



HOWARD COUNTY HEALTH DEPARTMENT

59804

DATE 10/21/16

WS

Received From

Chesapeake Geosystems

PHONE #

410 789-5600

For

Well Permit / 3009 Center
DK.

CASH

CHECK

NO.

37171

One hundred sixty

Dollars

\$

100.00

Received By

D. King

C1 48202

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 13

ST/CO USE ONLY DATE RECEIVED

DATE WELL COMPLETED

Depth of Well 320

PERMIT NO. FROM "PERMIT TO DRILL WELL" HD-15-0353

OWNER Bauernshub Richard TOWN Ellicott City, MO 21042

WELL LOG

Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

Table with columns: DESCRIPTION, FEET (FROM, TO), check if water bearing. Includes entries like Silty sands, fine to medium, Dry stiff, Weathered rock, brown/gray, mod. hard, Rock hard gray.

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED Y

- CIRCLE APPROPRIATE LETTER: A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED, E ELECTRIC LOG OBTAINED, P TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO. 1 MWD 567 DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION) LIC. NO. 1 D

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

GROUTING RECORD

WELL HAS BEEN GROUTED (Circle Appropriate Box) Y

TYPE OF GROUTING MATERIAL (Circle one) CEMENT CM BENTONITE CLAY BC

NO. OF BAGS 18 NO. OF POUNDS 900

GALLONS OF WATER 450

DEPTH OF GROUT SEAL (to nearest foot) from 0 TOP 52 ft. to 320 BOTTOM 58 ft.

CASING RECORD

ST STEEL, C/O CONCRETE, PL PLASTIC, O/T OTHER

MAIN CASING TYPE Nominal diameter top (main) casing (nearest inch): 60, 61, 63, 64, 66, 70

OTHER CASING (if used) diameter inch, depth (feet) from to

SCREEN RECORD

ST STEEL, BR BRASS, HO OPEN HOLE, PL PLASTIC, O/T OTHER

DEPTH (nearest ft.)

Table with columns: E, A, C, H, S, C, R, E, E, N. Rows for casing and screen depths.

SLOT SIZE 1 2 3 DIAMETER OF SCREEN (NEAREST INCH) from to

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER) T (E.R.O.S.) W Q

70 72 74 75 76 TELESCOPE CASING LOG INDICATOR OTHER DATA

PUMPING TEST

HOURS PUMPED (nearest hour) N/A

PUMPING RATE (gal. per min.) N/A

METHOD USED TO MEASURE PUMPING RATE N/A

WATER LEVEL (distance from land surface)

BEFORE PUMPING 80 ft.

WHEN PUMPING N/A ft.

TYPE OF PUMP USED (for test)

- A air, P piston, T turbine, C centrifugal, R rotary, O other, J jet, S submersible

PUMP INSTALLED

DRILLER INSTALLED PUMP YES NO

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29. N/A

CAPACITY: GALLONS PER MINUTE (to nearest gallon) 31 35

PUMP HORSE POWER N/A

PUMP COLUMN LENGTH (nearest ft.) 37 41

CASING HEIGHT (circle appropriate box and enter casing height) 43 47

LAND SURFACE below 3 (nearest foot)

LATITUDE 39.287806 LONGITUDE 76.833735 (DEFAULT COORD. WGS 84)

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.

B 1 SEQUENCE NO. (MDE USE ONLY) 43362 STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL please type 559804 STATE PERMIT NUMBER Ho-15-0353
 1 2 3 6 70 79 fill in this form completely

OWNER INFORMATION
 Date Received (APA) 10/21/16
 8 MM DD YY 13
Bauernshud Richard
 15 Last Name Owner First Name 34
3009 Center Drive
 36 Street or RFD 55
Ellicott City MD 21042-0000
 57 Town 70 State 72 Zip 76

B 3 LOCATION OF WELL
Howard County
 8 COUNTY 21
 23 SUBDIVISION 42
 SECTION 44 46 LOT 48 50
Ellicott City
 52 NEAREST TOWN 71

