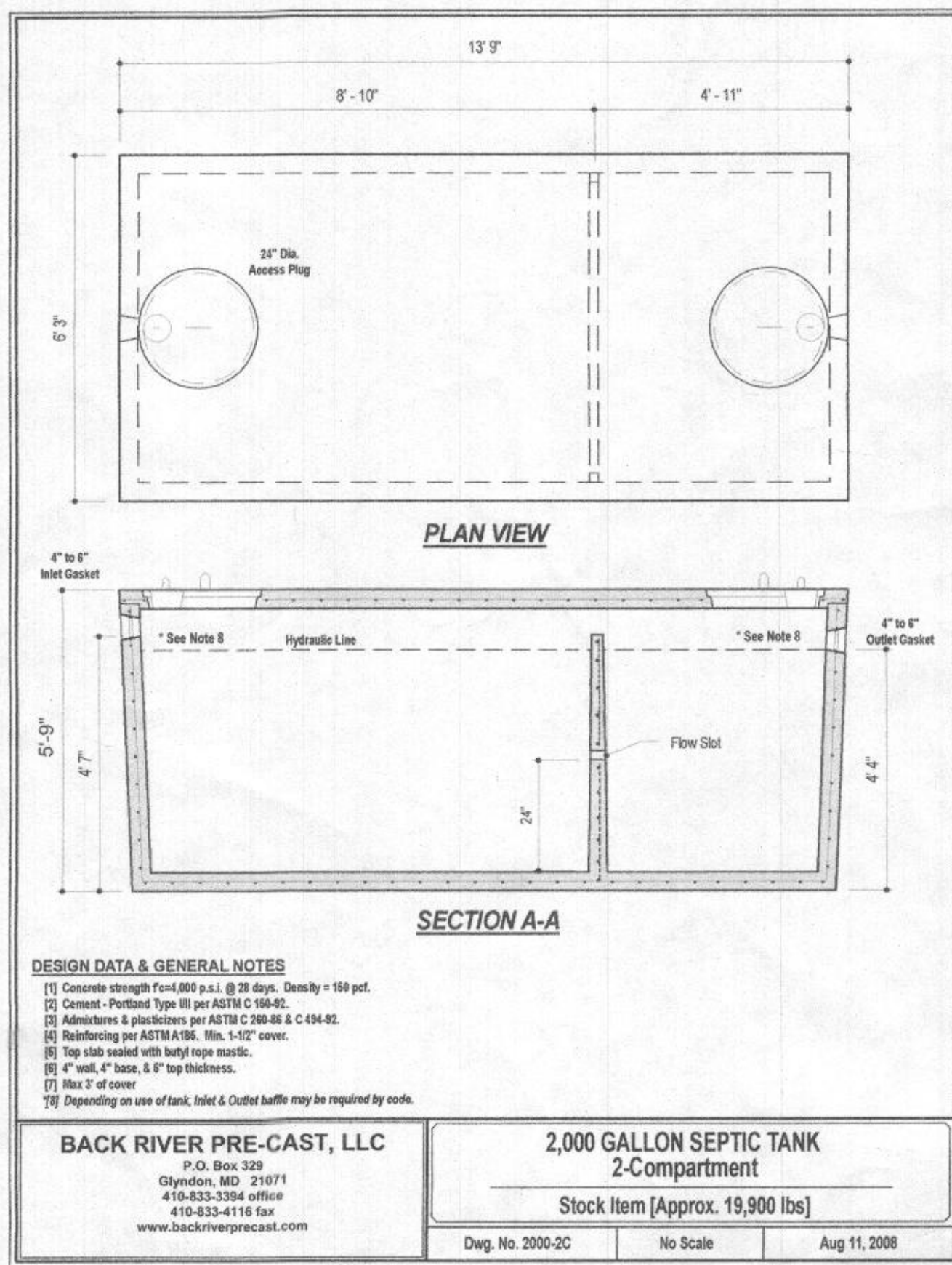


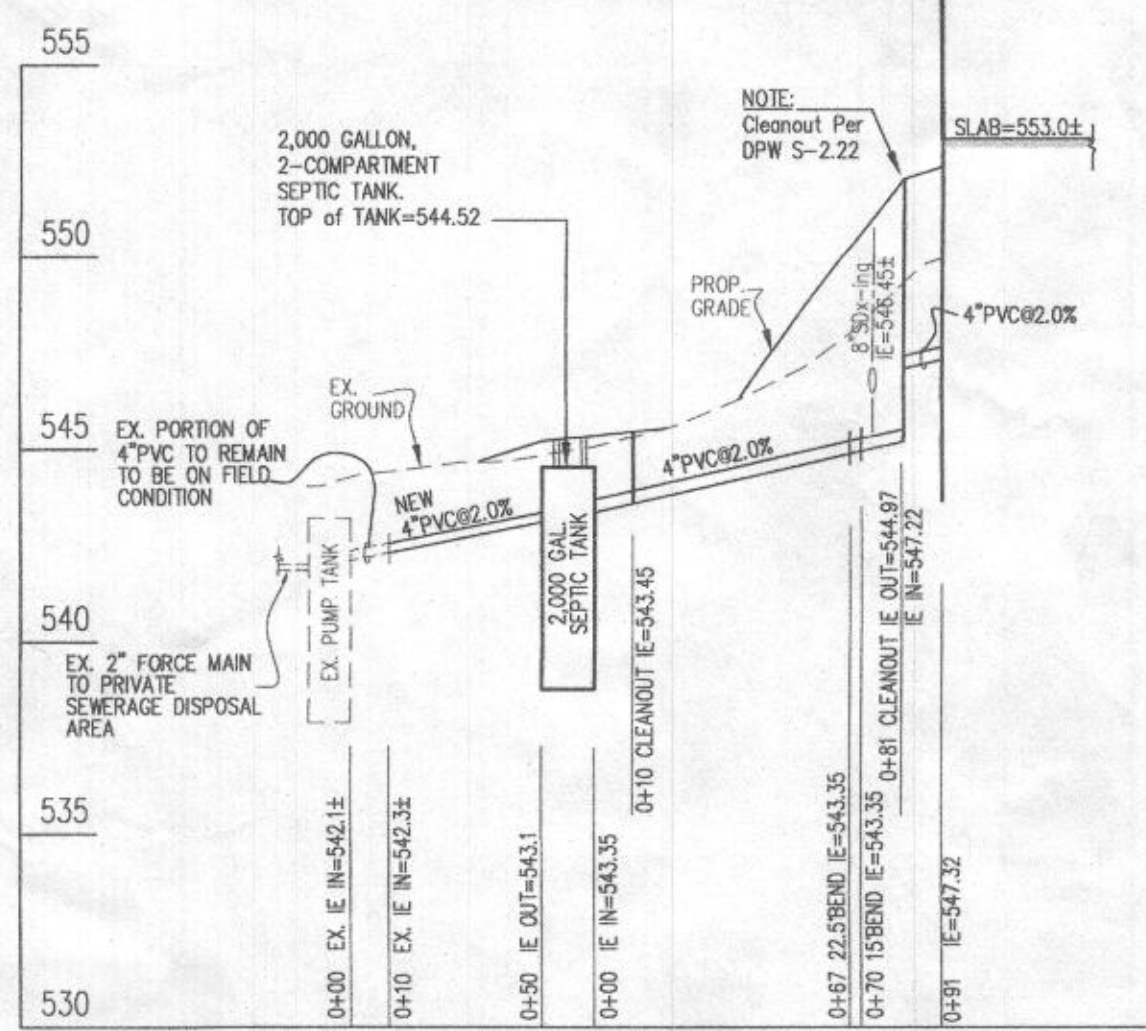
C 1 69914		SEQUENCE NO. (MDE USE ONLY)		STATE OF MARYLAND WELL COMPLETION REPORT FILL IN THIS FORM COMPLETELY PLEASE TYPE		THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.	
1 2 3 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)		DATE RECEIVED MM DD YY 11 10 20		DATE WELL COMPLETED MM DD YY 10 20 21		Depth of Well 22 450 26 (TO NEAREST FOOT)	
ST/CO USE ONLY DATE RECEIVED MM DD YY 11 10 21		DATE WELL COMPLETED MM DD YY 10 20 21		PERMIT NO. FROM "PERMIT TO DRILL WELL" 110 - 20 - 0135		COUNTY NUMBER 28 29 30 31 32 33 34 35 36 37	
OWNER WELL SITE ADDRESS SUBDIVISION		last name 3125 W. Ivory Rd		first name West Farm'ship RD		TOWN LOT	
WELL LOG Not required for driven wells		GRROUTING RECORD yes no WELL HAS BEEN GROUTED (Circle Appropriate Box) Y N 44 44		C 3 1 2		PUMPING TEST	
STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING		TYPE OF GROUTING MATERIAL (Circle one) CEMENT CM BENTONITE CLAY BC NO. OF BAGS 45 46 60 NO. OF POUNDS 45 46 1500 GALLONS OF WATER 1500 DEPTH OF GROUT SEAL (to nearest foot) from 48 TOP 52 ft. to 54 BOTTOM 58 ft. (enter 0 if from surface)		HOURS PUMPED (nearest hour) 8 9 PUMPING RATE (gal. per min.) 11 15 METHOD USED TO MEASURE PUMPING RATE WATER LEVEL (distance from land surface) BEFORE PUMPING 17 20 ft. WHEN PUMPING 22 25 ft.		