

7-9-91 1:30 PM  
7-12-91 AM 2 PM  
coop

# PERMIT

03-313255

P 47086

## SEWAGE DISPOSAL SYSTEM

A 38627

### DEPARTMENT OF HEALTH AND MENTAL HYGIENE

DISTRICT 3rd

DATE 5/15/91

#### HOWARD COUNTY HEALTH DEPARTMENT

BUREAU OF ENVIRONMENTAL HEALTH

461-9933

INDEXED

DATE SYSTEM APPROVED 7-12-91

INSPECTOR JEN

Walter W. King Plumbing & Heating

IS PERMITTED TO INSTALL ☒ ALTER

ADDRESS 5305 King's Court, Frederick, Maryland 21702 PHONE 662-6990

SUBDIVISION Willow Highlands LOT 4 ROAD 1721 Willow Springs Drive

PROPERTY OWNER ~~Pulte Homes~~ Patrick McCarthy

ADDRESS

SEPTIC TANK CAPACITY 1250 GALLONS

NUMBER OF BEDROOMS 4

180 SQUARE FEET PER BEDROOM

LINEAR FEET OF TRENCH REQUIRED 180

TRENCHES - 180 sq. ft. per bedroom. Trench to be 2 feet wide. Inlet 4.5 feet below cut original grade. Bottom maximum depth 8.5 feet below original grade. Effective area begins at 4.5 feet below original grade. 2.5 feet of stone below distribution pipe. 2.5 90 cut right 6-4-91 JEN 140

LOCATION - Place the distribution box 40 feet from the left lot line and 140 feet from the back lot line as seen when facing the Willow Springs Drive. Run trenches away toward from the left lot line on contour. and right lot lines on contour. EN 7-9-91

NOTE - No trench to exceed 100 feet in length. Provide 6" - 8" diameter cleanout and cap to grade or above on septic tank. OK 4/25/91 RH

PLANS APPROVED BY Raymond Hodges cm DATE 04/23/91

COVER NO WORK UNTIL INSPECTED AND APPROVED

NEITHER THE HOWARD COUNTY COUNCIL NOR THE HEALTH DEPARTMENT IS RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM

NOTE: CLEANOUT REQUIRED EVERY 70 FEET OF SEWER LINE AND/OR AT 90° SWEEPS IN LINES FROM HOUSE TO DRAIN FIELDS, 90° ELBOWS NOT ACCEPTABLE.

NOTE: ALL PARTS OF SEPTIC SYSTEMS (I.E. TANK, DISTRIBUTION BOX TRENCHES) TO BE 100 FEET FROM WELL (UNLESS OTHERWISE SPECIFICALLY AUTHORIZED)

NOTE: IF DEEP TRENCH(ES) ARE USED CALL FOR INSPECTION BEFORE AND AFTER PLACING GRAVEL IN TRENCH(ES)

NOTE: NO DRY WELL SHALL EXCEED 15 FOOT IN DIAMETER NO ABSORPTION TRENCH TO EXCEED 100 FEET IN LENGTH

NOTE: ALL PIPE FROM HOUSE TO SEPTIC TANK MUST BE CAST IRON OR SCHEDULE 35/40 PVC OR ABS

PERMIT VOID AFTER TWO YEARS

BLDG. PERMIT SIGNED

AND RETURNED 8/23/93

NOTE: INSTALL STAND PIPE ON SEPTIC TANK AND DRY WELL STAND PIPES MUST BE 6 INCHES IN DIAMETER CAST IRON. CONCRETE OR TERRA COTTA OR PVA OR ABS ACCEPTED. IF TOP OF SEPTIC TANK IS DEEPER THAN 3 FEET. MANHOLE TO GRADE REQUIRED. Serial # 50232

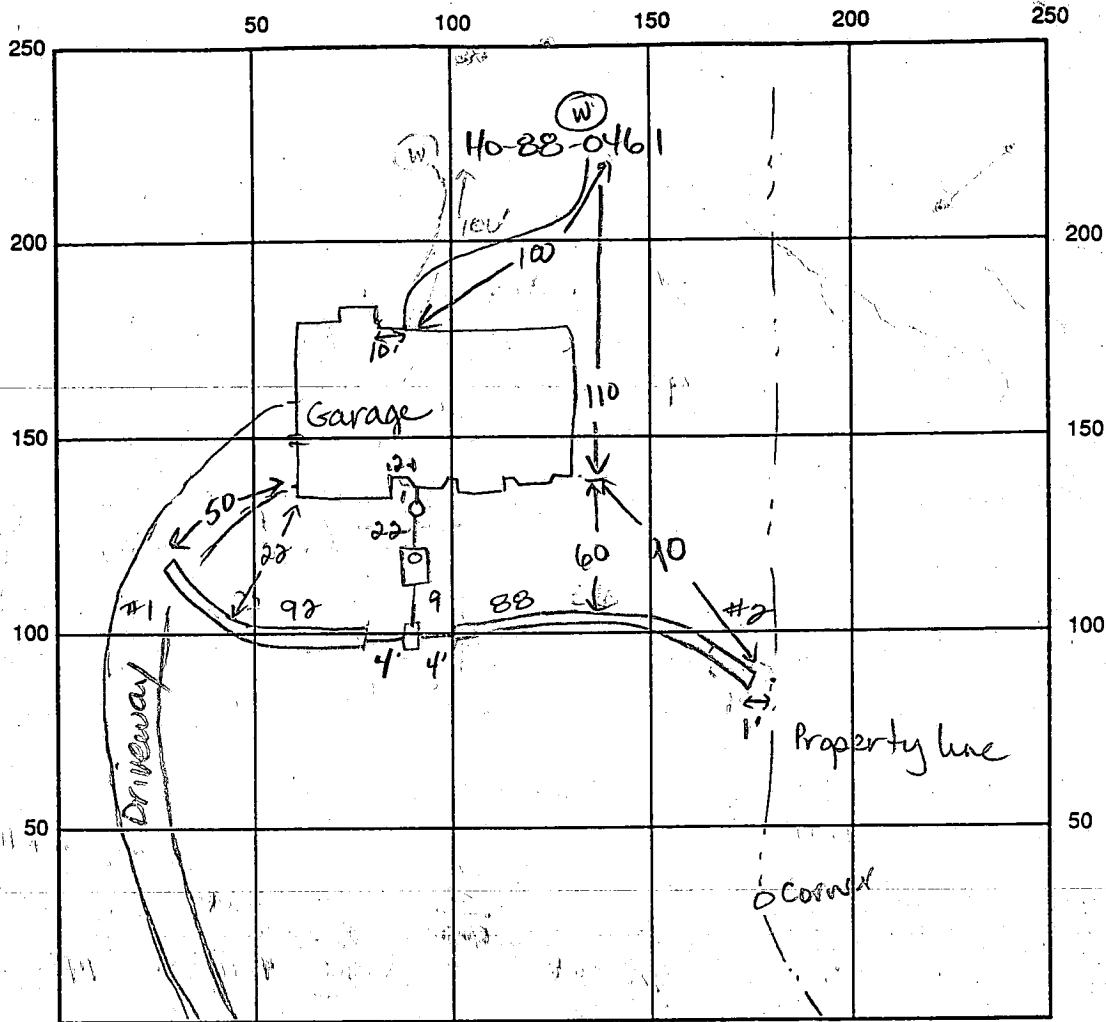
NOTE: DISTRIBUTION BOXES MUST HAVE BAFFLES

\*INSTALLER IS RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT

HD-260(6-90)

\*CALL 461-9933 FOR INSPECTION OF SEPTIC SYSTEM.

