

C1 21052

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)

FILL IN THIS FORM COMPLETELY PLEASE TYPE

COUNTY NUMBER

ST/CO USE ONLY DATE Received MM DD YY

DATE WELL COMPLETED MM DD YY

Depth of Well

PERMIT NO. FROM "PERMIT TO DRILL WELL"

OWNER WELL SITE ADDRESS SUBDIVISION SECTION LOT

WELL LOG Not required for driven wells. STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING. DESCRIPTION (Use additional sheets if needed) FEET FROM TO check if water bearing

GROUTING RECORD WELL HAS BEEN GROUTED (Circle Appropriate Box) TYPE OF GROUTING MATERIAL (Circle one) CEMENT BENTONITE CLAY NO. OF BAGS NO. OF POUNDS GALLONS OF WATER DEPTH OF GROUT SEAL

CASING RECORD casing types insert appropriate code below MAIN CASING TYPE Nominal diameter top (main) casing Total depth of main casing

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

SCREEN RECORD screen type or open hole insert appropriate code below

DEPTH (nearest ft.)

NUMBER OF UNSUCCESSFUL WELLS: WELL HYDROFRACTURED

CIRCLE APPROPRIATE LETTER A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED ELECTRIC LOG OBTAINED 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. DRILLERS SIGNATURE LIC. NO. SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

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

TELESCOPE CASING LOG INDICATOR OTHER DATA

PUMPING TEST HOURS PUMPED (nearest hour) PUMPING RATE (gal. per min.) METHOD USED TO MEASURE PUMPING RATE WATER LEVEL (distance from land surface) BEFORE PUMPING WHEN PUMPING TYPE OF PUMP USED (for test)

PUMP INSTALLED DRILLER INSTALLED PUMP (CIRCLE) (YES or 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. CAPACITY: GALLONS PER MINUTE (to nearest gallon) PUMP HORSE POWER PUMP COLUMN LENGTH (nearest ft.) CASING HEIGHT (circle appropriate box and enter casing height) LAND SURFACE (nearest foot)

LATITUDE 39.178914 LONGITUDE 76.891979 (DEFAULT COORD. WGS 84) NOTES: AS per plat

B 1 11384

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL

STATE PERMIT NUMBER

HO-95-2488

544535 please type

fill in this form completely

Date Received (APA) 02 19 13

OWNER INFORMATION

Owner: BALL JAMES & KAREN, 10842 Hunting Lane, Columbia MD 21044

LOCATION OF WELL

Howard COUNTY, Riverside Estates SUBDIVISION, SECTION B LOT 2, Simpsonville NEAREST TOWN

DRILLER INFORMATION

Driller's Name: David Kelly, License No. MW D 304, Firm Name: JONES WELL DRILLING, Address: 3700 RUSH RD TARBETTSVILLE, MD, Signature: David Kelly, Date: 2-14-13

SOURCES OF DRILLING WATER

1. MIA, 2., 3.

10842 Hunting Lane STREET ADDRESS, ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX), DISTANCE FROM ROAD 90 FT, ENTER FT OR MI, TAX MAP: 41 BLK: 5 PARCEL 398

WELL INFORMATION: APPROX. PUMPING RATE 0 GAL. PER MIN., AVERAGE DAILY QUANTITY NEEDED 0 GAL. PER DAY

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 holes)

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard (13) A20390 COUNTY NAME, COUNTY NO., STATE SIGNATURE, DATE ISSUED 3/29/2013, CO SIGNATURE Brian Baker, EXP. DATE 3/29/2014