DRILLER INFORMATION
Jeff Corron MWD 567
 Driller's Name 76 License No. 81
Chesapeake Geosystems, Inc.
 Firm Name
6720 Fort Smallwood Rd Balt.
 Address
Jeff Corron 10/20/16
 Signature Date

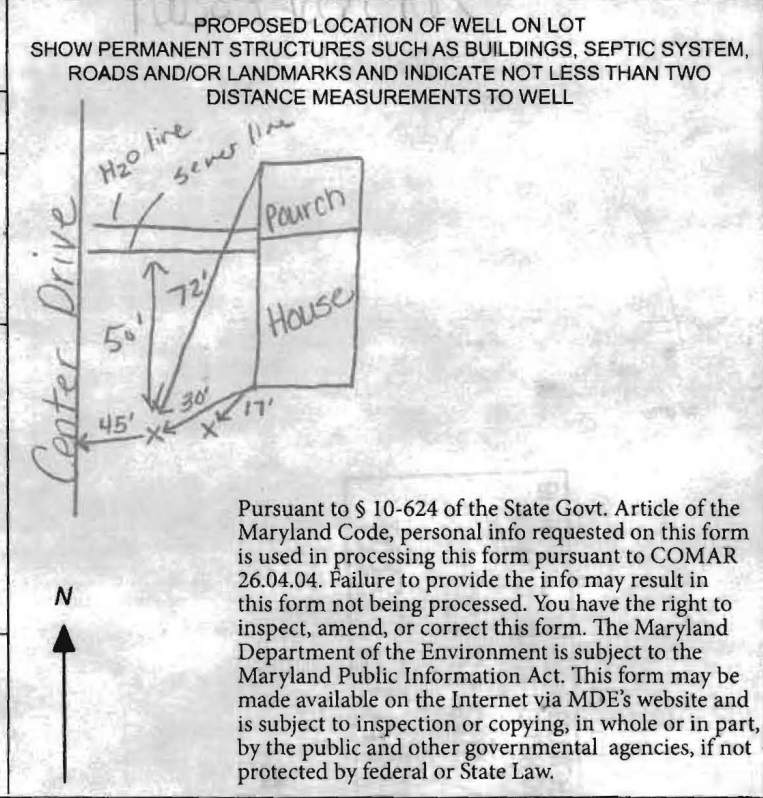
B 4 SOURCES OF DRILLING WATER
 1. municipal 3009 Center Drive
 11 STREET ADDRESS 30
 2.
 3.
 ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)
 NORTH
 WEST EAST
 SOUTH
 34 45 37
 DISTANCE FROM ROAD FT
 ENTER FT OR MI 38 39
 TAX MAP: 17 BLK: 22 PARCEL 401

B 2 WELL INFORMATION
 APPROX. PUMPING RATE N/A
 (GAL. PER MIN.) 8 12
 AVERAGE DAILY QUANTITY NEEDED N/A
 (GAL. PER DAY) 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 2 @ 320'

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL
Howard (13)
 COUNTY NAME COUNTY NO.
 STATE SIGNATURE _____ INSERT S → 41
 DATE ISSUED 11/16/16
 43 MM DD YY 48 CO SIGNATURE [Signature] EXP. DATE 11/16/17

APPROXIMATE DEPTH OF WELL 320 FEET
 24 28
 APPROXIMATE DIAMETER OF WELL 6 NEAREST INCH



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 DEEPEINED WELLS (CIRCLE APPROPRIATE BOX)
 THIS WELL WILL NOT REPLACE AN EXISTING WELL
 THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
 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 DEEPEIN AN EXISTING WELL
 PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEINED (IF AVAILABLE) 41 _____ 52

Not to be filled in by driller (MDE OR COUNTY USE ONLY)
 APPROP. PERMIT NUMBER _____ G _____
 PERMIT No. Ho-15-0353
 70 71 72 73 74 75 76 77 78 79

SPECIAL CONDITIONS Grout bores bottom to top. 39.287806 -76.833735

DEPARTMENT OF INSPECTIONS,
 LICENSES & PERMITS
 3430 COURT HOUSE DRIVE
 ELLICOTT CITY, MD 21043
 PERMITS (410) 313-2455
 INSPECTIONS (410) 313-1850

**HOWARD COUNTY
 RESIDENTIAL
 HEATING-VENTILATION-AIR
 CONDITIONING AND
 REFRIGERATION PERMIT
 APPLICATION**

HVACR PERMIT # M17000135
 BUILDING PERMIT #

BUILDING ADDRESS: SUITE/APT:
 3009 Center Drive Ellicott City Md 21042

OWNERS NAME: Richard Bauemshub
 ADDRESS: 3009 center Dr.