TYPE OF PUMP USED (for test) A air P piston T turbine C centrifugal R rotary O other (describe below) J jet S submersible	
DESCRIPTION (Use additional sheets if needed)		FEET FROM TO Bin Soil 0 10 Red Bin Clay 10 30 Bin Clay/Sand 30 50 Bin Rock 50 60 Gray Rock w/ water 60 220 ✓ Gray Rock 220 450		Casing types insert appropriate code below MAIN CASING TYPE Nominal diameter top (main) casing (nearest inch)! Total depth of main casing (nearest foot) 60 61 63 64 66 70 OTHER CASING (if used) diameter inch depth (feet) from to E A C H C A S I N G		PUMP INSTALLED DRILLER INSTALLED PUMP YES NO (CIRCLE) (YES or NO) IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS. TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) 29 IN BOX 29. CAPACITY: GALLONS PER MINUTE (to nearest gallon) 31 35 PUMP HORSE POWER 37 41 PUMP COLUMN LENGTH (nearest ft.) 43 47	
NUMBER OF UNSUCCESSFUL WELLS: 0		WELL HYDROFRACTURED yes no Y N		C 2 1 2 DEPTH (nearest ft.) E 1 8 9 11 15 17 21 A 2 23 24 26 30 32 36 C 3 38 39 41 45 47 51 R E E N SLOT SIZE 1 2 3 DIAMETER OF SCREEN (NEAREST INCH) 56 60 from to		CASING HEIGHT (circle appropriate box and enter casing height) + above } LAND SURFACE (nearest foot) - below } 50 51	
CIRCLE APPROPRIATE LETTER A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED E ELECTRIC LOG OBTAINED P TEST WELL CONVERTED TO PRODUCTION WELL I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.		DRILLERS LIC. NO. M S D 237 DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION) LIC. NO. D		GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68 MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER) T (E.R.O.S.) W Q 70 72 74 75 76 TELESCOPE CASING LOG INDICATOR OTHER DATA		LATITUDE 39.28626 LONGITUDE 76.92130 (DEFAULT COORD. WGS 84) Pursuant to §10-624 of the State Govt. Article of the Maryland Code personal info. requested on this form is used in processing this form pursuant to COMAR 26.04.04. Failure to provide the info. may result in this form not being processed. You have the right to inspect, amend, or correct this form. The Maryland Department of the Environment is subject to the Maryland Public Information Act. This form may be made available on the Internet via MDE's website and is subject to inspection or copying, in whole or in part, by the public and other governmental agencies, if not protected by federal or state law.	

