

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: 8/15/22 **ONSITE SEWAGE DISPOSAL SYSTEM** P 572140
 APPROVAL DATE: 12/15/2022 JCC **PERMIT: CONSTRUCTION** A _____
 PROPERTY ADDRESS: 1853 DAVIS BRANCH ROAD, WOODSTOCK, MD 21163
 SUBDIVISION: MYRTUE PROPERTY LOT: 13 TAX ID: 03-352455
 CONTRACTOR: FARM AND HOME EXCAVATING, INC. EMAIL: farmhomeex@verizon.net
 CONTRACTOR ADDRESS: 901 DRIVER ROAD, MARRIOTTSVILLE, 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: 5 APPLICATION RATE: 0.6

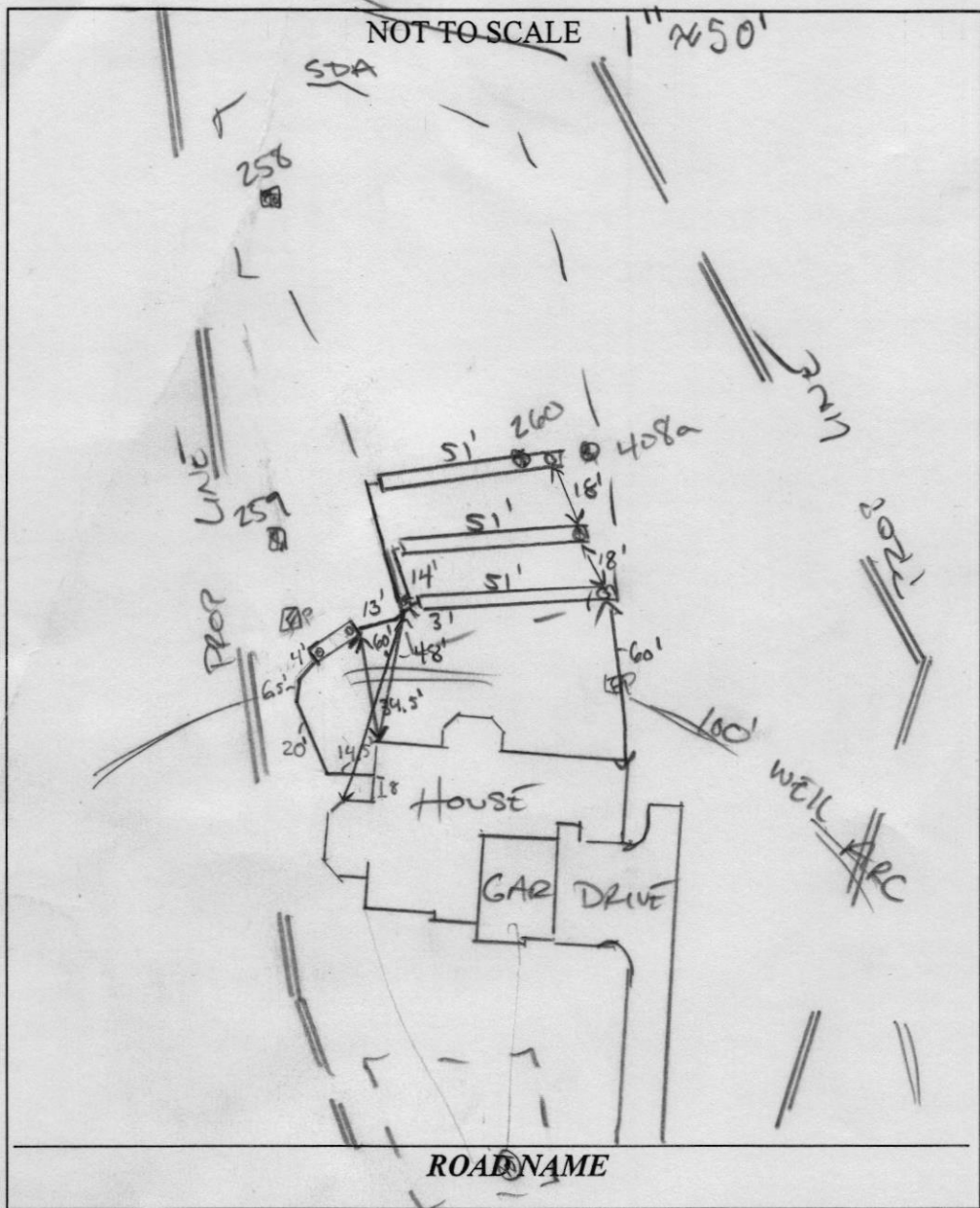
TRENCHES:	LINEAR FEET REQUIRED: <u>149</u>	INLET DEPTH: <u>3.0*</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>8.0</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>13</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>3.0</u>
LOCATION:	PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND TANK LOCATIONS MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.	
NOTES:	*TRENCH T-1-1 INVERT IN IS AT 3 FEET DEPTH; INVERT IN FOR TRENCHES T-1-2 AND T-1-3 IS AT 2 FEET DEPTH INSTALL AT LEAST 3 CLEANOUTS IN SHC.	

