

NON
9/29/93
9/29/93 2:00

PERMIT

SEWAGE DISPOSAL SYSTEM

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

P 49641
A Repair

HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH
461-9933

04-332512
INDEXED

DISTRICT _____

DATE 9/30/93

DATE SYSTEM APPROVED 9/29/93

INSPECTOR M. RISKIN

Lib. Mechanical

IS PERMITTED TO INSTALL _____ ALTER _____

ADDRESS _____ PHONE 898-9811

SUBDIVISION Chestnut Hills LOT Par. T-2 ROAD 1331 Long Corner Rd

PROPERTY OWNER James Cocita

ADDRESS _____

SEPTIC TANK CAPACITY 1000 GALLONS

NUMBER OF BEDROOMS 3

125 SQUARE FEET PER BEDROOM

LINEAR FEET OF TRENCH REQUIRED 86

<u>INLET 6"</u>	<u>BOT 11"</u>	<u>37' TRENCH</u>
<u>u u u 10'</u>	<u>49'</u>	<u>"</u>

3	86
<u>37</u>	<u>37</u>
<u>X5</u>	<u>349</u>
<u>185</u>	<u>X4</u>
	<u>196</u>

PLANS APPROVED BY _____ DATE _____

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

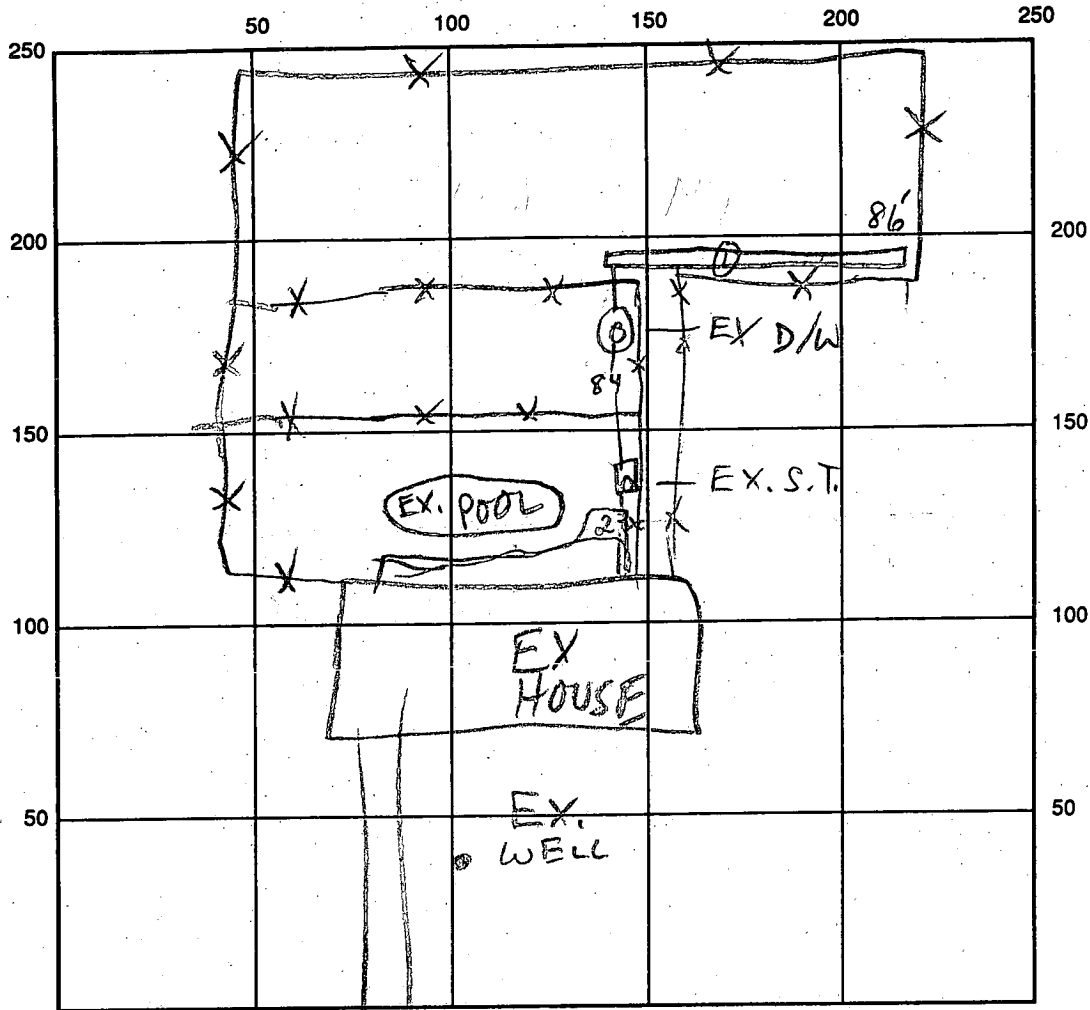
NOTE: INSTALL STAND PIPE ON SEPTIC TANK AND DRY WELL STAND PIPES MUST BE 6 INCHES IN DIAMETER CAST IRON. CONCRETE OR TERRA COTTA OR PVA OR ABS ACCEPTED. IF TOP OF SEPTIC TANK IS DEEPER THAN 3 FEET. MANHOLE TO GRADE REQUIRED.

NOTE: DISTRIBUTION BOXES MUST HAVE BAFFLES

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

R 49641

27'
84'
15



INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE

SEPTIC TANK LEVEL EX 1000 GAL-OK CLEANOUTS S.T. + D/W - NEW C/O OK

DISTRIBUTION BOX LEVEL —

DRAIN FIELD/TITLE DEPTH 10-11 FT. TRENCH WIDTH 2 FT. INLET DEPTH 6 FT.

EFFECTIVE GRAVEL DEPTH 4-5 FT. TOTAL LENGTH 86 FT. 37' @ 5' STONE = 185

NUMBER OF TRENCHES 1 ONE SIDEWALL/BOTTOM AREA 49' @ 4' STONE = 196

DRYWALL INSIDE DIAMETER — FT. EFFECTIVE DEPTH BELOW INLET — FT.

ABSORBENT AREA 381 SQ. FT.

REMARKS: 9/24/93 DISCUSSED NEED FOR & METHOD OF REPAIR
TO SEPTIC SYSTEM MR

9/29/93 OK TO FINISH & COVER MR

DATE SYSTEM APPROVED 9/29/93 INSPECTOR M. Rifkin

PERMIT

SEWAGE DISPOSAL SYSTEM

MARYLAND STATE DEPARTMENT OF HEALTH

P 23247

A 21143

HOWARD COUNTY

ELLICOTT CITY

DISTRICT 4th

DATE 5/10/76

INDEXED

*6/11/76
check
resp.*

6/23/76 file app'd

Martin Builders

IS PERMITTED TO INSTALL ALTER

ADDRESS Route 1, Box 297-B, Mt. Airy, Maryland 21771 PHONE 253-5840

A SEWAGE DISPOSAL SYSTEM LOCATED AT _____

SUBDIVISION (Chestnut Hills) ROAD 1331 Long Corner Road LOT Parcel T-2

PROPERTY OWNER Martin Builders

ADDRESS same as above

SPECIFICATIONS 3 bedrooms

DRAIN FIELD _____ DEPTH _____ FEET, BOTTOM AREA _____ SQ. FT.

