

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: 2/24/23 **ONSITE SEWAGE DISPOSAL SYSTEM** P 572799

APPROVAL DATE: 5/11/2023 **PERMIT: CONSTRUCTION** A _____

PROPERTY ADDRESS: 1880 DAVIS BRANCH ROAD, WOODSTOCK, MD 21163

SUBDIVISION: MYRTUE PROPERTY LOT: 32 TAX ID: 03-352471

CONTRACTOR: FARM AND HOME EXCAVATING, INC. EMAIL: farmhomeex@verizon.net

CONTRACTOR ADDRESS: 901 DRIVER ROAD, MARRIOTTSTVILLE, MD 21104 PHONE: (410)442-2139

PROPERTY OWNER: SONSHINE MD LP EMAIL: nbontempi@keystonecustomhomes

OWNER ADDRESS: 227 GRANITE RUN ROAD, LANCASTER, PA 17601 PHONE: (717)469-9060

SEPTIC TANK SIZE (GALLONS): 2000 TANK MANUFACTURER: MAYER BROS., INC.

PUMP MODEL: n.a. PUMP SIZE n.a. PUMP TANK CAPACITY: n.a.

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

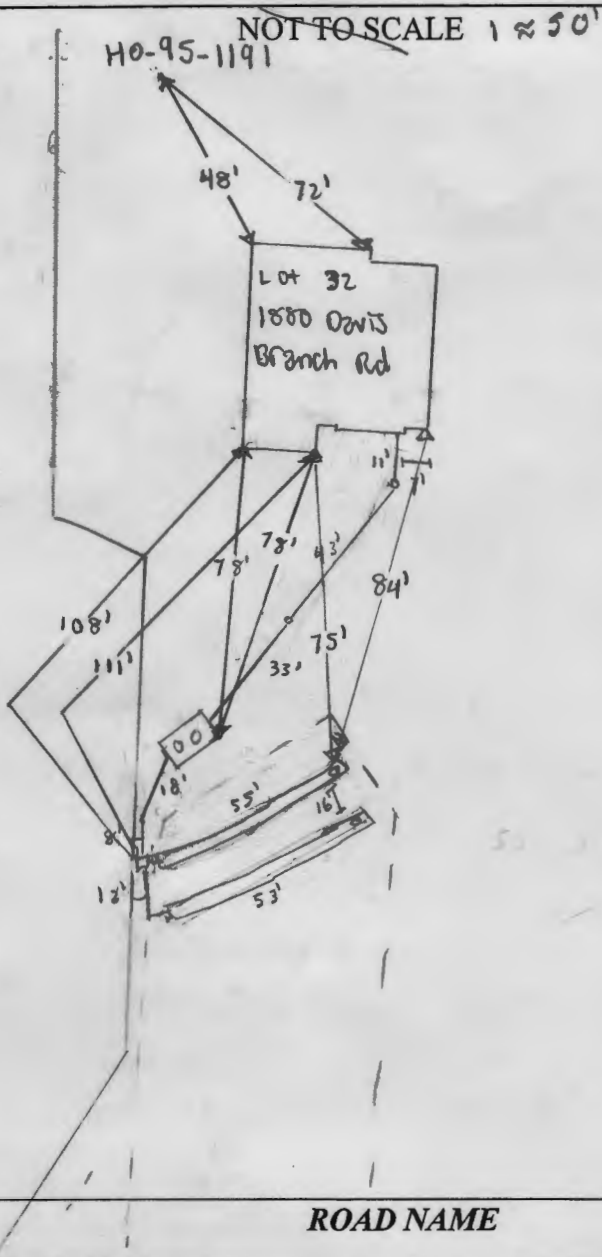
TRENCHES:	LINEAR FEET REQUIRED: <u>104</u>	INLET DEPTH: <u>2.0</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>6.0</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>11</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>2.0</u>
LOCATION:	PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND TANK LOCATIONS MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.	
NOTES:	INSTALL AT LEAST 2 CLEANOUTS IN SHC: 1 NEAR FLOUNDATION AND 1 BEFORE SLEEVE UNDER DRIVEWAY. INSTALL SLEEVE FOR SHC UNDER DRIVEWAY WITHIN THE 20-FT UTILITY EASEMENT	

ISSUED BY: R BRICKER ISSUE DATE: 2/24/2023 EXPIRATION DATE: 2/24/2024

- 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 DOWNGRAIDENT 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.**