ISSUED BY: R BRICKER ISSUE DATE: 8/15/22 EXPIRATION DATE: 8/15/23

- 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 DOWNGRAIENT 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.**

NOT TO SCALE 1" = 50'



TRENCH/DRAINFIELD DATA

WIDTH	INLET	BOTTOM
3'	3'	8'
NUMBER OF TRENCHES	3	
TOTAL LENGTH	153 F	
ABSORPTION AREA	459 SF + 5' SIDE WALL	
DISTRIBUTION BOX LEVEL	SPEED	
DISTRIBUTION BOX BAFFLE	CONCRETE	
DISTRIBUTION BOX PORT	YES	

SEPTIC TANK DATA

SEPTIC TANK 1 LEVEL	YES
MANUFACTURER	
CAPACITY	2000 GAL
SEAM LOC	TOP
TANK LID DEPTH	2.5' - 4'
BAFFLES	YES
BAFFLE FILTER	
MANHOLE LOC	FRONT & BACK
6" PORT LOC	
WATERTIGHT TEST	
SLOTTED	YES
DATE ON LID	9/26/22
PUMP/SEPTIC TANK LEVEL	
MANUFACTURER	
CAPACITY	
SEAM LOC	
TANK LID DEPTH	
BAFFLES	
BAFFLE FILTER	
MANHOLE LOC	
6" PORT LOC	
WATERTIGHT TEST	
SLOTTED	
DATE ON LID	

PRE-CONSTRUCTION:

12/5/22 - builder has dirt pile on T_{1,3} area. pile. SDA is staked. sewer line under foundation confirmed septic tank & T_{1,3} id out. T₁ is 50. Trenches was staked by builder, not surveyor (RR/SP)

12/12/2022

INSTALLATION: Plumber came out 12" below planned elevation, caused tank lid depth to be 2.5' - 3.5' below grade. Saw front baffle. Tank level. (RR/SP)