SEEPAGE PITS _____ ABSORBENT SIDE-WALL AREA _____ SQ. FT.

SEPTIC TANK CAPACITY 1000 GALLONS

*35' x 50'
4 1/2*

*35'
210*

FOR GARBAGE GRINDER, INCREASE DISPOSAL AREA 22% & TANK CAPACITY 50%.

OTHER DRY WELL AND TRENCH - Dry well at perc hole 5 (around 250 ft. from Long Corner Road and around 80 ft. from 438 ft. lot line). Inlet to be 6 ft. below grade, and maximum depth permitted for dry well is 11 ft. 240 ft. absorbent area. Trench to run south towards 438 ft. lot line, inlet a 6 ft. maximum depth 11 ft. Trench to be 35 ft. long. Call for inspection of trench before placing gravel in trench. There must be a 5 ft. earth buffer between trench and dry well.

NOTE: ALL PIPE FROM HOUSE TO DISPOSAL AREA MUST BE CAST IRON. PERMIT VOID AFTER THREE YEARS. NOTE: INSTALL STAND PIPE ON SEPTIC TANK AND DRY WELL. STAND PIPES MUST BE ~~EXE~~ 6 INCHES IN DIAMETER. CAST IRON, CONCRETE OR TERRA COTTA ACCEPTED.

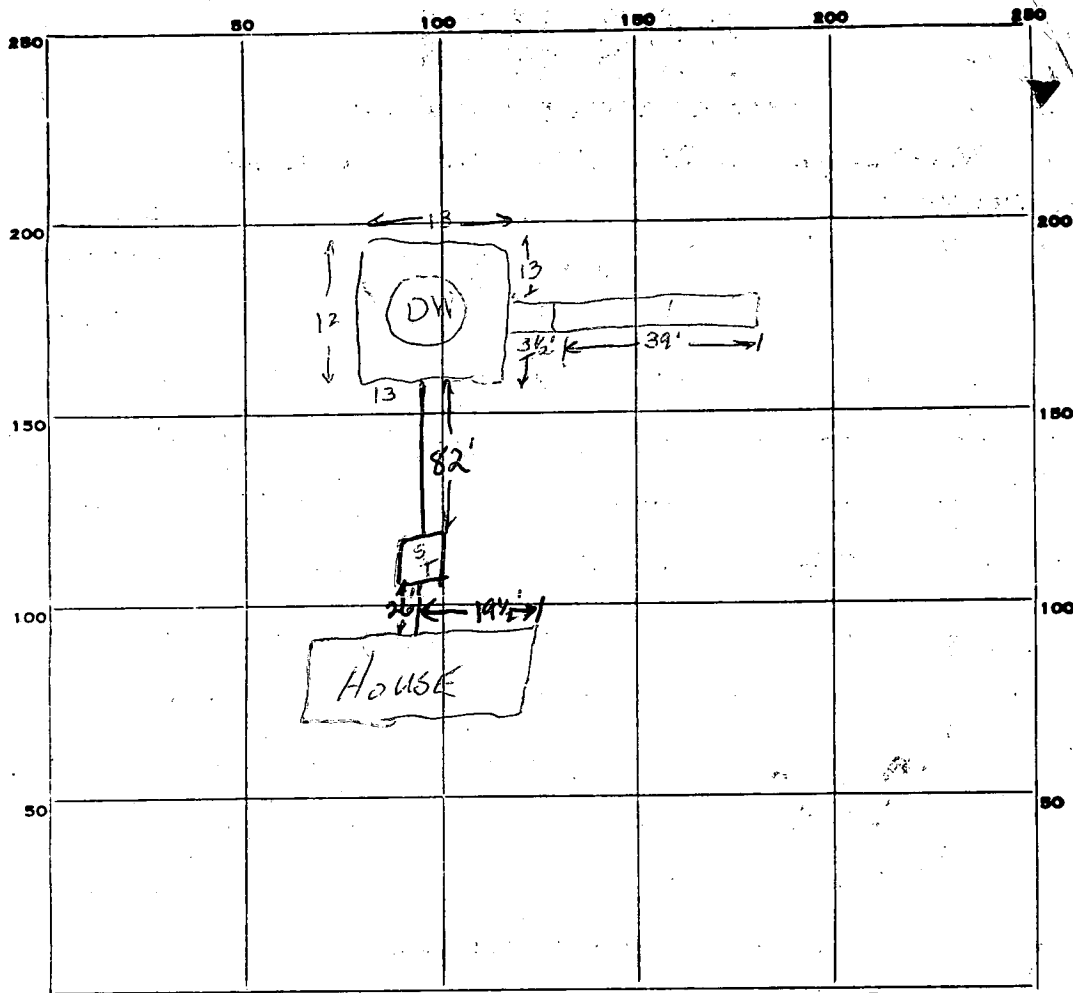
PLANS APPROVED BY David J. O'Neill DATE 4/29/75

FILL SEPTIC TANK AND DISTRIBUTION BOX WITH WATER BEFORE CALLING FOR AN INSPECTION. COVER NO WORK UNTIL INSPECTED AND APPROVED.

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

BLDG. PERMIT SIGNED AND RETURNED 7/7/83
Serial # 54638
prol

21143



39
 5 1/2
 195
 20
 215

 51
 5 1/2
 285
 20
 230

INDICATE NORTH. - NAME ADJOINING ROADWAY AS BASE LINE.
LONG CORNER RD

PERMIT CARD none seen
 SEPTIC TANK, LEVEL 1000 gal ✓ CLEANOUTS

ST	DW
✓	✓

 DISTRIBUTION BOX, LEVEL _____
 TILE FIELD, DEPTH 11 FT. TRENCH WIDTH 2 FT.
 GRAVEL DEPTH 5 FT. TOTAL LENGTH 39 FT.
 NUMBER OF TRENCHES 1 SIDEWALL TOTAL BOTTOM AREA 215 ft²
 SEEPAGE PITS, INSIDE DIAMETER 51 FT. DEPTH BELOW INLET 4 1/2 FT.
 ABSORBENT AREA 255 SQ. FT.

REMARKS 6/11/76 DW has 230 ft²; trench has 175 ft². Approx 50 ft short on system. Add 11' of trench to existing trench; also 11' deep.
Location as per spec. W2, L13
6/23/76 Final app'd. Total ft² = 470 ft²

DATE SYSTEM APPROVED 6/23/76 INSPECTOR William St. Jepp

Preliminary

Martin Bldg.

