Howard County Health Department
Maura J. Rossman, M.D., Health Officer

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

RECEIPT DATE: 4-28-21 **ONSITE SEWAGE DISPOSAL SYSTEM** P 528880

APPROVAL DATE: 8/19/21 (SP) **PERMIT: CONSTRUCTION** A

PROPERTY ADDRESS: **12455 BARNARD WAY, WEST FRIENDSHIP, MD 21794**

SUBDIVISION: **MATHIS PROPERTY** LOT: **19** TAX ID: **03-313069**

CONTRACTOR: Brandon Smith Contractors EMAIL:

CONTRACTOR ADDRESS: P.O.Box 83, West Friendship, MD 21794 PHONE: 410-489-6909

PROPERTY OWNER: **DORSEY FAMILY HOMES, INC.** EMAIL:

OWNER ADDRESS: **10717-B BIRMINGHAM WAY, WOODSTOCK, MD 21163** PHONE:

SEPTIC TANK SIZE (GALLONS): **2000** TANK MANUFACTURER: **TBD**

PUMP MODEL: **EP04** PUMP SIZE **0.4 HP** PUMP TANK CAPACITY: **2000**

DISTRIBUTION SYSTEM: ☒ GRAVITY ☐ PRESSURE DOSED BEDROOMS: **5** APPLICATION RATE: **1.2**

TRENCHES:	LINEAR FEET REQUIRED: 94	INLET DEPTH: 2.0	
	TRENCH WIDTH: 3	MAXIMUM BOTTOM DEPTH: 7.0	
	MINIMUM SPACE BETWEEN TRENCHES: 10	EFFECTIVE AREA BEGINNING DEPTH: 3.5	
LOCATION:	**PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND TANK LOCATIONS MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.**		
NOTES:	**INSTALL CLEANOUT IN SHC.** **WATERTIGHT TEST OF TANKS IS LIOKELY NEEDED. EVALUATE SOIL AT PROPOSED TANKS' LOCATIONS.**		

ISSUED BY: **R BRICKER** ISSUE DATE: EXPIRATION DATE:

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

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

ROAD NAME

TRENCH/DRAINFIELD DATA

WIDTH	INLET	BOTTOM
3'	2'	7'

NUMBER OF TRENCHES 2
TOTAL LENGTH 94 F
ABSORPTION AREA 282 SF + 3.5' SIDE WALL
DISTRIBUTION BOX LEVEL N/A
DISTRIBUTION BOX BAFFLE YES
DISTRIBUTION BOX PORT YES

SEPTIC TANK DATA

SEPTIC TANK 1 LEVEL YES
MANUFACTURER BABYLON
CAPACITY 2000 GAL
SEAM LOC TOP
TANK LID DEPTH
BAFFLES inlet + outlet
BAFFLE FILTER —
MANHOLE LOC FRONT/BACK
6" PORT LOC —
WATERTIGHT TEST —
SLOTTED yes
DATE ON LID 05/27/2021

PUMP/SEPTIC TANK LEVEL YES
MANUFACTURER BABYLON
CAPACITY 2000 GAL
SEAM LOC Top
TANK LID DEPTH
BAFFLES —
BAFFLE FILTER —
MANHOLE LOC FRONT/BACK
6" PORT LOC —
WATERTIGHT TEST —
SLOTTED —
DATE ON LID 04/19/2021

PRE-CONSTRUCTION:
7/1/21 - laid out 2 trenches @ 47' each, SDA staked, septic tanks & d box staked, informed contractor about potential for ST water tight tests. (RR)

