

10/18/93 1130
12/27/93
do duplicate

ADDITIONAL FILE RETAINED

PERMIT

INDEXED

UNDER ->P 49677

SEWAGE DISPOSAL SYSTEM

A 21783

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

DISTRICT _____

04-324870

DATE 10/14/93

HOWARD COUNTY HEALTH DEPARTMENT

BUREAU OF ENVIRONMENTAL HEALTH

~~PHONE~~ 313-2640

DATE SYSTEM APPROVED 12/29/93

INDEXED

INSPECTOR *[Signature]*

Paul Schissler/South Carroll Backhoe IS PERMITTED TO INSTALL X ALTER _____

ADDRESS 4410 Salem Bottom Road, Westminster, Maryland 21157 PHONE 875-4197

SUBDIVISION Gifford Dye Property LOT 20 ROAD 14295 Old Frederick Road

PROPERTY OWNER Warren Barrett/Altieri

ADDRESS _____

NUMBER OF BEDROOMS 4

225 SQUARE FEET PER BEDROOM

Make septic system with 2 beds connected via 2 top seamed septic tanks in series thru a Bull Run Valve. System to be an Alternating Bed System.

BED #1 - (Approximately 50 feet Southeast of house site). BED Dimension - 36 feet long (long axis on contour) by 13 feet wide; upslope edge to be 6 feet deep, bottom of bed level (approximately 5 feet deep on down slope edge). Place 2 feet gravel in bed, then two drain pipes (6' spacing between pipes) connected thru a distribution box. (Use present trench as upslope edge of bed.

BED #2 - (Approximately 75 feet Northeast of house site). BED DIMENSIONS - approximately 19 feet long (short axis on contour) by 24 feet wide, using current trench as down-slope edge of bed. Keep bottom of bed level with present bottom of trench (approx. 5 feet deep). Place 2 feet gravel in bed with 3 drainpipes (with 8' spacing between pipes) laid on contour thru a distribution box.

Connect both beds via a bull run valve to septic tanks. Use 2 single chambered top seamed septic tanks in series. First tank to be 1500 gallons, second tank to be 1000 gallons. Call for inspection of bed bottoms prior to gravel filling.

PLANS APPROVED BY Ronald Pinkley DATE 10/13/93

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

BLOG. PERMIT SIGNED

AND RETURNED 10/18/93

PERMIT VOID AFTER TWO YEARS

Serial # 50172 - 2 Story Addition

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

BLOG. PERMIT SIGNED

AND RETURNED 5/2/95

NOTE: DISTRIBUTION BOXES MUST HAVE BAFFLES

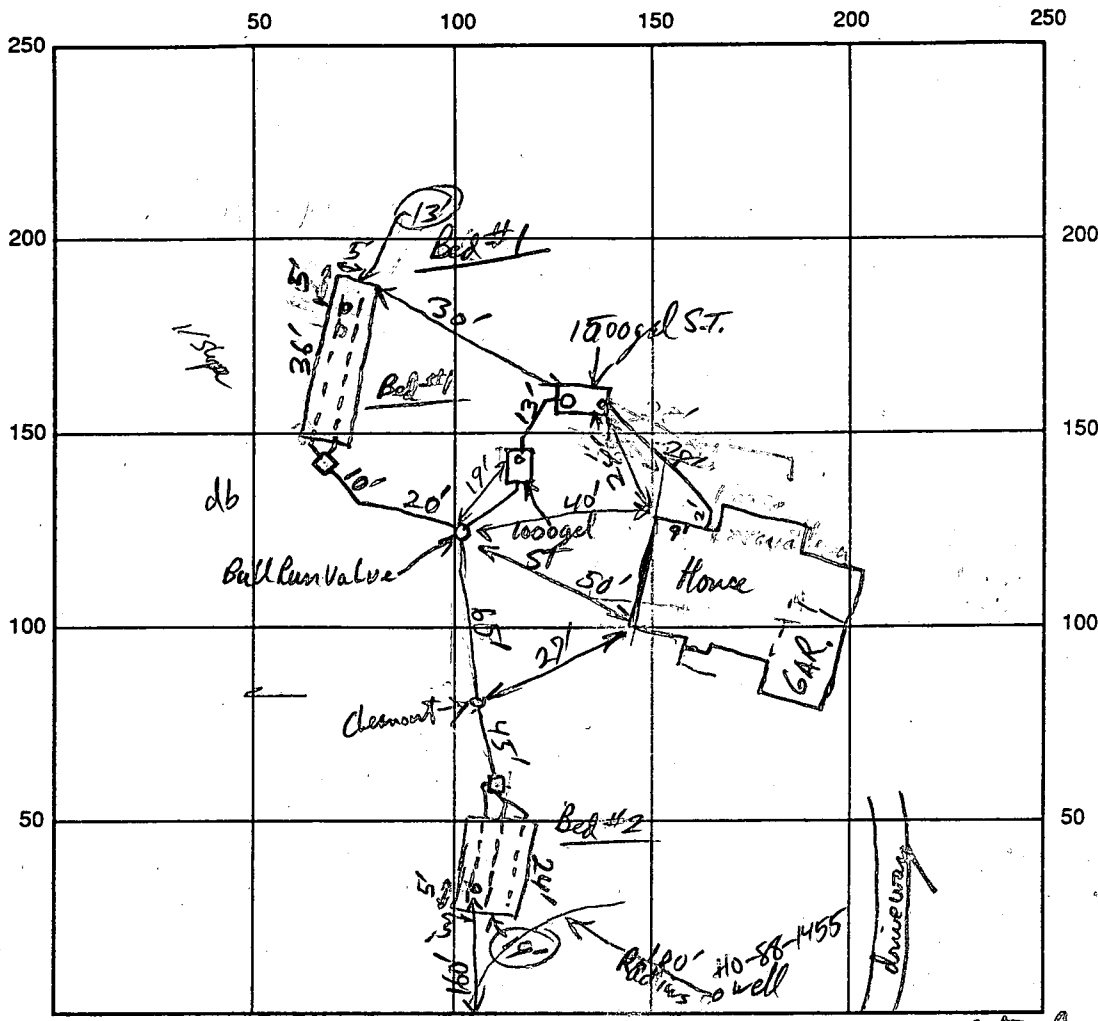
Black + Gussis

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

A 21783
49677
77

Bed #1
 36' Long
 13' wide
 Bottom 4'-5'
 2' gravel
 (2 drain pipes, 6' spacing)

Bed #2
 24' long
 19' wide
 Bottom 5'-6'
 2' gravel,
 (3 drain pipes, 6' spacing)



INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE Old Frederick Rd

SEPTIC TANK LEVEL 1000 gal Top Second 1500 gal " " one chamber CLEANOUTS 2 S.T. and on long feeder pipe

DISTRIBUTION BOX LEVEL Bed #1 OK Bed #2 OK

DRAIN FIELD/TITLE DEPTH _____ FT. TRENCH WIDTH _____ FT. INLET DEPTH _____ FT.

