



# APPLICATION

## FOR PERCOLATION TESTING AND SITE EVALUATION

TEST DATE(S) \_\_\_\_\_ TEST TIME \_\_\_\_\_

APP 530307-W

AGENCY REVIEW: \_\_\_\_\_

DATE 2/18/09

DO NOT WRITE ABOVE THIS LINE

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

CHECK AS NEEDED:

- CONSTRUCT NEW SEPTIC SYSTEM(S)
- REPAIR/ADD TO AN EXISTING SEPTIC SYSTEM
- REPLACE AN EXISTING SEPTIC SYSTEM

CHECK AS NEEDED:

- NEW STRUCTURE(S)
- ADDITION TO AN EXISTING STRUCTURE
- REPLACE AN EXISTING STRUCTURE

CHECK ONE:

- CREATE NEW LOT(S)
- BUILD ON AN EXISTING LOT IN A SUBDIVISION
- BUILD ON AN EXISTING PARCEL OF RECORD

IS THE PROPERTY WITHIN 2500' OF ANY RESERVOIR?

- YES
- NO

THE TYPE OF STRUCTURE IS:

- RESIDENTIAL WITH UNKNOWN PROPOSED BEDROOMS IN THE COMPLETED STRUCTURE (NOTE UNKNOWN IF APPROPRIATE)
- COMMERCIAL (PROVIDE DETAIL OF NUMBERS AND TYPES OF EMPLOYEES/ CUSTOMERS ON ACCOMPANYING PLAN)
- INSTITUTIONAL/GOVERNMENT (PROVIDE DETAIL OF NUMBERS AND TYPES OF EMPLOYEES/USERS ON ACCOMPANYING PLAN)

PROPERTY OWNER(S) RONALD REGAN & SCOTT REGAN TRUSTEE

DAYTIME PHONE \_\_\_\_\_ CELL \_\_\_\_\_ FAX \_\_\_\_\_

MAILING ADDRESS 12859 ROUTE 108 HIGHLAND MD 20177  
STREET CITY/TOWN STATE ZIP

APPLICANT SAME AS OWNERS

DAYTIME PHONE \_\_\_\_\_ CELL \_\_\_\_\_ FAX \_\_\_\_\_

MAILING ADDRESS \_\_\_\_\_ STREET CITY/TOWN STATE ZIP

APPLICANT'S ROLE: DEVELOPER BUILDER BUYER RELATIVE/FRIEND REALTOR CONSULTANT

PROPERTY LOCATION  
SUBDIVISION/PROPERTY NAME REGAN PROPERTY LOT NO. 23

PROPERTY ADDRESS POINT RIDGE DRIVE  
STREET TOWN/POST OFFICE

TAX MAP PAGE(S) 34 GRID 24 PARCEL(S) 200 PROPOSED LOT SIZE 1 AC.

AS APPLICANT, I UNDERSTAND THE FOLLOWING: THE SYSTEM INSTALLED SUBSEQUENT TO THIS APPLICATION IS ACCEPTABLE ONLY UNTIL PUBLIC SEWERAGE IS AVAILABLE. THIS APPLICATION IS COMPLETE WHEN ALL APPLICABLE FEES AND A SUITABLE SITE PLAN HAVE BEEN RECEIVED. I ACCEPT THE RESPONSIBILITY FOR COMPLIANCE WITH ALL M.O.S.H.A. AND "MISS UTILITY" REQUIREMENTS. APPROVAL IS BASED UPON SATISFACTORY REVIEW OF A PERC CERTIFICATION PLAN.

TEST RESULTS WILL BE MAILED TO APPLICANT.

