Howard County Health Department

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: 7/7/22

ONSITE SEWAGE DISPOSAL SYSTEM PERMIT: CONSTRUCTION

P 572077

APPROVAL DATE: 12/2/2022

A

PROPERTY ADDRESS: 14775 McCann Farm Road

SUBDIVISION: McCann Estates - West LOT: 2 TAX ID:

CONTRACTOR: Hatfields Equipment EMAIL:

CONTRACTOR ADDRESS: PHONE:

PROPERTY OWNER: Nicholas Lally EMAIL:

OWNER ADDRESS: 14830 Old Frederick Rd 21797 PHONE:

SEPTIC TANK SIZE (GALLONS): 2,000 TANK MANUFACTURER: Mayer Bros

PUMP MODEL: EP05 PUMP SIZE 0.4 PUMP TANK CAPACITY: 2,000

DISTRIBUTION SYSTEM: ☒ GRAVITY ☐ PRESSURE DOSED BEDROOMS: 6 APPLICATION RATE: 0.8

TRENCHES:	LINEAR FEET REQUIRED:	168.75	INLET DEPTH:	2'
	TRENCH WIDTH:	3'	MAXIMUM BOTTOM DEPTH:	7.5'
	MINIMUM SPACE BETWEEN TRENCHES:	10'	EFFECTIVE AREA BEGINNING DEPTH:	4'
LOCATION:	PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND TANK LOCATIONS MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.			
NOTES:	Install two trenches @ 85' each.			

ISSUED BY: Hank Oswald ISSUE DATE: 7/7/22 EXPIRATION DATE: 7/7/23

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 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

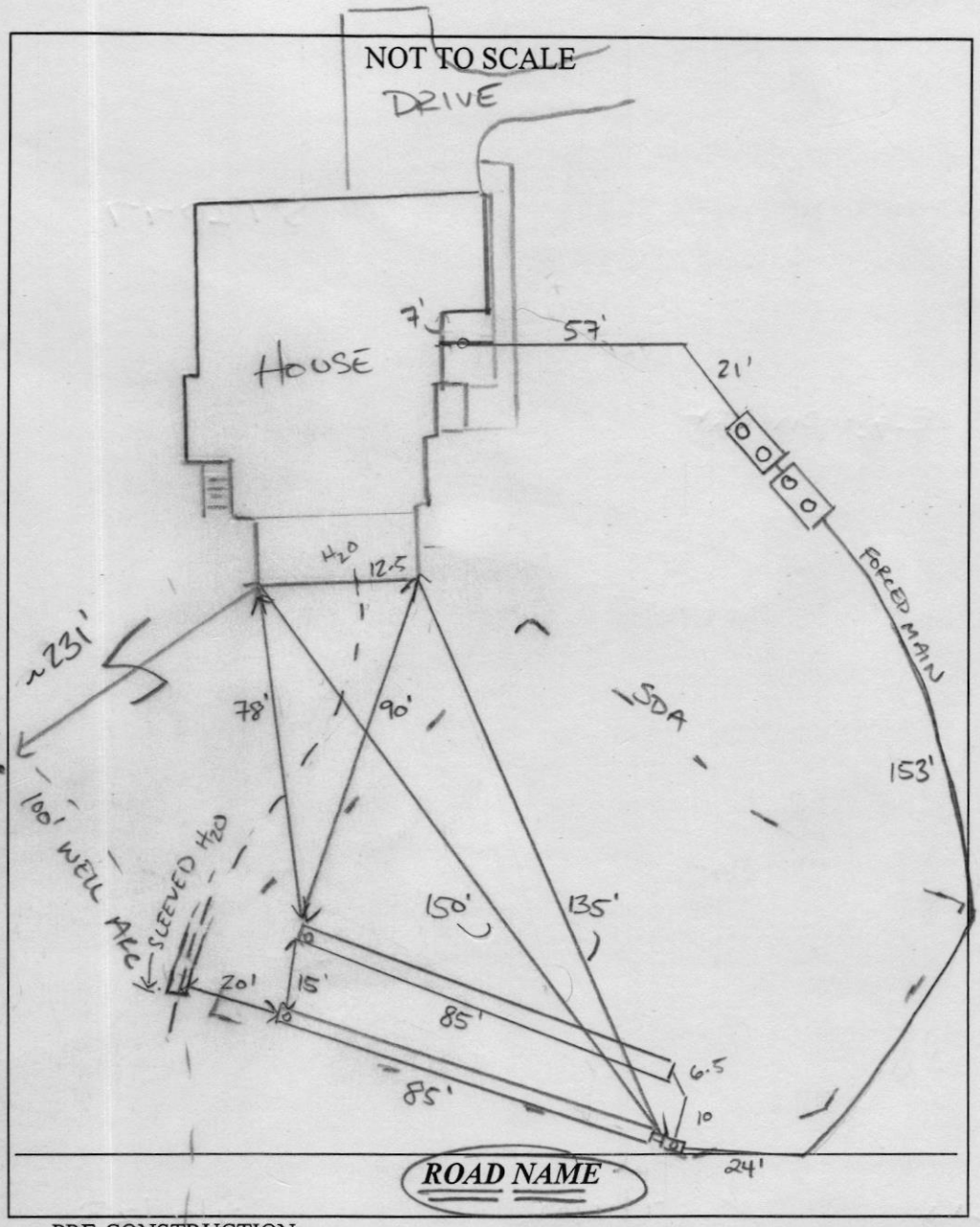
☐ *ELECTRICAL PERMIT ISSUED* E B21004405