APPROXIMATE DEPTH OF WELL 240 FEET, APPROXIMATE DIAMETER OF WELL 6 INCH, NEAREST TOWN

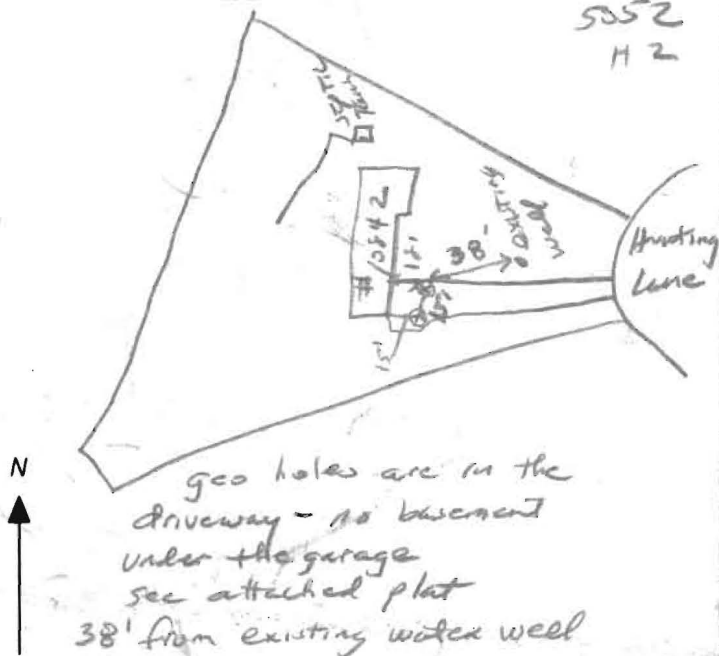
METHOD OF DRILLING (circle one)

BORED (or Augered), JETTED, Jetted & DRIVEN, AIR-ROTary, AIR-PERCussion, ROTARY (Hydraulic Rotary), CABLE, REVERSE-ROTary, DRIVE-POINT

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, 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

PROPOSED LOCATION OF WELL ON LOT SHOW PERMANENT STRUCTURES SUCH AS BUILDINGS, SEPTIC SYSTEM, ROADS AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCE MEASUREMENTS TO WELL