SUBDIVISION:
 CENSUS TRACT: SECTION: AREA:
 LOT: TAX MAP: PARCEL:
 BLOCK: ZONE:

CITY: Ellicott City
 STATE: Maryland ZIP CODE: 21042
 HOME PHONE: 443.465.3760 WORK PHONE:

PROPERTY ID: MAP COORDINATES:

TYPE OF IMPROVEMENTS: USE:

	<u>CHECK ONE</u>	<u>HOW MANY</u>	
SINGLE FAMILY DWELLING	<input checked="" type="checkbox"/>	<u>1</u>	ZONES
SINGLE FAMILY TOWNHOUSE	<input type="checkbox"/>	___	ZONES
MULTI-FAMILY / HOTEL/MOTEL	<input type="checkbox"/>	___	ROOMS
ASSISTED LIVING HOMES (16 OR FEWER RESIDENTS)	<input type="checkbox"/>	___	ROOMS

COMPANY NAME: Advanced Heating & Cooling LLC
 LICENSEE NAME: Richard Gilmore
 ADDRESS: 212 Business center Dr.
 CITY: Reisterstown
 STATE: Maryland ZIP CODE: 21136
 PHONE: 410.833.9445 HVACR LICENSE NO: 17486

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

Replacement
 Heating
 Air Conditioning
 Heating and Air Conditioning
 Additions and Alterations
 Heating
 Air Conditioning
 Heating and Air Conditioning

vertical well drilling
 MAKE: WATER FURNACE
 MODEL # NDV049
 Public water
 Public sewer

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

Zones
 Permit Fee = # of Zones x \$40 =
 Technology Fee (10% of Permit Fee) =
 Plus Application Fee
 Total Fees Due =

40
4
\$50.00
94.00

Rooms
 Permit Fee = # of Rooms x \$80 =
 Technology Fee (10% of Permit Fee) =
 Plus Application Fee \$50
 Total Fees Due =

\$50.00

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

Richard Gilmore

PRINT NAME OF LICENSEE

rgilmore@advancedhc.com

Email Address

DATE

2/13/2016

Make check payable to: DIRECTOR OF FINANCE OF HOWARD COUNTY

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

[Handwritten signature]

Validation
 Check Number: 8782
 Cash: _____
 Receipt Number: 480143

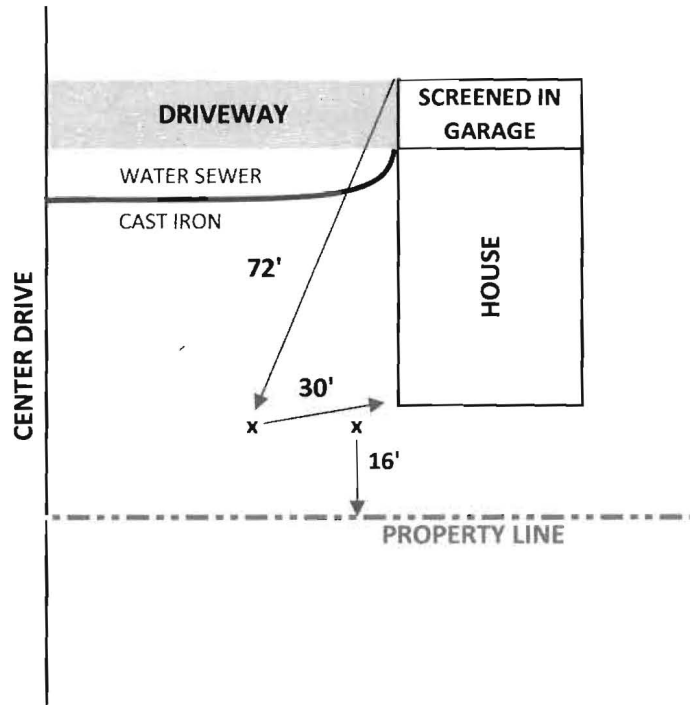
RECEIVED

FEB 13 2017

LICENSES & PERMITS
 DIVISION

Owner: Richard Bauernshud
Address: 3009 Center Drive
Ellicott City, MD 21042
County: Howard County
CGI Job # 16076