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.



TRENCH/DRAINFIELD DATA

WIDTH	INLET	BOTTOM
3'	2'	7.5'

NUMBER OF TRENCHES 2
TOTAL LENGTH 170 F
ABSORPTION AREA 510 SF + 3.5' SIDE WALL
DISTRIBUTION BOX LEVEL PUMP
DISTRIBUTION BOX BAFFLE CONC.
DISTRIBUTION BOX PORT YES

SEPTIC TANK DATA

TB

SEPTIC TANK 1 LEVEL YES
MANUFACTURER BABYLON
CAPACITY 2000 GAL
SEAM LOC TOP
TANK LID DEPTH 4'
BAFFLES YES
BAFFLE FILTER —
MANHOLE LOC FRONT/BACK
6" PORT LOC —
WATERTIGHT TEST —
SLOTTED YES
DATE ON LID 06/24/2022

PUMP/SEPTIC TANK LEVEL YES
MANUFACTURER BABYLON
CAPACITY 2000 GAL
SEAM LOC TOP
TANK LID DEPTH 4'
BAFFLES —
BAFFLE FILTER —
MANHOLE LOC FRONT/BACK
6" PORT LOC —
WATERTIGHT TEST —
SLOTTED —
DATE ON LID 07/20/2022

PRE-CONSTRUCTION:

8/19/2022 SDA, trenches + tanks staked. Contour shot in field w/ in 3" ± end to end. Spec's look good. Install system per plan

INSTALLATION: 08/22/2022 TAS Complete. 08/23/2022 SHC installed, tanks set, FM install. 08/24/2022 FM complete.
12/2/22 - Contractor on site for inspection. P & A test successful. Alarm mounted outside, audio & visual. Panel on dedicated circuit. SP/KW

FINAL INSPECTOR K. Wolf / Shawn P. DATE OF APPROVAL 12/2/2022

Mashid Tringa

From: Bruce Harvey <BruceHarvey@williamsburgllc.com>
Sent: Friday, April 1, 2022 1:14 PM
To: Samer Alomer; Mashid Tringa; Maya Mildenberg
Cc: Chris Wine
Subject: FW: B21004405 and B21004406_McCann Farm Road

Please see below from Hank Oswald about new OSDS plans for Lot 1 East and Lot 2 West at McCann Estates. Please let us know how quickly these can be completed.