APPLICATION

A 21143

P _____

SEWAGE DISPOSAL TESTING

STATE OF MARYLAND - DEPARTMENT OF HEALTH AND MENTAL HYGIENE

HOWARD COUNTY HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH SERVICES
P. O. BOX 476, ELLICOTT CITY, MARYLAND 21043
TELEPHONE: 465-5000, EXT. 356

Septic tank

DISTRICT 4th

3 bedrooms 1000 sq ft

DATE 2/20/75

4 bedrooms 1250 sq ft

Dry Well at peak hole 5 (~ 250' from long corner rd, ~ 80' from 438' lot line) Inlet to be 6' below grade, max depth 11'; 240' above about area

Trench to run south towards 438' lot line, inlet at 6' max depth 11'

3 bedrooms 35' long, 4 bedrooms 60' long. Call office for inspection of trenches. There must be a 5' earth buffer between trenches and dry well.

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 C. P. Musgrove

ADDRESS 15714 Allnut Lane, Burtonville, Md. 20730 PHONE 384-6503

PROPERTY LOCATION:

SUBDIVISION (Chestnut Hills) LOT NO. T-2

ROAD AND DESCRIPTION Long Corner Road

SIZE OF LOT 1.7730 acres TYPE BLDG 3 gr 4 BR
NUMBER OF BEDROOMS

IF NOT SINGLE RESIDENCE DESCRIBE _____

THE SYSTEM INSTALLED UNDER THIS APPLICATION IS ACCEPTABLE ONLY UNTIL PUBLIC FACILITIES BECOME AVAILABLE.

SIGNATURE OF APPLICANT /s/ Charles P. Musgrove

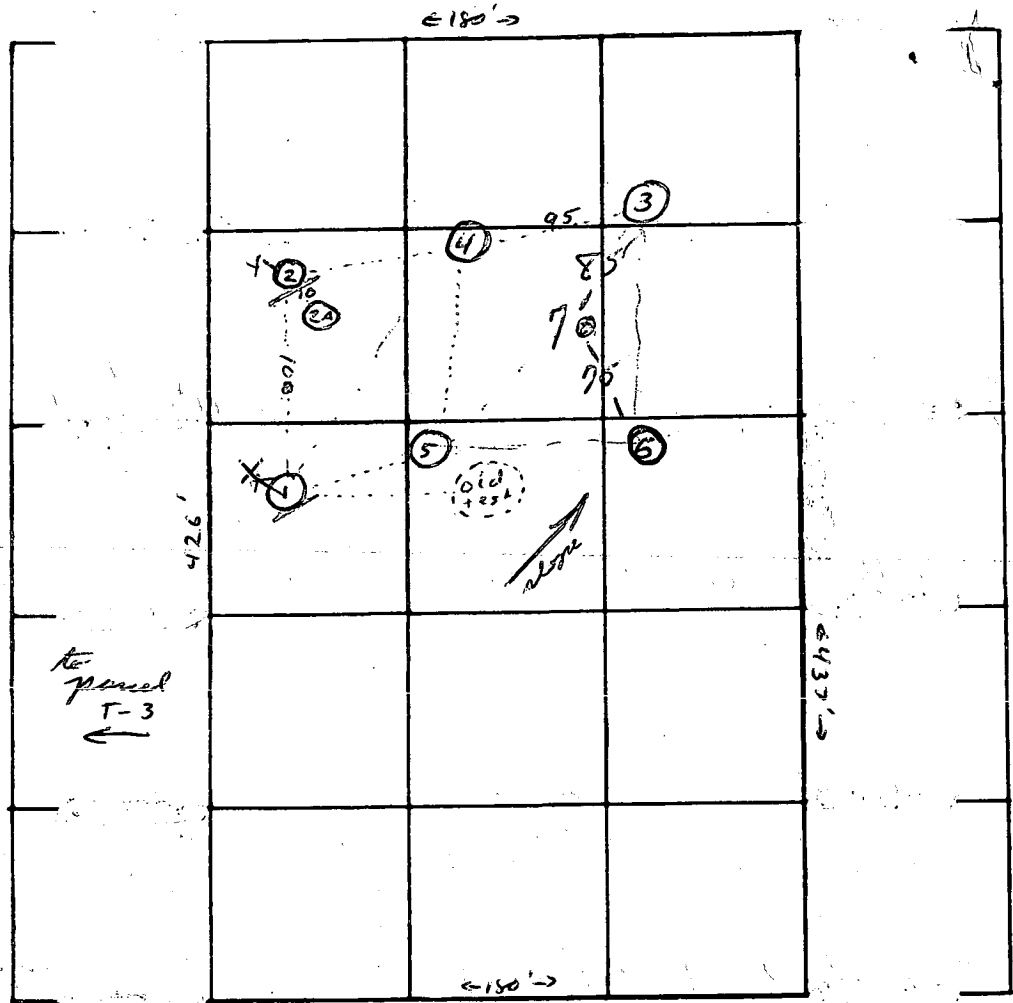
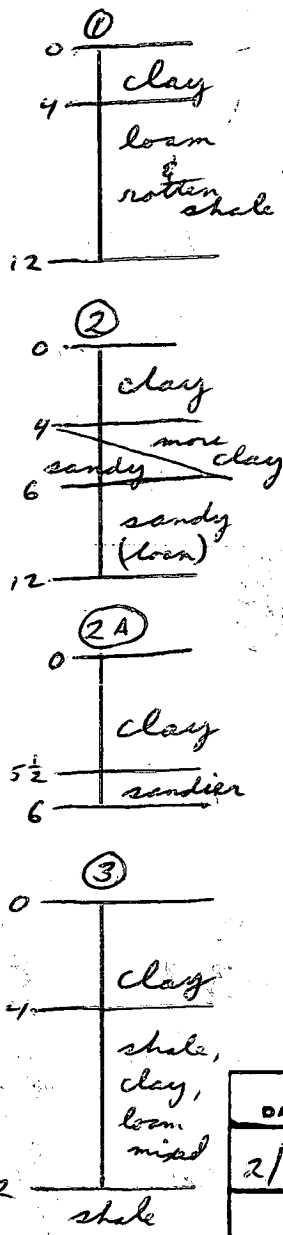
✓ APPROVED BY DJ O'Neil FOR Trench + Dry Well DATE 4/29/75
(KIND OF SYSTEM)

REJECTED BY _____ FOR _____ DATE _____
(KIND OF SYSTEM)

HOLD PENDING FURTHER TESTS _____ DATE _____

REASONS FOR REJECTION OR HOLDING _____
BLDG. PERMIT SIGNED AND RETURNED 7/23/76

THIS IS NOT A PERMIT



Lot
T-2

INDICATE NORTH. - NAME ADJOINING ROADWAY AS BASE LINE.
← Long Corner Rd →

DATE	TEST NO.	DEPTH	PRE-WET		TEST - 1" DROP		TIME
			START	STOP	START	STOP	
2/27	1	12	10:38	11:05	11:05	11:32	32
	1A	5	11:32	11:38	11:38	11:41	3
	2	12	10:56	10:57	10:52	10:58	1
	2A	6	11:09	11:43			30
	3	6	12:03	12:08	12:08	12:18	10
	3A	12	12:05	12:08	12:08	12:14	6
	4	6	1:13	1:18	1:18	1:32	14
	4A	12	1:12	1:14	1:14	1:18	4
	5	12	1:21	1:24	1:24	1:34	10
	5A	6	1:22	1:23	1:23	1:26	3

REMARKS: Test #2 shelf deg @ 5', note tested due to clay content

TYPE OF SOIL: certify all holes

TESTED BY: R. M. ALSO PRESENT: H. S. K.