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

APPROX. PERMIT NUMBER G, PERMIT No. HO-95-2448

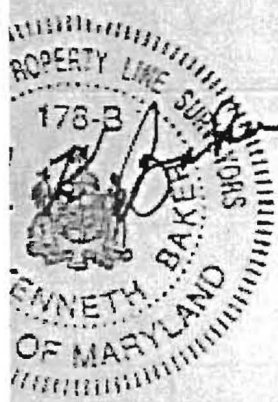
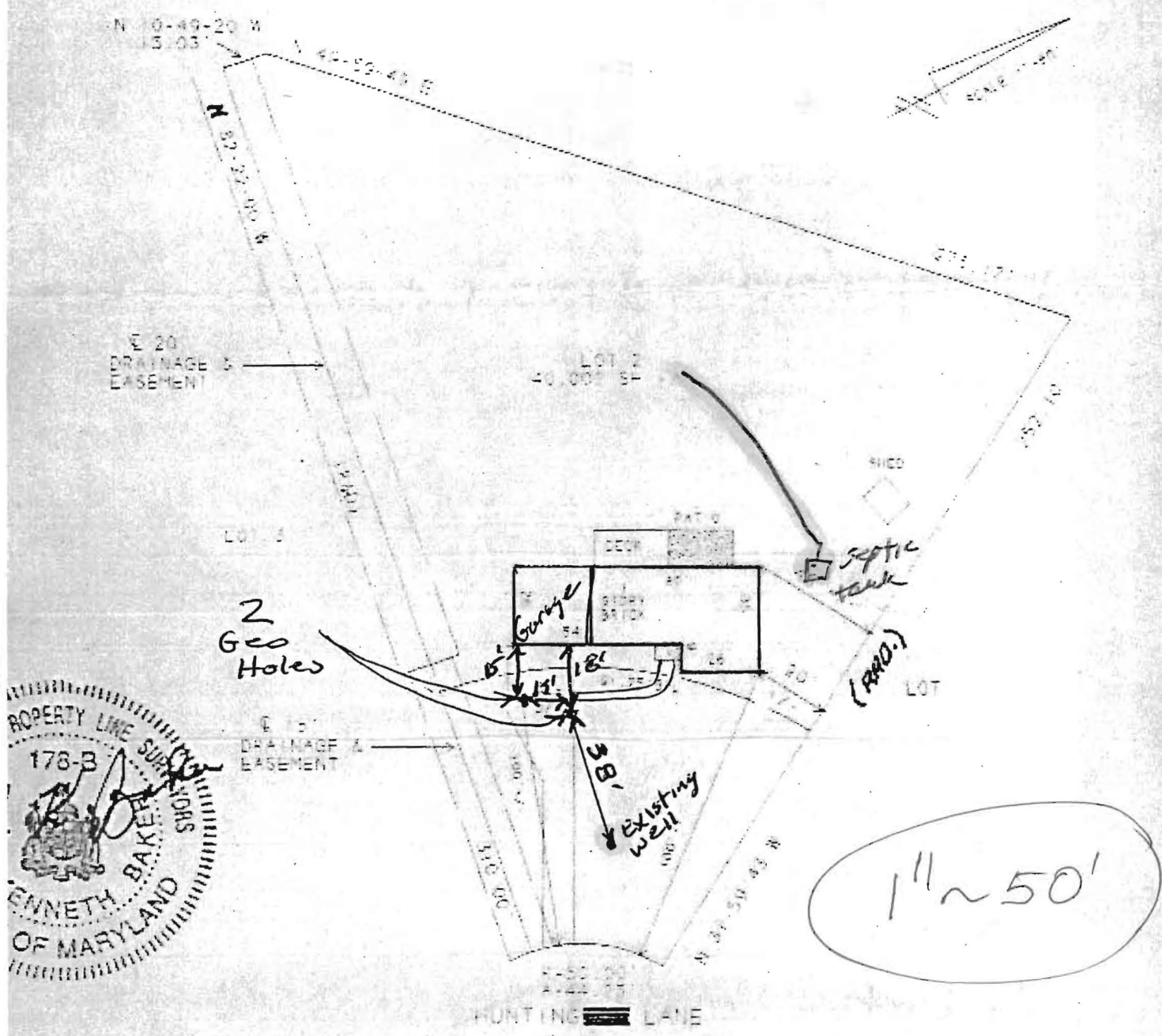
SPECIAL CONDITIONS

NOTE APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED

DN 3
 SIDE ESTATES
 BK. 30 PG. 31
 T. HOWARD, CO. INC.
 REF #766/550

1158 EIGHTH BAY HARBOUR
 Pasadena MD. 21122
 (410) - 360 - 9404

DATE 01/17/03
 CONCRETE



DEED CERTIFICATE

BY CERTIFY THAT THE IMPROVEMENTS SHOWN HEREON, AND TO THE BEST OF MY INFORMATION, PROFESSIONAL JUDGMENT AND BELIEF THERE ARE NO OTHER IMPROVEMENTS EXCEPT AS SHOWN HEREON AT THE IMPROVEMENTS APPEAR TO BE IN ZONE C. THIS SURVEY IS TO ESTABLISH ABOVE GROUND IMPROVEMENTS ONLY AND I INTEND TO FIND UNDERGROUND UTILITIES OR INSTALLATIONS THE LEVEL OF ACCURACY FOR THIS DRAWING IS 1/4"

GENERAL NOTES

- 1. THIS PLAT IS OF BENEFIT TO THE CONSUMER ONLY IN- SO FAR AS IT IS REQUIRED BY A LENDER OR A TITLE INSURANCE COMPANY OR ITS AGENT IN CONNECTION WITH A CONTEMPLATED TRANSFER, FINANCING OR RE-FINANCING.
- 2. 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 RE-FINANCING.
- 3. THIS PLAT IS NOT INTENDED TO BE USED OR RELIED UPON FOR THE ESTABLISHMENT OR LOCATION OF BENCH MARKS, BUILDINGS, OR ANY OTHER FUTURE IMPROVEMENTS.
- 4. THIS PLAT IS NOT INTENDED TO BE USED FOR THE PURPOSE OF ESTABLISHING PROPERTY LINES.
- 5. THIS SURVEY WAS PREPARED WITHOUT BENEFIT OF A TITLE REPORT.