B 1	SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL please type	STATE PERMIT NUMBER HO - 20 - 0135 fill in this form completely
1 2 3 6			
Date Received (APA) <u>10/14/21</u> 8 MM DD YY 13 OWNER INFORMATION 15 Last Name Owner First Name 34 36 Street or RFD 55 57 Town 70 State 72 Zip 76		B 3 LOCATION OF WELL 8 COUNTY <u>Howard</u> 21 23 SUBDIVISION 42 SECTION <u>44</u> 46 LOT <u>48</u> 50 52 NEAREST TOWN 71	
DRILLER INFORMATION Driller's Name <u>M S D</u> 76 License No. 81 Firm Name _____ Address _____ Signature _____ Date _____		B 4 SOURCES OF DRILLING WATER 1. <u>3125 W Ivory Rd</u> 2. _____ 3. _____ ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX) NORTH <input checked="" type="checkbox"/> WEST <input type="checkbox"/> EAST <input type="checkbox"/> SOUTH <input type="checkbox"/> 34 <u>150'</u> 37 DISTANCE FROM ROAD ENTER FT OR MI 38 39 TAX MAP: _____ BLK: _____ PARCEL <u>0023</u>	
B 2 WELL INFORMATION APPROX. PUMPING RATE (GAL. PER MIN.) <u>8</u> 12 AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) <u>14</u> 20		NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL COUNTY NAME <u>Howard</u> COUNTY NO. <u>13</u> STATE SIGNATURE _____ INSERT S → 41 DATE ISSUED <u>10/13/21</u> 43 MM DD YY 48 CO SIGNATURE <u>[Signature]</u> EXP. DATE <u>12/15/21</u>	
USE FOR WATER (CIRCLE APPROPRIATE BOX) 22 <input type="checkbox"/> DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION <input type="checkbox"/> FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION) <input type="checkbox"/> INDUSTRIAL, COMMERCIAL, DEWATERING <input type="checkbox"/> PUBLIC WATER SUPPLY WELL <input type="checkbox"/> TEST, OBSERVATION, MONITORING <input type="checkbox"/> OPEN LOOP GEOTHERMAL <input checked="" type="checkbox"/> CLOSED LOOP GEOTHERMAL		PROPOSED LOCATION OF WELL ON LOT SHOW PERMANENT STRUCTURES SUCH AS BUILDINGS, SEPTIC SYSTEM, ROADS AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCE MEASUREMENTS TO WELL <u>10/13/21</u> <u>NO DRILLING ON SITE</u> <u>10/14/2021</u> <u>450' IN 2nd HOLE</u> <u>10/15/21</u> <u>grout 1st hole</u> <u>2nd hole</u> 	
APPROXIMATE DEPTH OF WELL <u>24</u> 28 FEET APPROXIMATE DIAMETER OF WELL _____ NEAREST INCH		Pursuant to § 10-624 of the State Govt. Article of the Maryland Code, personal info requested on this form is used in processing this form pursuant to COMAR 26.04.04. Failure to provide the info may result in this form not being processed. You have the right to inspect, amend, or correct this form. The Maryland Department of the Environment is subject to the Maryland Public Information Act. This form may be made available on the Internet via MDE's website and is subject to inspection or copying, in whole or in part, by the public and other governmental agencies, if not protected by federal or State Law.	
METHOD OF DRILLING (circle one) BORED (or Augered) JETTED Jetted & DRIVEN 30 AIR-ROTARY AIR-PERCussion ROTARY (Hydraulic Rotary) 37 CABLE REVERSE-ROTARY DRIVE-POINT other _____		REPLACEMENT OR DEEPEENED WELLS (CIRCLE APPROPRIATE BOX) 39 <input checked="" type="checkbox"/> THIS WELL WILL NOT REPLACE AN EXISTING WELL <input type="checkbox"/> THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED <input type="checkbox"/> THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS <input type="checkbox"/> THIS WELL WILL DEEPEEN AN EXISTING WELL PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEENED (IF AVAILABLE) 41 _____ 52	
Not to be filled in by driller (MDE OR COUNTY USE ONLY) APPROP. PERMIT NUMBER _____ G _____ PERMIT No. <u>HO - 20 - 0135</u> 70 71 72 73 74 75 76 77 78 79			
SPECIAL CONDITIONS NOTE: APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED. <u>grout holes from bottom to top</u>			



