



# HOWARD COUNTY HEALTH DEPARTMENT

65503

DATE 5/23/19

*W-5*

Received From

*Chesapeake Biosystems* PHONE # *410-189-5020*

For

*Well Permit / 18045*  
*Snaps 1/10/19*

CASH

CHECK

NO

*39646*

*One hundred sixty* Dollars

\$

*160*

*W*

Received By

*J King*

C1 53204

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

COUNTY NUMBER XIII

ST/CO USE ONLY DATE RECEIVED

DATE WELL COMPLETED

Depth of Well 320' (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" HO-18-0092

OWNER Kutscher last name 18045 Shaffers Mill Rd. TOWN Mt Airy SECTION LOT 2

WELL LOG table with columns: DESCRIPTION, FEET (FROM, TO), check if water bearing. Rows include Topsoil/glass, Soft Dry orange sandy silt, Light Brown weathered Rock, Rock (Schist), 2x Geothermal.

GROUTING RECORD, CASING RECORD, SCREEN RECORD sections with checkboxes and input fields for materials and dimensions.

PUMPING TEST section with fields for HOURS PUMPED, PUMPING RATE, WATER LEVEL, TYPE OF PUMP USED.

NUMBER OF UNSUCCESSFUL WELLS: 0. WELL HYDROFRACTURED: YES (Y) NO (N)

DEPTH (nearest ft.) table with rows for casing sections and slot size/diameter of screen.

PUMP INSTALLED section with fields for DRILLER INSTALLED PUMP, TYPE OF PUMP INSTALLED, CAPACITY, PUMP HORSE POWER, PUMP COLUMN LENGTH, CASING HEIGHT.

CIRCLE APPROPRIATE LETTER: A (well abandoned), E (electric log), P (test well converted to production). I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04...

DRILLERS LIC. NO. 1 M 46 598. DRILLERS SIGNATURE: Wesley Wolfe. MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER) T (E.R.O.S.) W Q.

LATITUDE 39.322376 LONGITUDE 77.142292 (DEFAULT COORD. WGS 84). Pursuant to §19-624 of the State Govt. Article of the Maryland Code personal info. requested on this form is used in processing this form pursuant to COMAR 26.04.04.

B 1  
62908

SEQUENCE NO.  
(MDE USE ONLY)

STATE OF MARYLAND  
APPLICATION FOR PERMIT TO DRILL WELL

STATE PERMIT NUMBER

HO - 18 - 0092  
fill in this form completely

565503 please type

**OWNER INFORMATION**

Date Received (APA) 05/23/19

8 MM DD YY 13

15 Last Name Kutscher Owner Brett First Name Brett 34

36 Street or RFD 18045 Shafers Mill Road 55

57 Town Mount Airy, MD 21771 70 State MD 72 Zip 21771 76

**LOCATION OF WELL**

B 3

8 COUNTY Howard County 21

23 SUBDIVISION \_\_\_\_\_ 42

SECTION 44 46 LOT 2 48 50

52 NEAREST TOWN Mount Airy 71

**DRILLER INFORMATION**

Driller's Name Wes Wolfe M WD 598

76 License No. 81

Firm Name Chesapeake Geosystems, Inc.

Address 6720 Fort Smallwood Rd Balt.

Signature Wesley G Wolfe Date 5/19/19

**SOURCES OF DRILLING WATER**

1. Municipal

2. \_\_\_\_\_

3. \_\_\_\_\_

11 STREET ADDRESS 18045 Shafers Mill Rd 30

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)

NORTH  WEST  EAST  SOUTH

34 75 37

DISTANCE FROM ROAD ENTER FT OR MI FT 38 39

TAX MAP: 6 BLK: 23 PARCEL 231

**WELL INFORMATION**

1 2

APPROX. PUMPING RATE (GAL. PER MIN.) N/A 8 12

AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) N/A 14 20

**USE FOR WATER (CIRCLE APPROPRIATE BOX)**

DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION

FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)