K. Baker 1-20-03
 K. Baker
 Land Surveyor # 178-B

R & JAMES + KAREN BALL

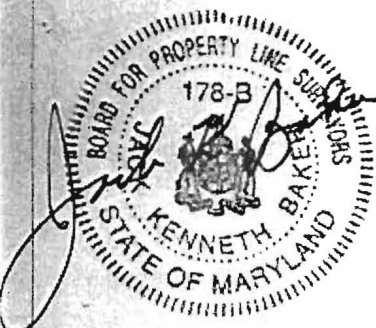
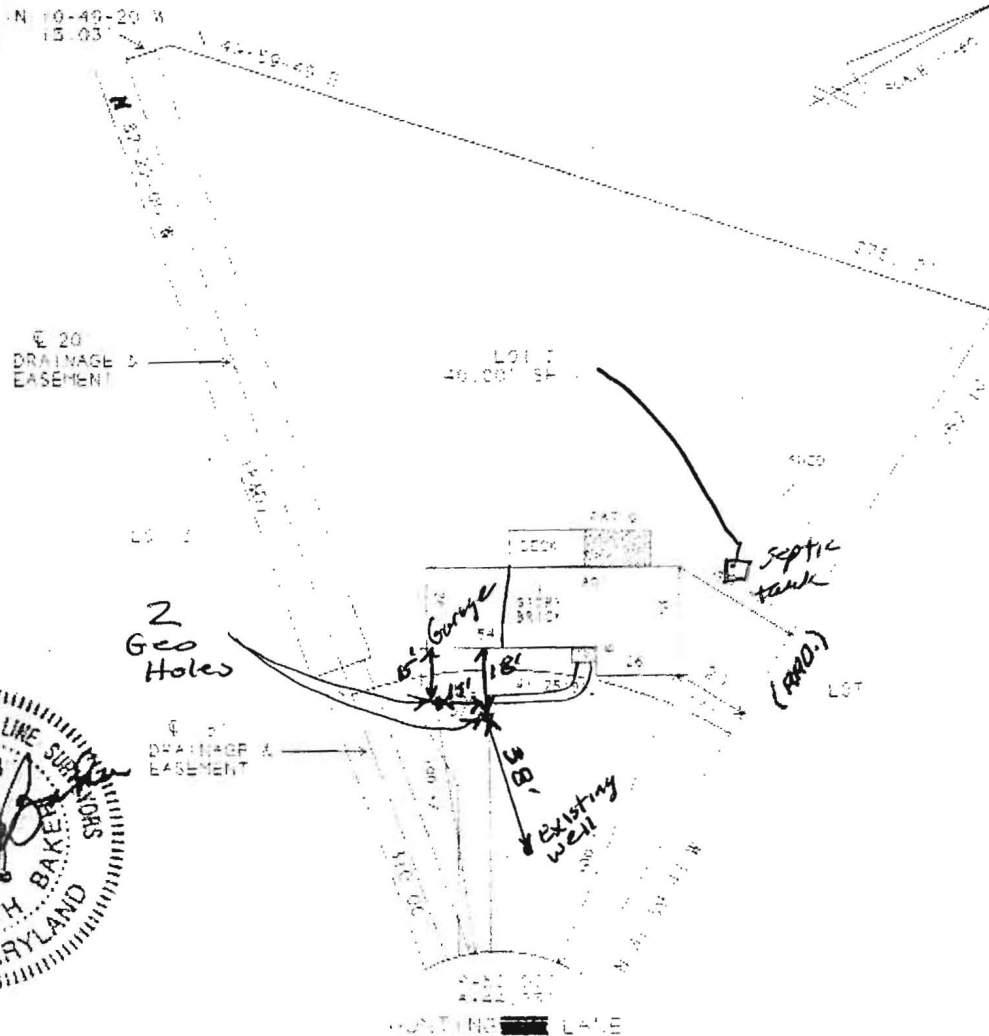
Scale 1" = 50'