5-24-75
 D. J. N. 7 d 12:10:14 10:20 10:20 10:24 4 min
 upon 10 min 75 6:10:21 10:30 10:30 10:46 16 min

RENN SURVEYS, INC.
253-3591

PLAT OF SURVEY
PARCEL T-2
PART OF PARCEL -T-

SCALE: 1"-100'
FEB. 11, 1975

CHESTNUT HILLS
FORTH ELECTION DIST.
HOWARD COUNTY, MARYLAND

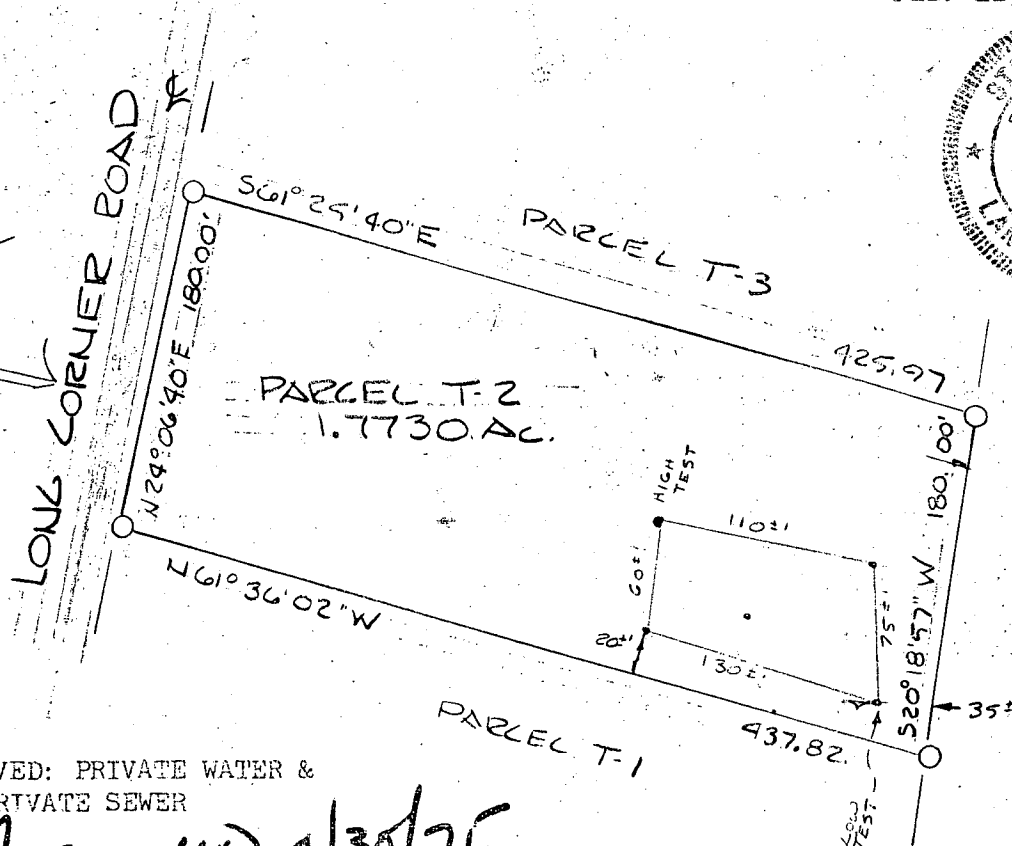
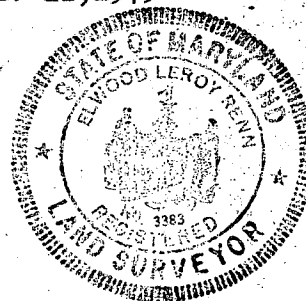
DESCRIPTION: Being part of a conveyance from Charles P. Musgrove ET. AL. to _____ as recorded in the Land Records of Howard County, Maryland in Liber _____ at folio _____ and being also known as Parcel T of Chestnut Hills and being more particularly described as follows:

Beginning for the same at a point alongside Long Corner Road 180.00 feet on the 2nd line of the aforementioned Parcel T and thence with part of said 2nd Line and with the said road N24-06-40E 180.00 feet thence leaving said line and road and crossing said Parcel T to include a part thereof S61-25-40E 425.97 feet; thence with part of the common line between Parcels T & S S20-18-57W 180.00 feet thence N61-36-02W 437.82 feet to point of beginning containing 1.7730 Acres of land.

I hereby certify that the plan shown hereon is correct and that it is based on actual field surveys and that iron pipe marked thus -o- and stone monuments marked thus -□- have been placed where shown. The lot shown hereon complies with the minimum width & lot area required by Maryland State Dept. of Health regulations.

Elwood L. Renn

Elwood L. Renn
R. P. L. S. MD. #3383
FEB. 11, 1975



APPROVED: PRIVATE WATER &
PRIVATE SEWER

J. P. [Signature] 4/30/75
COUNTY HEALTH OFF. DATE

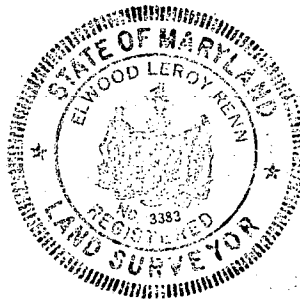
CHESTNUT HILLS
FORTH ELECTION DIST.
HOWARD COUNTY, MARYLAND

DESCRIPTION: Being part of a conveyance from Charles P. Musgrove ET. AL. to _____ as recorded in the Land Records of Howard County, Maryland in Liber _____ at folio _____ and being also known as Parcel T of Chestnut Hills and being more Particularly described as follows;