(2) Closed Loop Geothermal Well @ 320ft/each



Wolf, Kevin

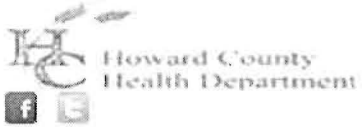
From: Wolf, Kevin
Sent: Thursday, October 27, 2016 10:02 AM
To: 'Tiffany Gray'
Subject: 3009 Center Drive Geo permit

Tiffany,

I need a revised site plan indicating the location of the public water and sewer line as well as the type of construction material for the sewer line.

Thanks,

Kevin M. Wolf, LEHS, REHS/RS
Groundwater Mgmt. Sec. Supervisor
Well & Septic Program
Bureau of Environmental Health
8930 Stanford Blvd.
Columbia, MD 21045
(o) 410-313-2645
(f) 410-313-2648



kwolf@howardcountymd.gov

CONFIDENTIALITY NOTICE

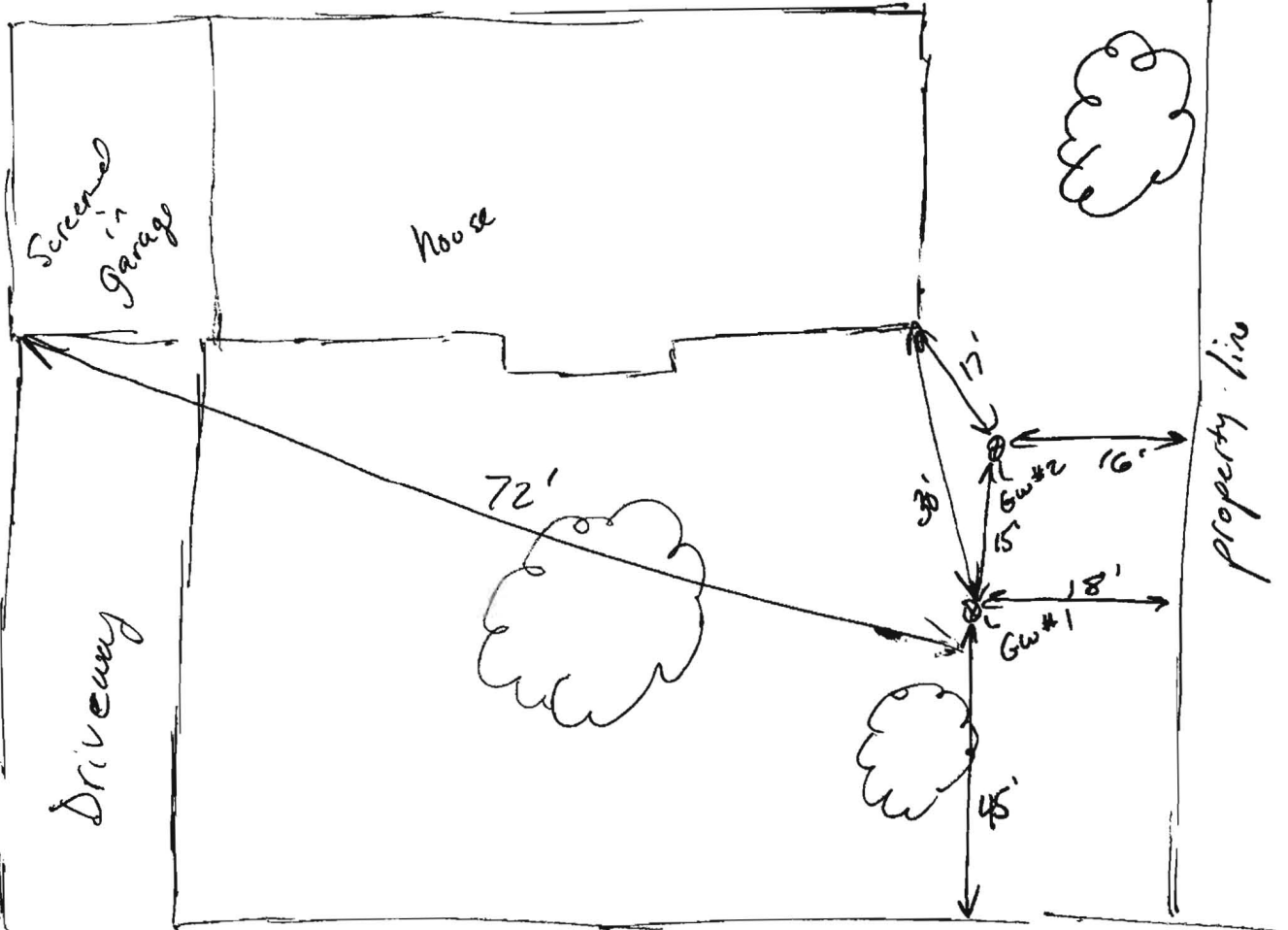
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5007 Center Drive
Ellicott City Md