INDUSTRIAL, COMMERCIAL, DEWATERING

PUBLIC WATER SUPPLY WELL

TEST, OBSERVATION, MONITORING

OPEN LOOP GEOTHERMAL

CLOSED LOOP GEOTHERMAL

**NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL**

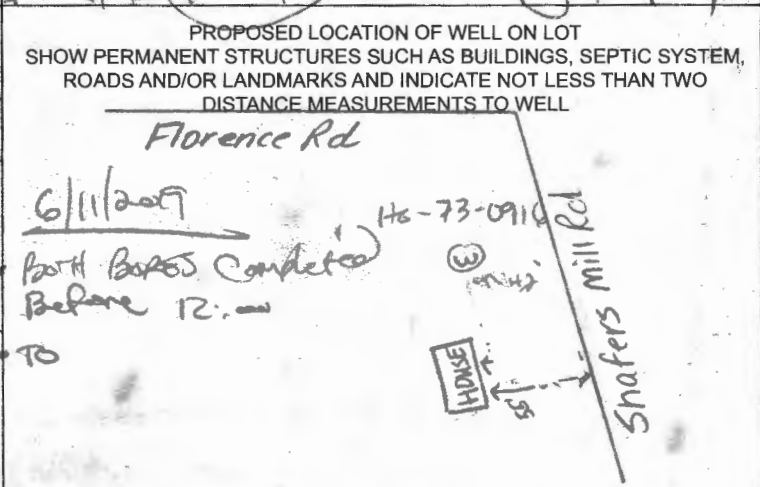
Howard COUNTY NAME COUNTY NO. 24

STATE SIGNATURE \_\_\_\_\_ INSERT S →

DATE ISSUED 06/05/2019 43 MM DD YY 48 CO SIGNATURE \_\_\_\_\_ EXP. DATE 06/05/2019

APPROXIMATE DEPTH OF WELL 320 FEET 24 28

APPROXIMATE DIAMETER OF WELL 6 INCH NEAREST



**METHOD OF DRILLING (circle one)**

BORED (or Augered)  JETTED  Jetted & DRIVEN

30 AIR-ROTARY  AIR-PERCussion  ROTARY (Hydraulic Rotary)

37 CABLE  REVERSE-ROTary  DRIVE-POINT

other \_\_\_\_\_

**REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX)**

THIS WELL WILL NOT REPLACE AN EXISTING WELL

THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED

39  THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS

THIS WELL WILL DEEPEM AN EXISTING WELL

PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED (IF AVAILABLE) 41 \_\_\_\_\_ 52

**Not to be filled in by driller (MDE OR COUNTY USE ONLY)**

APPROP. PERMIT NUMBER \_\_\_\_\_ G \_\_\_\_\_

PERMIT No. HO-18-0092 70 71 72 73 74 75 76 77 78 79

Pursuant to § 10-624 of the State Govt. Article of the Maryland Code, personal info requested on this form is used in processing this form pursuant to COMAR 26.04.04. Failure to provide the info may result in this form not being processed. You have the right to inspect, amend, or correct this form. The Maryland Department of the Environment is subject to the Maryland Public Information Act. This form may be made available on the Internet via MDE's website and is subject to inspection or copying, in whole or in part, by the public and other governmental agencies, if not protected by federal or State Law.

**SPECIAL CONDITIONS**

NOTE APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED - Great Insp. CALL IN DRILLING ACTIVITIES