EFFECTIVE GRAVEL DEPTH _____ FT. TOTAL LENGTH _____ FT.

NUMBER OF TRENCHES _____ ONE SIDEWALL/BOTTOM AREA _____ SQ. FT.

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

ABSORBENT AREA _____ SQ. FT.

REMARKS: Beds OK to fill with stone 10/14/93 Beds OK to cover, 1st septic Tank Set 10/14/93
2nd Tank OK, piping OK, OK to cover. Call for house connection when ready 10/18/93
HSE connection OK, OK to cover system 12/27/93 PJ

Note on Bull Run Valve - setting #1 in use Now leads to Bed #2 (and vice versa)

DATE SYSTEM APPROVED 12/27/93

INSPECTOR R. H. [Signature]

C1 1716 SEQUENCE NO. (DENV 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 A21783

ST/CO USE ONLY DATE Received DATE WELL COMPLETED

Depth of Well 160 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" HO-88-1455

OWNER Howard Kenneth STREET OR RFD 14293 Old Frederick Rd TOWN Cooksville SUBDIVISION GLEFORD DVE SUR SECTION LOT 20

WELL LOG table with columns: DESCRIPTION, FEET (FROM, TO), Check if water bearing. Includes entries for Top Soil, Br. Shale, Thin mica, Gray mica, and pump test notes.

GROUTING RECORD: WELL HAS BEEN GROUTED (Y), TYPE OF GROUTING MATERIAL CEMENT (CM), BENTONITE CLAY (BC), NO. OF BAGS 29, NO. OF POUNDS 2900.

CASING RECORD: casing types insert appropriate code below, MAIN CASING TYPE ST, Nominal diameter 6, Total depth 43.

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

SCREEN RECORD: screen type or open hole insert appropriate code below, SCREEN TYPE ST, BR, HO, PL, OT.

DEPTH (nearest ft.) table with rows for EACH SCREEN and columns for depth measurements.

GRAVEL PACK 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.), W Q, TELESCOPE CASING, LOG INDICATOR, OTHER DATA.

PUMPING TEST: HOURS PUMPED 3, PUMPING RATE 10, METHOD USED TO MEASURE PUMPING RATE Bucket, WATER LEVEL 37, WHEN PUMPING 40, TYPE OF PUMP USED S (submersible).

PUMP INSTALLED: DRILLER WILL INSTALL PUMP YES (NO), TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX - SEE ABOVE: CAPACITY, GALLONS PER MINUTE, PUMP HORSE POWER, PUMP COLUMN LENGTH, CASING HEIGHT.

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 LETTER: 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 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT...



HOWARD COUNTY HEALTH DEPARTMENT

Joyce M. Boyd, M.D., County Health Officer
April 25, 1994

Mr. Warren Barrett
14295 Old Frederick Road
Sykesville, MD 21784

RE: Clifford Dye Property Lot 20
14295 Old Frederick Road
Well Tag #HO-88-1455

Dear Mr. Barrett:

This is to advise you that the septic system was installed, inspected and approved on December 27, 1993.

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

FINAL CERTIFICATE 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-88-1455.

Date of Final Sampling: April 18, 1994
Date of Acceptance: April 25, 1994

Approving Authority

Charles Streaker R.S.
Charles Streaker, R.S.
Water and Sewerage Program

Water Sample Dates: March 10, 1994 and April 18, 1994

CS/brl

cc: file ✓

4 Beds

owner Karen Barrette

~~2100 sq ft / Bed~~
600 sq ft / Home ← Each Bed to be 75% of total
150 sq ft / Bed
Installer South Carroll Backhoe
Contractor Older Altieri

Gifford Dye 6420

Old Frederick Rd
approx 300' w/ Forsyth

Make Septic System with 2 Beds connected via 2 Top Seamed Septic Tanks in series thru a Bull Run Valve. System to be an ~~Alternating~~ Alternating Bed System.

Bed #1 [approximately 50' South East of House Site]

Bed Dimension - 36' Long (Long axis on Contour) by 13' wide; upslope edge to be 6' deep, Bottom of Bed Level (approx. 5' deep on downslope edge).

450^{ft} Min each
Place 2' gravel in bed, then two drain pipes (6' spacing between pipes) connected thru a distribution Box. (use present trench as upslope begin of bed)

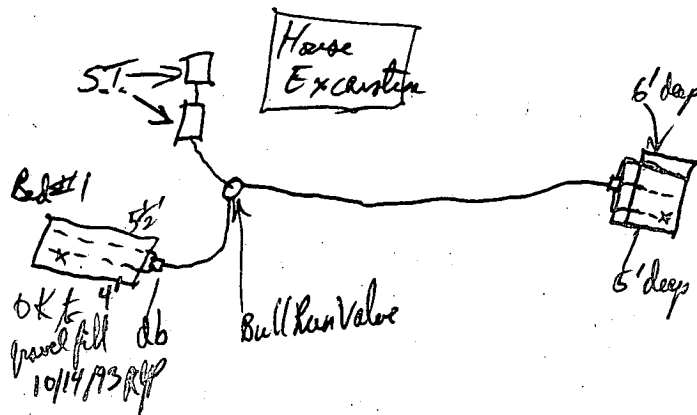
Bed #2 [approximately 75' North East of House Site]

450^{ft}
Bed Dimensions - approximately 19' long (short axis on Contour) by 24' wide, using current trench as downslope edge of bed. Keep bottom of trench level with present bottom of current bed (approx 5' deep). Place 2' gravel in bed with 3 drain pipes (with 8' spacing between pipes) laid on contour thru a distribution Box.

Connect Both Beds via a Bullrun Valve to Septic Tanks

Use 2 single chambered 1500 gal each, Top Seamed Septic Tanks in Series.
1000 gal OK for Septic Tank

Call for inspection of Bed Bottoms prior to Gravel Filling.



put one o.p. in each bed about (4x6) 3' from each edge at downslope end of bed.
Bed #2
change to 24' long by 19' wide
cut getting too deep at upslope end
10/14/93
Ronald J. P.../K...
10/13/93

4 Beds

swan karren Barrette

~~200 gft/bed~~

600 gft/1st bed
150 gft/2nd bed

Each bed to be 75% of total

Installer South Carroll Backhoe
Contractor Aldo Altieri

Gifford Dye 6/20

Old Frederick Rd
approx 300' w/ Forsythe Rd

Make Septic System with 2 Beds connected via 2 Top Seamed Septic Tanks in series thru a Bull Run Valve. System to be an ~~Alternating~~ Alternating Bed System.

Bed #1 [approximately 50' South East of House Site]

Bed Dimensions - 36' Long (Long axis on Contour) by 13' wide; upslope edge to be 6' deep, Bottom of Bed Level (approx. 5' deep on downslope edge).