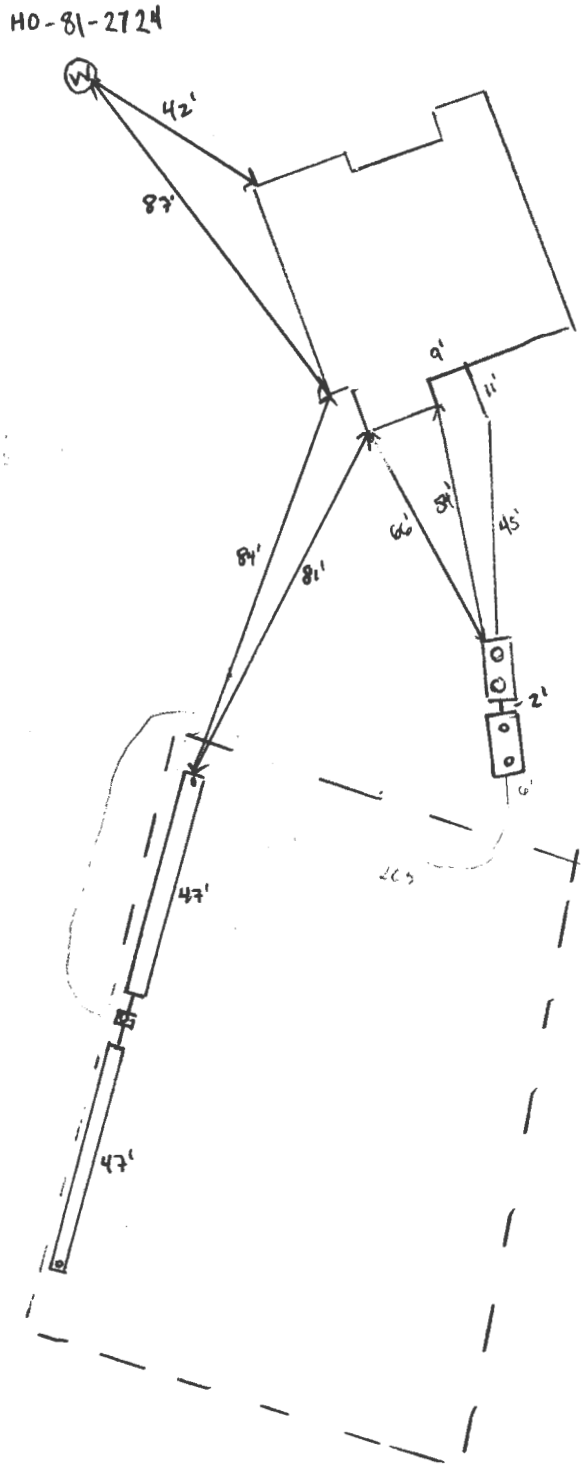
INSTALLATION: 07/02/2021 (AM) STC INSTALLED; ST SET - GRADE IS EXCESS OF 3' TO CUT DOWN. TANK SET IN STANDING WATER W/O #57 STONE. (PM) TRENCHES COMPLETED, D BOX SET, PUMP TANK SET. @ 7/6/21 FM line from pump tank to d-box complete. Re-inspect for 3' of cover on tanks and P & A. (ST) 8/19/21 3.5' of cover on tanks. Bowl depression around inlet manhole of septic tank - told contractor to regrade. Alarm and pump observed to work with water pumping up to d-box. Alarm and pump obs. on seperate circuits in basement. Alarm located outside next to tanks. (ST)

FINAL INSPECTOR Susan Thomas DATE OF APPROVAL 8/19/21

1" ≈ 40'

12455 Barnard Way

NOT TO SCALE



A 37995

SUBDIVISION: MATHIS PROPERTY BARNARD WAY

LOT NUMBER: 19

DRY WELL OR DRY WELL AND TRENCH

_____ sq. ft./bedroom

	Septic Tank	Minimum Total Square Feet
3 bedroom	1000 gallon	_____
4 bedroom	1250 gallon	_____
5 bedroom	1500 gallon	_____

Inlet _____ feet below original grade.

Bottom maximum depth _____ feet below original grade.

Effective area begins at _____ feet below original grade.

NOTE: If trench is used to make up absorbent area, run the trench on level ground and leave a 5-foot earth buffer between dry well and trench. No trench is to exceed 100 feet in length. Trench inlet to be same as dry well, with _____ feet of stone below distribution pipe.

TRENCHES

180 sq. ft./bedroom

Trench to be 2 wide.

Inlet 3 feet below original grade.

Bottom maximum depth 7 feet below original grade.

Effective area begins at 3 feet below original grade.

4 feet of stone below distribution pipe.

NOTE:
(1) No trench to exceed 100 feet in length.
(2) If more than one trench used, a distribution box is required.
(3) Trenches to be installed on level ground.
(4) Call for inspection of trench before gravel is installed.
(5) Provide 6" - 8" diameter cleanout and cap to grade or above on septic tank and drywell.
(6) If a garbage disposal is used, increase septic tank capacity by 50% and increase absorbent sidewall area by 22%.

LOCATION: START THE FIRST TRENCH 240' FROM THE SHORT (225') LOT LINE AND 60 FROM THE LONG (1120') LOT LINE. RUN TRENCHES ALONG CONTOUR TOWARD BACK OF PROPERTY.

* TRENCHES TO BE STAKED BY ENGINEER.

* LOCATION IS 40' HIGHER THAT PLATTED SEPTIC AREA.

