

C 1 30351

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

ST/CO USE ONLY DATE RECEIVED

DATE WELL COMPLETED

Depth of Well

PERMIT NO. FROM "PERMIT TO DRILL WELL"

OWNER Kelly Michael & Daughters WELL SITE ADDRESS 1335 Pleasant View Dr TOWN Fulton MD SUBDIVISION SECTION LOT

WELL LOG table with columns: DESCRIPTION, FEET (FROM, TO), check if water bearing. Includes handwritten entries: Soil, Brn sand, Tan hard soil, Brn watered Rock, Gng Rock.

GROUTING RECORD form with fields: WELL HAS BEEN GROUTED (Y), TYPE OF GROUTING MATERIAL (CM, BC), NO. OF BAGS, NO. OF POUNDS, GALLONS OF WATER, DEPTH OF GROUT SEAL.

CASING RECORD form with fields: casing types insert appropriate code below (ST, CO, PL, OT), MAIN CASING TYPE, Nominal diameter, Total depth.

OTHER CASING (if used) table with columns: diameter inch, depth (feet) from, to.

SCREEN RECORD form with fields: screen type or open hole, insert appropriate code below (ST, BR, HO, PL, OT).

DEPTH (nearest ft.) table with columns: 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 15, 17, 21, 23, 24, 26, 30, 32, 36, 38, 39, 41, 45, 47, 51, SLOT SIZE, DIAMETER OF SCREEN.

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 form with fields: HOURS PUMPED, PUMPING RATE, METHOD USED TO MEASURE PUMPING RATE, WATER LEVEL, BEFORE PUMPING, WHEN PUMPING, TYPE OF PUMP USED.

PUMP INSTALLED form with fields: DRILLER INSTALLED PUMP, TYPE OF PUMP INSTALLED, CAPACITY: GALLONS PER MINUTE, PUMP HORSE POWER, PUMP COLUMN LENGTH, CASING HEIGHT.

LATITUDE 39.17834 LONGITUDE 76.93894 (DEFAULT COORD. WGS 84)

NOTES: Includes handwritten notes and a diagram of a well casing section.

NUMBER OF UNSUCCESSFUL WELLS, WELL HYDROFRACTURED, CIRCLE APPROPRIATE LETTER (A, E, P), I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04, DRILLERS LIC. NO., DRILLERS SIGNATURE, LIC. NO., SITE SUPERVISOR.

B 1 37060  
1 2 3 6

SEQUENCE NO.  
(MDE USE ONLY)

STATE OF MARYLAND  
APPLICATION FOR PERMIT TO DRILL WELL  
555738 please type

STATE PERMIT NUMBER

HD - 15 - 0004  
70 fill in this form completely 79

Date Received (APA)  
02/06/15

OWNER INFORMATION

8 MM DD YY 13  
15 Last Name Owner First Name 34  
12315 Pleasant View Drive  
36 Fulton MD 20759  
57 Town 70 State 72 Zip 76

B 3

LOCATION OF WELL

Howard  
8 COUNTY 21  
Fulton Manor II Rev  
23 SUBDIVISION 42  
SECTION 44 46 LOT 48 50  
Fulton  
52 NEAREST TOWN 71

DRILLER INFORMATION

C John Hess M W D 553  
Driller's Name 76 License No. 81  
Allied Environmental Services  
Firm Name  
PO Box 29 Annapolis Junction MD 20701  
Address  
C John Hess 02/06/15  
Signature Date

B 4

SOURCES OF DRILLING WATER

1. Public  
2.  
3.

12315 Pleasant View Dr  
11 STREET ADDRESS 30  
ON WHICH SIDE OF ROAD  
(CIRCLE APPROPRIATE BOX)  
NORTH  
WEST EAST  
SOUTH  
34 30 37  
DISTANCE FROM ROAD  
ENTER FT OR MI 38 39  
TAX MAP: 0040 BLK: 0001 PARCEL 0205

B 2

WELL INFORMATION

APPROX. PUMPING RATE  
(GAL. PER MIN.) 8 12  
AVERAGE DAILY QUANTITY NEEDED  
(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 Loops