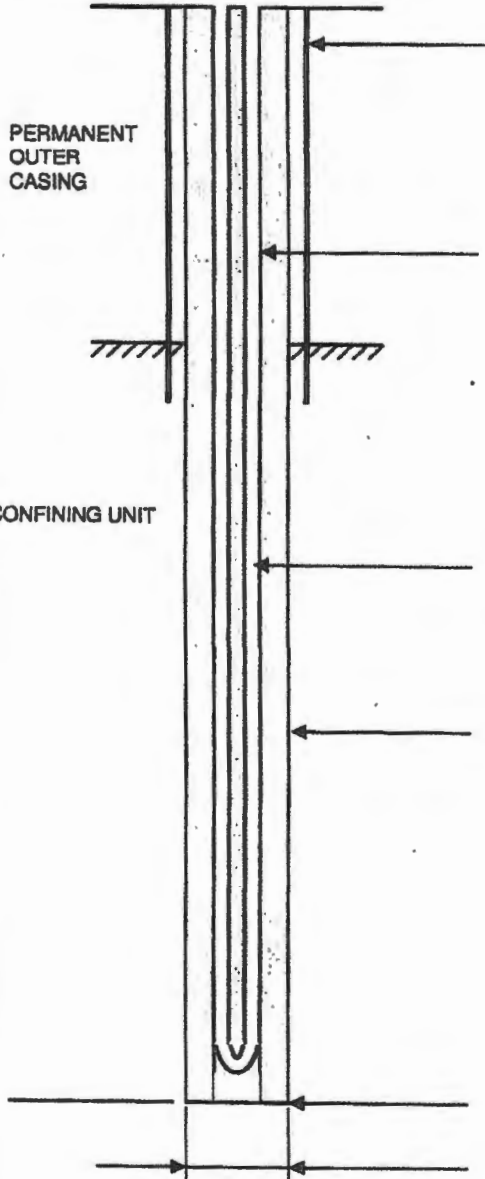


# WELL SCHEMATIC FORM

GROUND SURFACE

PERMANENT  
OUTER  
CASING

CONFINING UNIT



PERMANENT OUTER CASING (if area contaminated)

MATERIAL \_\_\_\_\_  
 DIAMETER \_\_\_\_\_  
 LENGTH \_\_\_\_\_  
 DEPTH INTO CONFINING UNIT \_\_\_\_\_

TUBE CASING (if not regular, single loop)

ATTACH HORIZONTAL SCHEMATIC  
 NUMBER OF TUBES PER BOREHOLE \_\_\_\_\_  
 DIAMETER OF TUBES \_\_\_\_\_  
 MATERIAL \_\_\_\_\_  
 SHAPE AND LENGTH \_\_\_\_\_  
 TUBE CONNECTION METHOD \_\_\_\_\_  
 TUBE CONNECTION MATERIAL \_\_\_\_\_

LOOP PIPE CASING (regular, single loop)

MATERIAL HDPE? YES  NO   
 DIAMETER 1.75"  
 LENGTH 320' (600 Total)

GROUT

MATERIAL Bentonsin  
 PERMEABILITY  $1 \times 10^{-7}$   
 WATER / GROUT RATIO 24 gals / 50 lbs  
 PERCENT SOLIDS 20%

TREMIE GROUTED FROM BOTTOM OF BOREHOLE? YES  NO

USING A POSITIVE DISPLACEMENT PUMP? YES  NO

DEPTH TO THE BOTTOM OF HOLE 320'

DIAMETER OF BOREHOLE 5.75"

WELL ADDRESS 18045 Shafter Mill Rd  
Mt Airy MD 21771  
 LOT NUMBER: 2  
 SQUARE NUMBER: \_\_\_\_\_

WELL OWNER: Brent Kutcher  
 OWNER ADDRESS: 18045 Shafter Mill Rd  
Mt Airy, MD 21771

DEPARTMENT OF INSPECTIONS, LICENSES & PERMITS 3430 COURT HOUSE DRIVE ELLICOTT CITY, MD 21043 PERMITS (410) 313-2455 INSPECTIONS (410) 313-1850	<b>HOWARD COUNTY          RESIDENTIAL          HEATING-VENTILATION-AIR          CONDITIONING AND          REFRIGERATION PERMIT          APPLICATION</b>	HVACR PERMIT # <b>m19000440</b> BUILDING PERMIT #
---	---	--

BUILDING ADDRESS: SUITE/APT: <b>18045 Shafers Mill Rd.</b> SUBDIVISION: CENSUS TRACT: SECTION: AREA: LOT: <b>2</b> TAX MAP: <b>6</b> PARCEL: BLOCK: ZONE: <b>0231</b> PROPERTY ID: MAP COORDINATES: <b>04-334345</b> TYPE OF IMPROVEMENTS: USE: <b>RES.</b>	OWNERS NAME: <b>Brett Kutscher</b> ADDRESS: <b>18045 Shafers Mill Rd.</b> CITY: <b>Mount Airy Shafers</b> STATE: <b>MD</b> ZIP CODE: <b>21771</b> HOME PHONE: <b>215-495-9926</b> WORK PHONE:
---	---

<u>CHECK ONE</u>	<u>HOW MANY</u>	COMPANY NAME: Ground Loop Heating & Air Cond., Inc.
SINGLE FAMILY DWELLING <input checked="" type="checkbox"/>	<u>1</u> ZONES	LICENSEE NAME: Michael E. Cullum
SINGLE FAMILY TOWNHOUSE <input type="checkbox"/>	___ ZONES	ADDRESS: 1701 Whiteford Road
MULTI-FAMILY / HOTEL/MOTEL <input type="checkbox"/>	___ ROOMS	CITY: Darlington
ASSISTED LIVING HOMES (16 OR FEWER RESIDENTS) <input type="checkbox"/>	___ ROOMS	STATE: MD ZIP CODE: 21034 PHONE: 410-836-1706 HVACR LICENSE NO: 6539

