4/11/89 11:12
4-26-89 3 pm

02-270331

PERMIT

P 42978

A 29472

SEWAGE DISPOSAL SYSTEM

MARYLAND STATE DEPARTMENT OF HEALTH*

DISTRICT 2nd

HOWARD COUNTY
BUREAU OF ENVIRONMENTAL HEALTH
461-9933

INDEXED

DATE 11/15/87

DATE SYSTEM APPROVED 4-26-89

INSPECTOR S. Abel

Mr. Gopal IS PERMITTED TO INSTALL X ALTER ____

ADDRESS ____ PHONE ____

SUBDIVISION Twin Acres ROAD 2267 Daniels Road LOT 1

PROPERTY OWNER Jay Gopal

ADDRESS ____

IF GARBAGE GRINDER IS USED INCREASE SEPTIC TANK CAPACITY BY 50% AND ABSORPTION AREA BY 22%.

GARBAGE GRINDER? YES X NO ____

SEPTIC TANK CAPACITY 2000 GALLONS NUMBER OF BEDROOMS 4

TRENCHES - 220 sq. ft. per bedroom with garbage disposal. Trench to be 2 feet wide. Inlet 4 feet below original grade. Bottom maximum depth 6 feet below original grade. Effective area begins at 4 feet below original grade. 5 feet of stone below distribution pipe.

LOCATION - Place the distribution box 225 feet up the right (294.13') lot line and 105 feet off the same lot line as seen when facing the lot from Daniels's Road. Run trenches on contour toward rear and front of lot.

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

ok/cw

5 | 880 = 176 2-90's Trenches

PLANS APPROVED BY Sid Abel DATE 6/27/88

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

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 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 PVC OR ABS ACCEPTED. IF TOP OF SEPTIC TANK IS DEEPER THAN 3 FEET, MANHOLE TO GRADE REQUIRED

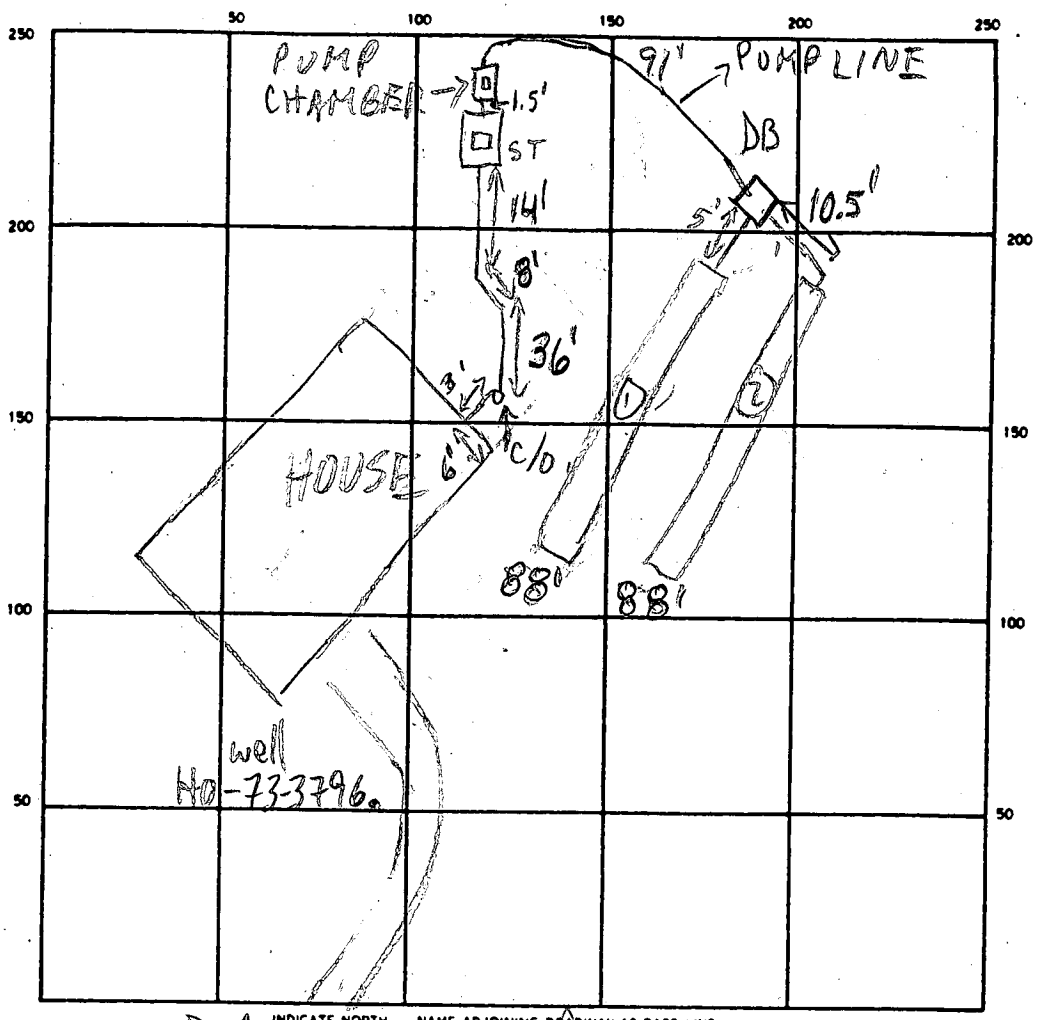
NOTE: DISTRIBUTION BOXES MUST HAVE BAFFLES

A 29472

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

*CALL 461-9933 FOR INSPECTION OF SEPTIC SYSTEMS.