450#
min
each
Place 2' gravel in bed, then two drain pipes (6' spacing between pipes) connected thru a distribution Box. (use present trench as upslope begin of bed)

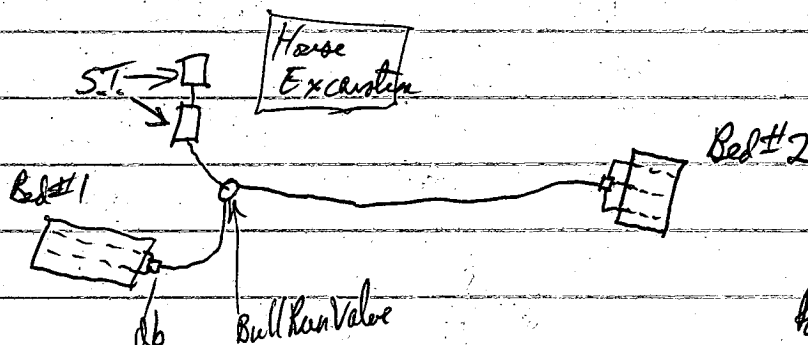
Bed #2 [approximately 75' North East of House Site]

450#
Bed Dimensions - approximately 19' long (short axis on Contour) by 24' wide, using current trench as downslope edge of bed. Keep bottom of trench level with present bottom of current bed (approx 5' deep). Place 2' gravel in bed with 3 drain pipes (with 8' spacing between pipes) laid on contour thru a distribution Box.

Connect Both Beds via a Bullrun Valve to Septic Tanks

Use 2 single chambered 1500 gal each, Top Seamed Septic Tanks in Series.
1000 gal OK for Septic Tank

Call for inspection of Bed Bottoms prior to Gravel Filling.



Don't Pittman/cm
10/13/93

$$\begin{array}{r} 24 \quad 36 \\ 19 \quad 13 \\ \hline 216 \quad 108 \\ 24 \quad 36 \\ \hline 456 \quad 468 \end{array}$$

65% of Septal/ed

$$\begin{array}{r} 190 \\ \times 4 \\ \hline 720 \end{array}$$

$$\begin{array}{r} 400 \\ \hline 720 \end{array}$$

$$\begin{array}{r} 470 \quad 1.5 \\ \times 720 \\ \hline 49 \\ \hline 250 \end{array}$$

$$\begin{array}{r} 720 \overline{) 470} \\ \underline{432} \\ 380 \\ \underline{360} \\ 200 \end{array}$$

$$\begin{array}{r} 210 \\ \times 4 \\ \hline 840 \end{array} \quad 75\% = 630$$

$$\begin{array}{r} 470 \\ \hline 840 \end{array} =$$

Linear loading rates

$$\frac{600}{1.2} = 500$$

$$75\% = 375$$

$$\frac{600}{0.9} = 666.6$$

$$\begin{array}{r} 6 \\ 9 \overline{) 6000} \\ \underline{54} \\ 6 \end{array}$$

$$\begin{array}{r} 150 \\ 8 \overline{) 6000} \\ \underline{56} \\ 40 \\ \underline{40} \end{array}$$

$$\frac{600}{0.8} = 750$$

$$\frac{1}{2} \times 800 = 500 = 25\%$$

@ per 6-10 min standard system is

$$\begin{array}{r} 165 \text{ ft} / \text{hr} \\ \times 4 \\ \hline 4 \overline{) 660} \\ \underline{165} \\ \times 3 \\ \hline 495 \text{ ft} \text{ per } 75\% \text{ system} \end{array}$$

$$\left(\frac{3}{4}\right) \left(\frac{3}{4}\right) = \frac{9}{16} = 16 \overline{) 5625}$$

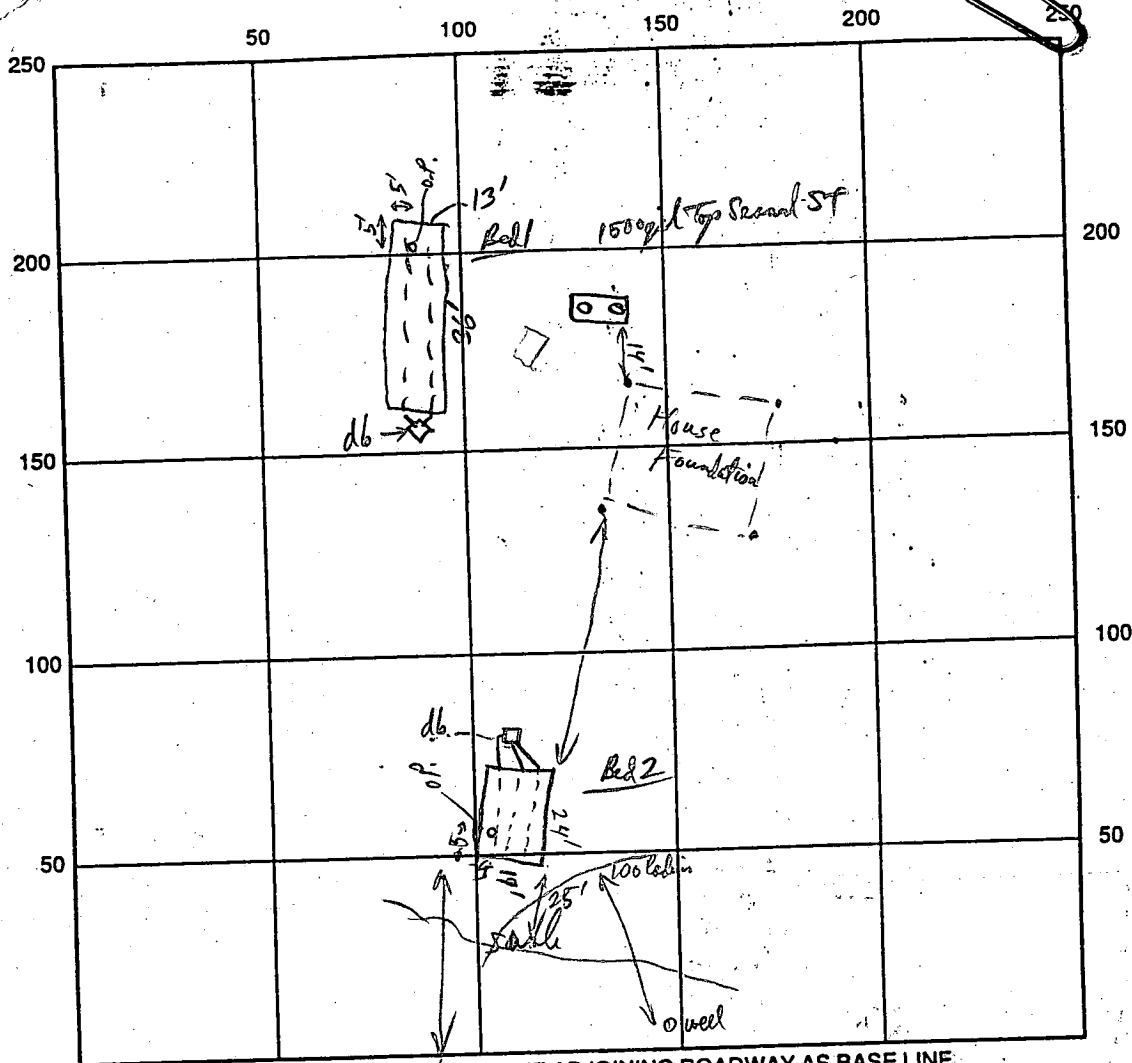
$$\begin{array}{r} 350 \\ 16 \overline{) 5625} \\ \underline{80} \\ 100 \\ \underline{96} \\ 40 \\ \underline{32} \\ 80 \end{array}$$

$$\begin{array}{r} 125 \text{ (5 min peak)} \\ \times 4 \\ \hline 500 \end{array}$$

$$2562.5 \text{ gal}$$

$$\begin{array}{r} 36 \\ 36 \\ 18 \\ \hline 100 \text{ ft} \end{array}$$

$$\begin{array}{r} 131 \\ 36 \overline{) 495} \\ \underline{36} \\ 135 \end{array}$$