New Heating and Air Conditioning  
 New Geo Thermal System  
 Heating System Only  
 Ductless Mini Splits  
 Other Work (Describe):  
 Thru The Wall Systems

Replacement  
 Heating  
 Air Conditioning  
 Heating and Air Conditioning

**EQUIPMENT:**  
**WATER FURNACE 4 TON**  
**NDV049**

Additions and Alterations  
 Heating  
 Air Conditioning  
 Heating and Air Conditioning

\*\*\*\*Replacement Geo Thermal Systems are not required; However, if a tax credit is being sought a permit is required\*\*\*\*

Zones	Rooms
Permit Fee = # of Zones x \$40 = <u>40.00</u> Technology Fee (10% of Permit Fee) = <u>4.00</u> Plus Application Fee <u>50.00</u> Total Fees Due = <u>94.00</u>	Permit Fee = # of Rooms x \$80 = _____ Technology Fee (10% of Permit Fee) = _____ Plus Application Fee \$50 <u>50.00</u> Total Fees Due = _____

I HAVE CAREFULLY EXAMINED AND READ THIS APPLICATION AND KNOW IT IS TRUE AND CORRECT. THE WORK DESCRIBED HEREIN WILL BE PERFORMED BY A STATE HVACR LICENSED PERSON(S), AND ALL WORK WILL BE PERFORMED IN COMPLIANCE WITH APPLICABLE CODES AND STANDARDS OF HOWARD COUNTY THE STATE OF MARYLAND.

SIGNATURE OF LICENSEE: Michael Cullum DATE: 5/24/19  
 PRINT NAME OF LICENSEE: Michael Cullum  
 Email Address: linda@groundloop.com

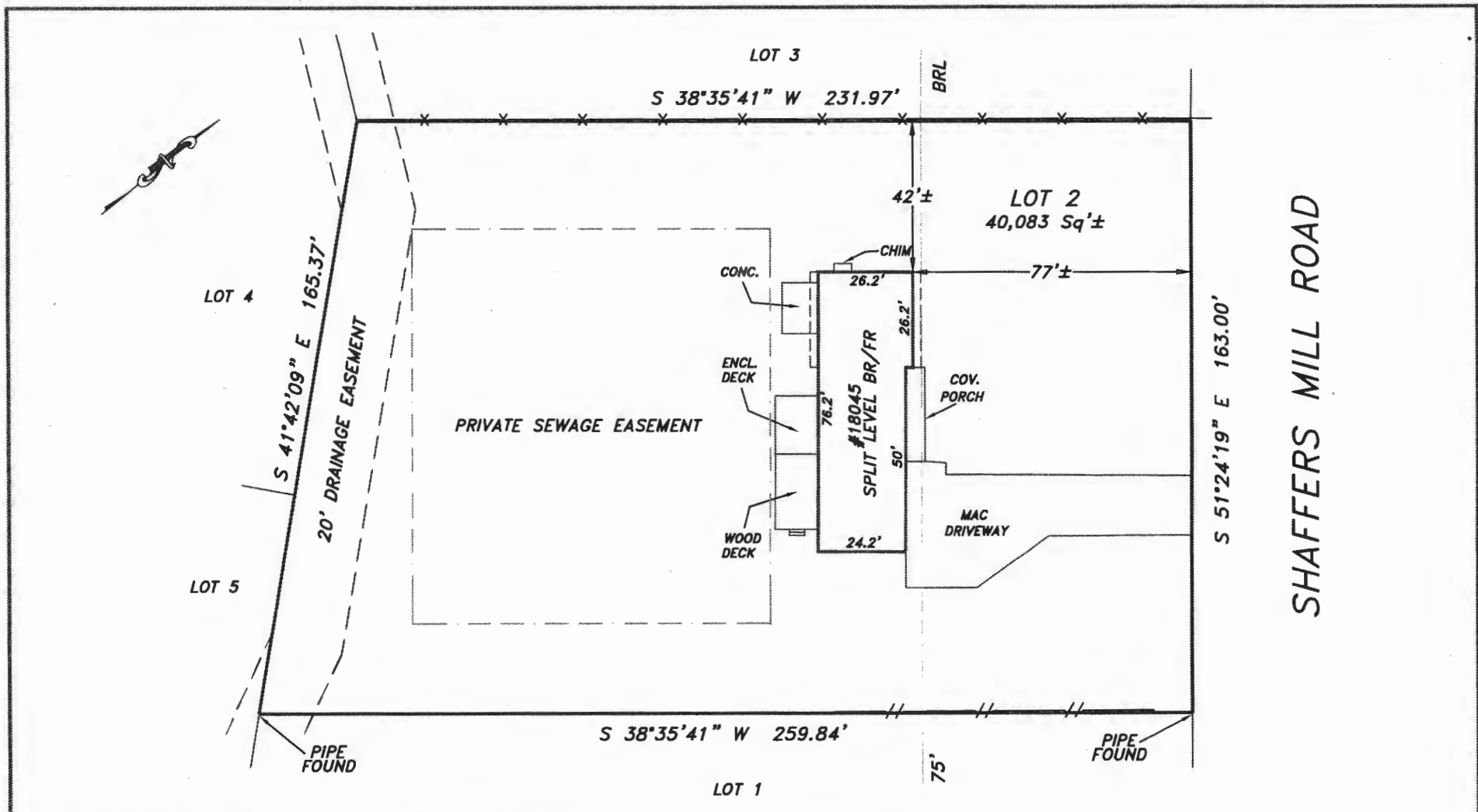
Make check payable to: DIRECTOR OF FINANCE OF HOWARD COUNTY