HD-260



SEPTIC TANK LEVEL OK CLEANOUTS MANHOLES ON S.T. + PUMP CH. OK

DISTRIBUTION BOX LEVEL OK

DRAIN FIELD/TILE FIELD DEPTH 9 FT. TRENCH WIDTH 2 FT. INLET DEPTH 4 1/2 FT.

EFFECTIVE GRAVEL DEPTH 5 | 5 FT. TOTAL LENGTH 88 88 } 176 FT

NUMBER OF TRENCHES 2 ONE SIDEWALL/BOTTOM AREA 880 SQ FT.

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

ABSORBENT AREA — SQ. FT.

4/24/89 Twin Pumps w/ Alarms Installed + Functioning. SAbl

REMARKS 2/15/89 - Call From Contractor - Inlet 18" too deep. GP indicates no bsmt on grounds, Pipe leaves house below footers. Instructed contractor that 18" is too much to allow - owner/plumber must comply with specs + BP. S Abl 2-23-89 Site Insp. Pump syst. required or plumbing to be raised to get gravity to system. Area of system has been cut approx. 3' Change Inlet to 4' and 18" of final cover required. S. Abl 4/11/89 A TRENCH 1 DUG TO 78' STONE IN PROCESS. 4/11/89 B TRENCHES COMPLETE. 18" F.C. OK OK TO COVER CONTRACTOR WILL CALL WHEN PUMPS INSTALLED FOR TESTING MR

DATE SYSTEM APPROVED 4-26-89 INSPECTOR S. Abl

HOWARD COUNTY HEALTH DEPARTMENT

JOYCE M. BOYD, M.D., M.R.H.
COUNTY HEALTH OFFICER

Bureau of Environmental Health
3525 Ellicott Mills Drive
Ellicott City, Maryland 21043

Director - 461-9956
Water & Sewerage, Permits - 461-9933
Community Environmental Health - 461-9944
Technical Services - 461-9955

February 24, 1989

Dr. Jay Gopal
7839 Marioak Drive
Elkridge, Maryland 21227

RE: Septic System Installation
Lot 1 - Twin Acres
2267 Daniels Road
Sewage Disposal Permit -
No. P42978

Dear Dr. Gopal:

This is to confirm that significant problems were encountered during the February 23, 1989 septic system inspection on the above referenced property.

Unauthorized grading of the sewage disposal easement has made it impossible to install the septic system at the originally specified depth.

As you are aware, minor modifications to the depth of the system has been agreed upon. In order to reach the required location, the house plumbing will have to be raised. This will provide for gravity sewer service to the first floor. Basement service, if desire, can be obtained by pumping.

Please contact this office (461-9933) to fully discuss your plans before proceeding any further. Failure to do so could result in disapproval of the septic system installation.

