



APPLICATION

FOR PERCOLATION TESTING AND SITE EVALUATION

TEST DATE(S) _____ TEST TIME _____ A/P _____

AGENCY REVIEW: _____ DATE _____

DO NOT WRITE ABOVE THIS LINE

I 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 5 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) Robert Francis & Moira Chiacchierini

DAYTIME PHONE (202) 360-8850 CELL _____ FAX _____

MAILING ADDRESS 13571 Argo Drive Dayton MD 21036
STREET CITY/TOWN STATE ZIP

APPLICANT Linda Alexander / CLS

DAYTIME PHONE (443) 375-9903 CELL _____ FAX _____

MAILING ADDRESS 439 East Main Street Westminster MD 21157
STREET CITY/TOWN STATE ZIP

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

PROPERTY LOCATION
SUBDIVISION/PROPERTY NAME Linden Chapel Hills LOT NO. 10

PROPERTY ADDRESS 13571 Argo Drive Dayton MD
STREET TOWN/POST OFFICE

TAX MAP PAGE(S) 28 GRID 14 PARCEL(S) 289 PROPOSED LOT SIZE 3.142c

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

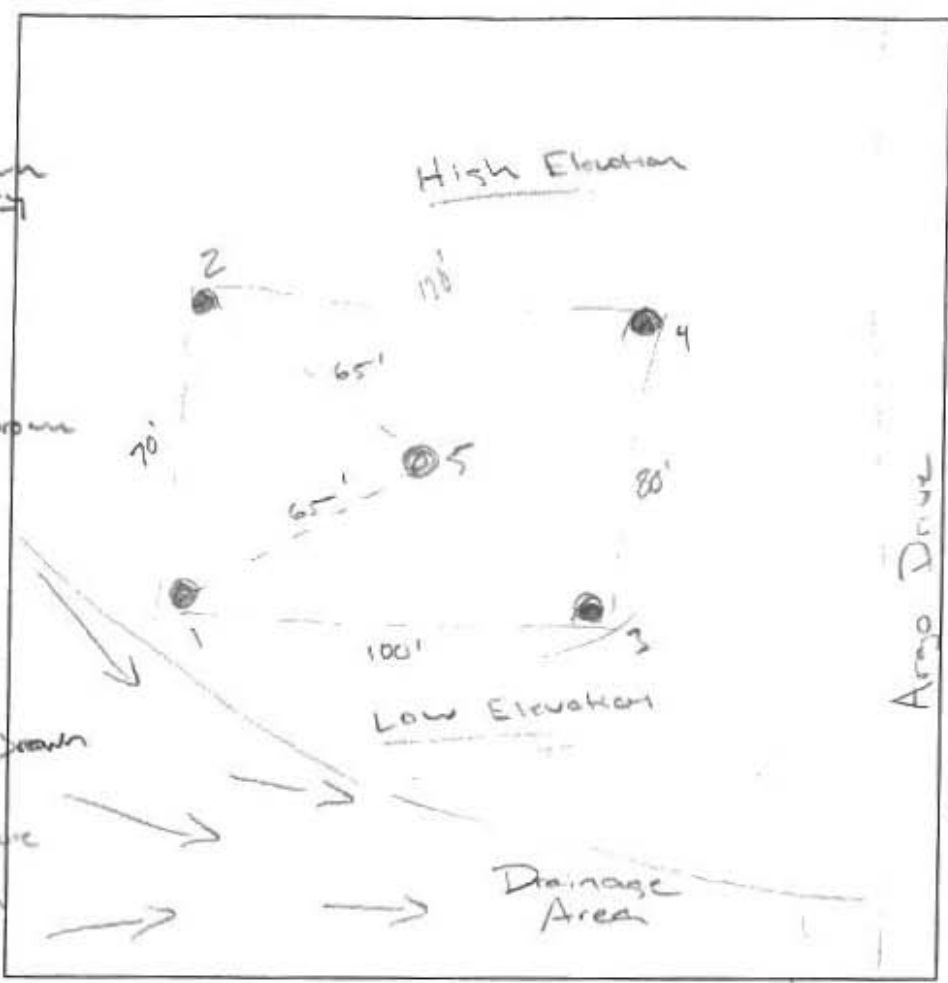
HOWARD COUNTY HEALTH DEPARTMENT, BUREAU OF ENVIRONMENTAL HEALTH, WELL AND SEPTIC PROGRAM
7178 COLUMBIA GATEWAY DRIVE COLUMBIA, MARYLAND 21046 (410) 313-2640 FAX (410) 313-2648
TDD (410) 313-2323 TOLL FREE 1-877-4MD-DHMH

AP _____

#4
 1' Loam
 2.5' St, Yellow Brown
 Platy, Flaty
 5.5' Sl, Platy
 Red Brown
 7' Shale
 Micaceous
 Brown, Gray Brown
 LS
 9' Platy
 Shale layer
 Hard Bottom

#3
 5" Loam
 Yellow Brown
 SL, No Structure
 4' Red Red Brown
 Platy,
 Sl, Mica
 9' Platy shale
 10' LS
 Tan Brown
 Gray Brown

#2
 1' Loam
 Clay loam
 Yellow Brown,
 Brown
 5' Sl, Mica
 Gray Brown
 9' Platy shale
 layer
 Loamy sand
 Gray Brown
 Yellow Brown



#1
 1' Loam
 Red Brown
 SL
 4' Sl
 Red Brown
 Platy
 Channels
 9' Platy
 Shale
 Layer
 10' Gray Brown
 Brown
 LS

#5
 1' Loam
 Red Brown
 SL
 Thin platy
 mica
 2' Red Brown
 Sl Thin
 Platy mica
 2' Tan
 shale
 layer
 9' LS, Tan
 Pale Brown
 Gray Brown
 platy

DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2ND INCH	P/F/H
4/18	3	4 / 14.5	9:33	9:50	10:13	23 min	P
4/18	4	4 / 9	10:25	10:29	10:36	7 min	P
4/18	2	6 / 11	11:06	11:08	11:08	2 min	P
4/18	1	4.6 / 11	11:35	11:50	12:20	30 min	P
4/18	5	6 / 11	12:48	12:49	12:52	3 min	P

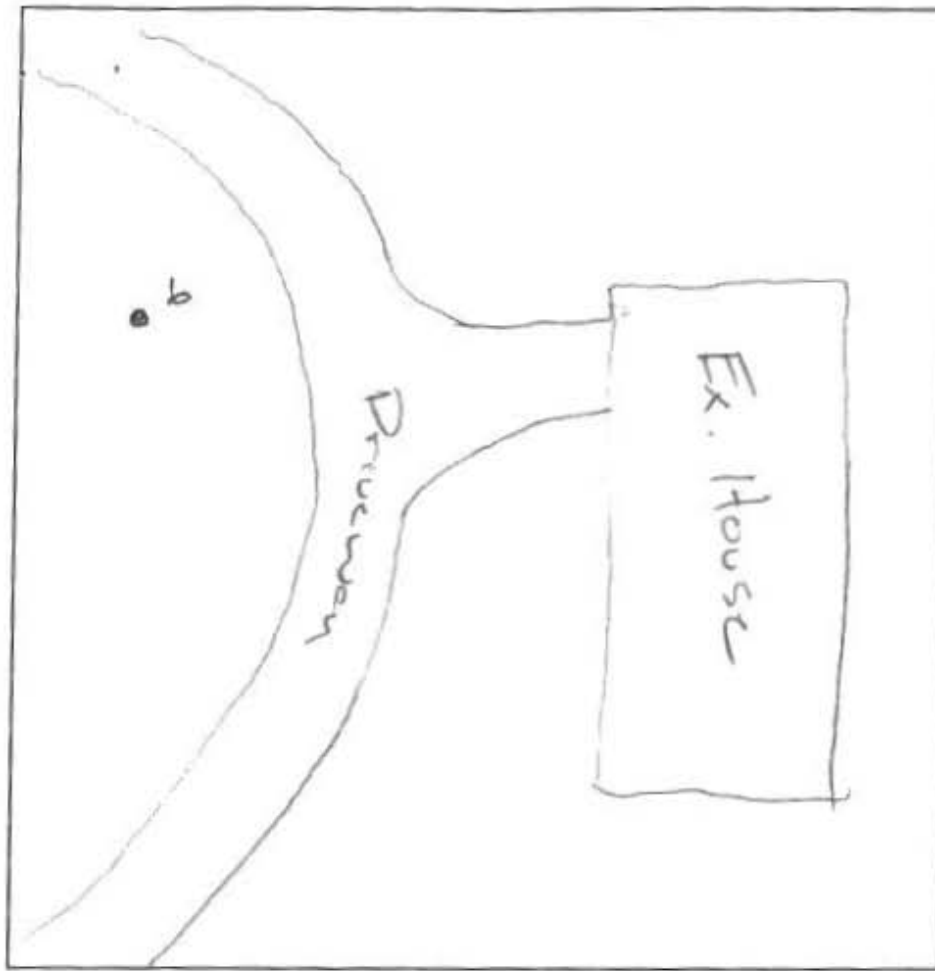
REMARKS _____
 SANITARIAN _____ BACKHOE _____ OTHERS _____
 TEST HOLES USED IN SDA _____ AVG. PERC TIME _____ SQ. FT/BR _____
 TRENCH WIDTH _____ INLET DEPTH _____ MAX. BOT DEPTH _____ EFFECTIVE SW _____

AP _____

6

Rock
Outcrop
> 50%
Rock

3'



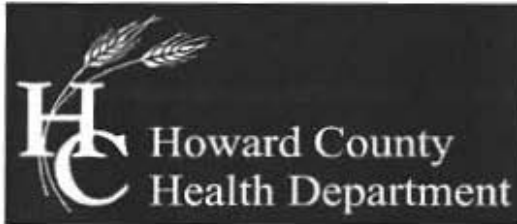
DATE	TEST #	DEPTH	START	BREAK 1" DROP	STOP 2" DROP	TIME OF 2ND INCH	P/F/H
4/18	6	3'	VISUAL	> 50%	ROCK		F

REMARKS _____

SANITARIAN _____ BACKHOE _____ OTHERS _____

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

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



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: 13571 Argo Dr. Dayton, MD 21036

Subdivision: Linden Chapel Hills Lot: 16

Initial system: Application rate: 1.2 Effective area beginning depth: 5 Bottom maximum depth: 7
1st Replacement: Application rate: 0.8 Effective area beginning depth: 5 Bottom maximum depth: 7
2nd Replacement: Application rate: 0.8 Effective area beginning depth: 5 Bottom maximum depth: 7

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:

(W + 2) / (W + 1 + 2D) x 100 = Percent of length of standard trench where W=trench width and D= 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:

1st system - by hole 2 - staying b/t hole 2 + 5
2nd system - under 1st - b/t holes 5 + 1
3rd system - next to 2nd from bottom w/ b/t holes 5 + 3

- all avoid hole 4

Approved: _____ Date: 4/25/17

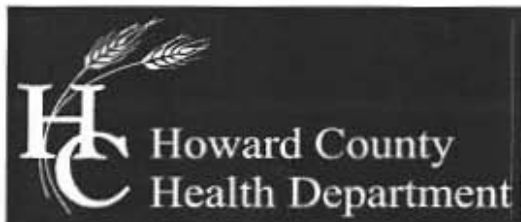
[Signature]

with a box in center - 2 across upper contour 140'
3rd below by hole 4

system 1 - $3 \times 70'$
at 5' wide - no sidewall 1.2 rate
above + on holes 2 + 4

sys 2 - b/t 2 + 5 - ^{bits} specs

sys 3 - below



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Twitter: [HowardCoHealthDep](https://twitter.com/HowardCoHealthDep)

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

Date: April 26, 2017

To: Robert Francis
13571 Argo Dr.
Dayton, MD 21036

Re: Percolation Test Report
13571 Argo Dr.
Dayton, MD 21036

Wet season percolation tests were conducted at 13571 Argo Drive (Tax Map 28, Parcel 289) on April 18th 2017. Tests and profile descriptions were documented for 6 locations (1, 2, 3, 4, 5, & 6). Five out of the six test holes passed (1, 2, 3, 4, & 5). Please note that test hole 6 is not shown on the test plan. All holes must be field located and accurately represented on the perc certification plan.