HD-191

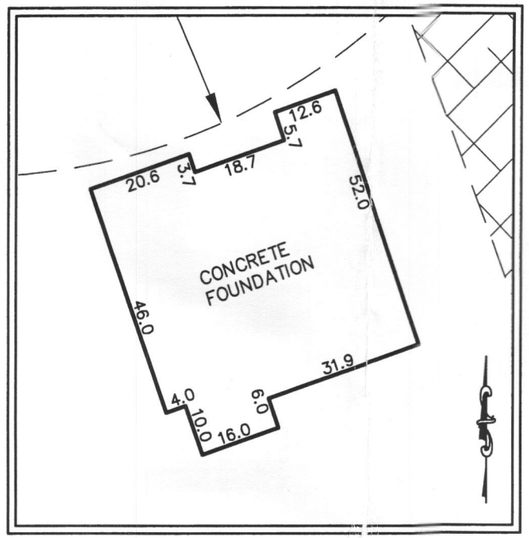
1. THIS IS NOT A BOUNDARY SURVEY.
2. THIS DRAWING WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT
2. BEARINGS SHOWN HEREON ARE BASED ON RECORD PLAT DATUM (NAD27).
3. DIMENSION SHOWN FROM THE BUILDINGS TO THE PROPERTY LINE ARE AT AN ACCURACY OF 3.0' (PLUS OR MINUS)
4. THE INFORMATION SHOWN HAS BEEN ESTABLISHED BY CURRENT ACCEPTABLE SURVEY PROCEDURES AND FROM AVAILABLE RECORD INFORMATION. THIS DRAWING IS TO BE USED FOR TITLE TRANSFER FINANCING, OR REFINANCING ONLY AND IS NOT TO BE USED FOR THE ESTABLISHMENT OF PROPERTY LINES, LOCATION OF FENCES, GARAGES, BUILDINGS, OR OTHER EXISTING OR FUTURE IMPROVEMENTS.
5. 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. 21351, EXPIRATION DATE: 07/15/21.

01/26/2021

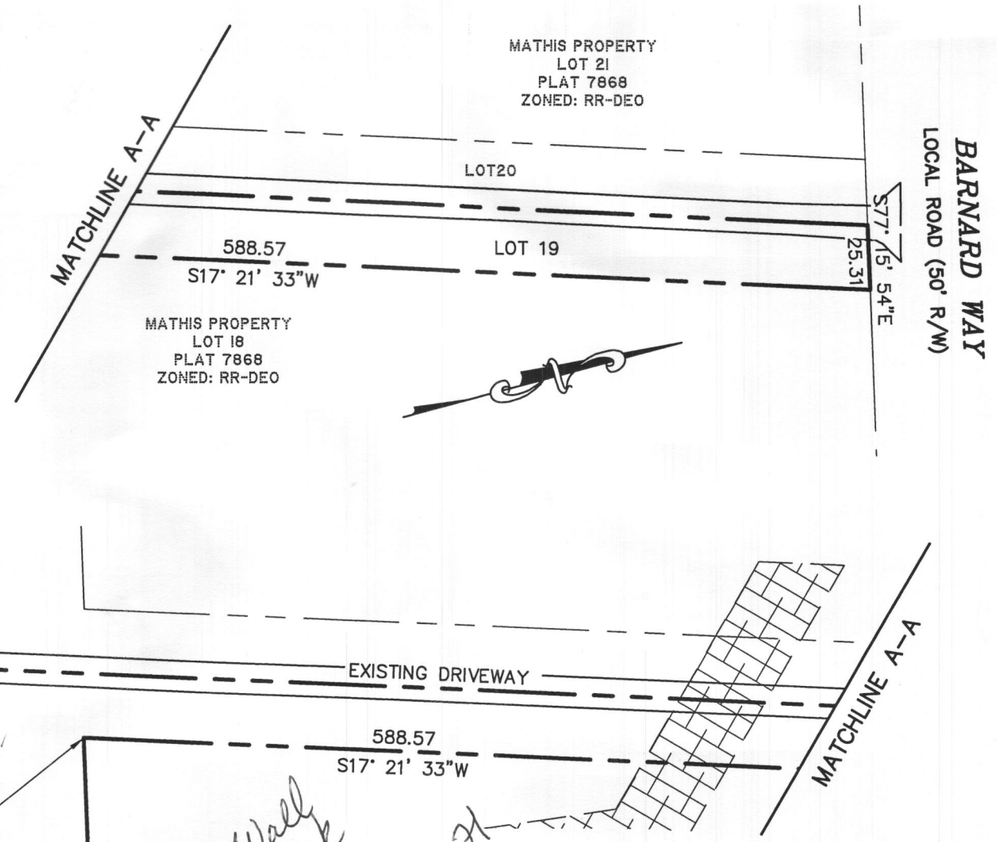
TODD M. HILL
PROF. LAND SURVEYOR MARYLAND No. 21351