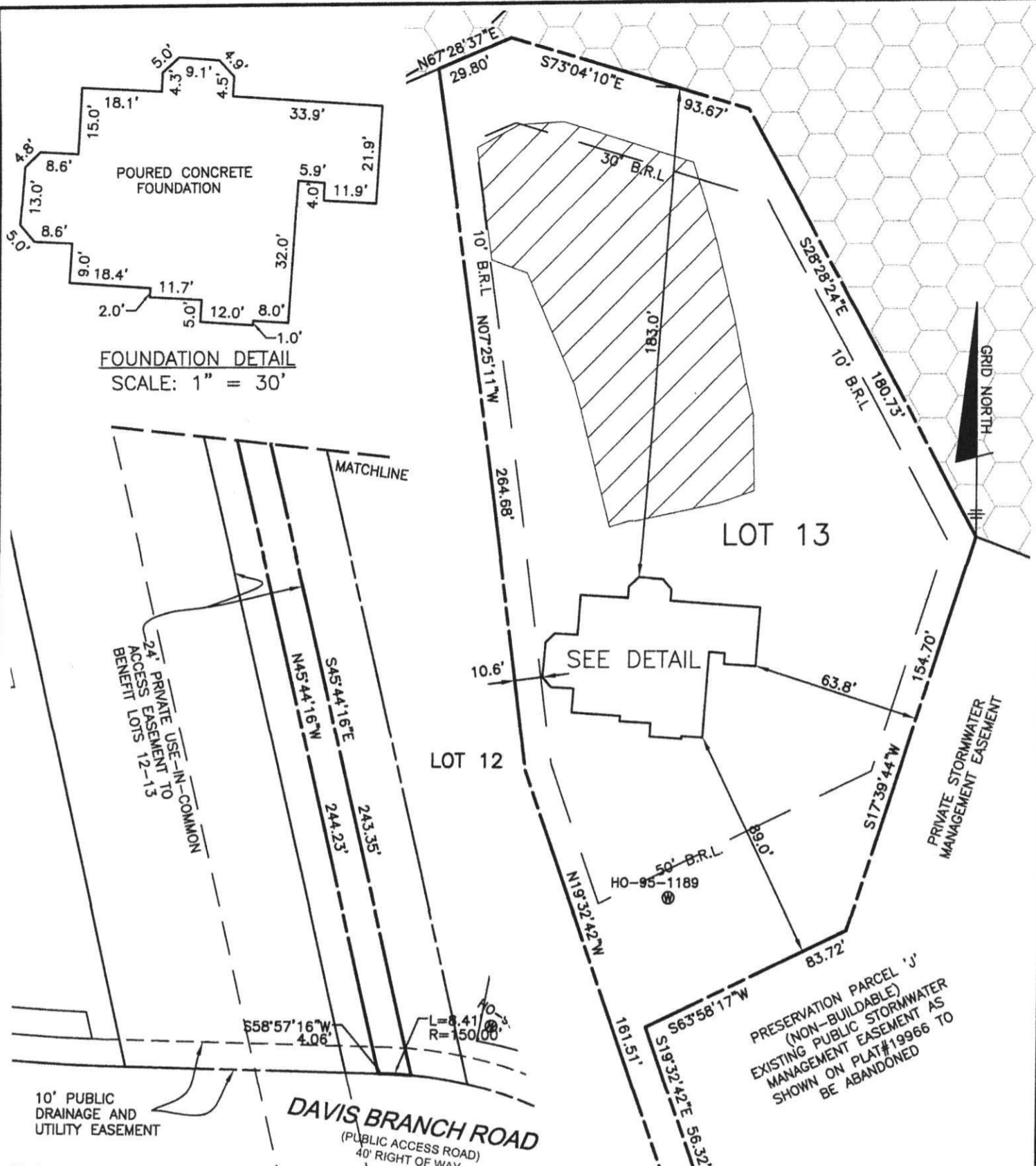
12/13/2022 - phone convo w/ contractor stating T₁ inlet is already at 8' (RR/SP)

12/19/2022 TRENCHES COMPLETE; D BOX LEVELED W/ SPEED LEVELS

FINAL INSPECTOR

DATE OF APPROVAL

12/19/2022



FOUNDATION DETAIL
SCALE: 1" = 30'

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 1-7-2023 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 07/26/2022.

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

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

BENCHMARK

ENGINEERS LAND SURVEYORS PLANNERS
ENGINEERING, INC.
3300 N. RIDGE RD. SUITE 140 ELICOTT CITY, MARYLAND 21043
(P) 410-485-6105 (F) 410-465-6644
WWW.BEI-CMLENGINEERING.COM

TOP OF FOUNDATION WALL = 385.4'
OFFSET DIMENSIONS TO PROPERTY LINES ARE ± 0.1'