Very truly yours,

Craig Williams

Craig Williams, Director
Water and Sewerage Program

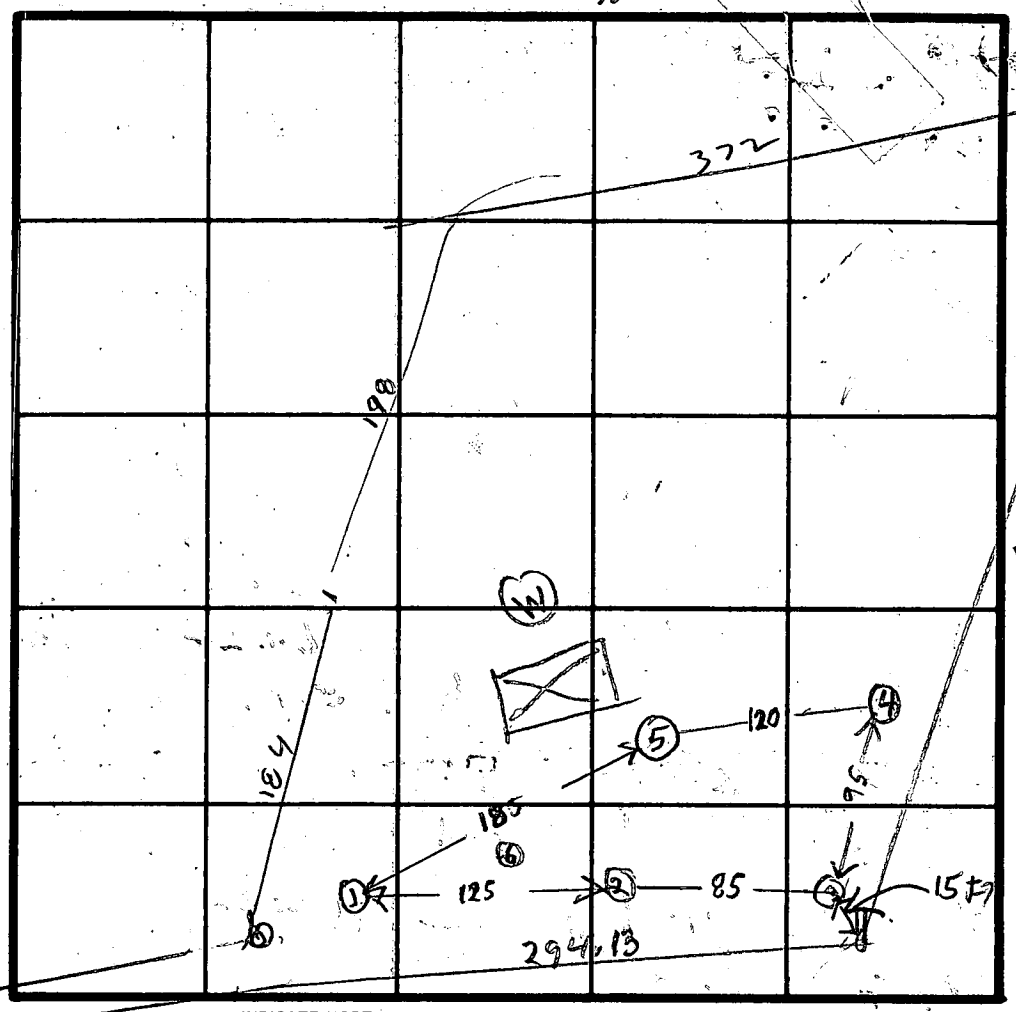
CW:JR

SEE PLAT

(5)
SOIL PROFILE

0'
CLAY
3
SOFT SAND
8
HARD SAND
USE FORDW
(12½)

A29472



INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE.

DATE	TEST NO.	DEPTH	PRE-WET START	PRE-WET STOP	TEST - 1" DROP START	TEST - 1" DROP STOP	TIME	HOLE ELEVATIONS
2/27/79	1D	13	142	147	147	156	9	LOWEST
	1S	4	142	147	147	155	8	
	2V	13	TOP BOT	5FT 9FT	CLAY SANDY	DRY		LOW
	3D	14	203	210	210	215	5	LOW
	(3S)	6	203	225	225	1st rock	22	
	4	12	TOP BOT	3FT CLAY 9FT	SANDY	DRY		"
	5D	12½	220	240	240	308	28	HIGHEST USE FORDW
	5S	4	221	222	222	224	2	
	3ES	6½	235	238	238	245	7	
	5M	8	322	325	325	332	7	
2/27/79	6V	12	TOP BOT	3FT CLAY 9FT SANDY		DRY		LOW