2 wells @ 320'



X
1.25"
Closed Loop
Geothermal
Factory U-Bends



Center Drive

WELL SCHEMATIC FORM

GROUND SURFACE

PERMANENT OUTER CASING (if area contaminated)

MATERIAL ~~_____~~

DIAMETER ~~_____~~

LENGTH ~~_____~~

DEPTH INTO CONFINING UNIT ~~_____~~

PERMANENT OUTER CASING

TUBE CASING (if not regular, single loop)

ATTACH HORIZONTAL SCHEMATIC _____

NUMBER OF TUBES PER BOREHOLE 2

DIAMETER OF TUBES 1.25"

MATERIAL HDPE

SHAPE AND LENGTH _____

TUBE CONNECTION METHOD Fusion

TUBE CONNECTION MATERIAL HDPE

CONFINING UNIT

LOOP PIPE CASING (regular, single loop)

MATERIAL HDPE? YES NO

DIAMETER 1.25"

LENGTH 320'

GROUT

MATERIAL Bentonite

PERMEABILITY _____

WATER / GROUT RATIO 24 / 50

PERCENT SOLIDS _____

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 6"

WELL ADDRESS 3009
Center Drive
Ellicott City Md

LOT NUMBER: _____

SQUARE NUMBER: _____

WELL OWNER: Richard & Mirande
Bauernschub Bissell

OWNER ADDRESS:
3009
Center Drive
Ellicott City Md

Wolf, Kevin

From: Lang, Joe
Sent: Monday, October 24, 2016 1:26 PM
To: Wolf, Kevin
Subject: RE: 3009 Center Drive

Kevin,

The water meter was set on 2/21/1961.
The sewer was connected on 10/7/2003.

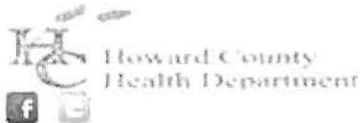
Joe

From: Wolf, Kevin
Sent: Monday, October 24, 2016 12:25 PM
To: Brooks, Calvin; Lang, Joe
Subject: 3009 Center Drive

Gentlemen,
Can you tell me the install dates for water and sewer at the above address?

Thanks,

Kevin M. Wolf, LEHS, REHS/RS
Groundwater Mgmt. Sec. Supervisor
Well & Septic Program
Bureau of Environmental Health
8930 Stanford Blvd.
Columbia, MD 21045
(o) 410-313-2645
(f) 410-313-2648



kwolf@howardcountymd.gov

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ENGINEERS' CERTIFICATE

We hereby certify that the plan shown hereon is correct, that it is a subdivision of a part of the land which by deed dated Feb 18, 1944 and recorded among the Land Records of Howard County, Md. in No 100 folios etc. was granted and conveyed by Thomas M. Johnson Jr and wife to H. Lee Ramsburg and Alva S Ramsburg Jr, and that iron pipes marked thus \odot and concrete monuments marked thus \bullet are in place as shown hereon.