All percolation tests conducted were standard tests, measuring rate of fall for a pre-wet period followed by measurement and recordation of the time required for the water level to drop 1 inch. Areas that may be included in the septic reserve area are represented by test locations having satisfactory soil condition. The area must be large enough to fit three systems (1 initial, 2 replacements). If in the future a building permit increasing living space is proposed a septic system upgrade will be required.

The next step in the process is to have an engineer/consultant submit a percolation certification plan to confirm the design of the sewage disposal area.

Should you have any questions regarding this evaluation, please contact me. I may be reached at (410) 313-6357 or by email rfreemon@howardcountymd.gov

Respectfully,

A handwritten signature in black ink, appearing to read 'Robert Freemon', is written over a light blue horizontal line.

Robert Freemon
Bureau of Environmental Health
Well & Septic Program

Attachment: Percolation Field Notes



Bureau of Environmental Health

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

MEMORANDUM

TO: CLSI Engineers & Surveyor
439 East Main Street
Westminster, MD 21157-5539

FROM: Robert Freeman *RIF*
Well & Septic Program

RE: 13571 Argo Drive
Dayton, MD 21036-1103

DATE: 6/1/2017

I have reviewed the Perc Cert and here are my comments.

- The western half of the SDA shall not extend passed perc holes 1 & 3. The eastern half of the SDA may extend out passed holes 2 & 4 up to five feet of the property line. If the eastern half is extended to five feet of the property line the following note must be added:
 - "The property line dividing lots 15 & 16 must be professionally staked by a licensed surveyor prior to system installation."
- ✓ Note 3 needs to state the topography was field verified and by whom it was field verified.
- ✓ The sqft of the SDA must be shown.
- ✓ The SDA must be 25ft from a drainage easement and/or center of a swale.
- ✓ Eliminate any legend symbols not being used on the plan.
- ✓ The "Existing Well Location" legend symbol does not match what is on the plan.
- ✓ Change approved/disapproved perc test to passed/failed perc test in the legend.

- Can't be passed direction

- Trenches must show width

- All well sites or well base

Freemon, Robert

To: Tracie Rippeon
Cc: Linda D. Alexander; Bob Francis
Subject: 13571 Argo
Attachments: 13571 Argo PC.pdf

Hi,

Attached are my comments on the Perc Cert for Linden Chapel Hills Lot 16. In addition to my 1st comment alternative specs (Rate: 1.2, No Sidewall) may be used for the initial system only in order to better fit it between holes 2 & 5. As for my 2nd comment the topography of the SDA must be field verified at minimum. If you have any questions let me know.

Robert Freemon

Howard County Health Department

8930 Stanford Blvd. Columbia, MD 21045

Well and Septic Program

Bureau of Environmental Health

Phone: 410-313-6357

Email: rfreemon@howardcountymd.gov

<https://www.howardcountymd.gov/Departments/Health/Environmental-Health/Well-and-Septic>

439 East Main Street
Westminster, MD 21157-5539



(410) 848-1790 • (301) 662-1799
Fax (410) 848-1791

June 7, 2017

Howard County Health Department
8930 Stanford Blvd
Columbia, MD 21045

Attn: Mr. Robert Freemon
Environmental Sanitarian

RE: 13571 Argo Drive, Linden Chapel Hills, Lot 16
CLSI Job No.: 2015074A

Dear Mr. Freemon,

We offer the following responses to your comment letter dated June 1, 2017:

1. The SDA has been revised to reflect your remarks. A note has been added to the plan, requiring the line dividing lots 15 & 16 to be staked prior to system installation.
2. Note 3 has been revised to include field verification of topo in SDA.
3. The square footage of the SDA has been added to the plan.
4. The SDA shown is 28.7' from the existing drainage easement and has been dimensioned as such.
5. Legend symbols not being used on the plan have been removed.
6. Existing well location symbols have been revised to match the legend symbol.
7. The notes for passed/failed perc tests have been revised in accordance with your request.

Please note that additional spot shots have been shown in the area.

Should you have any questions or concerns, please feel free to contact our office.

Sincerely,

A handwritten signature in black ink that reads "Linda Alexander".

Linda Alexander
Associate/ Project Manager

Cc: File



Bureau of Environmental Health

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

MEMORANDUM

TO: CLSI Engineers & Surveyor
439 East Main Street
Westminster, MD 21157-5539

FROM: Robert Freemon *RIF*
Well & Septic Program

RE: 13571 Argo Drive
Dayton, MD 21036-1103
"Perc Cert Comments"

DATE: 6/19/2017

I have reviewed the Perc Cert and here are my comments.

- No part of the SDA shall extend passed holes 1 & 3 in the northwest direction.
- Three alternate well locations or a 1,500sqft well box must be shown on the plan.
- Trenches shown on the plan must reflect the width chosen in the calculations.

Freemon, Robert

To: Tracie Rippeon
Cc: Linda D. Alexander; Bob Francis
Subject: Perc Cert
Attachments: 13571 Argo PC2.pdf

Hi,
Attached are my comments for the revised perc cert. Let me know if you have any questions.