WALL CHECK

*8.15.22
wall check
-key -40.*

MYRTUE PROPERTY
PLAT No. 23868
LOT No. 13
1853 DAVIS BRANCH ROAD

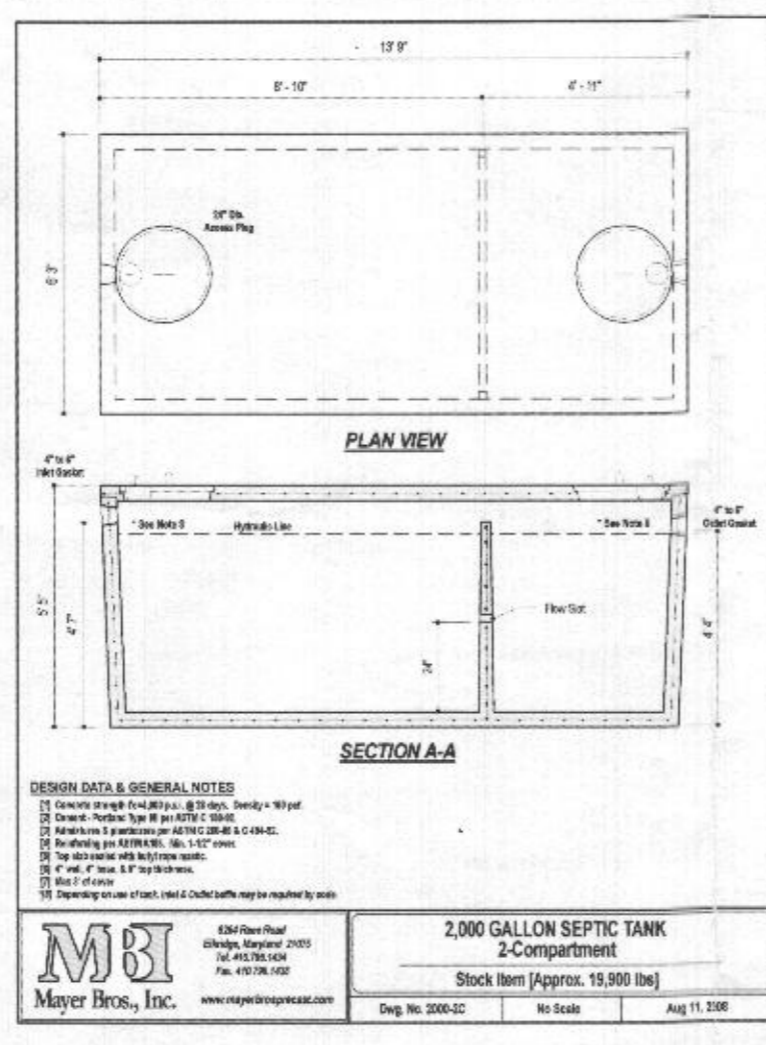
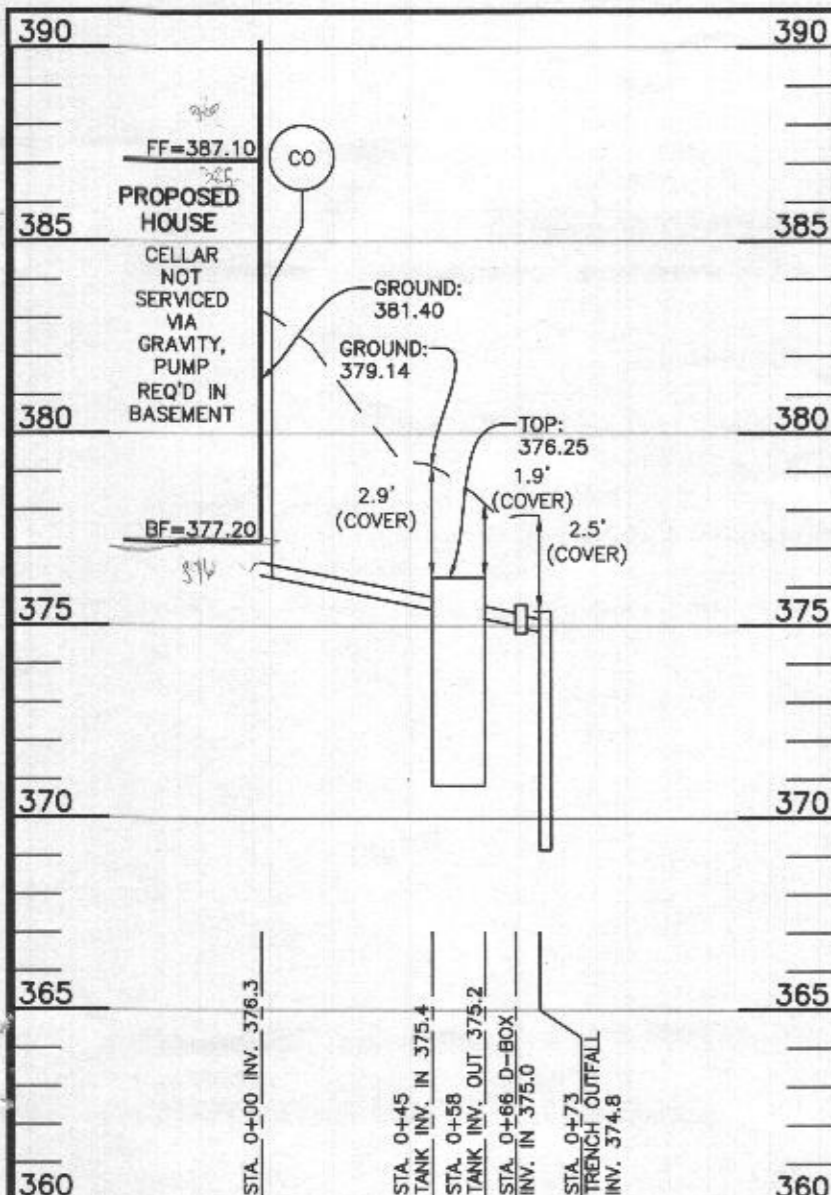
3rd ELECTION DISTRICT
FIELD OBS. BY AS
COMP. BY EWF
DRAWN BY EWF
SCALE: 1" = 50' DATE: REV 08/11/2022