LOCATION DRAWING OF
 LOT 2 BLOCK "C"
 SECTION 3
 RIVERSIDE ESTATES
 PLAT BK. 30 PG. 31
 5 DIST. HOWARD, CO. MD.
 DEED REF. #766/550

AFFORDABLE
 S I H
 1158 BOOTH BAY HARBOUR
 Pasadena MD. 21122
 (410)-360-9404

5637-7-5800
 10842 HUNTING LA
 COLLEGE BLVD, MD. 21044
 DATE 01-27-03

CONCRETE



SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THE IMPROVEMENTS ARE LOCATED AS SHOWN HEREON AND TO THE BEST OF MY INFORMATION, PROFESSIONAL KNOWLEDGE AND BELIEF THERE ARE NO ENCROACHMENTS EXCEPT AS SHOWN HEREON AND THAT THE IMPROVEMENTS APPEAR TO BE IN FLOOD ZONE C. THIS SURVEY IS INTENDED ONLY FOR THESE ABOVE GROUND IMPROVEMENTS AND NOT INTENDED TO FIND UNDERGROUND UTILITIES OR OTHER INSTALLATIONS. THE LEVEL OF ACCURACY FOR THIS DRAWING IS 1/4\"

GENERAL NOTES

1. THIS PLAN IS INTENDED TO BE USED FOR THE CONSUMER ONLY INsofar as IT IS REQUIRED BY A LENDER OR AN INSURANCE COMPANY OR ITS AGENT IN CONNECTION WITH A CONTEMPLATED TRANSFER FINANCED BY OR THROUGH FINANCING.
 2. THIS PLAN IS NOT TO BE USED FOR THE ESTABLISHMENT OF LOCATION OF BENCH MARKS, BUILDINGS, OR ANY OTHER FUTURE IMPROVEMENTS.

THIS PLAN 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.

THIS PLAN IS NOT INTENDED TO BE USED FOR THE PURPOSE OF ESTABLISHING PROPERTY LINES!!!

THIS SURVEY WAS PREPARED WITHOUT BENEFIT OF A TITLE REPORT.