6 of 12 Day 1/20

INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE

SEPTIC TANK LEVEL 1500 gal OK CLEANOUTS _____

DISTRIBUTION BOX LEVEL _____

DRAIN FIELD/TITLE DEPTH _____ FT. TRENCH WIDTH _____ FT. INLET DEPTH _____ FT.
 EFFECTIVE GRAVEL DEPTH _____ FT. TOTAL LENGTH _____ FT. Bed 1 36' long, 13' wide, 4-5' deep
 NUMBER OF TRENCHES _____ ONE SIDEWALL/BOTTOM AREA _____ SQ. FT. Bed 2 24' long, 19' wide, 5-6' deep
 DRYWALL INSIDE DIAMETER _____ FT. EFFECTIVE DEPTH BELOW INLET _____ FT.
 ABSORBENT AREA _____ SQ. FT.

REMARKS: Beds OK to cover, 1st ST. set - Need to put in cement piping to set second ST. 10/14/93 R/P

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 Replacement

Receipt # _____ Date 1/31/94

Name of Installer ROBERT L. FEEZER CO.

Telephone 781-4655

License Number 2122

Certified Well Pump Installer Well Driller Registered Plumber

Name of Property Owner ALDRI HOMES 22

Telephone 795-1405

Subdivision G.F.W./DYE Lot # 200

Well Tag # HO-88-1455

Site Address 14295 OLD MADRICK ROAD

Pump

- Type
 - Deep well jet
 - Shallow well jet
 - Submersible
- Make Denning/Criswell
- Model # 3ALN
- Capacity 8 GPM
- Pump exceeds well capacity Yes No
- If Yes, is low pressure cutoff switch installed? Yes No
- What methods are used to protect the pump and electrical wiring from vibrations? Torque arrestors Cable guards Other

Motor

- Horsepower 1/2
- RPM 3450
- Voltage
 - 110
 - 220

Pitless Adapter

- Make HARVARD
- Model # TT-800
- Depth 42'

Tank CAPTIVE MR-WX203

- Capacity 32 GALLS.
- Pressure relief valve? MR/BKS

NOTHING VISIBLE 2/15/94
ALL WORK COVERED

Piping

- Type Poly.
- Size 1"
- NSF and/or BOCA Code approved
- Depth of supply line 42'

Well data

- Depth 160 ft.
- Yield 10 GPM
- Static water level ? ft.
- 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: [Signature]

Date: 1/31/94

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

APPLICATION

HOWARD COUNTY

PERMIT APPLICATION

DEPARTMENT OF INSPECTIONS, LICENSES & PERMIT
3430 COURT HOUSE DRIVE, ELLICOTT CITY, MARYLAND 21043

SERIAL NUMBER

50172

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

14295 ~~Forsythe Rd~~ Old Frederick Rd

Cooksville, MD. 21723

LOT NO.	PARCEL NO.	SEC.	AREA	BLOCK NO.	LIBER	FOLIO
-	265	-	-	12	-	-

SUB DIVISION	LOT	ZONE	ZONE MAP	ELEC. DIST.	CENSUS TR.
GIFFORD DYE SUBDIVISION 20		RC	8	4 th	6040

OWNER NAME AND ADDRESS

Artisan Homes, Inc. 410-796-5266
7347 Gardenview Dr.
Rt. 14, MD 21729

OCCUPANT'S NAME AND ADDRESS

SAME 7465266

ARCHITECT OR ENGINEER'S NAME AND ADDRESS

SAME

CONTRACTOR'S NAME AND ADDRESS

SAME

EXISTING USE

VACANT LAND

PROPOSED USE

S.F.D.

EST. CONSTRUCTION COST

100,000

LICENSE NUMBER

PERMIT FEE

GRADING/SEDIMENT CONTROL YES NO

DESCRIPTION OF WORK AUTHORIZED

2 story, 9R, 2 FB, 1 HB
6 Garage (4 BR), F.P.
Deck

SIZE OF BLDG.

TYPE OF BLDG.

B. ROOMS	ROOMS	BATHS	FIREPLACES

FOOTINGS FOUNDATION S. WALLS

UTILITIES

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

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 Department of Inspections, and Permits twenty-four hours in advance when I am ready for the inspections called for elsewhere in the application; and that no work will be covered up until such inspections have been completed with.

SIGNATURE: [Signature] DATE: 8/13/93

FOR OFFICE USE ONLY

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

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

TO SIDE BUILDING LINE DISTANCE IN FEET, REAR YD. REQUIRING SET

BACK (CORNER LOT ONLY) SDP #

Check 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 170 weeks before it will be issued.

IMPORTANT: PLEASE SHOW ZIP CODES AND AREA CODES WHEREVER REQUIRED.

FUNCTION	DATE	SIGNATURE APPROVAL
ZONING/PLANNING	X	
SHA	X	
SEDIMENT/GRADING		
BUILDING OFFICIAL	X	
WATER & SEWER	10/18/93	
HEALTH DEPT.	10/25/93	Craywell
FIRE PROTECTION		
STORM WATER MGM.		

APPROVED DATE

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



HOWARD COUNTY HEALTH DEPARTMENT

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

Reply to:

October 1, 1993

Altieri Homes, Inc.
7347 Gardenvue Drive
Baltimore, Maryland 21227
Attention: Doug Altieri

RE: Gifford Dye Property - Lot 20
14295 Old Frederick Road
Building Permit Application: 50172

Dear Mr. Altieri:

This letter is a summary of our conference of September 30, 1993 concerning the development of the above referenced property.

Initially we were not able to recommend approval of your building permit application because septic plans were incomplete. It was subsequently discovered that the principle portion of the septic area had been damaged by excavation; follow-up testing to confirm soil conditions in the remaining area revealed conditions not suitable for the proposed sand mound system.

However, additional tests conducted on September 28, 1993 did reveal an area potentially suitable for a conventional shallow trench system. The concern is that the appearance of rock in the test holes, and throughout the property in general, has been inconsistent. Conditions in these test holes may or may not be indicative of conditions throughout the potential area for this septic system.

We propose that the final test would be installation of the critical portion of the planned septic system under controlled conditions. If that effort is successful, then we would release the building permit.