2'
to grade

4'
to
grade

contractor will cut
grade to be 2.5' to 3.6'
cover on tank



INITIAL SYSTEM		
Number of Bedrooms	5	
Application Rate	0.6	gpd/sf
Effective Area Beginning Depth	3.0	ft
Bottom Max Depth	8.0	ft
Design Flow	750	gpd
Drainage Field square footage	1250	sf
Sidewall Reduction Credit	0.36	
Trench width	3	ft
Effective Area Depth	5	ft
Trench Spacing	13	ft
Linear Length of trench Required	149	lf

1ST REPLACEMENT SYSTEM		
Number of Bedrooms	5	
Application Rate	0.8	gpd/sf
Effective Area Beginning Depth	4.0	ft
Bottom Max Depth	8.0	ft
Design Flow	750	gpd
Drainage Field square footage	937.5	sf
Sidewall Reduction Credit	0.42	
Trench width	3	ft
Effective Area Depth	4	ft
Trench Spacing	11	ft
Linear Length of trench Required	130	lf

2ND REPLACEMENT SYSTEM		
Number of Bedrooms	5	
Application Rate	0.8	gpd/sf
Effective Area Beginning Depth	3.0	ft
Bottom Max Depth	8.0	ft
Design Flow	750	gpd
Drainage Field square footage	938	sf
Sidewall Reduction Credit	0.36	
Trench width	3	ft
Effective Area Depth	5	ft
Trench Spacing	13	ft
Linear Length of trench Required	112	lf

SEPTIC INVERT CHART - Lot 13	
INV @ HOUSE	376.3
GROUND @ HOUSE	381.4
INV IN SEPTIC TANK	375.4
INV OUT SEPTIC TANK	375.2
TOP OF SEPTIC TANK	376.3
GROUND OVER SEPTIC TANK	379.1
INV IN DIST BOX	375.0
INV OUT DIST BOX	374.9
GROUND AT DIST BOX	377.9

HEALTH DEPARTMENT SPECIFICATIONS - Lot 13			
System	Application Rate	Effective Depth	Bottom Depth
1st System	0.6	3.0	8.0
2nd System	0.8	4.0	8.0
3rd System	0.8	3.0	8.0

SEWER OUTFALL LOT 13
 SCALE: 1"=50' HORIZ., 1"=5' VERT.