REMARKS

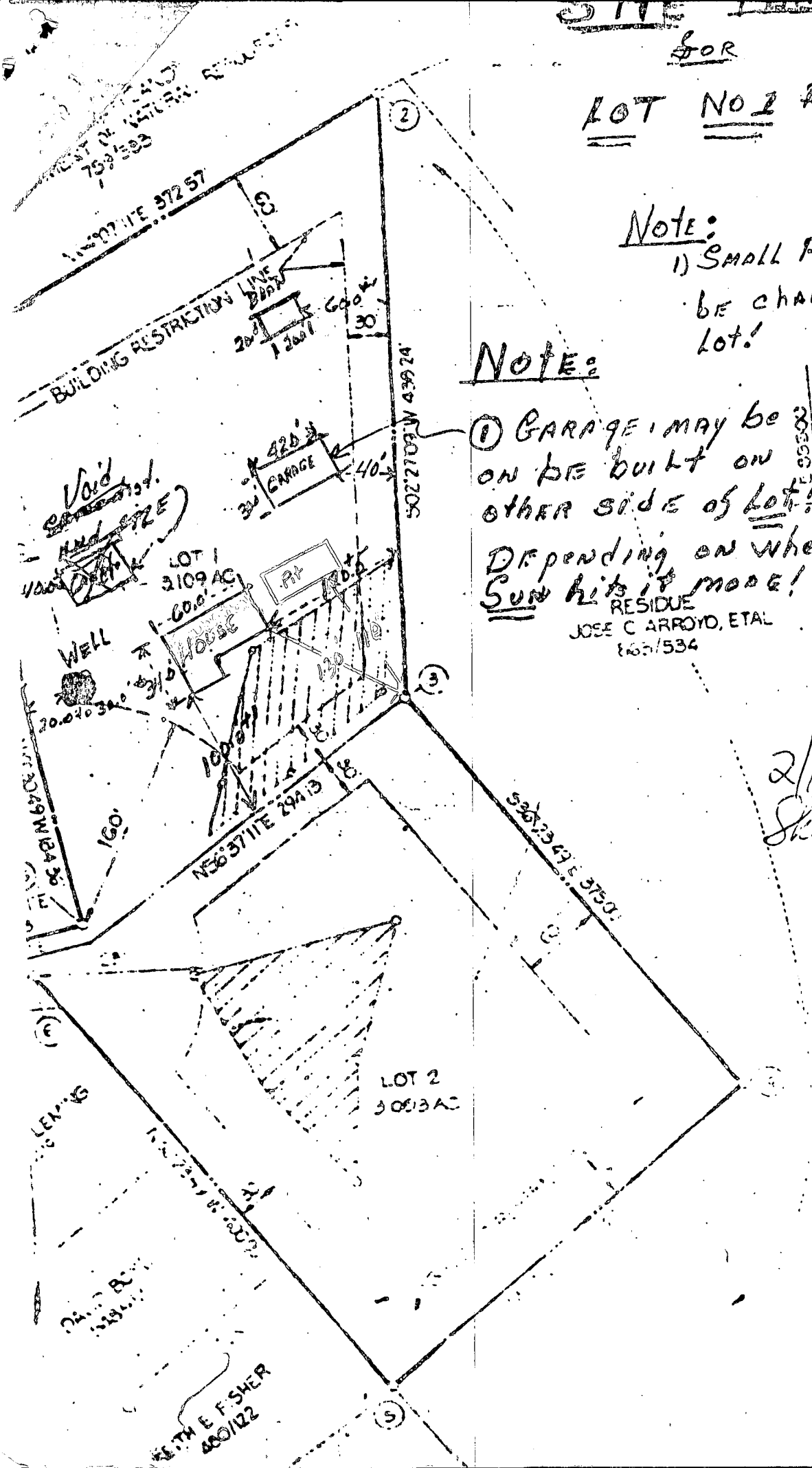
TYPE OF SOIL

TESTED BY BH ALSO PRESENT DEVRA & DENNY

SITE PLAN

FOR

LOT NO 1 2267 DANIEL'S Rd MD. 21043



Note:
1) SMALL PONY BARN subject to be changed to middle of lot!

Note:
(1) GARAGE MAY be ON BE built on OTHER SIDE of Lot! Depending on where Sun hits it more!

2/17/81
Sketch O.K.
FOR GARAGE

Lot #1 Twin Areas
2267 Daniel's Rd:

Measurements & Dists:

A)- Dist: From Prop. Line to Water Well 104.2' Front 87.5' Side Lt

B)- Dist: Well to House 34.0'

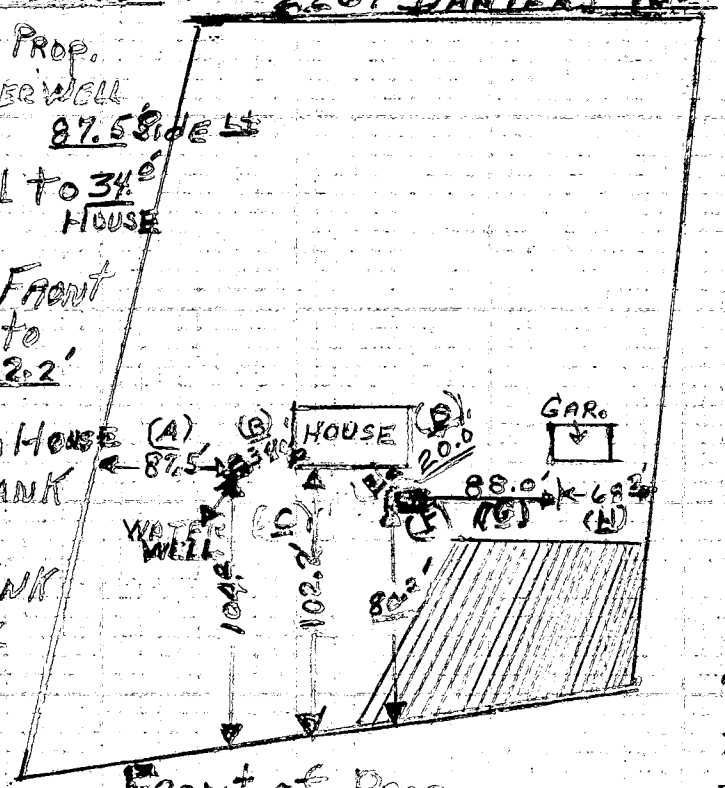
C)- Dist From Front Prop. Line to House 102.2'

D)- Dist. From House to Spt. Tank 20.0'

F) Septic Tank

G)- Lenght of 10.0' Ditch Using 7.0' #2 Stone 4" Per. Pipes: 2" Stones over 4" Pipe - Building paper on top of stones than dirt to top of Finish Grade!