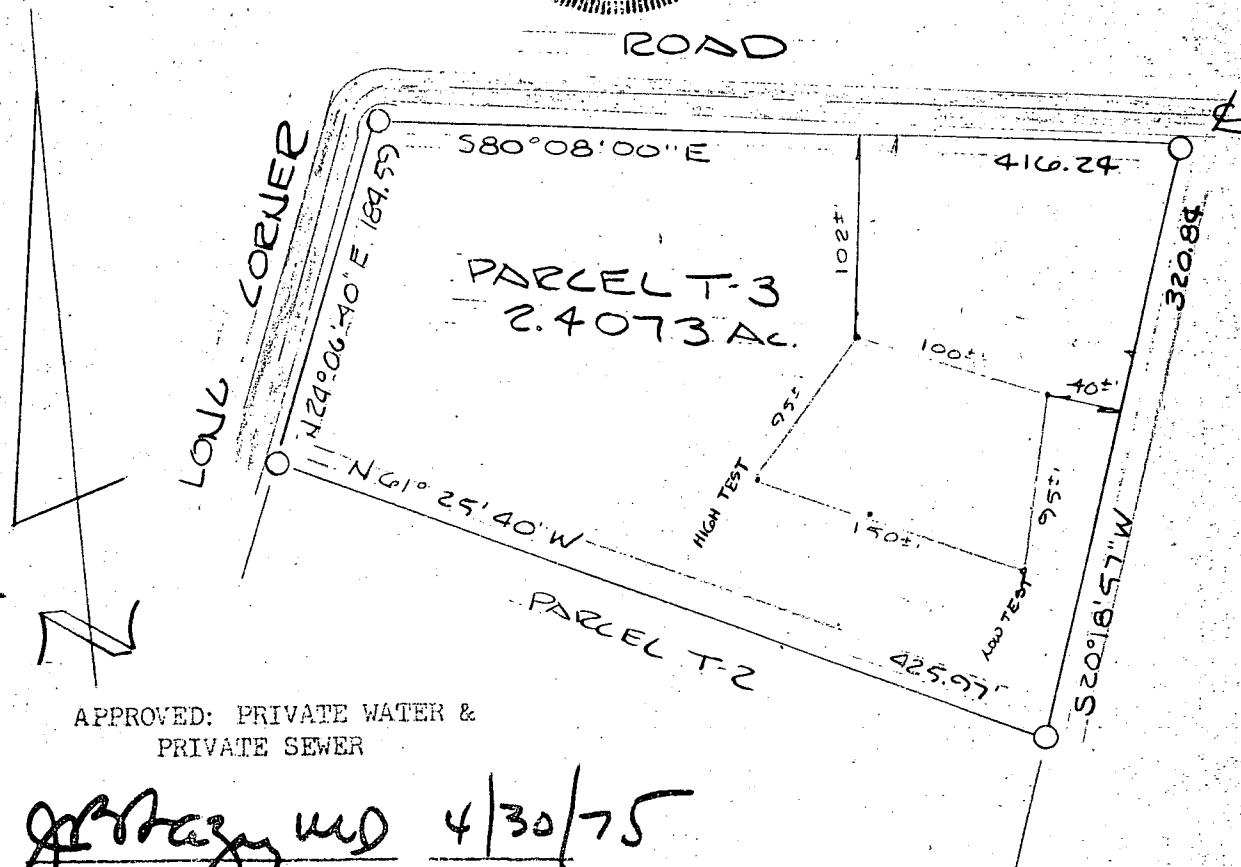
Beginning for the same at a point along side of Long Corner Road and being also the beginning of the 3rd line of the said Parcel T and thence with the 3rd Line and said road S80-08-00E 416.24 feet, thence leaving said road and with part of the 4th Line of said Parcel T S20-18-57W 320.84 feet, thence crossing said Parcel to include a part thereof N61-25-40W 425.97 feet to a point along side of Long Corner Road, thence with said road N24-06-40E 184.59 feet to point of beginning containing 2.4073 Acres of land.

I, hereby certify that the plan shown hereon is correct and that iron pipe marked thus -●- and stone monuments maked thus -□- have been placed where shown. The lot shown hereon complies with the minimum ownership width & lot area required by Maryland State Dept. of Health regulations.

Elwood L. Renn



Elwood L. Renn
R.P.L.S. MD. #3383
FEB. 11, 1975



APPROVED: PRIVATE WATER &
PRIVATE SEWER

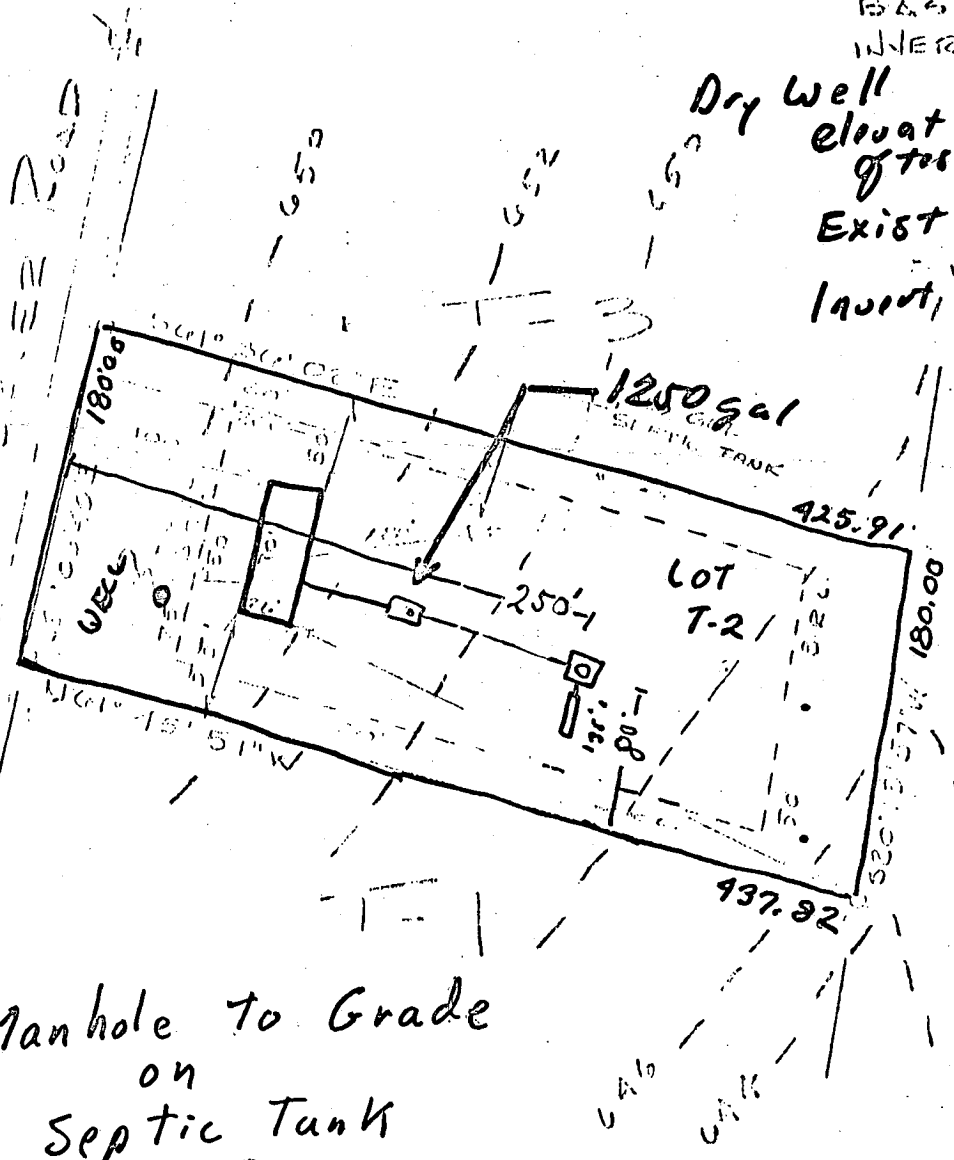
J. P. ... 4/30/75
COUNTY HEALTH OFF. DATE