** If fall cannot be created a pump tank may be required.*



TRENCH/DRAINFIELD DATA		
WIDTH	INLET	BOTTOM
3	1.5'-2'	6
NUMBER OF TRENCHES		2
TOTAL LENGTH		108'
ABSORPTION AREA		329 ft ³
DISTRIBUTION BOX LEVEL		yes
DISTRIBUTION BOX BAFFLE		yes
DISTRIBUTION BOX PORT		-

SEPTIC TANK DATA	
SEPTIC TANK 1 LEVEL	yes
MANUFACTURER	Babylon
CAPACITY	2000 GAL
SEAM LOC	Top
TANK LID DEPTH	2'
BAFFLES	4" back + 6" front
BAFFLE FILTER	-
MANHOLE LOC	Front + back
6" PORT LOC	-
WATERTIGHT TEST	-
SLOTTED	yes
DATE ON LID	3/20/23
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	-

PRE-CONSTRUCTION: 4/16/2023 Moved 1st trench 10'-8" down. Contour in site didn't match plan, beginning of trenches were 2' higher than rest of grade. T₁ + T₂ measured @ 52', distance between trenches 11'. Tank + SDA stacked. (Wife)

INSTALLATION: 5/1/2023 - Entire system finished. 2 cleanouts installed. Measured distance from house connection to tank inlet. Saw tank back 4" baffle, slot, + 6" front baffle. Date tank cured 1 + month from today. 2' of cover on tank. Measured tank to D-box + D-box to trenches. Upper trench length @ 55' + Lower @ 53'. D-box had baffle + water leveler, leveled D-box. Upper trench inlet @ 2' + lower trench inlet @ 1.5. Installer stated beginning of trench was in a ditch. Rest of trench inlet per plan. Told installer to leave 1 trench completely open next time.

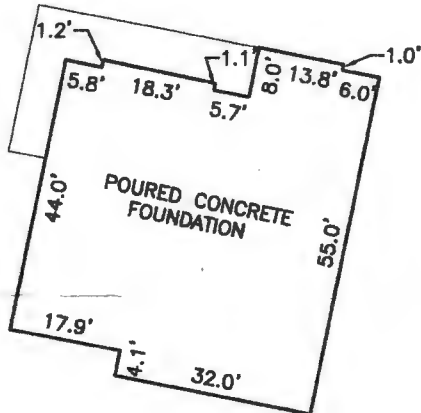
FINAL INSPECTOR Shepsara Pige DATE OF APPROVAL 5/1/2023

Wall Check
OK
RDC 2/24/2023



RUTH D. BROWN
L.2214 F. 731
SAMUEL BROWN &
FRANCES LOUISE BROWN

PRIVATE VARIABLE WIDTH
(24' MINIMUM) USE IN COMMON
DRIVEWAY EASEMENT FOR
LOTS 32 and 33
L. 20800, F. 58-69



FOUNDATION DETAIL
SCALE: 1" = 30'

PRIVATE 20' SEWER
EASEMENT FOR LOT 32
L. 20800, F. 49-57

SURVEYOR'S CERTIFICATE

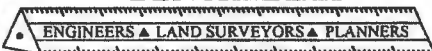
I HEREBY CERTIFY THAT THESE DOCUMENTS, WERE PREPARED BY ME OR UNDER MY RESPONSIBLE CHARGE, AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21320, EXPIRATION DATE 1-7-2025 AND TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, INFORMATION AND BELIEF, THAT THE DIMENSIONS OF THE BUILDING WALLS SHOWN HEREON ARE CORRECT; THAT THEY ARE BASED ON A FIELD RUN SURVEY PERFORMED BY BENCHMARK ENGINEERING, INC. ON 02/03/2023.