Bruce A. Harvey
President
Williamsburg Homes
410-997-8800 (o)
443-398-4358 (c)
Email: bruceharvey@williamsburgllc.com

From: Chris Wine <ChrisWine@williamsburgllc.com>
Sent: Friday, April 1, 2022 9:20 AM
To: Bruce Harvey <BruceHarvey@williamsburgllc.com>; Samer Alomer <salomer@mba-eng.com>
Subject: Fw: B21004405 and B21004406_McCann Farm Road

See below on the McCann permits

From: Oswald, Hank <hoswald@howardcountymd.gov>
Sent: Friday, April 1, 2022 8:49 AM
To: Chris Wine <ChrisWine@williamsburgllc.com>
Subject: B21004405 and B21004406_McCann Farm Road

Hi Chris:

Good morning. This office will need a revised Onsite Sewage Disposal System (OSDS) plan for building permits B21004405 (14775 McCann Farm Road) and B21004406 (14740 McCann Farm Road).

Should you have any questions, please don't hesitate to ask.

Thanks,

Hank

Hank Oswald, L.E.H.S.
Howard County Health Department
Well & Septic Program
410.313.1786
hoswald@howardcountymd.gov

Oswald, Hank

From: Oswald, Hank
Sent: Friday, October 22, 2021 10:14 AM
To: Maya Mildenberg (maya@mba-eng.com)
Subject: OSDS Plan_14775 McCann Farm Road_McCann Estates - West Lot 2

Hi Maya:

Good morning. The OSDS Plan for 14775 McCann Farm Road, McCann Estates – West Lot 2 has been reviewed with the following comments:

1. SDA may not be within 25 feet of steep slopes (greater than 25 %)
2. Tanks may not exceed 3 feet below grade.
3. Raise trench inverts to 2 feet below grade for better design
4. Add test hole #s to plan as well as SDA sq. footage
5. Label all stormwater management devices
6. 2nd replacement system rate is 0.8 (not 0.6)
7. Label calculation for emergency storage above high water alarm.
8. Clarify pump model information. Please note: Pump should not be a 230v model.
9. Initial calc 375 x .0.45 = 168.75, 375 x .4545 = 170.45

Should you have any questions ,please don't hesitate to ask.

Thanks,

Hank

Hank Oswald, L.E.H.S.
Howard County Health Department
Well & Septic Program
410.313.1786
hoswald@howardcountymd.gov

Oswald, Hank

From: Oswald, Hank
Sent: Tuesday, November 2, 2021 8:24 AM
To: Maya Mildenberg
Subject: RE: OSDS Plan_14775 McCann Farm Road_McCann Estates - West Lot 2
Attachments: [Untitled].pdf

Hi Maya:

Good morning. It looks like the grading near DW M-5 is greater than 25 %. It looks to be between 33 and 36 % (see attachment). Can you please check it for me?

Thanks,

Hank

From: Maya Mildenberg <maya@mba-eng.com>
Sent: Thursday, October 28, 2021 1:29 PM
To: Oswald, Hank <hoswald@howardcountymd.gov>
Subject: RE: OSDS Plan_14775 McCann Farm Road_McCann Estates - West Lot 2

