

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

Twitter: HowardCoHealthDep

Maura J. Rossman, M.D., Health Officer

APPLICATION

FOR PERCOLATION TESTING AND SITE EVALUATION

PROPERTY LOCATION

SUBDIVISION/PROPERTY NAME Rover Mill Estates

PROPERTY ADDRESS Pfefferkorn Road, West Friendship, 21794
STREET TOWN ZIP

TAX ACCOUNT # 03-293173 TAX MAP 15 GRID 14 PARCEL 169 LOT NO. 4 PROPOSED LOT SIZE (ACRES) 1.07
46,744

ZONING CATEGORY RR-DEO TIER 3

PROPERTY OWNER(S) Pfefferkorn Rover Mill LLC

DAYTIME PHONE _____ CELL _____ EMAIL _____

MAILING ADDRESS 12668 Frederick Road, West Friendship, MD 21794
STREET CITY, STATE ZIP

APPLICANT Vogel Engineering + Timmons Group RELATIONSHIP TO OWNER: engineer

DAYTIME PHONE 410-461-7666 CELL _____ EMAIL Rob.Vogel@timmons.com

MAILING ADDRESS 8407 Main Street, Ellicott City, MD 21043
STREET CITY, STATE ZIP

I HEREBY APPLY FOR THE NECESSARY TESTING/EVALUATION PRIOR TO ISSUANCE OF SEWAGE DISPOSAL SYSTEM PERMIT(S):

PROPERTY:

- ☒ SUBDIVISION: NUMBER OF LOTS INCLUDING RESIDUE: 7
SUBDIVISION CLASSIFICATION (PER DEPT. OF PLANNING AND ZONING) ☒ MAJOR ☐ MINOR
☐ CONSTRUCT NEW OSDS ON UNDEVELOPED LOT
☐ REPAIR OR REPLACE FAILING OSDS
☐ UPGRADE EXISTING OSDS

BUILDING:

- ☒ RESIDENTIAL WITH UNKNOWN EXISTING OR PROPOSED BEDROOMS IN THE COMPLETED STRUCTURE
☐ COMMERCIAL (PROVIDE DETAIL OF TYPE OF USE AND NUMBERS OF EMPLOYEES/CUSTOMERS ON ACCOMPANYING PLAN)

IS THE PROPERTY WITHIN 2500 FEET OF ANY RESERVOIR?

- ☒ YES
☐ NO

AS APPLICANT, I UNDERSTAND THE FOLLOWING:

- THIS APPLICATION IS VALID FOR TWO(2) YEARS FROM DATE OF FEE PAYMENT AND APPROVAL IS BASED UPON HEALTH OFFICER SIGNATURE OF A PERC CERTIFICATION PLAN PRIOR TO EXPIRATION OF THIS PERMIT.
- THE APPLICATION FEE IS NON-REFUNDABLE
- THIS APPLICATION MUST BE ACCOMPANIED BY ALL APPLICABLE FEES AND A SUITABLE SITE PLAN IN ORDER TO BE PROCESSED
- THIS IS A PUBLIC DOCUMENT

I declare and affirm that to the best of my knowledge, the information contained herein is correct. I declare that I am the owner of the property or duly authorized to make this application on behalf of the owner. I agree to comply with all applicable state and county regulations.

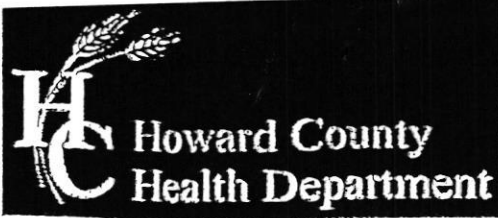
By signature of this application, I hereby grant Howard County Health Department officials the right to enter onto the property for the purpose of inspecting the property as directly related to the requested permit/service.