38627



INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE

Willow Springs Drive

SEPTIC TANK LEVEL 1250 gal

CLEANOUTS 1 in line 1 on S. Tank

DISTRIBUTION BOX LEVEL OK w/ baffle

DRAIN FIELD TITLE DEPTH 5 6.5 FT.

TRENCH WIDTH 2 FT.

INLET DEPTH 2.0 2.5 FT.

EFFECTIVE GRAVEL DEPTH 4 4 FT.

TOTAL LENGTH 92 88 FT.

NUMBER OF TRENCHES 2

ONE SIDEWALL/BOTTOM AREA 368 352 SQ. FT.

DRYWALL INSIDE DIAMETER        FT.

EFFECTIVE DEPTH BELOW INLET        FT.

ABSORBENT AREA 720 SQ. FT.

REMARKS: 6-4-91 stop work order issued. Graveling cuts in SDA. JEN  
7-9-91 Located dist. box and contractor shot grade w/ transit; 2 ft cut in SDA. Rewrote spec. OK to continue. JEN.  
7-12-91 Raise dist box to allow 4 ft stone below pipe in trench #1. About 1.5 ft fill placed on this end of easement. OK to stone trenches. JEN.  
7-12-91 OK to cover all work JEN.

DATE SYSTEM APPROVED 7-12-91

INSPECTOR Jane E. Hadeau

A 38627

SUBDIVISION: Willow Highlands

LOT NUMBER: 4

DRY WELL OR DRY WELL AND TRENCH

|           |                    | sq. ft./bedroom                  |
|-----------|--------------------|----------------------------------|
|           | <u>Septic Tank</u> | <u>Minimum Total Square Feet</u> |
| 3 bedroom | 1000 gallon        |                                  |
| 4 bedroom | 1250 gallon        |                                  |
| 5 bedroom | 1500 gallon        |                                  |

Inlet \_\_\_\_\_ feet below original grade.

Bottom maximum depth \_\_\_\_\_ feet below original grade.

Effective area begins at \_\_\_\_\_ feet below original grade.

NOTE: If trench is used to make up absorbent area, run the trench on level ground and leave a 5-foot earth buffer between dry well and trench. No trench is to exceed 100 feet in length. Trench inlet to be same as dry well, with \_\_\_\_\_ feet of stone below distribution pipe.

TRENCHES

180 sq. ft./bedroom

Trench to be 2 wide.Inlet 4.5 feet below original grade.Bottom maximum depth 8.5 feet below original grade.Effective area begins at 4.5 feet below original grade.4 feet of stone below distribution pipe.

- NOTE:
- (1) No trench to exceed 100 feet in length.
  - (2) If more than one trench used, a distribution box is required.
  - (3) Trenches to be installed on level ground.
  - (4) Call for inspection of trench before gravel is installed.
  - (5) Provide 6" - 8" diameter cleanout and cap to grade or above on septic tank and drywell.
  - (6) If a garbage disposal is used, increase septic tank capacity by 50% and increase absorbent sidewall area by 22%.

LOCATION: Place THE DISTRIBUTION BOX 185 FT FROM THE REAR LOT LINE  
220 FT  
AND 220 FT FROM THE LEFT LOT LINE AS SEEN WHEN  
FACING THE LOT FROM Willow Springs Dr. RUN TRENCHES  
ON CONTOUR TOWARD THE REAR AND RIGHT LOT LINES. 3-1489

REVISED 3/19/90 CWL

PLACE THE DISTRIBUTION BOX 40 FT FROM THE LEFT  
LOT LINE AND 185 FT FROM THE BACK LOT LINE  
AS SEEN WHEN FACING THE WILLOW SPRING DR  
RUN THE TRENCHES AWAY FROM THE LEFT LOT LINE  
ON CONTOUR REVISED 4/23/91 R14

# APPLICATION

PERCOLATION TESTING

A 38627

P \_\_\_\_\_

HOWARD COUNTY HEALTH DEPARTMENT  
BUREAU OF ENVIRONMENTAL HEALTH  
P.O. BOX 476 ELLICOTT CITY, MARYLAND 21043  
TELEPHONE: 461-9933

DISTRICT 3

DATE 12-16-1986

TO: THE COUNTY HEALTH OFFICER  
ELLICOTT CITY, MARYLAND

I, HEREBY, APPLY FOR THE NECESSARY TEST IN ORDER TO CONSTRUCT (OR RECONSTRUCT) A SEWAGE DISPOSAL SYSTEM.

PROPERTY OWNER WILLOW SPRINGS LIMITED PARTNERSHIP Pulte Home Corp  
16801 WESLEY CHAPEL ROAD  
ADDRESS MONKTON, MARYLAND 21111 PHONE 921-8707  
347-8700

PROSPECTIVE BUYER \_\_\_\_\_

ADDRESS \_\_\_\_\_ PHONE \_\_\_\_\_

PROPERTY LOCATION:

SUBDIVISION Highlands  
WILLOW SPRINGS GOLF COURSE LOT NO. 4

ROAD AND DESCRIPTION N/S U.S. RTE 70 N AT LIVESTOCK ROAD  
1721 Willow Springs Dr.

TAX MAP 9 & 15 PARCEL # 151 & 11

SIZE OF LOT 3.0 AC. ± TYPE BLDG. S.F.D.  
(SINGLE FAMILY DWELLING OR COMMERCIAL)

THE SYSTEM INSTALLED UNDER THIS APPLICATION IS ACCEPTABLE ONLY UNTIL PUBLIC FACILITIES BECOME AVAILABLE. I FULLY UNDERSTAND THE  
FEE CONNECTED WITH THE FILING OF THIS PERC TEST APPLICATION IS NON-REFUNDABLE UNDER ANY CIRCUMSTANCES. I ALSO AGREE TO COMPLY  
WITH ALL M.O.S.H.A. REQUIREMENTS IN TESTING THIS LOT.

By Willow Springs Inc. Gen Partner  
Sharon C. [Signature] (SIGNATURE OF APPLICANT) Pur

APPROVED BY Sid [Signature] FOR Deputy [Signature] DATE 5-22-89

REJECTED BY \_\_\_\_\_ FOR \_\_\_\_\_ DATE \_\_\_\_\_

HOLD PENDING FURTHER TESTS \_\_\_\_\_ DATE \_\_\_\_\_

REASONS FOR REJECTION OR HOLDING 4-13-87 Pur SATISFACTORY; LOT LINE CHANGES REQUIRED hold  
for subdivision plat. S.M.H.