Robert Freemon

Howard County Health Department

8930 Stanford Blvd. Columbia, MD 21045

Well and Septic Program

Bureau of Environmental Health

Phone: 410-313-6357

Email: rfreemon@howardcountymd.gov

<https://www.howardcountymd.gov/Departments/Health/Environmental-Health/Well-and-Septic>

439 East Main Street
Westminster, MD 21157-5539



(410) 848-1790 • (301) 662-1799
Fax (410) 848-1791

June 22, 2017

Howard County Health Department
8930 Stanford Blvd
Columbia, MD 21045

Attn: Mr. Robert Freemon
Environmental Sanitarian

RE: 13571 Argo Drive, Linden Chapel Hills, Lot 16
CLSI Job No.: 2015074A

Dear Mr. Freemon,

We offer the following responses to your comment letter dated June 19, 2017:

1. The SDA has been revised to reflect your remarks. There is a slight extension of the SDA past holes 1 & 3 in order to accommodate the required trenches shown in the calculations. However, we believe this extension would be representative of field conditions considering the actual excavated area of the test holes would be larger than the location shown by the symbol on the plan.
2. Three alternate well locations have been shown on the plan.
3. Trenches have been revised to reflect the widths shown in the calculations

Should you have any questions or concerns, please feel free to contact our office.

Sincerely,

A handwritten signature in cursive script that reads "Linda Alexander".

Linda Alexander
Associate/ Project Manager

Cc: File

439 East Main Street
Westminster, MD 21157-5539



(410) 848-1790 • (301) 662-1799
Fax (410) 848-1791

September 14, 2017

Howard County Health Department
8930 Stanford Blvd
Columbia, MD 21045

Attn: Mr. Robert Freemon
Environmental Sanitarian

RE: 13571 Argo Drive, Linden Chapel Hills, Lot 16
CLSI Job No.: 2015074A

Dear Mr. Freemon,

We offer the following responses to your comment letter dated September 11, 2017:

1. Note 3 has been revised to include who verified the well location
2. The note regarding electrical work has been added to the plan.
3. Sleeves have been shown where the septic line crosses driveway and notes have been added.
4. 25% slopes have been shown.
5. Elevations have been shown for perc locations.
6. The "Pump / System Design" calculations have been revised.

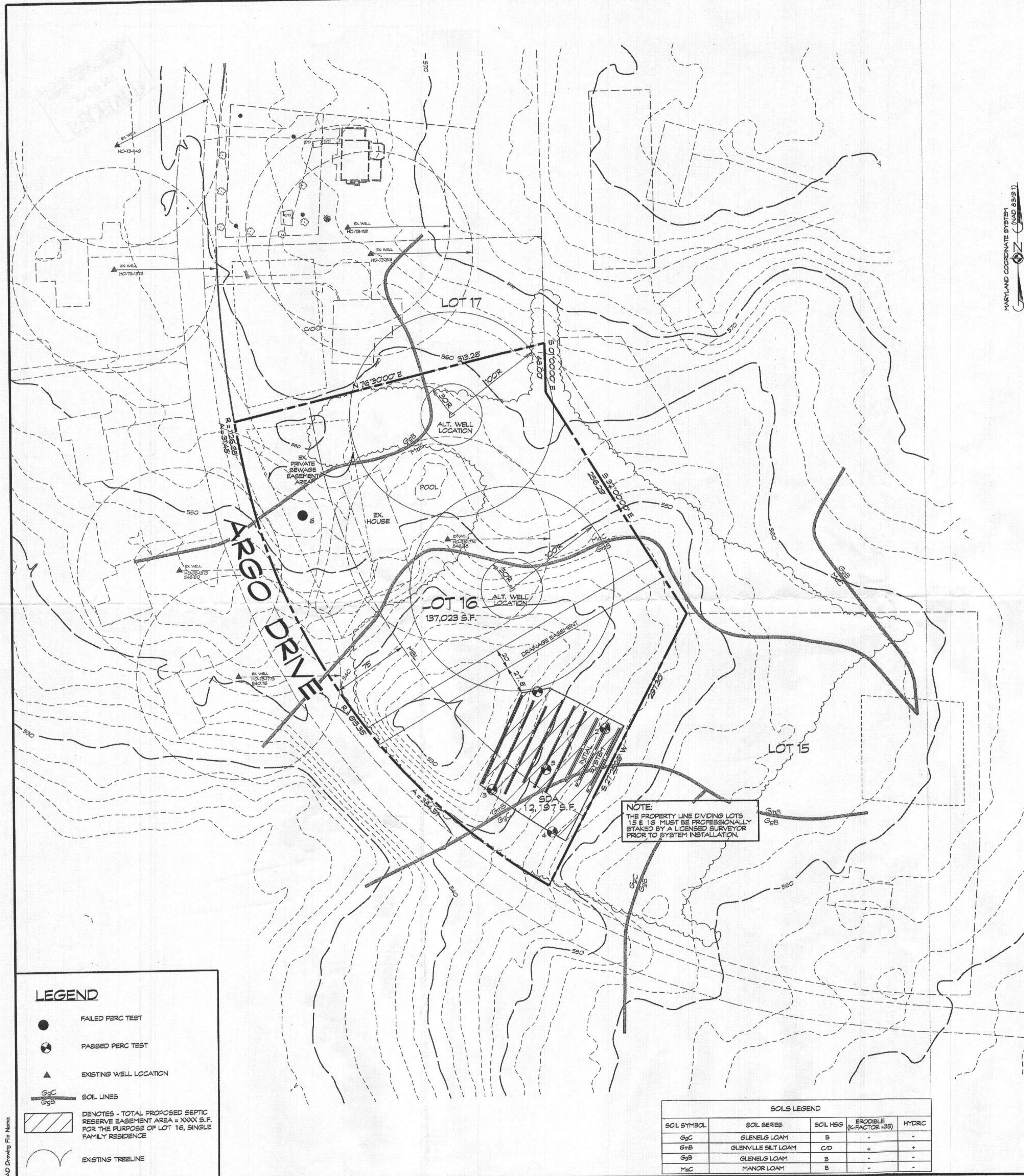
Should you have any questions or concerns, please feel free to contact our office.