Jack K. Baker 1-20-03
 Jack K. Baker
 Property Line Surveyor # 178-B

Owner's JAMES + KAREN BALL
 70842 Hunting Lane
 Columbia MD 21044

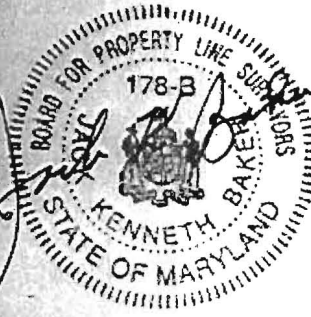
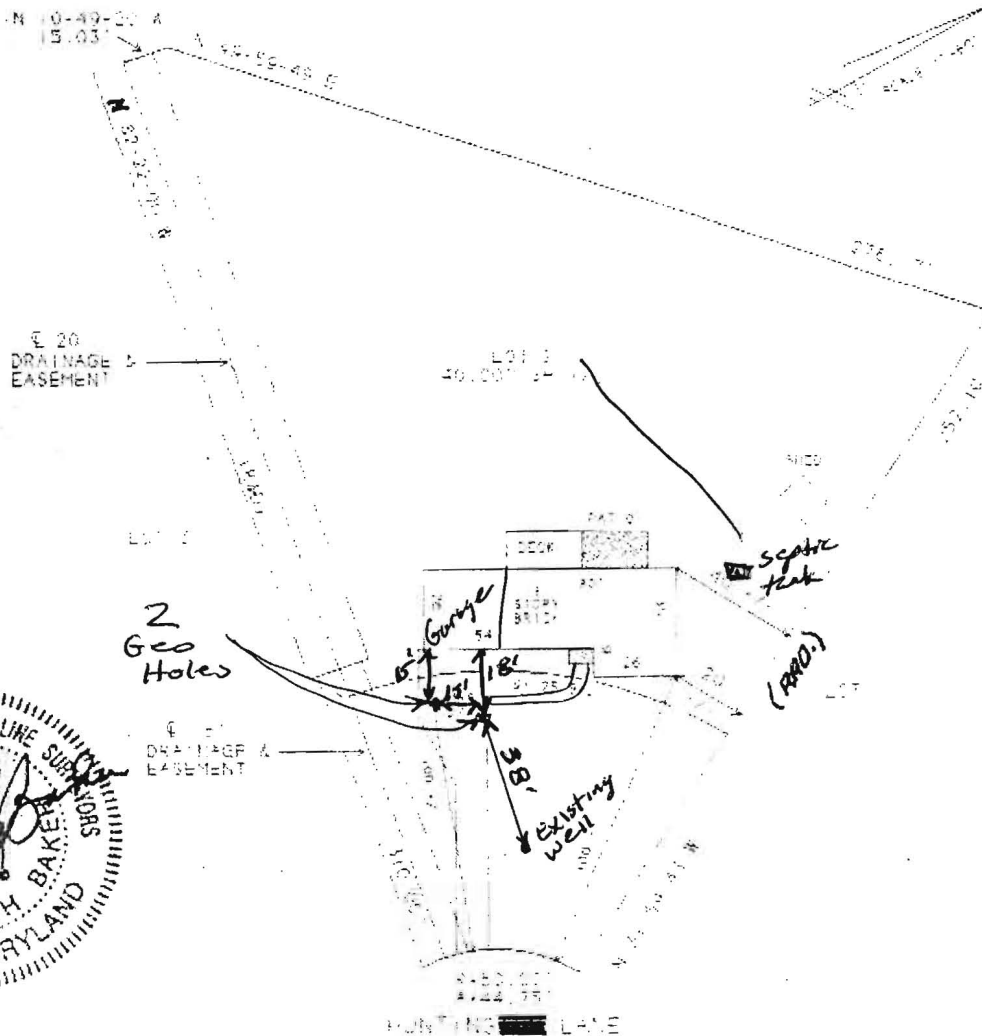
Scale 1" = 50'

LOCATION DRAWING OF
 LOT 2 BLOCK 'G'
 SECTION 3
 RIVERSIDE ESTATES
 PLAT BK. 30 PG. 31
 5 DIST. HOWARD CO. MD.
 DEED REF. #766/550

AFFORDABLE
 S I L L
 1158 BOOTH BAY HARBOUR
 Pasadena MD. 21122
 (410) - 360 - 9461

5637 LT-5680
 70842 HUNTING LA
 COLLETTA, MD 21044
 DATE 01-27-03

CONCRETE



SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THE IMPROVEMENTS ARE LOCATED AS SHOWN HEREON, AND TO THE BEST OF MY INFORMATION, PROFESSIONAL KNOWLEDGE AND BELIEF THERE ARE NO ENCROACHMENTS EXCEPT AS SHOWN HEREON AND THAT THE IMPROVEMENTS APPEAR TO BE IN FLOOD ZONE C. THIS SURVEY IS TO ESTABLISH THESE ABOVE GROUND IMPROVEMENTS ONLY AND NOT INTENDED TO FIND UNDERGROUND UTILITIES OR OTHER INSTALLATIONS. THE LEVEL OF ACCURACY FOR THIS DRAWING IS AS FOLLOWS:

GENERAL NOTES

THIS PLAT IS OF BENEFIT TO THE CONSUMER ONLY IN SO FAR AS IT IS REQUIRED BY A LENDER OR A TITLE INSURANCE COMPANY OR ITS AGENT IN CONNECTION WITH A CONTEMPLATED TRANSFER, FINANCING OR REFINANCING.

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.

THIS PLAT IS NOT TO BE USED OR RELIED UPON FOR THE ESTABLISHMENT OF LOCATION OF FENCES, GARDENS, BUILDINGS, OR ANY OTHER FUTURE IMPROVEMENTS.