MARTIN BUILDERS, INC.
RT 1, Box 297-B
MT. AIRY, Md. 21771
Phone: 253-5843

SEPTIC TANK
EXIST. ELE. - 651'
INVERT ELE. - 644.0
TRENCH
ELE. AT TIME OF TEST - 649.0
EXIST. ELE. - 649.0
INVERT ELE. - 643.0
WATER WELL ELE. - 650
HOUSE FF. - 651
BASE - 643
INVERT - 644.5

OK for Septic System 4/23/94
0204

Dry Well
Elevat. of Test 649.0
Exist 649.0
Invert 643.0



Changes OK by phone 4/23/94
L.C. Martin

Manhole to Grade on Septic Tank

PROPOSED HOUSE LOCATION

Checked and Approved
L. C. MARTIN
COUNTY, MARYLAND
RECORDED IN PLAT BOOK PLAT SCALE 1" = 100'

I hereby certify that the position of all the existing improvements on the above described property has been established by a transit line measurement and that unless otherwise shown there are no encroachments.

Date: APR 21 1994

By: [Signature]
L. C. MARTIN
Registered Land Surveyor
Maryland No. 3111

Small text in bottom left corner, likely a disclaimer or legal notice.

DNR-131 (7/73) STATE OF MARYLAND WATER RESOURCES ADMINISTRATION TAWES STATE OFFICE BLDG., ANNAPOLIS, MARYLAND 21401 APPLICATION FOR PERMIT TO DRILL WELL

SEQUENCE NO. (WRA USE ONLY) WRA PERMIT NUMBER
 1 2 3 (SEQ. NO.) 6
 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

10-73-1459 ✓
 FILL IN THIS FORM COMPLETELY

DATE RECEIVED (WRA USE ONLY) 6/9/76 1:30 P.M.

OWNER: Martin Builders, Inc.
 COL 15 LAST NAME FIRST NAME COL. 34

STREET OR RFD: RT. 7, Box 105
 COL 36 COL. 55

POST OFFICE: Mt. Airy, Md. 21771
 COL 57 COL. 78

B 1 CONTINUED DRILLER INFORMATION

1 2 3 (SEQ. NO.) 6

DATE: May 8, 1975 LICENSE NUMBER: 273
 77 80

First Name: Ralph Driller Last Name: Mayne

SIGNATURE: *Ralph Mayne*

B 3 LOCATION OF WELL

1 2 3 (SEQ. NO.) 6

COUNTY: Howard (DO NOT ABBREVIATE COUNTY NAME) 21

SUBDIVISION: Chestnut Hills 42

SECTION: LOT: 50

NEAREST TOWN: Long Corner 71

MILES FROM TOWN (ENTER 0 IF IN TOWN) 0 M I 71

B 2 WELL INFORMATION

1 2 3 (SEQ. NO.) 6

MAXIMUM PUMPING RATE (GALLONS PER MINUTE) 5 8 12

AVERAGE DAILY QUANTITY NEEDED (GALLONS PER DAY) 500 14 20

USE FOR WATER (CIRCLE APPROPRIATE BOX)

HOME (SINGLE OR DOUBLE HOUSEHOLD UNIT ONLY)

FARMING, AGRICULTURE, IRRIGATION

INDUSTRIAL, COMMERCIAL, STATE AND FEDERAL GOVERNMENT.

MUNICIPAL WATER SUPPLY } MUST HAVE STATE HEALTH DEPT. APPROVAL

PRIVATE WATER COMPANY

TEST

B 4 DIRECTION FROM TOWN (CIRCLE APPROPRIATE BOX)

1 2 3 (SEQ. NO.) 6

NORTH EAST NORTHEAST SOUTHEAST

SOUTH WEST NORTHWEST SOUTHWEST

NEAR WHAT ROAD: Long Corner

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX) N S E W

DISTANCE FROM ROAD (ENTER DISTANCE AND CIRCLE APPROPRIATE BOX) 60 34 37 38 39

APPROXIMATE DEPTH OF WELL 125 FEET

APPROXIMATE DIAMETER OF WELL 6 (NEAREST INCH)

METHOD OF DRILLING USED (CIRCLE APPROPRIATE METHOD)

BORED (OR AUGERED) JETTED DRIVEN

30-37 AIR-ROTARY AIR-PERCUSSION ROTARY (HYDRAULIC ROTARY)

CABLE REVERSE-ROTARY DRIVE-POINT

OTHER (DESCRIBE):

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

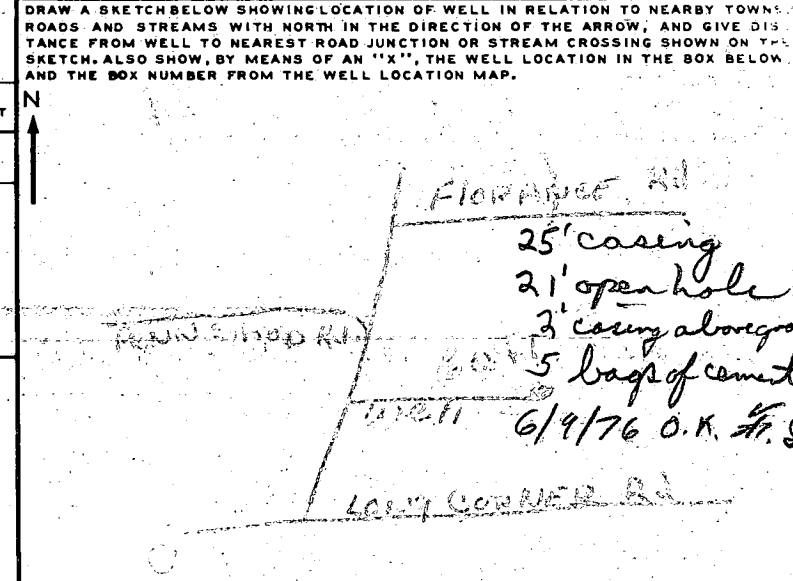
THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY

THIS WELL WILL DEEPM AN EXISTING WELL PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED (IF AVAILABLE)

NOT TO BE FILLED IN BY DRILLER (WRA USE ONLY)

APPROPRIATION PERMIT NUMBER ENGINEER REVIEW DISTRICT NO.