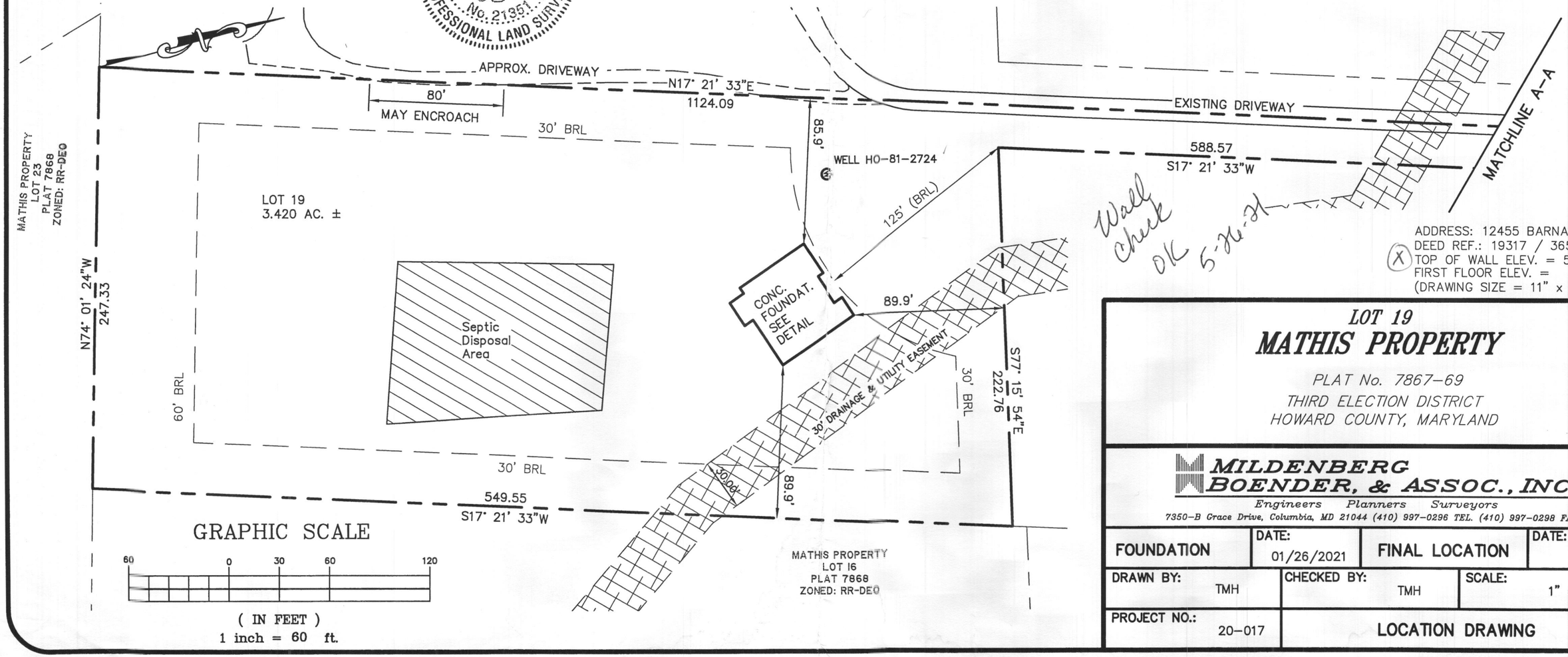
DATE

STATE OF MARYLAND
TODD M. HILL
No. 21351
PROFESSIONAL LAND SURVEYOR



HOUSE DETAIL (SCALE: 1" = 30')





GRAPHIC SCALE

60 0 30 60 120

(IN FEET)
1 inch = 60 ft.

Wall Check OK 5-26-21

ADDRESS: 12455 BARNARD WAY
DEED REF.: 19317 / 365
(X) TOP OF WALL ELEV. = 565.9' ±
FIRST FLOOR ELEV. =
(DRAWING SIZE = 11" x 17")

LOT 19
MATHIS PROPERTY

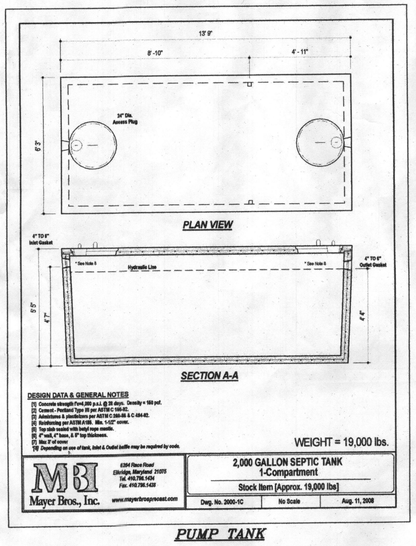
PLAT No. 7867-69
THIRD ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

MILDENBERG BOENDER, & ASSOC., INC.
Engineers Planners Surveyors
7350-B Grace Drive, Columbia, MD 21044 (410) 997-0296 TEL. (410) 997-0298 FAX.