BLDG. PERMIT SIGNED  
AND RETURNED 4/23/91  
Serial # 34877-SFD

BLDG. PERMIT SIGNED  
AND RETURNED 5-22-89  
BP 25938 JAL

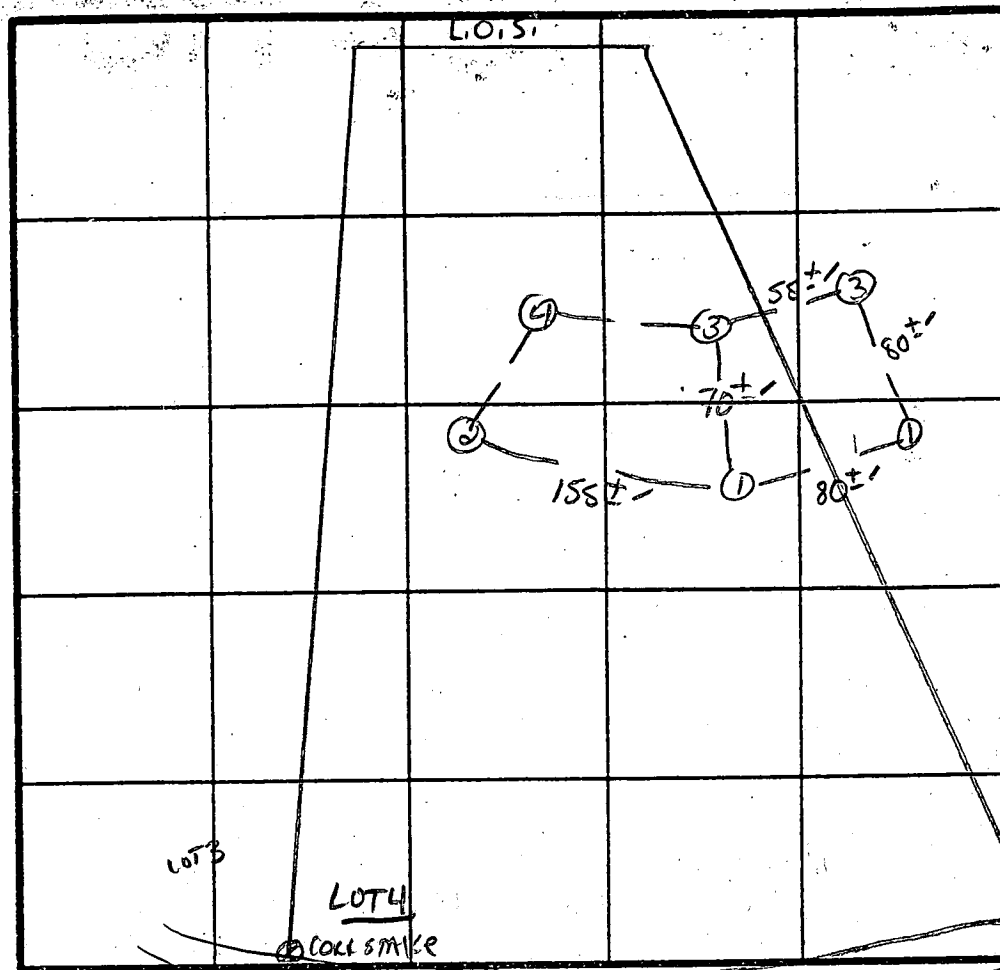
# THIS IS NOT A PERMIT

①-④  
SOIL PROFILE

0'  
11'  
4'  
13'

AD.  
yellow L<sup>ED</sup>  
Silt loam  
many frags  
lg. 25-35%  
clay 12-15%

yellow BL  
silty sand  
loam  
35-40%  
frags



$\bar{X}$  PERC 9 min  
180  $\phi$  1 BR  
INLET 4.5 4  
BOTTOM 9.0 8

INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE.

12.5' 190

Willow SP. Ct

| DATE   | TEST NO. | DEPTH | PRE-WET                 |      | TEST - 1" DROP |      | TIME   |
|--------|----------|-------|-------------------------|------|----------------|------|--------|
|        |          |       | START                   | STOP | START          | STOP |        |
| 4/3/87 | 1 S      | 4.5   | 3:30                    | 3:35 | 3:35           | 3:45 | 10 min |
|        | 1 V      | 13"   | UNIFORM soil below 4"   |      | 4"             |      |        |
|        | 2 S      | 4.5   | 3:37                    | 3:42 | 3:45           | 4:01 | 16 min |
|        | 2 V      | 12.5  | UNIFORM soil below 4.5" |      | 4.5"           |      |        |
|        | 3 V      | 12.5  | UNIFORM soil below 4"   |      | 4"             |      |        |
|        | 4 S      | 5"    | 3:49                    | 3:51 | 3:51           | 3:56 | 5 min  |
|        | 4 M      | 8.5   | 3:48                    | 3:50 | 3:50           | 3:55 | 5 min  |
|        | 4 V      | 13"   | UNIFORM soil below 4.5" |      |                |      |        |
|        |          |       |                         |      |                |      |        |
|        |          |       |                         |      |                |      |        |
|        |          |       |                         |      |                |      |        |
|        |          |       |                         |      |                |      |        |
|        |          |       |                         |      |                |      |        |
|        |          |       |                         |      |                |      |        |
|        |          |       |                         |      |                |      |        |
|        |          |       |                         |      |                |      |        |
|        |          |       |                         |      |                |      |        |

REMARKS Notes DIFF THAN PLAT / MAJOR CHANGE IN LOT LINE REQUIRED + POSS.

TYPE OF SOIL Chester.

TESTED BY S. Am

ALSO PRESENT O-KETTER MM

## APPLICATION

HOWARD COUNTY

## PERMIT APPLICATION

DEPARTMENT OF PUBLIC WORKS

BUREAU OF INSPECTIONS LICENSES &amp; PERMITS

3430 COURT HOUSE DRIVE, ELLICOTT CITY, MARYLAND 21043

SERIAL NUMBER

36817

BUILDING ADDRESS (HOUSE NO., STREET, TOWN OR AREA)

1721 WILLOW SPRINGS DRIVE  
SYKESVILLE, MD. 21784GRADING/SEDIMENT CONTROL ☐ YES ☐ NO

SDP #

DESCRIPTION OF WORK AUTHORIZED

CONSTRUCT NEW SINGLE  
FAMILY DWELLING WITH A  
SIDE ENTRY GARAGE  
ELEVATION #2, WILTSHIRE

LOT NO. PARCEL NO. SEC. AREA BLOCK NO. LIBER FOLIO

4 22 3 6030

SUB DIVISION

WILLOW

ZONE

HIGHLANDS

ZONE MAP

9

ELEC. DIST.

3

CENSUS TR.

6030

OWNER'S NAME AND ADDRESS

PHONE NO.

PULTE HOME CORP.  
444 N. FREDERICK AVE  
GAITHERSBURG, MD 20878  
921-8707

OCCUPANT'S NAME AND ADDRESS

PHONE NO.

ARCHITECT OR ENGINEER'S NAME AND ADDRESS

PHONE NO.

SHANABERGER + LANE  
8726 TOWN + COUNTRY BLVD.  
ELLICOTT CITY, MD 21043  
461-9563

CONTRACTOR'S NAME AND ADDRESS

PHONE NO.

PULTE HOME CORPORATION

EXISTING USE

PROPOSED USE

VACANT LOT

SFD

EST. CONSTRUCTION COST

LICENSE NUMBER

PERMIT FEE

125,000

W/S CODE

FOR OFFICE USE ONLY

DISTANCE IN FEET FROM R/W LINE TO FRONT BUILDING LINE

SIDE YARD

(DISTANCE IN FEET FROM SIDE BLDG. LINE TO SIDE PROPERTY LINE)

DISTANCE IN FEET FROM SIDE STREET R/W LINE

TO SIDE BUILDING LINE

DISTANCE IN FEET, REAR YD. REQUIRING SET

BACK

(CORNER LOT ONLY)

CONDITIONS (IF ANY)

SDP #

Checks payable to DIRECTOR OF FINANCE OF HOWARD COUNTY

## CAUTION

To begin construction before a permit placard has been issued and  
displayed on the job is a violation of the law.Use and occupancy permit must be applied for two weeks before it  
will be issued.IMPORTANT: PLEASE SHOW ZIP CODES AND  
AREA CODES WHEREVER REQUIRED.