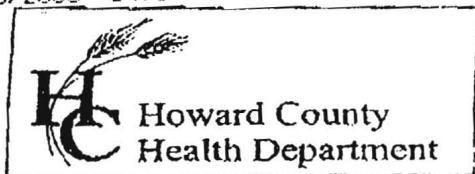
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THIS SURVEY WAS PREPARED WITHOUT BENEFIT OF A TITLE REPORT.

Jack K. Baker 1-20-03
 Jack K. Baker
 Property Line Surveyor # 178-B

OWNER'S JAMES + KAREN BALL
 70842 Hunting Lane
 Columbia md 21044

Scale 1" = 50'



7178 Columbia Gateway Drive, Columbia MD 21046
 (410) 313-2640 Fax (410) 313-2648
 TDD (410) 313-2323 Toll Free 1-866-313-6300
 website: www.hchealth.org

Penny E. Borenstein, M.D., M.P.H., Health Officer

TO ALL INTERESTED PARTIES

When submitting a well permit application for a proposed well for new construction, please indicate one of the following:

Well Site Location:

10842 Hunting Lane
 Subdivision/Property Name Lot# Road Name

The well site has been staked by _____,
 (professional land surveyor or company employing professional land surveyors)
 on _____ (date) and does not require a site inspection.

The well driller, builder or property owner will call the Health Department to schedule a time to meet in the field to verify the proposed well site location.

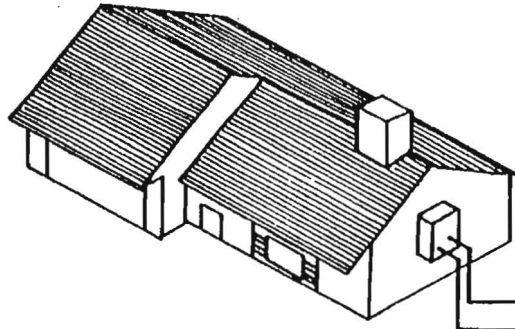
Refer to plat - NO STAKES - WELLS ARE in the driveway. CALL

This sheet, along with two copies of an acceptable well site plan, must be attached to the green well permit application.

*DAVE KELLY
 if you need
 me to meet
 on site
 443-807-7046*

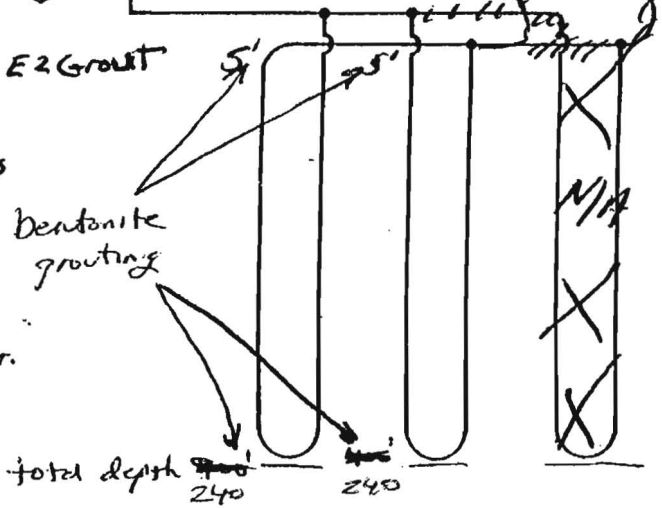
Revised 3/11/05

Driller: Jones Well Drilling
 contact: David Kelly
 410-692-6981



bury depth 5' below grade

Wyo-Ben bentonite-E2 GROUT
 grout (50 lb. bags)
 mixed with 24 gallons
 of water per
 manufacturer specs
 yields 27 gal slurry
 with a 0.42 btu-ft/hr.
 thermal conductivity



Earth Coil Type: Vertical - Single U-Bend
 Water Flow: Parallel
 Pipe Sizes: 1" double Loop

Bore Lengths: 240' x 2 holes (480' vertical bore)
 Pipe Lengths: 480' x 2 (960' vertical pipe)

FIGURE 4.5: Parallel Vertical Ground Heat Exchanger