Sincerely,

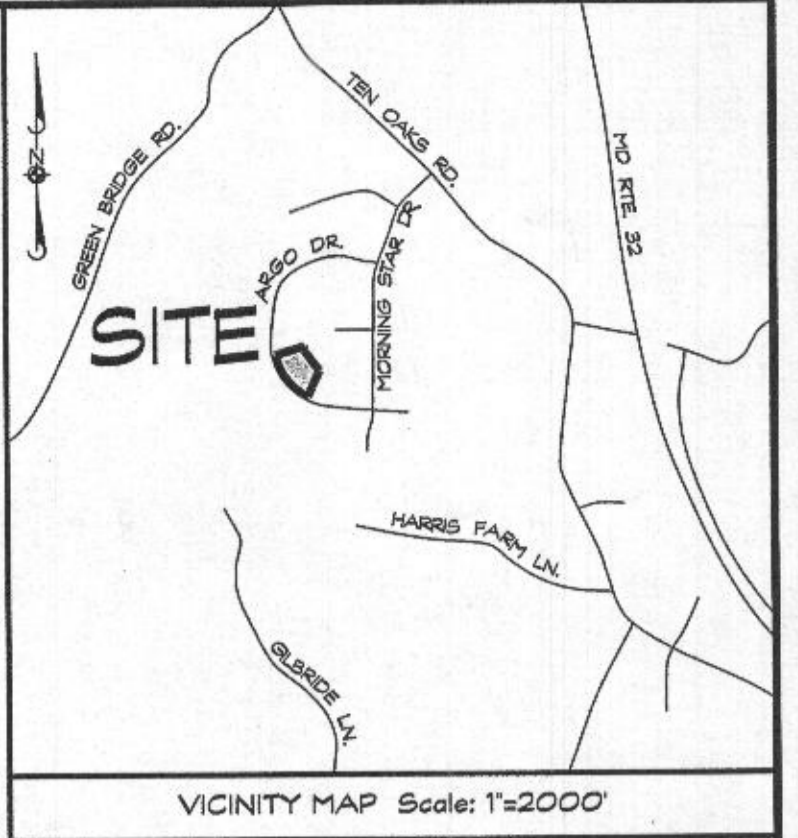
A handwritten signature in cursive script that reads "Linda Alexander".

Linda Alexander
Associate/ Project Manager

Cc: File



MARYLAND COORDINATE SYSTEM
(NAD 83)



SEPTIC SYSTEM TRENCH DESIGN:

INITIAL SYSTEM:
 PROPOSED NUMBER OF BEDROOMS = 5
 APPLICATION RATE = 1.2 GPD/SQ. FT.
 150 GALS x 5 BEDROOM = 750 GAL/DAY
 750 GAL/DAY / 1.2 GAL./DAY/SQ. FT. = 625 SQ. FT.
 625 SQ. FT. x .3 FT. = 209 LF. OF TRENCH
 USE 3 x 70' OF TRENCH FOR INITIAL SYSTEM

REPLACEMENT SYSTEMS:
 PROPOSED NUMBER OF BEDROOMS = 5
 APPLICATION RATE = 0.8 GPD/SQ. FT.
 EFFECTIVE DEPTH IS 2
 150 GALS x 5 BEDROOM = 750 GAL/DAY
 750 GAL/DAY / 0.8 GAL./DAY/SQ. FT. = 937.5 SQ. FT.
 937.5 SQ. FT. x .2 FT. = 469 LF. OF TRENCH
 469 LF. x .57 = 267.3 LF. OF TRENCH - 268 LF.
 USE 4 x 67' OF TRENCH FOR EACH SYSTEM

THIS AREA DESIGNATES A PRIVATE SEWAGE EASEMENT OF AT LEAST 10,000 S.F. AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL IMPROVEMENTS OF ANY NATURE IN THIS EASEMENT ARE RESTRICTED UNTIL PUBLIC SEWAGE IS AVAILABLE. THIS EASEMENT 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 EASEMENT. RECORDATION OF THE MODIFIED SEWAGE EASEMENT SHALL NOT BE NECESSARY.

NOTE:
 THE PROPERTY LINE DIVIDING LOTS 15 & 16 MUST BE PROFESSIONALLY STAKED BY A LICENSED SURVEYOR PRIOR TO SYSTEM INSTALLATION.

LEGEND

- FAILED PERC TEST
- PASSED PERC TEST
- EXISTING WELL LOCATION
- SOIL LINES
- DENOTES - TOTAL PROPOSED SEPTIC RESERVE EASEMENT AREA = XXXX S.F. FOR THE PURPOSE OF LOT 16, SINGLE FAMILY RESIDENCE
- EXISTING TREELINE

SOILS LEGEND

SOL SYMBO	SOL SERIES	SOL HSG	ERODIBLE (K-FACTOR x35)	HYDRIC
GgC	GLENELG LOAM	B	-	-
GmB	GLENVILLE SILT LOAM	C/D	+	+
GgB	GLENELG LOAM	B	-	-
MgC	MANOR LOAM	B	-	-

APPROVED FOR PRIVATE WATER AND SEWERAGE SYSTEM
 HOWARD COUNTY HEALTH DEPARTMENT

Robert Francis 7/19/2017
 HOWARD COUNTY HEALTH OFFICER DATE

I HEREBY CERTIFY THAT THE INFORMATION SHOWN HEREON IS BASED ON FIELD WORK PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION, AND IS CORRECT, TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Dennis E. Meckley 6/29/17
 DENNIS E. MECKLEY, PROPERTY LINE SURVEYOR NO. 10844