Conditions of installation would be as follows:


1. Stake-out inspection of disposal trench locations. Planned total trench length to be 280 linear feet*, 3 feet wide.
2. Trench excavation while health department inspector is on-site. Planned trench bottom depth is 5 feet*.

Bureau of Environmental Health
3525-H Ellicott Mills Drive Ellicott City, Maryland 21043-4544
Water and Sewerage, Permits 313-2640 Community Environmental Health 313-2642
Technical Services 313-2644 Director 313-2645 TDD 313-2323

October 1, 1993

Cause for disapproval would be failure to be able to complete trench excavation because of soil conditions significantly different (worse) than anticipated from September 28, 1993 testing. If trench excavation is satisfactory, then health department would release building permit as plans for final septic system detail (number and placement of tanks, definition of future reserve area, etc.) are completed.

Very truly yours,


Craig Williams, Program Director
Water and Sewerage Program

CW:jr

cc: Warren Barrett
South Carroll Backhoe
File

* Health department reserves the right to request minor modification to trench dimensions in response to soil conditions observed during trench installation.

6 Spruce lot 20 (

Howard County Health Department

(as available is optional)

To: Set Meeting to discuss & make agreement
then write up agreement once we reach a consensus.

1) Install septic system first, before BP release.

2) order of stages 1) open trenches inspected
before gravel fill allowed (Trench 5 ft bottom)
3 ft wide

2) final trench inspection

3) septic tanks placed last. (Trench for uppermost trench)

4) two 150 gal (shallow) septic tanks (200 gal)
in series required (reason better quality effluent)

2) Hold upper area (tested Sept 21 + 22 on 9/28)

Draw outside of 100' well radius as reserve plus
+ 25' show area for 1st + 1st repair also - show on
the plat revised per plat.

3) if all goes well no further testing needed.
(but maybe while putting in trenches)

From: _____

Date: _____

9/29/93 PH

Mark S. Stolar
Inspector

9/29/83

To:

Gifford Dye lot 20 - Warren Barrett
System First, before B.P.

Double Septic Tank (shallow 1500's

~~Revery~~ ~~the~~ specification - open trenches First, then
First

What goes in where

~~Letter~~ & ~~the~~ come in to discuss then Make
~~the~~ an agreement in writing

Test 3rd area while out there

From:

one way or other we claim this area with that

we believe

Date:

further tested
Office or 150' from well

APPLICATION

PERCOLATION TESTING

BP50172

A 21883

P _____

HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH
3525-H ELLICOTT MILLS DRIVE/ELLICOTT CITY, MARYLAND 21043
TELEPHONE: 313-2640

page 1 of 4

DISTRICT _____

DATE _____

TO: THE COUNTY HEALTH OFFICER
ELLICOTT CITY, MARYLAND

I HEREBY APPLY FOR THE NECESSARY TEST PRIOR TO APPLICATION FOR PERMIT TO CONSTRUCT (OR RECONSTRUCT) A SEWAGE DISPOSAL SYSTEM.

PROPERTY OWNER Warren Barrette

ADDRESS _____ PHONE _____

AGENT OR PROSPECTIVE BUYER _____

ADDRESS _____ PHONE _____

PROPERTY LOCATION:

SUBDIVISION Gifford Aye LOT NO. 20

ROAD AND DESCRIPTION S/S Old Frederick Rd (Route 99), 300' West of Fosi, the Rd

TAX MAP _____ PARCEL # _____

*block E 788
N 547*

SIZE OF LOT _____ TYPE BLDG. _____
(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.

(SIGNATURE OF APPLICANT)

APPROVED BY _____ FOR _____ DATE _____

DISAPPROVED BY _____ FOR _____ DATE _____

HOLD PENDING FURTHER TESTS _____

REASONS FOR REJECTION OR HOLDING _____

PERCOLATION TEST PLAT/PRELIMINARY PLAT - TITLE OR I.D. # _____ DATE _____

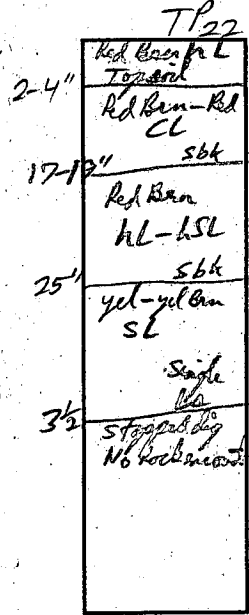
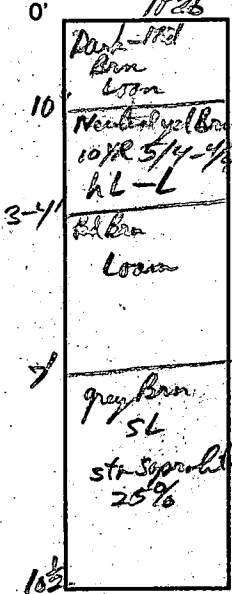
SITE DEVELOPMENT PLAN/FINAL PLAT - TITLE OR I.D. # _____ DATE _____

THIS IS NOT A PERMIT

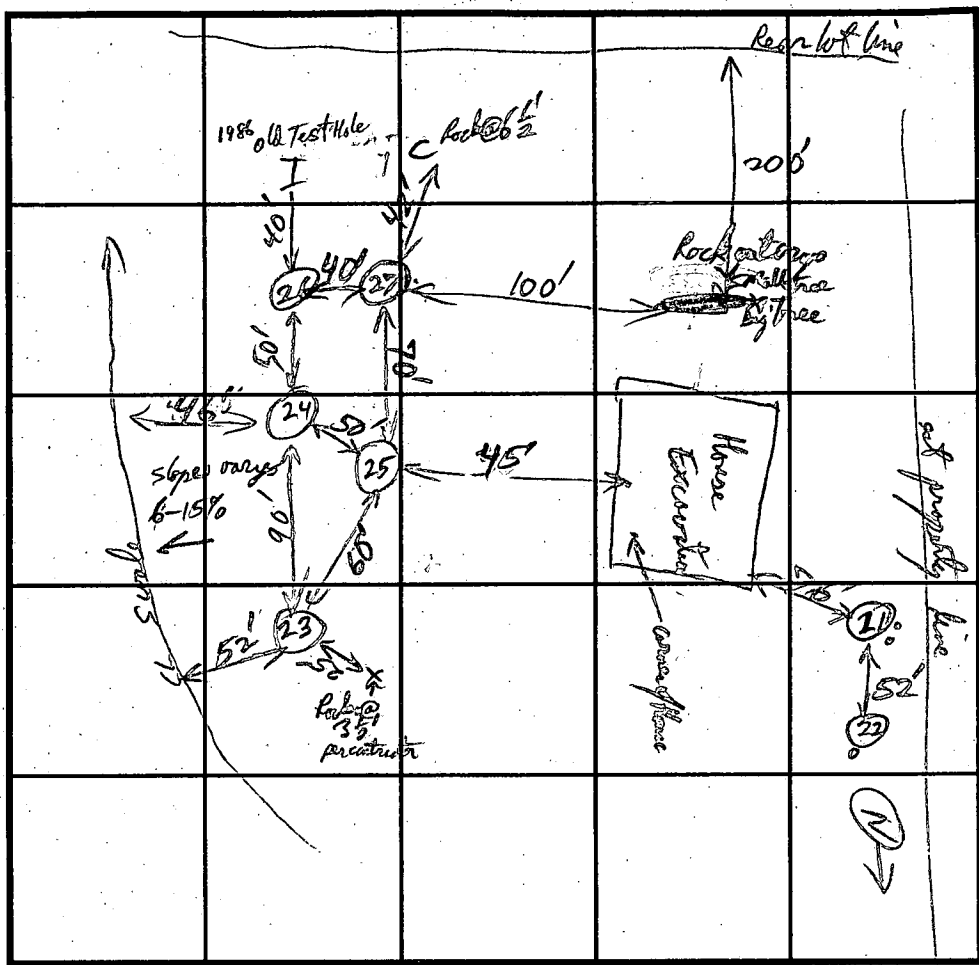
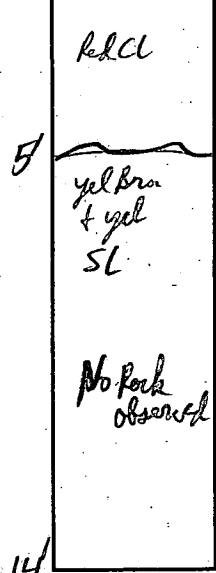
Gifford Dye Lot 20
A 21783