SIGNATURE OF APPLICANT

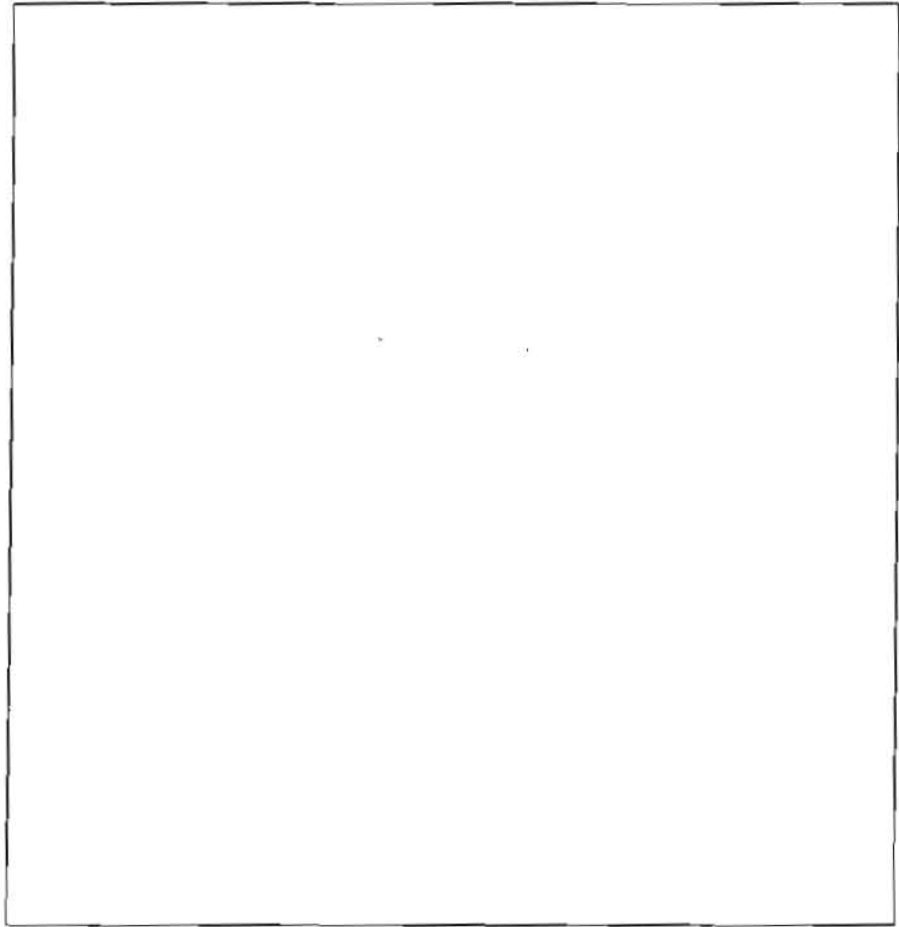
HOWARD COUNTY HEALTH DEPARTMENT, BUREAU OF ENVIRONMENTAL HEALTH, WELL AND SEPTIC PROGRAM  
7178 COLUMBIA GATEWAY DRIVE COLUMBIA, MARYLAND 21046 (410) 313-2640 FAX (410) 313-2648  
TDD (410) 313-2323 TOLL FREE 1-877-4MD-DHMH

AP

232  
 1' brn st l  
 3.5' brn scl  
 1CSBK  
 brn  
 vch ls  
 ↓  
 8' 50% rx  
 yellow br  
 ls  
 10.5' 15% flaggy  
 boulders

234  
 .8' brn lsbk  
 2' yellow br  
 scl  
 1CSBK  
 yellow  
 br scl  
 5' 2msbk  
 yellow  
 br scl  
 20% rx  
 7' white/yellow  
 ls saprotic  
 20% rx  
 12' gr

239  
 2.5' brn l  
 brn scl  
 1msbk  
 brn scl  
 30% flaggy  
 boulders  
 7.5' brn fsl  
 saprotic  
 micaceous  
 20% rx  
 & boulders  
 H<sub>2</sub>O



224  
 brn lsbk 6"  
 brn scl  
 ↓ 1CSBK 5.5'  
 gray br  
 scl  
 scl mottles/moist  
 brn  
 cgres  
 moist  
 H<sub>2</sub>O net 12'

222  
 5' yellow br  
 2CSBK w/  
 gray mottles  
 ↓  
 scl ϕ  
 7' micaceous  
 sl/blue-gray  
 black ls  
 micaceous 8'  
 H<sub>2</sub>O  
 208  
 brn l ϕ @ 8'  
 1'  
 heavy brn  
 scl 20%  
 rx 4'  
 brn  
 chsl  
 15% quartz  
 1'  
 brn scl  
 micaceous 8'  
 tan ls 12'

DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2ND INCH	P/F/H
10-21-09	232	4.5' / 12'	10:27	10:28	10:30	2	P
	234	5.5' / 12'	10:56	11:00	11:07	7	P
	<del>239</del>	7.5'	VISUAL				F
	224	12'	VISUAL				F
	222	8'	VISUAL				F
	208	6' / 12'	2:12	2:13	2:15	2	P

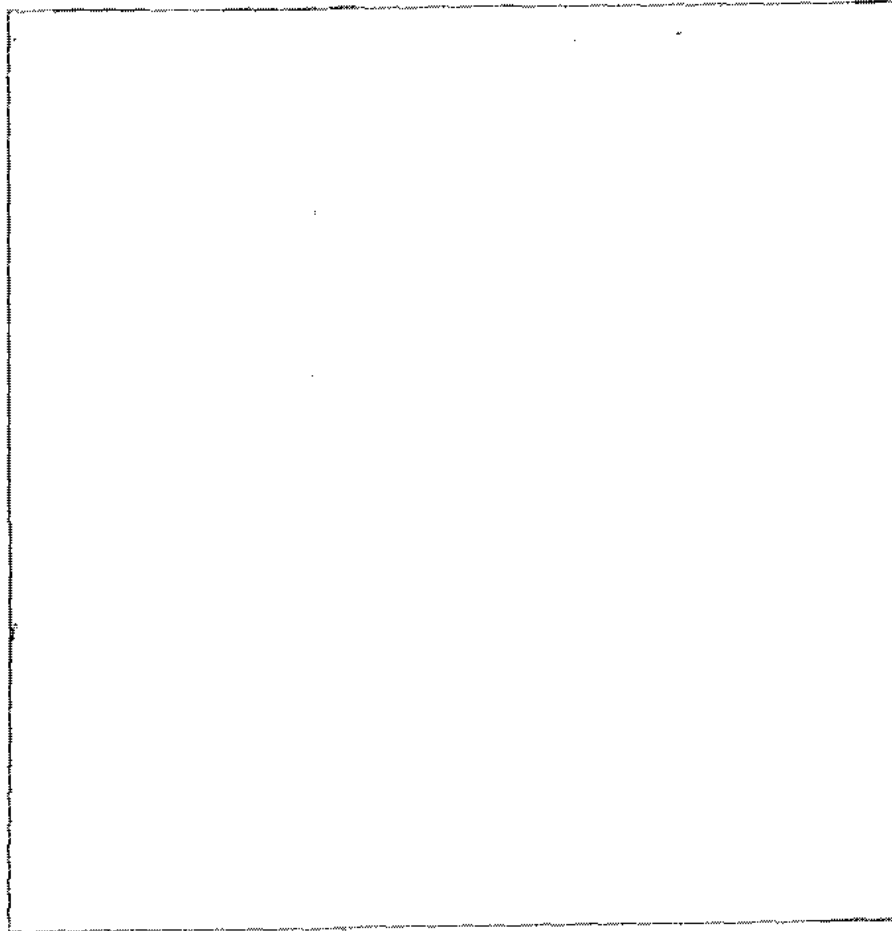
REMARKS \_\_\_\_\_  
 SANITARIAN HS / DB BACKHOE Bruce OTHERS \_\_\_\_\_  
 TEST HOLES USED IN SDA \_\_\_\_\_ AVG. PERC TIME \_\_\_\_\_ SQ. FT/BR \_\_\_\_\_  
 TRENCH WIDTH \_\_\_\_\_ INLET DEPTH \_\_\_\_\_ MAX. BOT DEPTH \_\_\_\_\_ EFFECTIVE SAW \_\_\_\_\_

A/P

**233**  
 Bn 25K 0.5  
 Red brn SL 2'  
 Rd. Brn Yellow mica  
 5'  
 Lt. Brn Yellow LS  
 ↓  
 14'

**231**  
 Bn 28K 0.5  
 Red Brn SL mica 2'  
 ↓  
 Rd Brown SL  
 ↓  
 mush mica 10'  
 5' Red Brn 3m Barber's Refusal  
 @ 11 11'