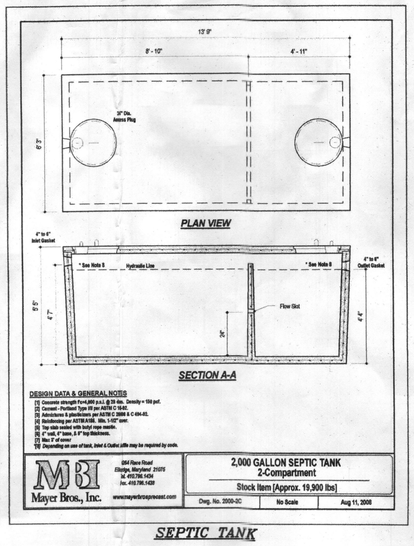
FOUNDATION	DATE: 01/26/2021	FINAL LOCATION	DATE:
DRAWN BY: TMH	CHECKED BY: TMH	SCALE: 1" = 60'	
PROJECT NO.: 20-017	LOCATION DRAWING		

SOILS TABLE (WITHIN LOD)

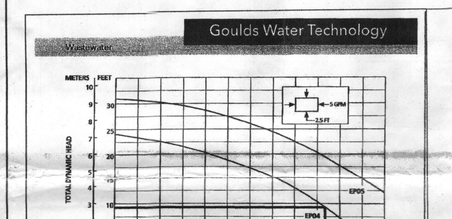
SYMBOL	RATING	NAME	K FACTOR
GgA	(B)	GLENELG LOAM, 0–3% SLOPES.	.20
GgB	(B)	GLENELG LOAM, 3–8% SLOPES.	.20
GmB	(C)	GLENVILLE SILT LOAM, 3–8% SLOPES.	.35

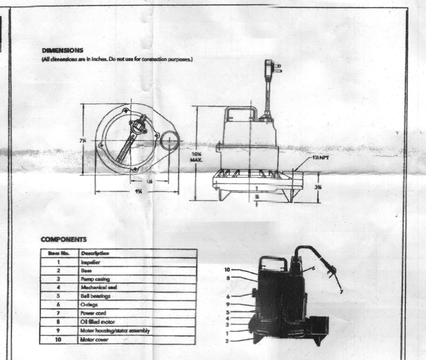


PUMP TANK



SEPTIC TANK

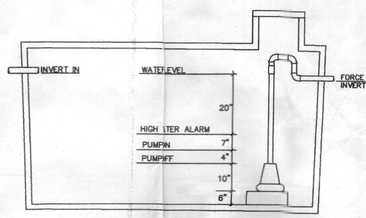




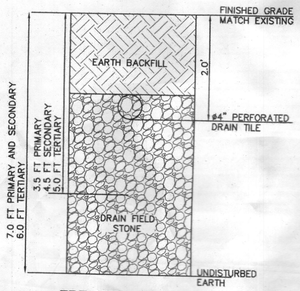
STATIC HEAD		7.53	FT
FORCE MAIN	2 IN DIAMETER SCH 40 PVC	2.047	IN
AREA		0.02285	SQ FT
NO INTERMEDIATE LOW POINTS; MIN VELOCITY =		2	FPS
FLOW RATE = 0.0457 CFS, =		20.5	GPM
FOR CALCULATING DYNAMIC HEAD,	USE	40	GPM
HEAD LOSS IN FEET/100 FT OF PIPE = 0.2083(100/C)^1.852*Q^1.852/D^4.8655 (HAZEN WILLIAMS EQN.)			
C = ROUGHNESS COEFFICIENT =	140		
Q = FLOW IN GPM =	40		
D = DIAMETER IN INCHES =	2.047		
HEAD LOSS IN FEET/100 FT OF PIPE =		0.833	FT
HEAD LOSS IN FEET FOR ACTUAL LENGTH		1.666	FT
FITTINGS LOSS: USE EQUIVALENT PIPE LENGTH			
90° ELBOW	5.5 FT EQUIVALENT x5	.275	FT
45° ELBOW	3.5 FT. EQUIVALENT x1	.035	FT
2"X3" REDUCER	2.0 FT EQUIVALENT X1	.02	FT
TOTAL DYNAMIC HEAD =		9.53	FT
USE GOULD EP04 PUMP (OR EQUIVALENT)			

FM HOLDS 30± GALLONS OF SEWAGE. ALLOW FOR RUN BACK.
900 GPD, PUMP RUNS 6X DAILY, 150 GALLONS PLUS
RUNBACK 30 GALLONS
RUN TIME = 180 GALLONS/47 GPM = (MINUTES/RUN) 3 MIN. 50 SEC.