Megan Ruggien

SIGNATURE OF APPLICANT

4/16/18

DATE



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

Twitter: HowardCoHealthDep

Maura J. Rossman, M.D., Health Officer

SEWAGE DISPOSAL SYSTEM SPECIFICATIONS WORKSHEET

Reissue
Trench
specs
vrb
7/14/21

Address: 3011 Skye Meadow Way

Subdivision: Raven Mill Estates

Lot: 4

Initial system: Application rate: 1.2 Effective area beginning depth: 4.5 Bottom maximum depth: 8

1st Replacement: Application rate: 0.8 Effective area beginning depth: 4 Bottom maximum depth: 6

2nd Replacement: Application rate: 0.6 Effective area beginning depth: 4 Bottom maximum depth: 5

Design Flow = 150 gallons per day per bedroom

Design flow ÷ application rate = square footage of drainfield required

Linear length of trench required = drainfield square footage x sidewall reduction percentage ÷ trench width

Sidewall reduction credit formula:

$$\frac{W + 2}{W + 1 + 2D} \times 100 = \text{Percent of length of standard trench where } W = \text{trench width and } D = \text{depth between effective area beginning depth and trench bottom.}$$

Standard design requirements:

- Trenches must be located to provide room for 3 systems in the disposal area
- All trenches must be equal length unless low pressure dosed
- All trenches must be on contour
- Tank and trenches must be placed as shallow as possible while maintaining 2% fall in pipe from house and at least 18" cover over trenches. If 2% fall from house is not possible, the minimum allowable fall is 1%.
- Minimum trench spacing: 10' for all trenches utilizing sidewall reduction credit. Additional spacing may be necessary for any trench using over 3.5' of effective sidewall. In those cases, the spacing formula is $2D + W$ up to a maximum spacing of 18'.
- Minimum trench spacing for trenches with no sidewall credit (bottom area only) is 6' for a 2' wide trench and 9' for a 3' wide trench (spacing is measured edge to edge)
- Maximum trench length is 100'
- Maximum pipe depth is 4'

Additional requirements:

Install Upper Initial System Trench
above 5/4 contour

Approved: R Bricker

Date: 7/14/21

Rover Mill Estates

A/P _____

302
Red Brown
yellow
SCL
6.8'
Red Brown
yellow
Sh 5-10%
Schist
↓
14'

301
Red Brown
yellow
SCL
5.6'
Red Brown
yellow
Sh
5-10%
Schist
↓
14'

300
Red Brown
yellow
Sh
5.8'
Red Brown
yellow
Sh
5-10%
Schist
↓
14'

303
Red Brown
yellow
SCL
5.7'
Red Brown
yellow
Sh
5-10%
Schist
magma
↓
14'

305
Red Brown
yellow
SCL
5.5'
Red Brown
yellow
SL
0-5% Rv
Moist @ 13'
5-10% Rv
H₂O in Bottom
14'

304
Red Brown
yellow
SCL
7.0'
Red Brown
yellow
molding
@ 8'
H₂O in Bottom
9'

See Map 15; Grid 14; Parcel 169

DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2ND INCH	P/F/H
5-3-18	302	7/14	11:00	11:12	11:17	5min	P
5-3-18	301	6/14	11:25	11:27	11:29	2min	P
5-3-18	300	6/14	11:37	11:39	11:45	6min	P
5-3-18	303	4/4	12:08	12:11	12:17	6min	P
5-3-18	305	5/14	12:20	12:29	12:32	3min	P
5-3-18	304	7/9	filled H ₂ O table High F				

REMARKS: No signs of H₂O in 300, 301, 302

SANITARIAN: D. Beaudard BACKHOE: _____ OTHERS: _____

TEST HOLES USED IN SDA: _____ AVG. PERC TIME: _____ SQ. FT/BR: _____

TRENCH WIDTH: _____ INLET DEPTH: _____ MAX. BOT DEPTH: _____ EFFECTIVE S/W: _____

Round II of Testing

#121

Red Brown
yellow
SC

margin

Red Brown
yellow
SC

Wet

7' 20-30%
Rx

9'

A/P

#124

Red Brown
yellow
SC

Sh

3.5

Red Brown
yellow
SC

Wet H₂O Sh

8'

↓

10

#122

Red Brown
yellow
SC

↓

H₂O

Bottom 6'

#123

Red Brown
yellow
SC

4.5

Red Brown
yellow
SC

Sh

5-10%

Rx

↓

10

Lot #5

DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2ND INCH	P/F/H
3-21-16	124	5/10	12:06	12:10	12:28	18min	P
3-21-16	122	NO Buffer					F
3-21-16	123	5/10	12:16	12:10	12:18	8min	P
3-21-16	121	5/9	12:19	12:27	12:50	23min	P