**228**  
 Rd Brn Grey SL  
 Moist SL  
 ↓  
 H<sub>2</sub>O 12'



DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2ND INCH	P/F/H
10-21	<del>233</del>	4.5/14	10:41	10:43	10:46	3m	P
						lot # 24	
10-21	231	4/11	11:44	11:46	11:49	3m	P
						lot # 19	
10-21	228	12	Visual	H <sub>2</sub> O @ 11'			F
10-21							
10-21							

REMARKS \_\_\_\_\_

SANITARIAN DB + HS BACKHOE \_\_\_\_\_ OTHERS \_\_\_\_\_

TEST HOLES USED IN SOA \_\_\_\_\_ AVG. PERC TIME \_\_\_\_\_ SQ. FT/HR \_\_\_\_\_

TRENCH WIDTH \_\_\_\_\_ INLET DEPTH \_\_\_\_\_ MAX. BOT DEPTH \_\_\_\_\_ EFFECTIVE SW \_\_\_\_\_

A/P

P-108

Red Brown  
SCL



Refusal

6'

P-109

Gray Brown  
SCL 2.1 mo. 7

SCL Red  
Brown



Rock (Small)

SL Red Brown  
micaceous

Small  
Rocks



Large Boulders  
Refusal  
10'

Lot # 251

DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2ND INCH	P/F/H
5-19	108	6'	—————	—————	—————	—————	P
5-19	109	5/10	3:00	3:05	3:05	3m	P

REMARKS \_\_\_\_\_

SANITARIAN \_\_\_\_\_ BACKHOE \_\_\_\_\_ OTHERS \_\_\_\_\_

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

TRENCH WIDTH \_\_\_\_\_ INLET DEPTH \_\_\_\_\_ MAX. BOT DEPTH \_\_\_\_\_ EFFECTIVE S/W \_\_\_\_\_

AP

101

1  
25  
10  
9  
11.5

brn scl  
lsbk  
brn sl  
many mica  
brn fscl  
micaceous  
saponite  
few  
quartz  
channers  
brn  
chfscl