ON-SITE SEWAGE DISPOSAL SYSTEM PUMP DESIGN



PUMP CONTROL ELEVATIONS
NOT TO SCALE



TRENCH DETAIL
NOT TO SCALE

APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS

COUNTY HEALTH OFFICER — DATE
HOWARD COUNTY HEALTH DEPARTMENT

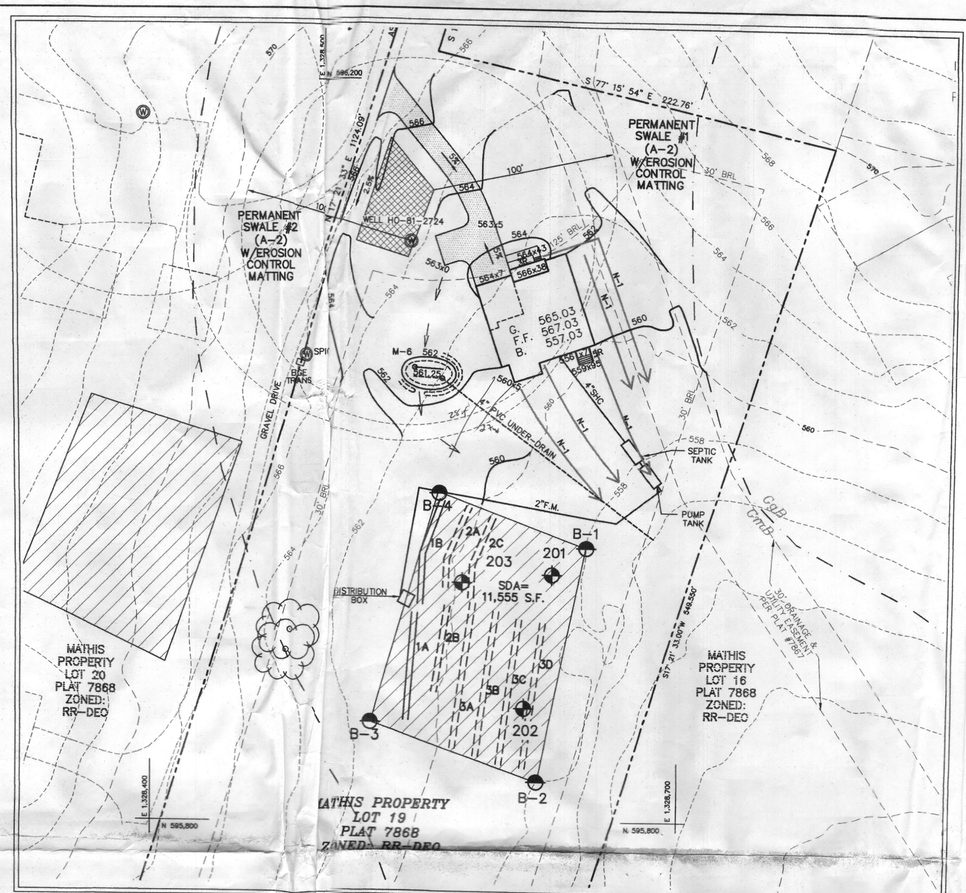
STATE OF MARYLAND — MICHAEL G. KRETSCH — NO. 34027 — REGISTERED PROFESSIONAL ENGINEER

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. 34027, EXP DATE 8/16/2021

MICHAEL G. KRETSCH, P.E. — 09/14/2020 DATE:

OWNER/DEVELOPER

DORSEY FAMILY HOMES, INC.
10717 BIRMINGHAM WAY
WOODSTOCK, MARYLAND 21163
(410)465-5739



01-SITE SEWAGE DISPOSAL SYSTEM PLAN
SCALE: 1"=40'

SEPTIC TRENCH SIZING

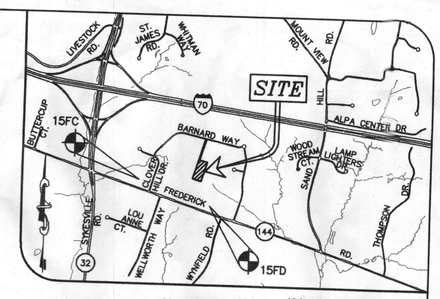
SYSTEM	APPLICATION RATE (GPD / SF)	MINIMUM PERC RATE	AREA OF REQUIRED TRENCH (SF)	TRENCH WIDTH (FT)	LENGTH OF REQUIRED TRENCH (LF)	EFFECTIVE DEPTH BEGINS (FT)	TRENCH BOTTOM DEPTH (FT)	TRENCH REDUCTION FACTOR**	ADJUSTED LENGTH OF REQUIRED TRENCH (LF)	MINIMUM TRENCH SPACING (FT)	NUMBER OF TRENCHES	PROVIDED TRENCH LENGTH (FT)
PRIMARY	1.2	0	750	3	250.0	3.5	7.0	0.45	112.5	10.0	2	57
SECONDARY	1.2	0	750	3	250.0	4.5	7.0	0.55	137.5	10.0	3	46
TERTIARY	0.8	0	1,125	3	375.0	5.0	6.0	0.83	259.4	10.0	4	78