REMARKS

SANITARIAN Bernard BACKHOE _____ OTHERS _____

TEST HOLES USED IN SDA _____ AVG. PERC TIME _____ SQ. FT/BR _____

TRENCH WIDTH _____ INLET DEPTH _____ MAX. BOT DEPTH _____ EFFECTIVE SW _____

A/P

#120

Red Brown

yellow

Sh 4'

Red Brown

yellow

Sh

5-10%

Lx

H20 @ 12' 14'

DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2ND INCH	P/F/H
12-1-15	120	5/12	2:18	2:30	2:28	8 min	P

REMARKS

SANITARIAN

Bernard

BACKHOE

Joggles

OTHERS

Pike

TEST HOLES USED IN SDA

AVG. PERC TIME

SQ. FT/BR

TRENCH WIDTH

INLET DEPTH

MAX. BOT DEPTH

EFFECTIVE SW

Round III of Testing

A/P

#210
Red Brown
yellow
Sh
Red Brown
yellow
Sh
5-10%
Rx

Depth

#201
Red Brown
yellow
Sh 2'
Red Brown
yellow
Sh
5-10%
Rx 7'
12'

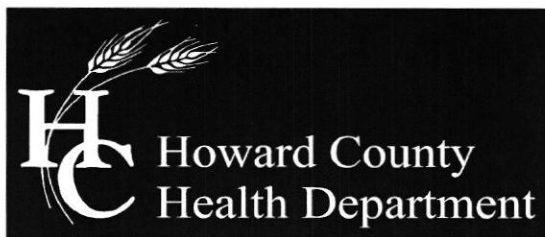
#207
Red Brown
yellow
Sh 3'
Red Brown
yellow
Sh
5-10%
Rx
↓ 10'

#206
Red Brown
yellow
Sh 2'
Red Brown
yellow
Sh
5-10%
Rx
6'

DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2ND INCH	P/F/H
6-17-16	210	3/13	11:41	11:46	11:50	4min	P
6-17-16	207	4/13	11:49	11:51	11:54	3min	P
6-17-16	206	3/10	12:05	12:07	12:10	3min	P
6-17-16	201	3/12	Visual Pass				P

REMARKS _____
 SANITARIAN Bernard BACKHOE Jake OTHERS Jogles
 TEST HOLES USED IN SDA _____ AVG. PERC TIME _____ SQ. FT/BR _____
 TRENCH WIDTH _____ INLET DEPTH _____ MAX. BOT DEPTH _____ EFFECTIVE S/W _____

10'



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

Twitter: HowardCoHealthDep

Maura J. Rossman, M.D., Health Officer

SEWAGE DISPOSAL SYSTEM SPECIFICATIONS WORKSHEET

Address: Rover Mills Estate

Subdivision: _____ Lot: 4

Initial system:	Application rate: <u>1.2</u>	Effective area beginning depth: <u>6</u>	Bottom maximum depth: <u>8</u>
1 st Replacement:	Application rate: <u>1.2</u>	Effective area beginning depth: <u>4.5</u>	Bottom maximum depth: <u>6</u>
2 nd Replacement:	Application rate: <u>0.6</u>	Effective area beginning depth: <u>4</u>	Bottom maximum depth: <u>6</u>

Design Flow = 150 gallons per day per bedroom

Design flow ÷ application rate = square footage of drainfield required

Linear length of trench required = drainfield square footage x sidewall reduction percentage ÷ trench width

Sidewall reduction credit formula:

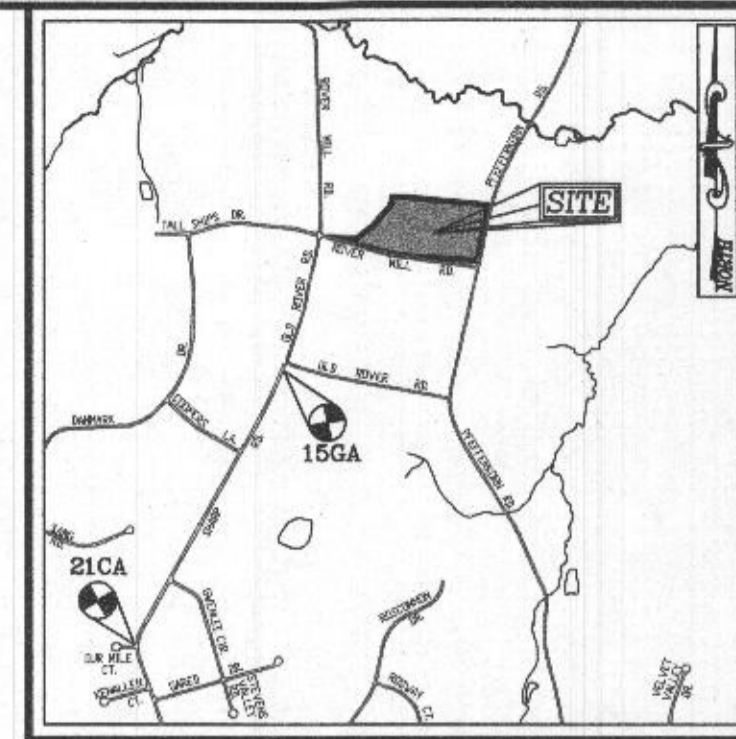
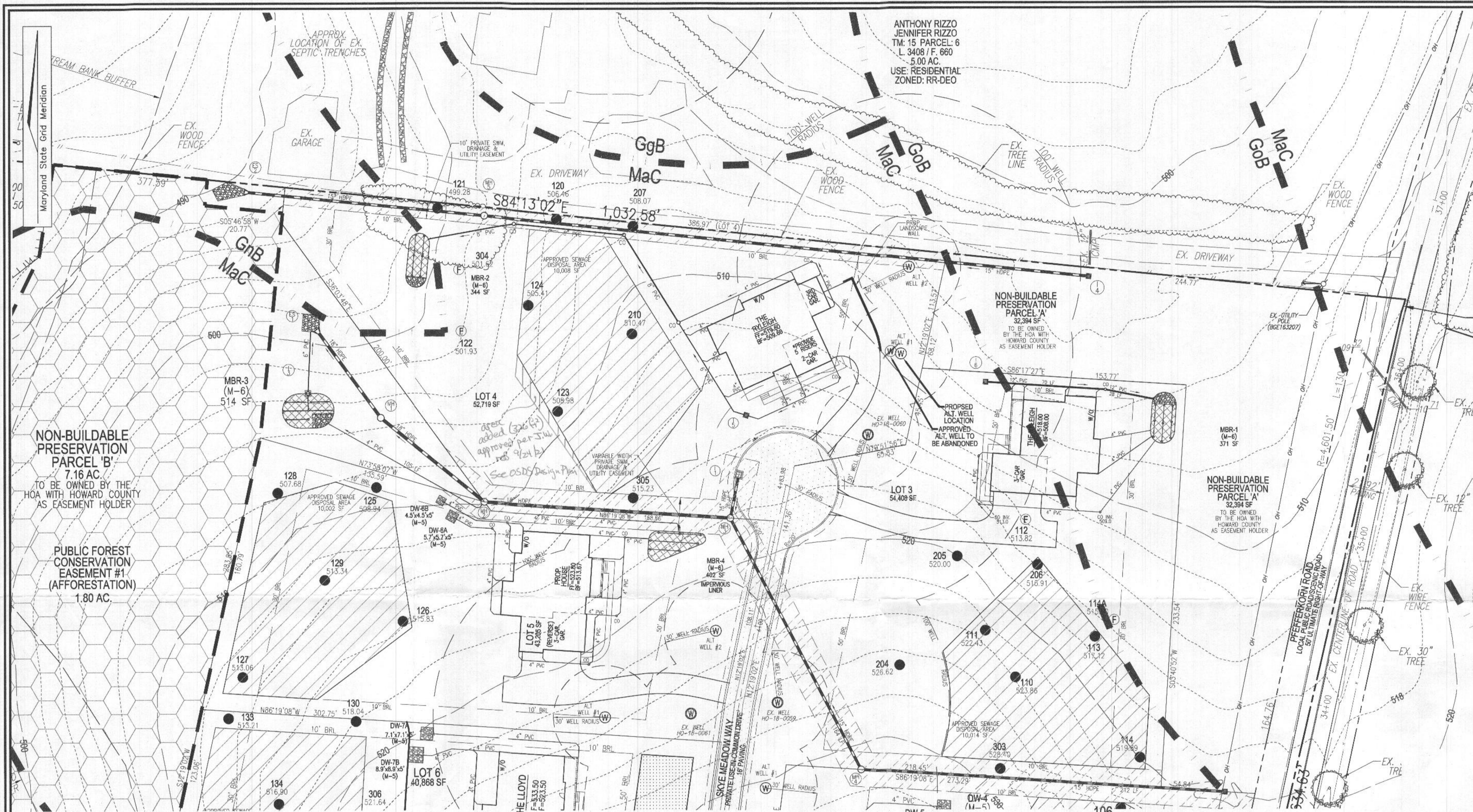
$$\frac{W + 2}{W + 1 + 2D} \times 100 = \text{Percent of length of standard trench where } W = \text{trench width and } D = \text{depth between effective area beginning depth and trench bottom.}$$