H)- Dist From End of drain Field to Rt. Side of Prop Line 68.2'.



Elevations and X Sections

A)- Well Elev: 0.0'

B)- Frist Floor of House: +2.5'

C)- Basement Elev: -5.5'

D)- House Inv. Elev: -7.0'

E)- Septic Tank Inv: -6.6

F)- Septic Tank Grade: At Top -7.0'

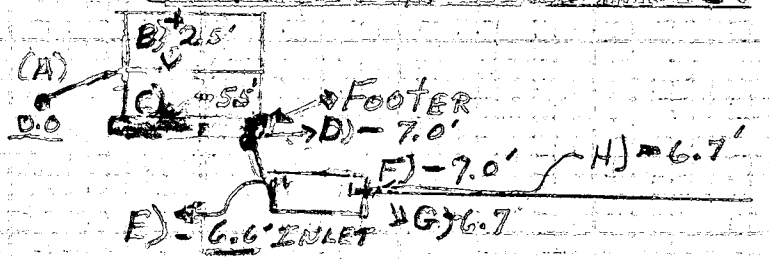
G)- Grade at Trench -6.7'

H)- Trench Inv: - -9.7'

I)- Grade at Trench at time of Percolation Test: Same!

J)- Trench is 10.0' Deep 2.0' Wide 88.0' Long

X Sections & Grades:



Notes:

1) Well is 0.0' Grade!

2) Bottom of basement is a cut of -5.5' from existing well elev:

3) From Basement floor to Inv. of Septic Tank is 1/4" fall per ft.

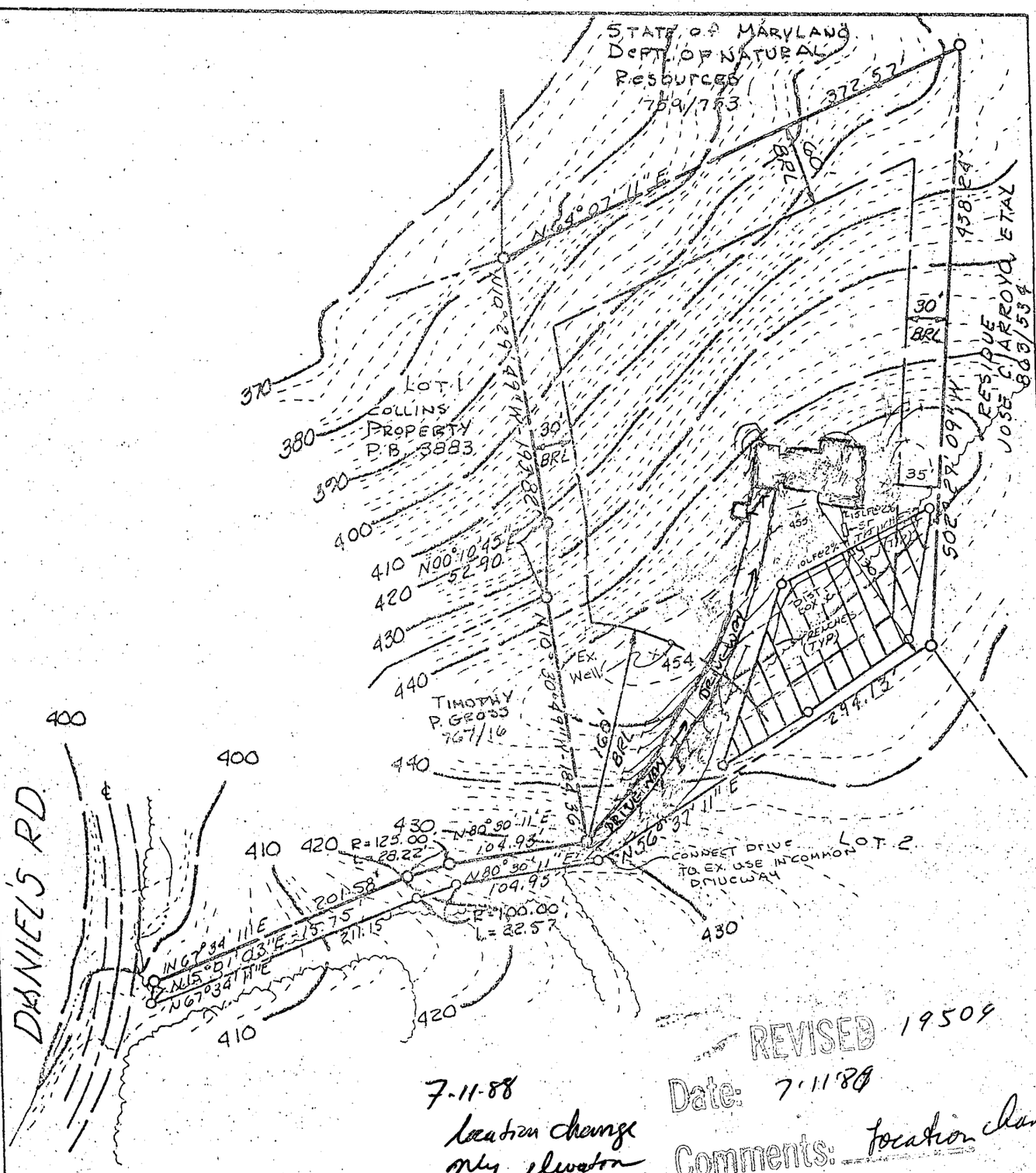
4) Out Let of Septic Tank is 3.0" below Inv. and

5) All Grades are A - except for letter No (B) that is A(+) 2.5' above Well Grade!