COUNTY #

SOIL PROFILE TP26

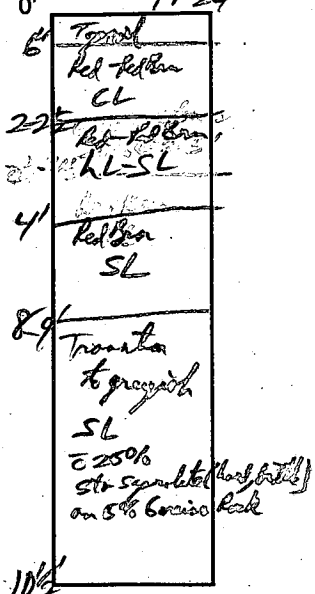


TP 23



INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE. Old Frederick Rd

SOIL PROFILE TP24



TP25 Same as TP24 to 10' 6 grains stones in 20' hole 5' per hole

DATE	TEST NO.	DEPTH	PRE-WET		TEST - 1" DROP		TIME
			START	STOP	START	STOP	
9-28-93	TP23	14' 6"	3:19:40	3:29:00	3:29:00	3:55	26 min
	TP24	10 1/2'					visual only
	TP25	10' 6 1/2"	3:04:00	3:11:00	3:11:00	3:17:00	6 min
		OK below 4 1/2' 3 1/2'	3:24:00	3:29:00	3:29:00	3:36:00	7 min
	TP26	10 1/2' 5'	4:10:00	4:15:00	4:15:00	4:27	12 min
	TP27	10' 4'	4:38:00	4:42:00	4:42	4:52	10 min
	TP29	10' 4'		pg 2 of 4			0'
							6-10" loam
							Red Brn Str Brn LL-CL
							3-3 1/2" Red Brn loam-SL small pebbles

REMARKS Estimate effective area up to 150' long by 60' wide at Max. $\approx 8-9000'$ $\approx 25-35\%$ $\approx 1/2$ inch but capable to 10'

TYPE OF SOIL Chert

TESTED BY [Signature] ALSO PRESENT _____

TRENCH DESIGN DATA: AVERAGE PERCOLATION TIME _____ TRENCH WIDTH _____

INLET DEPTH _____ MAXIMUM BOTTOM DEPTH _____ SQ. FT./BEDROOM _____

SOIL DESCRIPTION

NAME Warren Barrette COUNTY Howard FILE NO A 21883
 SOIL MAP UNIT Chester MAP SYMBOL ChC₃ DATE 9/28/93
 GEOLOGIC MATERIAL Gneiss ELEVATION _____ GRID NO 0798 E
 NO. TP₂₁ DESCRIBED BY RJ Pinkley 542 N

Horizon	Depth in.	Color		Texture	Structure		% Rock Fragments	Notes (Moisture, Density, Biopores, Seepage)
		Matrix	Mottles		Grade	Type		
<u>Ap</u>	<u>0-8"</u>	<u>Dark Brn</u>	<u>—</u>	<u>Loam</u>	<u>3f</u>	<u>gran</u>	<u>—</u>	<u>Moist</u>
<u>B_{T21}</u>	<u>8-17"</u>	<u>Red Brn</u>	<u>—</u>	<u>HL-CL</u>	<u>2f</u>	<u>SBk</u>	<u>—</u>	<u>Moist 2-3 mt clay bits on m-c ped face</u> <u>boundary c w</u>
<u>B_C</u>	<u>17-27"</u>	<u>Red Brn - Hstr Brn</u>	<u>—</u>	<u>L-HSL</u>	<u>2vf</u>	<u>SBk</u>	<u>a few stones (gneiss)</u>	<u>Moist</u>
<u>C₁</u>	<u>27"->1'</u>	<u>Yel-Yl Brn</u>	<u>—</u>	<u>M-SL</u>	<u>3vf</u>	<u>single</u>	<u>—</u>	<u>Moist micaceous</u>
<u>C₂</u>	<u>7'-11'</u>	<u>Pale grey variegated</u>	<u>—</u>	<u>SL-FSL</u>	<u>3vf</u>	<u>single</u>	<u>30-50% grndt-collapse structured sap.</u>	<u>Moist pockets of Str. Saprotic over weathered rock</u>
	<u>Pink sands @ 11"</u>						<u>80-90% fract gneiss</u>	<u>5 ft zone (North end) fractured rock (80-90%) at 3 1/2 ft + deeper</u>

LANDSCAPE

Position

Summit _____ Depression _____
 Shoulder _____ Upland X
 Sideslope X Terrace _____
 Footslope _____ Floodplain _____

Slope

Percent 6.8%
 Shape Linear

SOIL DRAINAGE CLASS

ED _____ MWD _____ PD _____
 WD X SPD _____ VPD _____

WATER TABLE

NA

LIMITING ZONE

Fractured Rock

very slowly permeable horizon @ 8-17"
Marginal " @ 17-27"
SOIL CLASSIFICATION OK 294

Chester

TP₂₂ horizons very similar to TP₂₁ to 42'

TEST DATA

Page 3 of 4

NAME <u>Warren Barrett</u>	FILE NO <u>A-21783</u>
LOCATION <u>Gifford Dye lot 20</u>	COUNTY <u>Howard</u>
	DATE <u>9/28/93</u>
	GRID <u>798</u> E
RECORDED BY <u>R.J. Pinkley</u>	<u>547</u> N