Word doc: T:\Updated Forms\hvac application  
Rev:10.2009

<b>Validation</b>
Check Number: <u>25484</u>
Cash: _____
Receipt Number: <u>5176359</u>

**RECEIVED**  
**RECEIVED**  
 Approved Septic System Plan  
 Howard County Health Department  
 Signature: [Signature] Date: 6/6/19  
 MAY 28 2019  
 LICENSES & PERMITS DIVISION

M19000440



NOTE: THE FENCE APPEARS TO LIE AT, ON, OR OVER PROPERTY LINE.

The purpose of this drawing is to locate, describe, and represent the positions of buildings and substantial improvements affecting the property shown hereon, being known as:

Lot 2 as shown on plat entitled  
"SHAFFER'S MILL ESTATES"

recorded among the land records of Howard County, Maryland in  
Plat Book 31 folio 31

PREPARED FOR:

**Lakeside**

This is page one of a two page document. The advice found on the affixed page is an integral part of this drawing, and is not valid without all pages.

STATE OF MARYLAND  
JAMES C. HUDGINS  
REGISTERED PROPERTY LINE SURVEYOR  
No. 96

James Carl Hudgins  
Property Line Surveyor #96  
Expiration Date: 3/11/2020

**LOCATION DRAWING**  
18045 SHAFFERS MILL ROAD  
4th ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

**NTT Associates, Inc.**  
16205 Old Frederick Rd.  
Mt. Airy, Maryland 21771  
Phone: (410) 442-2031  
Fax: (410) 442-1315  
www.nttsurveyors.com

Scale:	1" = 40'
Date:	2-5-2019
Field By:	RMS/EBS
Drawn By:	EBS
File No.:	LMD43864
Page No.:	1 of 2

**GENERAL NOTES:**

- 1) The accuracy of the distances shown from any structure to any apparent property line is 2'±.
- 2) This drawing does not represent a Boundary Survey. Any property markers labeled hereon are not guaranteed by NTT Associates, Inc.
- 3) This plat is of benefit to a consumer only insofar as it is required by a lender, a title insurance company or its agent in connection with contemplated transfer, financing, or refinancing.
- 4) This plat does not provide for the accurate identification of property boundary lines, but such identification may not be required, for the transfer of title or securing financing or refinancing.
- 5) This plat is not to be relied upon for the establishment or location of fences, garages, buildings, or other existing or future improvements.
- 6) Unless noted on the drawing, no title report was provided. This drawing was prepared by examining the current title deed or record plat. Any easements, restrictions, rights of way, or any other property alterations not referred to in the current title deed may not be shown.
- 7) Unless otherwise noted, the bearings and north arrow shown hereon are in the meridian of the current title deed or record plat.
- 8) Building Restriction Line Information, if shown, was obtained from existing records only and is not guaranteed by NTT Associates, Inc.
- 9) Flood Zone Information shown on FIRM maps is subject to interpretation.
- 10) Improvements which in the surveyor's opinion appear to be in a state of disrepair or considered "temporary" may not be shown.
- 11) If it appears encroachments may exist, a Boundary Survey is recommended to determine the exact location of the property boundary lines and improvements.
- 12) The locations of fence lines, if shown, are approximate.