FORCE WRITE INITIALS IN BOX CONDITIONS



B 4 CONTINUED HEALTH DEPARTMENT APPROVAL

1 2 3 (SEQ. NO.) 6

41 STATE HEALTH (CIRCLE BOX) HOWARD COUNTY NAME 1123205 COUNTY NO.

DATE: 5 5 76 APPROVED BY: Donald Monahan, Sanitarian

BOX NUMBER E 750 N 340

NORTH COORDINATE 50 51 52 53 54 55

EAST COORDINATE 57 58 59 60 61 62 63

ELEVATION AT WELL HEAD (FEET) 0/0 5/0

B 5 SPECIAL CONDITIONS 8-63 (WRA USE ONLY)

1 2 3 (SEQ. NO.) 6

SEQUENCE NO. (WRA USE ONLY) **1731**

1 2 3 (SEQ. NO.) 6
(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

DATE RECEIVED (WRA USE ONLY) **6/14/76**

DATE WELL COMPLETED

8-13 15 20

STATE OF MARYLAND
WATER RESOURCES ADMINISTRATION
TAWES STATE OFFICE BLDG., ANNAPOLIS, MD. 21401
WELL COMPLETION REPORT

THIS REPORT MUST BE SUBMITTED WITHIN 30 DAYS AFTER WELL COMPLETION

FILL IN THIS FORM COMPLETELY.

COUNTY NUMBER **W23200**

PERMIT NO. FROM "PERMIT TO DRILL WELL" **80-72-1459**

28 29 30 31 32 33 34 35 36 37

DRILLERS IDENTIFICATION NO. **223**

OWNER **Martin Building Inc** LAST NAME **Martin** FIRST NAME **Martin**

STREET OR RFD **Rt 2 Box 105** POST OFFICE **117, Aiey Md.**

WELL LOG

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

DESCRIPTION (USE ADDITIONAL SHEETS IF NECESSARY)	FEET		CHECK IF WATER BEARING
	FROM	TO	
<i>Top Soil</i>	0	2	
<i>Brown Shale</i>	2	12	
<i>Brown Shale</i>	12	30	
<i>Blue Shale</i>	30	40	
<i>Brown Shale</i>	40	50	<input checked="" type="checkbox"/>
<i>Blue Shale</i>	50	150	

GROUTING RECORD

WELL HAS BEEN GROUTED. (CIRCLE APPROPRIATE BOX) YES NO

TYPE OF GROUTING MATERIAL (CIRCLE BOX)

CEMENT BENTONITE CLAY

NO. OF BAGS **5** NO. OF POUNDS **200**

GALLONS OF WATER **30**

DEPTH OF GROUT SEAL (TO NEAREST FOOT)

FROM **0** FT. TO **21** FT.

CASING RECORD

INSERT APPROPRIATE CODE BELOW

STEEL CONCRETE

PLASTIC OTHER

MAIN CASING TYPE **C** NOMINAL DIAMETER TOP (MAIN) CASING (NEAREST INCH) **4** TOTAL DEPTH OF MAIN CASING (NEAREST FOOT) **66**

PUMPING TEST

HOURS PUMPED (TO NEAREST HOUR) **2**

PUMPING RATE (GALLONS PER MINUTE TO NEAREST GALLON) **3**

METHOD USED TO MEASURE PUMPING RATE **Bucket**

WATER LEVEL: (DISTANCE FROM LAND SURFACE)

BEFORE PUMPING **40** (NEAREST FOOT)

WHEN PUMPING **150** (NEAREST FOOT)

TYPE OF PUMP USED (CIRCLE APPROPRIATE BOX) (FOR PUMPING TEST)

AIR PISTON TURBINE

CENTRIFUGAL ROTARY OTHER (DESCRIBE BELOW)

JET SUBMERSIBLE

R CASING (IF USED)

METER CH. DEPTH (FEET) FROM TO

PLASTIC OTHER

PUMP INSTALLED

TYPE OF PUMP (WRITE APPROPRIATE LETTER IN SEE ABOVE: A, C, J, R, S, T, O)

ALL PUMP BOX YES NO

DEPTH (NEAREST FOOT) **43**



CASING HEIGHT (CIRCLE APPROPRIATE BOX AND ENTER CASING HEIGHT)

ABOVE BELOW

LAND SURFACE **2** (NEAREST FOOT)

LOCATION OF WELL ON LOT

SHOW PERMANENT STRUCTURE SUCH AS BUILDINGS, SEPTIC TANKS, AND/OR OTHER LAND MARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL).

CIRCLE APPROPRIATE BOXES

A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED.

ELECTRIC LOG OBTAINED

TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT I HAVE COMPLIED WITH ALL CONDITIONS STATED ON THE ABOVE-CAPTIONED "PERMIT TO DRILL WELL", AND THAT INFORMATION CONTAINED IN THIS REPORT IS TRUE, ACCURATE, AND COMPLETE TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF.

DRILLERS NAME **Ralph Maynre**

(PLEASE PRINT) **Ralph Maynre**

SIGNATURE **Ralph Maynre**

DEPTH (NEAREST WHOLE FOOT)

FROM **0** TO **150**

DIAMETER OF SCREEN **56** (NEAREST INCH)

GRAVEL PACK

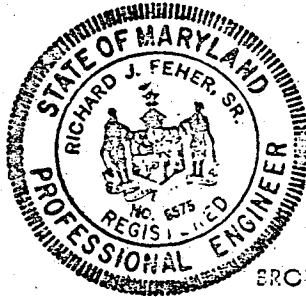
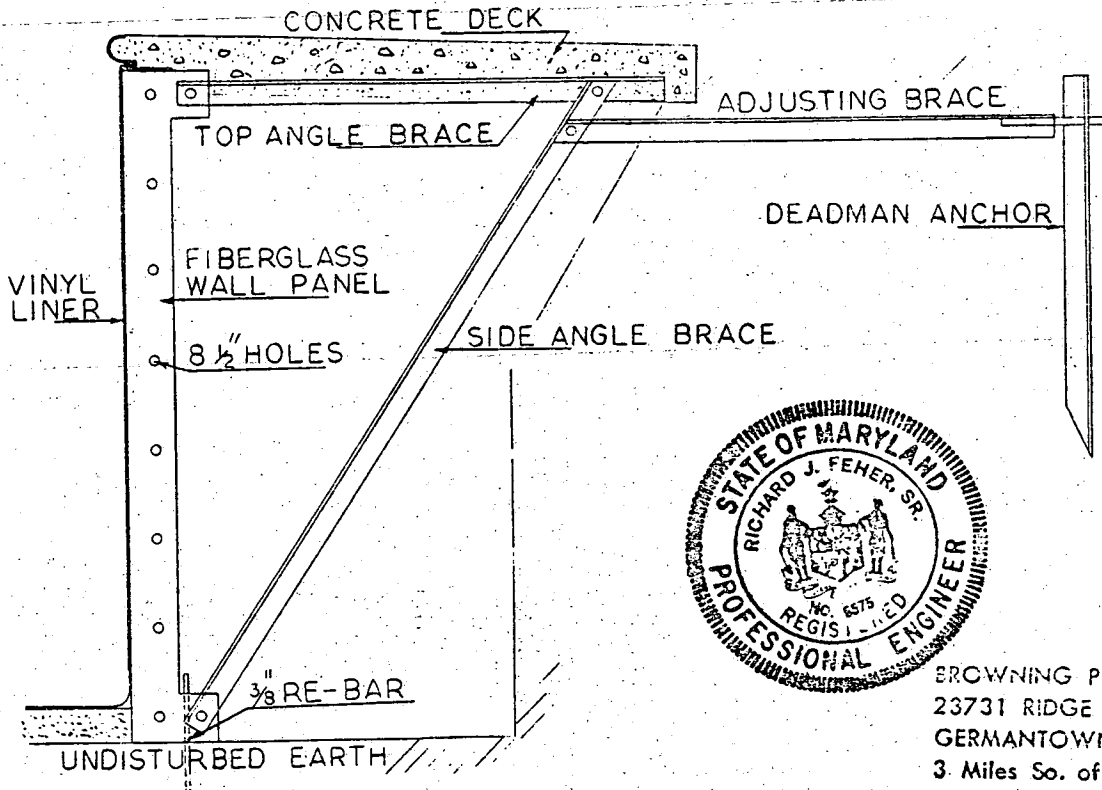
IF WELL DRILLED WAS A FLOWING WELL CIRCLE BOX **68 F**