TRENCH DESIGN - Lot 13					
INITIAL SYSTEM		1ST REPLACEMENT SYSTEM		2ND REPLACEMENT SYSTEM	
T-1-1	LENGTH 49.7 ft	T-2-1	LENGTH 65.2 ft	T-3-1	LENGTH 55.9 ft
GROUND ELEVATION	377.8	GROUND ELEVATION	369.1	GROUND ELEVATION	363.4
INVERT ELEVATION	374.8	INVERT ELEVATION	367.1	INVERT ELEVATION	361.4
MAX BOTTOM ELEVATION	369.8	MAX BOTTOM ELEVATION	361.1	MAX BOTTOM ELEVATION	355.4
T-1-2	LENGTH 49.7 ft	T-2-2	LENGTH 65.2 ft	T-3-2	LENGTH 55.9 ft
GROUND ELEVATION	375.3	GROUND ELEVATION	366.2	GROUND ELEVATION	360.0
INVERT ELEVATION	373.3	INVERT ELEVATION	364.2	INVERT ELEVATION	358.0
MAX BOTTOM ELEVATION	367.3	MAX BOTTOM ELEVATION	358.2	MAX BOTTOM ELEVATION	352.0

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

Approved Septic System Plan
 Howard County Health Department
 2000-gallon Septic Tank
 to Gravity Distribution
 for 5-bedroom residence
 Signature: *[Signature]*
 Date: 11/19/2021

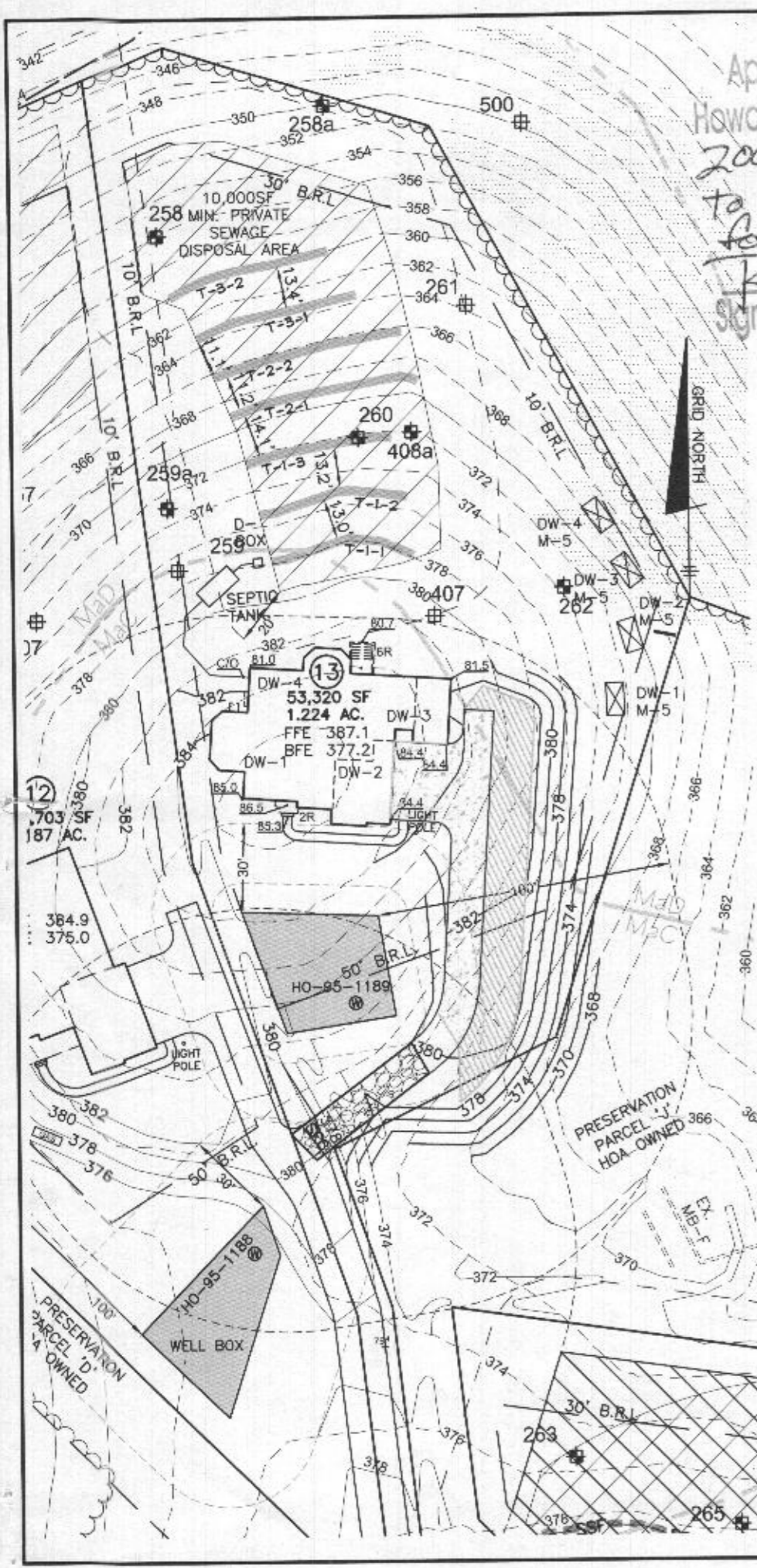
Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 28376, Expiration Date: 01-01-2023.