SEWAGE SYSTEM CHART

DESCRIPTION	VALUE
BASE ELEVATION	557.03
INVERT OF THE HOUSE	555.53
FINISGRADE AT SEPTIC TANK	558.20
TOP SEPTIC TANK	555.20
INVERTO SEPTIC TANK	554.37
INVERT OF SEPTIC TANK	554.12
FINISGRADE AT PUMP TANK	557.80
TOP PUMP TANK	554.89
INVERTO PUMP TANK	554.06
INVERT OF PUMP TANK	553.81
INVERTO DISTRIBUTION BOX	559.00
PUMP FLOOR	550.14
PUMP	551.47
PUMP	551.80
HIGHER ALARM	552.40
WATER LEVEL	554.06
TOTAL DYNAMIC HEAD	9.53
DOSE SIZE	180 GALL
PUMP RUN TIME	3.83 MIN.

SEPTIC TRENCH ELEVATIONS

TRENCH	EXISTING GROUND ELEVATION	INVERT ELEVATION	BOTTOM OF TRENCH EL.
PRIMARY A	560.6	558.6	553.6
PRIMARY B	560.6	558.6	553.6
SECONDARY A	560.1	558.1	553.1
SECONDARY B	560.1	558.1	553.1
SECONDARY C	559.8	557.8	552.8
TERTIARY A	559.8	557.8	553.8
TERTIARY B	559.4	557.4	553.4
TERTIARY C	558.8	556.8	552.8
TERTIARY D	558.4	556.1	552.4



VICINITY MAP
SCALE: 1"=2000'
ADC MAP: 18 GRID: D-3

GENERAL NOTES:

1. THE SUBJECT PROPERTY IS ZONED RR-DEO PER THE 10/06/2013 COMPREHENSIVE ZONING PLAN.
2. PARCEL BACKGROUND:
   ADDRESS : 1245 BARNARD WAY,WEST FRIENDSHIP, MD 21794
   TAX MAP 15; PARCEL 15; LOT 19
   ELECTION DISTRICT : THIRD
   DEED REFERENCE: 19317/00365 RECORD
   PLAT NO: 7868
   AREA : 3.42 ACRES
   TOTAL NUMBER OF UNITS : 1 TYPE OF PROPOSED UNIT : SFD
   PROPOSED USE FOR SITE : RESIDENTIAL.
3. PROJECT BOUNDARY IS BASED ON A FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED ON OR ABOUT OCTOBER, 2018 BY MILDENBERG, BOENDER & ASSOC.
4. TOPOGRAPHY SHOWN HERE WAS FIELD VERIFIED BY MILDENBERG, BOENDER & ASSOC, INC. IN MAY OF 2020 TO ACCURATELY REPRESENT THE RELATIVE CHANGES ON THE SUBJECT PROPERTY.
5. HORIZONTAL AND VERTICAL DATUMS ARE RELATED TO THE MARYLAND STATE PLANE COORDINATE SYSTEM AS PROJECTED FROM HOWARD COUNTY CONTROL STATIONS NO. 15FC & 15FD
   STA. No. 15FC: N 595,354.551; E 1,327,142.598; EL. 570.235
   STA. No. 15FD: N 594,794.027; E 1,328,869.304; EL. 534.211
6. 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.
7. SOILS LOCATION AND CLASSIFICATION BASED ON HOWARD COUNTY GIS SOIL SURVEY
8. THE WELL (HO-81-2724) HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN.
9. ANY CHANGES TO THE LOCATION OR DEPTH TO ANY COMPONENTS MUST BE APPROVED BY THE ENGINEER AND HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO INSTALLATION. A SITE PLAN MAY BE REQUIRED.
10. SEPTIC TANKS AND DRAIN FIELD SHOWN IS BASED ON DATA PROVIDED BY HOWARD COUNTY HEALTH DEPARTMENT.
11. THIS AREA DESIGNATES A PRIVATE SEWERAGE AREA 10,000 SQ. FT. AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF ENVIRONMENT FOR INDIVIDUAL SEWERAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THIS EASEMENT SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWERAGE EASEMENT. RECORDATION OF A MODIFIED EASEMENT SHALL NOT BE NECESSARY.
12. THE MAXIMUM EARTH COVER OVER THE SEPTIC AND PUMP TANKS IS THREE (3) FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
13. THE MAXIMUM EARTH COVER OVER A HEAVY LOAD BEARING TANK IS FIVE (5) FEET. GREATER EARTH COVER IS NOT ALLOWED.
14. ANY WELLS OR SEPTIC SYSTEMS LOCATED WITHIN 100' OF THE PROPERTY BOUNDARIES AND 200' DOWN GRADIENT OF ANY WELL AND/OR SEPTIC SYSTEMS HAVE BEEN SHOWN.
15. ALL TRENCHES ARE FED BY GRAVITY FROM THE DISTRIBUTION BOX.
16. ELECTRICAL WORK FOR THE INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.