Donald A. Mason 2/23

DONALD A. MASON
PROFESSIONAL LAND SURVEYOR
MARYLAND REG. No. 21320

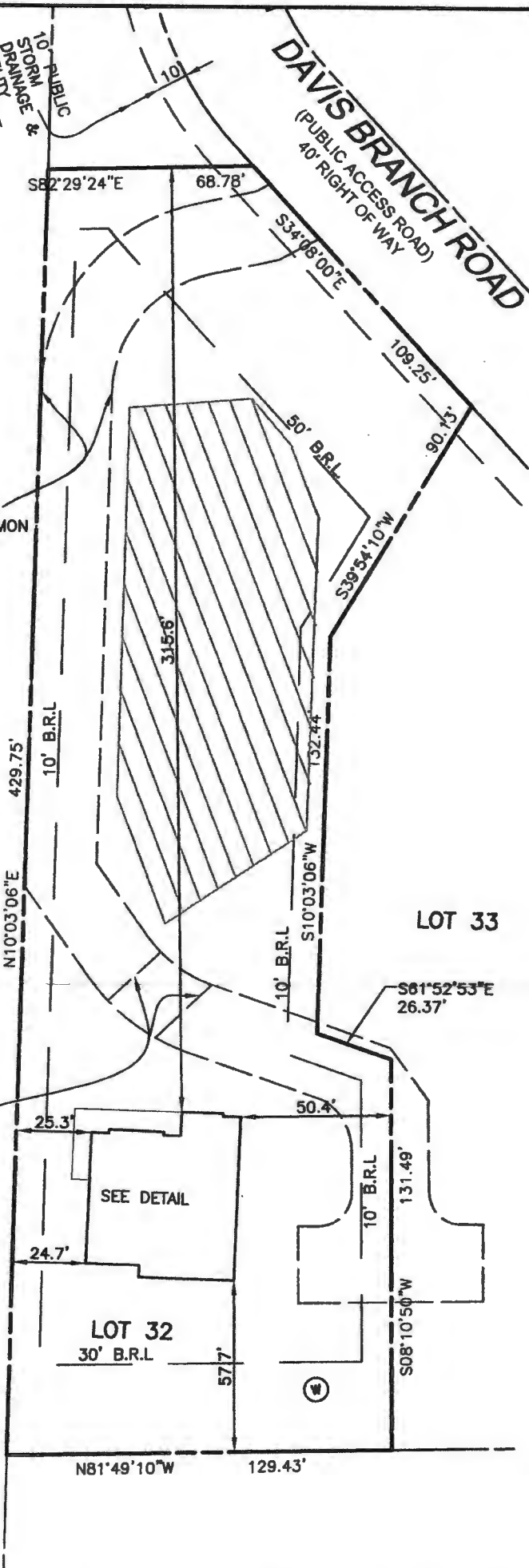
FEMA FIRM No. 24027C0080D
ZONE: X
DATED: 11/06/2013

BENCHMARK



ENGINEERING, INC.

3300 NORTH RIDGE ROAD ▲ SUITE 140
ELLCOTT CITY, MARYLAND 21043
(P) 410-485-6105 ▲ (F) 410-485-6644



TOP OF FOUNDATION WALL = 449.3'
OFFSET DIMENSIONS TO PROPERTY LINES ARE ± 0.1'

WALL CHECK

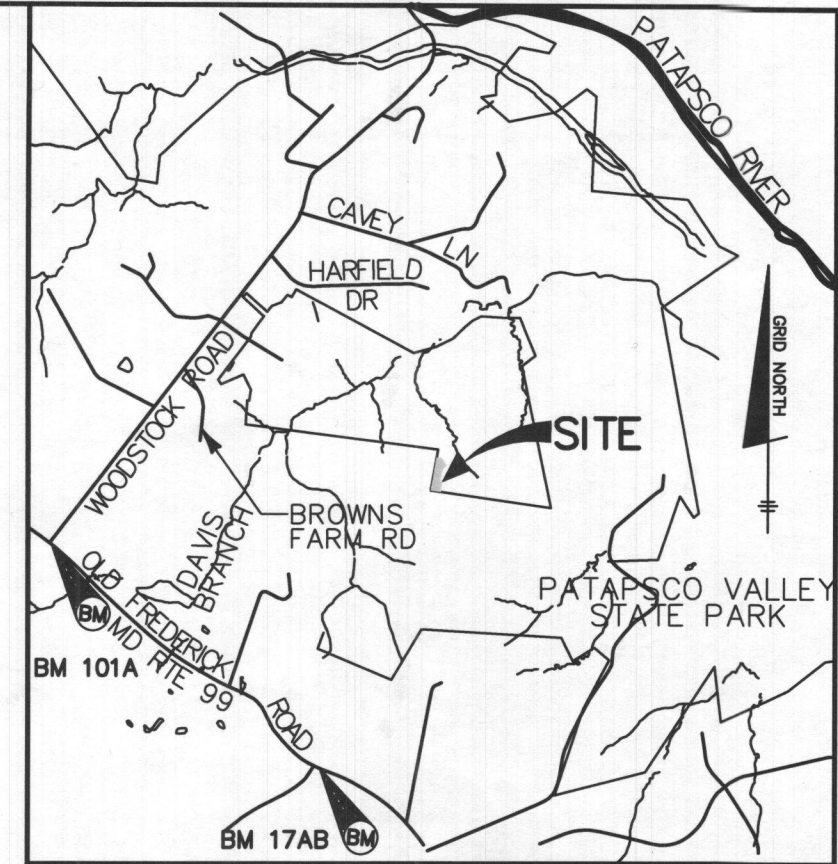
**MYRTUE PROPERTY
LOTS 32&33
PLAT No. 25865
LOT No. 32**