AAM-BEI

2021.11.09 09:12:47 -05'00

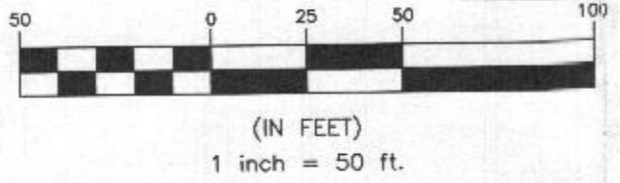
PROJECT:	MYRTUE PROPERTY LOT 13		
LOCATION:	TAX MAP: 10, GRID: 24, PARCEL: 225, ZONED: RC-DEO 1853 DAVIS BRANCH RD. WOODSTOCK, MD 21163 6TH ELECTION DISTRICT, HOWARD COUNTY, MD, TAX ID 352455		
TITLE:	ONSITE SEWAGE DISPOSAL PLAN		
HOUSE TYPE:	CUSTOM - KEYSTONE HOMES		
DATE:	NOVEMBER, 2021	PROJECT NO.	2099
SCALE:	AS SHOWN	DRAWING	2 OF 2



Approved Septic System Plan
 Howard County Health Department
 2000-gallon Septic Tank
 to Gravity Distribution
 for 5-bedroom residence
R. Builder 11/19/2021
 Signature Date MaC

LEGEND

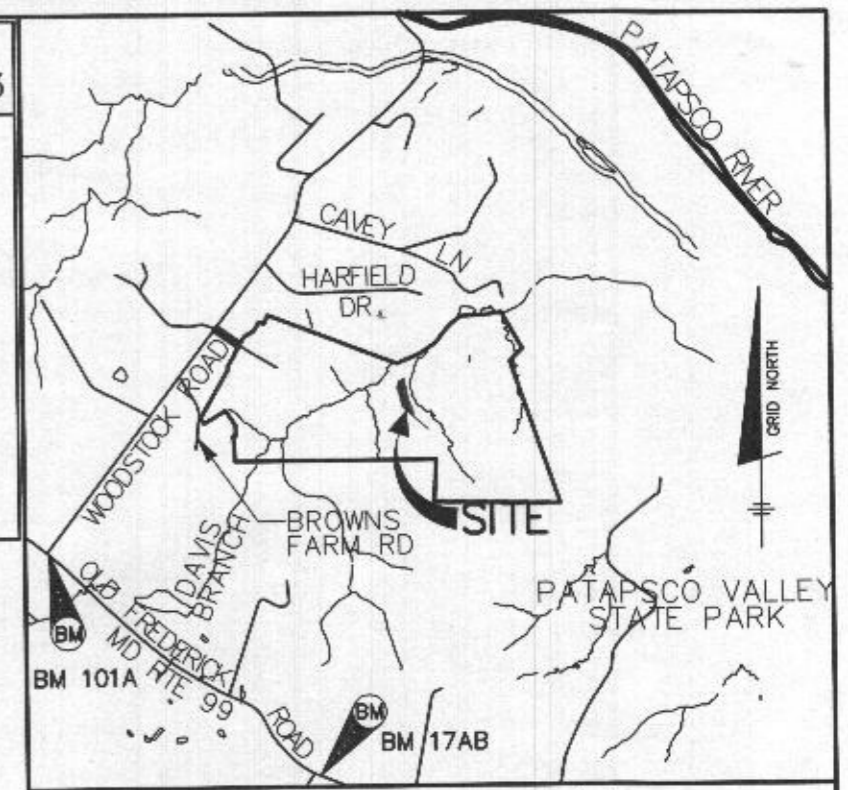
- 400 — PROPOSED CONTOURS
- 398 — EXISTING CONTOURS
- 400 — EXISTING PRIVATE SEWAGE DISPOSAL AREA
- ⊕ WELL BOX
- PROPOSED TREELINE
- EXISTING TREELINE
- SOILS MAP SYMBOL
- SOILS DELINEATION LINE
- PERC TEST PASSED
- PERC TEST FAILED
- PAVEMENT DISCONNECTION AND RECEIVING