LP-69

Revised

SIZE OF BLDG. FRONT DEPTH HEIGHT

TYPE OF BLDG. AREA VOLUME ROOF

B. ROOMS

ROOMS

BATHS

FIREPLACES

FOOTINGS

FOUNDATION

S. WALLS

UTILITIES

WATER/WELL SEWER/SEPTIC GAS ELECTRICITY TYPE OF HEAT AC

I have carefully examined and read this application and know the same is  
true and correct, and that in doing this work, all provisions of Howard  
County Ordinances and the State Laws of Maryland will be complied with,  
whether specified or not; and I will notify the Bureau of Inspections, and  
Permits twenty-four hours in advance when I am ready for the inspections,  
called for elsewhere in this application; and that no work will be covered  
up until such inspections have been complied with.Charles J. Quinn  
DESIGNER MAKER  
TITLE  
DATE 4/23/91

FUNCTION DATE SIGNATURE APPROVAL

ZONING/PLANNING

SHA

SEDIMENT/GRADING

BUILDING OFFICIAL

WATER &amp; SEWER

HEALTH DEPT.

FIRE PROTECTION

STORM WATER MGMT.

APPROVED

DATE

Distribution of Copies:  
White - Building Official  
Green - Planning & ZoningYellow - Engineering  
Pink - Health Dept.  
Gold - S.H.A.

7-12-91  
am

HOWARD COUNTY HEALTH DEPARTMENT  
Bureau of Environmental Health  
3525-H Ellicott Mills Drive  
Ellicott City, MD 21043  
461-9933

APPLICATION FOR PITLESS ADAPTER, WELL PUMP AND PRESSURE TANK INSTALLATION

New Installation   x    
Replacement           

Receipt # 47160  
Date 6/3/91

Name of Installer Walter W. King Plbg. & Htg. Contr. Telephone 301-662-6990

License Number Md 2217  
Certified Well Pump Installer            Well Driller            Registered Plumber   x  

Name of Property Owner Pulte Homes Telephone 301-921-8707  
Subdivision Willow Springs Lot # 4 Well Tag # HO -88 - 0461  
Site Address 1721 Willow Springs Dr.

**Pump**  
1. Type  
a. Deep well jet             
b. Shallow well jet             
c. Submersible   x    
2. Make Goulds  
3. Model # 5 ES 05422  
4. Capacity 5 GPM  
5. Pump exceeds well capacity Yes            No   x    
6. If Yes, is low pressure cutoff switch installed? Yes            No             
7. What methods are used to protect the pump and electrical wiring from vibrations? Torque arrestors            Cable guards   x   Other           

**Motor**  
1. Horsepower 1/2  
2. RPM 3500  
3. Voltage             
a. 110             
b. 220   x  

**Pitless Adapter**  
1. Make Martinson  
2. Model # BP-TOK  
3. Depth 42" min  
60" max

**Tank**  
1. Capacity 42  
2. Pressure relief valve? yes

**Piping**  
1. Type plastic 160#  
2. Size 1"  
3. NSF and/or BOCA Code approved   x    
4. Depth of supply line 42" min  
60" Max

**Well data**  
1. Depth 165' ft.  
2. Yield 10 GPM  
3. Static water level            ft.  
4. Will water supply be disinfected by installer? yes

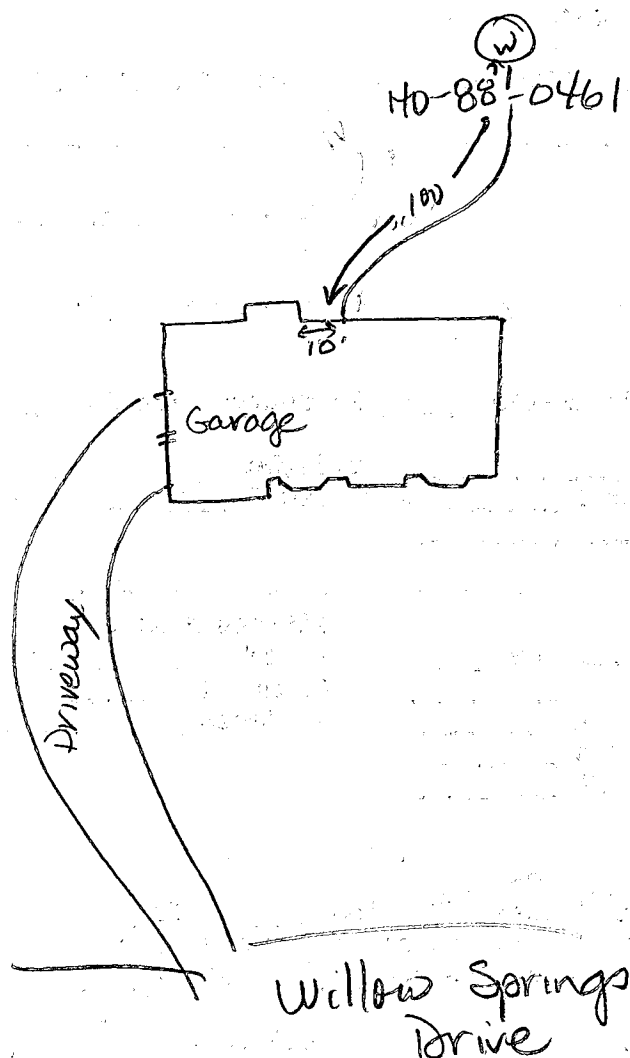
I understand that it is my responsibility to notify the Howard County Health Department when the installation is ready for inspection (otherwise this permit is null and void).

All information given above is true to the best of my knowledge.

Signature of Applicant: Walter W. King

Date: May 30, 1991

Note: A sticker indicating approval/status of the installation will be placed on the well casing at the time of the inspection.



7-12-91 WPI Pitless adaptor at 60 inches below grade. Well line at 48 inches below grade. House connection ok. No pump tank installed yet.  
JEN



Well Permit No. HO - 88-0461  
Location of property (road) Willow Spr Dr.  
Subdivision Willow Highlands Lot 4 Block      Plat      Sec.       
Well Driller R. Moyle Owner Willow Sp Co

Depth of well 165'  
Distance of measuring point (M.P.) above ground 2 ft  
Static water level (S.W.L.) below M.P. 26 ft

Time pump started 12:00 Pumping rate 106 gpm  
Total time 15 min to reach pumping water level 27' ft. below M.P.