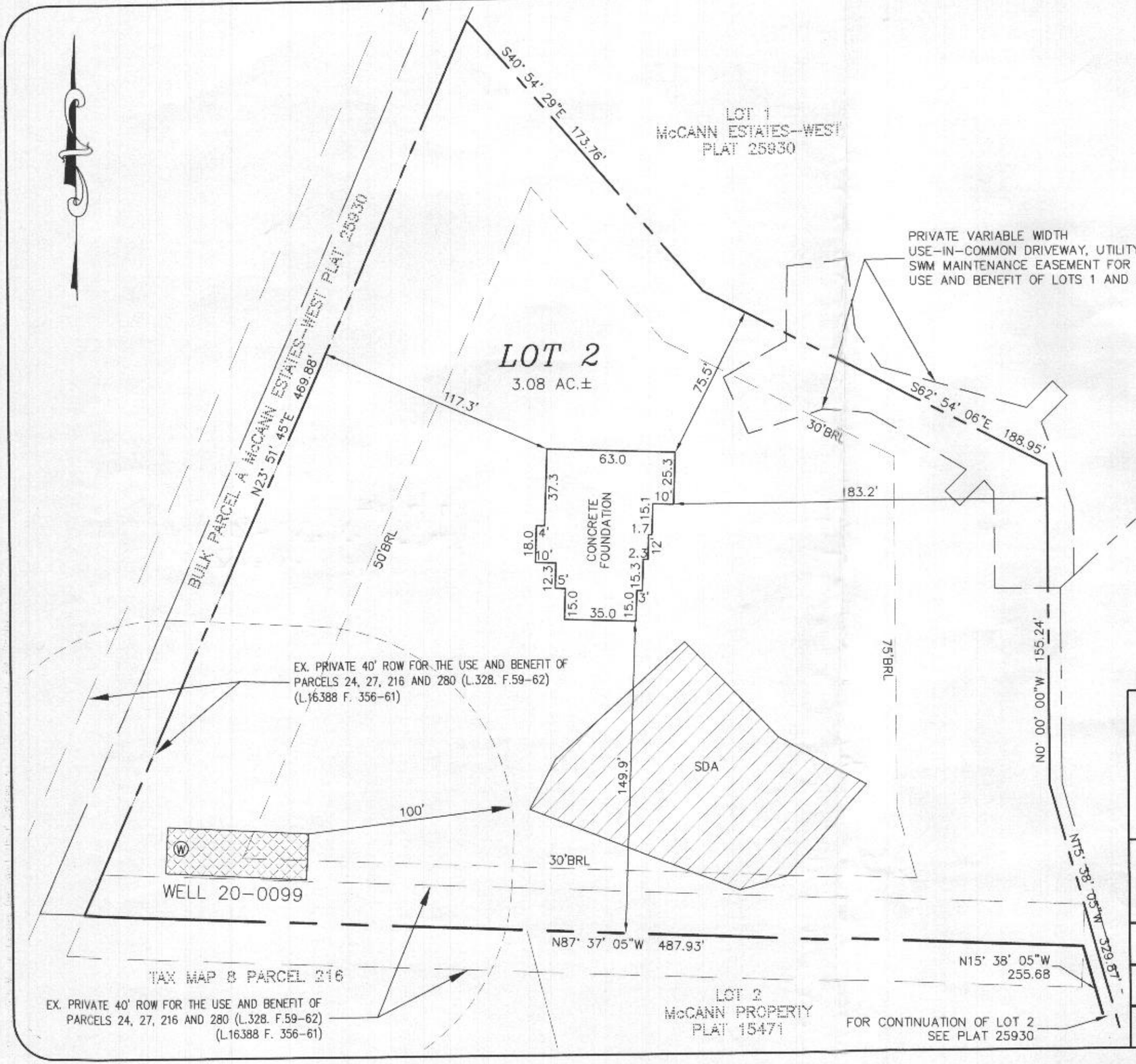
[Note: This email originated from outside of the organization. Please only click on links or attachments if you know the sender.]

Good afternoon Hank,

Attached are the revised OSDS plans for Lots 1 and 2 at McCann Estates-West, and the response letters to your comments dated October 22 . Three copies of the revised plans will be submitted this afternoon.

Thanks

Maya M Mildenberg
Vice President
Mildenberg, Boender & Assoc., Inc.
7350B Grace Drive, Columbia, MD 20144
410-997-0296
MILDENBERG, BOENDER AND ASSOC., INC.
Engineers Planners Surveyors



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 NAD83 DATUM.
3. DIMENSION SHOWN FROM THE BUILDINGS TO THE PROPERTY LINE ARE AT AN ACCURACY OF 1.0' (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 PROPERTY LINE SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 574, EXPIRATION DATE: 03/21/23.

Gary E. Lane 06-25-22

GARY E. LANE — DATE

PROP. LINE SURVEYOR MARYLAND No. 574

STATE OF MARYLAND — GARY EDWARD LANE — No. 574 — PROPERTY LINE SURVEYOR

7/5/22
Will check o.k.
-Hank

ADDRESS: 14775 McCann Farm Road
DEED REF.: 21571 / 355
TOP OF WALL ELEV. = 635.7 ±
FIRST FLOOR ELEV. = N/A
(DRAWING SIZE = 11" x 17")

LOT 2

McCann Estates-West

PLAT No. 25930
FOURTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

MILDENBERG BOENDER, & ASSOC., INC.
Engineers Planners Surveyors
8318 Forrest Street, Suite 300, Ellicott City, MD 21043