NOT TO BE FILLED IN BY DRILLER  
HEALTH DEPARTMENT APPROVAL

Howard 13  
COUNTY NAME COUNTY NO.  
STATE SIGNATURE INSERT S 41  
DATE ISSUED 02/13/2015 HKT 2/12/16  
43 MM DD YY 48 CO SIGNATURE EXP. DATE

APPROXIMATE DEPTH OF WELL 375 FEET  
APPROXIMATE DIAMETER OF WELL 6 INCH 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

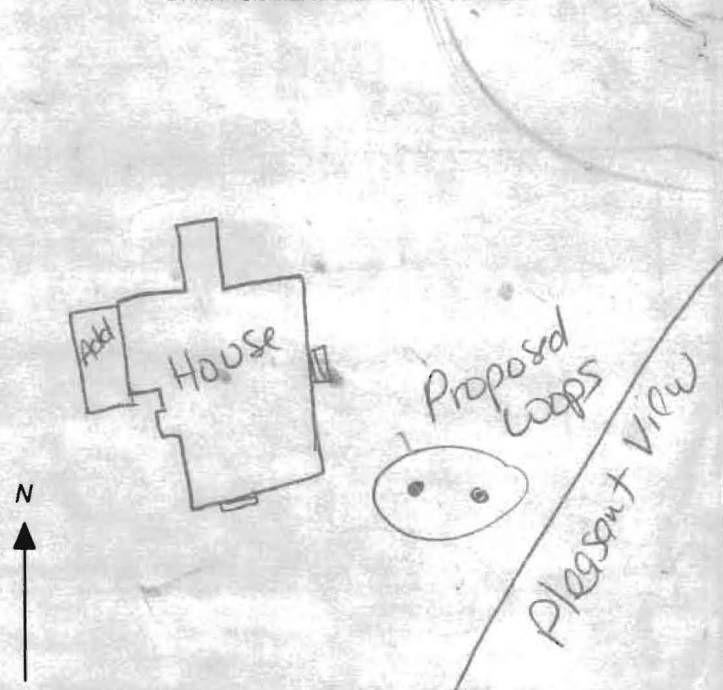
REPLACEMENT OR DEEPEMED WELLS  
(CIRCLE APPROPRIATE BOX)

- 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  
(IF AVAILABLE) 41 52

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

APPROP. PERMIT NUMBER G  
PERMIT No. HD - 15 - 0004  
70 71 72 73 74 75 76 77 78 79

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



SPECIAL CONDITIONS Well must be grouted from bottom to top and well grouting and drilling must be called into the office 24 hrs. prior  
NOTE APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED



Bureau of Environmental Health  
7178 Columbia Gateway Drive, Columbia, MD 21046-2147  
(410) 313-2640 Fax (410) 313-2648  
TDD (410) 313-2323 Toll Free 1-866-313-6300  
website: www.hchealth.org

Peter L. Beilenson, M.D., M.P.H., Health Officer

December 5, 2007

Mr. Don Upchurch  
457 Old Orchard Circle  
Millersville, Maryland 21108

RE: **Fulton Manor Lot 5**  
**Pleasant View Drive**  
**Well Tag: HO-95-1098**

Dear Mr. Upchurch:

A sample was collected during a yield test on May 15, 2007 and submitted to GPL Laboratories, LLLP to assess the possible presence of **Gross Alpha** and **Gross Beta** in the future well water supply. **Gross Alpha** and **Gross Beta** measure the total alpha and beta particle activity in a water supply. In turn, this can provide information regarding naturally occurring radiation (i.e., Radionuclides) that may exist in your area of development within the County.

Results from this screening revealed a **Gross Alpha** of  $0.3 \pm 1.1$  picocuries/liter (pCi/L); while the **Gross Beta** level was  $6.4 \pm 2.8$  pCi/L. Both the **Gross Alpha** and **Gross Beta** were below the **maximum contaminant level (MCL)** of 15 pCi/L and the targeted value of 50 pCi/L (roughly equivalent to the **annual dose rate** of 4 millirems/year).

At the time of testing and with respect to these parameters, the future well water supply appears safe for all uses. No additional testing **for these parameters** will be required to secure the future Use & Occupancy. However, other standard testing will still be necessary.

A copy of the test results is enclosed for your information. Please call this office at 410-313-1773 if you have any further questions.

Sincerely,

A handwritten signature in cursive script that reads 'Bert Nixon'.