[illegible]

|                |                                 |                                                                                                                   |  |                                                         |  |
|----------------|---------------------------------|-------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------|--|
| <b>C1</b> 2347 | SEQUENCE NO.<br>(DENY USE ONLY) | <b>STATE OF MARYLAND</b><br><b>WELL COMPLETION REPORT</b><br>FILL IN THIS FORM COMPLETELY<br>PLEASE PRINT OR TYPE |  | PERMIT NO.<br>FROM "PERMIT TO DRILL WELL"<br>40-88-0461 |  |
| DATE Received  |                                 | DATE WELL COMPLETED                                                                                               |  | COUNTY NUMBER A-38627                                   |  |
| 8 13           |                                 | 15 20                                                                                                             |  | 22 26                                                   |  |
|                |                                 | 040089                                                                                                            |  | 165                                                     |  |
|                |                                 |                                                                                                                   |  | (TO NEAREST FOOT)                                       |  |

|               |                    |            |                 |     |
|---------------|--------------------|------------|-----------------|-----|
| OWNER         | last name          | first name | TOWN            | LOT |
| STREET OR RFD | William Springs Dr | William    | West Friendship | 4   |
| SUBDIVISION   | William Highlands  | SECTION    | LOT 4           |     |

|                                                                                             |                 |                        |
|---------------------------------------------------------------------------------------------|-----------------|------------------------|
| <b>WELL LOG</b><br>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<br>FROM TO | Check if water bearing |
| Top Soil                                                                                    | 0 2             |                        |
| SANDY                                                                                       | 2 40            | ✓                      |
| SANDSTONE                                                                                   | 40 45           |                        |
| MICKA                                                                                       | 45 80           |                        |
| SANDSTONE                                                                                   | 80 85           | ✓                      |
| MICKA                                                                                       | 85 165          |                        |

|                                                |                          |
|------------------------------------------------|--------------------------|
| <b>GROUTING RECORD</b>                         |                          |
| WELL HAS BEEN GROUTED (Circle Appropriate Box) |                          |
| TYPE OF GROUTING MATERIAL                      |                          |
| CEMENT <b>CM</b>                               | BENTONITE CLAY <b>BC</b> |
| NO. OF BAGS 32                                 | NO. OF POUNDS 2400       |
| GALLONS OF WATER 122                           |                          |
| DEPTH OF GROUT SEAL (to nearest foot)          |                          |
| from 0                                         | ft. to 50                |
| (enter 0 if from surface)                      |                          |

|                                            |           |          |
|--------------------------------------------|-----------|----------|
| <b>CASING RECORD</b>                       |           |          |
| casing types insert appropriate code below |           |          |
| <b>ST</b>                                  | <b>CO</b> |          |
| STEEL                                      | CONCRETE  |          |
| <b>PL</b>                                  | <b>OT</b> |          |
| PLASTIC                                    | OTHER     |          |
| MAIN CASING TYPE                           |           |          |
| <b>PL</b>                                  | <b>G</b>  | <b>G</b> |
| 60 61                                      | 63 64     | 66 67 70 |

|                               |                      |
|-------------------------------|----------------------|
| <b>OTHER CASING (if used)</b> |                      |
| diameter inch                 | depth (feet) from to |
|                               |                      |

|                                                        |           |           |
|--------------------------------------------------------|-----------|-----------|
| <b>SCREEN RECORD</b>                                   |           |           |
| screen type or open hole insert appropriate code below |           |           |
| <b>ST</b>                                              | <b>BR</b> | <b>HO</b> |
| STEEL                                                  | BRASS     | OPEN HOLE |
| <b>PL</b>                                              | <b>OT</b> |           |
| PLASTIC                                                | OTHER     |           |

|                                   |                                                                                                                                                                                                                                                                                                 |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>C2</b>                         |                                                                                                                                                                                                                                                                                                 |
| DEPTH (nearest ft.)               |                                                                                                                                                                                                                                                                                                 |
| 1 2                               | 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 |
| SLOT SIZE 1 2 3                   |                                                                                                                                                                                                                                                                                                 |
| DIAMETER OF SCREEN (NEAREST INCH) |                                                                                                                                                                                                                                                                                                 |
| from to                           |                                                                                                                                                                                                                                                                                                 |

|                                                     |  |
|-----------------------------------------------------|--|
| <b>GRAVEL PACK</b>                                  |  |
| IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68 |  |
| OEP USE ONLY (NOT TO BE FILLED IN BY DRILLER)       |  |
| T (E.R.O.S.) WQ                                     |  |
| 70 72 74 75 76                                      |  |
| TELESCOPE CASING LOG INDICATOR OTHER DATA           |  |

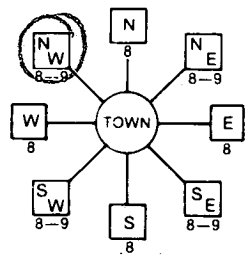
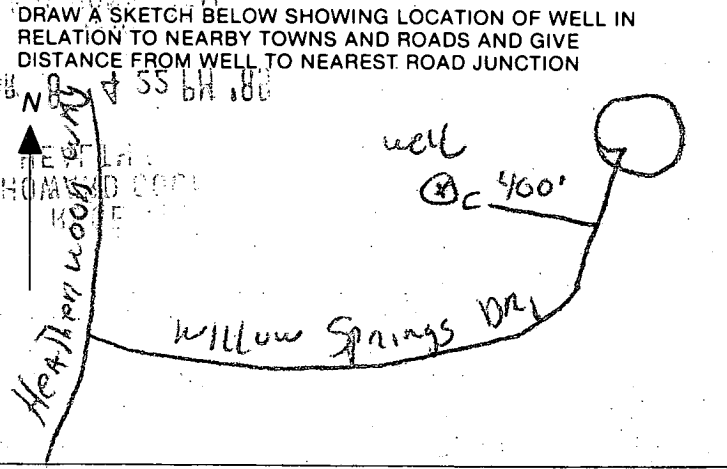
|                                                 |                      |                                 |
|-------------------------------------------------|----------------------|---------------------------------|
| <b>C3</b>                                       |                      |                                 |
| PUMPING TEST                                    |                      |                                 |
| HOURS PUMPED (nearest hour) 3                   |                      |                                 |
| PUMPING RATE (gal. per min. to nearest gal.) 10 |                      |                                 |
| METHOD USED TO MEASURE PUMPING RATE             |                      |                                 |
| WATER LEVEL (distance from land surface)        |                      |                                 |
| BEFORE PUMPING 16                               |                      |                                 |
| WHEN PUMPING 15                                 |                      |                                 |
| TYPE OF PUMP USED (for test)                    |                      |                                 |
| <b>A</b> air                                    | <b>P</b> piston      | <b>T</b> turbine                |
| <b>C</b> centrifugal                            | <b>R</b> rotary      | <b>O</b> other (describe below) |
| <b>J</b> jet                                    | <b>S</b> submersible |                                 |

|                                                                                        |  |
|----------------------------------------------------------------------------------------|--|
| <b>PUMP INSTALLED</b>                                                                  |  |
| DRILLER WILL INSTALL PUMP (CIRCLE) (YES or NO) YES NO                                  |  |
| IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS EXCEPT HOME USE |  |
| TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX - SEE ABOVE:                     |  |
| CAPACITY: GALLONS PER MINUTE (to nearest gallon) 31 35                                 |  |
| PUMP HORSE POWER 37 41                                                                 |  |
| PUMP COLUMN LENGTH (nearest ft.) 43 47                                                 |  |
| CASING HEIGHT (circle appropriate box and enter casing height)                         |  |
| + above } LAND SURFACE                                                                 |  |
| - below } (nearest foot) 3 51                                                          |  |

|                                                                                                                                           |  |
|-------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>LOCATION OF WELL ON LOT</b>                                                                                                            |  |
| SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL) |  |
|                                                                                                                                           |  |

|                                                                                                                                                                                                                                                                                         |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| CIRCLE APPROPRIATE LETTER                                                                                                                                                                                                                                                               |  |
| A 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 10.17.13 "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 IDENT. NO. 273                                                                                                                                                                                                                                                                 |  |
| DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)                                                                                                                                                                                                                                |  |
| SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)                                                                                                                                                                                   |  |