FOUNDATION	DATE: 06/25/22	FINAL LOCATION	DATE: N/A
DRAWN BY: GEL	CHECKED BY: GEL	SCALE: 1" =50'	
PROJECT NO.: 21-026	LOCATION DRAWING		

SOILS TABLE

SYMBOL	RATING	NAME	K FACTOR
GgB	(B)	GLENELG LOAM, 3–8% SLOPES.	.20
GgC	(B)	GLENELG LOAM, 8–15% SLOPES.	.20
GmB	(C)	GLENVILLE SILT LOAM, 3–8% SLOPES	.37
MkF	(B)	MANOR–BRINKLOW COMPLEX, 25–65% SLOPES	.24

SEPTIC TRENCH SIZING

SYSTEM	MAXIMUM FLOWRATE (GPD)	APPLICATION RATE (GPD / SF)	AREA OF REQUIRED TRENCH (SF)	TRENCH WIDTH (FT)	LENGTH OF REQUIRED TRENCH (LF)	SIDEWALL REDUCTION FACTOR	EFFECTIVE DEPTH BEGINS (FT)	TRENCH BOTTOM DEPTH (FT)	ADJUSTED LENGTH OF REQUIRED TRENCH (LF)	REQUIRED TRENCH LENGTH (FT)	NUMBER OF TRENCHES	MINIMUM TRENCH SPACING (FT)
INITIAL	900	0.8	1125	3	375	0.45	4.0	7.5	168.75	84.38	2	10
1ST REPLACEMENT	900	0.8	1125	3	375	0.45	4.5	8.0	168.75	56.25	3	10
2ND REPLACEMENT	900	0.8	1125	3	375	0.45	5.5	8.0	206.25	51.13	4	10

SEPTIC TRENCH ELEVATIONS

TRENCH		EX.GROUND ELEVATION	PIPE INVERT EL.	BOTTOM OF TRENCH EL.
PRIMARY	1A	643.30	641.30	635.80
PRIMARY	1B	642.00	640.00	634.50
1ST REPL.	2A	640.50	638.50	632.50
1ST REPL.	2B	640.20	638.20	632.20
1ST REPL.	2C	639.50	637.50	631.50
2ND REPL.	3A	639.00	637.00	631.00
2ND REPL.	3B	638.00	636.00	630.00
2ND REPL.	3C	638.00	636.00	630.00
2ND REPL.	3D	636.90	634.90	628.90

ON-SITE SEWAGE DISPOSAL SYSTEM:

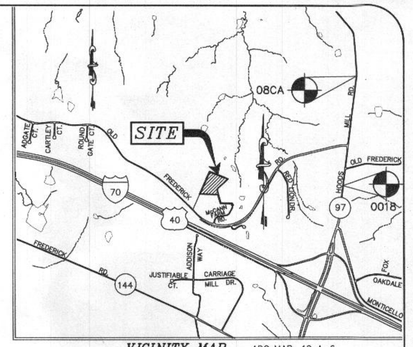
RESIDENTIAL SYSTEM DESIGN:
6 BEDROOM HOUSE
150 GALLONS X # OF BEDROOMS = VOLUME OF WASTEWATER /DAY
150 X 6 = 900 GPD

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 FT

PRIMARY SYSTEM USE 42" OF GRAVEL BELOW DRAIN PIPE
375 X 0.45 = 168.75 FT
USE TWO (2) TRENCHES 85.0' (REQUIRED: 84.38')
A MINIMUM OF 10' BETWEEN TRENCHES UTILIZING SIDEWALL REDUCTION CREDIT.

1ST. REPLACEMENT SYSTEM
USE 42" OF GRAVEL BELOW DRAIN PIPE
375 X 0.45 = 168.75 FT
USE THREE (3) TRENCHES 57.0' (REQUIRED: 56.25')
A MINIMUM OF 10' BETWEEN TRENCHES UTILIZING SIDEWALL REDUCTION CREDIT.