Standard design requirements:

- Trenches must be located to provide room for 3 systems in the disposal area
- All trenches must be equal length unless low pressure dosed
- All trenches must be on contour
- Tank and trenches must be placed as shallow as possible while maintaining 2% fall in pipe from house and at least 18" cover over trenches. If 2% fall from house is not possible, the minimum allowable fall is 1%.
- Minimum trench spacing: 10' for all trenches utilizing sidewall reduction credit. Additional spacing may be necessary for any trench using over 3.5' of effective sidewall. In those cases, the spacing formula is $2D + W$ up to a maximum spacing of 18'.
- Minimum trench spacing for trenches with no sidewall credit (bottom area only) is 6' for a 2' wide trench and 9' for a 3' wide trench (spacing is measured edge to edge)
- Maximum trench length is 100'
- Maximum pipe depth is 4'

Additional requirements:

Approved: Dana Bernard Date: 10/27/2020



VICINITY MAP
SCALE: 1"=2000'
ADC MAP: PAGE: 17 BLOCK: D4 & E4

BENCHMARKS

HOWARD COUNTY BENCHMARK 150A (CONC. MON.)
N 591743.48 E 1312790.80 ELEV. 587.64
LOCATION: NEAR NORTH END OF SHARP ROAD
(CUL. DE SAC)
HOWARD COUNTY BENCHMARK 210A (CONC. MON.)
N 588697.36 E 1311235.79 ELEV. 612.60
LOCATION: CORNER OF SHARP RD. & OUR MILE CT.

LEGEND:

- PROPERTY LINE
- ADJACENT PROPERTY LINE
- RIGHT-OF-WAY LINE
- EXISTING EDGE OF PAVING
- EXISTING STREAM
- EXISTING STREAM BUFFER
- EXISTING TREELINE
- PROPOSED TREELINE
- EXISTING WETLANDS
- EXISTING WETLAND BUFFER
- PUBLIC 100-YEAR FLOODPLAIN, DRAINAGE & UTILITY EASEMENT
- PUBLIC FOREST CONSERVATION EASEMENT (AFFORESTATION)
- EXISTING METAL FENCE
- EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
- APPROVED SEWAGE DISPOSAL AREA
- APPROVED WELL AREA
- EXISTING WELL LOCATION
- ALTERNATE WELL LOCATION
- PASSED PERC. TEST
- FAILED PERC. TEST
- Alt. Well Location to Be Abandoned

OWNER

SECURITY DEVELOPMENT, LLC
8480 BALTIMORE NATIONAL PIKE, SUITE 415
ELLCOTT CITY, MD 21043
(410) 465-4244

BUILDER

CATONVILLE HOMES
11175 STRATFIELD COURT
MARIOTTVILLE, MD 21104
(410) 499-7800

PLAN VIEW

SCALE: 1"=30'

SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	GROUP	K-FACTOR	ERODIBLE
GnB	GLENVIEW LOAM, 3 TO 8 PERCENT SLOPES	B	.28	NO
GgB	GLENVIEW-BALILE SILT LOAMS, 0 TO 8 PERCENT SLOPES	C	.43	YES
GgB	GLENVIEW-CODORUS SILT LOAMS, 0 TO 8 PERCENT SLOPES	C	.43	YES
MaC	MANOR LOAM, 8 TO 15 PERCENT SLOPES	B	.28	NO

-SOILS INFORMATION FROM USDA WEB SOIL SURVEY WEBSITE
-HOWARD COUNTY SOILS MAP NUMBER 11 - STYKEVILLE SA

NOTE:
HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT
OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR K GREATER THAN 0.35 AND WITH
A SLOPE GREATER THAN 5 PERCENT

THIS AREA DESIGNATES A PRIVATE SEWAGE AREA OF AT LEAST 10,000 SQUARE FEET AS REQUIRED
BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL IMPROVEMENTS
OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWAGE IS AVAILABLE. THIS AREA SHALL
BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWAGE SYSTEM. THE COUNTY HEALTH
OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWAGE AREA.
RECORDATION OF A MODIFIED SEWAGE AREA SHALL NOT BE NECESSARY.