WRA USE ONLY (NOT TO BE FILLED IN BY DRILLER) (E.R.O.S.)

TELESCOPE CASING LOG INDICATOR OTHER DATA AVAILABLE

BROWNING POOL PLANS

CROSS SECTION THROUGH POOL WALL AND DECK WITH CERTIFICATION

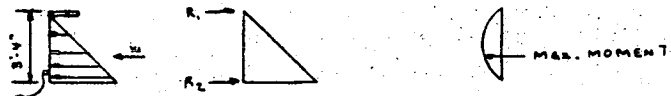


BROWNING POOLS
 23731 RIDGE ROAD
 GERMANTOWN, MD. 20767
 3 Miles So. of Damascus on Rt. 27
 972-3800 - 253-2875

ANALYSIS OF PANEL STRESSES ALLOWABLE STRESSES

<u>FLEXURE</u>	
REINF. FIBERGLASS PANEL	- 20,000 psi
REINF. CONCRETE	- 1,000 psi
STEEL	- 20,000 psi
<u>Shear</u>	
REINF. FIBERGLASS PANEL	- 6,000 psi
CONCRETE	- 70 psi

VERTICAL BENDING OF FIBERGLASS PANELS FOR EMPTY POOL (MAXIMUM POOL SIZE - 20'-0" x 40'-0")



$w = 130 \pi / 4 \pi$
 $w = \frac{1}{2} C_{20} W h^2$
 $R_1 = \frac{1}{2} w$
 $R_2 = \frac{1}{2} w$

$w = \frac{1}{2} \times \frac{1}{2} = 130 \times 3.3 \times 3 = 12875 \pi / L.F.$
 $R_1 = 78.65 \pi / L.F.$
 $R_2 = 157.30 \pi / L.F.$

$M_{max} = 2WR / 9\sqrt{3} = 2 \times 12875 \times 3.3 / 9\sqrt{3} = 99.9 \text{ ft-lb}$
 $M_{max} = 99.9 \times 12 = 1,198.8 \text{ in-lb}$

$f = M / Z$ WHERE
 $f = 1,198.8 / 0.123$ $Z = b d^2 / 6 = 12 \times (1/4)^2 / 6 = 0.123$
 $f = 9,890.4 \text{ psi} < 20,000 \text{ psi ALLOWABLE}$

SHEAR $V = 3R_2 / 2bd = 3 \times 157.3 / 2 \times 12 = 19.7$
 $V = 78.65 \text{ psi} < 6,000 \text{ psi ALLOWABLE}$

COPING STRESS
SHEAR STRESS ON 4" x 30" CONCRETE COPING
 ON MAXIMUM SPAN OF 40 FT

$V = 5V / 2 b_j d = (5 \times 78.65 \times 40) \div (2 \times 4 \times 20.875 \times 30)$
 $V = 22.47 \text{ psi} < 90 \text{ psi ALLOWABLE}$

BENDING STRESSES

- 1) 20 FT x 40 FT POOL
 $M = \frac{1}{8} w l^2 = \frac{1}{8} \times 78.65 \times 40^2 \times 12 = 188,760 \text{ in-lb}$
 $A_s = M / f_s j d = 188,760 \text{ psi} / 20,000 \times 0.875 \times 30$
 $A_s = 0.5595 \text{ sq.in.}$
 USE 4-#3 BARS OR 2-#4 BARS FOR 40 FT. SIDE
- 2) 18 FT x 36 FT POOL
 $M = \frac{1}{8} w l^2 = \frac{1}{8} \times 78.65 \times 36^2 \times 12 = 152,896 \text{ in-lb}$
 $A_s = M / f_s j d = 0.2912 \text{ sq.in.}$
 USE 3-#3 BARS OR 2-#4 BARS FOR 36 FT. SIDE
 $M = \frac{1}{8} w l^2 = \frac{1}{8} \times 78.65 \times 18^2 \times 12 = 38,224 \text{ in-lb}$
 $A_s = M / f_s j d = 0.0728 \text{ sq.in.}$
 USE 2-#3 BARS FOR 20 FT. SIDE
- 3) 16 FT x 32 FT POOL
 $M = \frac{1}{8} w l^2 = \frac{1}{8} \times 78.65 \times 32^2 \times 12 = 120,806 \text{ in-lb}$
 $A_s = M / f_s j d = 0.2301 \text{ sq.in.}$
 USE 3-#3 BARS FOR 32 FT. SIDE
 $M = \frac{1}{8} w l^2 = \frac{1}{8} \times 78.65 \times 16^2 \times 12 = 30,202 \text{ in-lb}$
 $A_s = M / f_s j d = 0.0575 \text{ sq.in.}$
 USE 2-#3 BARS FOR 16 FT. SIDE
- 4) 14 FT x 28 FT POOL
 $M = \frac{1}{8} w l^2 = \frac{1}{8} \times 78.65 \times 28^2 \times 12 = 92,492 \text{ in-lb}$
 $A_s = M / f_s j d = 0.1762 \text{ sq.in.}$
 USE 2-#3 BARS FOR 28 FT. SIDE
 $M = \frac{1}{8} w l^2 = \frac{1}{8} \times 78.65 \times 14^2 \times 12 = 23,123 \text{ in-lb}$
 $A_s = M / f_s j d = 0.044 \text{ sq.in.}$
 USE 2-#3 BARS FOR 14 FT. SIDE

NOTE: INSTALL 2'-6" #4 ROD ON 4'-0" CENTERS TO MAKE SECTION OF DECK AN INTEGRAL PART OF COPING FOR STRUCTURAL STRENGTH