5/19/81
Sketch O.K
J.S.

The above measurements and elevations are actual and correct.

Dave Hammond
May 18, 1981



REVISED 19509

Date: 7.11.88

7-11-88
location change
only elevation
remain same

Comments: location change

HOUSE:
F.F. - 456.50
BSMT - 446.88
INV OUT - 449.75
SEPTIC TANK:
INV IN - 449.45
INV OUT - 449.20
EX. GR. - 453
FINISH GR. - 453

DIST. BOX:
INV. IN - 449
EX. GR. - 452
FIN GR. - 452
WELL:
EX. - 454
FIN. - 454

NOTES:

1. TAX MAP: 18, PARCEL: P/O 2
2. PLAT REFERENCE: 4335
3. CONTRACTOR TO SET GRADES IN FIELD
4. TOPOGRAPY SHOWN HEREON IS BASED ON AERIAL TOPOGRAMMETRIC MAPS.

TITLE: GRADING STUDY REVISED COPY				
PROJECT: TWIN ACRES, LOT 1				
LOCATION: 2ND ELECTION DISTRICT HOWARD CO., MD.				
SCALE: 1"=	DESIGNED BY:	DRAWN BY: D.A.W.	CHECKED BY: L.E.B.	DATE: 7-9-88 ~~6-20-88~~
FIELD BOOK:	PAGE NO.:	JOB NO.: 8869 C/R 77143	DRAWING NO.: 1 OF 1	

boender associates inc.
consulting engineers
land surveyors
land planners
COURTHOUSE SQUARE
3565 ELLICOTT MILLS DRIVE
ELLICOTT CITY, MD. 21043
(301) 465-7777

EMERGENCY/TEMP NO. IF ANY

B 1 1467 SEQUENCE NO. WRA USE ONLY
(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND
APPLICATION FOR PERMIT TO DRILL WELL
please print or type

WRA PERMIT NUMBER: HO-73-3796
fill in this form completely

DATE RECEIVED 12-17-80
4/10/81 9:30 A.M.
8 (WRA USE ONLY) 13

OWNER INFORMATION

TITTSWORTH CALVIN
LAST NAME OWNER FIRST NAME (15–34)

7801 DOGWOOD RD
STREET OR RFD (36–55)

WOODLAWN MD 21207
TOWN (57) STATE 76 ZIP

B 1 CONTINUED — DRILLER INFORMATION

HOWARD Dillon 209
DRILLER'S NAME 77 LICENSE NO. 80

Howard Dillon 12/15/80
SIGNATURE DATE

B 2 — WELL INFORMATION

APPROX. PUMPING RATE (GAL. PER MIN) 5 (8–12)

AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 300 (14–20)

USE FOR WATER (CIRCLE APPROPRIATE BOX)

- (D) HOME (SINGLE OR DOUBLE HOUSEHOLD UNIT ONLY)
- [F] FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)
- 22 [I] INDUSTRIAL, COMMERCIAL, STATE AND FEDERAL GOV. OTHER (REQUIRES APPROPRIATION PERMIT)
- [P] PUBLIC OR PRIVATE WATER COMPANY (REQUIRES APPROPRIATION PERMIT AND STATE HEALTH DEPARTMENT APPROVAL)
- [T] TEST, OBSERVATION, MONITORING (MAY REQUIRE APPROPRIATION PERMIT)

APPROXIMATE DEPTH OF WELL 250 FEET (24–28)

APPROXIMATE DIAMETER OF WELL 6 NEAREST INCH

Method of Drilling (circle one)

BORED (OR AUGERED) JETTED JETTED & DRIVEN
30–37 AIR ROTARY AIR-PERCUSSION ROTARY (HYDRAULIC) ROTARY
CABLE REVERSE ROTARY DRIVE-POINT
other

REPLACEMENT OR DEEPENED WELLS (Circle Appropriate Box)

- (N) THIS WELL WILL NOT REPLACE AN EXISTING WELL
- 39 [Y] THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
- [S] THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY
- [D] THIS WELL WILL DEEPEN AN EXISTING WELL

PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPENED (IF AVAILABLE) 41–52

Not to be filled in by driller (WRA USE ONLY)

APPROP. PERMIT NUMBER GAP (54–63)