BENCHMARK INFORMATION NAD83

Ho. Co. STATION 17AB
 STAMPED DISC SET ON TOP
 OF CONCRETE COLUMN
 NORTHING: 564468.943'
 EASTING: 1318257.375'
 ELEVATION: 561.105'

Ho. Co. STATION 101A
 STAMPED DISC SET ON TOP
 OF CONCRETE COLUMN
 NORTHING: 565347.937'
 EASTING: 1319266.269'
 ELEVATION: 588.708'

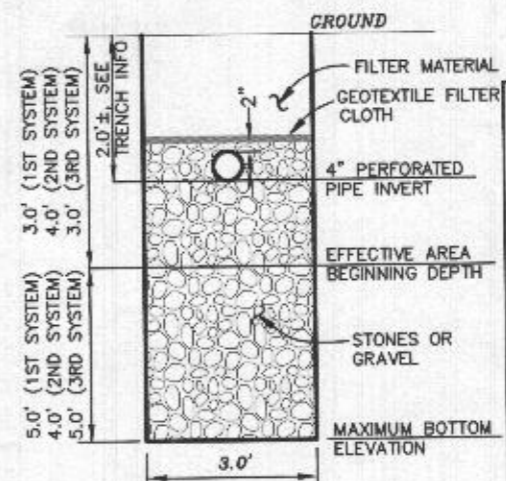


VICINITY MAP

SCALE: 1" = 2000'

GENERAL NOTES

1. THE LOT SHOWN HEREON WAS RECORDED ON THE PLAT FOR MYRTUE PROPERTY, PLAT NUMBER 23865. REFER TO THE PLAT FOR LOT DIMENSIONS, LOT AREA, ALL EASEMENTS AND CONDITIONS.
2. THE EXISTING WELL SHOWN ON THIS PLAN (HO-95-1189) HAS BEEN FIELD LOCATED BY DAFT, McCUNE WALKER, INC. AND IS SHOWN IN ACCORDANCE WITH THEIR SURVEY.
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 FEBRUARY 2003 AND SUPPLEMENTED WITH FIELD SURVEY BY DMW, INC. DATED 2005.
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.



TYPICAL TRENCH DETAIL
 NOT TO SCALE

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.



AAM-BEI

2021.11.18 11:30:33 -05'00

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

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PLAN VIEW
 1" = 50'

PROJECT: MYRTUE PROPERTY LOT 13	
LOCATION: TAX MAP: 10, GRID: 24, PARCEL: 225, ZONED: RC-DEO 1853 DAVIS BRANCH RD. WOODSTOCK, MD 21163 6TH ELECTION DISTRICT, HOWARD COUNTY, MD. TAX ID 352455	
TITLE: ONSITE SEWAGE DISPOSAL PLAN	
HOUSE TYPE: CUSTOM - KEYSTONE HOMES	
DATE: NOVEMBER, 2021	PROJECT NO. 2099
SCALE: AS SHOWN	DRAWING 1 OF 2