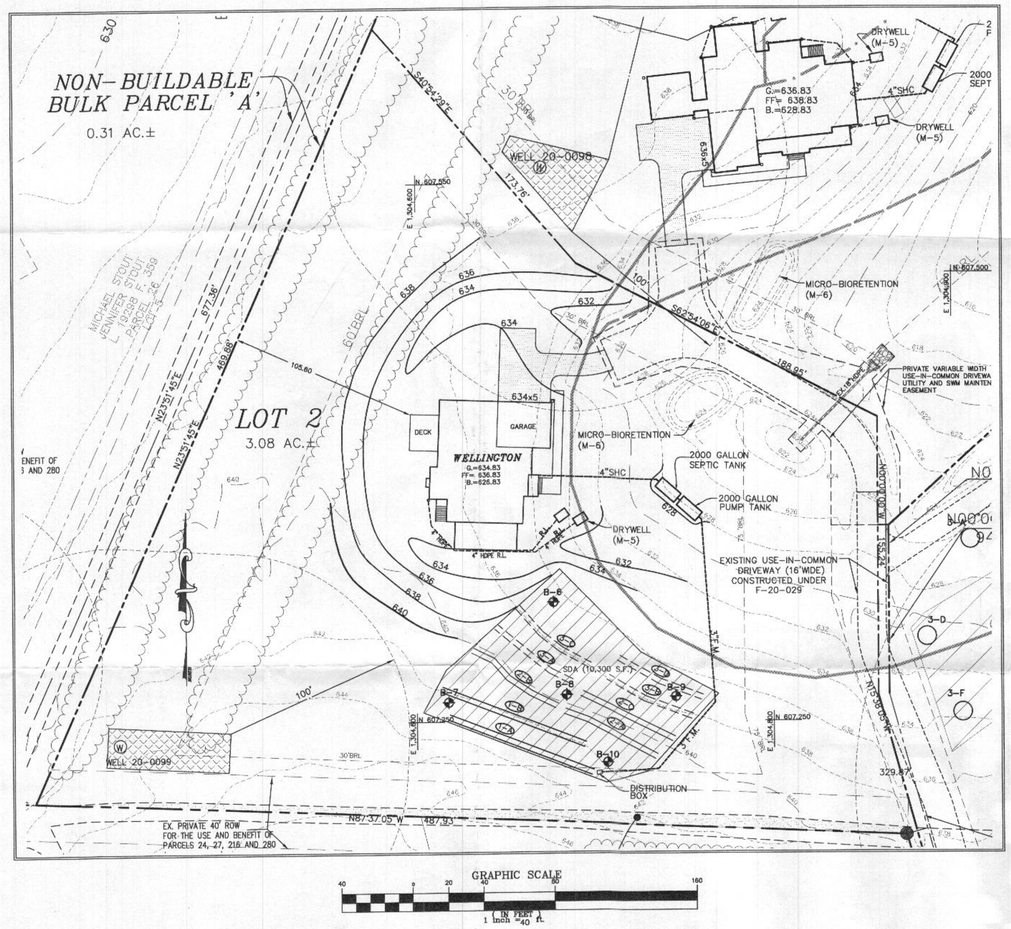
2ND. REPLACEMENT SYSTEM
USE 30" OF GRAVEL BELOW DRAIN PIPE
375 X 0.55 = 206.25 FT
USE FOUR (4) TRENCHES 52.0' (REQUIRED: 51.13')
A MINIMUM OF 10' BETWEEN TRENCHES UTILIZING SIDEWALL REDUCTION CREDIT.

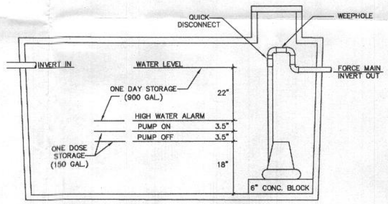


VICINITY MAP
SCALE: 1"=2,000'
ADC MAP: 10 A-6

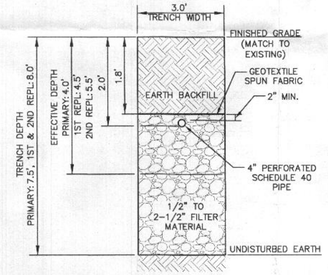
GENERAL NOTES:

1. THE SUBJECT PROPERTY IS ZONED RC-DEO PER THE OCTOBER 6, 2013 COMPREHENSIVE ZONING PLAN.
2. PARCEL BACKGROUND:
   TAX MAP : 8
   PARCEL : 27-A LOT: 2
   ELECTION DISTRICT : FOURTH
   ZONING : RC-DEO.
   AREA : 3.06 AC±
   DPZ FILES: ECP-18-045, F-20-048, WP-20-006, WP-20-101
   ADDRESS: 14775 MCCANN FARM DR., WOODBINE, MD 21797
3. 2' TOPOGRAPHY FOR THE DEVELOPED AREAS IS BASED ON FIELD RUN SURVEY PERFORMED BY MILDENBERG, BOENDER & ASSOC., INC. ON OR ABOUT DECEMBER 2014.
4. PRIVATE WELL AND SEPTIC WILL BE UTILIZED.
5. THIS AREA DESIGNATES A PRIVATE SEWERAGE EASEMENT OF AT LEAST 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.
6. ANY CHANGES TO THE LOCATION OR DEPTHS TO ANY COMPONENTS MUST BE APPROVED BY THE ENGINEER AND THE HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO INSTALLATION. A REVISED PLAN MAY BE REQUIRED.
7. THE MAXIMUM EARTH COVER OVER THE TANK IS THREE (3) FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
8. THE WELL TAG # H0-20-0099 HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN.
9. 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.

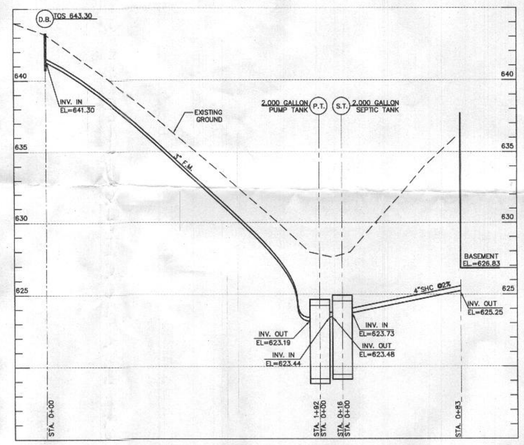




PUMP CONTROL ELEVATIONS
NOT TO SCALE



TRENCH DETAIL
NOT TO SCALE



PRIVATE SEWER PROFLE
SCALE: 1"=50' HOR
1"=5' VER

DYNAMIC HEAD (FRICTION HEAD)

DYNAMIC HEAD CALCULATION

3" FORCEMAIN LENGTH			185	LF
3	90°	x10FT	30	LF
3	45°	x 6FT	18	LF
1	CPL/RED	x 3FT	3	LF
TOTAL LENGTH			236	LF
42 GPM x0.43 FT/100 LF			236 LF = 1.05 FT	

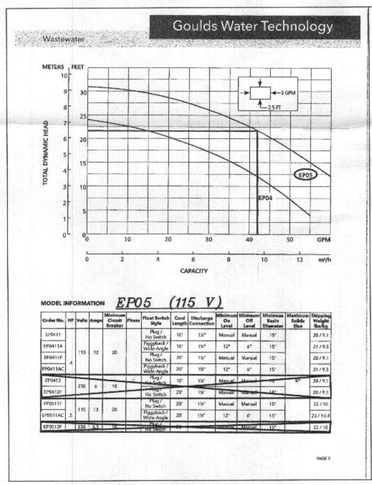
PUMP TANK STORAGE CALCULATIONS

TANK DIMENSIONS:
WIDTH: 5.25'
LENGTH: 12.75'
HEIGHT TO WATER LEVEL: 4.00'