1880 DAVIS BRANCH ROAD

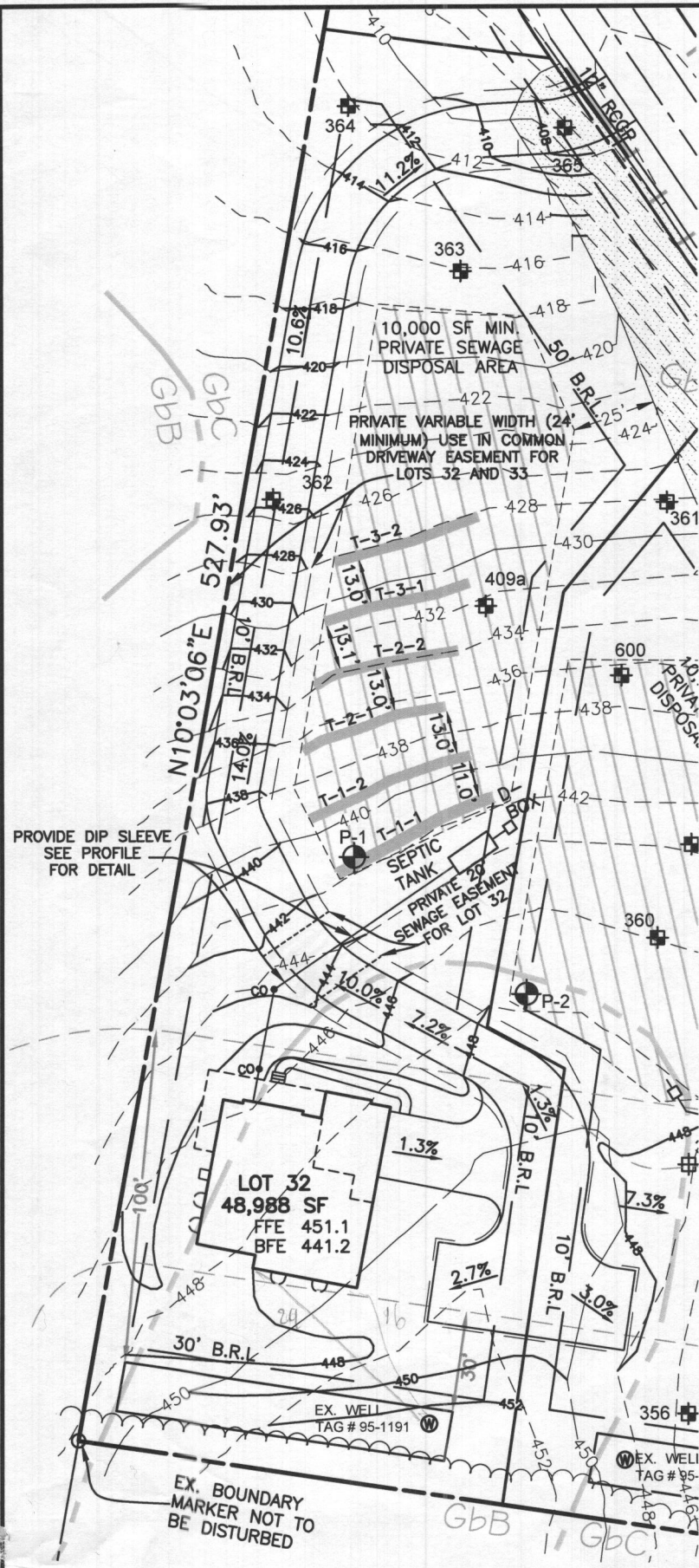
3RD ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
FIELD OBS. BY PJ
COMP. BY EWF
DRAWN BY EWF
SCALE: 1" = 50' DATE: 02/03/2023