HOLE NO.	TEST NO.	DEPTH	CLOCK TIME	ELAPSED TIME	MEASUREMENT	REMARKS (Method, Moisture, Biopores)
TP ₂₁	I _{21A} driven 5"	25-30"	11:35:42 11:45:40 12:06:50 12:23:10 12:46:50 1:08:40 1:37:17 5:03:00	3/4" in 45 min = 60 mpi 3/4" in 50 min = 68 mpi	13" even 13 1/4" 13 3/4" 14 even 14 3/8" 14 3/4" 15 1/8" 17 3/4"	in hSL-L soil of B ₆ horizon of TP ₂₁
TP ₂₁	I _{21B} driven 6"	16-22"	11:42:25 12:06:00 12:22:30 12:45:30 1:05:30 1:42:00 5:01	Too Slow	12" even 13 1/8" 13 1/2" 13 3/4" 13 1/2" 13 1/2"	in Red Brn - Red cl of B ₆ horizon of TP ₂₁
TP ₂₁	P _{21A}	6ft	12:03:30 12:07:00 12:11:30	4 1/2 mpi	Top Nail 2nd Nail 3rd Nail	in f SL massive sparite (ls)

TEST DATA

page 4 of 4

NAME Warren Barrette (Former MacCallum Property) FILE NO A21D83
 LOCATION 61 Ford Dye lot 20 COUNTY Howard
 DATE 9-28-93
 GRID 788 E
 RECORDED BY RJ Pinkley 547 N

HOLE NO.	TEST NO.	DEPTH	CLOCK TIME	ELAPSED TIME	MEASUREMENT	REMARKS (Method, Moisture, Biopores)
TP22	I22A	14-19"	11:58:30 12:11:00 12:27:00 12:48:30 11:13:30 1:52:20 5:04:20	240 min 200 mpi 160 mpi 180 mpi 1 1/2 in 102 min = 153-pi per cent	13 5/8 in 13 1/4" 13 7/16" ext 13 3/8 13 1/2 13 3/4 14 3/4	in Red-Red Brn Cl of B ₂ horizon of T _p 22
TP21	P21B	18"	11:20:00			in Red-Red Brn Cl poured @ 1230 → movement in 4 hrs @ 320 mpi Too Slow

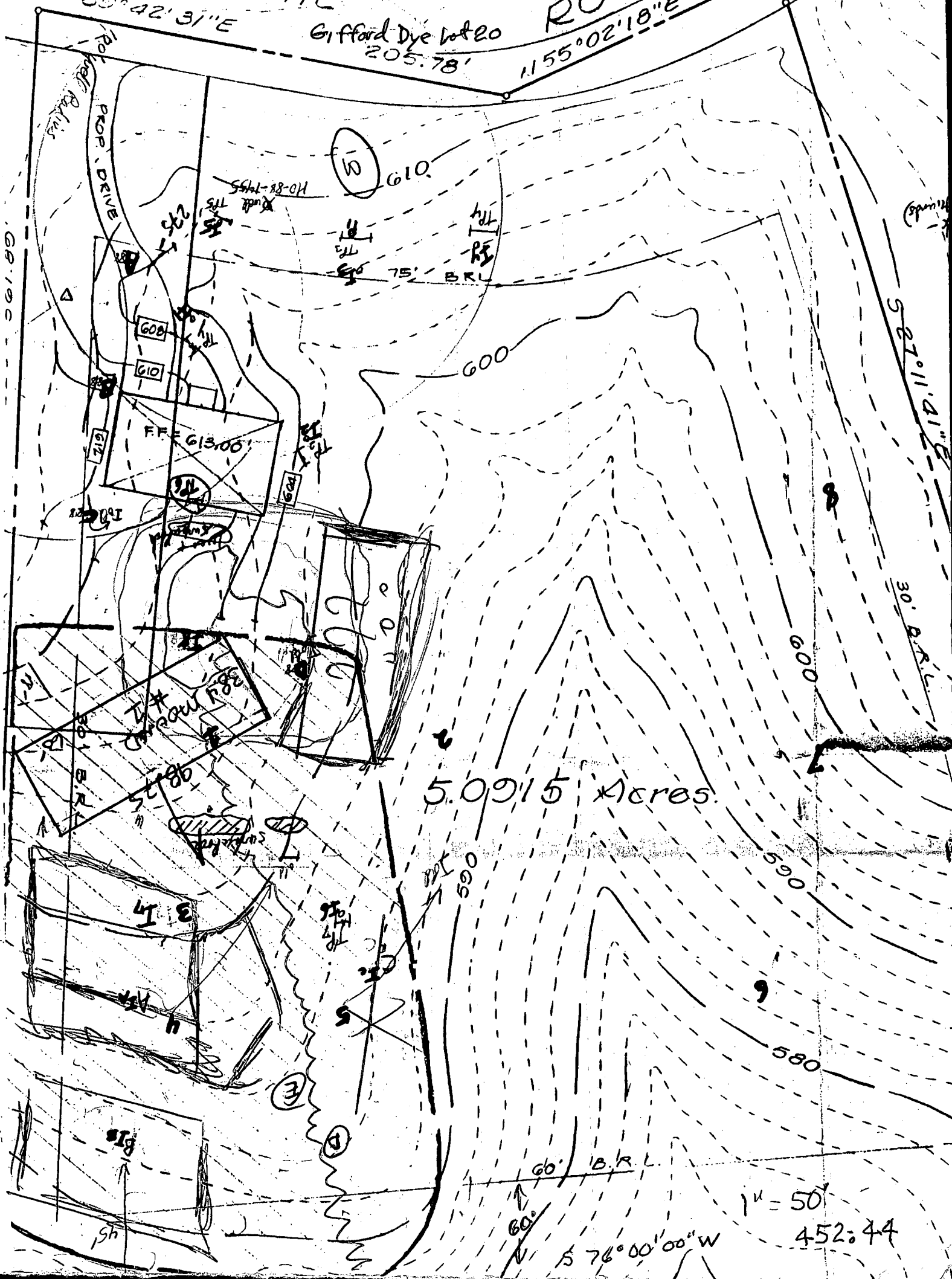
N 89° 42' 31" E

Gifford Dye lot 20

ROA

205.78'

1155° 02' 18" E



5.0915 Acres

590

590

580

60°

60' B.R.L.

S 76° 00' 00" W

1" = 50'

452.44

S 27° 11' 41" E

30' B.R.L.

68.100

Sh

Stg

41 E

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

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115

116

117

118

119

120

121

122

123

124

125

126

127

128

129

130

131

132

133

134

135

136

137

138

139

140

141

142

143

144

145

146

147

148

149

150

151

152

153

154

155

156

157

158

159

160

161

162

163

164

165

166

167

168

169

170

171

172

173

174

175

176

177

178

179

180

181

182

183

184

185

186

187

188

189

190

191

192

193

194

195

196

197

198

199

200

201

202

203

204

205

206

207

208

209

210

211

212

213

214

215

216

217

218

219

220

221

222

223

224

225

226

227

228

229

230

231

232

233

234

235

236

237

238

239

240

241

242

243

244

245

246

247

248

249

250

251

252

253

254

255

256

257

258

259

260

261

262

263

264

265

266

267

268

269

270

271

272

273

274

275

276

277

278

279

280

281

282

283

284

285

286

287

288

289

290

291

292

293

294

295

296

297

298

299

300

301

302

303

304

305

306

307

308

309

310

311

312

313

314

315

316

317

318

319

320

321

322

323

324

325

326

327

328

329

330

331

332

333

3

9/30/93 Meeting @ Mr. Altieri + Barrette, + G.W.