FORCE (67–68) WRITE INITIALS IN BOX CONDITIONS A E N S G W Q C L U (70–79)

B 3 — LOCATION OF WELL

COUNTY HOWARD (8–21)

SUBDIVISION TWIN ACRES (23–42)

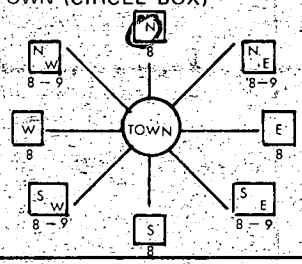
SECTION 2 DIS. (44–46) LOT 1 (48–50)

NEAREST TOWN ELLICOTT CITY (52–71)

MILES FROM TOWN (enter 0 if in town) 3 (73–76) MI (77–78)

B 4

DIRECTION OF WELL FROM TOWN (CIRCLE BOX)

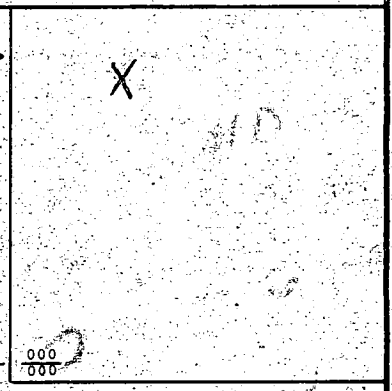


DANIELS
NEAR WHAT ROAD (11–30)

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX) NORTH N, WEST W, 32, EAST E, SOUTH S

500
34 DISTANCE FROM ROAD (CIRCLE APPROPRIATE BOX) FT. MI (37–39)

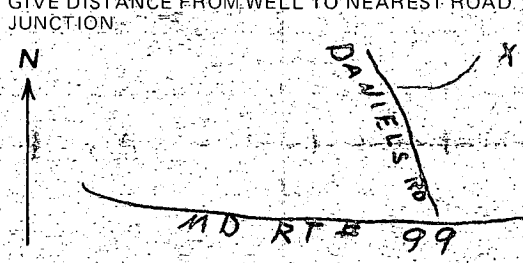
SHOW LOCATION OF WELL WITH AN "X" IN THIS BOX →



WRITE THE BOX NUMBER FROM THE MAP HERE ↓

E 850 2
N 530 8

DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION



4/10/81
20' casing
2½ conductor above grade
16' open hole jetted
5 bags cement used
a.k.

B 4 — NOT TO BE FILLED IN BY DRILLER
HEALTH DEPARTMENT APPROVAL

HOWARD A 29472
COUNTY NAME COUNTY NO.

EHA SIGNATURE STATE HEALTH CIRCLE BOX S (41)

MO DAY YR 02 04 81 (43–48) Frank Sh 2/9/81
CO SIGNATURE DATE

NORTH GRID 538000 (50–55) EAST GRID 0852000 (57–63) ELEV. (FT.) (65–68)

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

HEALTH

Howard County Health Dept
992-2333

① 100' and Next Lot
② At least 30' from House
③ 10' from property LINE

STATE OF MARYLAND
DEPARTMENT OF NATURAL RESOURCES
759/533

STATE PLANE

N64°07'11"E 372.57'

BUILDING RESTRICTION LINE

Barn

30'

S02°27'09"W 438.24'

N10°29'49"W 193.82'

N00°10'45"E 52.30'

2/9/81
well site O.K.

Well

Garage

LOT 1
COLLINS PROPERTY
FLATBOOK 3883

LOT 1
2.109 AC

House

Highway

RESIDUE
JOSE C ARROYO, ETAL.
863/534

AND DEDICATED TO HOWARD
COUNTY, MARYLAND FOR PURPOSES
OF A PUBLIC ROAD (0.021 AC.)

TIMOTHY P GOSS
767/16

N00°30'49"W 184.36'

160'

N36°37'11"E 294.13'

S46°23'49"E 375.00'

R=1250 L=25.39

R=1250 L=28.22

N80°30'11"E
104.99'

N80°30'11"E
154.99'

N67°34'11"E 299.37'

S67°34'11"W 298.50'

R=100.00 L=22.57

S80°30'11"E 59.35

WALTER A FLEMING
240/149

LOT 2
3.009 AC

N32°23'49"W 400.00'

BUILDING RESTRICTION LINE

DAVID BOYD
368/612

KEITH E FISHER
480/122

N537100

OWNERS STATEMENT

I/WE LUTGARDO G PANLILIO — OWNERS OF THE
PROPERTY SHOWN HEREON, HEREBY ADOPT THIS PLAN OF
SUBDIVISION, THE ESTABLISHMENT OF

SURVEYORS CE

I HEREBY CERTIFY THAT THE PL
IS CORRECT, THAT IT IS BASED
LANDS SURVEYED

C 4865 — SEQUENCE NO. (WRA USE ONLY)

