUITE 315
 ELLICOTT CITY, MARYLAND 21043
 (P) 410-465-6105 & (F) 410-465-8644
 WWW.BEI-CIVILENGINEERING.COM

PROJECT: 2920 ROUTE 32 PARCEL 160	
LOCATION: TAX MAP: 16, GRID: 23, PARCEL: 160, ZONED: RC-DEO 2920 ROUTE 32 WEST FRIENDSHIP, MD 21794 FOURTH ELECTION DISTRICT, HOWARD COUNTY, MD, TAX ID #290883	
TITLE: ONSITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN	
HOUSE TYPE: EXISTING HOUSE	
DATE: DECEMBER, 2019	PROJECT NO. 2997
SCALE: AS SHOWN	DRAWING 1 OF 3

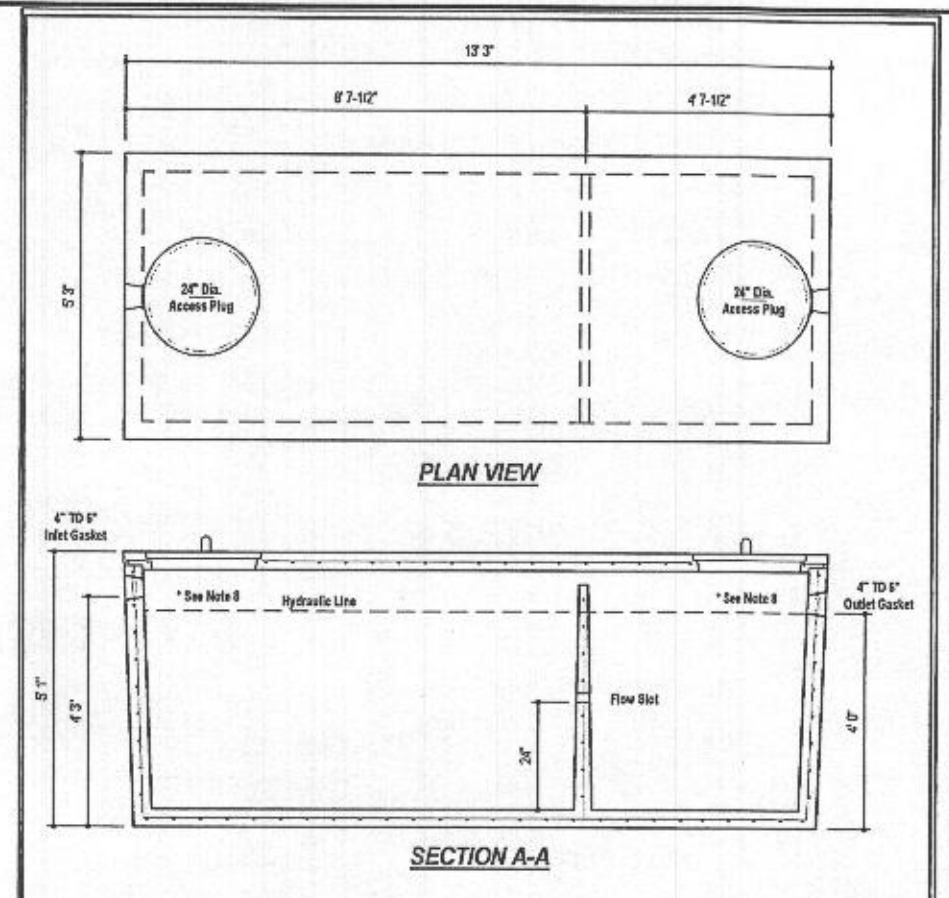


SEPTIC LINE FROM SIDE OF HOUSE
 HORIZONTAL SCALE: 1" = 50'
 VERTICAL SCALE: 1" = 5'



SEPTIC LINE FROM REAR OF HOUSE
 HORIZONTAL SCALE: 1" = 50'
 VERTICAL SCALE: 1" = 5'

SEPTIC INVERT CHART	
INV @ SIDE HOUSE	458.9
GROUND @ SIDE HOUSE	460.2
INV @ REAR HOUSE	460.2
GROUND @ REAR HOUSE	462.2
INV IN TANK	451.6
INV OUT TANK	451.3
TOP OF TANK	452.4
GROUND OVER TANK	453.9
INV IN DIST BOX	450.9
INV OUT DIST BOX	450.8
GROUND AT DIST BOX	453.4



DESIGN DATA & GENERAL NOTES

- Concrete strength f'c=4,000 p.s.i. @ 28 days. Density = 150 pcf.
- Cement - Portland Type III per ASTM C 150-02.
- Reinforcing bars per ASTM A 601-02.
- Reinforcing per ASTM A 185. Min. 1-1/2" cover.
- Top slab sealed with butyl rope mastic.
- 4" wall, base, & top thickness.
- Max 2-1/2" of cover.
- Depending on use of tank, inlet & outlet baffles may be required by code.

WEIGHT = 16,750 lbs.

 Mayer Bros., Inc.	8294 Race Road Elkridge, Maryland 21075 Tel. 410.796.1404 Fax. 410.796.1408 www.mayerbrosprecast.com	1,500 GALLON TANK (Non-Traffic) 2-Compartment Stock Item
	Dwg. No. 1500-2C	No Scale

THIS PLAN IS FOR SEPTIC DESIGN ONLY

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. 45577, Expiration Date: 06-09-2020.