APPROVED: FOR PRIVATE WATER AND PRIVATE SEWAGE SYSTEMS.

Robert H. Vogel
COUNTY HEALTH OFFICER
DATE: 7/16/21

PERCOLATION CERTIFICATION:

I CERTIFY THAT THE LOCATIONS SHOWN HEREON ARE BASED ON FIELD
LOCATIONS DONE UNDER MY DIRECT SUPERVISION, AND ARE CORRECT,
TO THE BEST OF MY PROFESSIONAL KNOWLEDGE AND BELIEF.

Robert H. Vogel
PROFESSIONAL LAND SURVEYOR, MD REG. NO. 21408
DATE: 07/02/2021

GENERAL NOTES

- THIS SUBJECT PROPERTY IS ZONED RR-DEO.
- THE PROJECT BOUNDARY IS BASED ON A FIELD RUN BOUNDARY SURVEY PREPARED BY
ROBERT H. VOGEL ENGINEERING, INC., DATED SEPTEMBER 05, 2017.
- DEED REFERENCE: LIBER 19082 FOLIO 490
- THE EXISTING TOPOGRAPHY SHOWN HEREON IS TAKEN FROM FIELD RUN SURVEY WITH 2' CONTOUR INTERVALS
PREPARED BY ROBERT H. VOGEL ENGINEERING, INC., DATED OCTOBER 2017. INFORMATION IS SUPPLEMENTED
WITH HOWARD COUNTY GIS DATA.
- SOIL TYPES SHOWN HEREON ARE FROM THE USDA WEB SOIL SURVEY.
- ALL WELLS AND SEPTIC SYSTEMS WITHIN 100' FROM THE PROPERTY BOUNDARIES HAVE BEEN
SHOWN.
- ANY CHANGE TO A PRIVATE SEWAGE AREA SHALL REQUIRE A REVISED PERCOLATION
CERTIFICATION PLAN.
- ADJUSTMENT TO THE PRIVATE SEWAGE AREA IS NOT PERMITTED WITHOUT ADDITIONAL TESTING.
- THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS
REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
- EXISTING WELLS AND/OR SEWAGE AREAS AND COMPONENTS WITHIN 200 FEET OF THE
PROPERTY HAVE BEEN SHOWN FROM THE BEST AVAILABLE INFORMATION.
- ALL BUILDING SITES SHOWN COMPLY WITH MINIMUM BUILDING RESTRICTION REGULATIONS.
- THE PURPOSE OF THIS PERCOLATION CERTIFICATION REVISION PLAN IS TO RELOCATE AN ALTERNATE WELL
LOCATION ON LOT 4 TO ACCOMMODATE THE PROPOSED REVENUE.

SCALE 1"=30'
15' 0' 30'

PERCOLATION CERTIFICATION REVISION PLAN

ROVER MILL ESTATES - LOT 4
3011 SKYE MEADOW WAY
WEST FRIENDSHIP, MD 21794

PARCEL: 169
GRID: 14
3RD ELECTION DISTRICT

ZONED: RR-DEO
L 15082 / F 490
HOWARD COUNTY, MARYLAND

VOGEL ENGINEERING

TIMMONS GROUP
3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
P: 410.461.7666 F: 410.461.8961 www.timmons.com

PROFESSIONAL CERTIFICATE

DESIGN BY: RHV
DRAWN BY: JMR
CHECKED BY: RHV
DATE: JULY 2021
SCALE: AS SHOWN
W.O. NO.: 15-36

I HEREBY CERTIFY THAT THESE DOCUMENTS
WERE PREPARED OR APPROVED BY ME, AND
THAT I AM A FULLY LICENSED PROFESSIONAL
ENGINEER UNDER THE LAWS OF THE STATE
OF MARYLAND, LICENSE NO. 15193
EXPIRATION DATE 08-27-2022

1 SHEET OF 1

ROBERT H. VOGEL, PE No. 16193