SEPTIC TANK CONSTRUCTION AND INSTALLATION NOTES

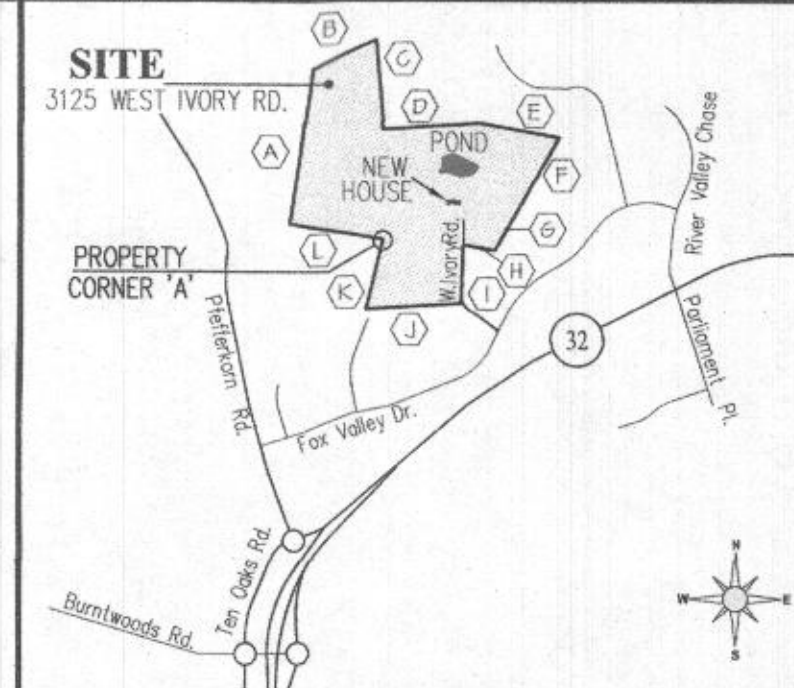
- TANK TO BE ASTM C1277-20 AND HOWARD COUNTY CODE COMPLIANT AND INCLUDE A PROPERLY POSITIONED INLET T-Baffle EXTENDED INTO THE TANK AIR SPACE AT LEAST 8-INCHES ABOVE THE LIQUID LEVEL, BUT AT LEAST 1-INCH BELOW THE TOP, CONSTRUCTED OF NOT LESS THAN SCHEDULE 40 PVC.
- CONCRETE SHALL NOT BE LESS THAN 4-INCHES THICK.
- PROVIDE ADDITIONAL COATINGS AS MANDATED BY HOWARD COUNTY, MD.
- TANK TO INCLUDE AN EFFLUENT FILTER, ORENCO MODEL #F0-848-36 WITH THE HANDLE EXTENDED TO JUST UNDER THE ACCESS LID. (NO SUBSTITUTIONS).
- SET THE SEPTIC TANK ON A 6-INCH MINIMUM LEVELING BED OF AASHTO #57 AGGREGATE ON A FIRM SUBGRADE.
- THE ACCESS COVERS TO BE CHILD PROOF HEAVY DUTY COVERS WITH INTERNAL SAFETY NET OR CATCH AS MANUFACTURED BY SIM TECH OR TUF-TITE. TANK AND RISERS TO BE WATER TIGHT AND PASS MANUFACTURERS WATER-TIGHTNESS TEST (VACUUM 2-INCHES HG FOR 60 MIN, 5 PSIG WATER FOR 60 MINUTES, 5 PSIG AIR FOR 15 MINUTES) OR MORE STRINGENT AS REQUIRED. THE LIDS ARE TO BE GAS TIGHT AND TO EXTEND NOT MORE THAN 4-INCHES ABOVE FINISHED GROUND.



SEPTIC SYSTEM PROFILE

HORIZ. SCALE: 1"=50'
 VERT. SCALE: 1"=5'

Plan came up per well permit - new/revised plan provided (+ 2 copies)



LINE	BEARING	LENGTH
(A)	N 08°14'18" E	1,814.18'
(B)	N 64°1'00" E	765.25'
(C)	S 04°33'20" E	940.30'
(D)	N 86°20'55" E	1,016.32'
(E)	S 80°00'18" E	787.47'
(F)	S 28°09'31" W	1,094.56'
(G)	S 30°04'31" W	247.24'
(H)	N 79°40'29" W	333.25'
(I)	S 01°50'55" W	611.66'
(J)	S 86°40'24" E	996.42'
(K)	N 14°31'24" E	746.50'
(L)	N 81°22'31" W	1,003.32'