OWNER/DEVELOPER
 ROBERT FRANCIS
 13571 ARGO DRIVE
 DAYTON, MD 21036

GENERAL NOTES

- CURRENT TITLE REFERENCE
 OWNER: ROBERT L. FRANCIS & MOIRA L. CHACCHIERINI
 DEED REFERENCE: L. 13956, F. 045
 DATE: APRIL 23, 2012
 GRANTOR: ROBERT L. FRANCIS
- THE LOT SHOWN HEREON COMPLIES WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
- THE TOPOGRAPHY SHOWN HEREON IS BASED ON HOWARD COUNTY 200 SCALE TOPO MAPS AND VERIFIED TO ACCURATELY REPRESENT THE RELATIVE CHANGES ON THE SUBJECT PROPERTY. TOPOGRAPHY OF THE SEWAGE DISPOSAL AREA WAS FIELD VERIFIED BY CLSI.
- EXISTING WELLS AND/OR SEWER EASEMENTS WITHIN 100' OF THE LOT LINES HAVE BEEN SHOWN. THERE ARE NO WELLS 200' DOWN GRADIENT OF THE SEPTIC EASEMENT AREA SHOWN.
- M.B.L. DENOTES MINIMUM BUILDING LINE
- ANY CHANGES TO THE PRIVATE SEWER EASEMENT AND/OR ALTERNATIVE WELL LOCATION SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
- THE PERCOLATION TEST LOCATIONS WERE TAKEN FROM THE INFORMATION PROVIDED BY THE HEALTH DEPARTMENT FROM THE ORIGINAL PERMIT INFO #XXXX.
- SHOULD STORM-WATER MANAGEMENT BE REQUIRED, IT WILL BE PROVIDED BY A DRY WELL ON SITE
- SHOULD A SEPTIC SYSTEM UPGRADE BE REQUIRED, THE SEPTIC SYSTEM COMPONENTS SHALL BE INSTALLED AND APPROVED PRIOR TO HEALTH DEPARTMENT APPROVAL OF THE BUILDING PERMIT APPLICATION.

DATA TABULATIONS

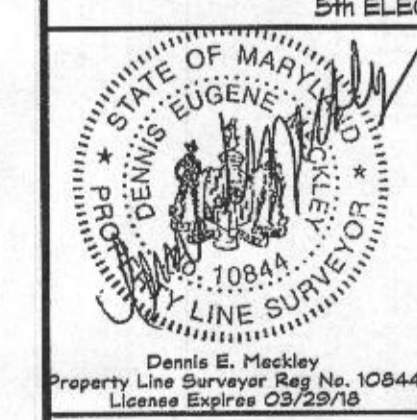
- ZONING DISTRICT: RR-DEO
- NUMBER OF BUILDING SITES: 1
- TOTAL AREA OF LOT: 3.14 ACRES

PURPOSE NOTE:
 THE PURPOSE OF THIS REVISED PERCOLATION CERTIFICATION PLAN IS TO SHOW AN ADDITIONAL SEPTIC EASEMENT TO SUPPORT THE PROPOSED ADDITIONAL BATHROOM WITH THE ADDITION OF THIS BATHROOM, A 5-BEDROOM SEPTIC DESIGN IS NECESSARY.

PERCOLATION TEST RESULTS, AP - A560593

**PERC CERTIFICATION PLAN
 LOT 16
 LINDEN CHAPEL HILLS**

ALSO KNOWN AS 13571 ARGO DRIVE
 PREVIOUSLY RECORDED IN PLAT #3330
 TAX MAP: 28 * BLOCK: 14 * PARCEL: 289
 5th ELECTION DISTRICT * HOWARD COUNTY, MD



439 East Main Street Westminster, MD 21157-5539
 (410) 848-1790 FAX (410) 848-1791

Date	Revisions	Drawn By:	TLR
6/22/17	Revised per HCHD comments - TLR	Designed By:	TLR
		Reviewed By:	DEB1
		Date:	5/23/2017
		Scale:	1" = 50'
		Job No.:	2015074A
		Sheet:	1 OF 1

GOULDS PUMPS



Submersible Effluent Pump

MODEL 3885

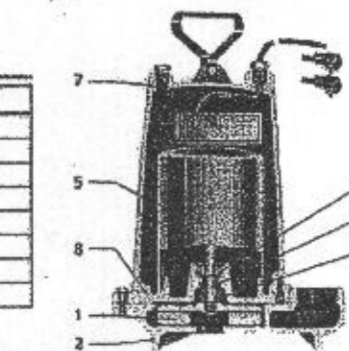
WE Series

PROSUREMENT AVAILABLE FOR RESIDENTIAL APPLICATIONS.

GOULDS PUMPS

COMPONENTS

Item No.	Description
1	Impeller
2	Casing
3	Mechanical Seal
4	Motor Shaft
5	Motor
6	Ball Bearings
7	Power Cable
8	Casing O-Ring



Submersible Effluent Pump

MODEL 3885

WE Series

APPLICATIONS

Specifically designed for the following uses:

- Homes
- Farms
- Trailer courts
- Hotels
- Hospitals
- Industry
- Effluent systems

SPECIFICATIONS

Pump

- Solids handling capabilities: 3/4" maximum.
- Discharge size: 2" NPT.
- Capacities: up to 140 GPM.
- Total heads: up to 128 feet TCH.
- Temperature: 104°F (40°C) continuous, 180°F (80°C) intermittent.
- See order numbers on reverse side for specific HP, voltage, phase and RPM's available.

FEATURES

- **Impeller:** Cast iron, semi-spherical design with pump-out ports for mechanical seal protection. Balanced for smooth operation. Silicon bronze impeller available as an option.
- **Casing:** Cast iron volute type for maximum efficiency. 2" NPT discharge.
- **Mechanical Seal:** SILICON CARBIDE VS. SILICON CARBIDE-wearing faces. Stainless steel metal parts, BUNA-N elastomers.

- **Shaft:** Corrosion resistant, stainless steel. Threaded design. Locknut on all models to guard against component damage on accidental reverse rotation.
- **Fasteners:** 300 series stainless steel.
- **Capable of turning dry** without damage to components.
- **Designed for continuous operation** when fully submerged.