OK'ed 1/7/2020

OWNER:
 ANDREW WETTEN AND
 KIMBERLY DRNEC
 2920 ROUTE 32
 WEST FRIENDSHIP, MD
 21794-9304
 443-415-9969

SEE MANUFACTURERS SPECIFICATIONS FOR DETAILS. WWW.MAYERPRECAST.COM EQUIVALENT FROM OTHER MANUFACTURERS CAN BE SUBSTITUTED.

SIGNATURE AND SEAL ARE FOR SEPTIC PROFILE AND CALCULATIONS ONLY, TANK AND DETAILS WERE NOT DESIGNED OR REVIEWED BY THE ENGINEER:

BENCHMARK
 ENGINEERS & LAND SURVEYORS & PLANNERS

ENGINEERING, INC.
 8480 BALTIMORE NATIONAL PIKE SUITE 315
 ELLICOTT CITY, MARYLAND 21043
 (P) 410-465-6105 (F) 410-465-6844
 WWW.BEI-CMLENGINEERING.COM

PROJECT:	2920 ROUTE 32 PARCEL 160	
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HOUSE TYPE:	EXISTING HOUSE	
DATE:	DECEMBER, 2019	PROJECT NO. 2997
SCALE:	AS SHOWN	DRAWING 2 OF 3

HEALTH DEPARTMENT SPEC SHEET INFORMATION

System	Application Rate	Effective Depth	Bottom Depth
Initial	1.2	4.0	8.0
1st Replacement	1.2	4.0	8.0
2nd Replacement	1.2	2.5	7.0

initial system percs 6 and 8A; 1st repair percs 6 and 8A;
2nd repair percs 7 and 8A

TRENCH DATA

INITIAL SYSTEM		FIRST REPLACEMENT		SECOND REPLACEMENT	
TRENCH 1-1		TRENCH 2-1		TRENCH 3-1	
LENGTH	86.8	LENGTH	86.8	LENGTH	80.1
GROUND ELEVATION	452.9	GROUND ELEVATION	450.0	GROUND ELEVATION	447.0
INVERT ELEVATION	450.4	INVERT ELEVATION	448.0	INVERT ELEVATION	445.0
MAX BOTTOM ELEVATION	444.9	MAX BOTTOM ELEVATION	442.0	MAX BOTTOM ELEVATION	440.0

INITIAL SYSTEM - existing house

Number of Bedrooms	5	
Application Rate	1.2	gpd/sf
Effective Area Beginning Depth	4.0	ft
Bottom Max Depth	8.0	ft
Design Flow	750	gpd
Drainage Field square footage	625	sf
Sidewall Reduction Credit	0.42	
Trench width	3	ft
Effective Area Depth	4	ft
Trench Spacing	11	ft
Linear Length of trench Required	86.8	lf

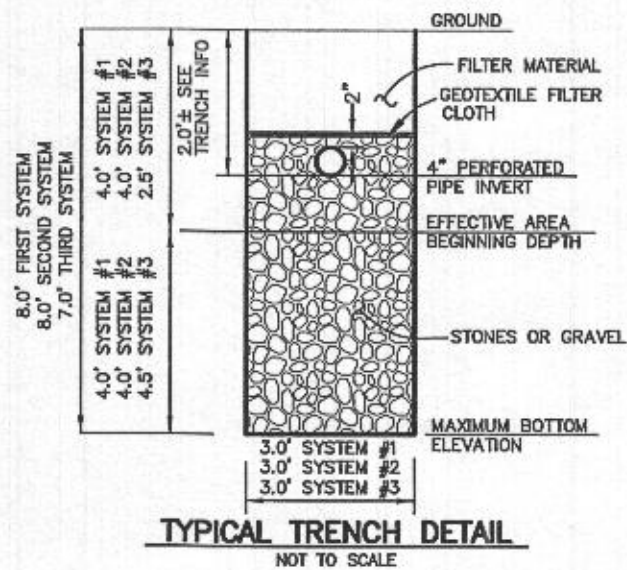
1st REPLACEMENT SYSTEM

Number of Bedrooms	5	
Application Rate	1.2	gpd/sf
Effective Area Beginning Depth	4.0	ft
Bottom Max Depth	8.0	ft
Design Flow	750	gpd
Drainage Field square footage	625	sf
Sidewall Reduction Credit	0.42	
Trench width	3	ft
Effective Area Depth	4	ft
Trench Spacing	11	ft
Linear Length of trench Required	86.8	lf

2nd REPLACEMENT SYSTEM

Number of Bedrooms	5	
Application Rate	1.2	gpd/sf
Effective Area Beginning Depth	2.5	ft
Bottom Max Depth	7.0	ft
Design Flow	750	gpd
Drainage Field square footage	625	sf
Sidewall Reduction Credit	0.38	
Trench width	3	ft
Effective Area Depth	4.5	ft
Trench Spacing	12	ft
Linear Length of trench Required	80.1	lf

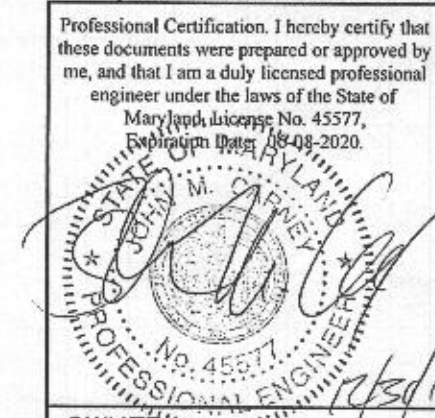
EXISTING HOUSE



Chg 1/2/2020

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