GENERAL NOTES

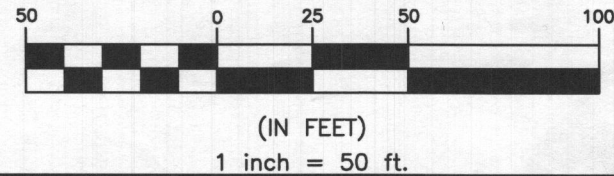
1. THE LOT SHOWN HEREON WAS RECORDED ON THE PLAT FOR MYRTUE PROPERTY, PLAT NUMBER 25865. REFER TO THE PLAT FOR LOT DIMENSIONS, LOT AREA, ALL EASEMENTS AND CONDITIONS.
2. THE EXISTING WELL SHOWN ON THIS PLAN (HO-95-1191) HAS BEEN FIELD LOCATED ON JUNE, 2019 BY BENCHMARK ENGINEERING, INC. AND IS ACCURATELY SHOWN.
3. THERE ARE NO EXISTING WELLS OR SEPTIC SYSTEMS WITHIN 100' OF THIS PROJECT'S BOUNDARY EXCEPT AS NOTED.
4. TOPOGRAPHY SHOWN WAS FLOWN BY VIRGINIA RESOURCE MAPPING, INC. DATED FEBUARY 2003 AND SUPPLEMENTED WITH FIELD SURVEY BY DMW, INC. DATED 2005 AND BENCHMARK ENGINEERING, INC. DATED JUNE, 2019 WHICH CONSISTS OF 2 FOOT CONTOUR INTERVALS.
5. SEDIMENT AND EROSION CONTROLS WILL BE SUBMITTED BY HOWARD SOILS CONSERVATION DISTRICT AS A CUSTOM GRADING PLAN.
6. ALL DRAINAGE AND STORMWATER MANAGEMENT FEATURES USED ON THIS SITE MUST COMPLY WITH THE APPROVED BUILDING PERMIT AND CUSTOM GRADING PLANS.
7. ANY CHANGES TO A PRIVATE SEWAGE DISPOSAL AREA OR WELL BOX SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
8. ANY CHANGES 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.
9. ANY ELECTRICAL WORK FOR THE INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
10. THE SEPTIC TANK WILL BE A 2000 GALLON TWO COMPARTMENT TANK.
11. THE MAXIMUM EARTH COVER OVER THE TANK IS 3 FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
12. ALL WELLS AND SEPTIC SYSTEMS LOCATED WITHIN 100' OF THE PROPERTY BOUNDARIES AND 200' DOWN GRADIENT OF ANY WELLS/OR SEPTIC SYSTEM HAVE BEEN SHOWN.
13. ANY FUTURE WELLS SHALL BE 10 FEET AWAY FROM THE DRIVEWAY.



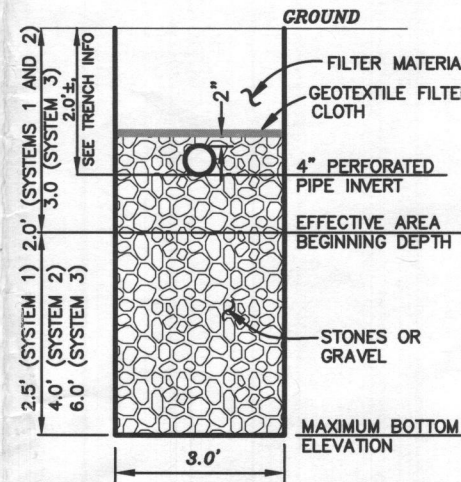
LOCATION MAP
SCALE: 1" = 2000'



PLAN VIEW
1" = 50'



Approved Septic System Plan
Howard County Health Department
2000-gal Septic Tank
to Gravity Drainfield
for 6-bed room SFD
R. Buckner 5/18/22
Signature Date



TYPICAL TRENCH DETAIL
NOT TO SCALE

LEGEND

- 400 PROPOSED CONTOURS
- 400 EXISTING CONTOURS
- 398 EXISTING CONTOURS
- EXISTING PRIVATE SEWAGE DISPOSAL AREA
- EXISTING WELL BOX
- EXISTING SLOPES 25% OR GREATER
- EXISTING TREELINE
- SOILS MAP SYMBOL
- SOILS DELINEATION LINE
- PERC TEST PASSED 2003
- PERC TEST FAILED 2003
- PERC TEST PASSED 2020

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. 28376, Expiration Date: 01-01-2023.