We further certify that the requirements of Section 72-A to 72-D of the Annotated Code of Maryland (Title Clerk of Court - Subtitle, Clerk of Circuit Court) as far as they relate to the marking of this plat and the setting of the markers, have been complied with.

Claude M Skinner Jr Registered Professional Engr No 2237

Guy C Sykes Registered Professional Engr and Land Surveyor No 1273

CURVE DATA					
CURVE	RADIUS	CH	ARC L	CHORD	CH BEAV
A	1000.00	107.00	167.78	181.70	532.70 NW
B	1000.00	20.35	167.78	371.47	527.33 NW
C	241.08	30.30	80.00	184.91	535.35 NW
D	147.21	60.16	80.00	157.70	483.09 NW
E	366.68	38.13	127.64	248.99	546.36 NW
F	604.57	19.11	115.31	228.56	455.00 NW
G	2000.00	90.30	200.00	314.16	428.84 NW
A'	1138.51	107.00	167.78	181.70	532.70 SW
B'	1000.00	20.35	167.78	371.47	527.33 SW
C'	241.08	30.30	80.00	184.91	535.35 SW
D'	147.21	60.16	80.00	157.70	483.09 SW
E'	366.68	38.13	127.64	248.99	546.36 SW
F'	604.57	19.11	115.31	228.56	455.00 SW
G'	2000.00	90.30	200.00	314.16	428.84 SW

MAP
of
HOWARD HEIGHTS
SECTION TWO
SECOND ELECTION DISTRICT
of
HOWARD COUNTY
ELlicott CITY MARYLAND
SCALE: 1"=100' — DECEMBER 1958



OWNER'S DEDICATION

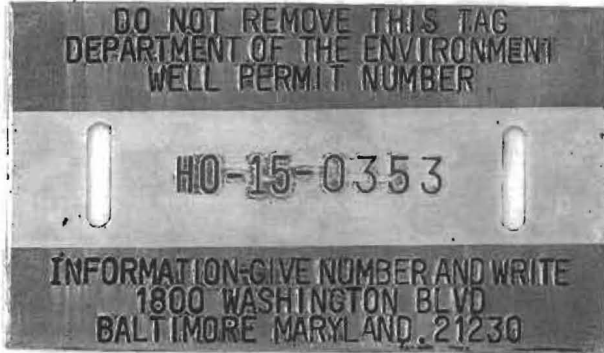
We, H Lee Ramsburg and Alva S Ramsburg Jr, owners of the property shown and described hereon, adopt this plan of subdivision and reserve the fee simple title to the beds of the streets and/or roads as shown hereon.

H. Lee Ramsburg
Alva S Ramsburg Jr

PLAT APPROVED

BY
W. L. Smith, Jr. Planner
Henry J. Kappel, Jr. Planning Director
Thomas O'Neill, Co. Roads Supervisor