104

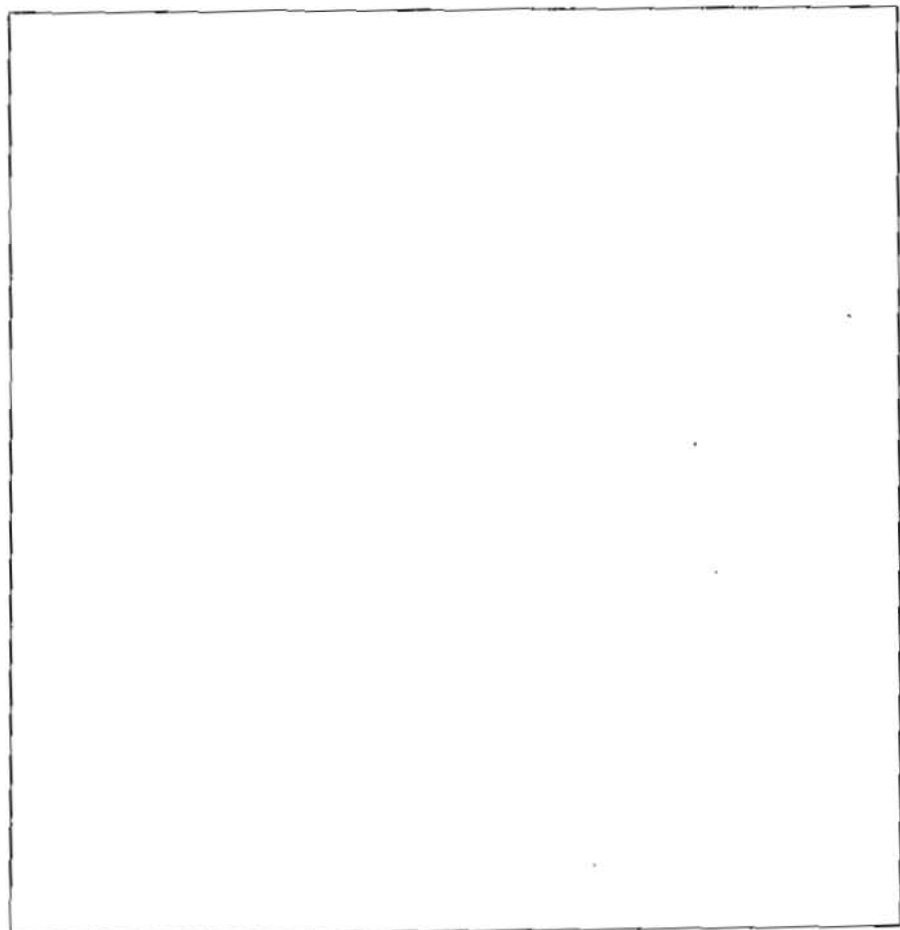
.5  
4.5  
6  
9.5  
10

brn l sbk  
org med  
brn scl  
msbk  
yellowish  
brn sl  
yellow  
brn fscl  
saponite  
chfscl

100

1  
4  
6  
10  
14

brn l  
lsbk  
red brn  
scl  
msbk  
red brn  
many mica  
sl  
yellow  
brn fscl  
saponite  
brn fscl



DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2ND INCH	P/F/H
5-19	101	5.0 / 11.5	1:48	1:50	1:52	2	P
	104	5 / 12	2:04	2:05	2:07	2	P
	100	6 / 14	2:20	2:38	2:40	12	P
	112	11	usual				F
	111	5.0 / 13	3:14	3:21	3:25	4	P

REMARKS \_\_\_\_\_

SANITARIAN \_\_\_\_\_ BACKHOE \_\_\_\_\_ OTHERS \_\_\_\_\_

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

TRENCH WIDTH \_\_\_\_\_ INLET DEPTH \_\_\_\_\_ MAX. BOT DEPTH \_\_\_\_\_ EFFECTIVE S/W \_\_\_\_\_

112

brn l  
yellow  
brn scl  
msbk  
yellow  
brn  
sl  
msbk  
yellow  
brn chfscl  
30% clay  
channers  
sl