System Plan
Department
2000-gal Septic Tank
W/2000-gal Pump Tank
& GOULDS EP-04 Pump
or equiv.
RBuckler 9/22/2020
Signature Date
to Gravity Distribution
for 6-bedroom SFD

ON-SITE SEWAGE DISPOSAL SYSTEM:

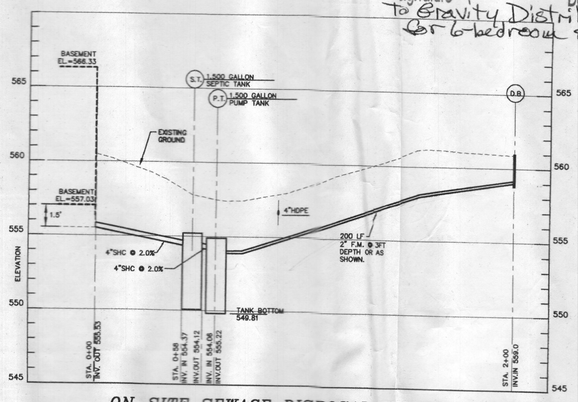
RESIDENTIAL SYSTEM DESIGN:
6 BEDROOM HOUSE
(LIVING AREA=2,663 SQ.FT. 1ST, 2ND FLR)
PLUS ½ BASEMENT 482 SQ.FT. = 3145 TOTAL
USE 2,000 GALLON SEPTIC TANK
150 GALLONS X # OF BEDROOMS =
VOLUME OF WASTEWATER /DAY
150 X 6 = 900 GPD

PRIMARY AND SECONDARY SYSTEM:
PERC RATE = 2–5 MINUTES/INCH
APPLICATION RATE = 1.2 GPD/SQ.FT.
DESIGN FLOW ÷ APPLICATION RATE =
SQ.FT. OF TRENCH REQUIRED
900 ÷ 1.2 = 750 SQ.FT.
SQ.FT. REQUIRED ÷ WIDTH OF TRENCH
= LENGTH OF TRENCH
750 ÷ 3.0' = 250.0 FT

PRIMARY SYSTEM:
USE 42" OF GRAVEL
250.0 X 0.45 = 112.5 USE 114 FT
USE TWO (2) TRENCHES,
PROVIDED LENGTH: 57 FT.
A MINIMUM OF 10' BETWEEN TRENCHES
UTILIZING SIDEWALL REDUCTION CREDIT.

SECONDARY SYSTEM:
USE 30" OF GRAVEL
250.0 X 0.55 = 137.5 USE 138 FT
USE THREE (3) TRENCHES,
PROVIDED LENGTH: 46 FT.
A MINIMUM OF 10' BETWEEN TRENCHES
UTILIZING SIDEWALL REDUCTION CREDIT.

TERTIARY SYSTEM
PERC RATE = 6–15 MINUTES/INCH
APPLICATION RATE = 0.8 GPD/SQ.FT.
DESIGN FLOW ÷ APPLICATION RATE =
SQ.FT. OF TRENCH REQUIRED
900 ÷ 0.8 = 1,125 SQ.FT.
SQ.FT. REQUIRED ÷ WIDTH OF TRENCH
= LENGTH OF TRENCH
1,125 ÷ 3.0' = 375.0 FT
USE 12" OF GRAVEL BELOW DRAIN PIPE
375 X 0.83 = 311.25 USE 312 FT
USE FOUR (4) TRENCHES,
PROVIDED LENGTH: 78 FT.
A MINIMUM OF 10' BETWEEN TRENCHES
UTILIZING SIDEWALL REDUCTION CREDIT.



ON-SITE SEWAGE DISPOSAL SYSTEM PROFILE
SCALE: HOR. 1"=50'
VER. 1"=5'

no.	description	date
1.	Revise septic computation to reflect 6 bedroom.	9/03/20

project 20-017 | date SEP.2020
illustration MM | engineering MM | approval MGK
scale 1"= 40'

MATHIS PROPERTY, LOT 19
12455 BARNARD WAY, WEST FRIENDSHIP
TAX MAP 15, GRID 12, PARCEL 15
THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
ON-SITE SEWAGE DISPOSAL SYSTEM PLAN

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
7360-B Grace Drive, Columbia, MD 21044
(410) 997-0296 Tel. (410) 997-0298 Fax

M:\2020\20-017 Mathis Property\PLOT plan\PLOT PLAN-2R.dwg