COUNTY

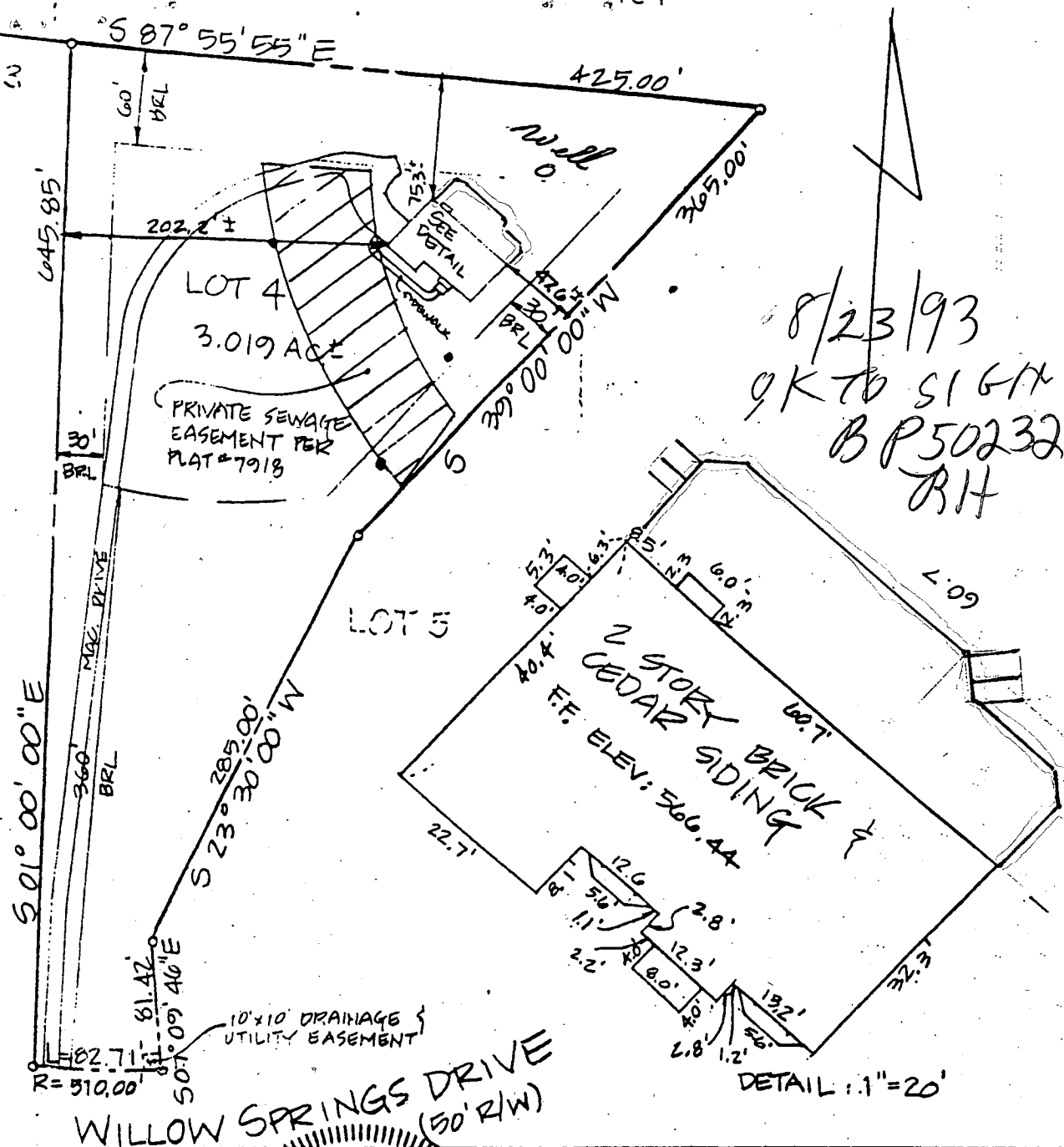
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                    |                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| B 1<br>7930<br><small>(THIS NUMBER IS TO BE PUNCHED IN COLS. 36 ON ALL CARDS)</small>                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | SEQUENCE NO. (DP USE ONLY)<br>1977 | STATE OF MARYLAND<br>PERMIT TO DRILL WELL<br>please print or type                                                                                                                                                                                                                                                                                                                  | STATE PERMIT NUMBER<br>HC-88-0461<br><small>fill in this form completely</small> |
| Date Received (APA)<br>021389<br>OWNER INFORMATION<br>15 Last Name: WILLOW<br>Owner: SP<br>First Name: Limited<br>36 Street or RFD: 16801<br>55 WESTLEY CH RD<br>57 Town: MOUNTAIN<br>70 State: 72 MD<br>Zip: 21111                                                                                                                                                                                                                                                                                                                                         |                                    | B 3<br>LOCATION OF WELL<br>8 COUNTY: HOWARD<br>21<br>23 SUBDIVISION: WILLOW HIGHLAND<br>42<br>SECTION: 44 46 LOT: 48 50<br>52 NEAREST TOWN: WEST FRIENDSHIP<br>71<br>MILES FROM TOWN (enter 0 if in town): 73 76 77 78<br>1 1 M I                                                                                                                                                  |                                                                                  |
| DRILLER INFORMATION<br>Driller's Name: Ralph Mayne<br>77 License No. 80: 273<br>Firm Name: Ralph Mayne Well Drilling<br>Address: 9120 Brown Church Rd. Mt Airy<br>Signature: Ralph Mayne<br>Date: 3/2/89                                                                                                                                                                                                                                                                                                                                                    |                                    | B 4<br>DIRECTION OF WELL FROM TOWN (CIRCLE BOX)<br> TOWN<br>ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)<br> NEAR WHAT ROAD: Willow Springs Dr.<br>34 400 37<br>DISTANCE FROM ROAD<br>ENTER FT or MI: 38 39 |                                                                                  |
| B 2<br>WELL INFORMATION<br>APPROX. PUMPING RATE (GAL. PER MIN.): 5<br>AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY): 500                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                    | NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL<br>COUNTY NAME: Howard<br>COUNTY NO.: A-3827<br>STATE SIGNATURE: _____ INSERT S<br>DATE ISSUED: 031389<br>CO SIGNATURE: [Signature]<br>EXP. DATE: 09-12-89<br>NORTH GRID: 541000<br>EAST GRID: 080800                                                                                                                    |                                                                                  |
| USE FOR WATER (CIRCLE APPROPRIATE BOX)<br><input checked="" type="checkbox"/> HOME (SINGLE OR DOUBLE HOUSEHOLD UNIT ONLY)<br><input type="checkbox"/> FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)<br><input type="checkbox"/> INDUSTRIAL, COMMERCIAL, STATE AND FEDERAL GOV. OTHER (REQUIRES APPROPRIATION PERMIT)<br><input type="checkbox"/> PUBLIC OR PRIVATE WATER COMPANY (REQUIRES APPROPRIATION PERMIT AND STATE HEALTH DEPARTMENT APPROVAL)<br><input type="checkbox"/> TEST, OBSERVATION, MONITORING (MAY REQUIRE APPROPRIATION PERMIT) |                                    | SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X<br>SOURCES OF DRILLING WATER<br>1. well<br>2.<br>3.<br>WRITE THE BOX NUMBER FROM THE MAP HERE<br>8008<br>5491<br>000 000                                                                                                                                                                                                        |                                                                                  |
| APPROXIMATE DEPTH OF WELL: 150 FEET<br>APPROXIMATE DIAMETER OF WELL: 6" INCH<br>METHOD OF DRILLING (circle one)<br>BORED (or Augered) JETTED Jetted & DRIVEN<br>30: AIR-ROTARY 37: AIR-PERCussion ROTARY (Hydraulic Rotary)<br>CABLE REVERSE-ROTARY Drive-POINT<br>other:                                                                                                                                                                                                                                                                                   |                                    | 4/20/89 11:55<br>Location ok<br>50ft+ open hole<br>60ft casing<br>2 ft above ground<br>27 bags cement<br>JENadeau                                                                                                                                                                                                                                                                  |                                                                                  |
| REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX)<br><input checked="" type="checkbox"/> THIS WELL WILL NOT REPLACE AN EXISTING WELL<br><input type="checkbox"/> THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED<br><input type="checkbox"/> THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY<br><input type="checkbox"/> THIS WELL WILL DEEPEMED AN EXISTING WELL<br>PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED (IF AVAILABLE): 41                                                                                  |                                    | DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION<br>                                                                                                                                                    |                                                                                  |
| Not to be filled in by driller (OEP USE ONLY)<br>APPROP. PERMIT NUMBER: 54 GAP 63<br>FORCE: SA WRITE INITIALS IN BOX PERMIT NO.: HC-88-0461<br>67 68 70 71 72 73 74 75 76 77 78 79                                                                                                                                                                                                                                                                                                                                                                          |                                    |                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                  |
| SPECIAL CONDITIONS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                    |                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                  |