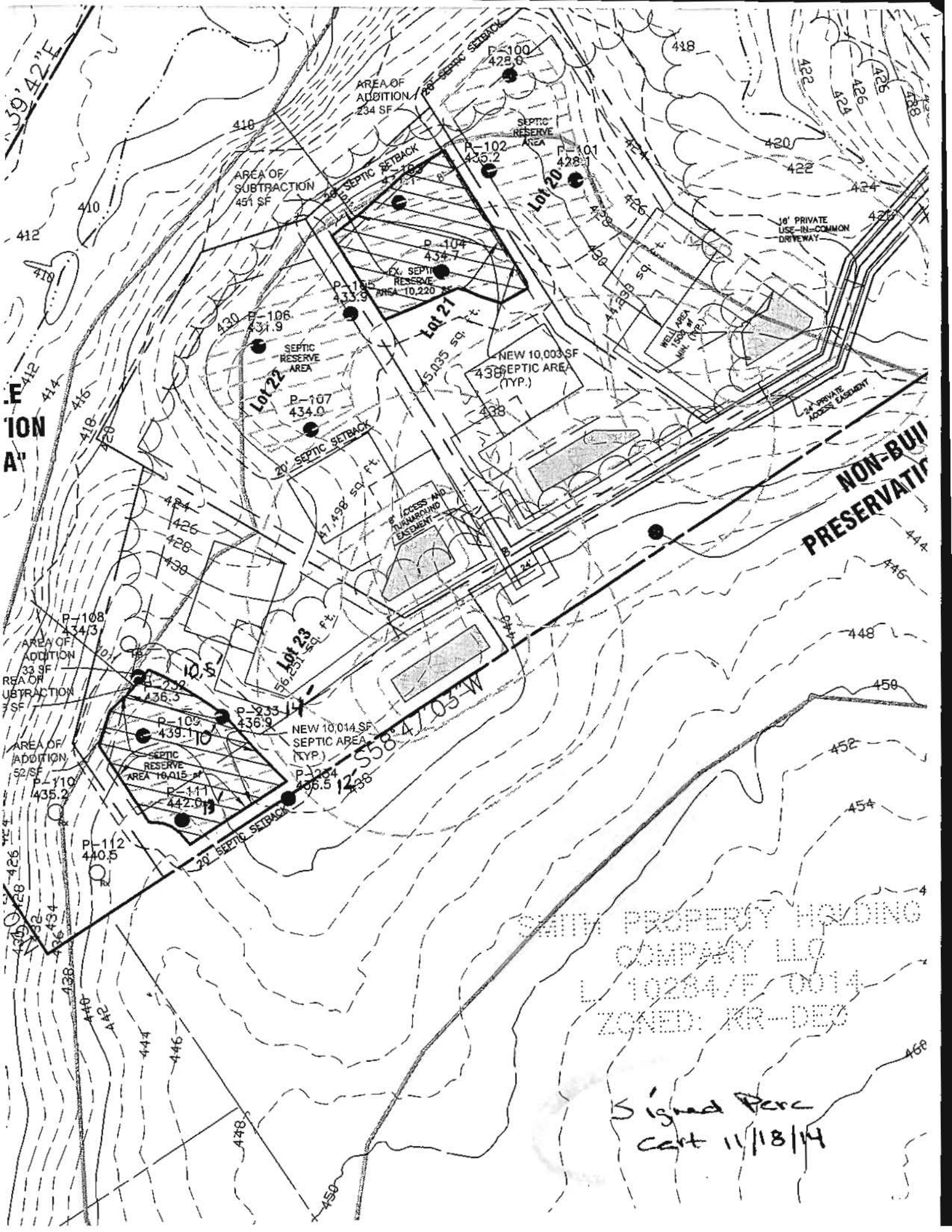
1  
3  
4  
6  
8  
40  
no

111

brn l  
brn scl  
msbk  
yellow  
brn fscl  
saponite  
yellow  
brn  
chfscl  
micaceous

1  
3.5  
8  
13





**NON-BUILDING PRESERVATION**

SAINT PROPERTY HOLDING  
 COMPANY LLC  
 L 10284/F 0014  
 ZONED: KR-DEC

Signed Perc  
 Cert 11/18/14



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: \_\_\_\_\_

Subdivision: Regan Property Lot: 23

Initial system: Application rate: 1.2 Effective area beginning depth: 3.5 Bottom maximum depth: 8  
 1<sup>st</sup> Replacement: Application rate: 0.8 Effective area beginning depth: 5 Bottom maximum depth: 8  
 2<sup>nd</sup> Replacement: Application rate: 1.2 Effective area beginning depth: 5 Bottom maximum depth: 8

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:

- All trenches must be equal length unless low pressure dosed
- All trenches must be on contour
- 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: Hank Oswald Date: 1/13/17



**EFFLUENT AND DRAIN WATER PUMPS****MYERS® ME40 SERIES**

The Myers® ME40 series effluent pumps are one of the industry's most efficient models featuring a 4/10 HP motor. This powerful pump provides the flow and head required for demanding dosing systems and drainage applications. The ME40 incorporates cast iron, engineered thermoplastic and stainless steel in combination to produce a powerful and highly durable pump.

Available with automatic float switch or manual models for use with external controls for precision dosing installations.

**APPLICATIONS**

Effluent removal, sump drainage, water transfer, flood control

**SPECIFICATIONS**

**Capacities** - 80 GPM (303 LPM)  
**Shut-off Head** - 32' (9.75 m)  
**Operation** - Manual or automatic  
**Max. Spherical Solids** - 3/4" (19 mm)  
**Liquids Handling** - Domestic effluent and drain water  
**Intermittent Liquid Temperature** - Up to 140°F (60°C)  
**Motor/Electrical Data** - 4/10 HP, 1650 RPM, oil-filled, permanent split capacitor type, 115V, 12A, 1Ø, 60Hz; 230V, 6A, 1Ø, 60Hz  
**Acceptable pH Range** - 5-9  
**Specific Gravity** - .9-1.1  
**Viscosity** - 28-35 SSU  
**Discharge, NPT** - 1-1/2" (38 mm)  
**Housing** - Cast iron  
**Minimum Sump Diameter** - Simplex: 24" (61.0 cm)  
 Duplex: 36" (91.4 cm)  
**Power Cord** - 10' or 20', 16/3, SJTW