MOTORS

- Fully submerged in high-grade turbine oil for lubrication and efficient heat transfer.
- Class 1 insulation on 1/2-1 1/2 HP models.
- Class 2 insulation on 2 HP models.

Single phase (60 Hz):

- Capacitor start motors for maximum starting torque.
- Built-in overload with automatic reset.
- STOW or STOW severe duty oil and water resistant power cords.
- 1/2 and 1 HP models have NEMA three prong grounding plugs.
- 1/2 HP and larger units have bare lead cord ends.

Three phase (60 Hz):

- Class 10 overload protection must be provided in separately ordered starter cable.
- STOW power cords all have bare lead cord ends.
- **Designed for Continuous Operation:** Pump ratings are within the motor manufacturer's recommended working limits.

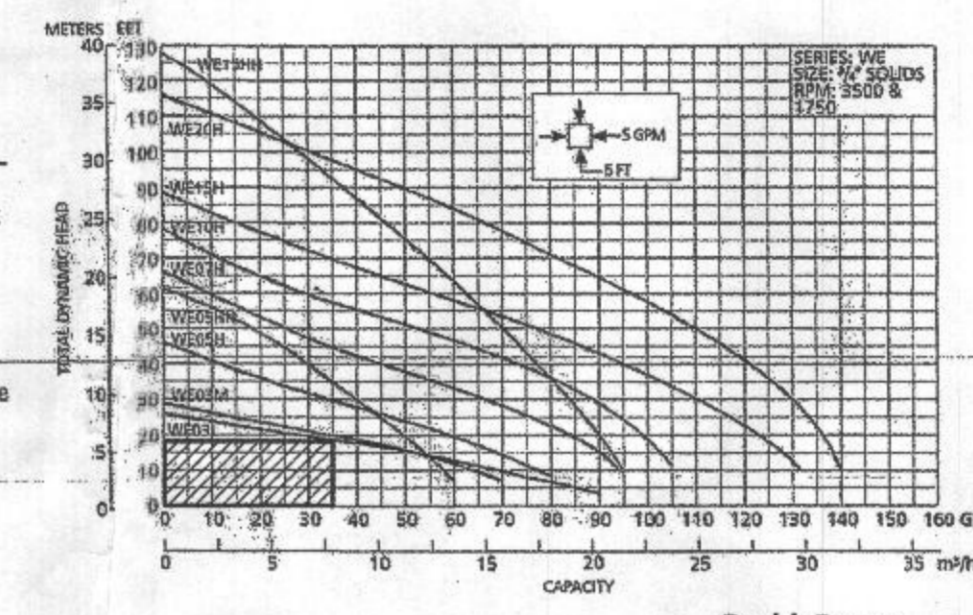
can be operated continuously without damage when fully submerged.

- **Bearings:** Upper and lower heavy duty ball bearing construction.
- **Power Cable:** Severe duty rated, oil and water resistant. Epoxy seal on motor end provides secondary moisture barrier in case of outer jacket damage and to prevent oil wicking. Standard cord is 20'. Optional lengths are available.
- **O-Ring:** Assures positive sealing against contaminants and oil leakage.

AGENCY LISTINGS

Refer to UL 718 and CSA 2.2.1.10 Standards by Canadian Standards Association File #133540

Goolds Pumps is ISO 9001 Registered.