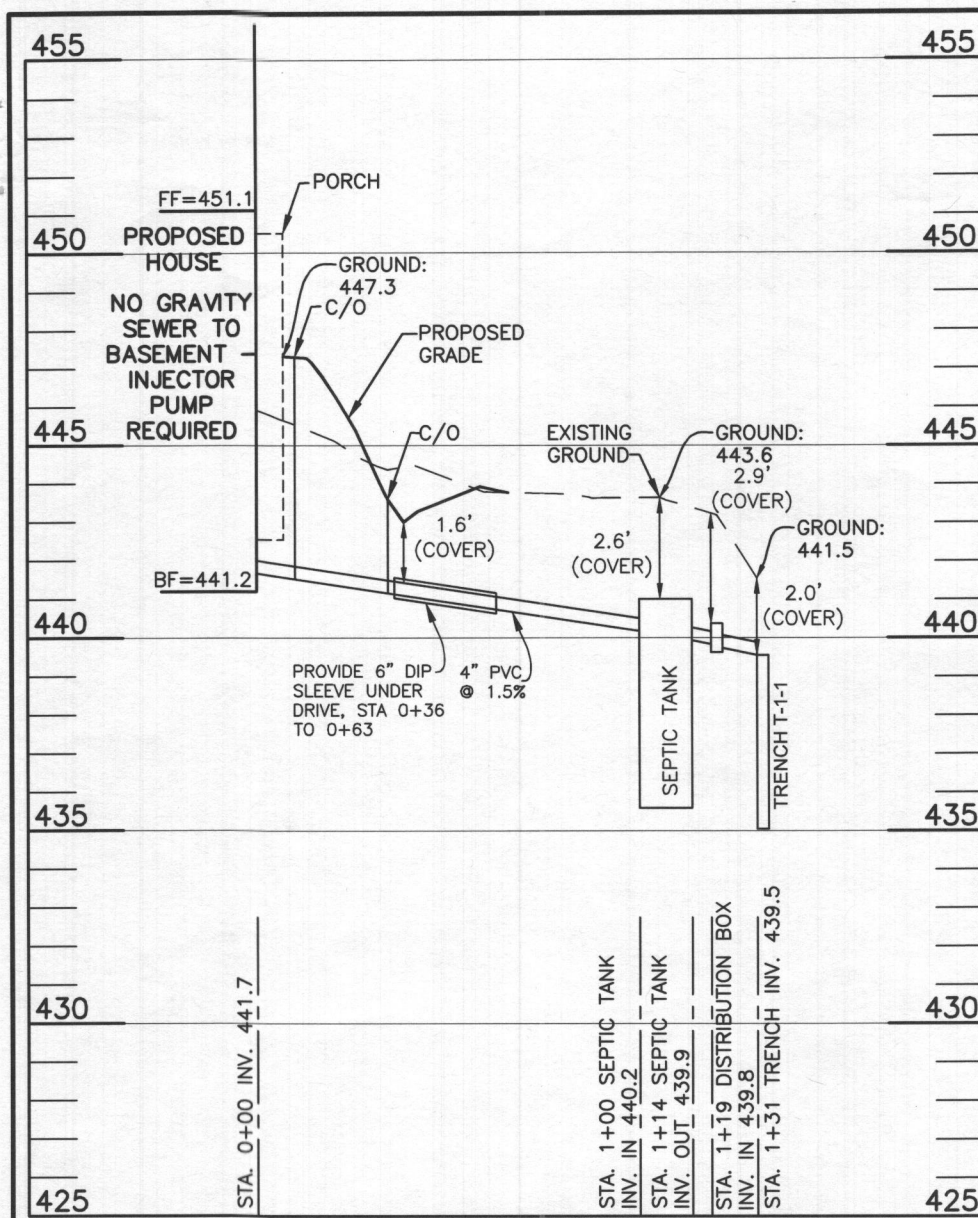
BEI-AAM

2022.05.11 10:01:14 -04'00

PROJECT:	MYRTUE PROPERTY LOT 32		
LOCATION:	TAX MAP: 10, GRID: 24, PARCEL: 225, ZONED: RC-DEO 1880 DAVIS BRANCH RD. WOODSTOCK, MD 21163 6TH ELECTION DISTRICT, HOWARD COUNTY, MD, TAX ID 352471		
TITLE:	ONSITE SEWAGE DISPOSAL PLAN		
HOUSE TYPE:	CUSTOM - KEYSTONE HOMES		
DATE:	MAY, 2022	PROJECT NO.	2099
SCALE:	AS SHOWN	DRAWING	1 OF 2