3009 Center Drive
Ellicott City Md



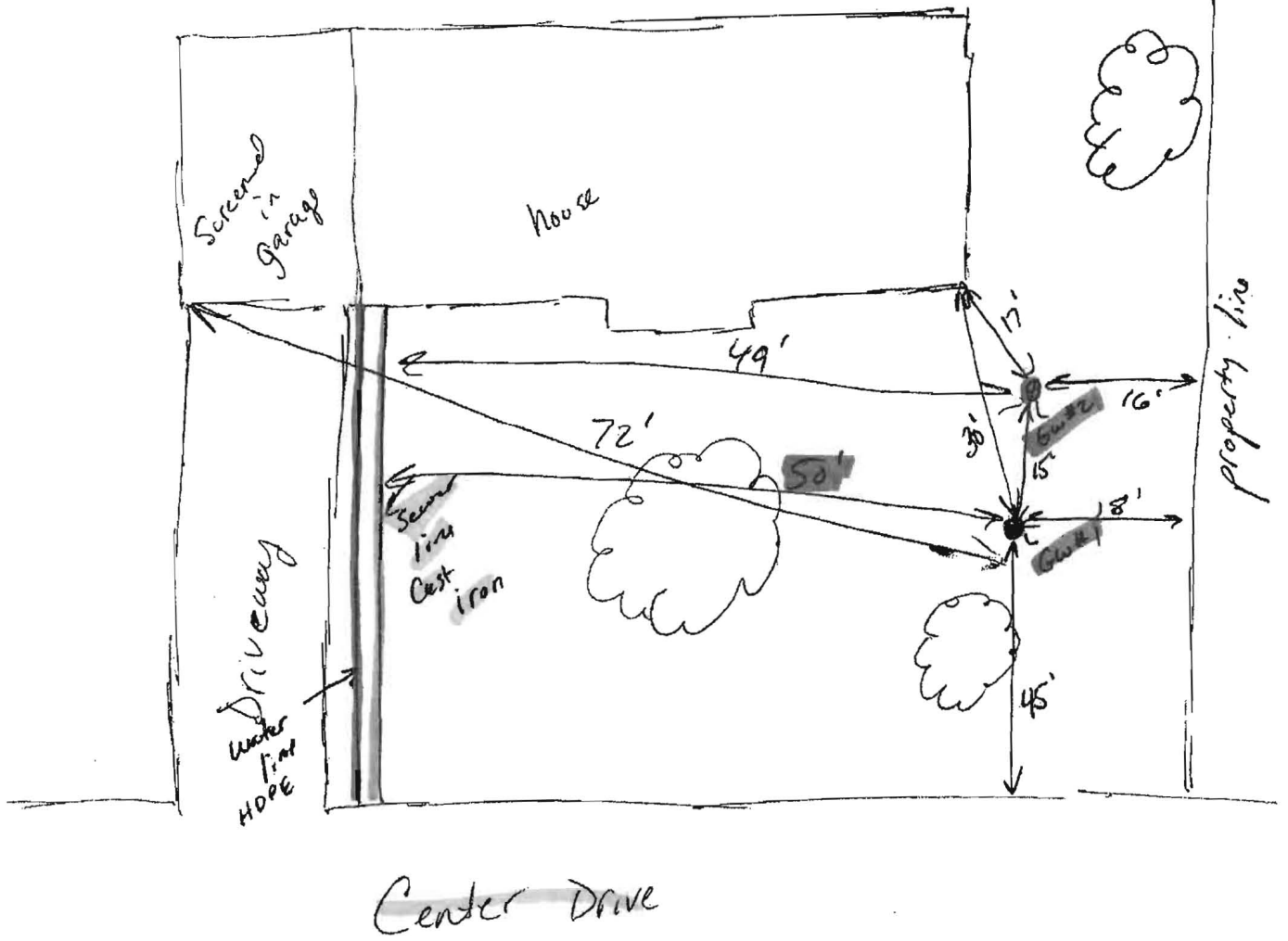
~~2 wells @ 320'~~

X

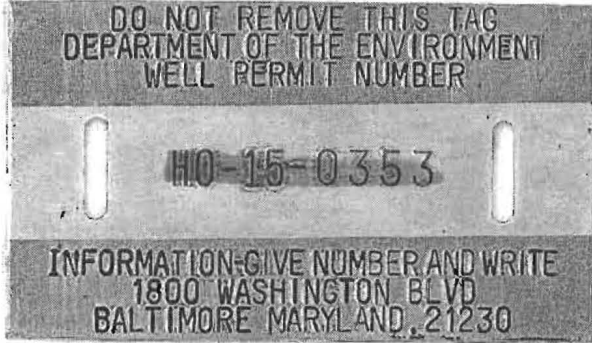
~~1.25"~~

Closed Loop
Geothermal
Factory U-Bends

11/16/16
Well sides approved.
(KAW)



3009 Center Drive
Ellicott City Md



2 wells @ 320'

X

1.25"

Closed Loop
Geothermal
Factory U-Bends

11/16/16
Well sides approved.
(KMM)