## HD-224



PLAT # 4401

THE LOT SHOWN HEREON DOES NOT LIE IN A FLOOD HAZARD ZONE AS PER  
HOWARD COUNTY FLOOD INSURANCE RATE MAP #S 240044 2015 B &  
240044 CDDP, D, DATED 12-4-86.

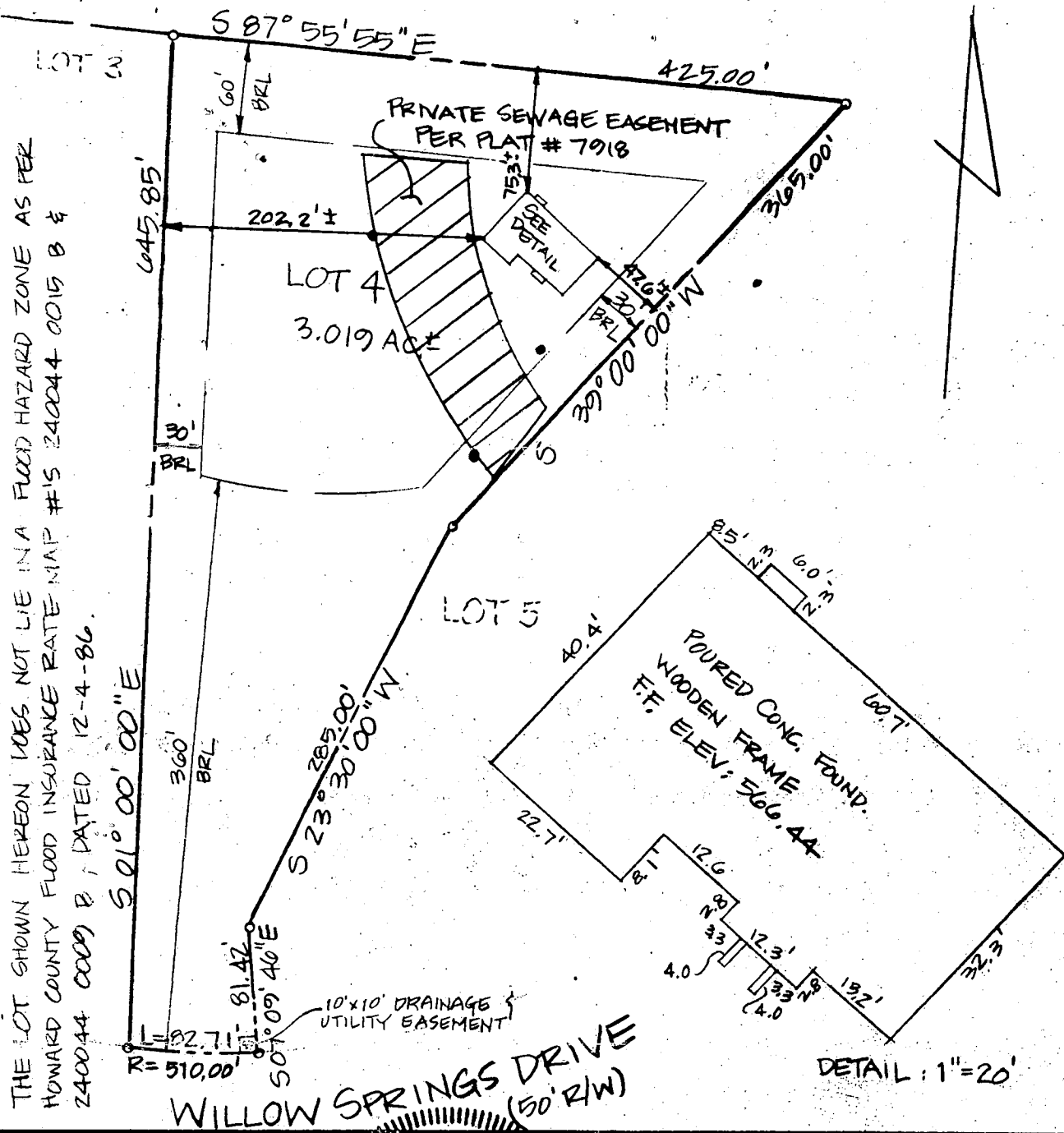


I HEREBY CERTIFY THAT THE PLAT OF MAPS LOCATED  
THE IMPROVEMENTS SHOWN HEREON  
DOES NOT REPRESENT A SURVEY  
& CANNOT BE USED TO ESTABLISH PROPERTY  
LINES OR CORNERS.

*Shanabarger & Lane*  
**SHANABARGER & LANE**  
8726 TOWN & COUNTRY BLVD.  
SUITES 106 & 107  
ELLCOTT CITY, MD. 21043  
(301) 461-9563

**FOUNDATION CERTIFICATION**  
**WILLOW HIGHLANDS AT**  
**WILLOW SPRINGS GOLF COURSE**  
LOT 4 PLAT # 7918  
ELECTION DISTRICT: 3<sup>RD</sup>  
COUNTY: HOWARD  
SCALE: 1"=100'  
DATE: 5/20/91 REV: 8/20/91

FLAT # 4401



I HEREBY CERTIFY THAT THE MAP LOCATED  
THE IMPROVEMENTS SHOWN ON THE MAP  
DOES NOT REPRESENT A BOUNDARY SURVEY  
& CANNOT BE USED TO ESTABLISH PROPERTY  
LINES OR CORNERS.