18045 SHAFFERS MILL ROAD  
MOUNT AIRY, MARYLAND 21771

**PRINTING INSTRUCTIONS:**

- 1) With the drawing open in Adobe Reader, select "Print..." in the "File" menu
- 2) Select the desired printer
- 3) Choose the "All" option under "Pages to Print"
- 4) Choose the "Actual size" option under "Page Sizing & Handling"
- 5) To print in COLOR click "Print", for BLACK & WHITE continue to step 6
- 6) Click the "Properties" button
- 7) Choose the "Imaging" tab
- 8) Check the "Print text as black" & "Print graphics as black" boxes (this will remain the default until unchecked)
- 9) Click "OK"
- 10) Click "Print"

**APPARENT ENCROACHMENT NOTES:**

- 1) The fence appears to lie at, on, or over property line.

**JOB SPECIFIC NOTES:**

- 1) Conflicting field evidence found.

This is to certify that I either personally prepared or was in responsible charge over the preparation of this drawing and the surveying work reflected in it, all set forth in Regulation .12 of Chapter 09.13.06 of the Code of Maryland Annotated Regulations.



**SURVEYOR LEGEND:**

Property Lines:	=====	Fence Line (Metal, Wire):	-----*
Buildings:	=====	Fence Line (Wood, Plastic):	-----//
Improvements:	=====	Right of Way:	-----
Building Restriction Line:	-----	100 Year Flood Plain:	-----
Easement Lines:	-----	Forest Conservation:	-----
Easement Lines:	-----	Septic Reserve Areas:	-----
Old Lot Lines:	.....	Overhangs:	-----

**NTT Associates, Inc.**

16205 Old Frederick Rd.  
Mt. Airy, Maryland 21771  
Phone: (410) 442-2031  
Fax: (410) 442-1315  
www.nttsurveyors.com

Subject property is shown in Zone X on the FIRM Map of Howard County, Maryland on Community Panel Number 24027C0010D, effective 11/06/2013

Drawing # LMD43864

Page No.: 2 of 2



# Load Short Form Entire House

M19000440

Job:  
Date: May 15, 2014  
By:

## Project Information

For: Brett Kutcher

## Design Information

	Htg	Clg	Infiltration	
Outside db (°F)	12	94	Method	Simplified
Inside db (°F)	72	70	Construction quality	Average
Design TD (°F)	60	24	Fireplaces	0
Daily range	-	M		
Inside humidity (%)	30	50		
Moisture difference (gr/lb)	27	47		

### HEATING EQUIPMENT

Make  
Trade  
Model  
AHRI ref

Efficiency 80 AFUE  
Heating input 0 Btuh  
Heating output 0 Btuh  
Temperature rise 0 °F  
Actual air flow 966 cfm  
Air flow factor 0.027 cfm/Btuh  
Static pressure 0 in H2O  
Space thermostat

### COOLING EQUIPMENT

Make  
Trade  
Cond  
Coil  
AHRI ref

Efficiency 0 SEER  
Sensible cooling 0 Btuh  
Latent cooling 0 Btuh  
Total cooling 0 Btuh  
Actual air flow 966 cfm  
Air flow factor 0.061 cfm/Btuh  
Static pressure 0 in H2O  
Load sensible heat ratio 0.82

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
L Base	713	6948	0	189	0
R Base	700	6571	1994	179	122
L 1st	713	10451	7005	285	427
R 1st	784	11476	6844	313	417
Entire House	2910	35446	15843	966	966
Other equip loads		0	0		
Equip. @ 1.00 RSM			15843		
Latent cooling			3528		
<b>TOTALS</b>	<b>2910</b>	<b>35446</b>	<b>19371</b>	<b>966</b>	<b>966</b>

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.