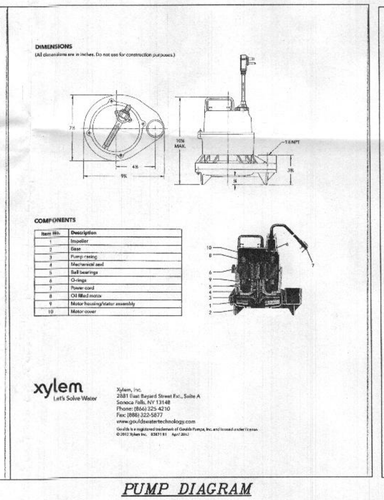
REQUIRED STORAGE ABOVE PUMP OFF: 150 GAL (20 C.F.)
PROVIDED STORAGE: 150 GAL.(20 C.F.) (5.25)(12.75)(0.3)
REQUIRED STORAGE ABOVE HIGH WATER ALARM: 900 GAL (120 C.F.)
PROVIDED STORAGE: 912 GAL.(122 C.F.) (5.25)(12.75)(1.83)

SEWER SYSTEM CHART

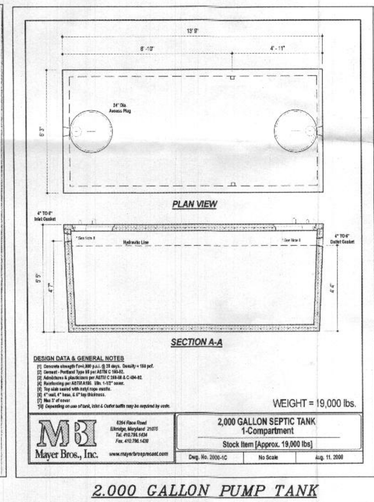
DESCRIPTION	VALUE
BASEMENT ELEVATION	626.83
INVERT OUT OF THE HOUSE	625.25
FINISHED GRADE AT SEPTIC TANK	627.50
TOP OF SEPTIC TANK	624.98
INVERT INTO SEPTIC TANK	623.73
INVERT OUT OF SEPTIC TANK	623.48
FINISHED GRADE AT PUMP TANK	627.50
TOP OF PUMP TANK	624.69
INVERT INTO PUMP TANK	623.44
INVERT OUT OF PUMP TANK	623.19
INVERT IN TO DISTRIBUTION BOX	641.30
PUMP TANK FLOOR	619.18
PUMP OFF	620.68
PUMP ON	620.97
HIGH WATER ALARM	621.26
WATER LEVEL	623.09
STATIC HEAD	20.62
TOTAL DYNAMIC HEAD	21.67
DOSED RATE (GALLONS)	150
PUMP RUNTIME (MINUTES)	3.57



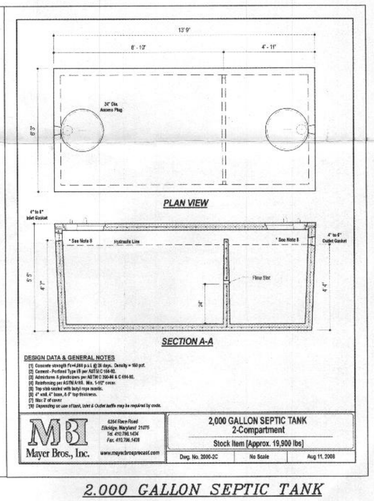
PUMP CURVES



PUMP DIAGRAM



2,000 GALLON PUMP TANK



2,000 GALLON SEPTIC TANK

Approved Septic System Plan
Howard County Health Department
Hank Ogrodnik 4/11/22
Signature Date

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 01/16/2023

04/04/2022
MICHAEL C. KRETSCH, P.E. DATE:

STATE OF MARYLAND MICHAEL C. KRETSCH No. 34027 PROFESSIONAL ENGINEER

M:\2021\21-026 McCann Estates\DWG\21-026 west - REVISED SEPTIC-APR 2022.dwg, 4/4/2022 11:54:16 AM

project	date
21-026	APR. 2022
illustration	engineering
MMM	MMM
scale	approval
1"=30	MK

no.	description	date
	revisions	

McCANN ESTATES– WEST (LOT 2)

14775 McCANN FARM ROAD, WOODBINE, MARYLAND 21797
TAX MAP: 8, BLOCK: 10, PARCEL: 27-B, LOT 1
FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

ON-SITE SEWAGE DISPOSAL SYSTEM

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
7350-B Grace Drive, Columbia, Maryland 21044
(410) 997-0296 Tel. (410) 997-0298 Fax.