**FEATURES****Efficient Dosing**

Two-vane cast iron impeller design provides maximum dosing efficiency

**Powerful Torque**

High-torque, permanent split capacitor (PSC) motor; no starting switches or relays to wear out

**Rugged and Cool**

Rugged-built, oil-filled motor for continuous bearing lubrication and maximum heat dissipation

**Water-tight Fit**

Positive seating, quick-connect float and switch cords make replacement easy

**Seal Protection**

Lower ball bearing and heavy duty Type 6 seal for added pump life

**Automatically Better**

Field-tested, wide-angle, mercury-free float switch provides maximum drawdown (automatic models only)

**Dual Operation**

Automatic float switch or manual operation by plugging directly into outlet

**Thermal Protection**

Heat sensor overload protection with automatic reset when motor cools to a safe operating temperature

**EFFLUENT AND DRAIN WATER PUMPS**

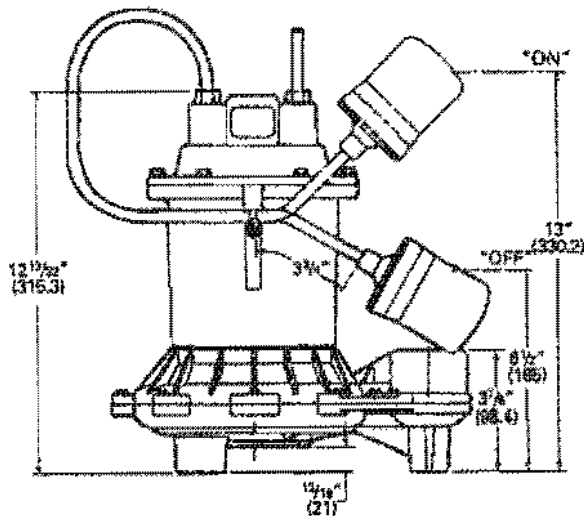
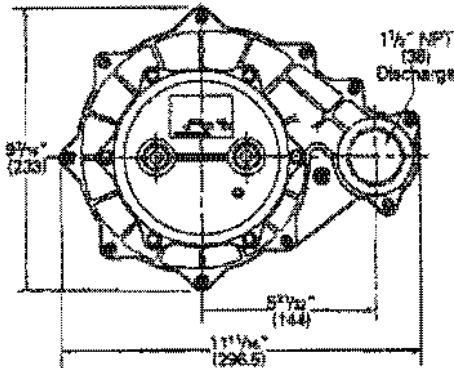
# MYERS® ME40 SERIES

**ORDERING INFORMATION**

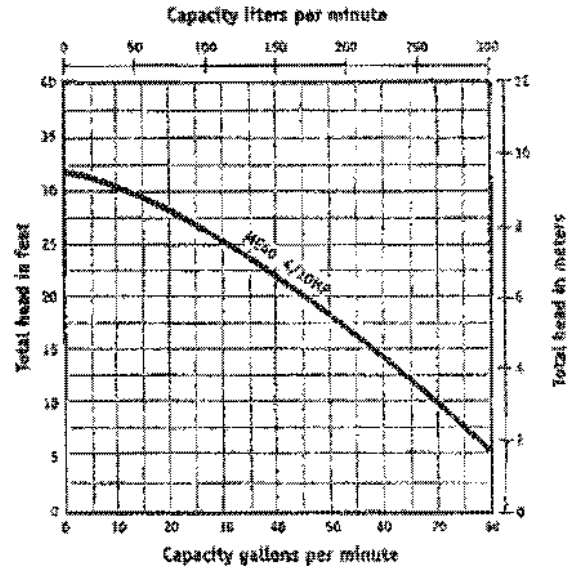
Catalog Number	HP	Volts	Phase/Cycles	Amps	Discharge Size	Switch Type	Approx. Cord Length	Wt. Lbs.
ME40A-11	4/10	115	1/60	12.0	1-1/2"	Tethered Automatic	10'	27
ME40AC-11	4/10	115	1/60	12.0	1-1/2"	Tethered Automatic	20'	28
ME40M-11	4/10	115	1/60	12.0	1-1/2"	Manual	10'	26
ME40MC-11	4/10	115	1/60	12.0	1-1/2"	Manual	20'	27
ME40AC-21	4/10	230	1/60	6.0	1-1/2"	Tethered Automatic	20'	28
ME40MC-21	4/10	230	1/60	6.0	1-1/2"	Manual	20'	27
ME40P-1	4/10	115	1/60	6.0	1-1/2"	Tethered Automatic*	10'	28
ME40PC-1	4/10	115	1/60	6.0	1-1/2"	Tethered Automatic*	20'	29
ME40PC-2	4/10	230	1/60	6.0	1-1/2"	Tethered Automatic*	20'	29