Bert Nixon, Director  
Bureau of Environmental Health

cc: Eric Dougherty, MDE Water Mgmt., Groundwater  
✓ Well & Septic File

Send Report To:

Bert Nixon

State of Maryland  
DHMH - Laboratories Administration  
Division of Environmental Chemistry  
**RADIATION LABORATORY**

201 W. Preston Street, Baltimore, Maryland 21201

*John M. DeBoy, Dr. P.H., Director*

**LABORATORY ANALYSIS REQUEST**

Sample Bottle No. A: H0-95-1098 No. B: \_\_\_\_\_ Field Blank Bottle No. A: \_\_\_\_\_ No. B: \_\_\_\_\_

Plant/Site Name: Fulton Manor II Lot 5 County: Howard

Sample Source: Pleasant view Dr. Location: H0-95-1098  
(well no., lab sink, sample tap, etc.)

County:   Plant No.

CHECK (one per box)

Drinking Water	<input checked="" type="checkbox"/>
Landfill	<input type="checkbox"/>
Stream	<input type="checkbox"/>
Other	<input type="checkbox"/>

Community	<input type="checkbox"/>
Non-community	<input type="checkbox"/>
Private	<input type="checkbox"/>
Other	<input type="checkbox"/>

Source (raw water)	<input checked="" type="checkbox"/>
Distribution (treated)	<input type="checkbox"/>
MCL	<input type="checkbox"/>

Emergency	<input type="checkbox"/>
Routine	<input checked="" type="checkbox"/>
Recheck	<input type="checkbox"/>
Special	<input type="checkbox"/>

Collector: K Wolf

Telephone No: 410-313-2645

Date Collected: 5/15/07

Time Collected: 11:30 a.m. \_\_\_\_\_ p.m.

Nitric Acid Preserved: Yes  No

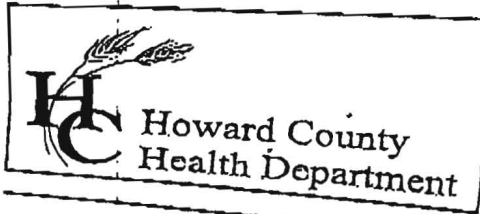
Iced: Yes  No

Submitters Code:   Federal Project:  Field Data: \_\_\_\_\_

Remarks: Sample Taken @ field test / pH preserved to (20)

✓	Test	EPA Code	Laboratory No.	Results (pCi/L)	Date Reported
✓	Gross Alpha	4000	<u>705103-03</u>	<u>0.3 ± 1.1</u>	<u>5/24/07</u>
✓	Gross Beta	4100		<u>6.4 ± 2.8</u>	
	Radon-222 Bottle A	4004			
	Radon-222 Bottle B	4004			
	Field Blank A	4004			
	Field Blank B	4004			
	Tritium				
	Ra - 226	4020			
	Ra - 228	4030			
	Total Uranium	4006			

Date Received: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
Supervisor: \_\_\_\_\_



7178 Columbia Gateway Drive, Columbia, MD 21046  
 (410) 313-2640 Fax (410) 313-2640  
 TDD (410) 313-2323 Toll Free 1-866-313-2640  
 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:

Fulton Manor II

Subdivision/Property Name

Lot#



Pleasant View Drive

Road Name

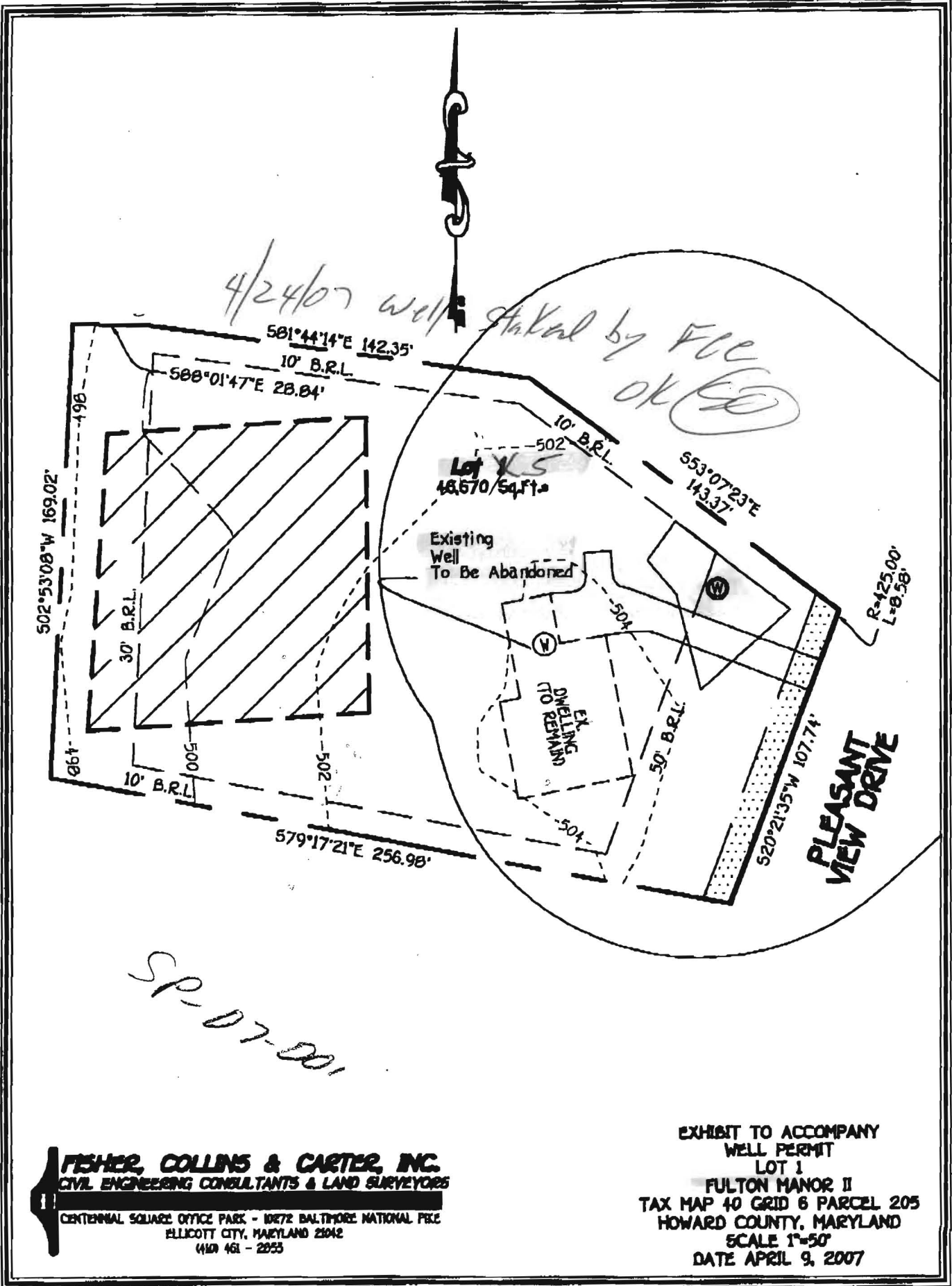
The well site has been staked by Fisher, Collins + Carter Inc  
 (professional land surveyor or company employing professional land surveyors)  
 on 4-10-07 (date) and does not require a site inspection.

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.