OWNER/BUILDER:
KEYSTONE CUSTOM HOMES, INC.
227 GRANITE RUN DR.
SUITE 100
LANCASTER, PA 17601
717-464-9060

BENCHMARK
ENGINEERS ▲ LAND SURVEYORS ▲ PLANNERS
ENGINEERING, INC.
3300 NORTH RIDGE ROAD ▲ SUITE 140
ELLCOTT CITY, MARYLAND 21043
(P) 410-465-6105 ▲ (F) 410-465-6644
WWW.BEI-CMLENGINEERING.COM



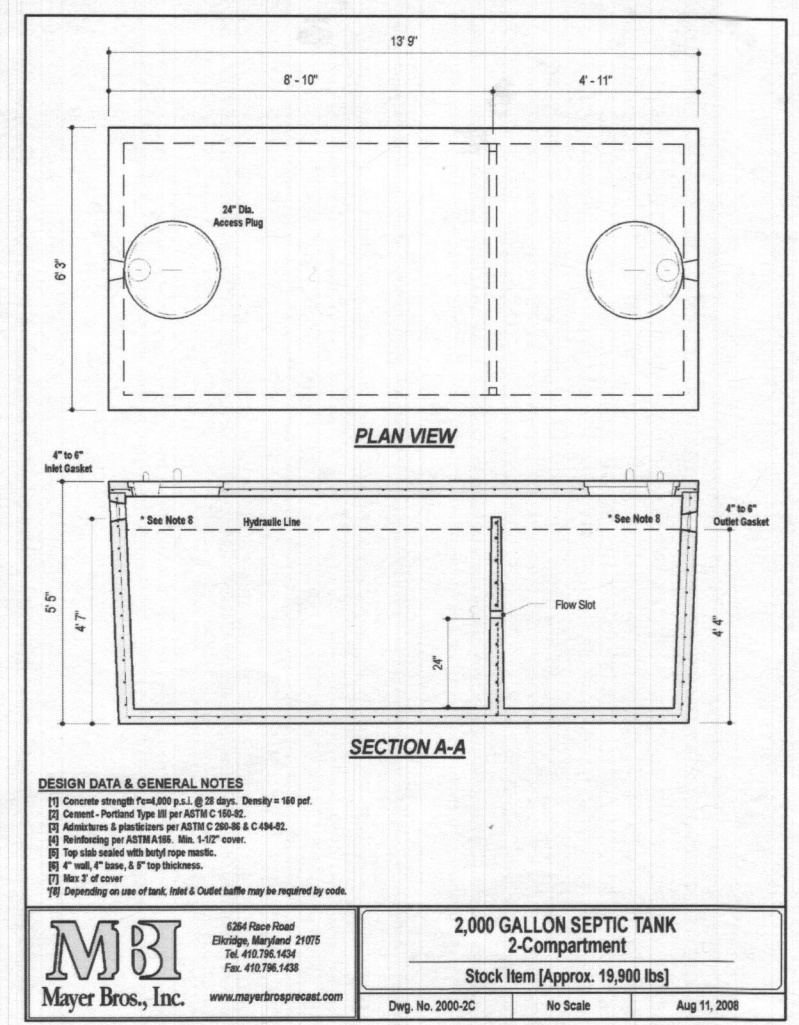
INITIAL SYSTEM		
Number of Bedrooms	6	
Application Rate	1.2	gpd/sf
Effective Area Beginning Depth	2.0	ft
Bottom Max Depth	6.0	ft
Design Flow	900	gpd
Drainage Field square footage	750	sf
Sidewall Reduction Credit	0.42	
Trench width	3	ft
Effective Area Depth	4	ft
Trench Spacing	11	ft
Linear Length of trench Required	104	lf