PLAN LEGEND

- EXISTING WELL LOCATION (TO BE ABANDONED)
- PROPOSED WELL BOX LOCATION
- PRIVATE SEWAGE DISPOSAL AREA
- PERCOLATION TEST HOLE (FAILED 2014)
- PERCOLATION TEST HOLE (PASSED 2014)
- PERCOLATION TEST HOLES (PASSED 2021)
- AS-BUILT TREE LOCATION
- APPROX. EDGE OF CULTIVATED FIELD
- SWM DRYWELL LOCATION
- EXISTING SEPTIC TRENCHES
- POSSIBLE 1st REPLACEMENT SEPTIC TRENCH
- POSSIBLE 2nd REPLACEMENT SEPTIC TRENCH

NOTES

- ANY CHANGE TO THE LOCATIONS OR DEPTHS TO ANY COMPONENTS MUST BE APPROVED BY CHANCER 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 SEPTIC SYSTEM INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
- EXISTING WELLS, SEPTIC SYSTEMS AND SEWAGE DISPOSAL AREAS WITHIN 100' OF THE PROPOSED IMPROVEMENTS AND THOSE 200' DOWN GRADIENT OF EXISTING OR PROPOSED SEPTIC SYSTEMS OR SEWAGE DISPOSAL AREAS HAVE BEEN SHOWN.
- THE EXISTING WELL (NO TAG) SHALL BE PROPERLY ABANDONED (sealed in accordance with COMAR 26.04.04.34-36) BY A WELL DRILLER LICENSED BY THE MARYLAND STATE BOARD OF WELL DRILLERS.
- THE NEW WELL (Tag #HO-20-0106) WAS AS-BUILT BY GLW IN 07/2021 IS ACCURATELY SHOWN ON THIS PLAN.
- THE EXISTING SEPTIC TANK SHALL BE PROPERLY ABANDONED (in accordance with Howard County Code Sec.3.810.(g)) BY A LICENSED PLUMBER.

SDA TRENCH SIZE CALCULATIONS

Whitney Property	3125 West Ivory Road
System Input Information	*Existing System
Application Rate	1.2"
Effective area beginning depth	3.0"
Effective area maximum bottom depth	6.0"
Number of Bedrooms	4
Design flow at 150 gal./day/bedroom	600
Absorption Trench Calculations	
Drainfield area required (Design flow/absorption rate)	500
Effluent pipe depth to invert	1.5"
Effective sidewall depth "D"	3.0"
Depth between the effective beginning depth or pipe depth (which ever is deeper) and maximum trench bottom	2.0"
Trench Width "W" (2 or 3 feet)	44.44"
Linear feet of trench required = (Drainfield area x sidewall reduction)/W	111
Trench Layout Information	
Number of trenches to use	2 ex.
Min. length (linear feet)	60.0'
Total (linear feet)	120.0'
Minimum Trench Spacing	10'

*Existing system from public records (2014 B.E.H. as-built field notes).

GLW
 PLANNING | ENGINEERING | SURVEYING
 3909 NATIONAL DRIVE | SUITE 250 | BURTONSVILLE, MD 20866 | GLWPA.COM
 PHONE: 301-421-4024 | BAL: 410-880-1820 | DCRA: 301-989-2524 | FAX: 301-421-4186

DESIGNED BY:					
mbt					
DRAWN BY:					
ktp					
CHECKED BY:					
ckg					
	DATE	REVISION		BY	APP'D

BUILDER:
 ANTHONY WILDER
 DESIGN-BUILD, INC.
 7913 MCCARTHY BLVD.
 CABIN JOHN, MD 20818
 ATTN: GEORGE BOIT
 GEORGE@ANTHONYWILDER.COM

OWNERS:
 RICHARD & KAREN WHITNEY,
 TRUSTEES
 27120 COMBOY UP ROAD
 STEAMBOAT SPRINGS, CO 80487
 kwhitney79@gmail.com
 rwhitney80@gmail.com

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE PLANS 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. 12975.
 EXPIRATION DATE: MAY 26, 2022
 7/1/21

ONSITE SEWERAGE DISPOSAL SYSTEM DESIGN PLAN
 3125 WEST IVORY ROAD
 Parcel 0023 (Tax Account No. 295958)
 ELECTION DISTRICT No. 5
 HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1"=40'	RC-DEO	20113
DATE	TAX MAP - GRID	SHEET
JULY 2021	15-20	1 OF 1

Sewage