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

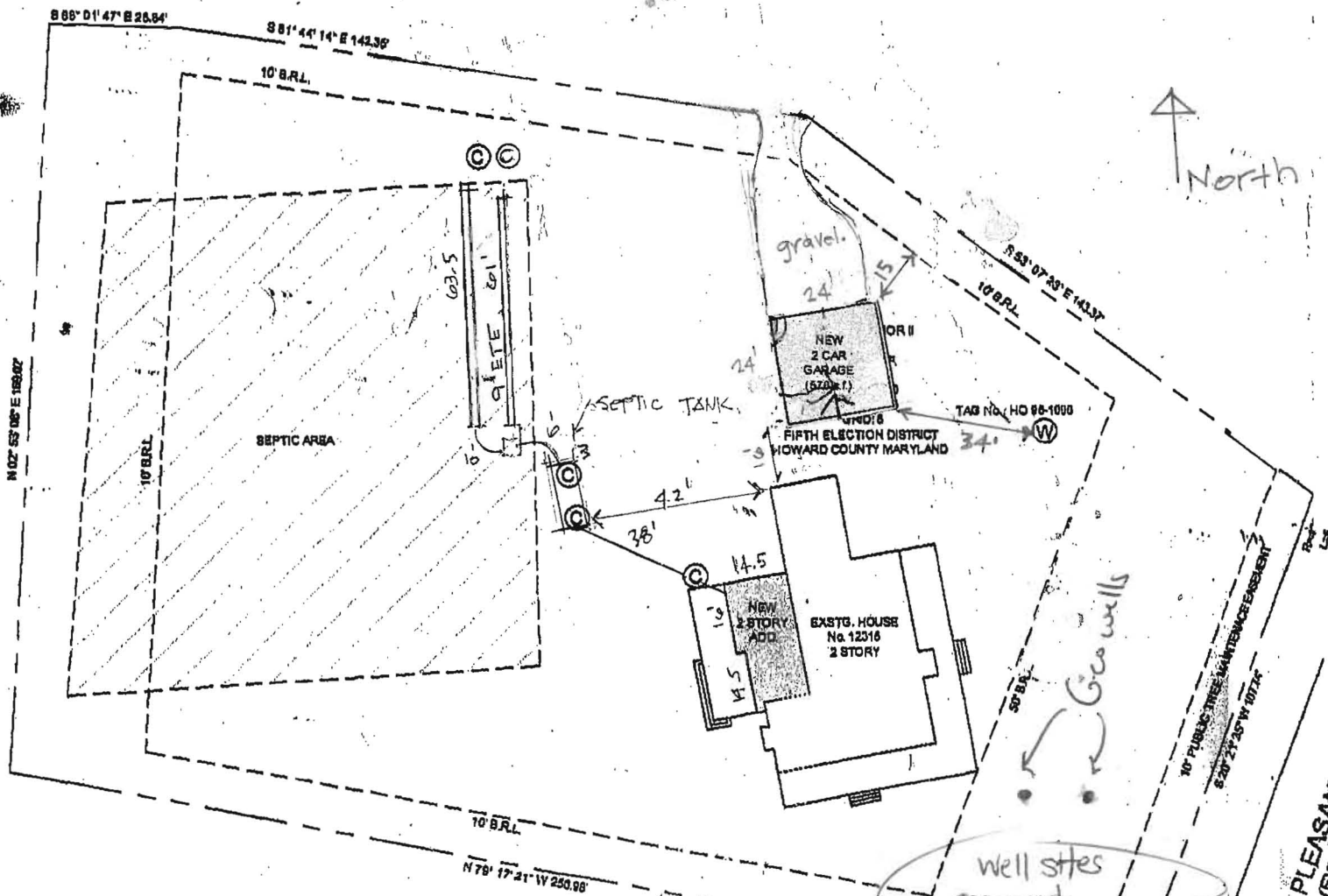
Revised 3/11/05

K:\SDSKPROJ\30793\dwg\30793 Fulton Manor II Bulk Parcel Lot 1 Well Exhibit.dwg, 4/9/2007 10:00:15 AM, 1:50



**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTENNIAL SQUARE OFFICE PARK - 1872 BALTIMORE NATIONAL PKE  
 ELLICOTT CITY, MARYLAND 21042  
 (410) 461 - 2253

EXHIBIT TO ACCOMPANY  
 WELL PERMIT  
 LOT 1  
 FULTON MANOR II  
 TAX MAP 40 GRID 6 PARCEL 205  
 HOWARD COUNTY, MARYLAND  
 SCALE 1"=50'  
 DATE APRIL 9, 2007



North ↑

PLAT LEGEND	
---	B.R.L. - BUILDING RESTRICTION LINE
⊕	WELL
⊙	CLEANOUT
▨	THIS HATCHED AREA INDICATES A PRIVATE SEWERAGE EASEMENT. IMPROVEMENTS OF ANY NATURE ARE RESTRICTED IN THIS AREA UNTIL PUBLIC SEWERAGE IS AVAILABLE AND CONNECTED TO PROPERTY.