1ST REPLACEMENT SYSTEM		
Number of Bedrooms	6	
Application Rate	1.2	gpd/sf
Effective Area Beginning Depth	2.0	ft
Bottom Max Depth	7.0	ft
Design Flow	900	gpd
Drainage Field square footage	750	sf
Sidewall Reduction Credit	0.36	
Trench width	3	ft
Effective Area Depth	5	ft
Trench Spacing	13	ft
Linear Length of trench Required	89	lf

2ND REPLACEMENT SYSTEM		
Number of Bedrooms	6	
Application Rate	1.2	gpd/sf
Effective Area Beginning Depth	3.0	ft
Bottom Max Depth	8.0	ft
Design Flow	900	gpd
Drainage Field square footage	750	sf
Sidewall Reduction Credit	0.36	
Trench width	3	ft
Effective Area Depth	5	ft
Trench Spacing	13	ft
Linear Length of trench Required	89	lf

TRENCH DESIGN - LOT 32			
INITIAL SYSTEM			
T-1-1	LENGTH	52.1 ft	T-1-2 LENGTH 52.1 ft
	GROUND ELEVATION	441.6	GROUND ELEVATION 439.3
	INVERT ELEVATION	439.6	INVERT ELEVATION 437.3
	MAX BOTTOM ELEVATION	435.6	MAX BOTTOM ELEVATION 433.3
1ST REPLACEMENT SYSTEM			
T-2-1	LENGTH	44.7 ft	T-2-2 LENGTH 44.7 ft
	GROUND ELEVATION	436.6	GROUND ELEVATION 434.0
	INVERT ELEVATION	434.6	INVERT ELEVATION 432.0
	MAX BOTTOM ELEVATION	429.6	MAX BOTTOM ELEVATION 427.0
2ND REPLACEMENT SYSTEM			
T-3-1	LENGTH	44.7 ft	T-3-2 LENGTH 44.7 ft
	GROUND ELEVATION	431.0	GROUND ELEVATION 428.2
	INVERT ELEVATION	429.0	INVERT ELEVATION 426.2
	MAX BOTTOM ELEVATION	423.0	MAX BOTTOM ELEVATION 420.2

Septic System Plan
 Howard County Health Department
 OSDS Design approved
 as illustrated
R. Bueck
 Date 5/10/22



DESIGN DATA & GENERAL NOTES
 [1] Concrete strength Fcm=4000 p.s.i. @ 28 days. Density = 150 pcf.
 [2] Cement - Portland Type III per ASTM C 150-92.
 [3] Admixtures & plasticizers per ASTM C 260-96 & C 494-02.
 [4] Reinforcing per ASTM A638. Min. 1-1/2" cover.
 [5] Top slab sealed with butyl rope mastic.
 [6] 4" wall, 4" base, 8" 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.
 6364 Race Road
 Elkridge, Maryland 21075
 Tel. 410.796.1434
 Fax. 410.796.1438
 www.mayerbrosprecast.com

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

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

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. 28376, Expiration Date: 01-01-2023.



BEI-AAM

2022.05.11 10:02:28 -04'00

SEPTIC OUTFALL LOT 32
 SCALE: 1"=50' HORIZ., 1"=5' VERT.

SEPTIC INVERT CHART - LOT 32	
INV @ HOUSE	441.7
GROUND @ HOUSE	447.3
INV IN SEPTIC TANK	440.2
INV OUT SEPTIC TANK	439.9
TOP OF SEPTIC TANK	441.0
GROUND OVER SEPTIC TANK	443.6
INV IN DIST BOX	439.8
INV OUT DIST BOX	439.7
GROUND AT DIST BOX	443.2

HEALTH DEPARTMENT SPEC SHEET INFORMATION - LOT 32			
System	Application Rate	Effective Depth	Bottom Depth
1st Replacement	1.2	2.0	6.0
2nd Replacement	1.2	2.0	7.0
3rd Replacement	1.2	3.0	8.0

OWNER/BUILDER:
 KEYSTONE CUSTOM HOMES, INC.
 227 GRANITE RUN DR.
 SUITE 100
 LANCASTER, PA 17601
 717-464-9060

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TITLE:	ONSITE SEWAGE DISPOSAL PLAN		
HOUSE TYPE:	CUSTOM - KEYSTONE HOMES		
DATE:	MAY, 2022	PROJECT NO.	2099
SCALE:	AS SHOWN	DRAWING	2 OF 2