(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND
WELL COMPLETION REPORT

FILL IN THIS FORM COMPLETELY
PLEASE PRINT OR TYPE

THIS REPORT MUST BE SUBMITTED WITHIN 30 DAYS AFTER WELL IS COMPLETED

COUNTY NUMBER: A 29472

Date Received (WRA use only): 4/16/81

DATE WELL COMPLETED:

Depth of Well: 245 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL": HO-73-3776

OWNER: Tittsworth (last name) Calvin (first name)

STREET OR RFD: Daniels TOWN: Ellicott City

SUBDIVISION: Twin Acres SECTION: LOT: 1

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	FEET TO	Check if water bearing
Mica Sand & Soil	0	20	
Mica Rock	20	245	X

GROUTING RECORD
WELL HAS BEEN GROUTED (Circle Appropriate Box): yes [Y] no [N]

TYPE OF GROUTING MATERIAL: CEMENT [CM] BENTONITE CLAY [BC]

NO. OF BAGS 15 NO. OF POUNDS 475

GALLONS OF WATER 40

DEPTH OF GROUT SEAL (to nearest foot) from 0 ft. TOP to 17 ft. BOTTOM (enter 0 if from surface)

CASING RECORD
casing types — insert appropriate code below: [ST] STEEL [CO] CONCRETE [PL] PLASTIC [OT] OTHER

MAIN CASING TYPE	Nominal diameter top(main)casing (nearest inch)	Total depth of main casing (nearest foot)
ST	6	20

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

SCREEN RECORD
screen type or open hole — insert appropriate code below: [ST] STEEL [BR] BRASS, BRONZE [HO] OPEN HOLE [PL] PLASTIC [OT] OTHER

C 2 (seq. no)

EACH SCREEN		DEPTH (nearest ft.)	
1	HO	20	245
2			
3			

SLOT SIZE 1 ____ 2 ____ 3 ____

DIAMETER OF SCREEN ____ (NEAREST INCH)

GRAVEL PACK from ____ to ____

IF WELL DRILLED WAS FLOWING WELL CIRCLE BOX [F]

C 3 (seq no)

PUMPING TEST
HOURS PUMPED (nearest hour): 6

PUMPING RATE (gal. per min. to nearest gal.): 4

METHOD USED TO MEASURE PUMPING RATE: TIME

WATER LEVEL (distance from land surface)

BEFORE PUMPING: 50

WHEN PUMPING: 225

TYPE OF PUMP USED (for test): [A] air [P] piston [T] turbine [C] centrifugal [R] rotary [O] other (describe below) [J] jet [S] submersible

PUMP INSTALLED
DRILLER WILL INSTALL PUMP (CIRCLE APPROPRIATE BOX): YES [Y] NO [N]

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS EXCEPT HOME USE

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

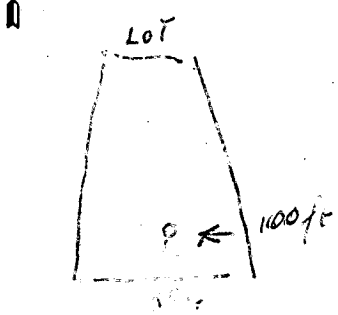
CAPACITY: GALLONS PER MINUTE (to nearest gallon)

PUMP HORSE POWER

PUMP COLUMN LENGTH (nearest ft)

CASING HEIGHT (circle appropriate box and enter casing height): [+] above [−] below LAND SURFACE (nearest foot): 2

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



CIRCLE APPROPRIATE BOX
[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 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 IDENT. NO. 209

Howard Hilton
DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

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

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

T — TELESCOPE CASING; (E.R.O.S.) — LOG INDICATOR; W Q — OTHER DATA

HEALTH

HOWARD COUNTY HEALTH DEPARTMENT

Joyce M. Boyd, M.D., County Health Officer

April 16, 1990

Reply to:

Charles Streaker, Sanitarian
461-9933 or 461-9934

Mr. Jay Gopal
2267 Daniels Road
Ellicott City, Maryland 21043

Re: Twin Acres - Lot 1
2267 Daniels Road
Well Permit No. HO-73-3796

Dear Mr. Gopal:

This is to advise you that the septic system was installed, inspected and approved on April 26, 1989.

The water sample recently submitted for testing was free of coliform and fecal coliform bacteria at the time of sampling and bacteriologically safe for drinking.

FINAL CERTIFICATION OF POTABILITY

This certifies that all sampling requirements of COMAR 26.04.04 "Well Regulations" have been met for the water supply system installed under permit(s) HO-73-3796.

April 5, 1990
Date of Final Sampling

April 16, 1990
Date of Acceptance

Charles Streaker

Charles Streaker, Sanitarian
Water and Sewerage Program

Water Sample Dates:
June 29, 1990
April 5, 1990

CS:cm

Bureau of Environmental Health
3525 Ellicott Mills Drive Ellicott City, Maryland 21043-4544
Director 461-9956 Water and Sewerage, Permits 461-9933 Community Environmental Health 461-9944
Technical Services 461-9955