PLAT INFORMATION	
1. PROPERTY ZONED RR (RURAL RESIDENTIAL).	
2. PROPERTY AREA:	± 1.044 ACRES (45,104 SF)
3. PROPERTY SETBACKS:	
PRIMARY STRUCTURE:	FRONT: 50'-0"
	REAR: 30'-0"
	SIDES: 10'-0"
ACCESSORY STRUCTURE:	FRONT: 10'-0"
	REAR: 10'-0"
SIDES: 10'-0"	
4. HEIGHT RESTRICTIONS:	
PRIMARY STRUCTURE:	34'-0"
ACCESSORY STRUCTURE:	25'-0"
5. THE BOUNDARY - EXISTING HOUSE LOCATION INDICATED HEREON IS FROM INFORMATION OF RECORD AND IS NOT THE RESULT OF A BOUNDARY SURVEY.	
6. INFORMATION OF RECORD: PLAT NO. 19194-10198	
7. NO 100 YEAR FLOOD PLAIN EXISTS ON SITE.	

PLEASANT VIEW DRIVE  
(EXISTING 50' RIGHT OF WAY)

Scale  
1" = 40'

GRADE

EACH BORE HOLE (TYP.)

MINIMUM  
HORIZONTAL BURY  
DEPTH 4 FT

FOR CONT.  
SEE PLANS

HORIZONTAL  
PIPING

GROUT ENTIRE ANNULAR  
SPACE AND VERTICAL  
U-TUBE WITH (BENTANITE)  
GROUT.

BORE DEPTH =

375'

TAPE

5 TO 10 FOOT SECTION OF  
REBAR TO GUIDE TUBE  
INTO BORE DURING  
INSTALLATION

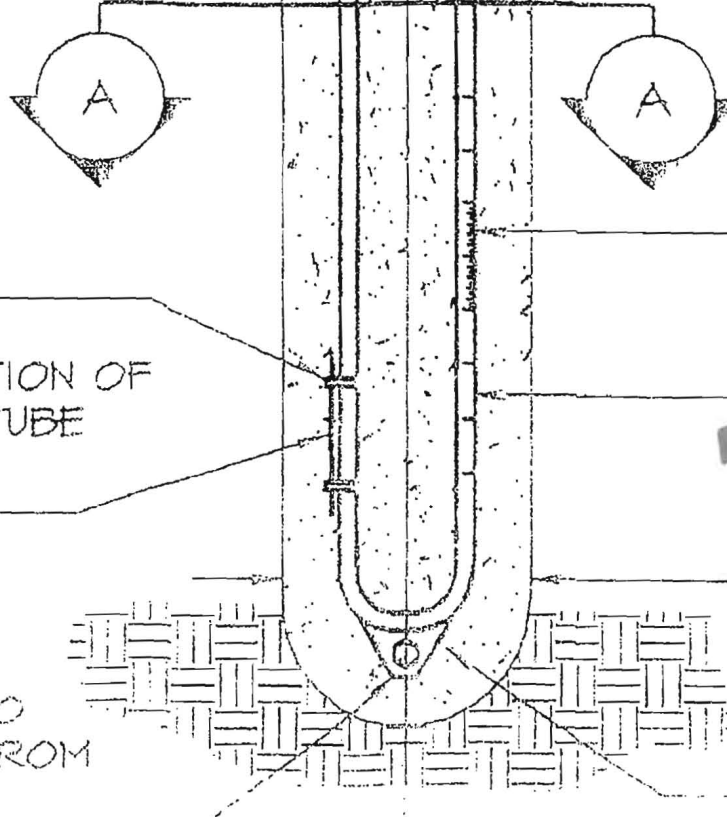
DEPTH MARKINGS IN FEET TO  
INDICATE DEPTH OF INSERTION

TYPICAL VERTICAL U TUBE  
1.25 INCHES

TYPICAL BORE DIAMETER  
6.0 INCHES

ANCHOR FITTING TO  
PREVENT U-TUBE FROM  
SURFACING AFTER  
INSTALLATION

TYPICAL SOCKET U-BEND



## **HOWARD COUNTY GROUTING PROCEDURE**

Boreholes will be grouted from the bottom to the top via a tremie pipe and positive displacement pump. Bentonite grout, known as Quik-Grout will be used according to the manufacturer's specifications to achieve a consistency of at least 20% solids (24 gallons potable water/50 lb. sack of grout) and a permeability no more than  $2.5 \text{ E}(-08) \text{ cm/sec}$ . Grouting will be completed immediately after installing the geothermal loop and no later than twenty-four (24) hours after installing the geothermal loop. Open boreholes/annular space will be protected as necessary to prevent the entry of surface water or pollutants.