\*Piggyback

**DIMENSIONS**



**PUMP PERFORMANCE**



**EFFLUENT AND DRAIN WATER PUMPS****MYERS® ME40 SERIES****SPECIFICATIONS**

**Effluent Pumps** – Pump(s) shall be F. E. Myers ME40 Series sump pumps selected in accordance with the following design criteria:

Number of Pumps:	_____
Primary Design Flow:	_____
Primary Design Head:	_____
Minimum Shut-off Head:	32'
Motor Horsepower:	4/10
Motor Speed:	1650 RPM
Electrical:	115 Volts, 1Ø, 60 Hz or 230 Volts, 1Ø, 60 Hz

**Pump** – The pump shall be designed to handle septic tank effluent and be capable of passing 3/4 inch spherical solids. The pump shall be capable of handling liquids with temperatures to 140°F intermittent.

**Motor** – The pump motor shall be of the submersible type rated 4/10 hp at 1650 RPM and shall be for \_\_\_\_\_ 115 volts or \_\_\_\_\_ 230 volts single phase, 60 cycles. Single phase motor shall be of the shaded pole type with no relays or starting switches. Stator winding shall be of the open type with Class A insulation rated for 105°C maximum operating temperature. The winding housing shall be filled with clean dielectric oil to lubricate bearings and seals, and transfer heat from the windings to the outer shell. The motor winding assembly shall be pressed into the stator housing for best alignment and heat transfer.

The motor shall be capable of operating over the full range of the performance curve without overloading the motor and causing any objectionable noise or vibration. The motor shall have two bearings to support the rotor; an upper sleeve bearing to accommodate radial loads and a lower sleeve bearing with thrust pad to take thrust and radial loads.

A heat sensor thermostat and overload shall be attached to the top end of the motor windings and shall be wired in series with the windings to stop the motor if the motor winding temperature reaches 223°F. The overload thermostat shall reset automatically when the motor cools to a safe operating temperature.

**Power Cord** – The motor power cord shall be \_\_\_\_\_ 10 or \_\_\_\_\_ 20 feet SJOW or SJTW type. The power and switch cords shall be of the positive sealing, quick-disconnect type. The power and switch cable connections shall be sealed at the motor entrance by means of a compression nut which serves to make a positive electrical connection and prevent water from entering the cable jacket and motor housing.

**Optional Control Switch** – The effluent pump shall be controlled by an optional integral float switch. The float switch shall be of a non-mercury type and be capable of directly controlling the pump motor without the need for an external control panel.

**Shaft Seal** – The motor shall be protected by a rotating mechanical shaft seal. The seals shall have carbon and ceramic seal faces lapped to a tolerance of one light band. Metal parts and springs for seals shall be 300 series stainless steel.

**Pump Impeller** – The pump impeller shall be of the two vane enclosed type. The impeller shall be constructed of cast iron.

**Motor Castings** – The motor housing castings shall be of high tensile strength Class 30 gray cast iron. Castings shall be treated with phosphate and painted with a high quality air dried modified epoxy resin for corrosion protection.

**Pump Case** – The pump case shall be a high efficiency volute design capable of passing 3/4 inch spherical solids. The pump volute shall be constructed of corrosion resistant, high impact, engineered thermoplastic.

**Fasteners** – All exposed fasteners shall be of 300 series stainless steel.