MODELS

Order No.	HP	Phase	Max. Amps	RPM	Volts	Wt. (lbs.)
WE011L	1/2	1	6.7	1750	115	56
WE012L	3/4	1	8.9	1750	115	56
WE013L	1	1	11.7	1750	115	56
WE014L	1 1/2	1	14.5	1750	115	56
WE015L	2	1	17.3	1750	115	56
WE016L	3	1	20.1	1750	115	56
WE017L	4	1	22.9	1750	115	56
WE018L	5	1	25.7	1750	115	56
WE019L	6	1	28.5	1750	115	56
WE020L	7 1/2	1	31.3	1750	115	56
WE021L	10	1	34.1	1750	115	56
WE022L	15	1	40.9	1750	115	56
WE023L	20	1	47.7	1750	115	56
WE024L	25	1	54.5	1750	115	56
WE025L	30	1	61.3	1750	115	56
WE026L	35	1	68.1	1750	115	56
WE027L	40	1	74.9	1750	115	56
WE028L	45	1	81.7	1750	115	56
WE029L	50	1	88.5	1750	115	56
WE030L	55	1	95.3	1750	115	56
WE031L	60	1	102.1	1750	115	56
WE032L	65	1	108.9	1750	115	56
WE033L	70	1	115.7	1750	115	56
WE034L	75	1	122.5	1750	115	56
WE035L	80	1	129.3	1750	115	56
WE036L	85	1	136.1	1750	115	56
WE037L	90	1	142.9	1750	115	56
WE038L	95	1	149.7	1750	115	56
WE039L	100	1	156.5	1750	115	56
WE040L	110	1	163.3	1750	115	56
WE041L	120	1	170.1	1750	115	56
WE042L	130	1	176.9	1750	115	56
WE043L	140	1	183.7	1750	115	56
WE044L	150	1	190.5	1750	115	56
WE045L	160	1	197.3	1750	115	56
WE046L	170	1	204.1	1750	115	56
WE047L	180	1	210.9	1750	115	56
WE048L	190	1	217.7	1750	115	56
WE049L	200	1	224.5	1750	115	56
WE050L	210	1	231.3	1750	115	56
WE051L	220	1	238.1	1750	115	56
WE052L	230	1	244.9	1750	115	56
WE053L	240	1	251.7	1750	115	56
WE054L	250	1	258.5	1750	115	56
WE055L	260	1	265.3	1750	115	56
WE056L	270	1	272.1	1750	115	56
WE057L	280	1	278.9	1750	115	56
WE058L	290	1	285.7	1750	115	56
WE059L	300	1	292.5	1750	115	56
WE060L	310	1	299.3	1750	115	56
WE061L	320	1	306.1	1750	115	56
WE062L	330	1	312.9	1750	115	56
WE063L	340	1	319.7	1750	115	56
WE064L	350	1	326.5	1750	115	56
WE065L	360	1	333.3	1750	115	56
WE066L	370	1	340.1	1750	115	56
WE067L	380	1	346.9	1750	115	56
WE068L	390	1	353.7	1750	115	56
WE069L	400	1	360.5	1750	115	56
WE070L	410	1	367.3	1750	115	56
WE071L	420	1	374.1	1750	115	56
WE072L	430	1	380.9	1750	115	56
WE073L	440	1	387.7	1750	115	56
WE074L	450	1	394.5	1750	115	56
WE075L	460	1	401.3	1750	115	56
WE076L	470	1	408.1	1750	115	56
WE077L	480	1	414.9	1750	115	56
WE078L	490	1	421.7	1750	115	56
WE079L	500	1	428.5	1750	115	56
WE080L	510	1	435.3	1750	115	56
WE081L	520	1	442.1	1750	115	56
WE082L	530	1	448.9	1750	115	56
WE083L	540	1	455.7	1750	115	56
WE084L	550	1	462.5	1750	115	56
WE085L	560	1	469.3	1750	115	56
WE086L	570	1	476.1	1750	115	56
WE087L	580	1	482.9	1750	115	56
WE088L	590	1	489.7	1750	115	56
WE089L	600	1	496.5	1750	115	56
WE090L	610	1	503.3	1750	115	56
WE091L	620	1	510.1	1750	115	56
WE092L	630	1	516.9	1750	115	56
WE093L	640	1	523.7	1750	115	56
WE094L	650	1	530.5	1750	115	56
WE095L	660	1	537.3	1750	115	56
WE096L	670	1	544.1	1750	115	56
WE097L	680	1	550.9	1750	115	56
WE098L	690	1	557.7	1750	115	56
WE099L	700	1	564.5	1750	115	56
WE100L	710	1	571.3	1750	115	56
WE101L	720	1	578.1	1750	115	56
WE102L	730	1	584.9	1750	115	56
WE103L	740	1	591.7	1750	115	56
WE104L	750	1	598.5	1750	115	56
WE105L	760	1	605.3	1750	115	56
WE106L	770	1	612.1	1750	115	56
WE107L	780	1	618.9	1750	115	56
WE108L	790	1	625.7	1750	115	56
WE109L	800	1	632.5	1750	115	56
WE110L	810	1	639.3	1750	115	56
WE111L	820	1	646.1	1750	115	56
WE112L	830	1	652.9	1750	115	56
WE113L	840	1	659.7	1750	115	56
WE114L	850	1	666.5	1750	115	56
WE115L	860	1	673.3	1750	115	56
WE116L	870	1	680.1	1750	115	56
WE117L	880	1	686.9	1750	115	56
WE118L	890	1	693.7	1750	115	56
WE119L	900	1	700.5	1750	115	56
WE120L	910	1	707.3	1750	115	56
WE121L	920	1	714.1	1750	115	56
WE122L	930	1	720.9	1750	115	56
WE123L	940	1	727.7	1750	115	56
WE124L	950	1	734.5	1750	115	56
WE125L	960	1	741.3	1750	115	56
WE126L	970	1	748.1	1750	115	56
WE127L	980	1	754.9	1750	115	56
WE128L	990	1	761.7	1750	115	56
WE129L	1000	1	768.5	1750	115	56
WE130L	1010	1	775.3	1750	115	56
WE131L	1020	1	782.1	1750	115	56
WE132L	1030	1	788.9	1750	115	56
WE133L	1040	1	795.7	1750	115	56
WE134L	1050	1	802.5	1750	115	56
WE135L	1060	1	809.3	1750	115	56
WE136L	1070	1	816.1	1750	115	56
WE137L	1080	1	822.9	1750	115	56
WE138L	1090	1	829.7	1750	115	56
WE139L	1100	1	836.5	1750	115	56
WE140L	1110	1	843.3	1750	115	56
WE141L	1120	1	850.1	1750	115	56
WE142L	1130	1	856.9	1750	115	56
WE143L	1140	1	863.7	1750	115	56
WE144L	1150	1	870.5	1750	115	56
WE145L	1160	1	877.3	1750	115	56
WE146L	1170	1	884.1	1750	115	56
WE147L	1180	1	890.9	1750	115	56
WE148L	1190	1	897.7	1750	115	56
WE149L	1200	1	904.5	1750	115	56
WE150L	1210	1	911.3	1750	115	56
WE151L	1220	1	918.1	1750	115	56
WE152L	1230	1	924.9	1750	115	56
WE153L	1240	1	931.7	1750	115	56
WE154L	1250	1	938.5	1750	115	56
WE155L	1260	1	945.3	1750	115	56
WE156L	1270	1	952.1	1750	115	56
WE157L	1280	1	958.9	1750	115	56
WE158L	1290	1	965.7	1750	115	56
WE159L	1300	1	972.5	1750	115	56
WE160L	1310	1	979.3	1750	115	56
WE161L	1320	1	986.1	1750	115	56
WE162L	1330	1	992.9	1750	115	56
WE163L	1340	1	999.7	1750	115	56
WE164L	1350	1	1006.5	1750	115	56
WE165L	1360	1	1013.3	1750	115	56
WE166L	1370	1	1020.1	1750	115	56
WE167L	1380	1	1026.9	1750	115	56
WE168L	1390	1	1033.7	1750	115	56
WE169L	1400					



HOWARD COUNTY HEALTH DEPARTMENT

60593

A5

DATE
4/17/17

Received From

Robert Francis

PHONE #

202-360-8835

For

Perc App - 13571 Arigo Dr.

CASH

CHECK

NO.

1377

Five Hundred Six

Dollars

\$

506.00

Received By

Sheila Beatty