*Shanabarger & Lane*  
**SHANABARGER & LANE**  
 8726 TOWN & COUNTRY BLVD.  
 SUITES 106 & 107  
 ELLICOTT CITY, MD. 21043  
 (301) 461-9563

**FOUNDATION CERTIFICATION**  
**WILLOW HIGHLANDS AT**  
**WILLOW SPRINGS GOLF COURSE**  
 LOT 4 PLAT # 7918  
 ELECTION DISTRICT: 3RD  
 COUNTY: HOWARD  
 SCALE: 1"=100'  
 DATE: 5/29/91

| REVISIONS |          |                       |                  |                                                      |
|-----------|----------|-----------------------|------------------|------------------------------------------------------|
| REV. NO.  | DATE     | REVISION REQUESTED BY | REVISION MADE BY | REVISION                                             |
| 1         | 12/19/89 | PULTE                 | S&L              | HOUSE TYPE CHANGE                                    |
| 2         | 1/6/89   | PULTE                 | S&L              | HOUSE TYPE - HAMILTON II                             |
| 3         | 1/5/90   | PULTE                 | S&L              | HOUSE TYPE - REMINGTON                               |
| 4         | 2/1/91   | PULTE                 | S&L              | HOUSE TYPE - WILTSHIRE (2Z FRONT)                    |
| 5         | 2/13/91  | PULTE                 | S&L              | LOWER HOUSE 1.0' CHANGE ENDWALL TO METAL END SECTION |

## SEPTIC SYSTEM DATA

INV. @ HOUSE. 556.47 @ 1.0%

### SEPTIC TANK

EX. GRADE 560.85  
FIN. GRADE 560.85  
INV. IN 556.0  
INV. OUT 555.7

### DISTRIBUTION BOX

EX. GRADE 560.0  
FIN. GRADE 560.0  
INV. IN 555.0  
INV. OUT 555.0

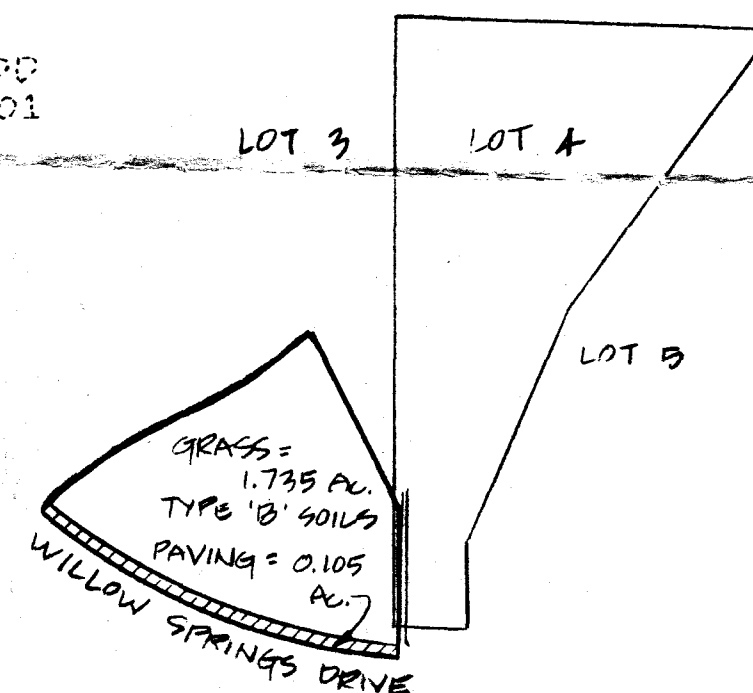
### TRENCHES (LENGTH AND NUMBER TO BE DETERMINED BY HOWARD COUNTY HEALTH DEPARTMENT)

TRENCH #1 TRENCH #2  
EX. GRADE 560.0 559.0  
FIN. GRADE 560.0-561.0 559.0-559.65  
INV. IN 555.5 554.5

NOTE: GRAVITY SEWER SERVICE TO BASEMENT IS NOT AVAILABLE.

PLANS OK  
4/23/91  
RHodger

HEATHERWOOD  
PLAT 4401



## DRAINAGE AREA MAP

(TO PROP. 12" CMP)  
SCALE: 1" = 200'

TOTAL DISTURBED AREA OF SITE = 23,329 #

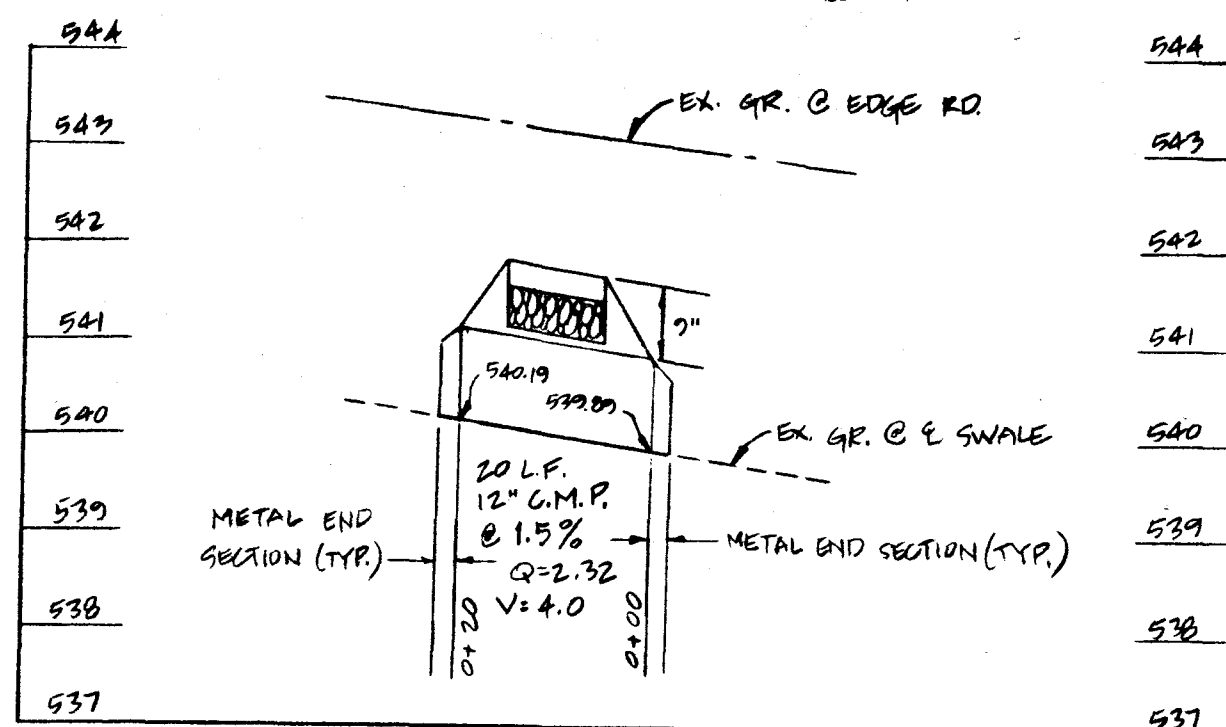
Pulte Homes  
Wilbur - Site foreman  
921-8714  
921-8707

SITE PLAN  
LOT 4  
WILLOW HIGHLANDS AT  
WILLOW SPRINGS GOLF COURSE

PLAT # 7918  
3RD ELECTION DISTRICT  
HOWARD COUNTY, MD  
SCALE: 1" = 50'  
DATE:

SHANABERGER & LANE  
8726 TOWN & COUNTRY BLVD.  
SUITE 107  
ELLICOTT CITY, MD. 21043  
(301) 461-9563

OWNER: PULTE HOME CORPORATION  
2050 GAITHER ROAD  
GAITHERSBURG, MARYLAND 20877  
(301) 921-8707



PIPE PROFILE (PROP. 12" CMP)  
SCALE: HORIZ - 1" = 20'  
VERT - 1" = 2'