Gifford by Lot 2

but get letter first

Dig 2 trenches in specific locations, spec depth + width.

give B Brame day that trenches are completed + approved (don't have to wait for S.T. placement before issuing)

Need Stebe trench site + transit to put on contours -

CONDITIONS OF INSTALLATION WOULD BE
AS FOLLOWS:

- 1) Stake out the proposed location of the first two drain field trenches using a level or transit to orient the trenches with the original elevation contours on the site. The stake out locations must be approved by a health department inspector before proceeding to step 2.
- 2) The first two trenches are excavated. Trenches are to be 3ft wide, 5ft deep, with level bottoms. Total trench length will be 280 Linear feet. This suggests three 93 foot long or four 70 foot long trenches. Some deviation to avoid subsurface rock is permissible pending health department approval. Once the first two trenches are excavation call for an inspection and approval before proceeding.
- 3) After initial trench approval, layout and excavate the remaining trenches. Again call for approval before proceeding further.
- 4) After all open trenches are approved, proceed gravel filling (2ft) placing drain pipe at 3ft below grade, paper trenches and set Distribution Box. Call for inspection and cover trenches.

RE. Gifford Dye Lot 20

September 24, 1993

This is to advise that the above ^{Referenced} building permit application cannot be approved at this time. Septic plans are incomplete.

A significant portion of the planned septic area has been rendered unsuitable because of unauthorized excavation. Follow-up testing was conducted on September 9, 1993, within some of the remaining portion of the planned septic area. Test results revealed percolation rates too slow for any type of sewage disposal system in the area tested.

An additional test date has been scheduled for September 28, 1993 to determine if suitable rates can be established elsewhere on the property. After consultation with Mr. Jay Prager and Barry Glotfelty of the Md. Dept. of Environment, Innovative/Alternative Sewage Disposal System Program, the following parameters for site testing and system design will apply:

- (1) All infiltrometer percolation tests will be performed in the most restrictive soil horizon in the upper two feet of the soil profile. Any restrictive horizon (i.e., rock, fragipan, dense slowly permeable soil) close enough to the 24 in. boundary to suggest an effect on the overall functioning of a sand mound system will also be considered in the site evaluation. (Unless otherwise mentioned, all further reference to sewage disposal system will mean a sand mound type SDS.)
- (2) Acceptable percolation rates for a conventional sand mound system are 2-60 minutes per inch on site^s with slopes less than or equal to 12%.
- (3) Percolation rates of 60-90 minutes per inch will be considered ^{for} I/A sand mound SDS. Only sites with slopes less than 12% will be considered.
- (4) Sites with slopes between 12-15% may be considered for I/A sand mounds if percolation rates, tested as above, are 2-60 minutes per inch (2-30 minutes per inch preferred).
- (5) Every proposed mound site must be retested according to the above

parameters, even if previous satisfactory percolation rates were observed nearby.

- (6) The design and orientation of a sand mound to a specific site must be one that emphasizes optimum functional performance based on test results. Squarish designs provided to best fit a sand mound onto a topographically restricted site will not be considered.
- (7) Although three sand mound sites are preferable (one initial and two repair), one initial and one repair may be acceptable as a minimum requirement for an existing lot of record.
- (8) All marginal conventional and I/A tests and related design plans are subject to Md. Dept. of Environment confirmation prior to approval.

Finally, since further testing and system design work may be technically difficult and time consuming, we recommend that you consider hiring a private hydrogeological consultant to best advise and assist you in the development of your property.

Should you have any questions, please call me at (410) 313-2640 weekdays between 8:30 a.m. and 5:00 p.m.

Respectfully yours,

Craig Williams, Director
Water and Sewerage Program

CW:TRS

cc: files

Howard County - Old Frederic Rd
Gifford Dye lot 20 (Previously MacCallum Property)

Mostly, Noting earthshattering
Drip Irrigation in our climate

Notes from 9/21/93
Meeting @ MDE w/ J. Proger, B. Glotfelty, R. Pinkley

MDE Recommendation - will consider approval of 80-90 min SM
initial & one. - but must be tested in most restrictive horizon
(look @ 24 would be considered a barrier
duplicate tests

2) Before I approve it @ 90 min have MDE confirm it.

3) Process of developing 3rd Area - and SM's @ 90 min or equivalent is

4) If we can show a clearly adequate spacing for a road network that
will work at these rates we can confidently

5) Develop a chronology of this before case - work & cover /
this goes thru court.
Helps to develop chronology now.

6) Slope - at less than 60 mph could maybe go to 15%, but
prefer 2-30 for steeper. - Hobb to slope -

7) Recommend Property owner prepare his own consultant to explain
substantive

8) MDE will Not provide some @ times

9) If this is happening, MDE is granting a little variance of their
Policy

10) Delineate area, they'll come out and verify, confirm but not
actual testing - they don't have manpower - their pretty pressed.

11) Data SM @ 120 given proper controls, high confidence
> 120 good success but Mixed, LPD don't like over slow soils > 60
up over programs (could correct by adjust loading later)

When felt comfortable
of ST's of design

organize
file in
chronological
order

90-120 mph
could be ok

Some literature on loading rates on letter effort quality.
Aliphant (Clearwater) got his NSF approval.

9/15/93
10:50 Meeting
Warren Barrette
CLU + R.P.

Leaving Now - out of their
place by Sept.

on Gifford Dye Lot 20 (on Old Frederick Rd just w/ Forsythe Rd)

- 1) How did his perception of where to begin Bldg Excavation
- 2) The Problem: Haven't been able to establish within an area suitable perc tests.
- 3) Regs Say Shall Not, Cannot, etc. - but during Appeal Process decisions may be overruled. Holding Tanks mentioned
- 4) Do we proceed as advocates or advisors?
 - 1) could continue testing - test it exhaustively
- 5) Time Does Not See a resolution within next 30 days.
- 6) Wants a written statement of this position before proceeding - pref. resume testing 2 weeks from now if agreeable - plan to get him a letter in Mail by Friday or Close of Business Monday
- 7) Support bob @ watermeter on daily basis.
- 8) In terms - The excavation was absolutely as called for.
 Have Greg ^{his contractor} called set tentative date. ^{test} Schedule for Tues - Fri Sept 28 - Oct 1, '93
 (if Not then, then Wed Oct 6th)
 May try to get State Specimen to see if encourage
 [Tell them to bring a clinometer]

Notes from Meeting of

9-15-93 by ~~Barrett~~ Barrett 10:30

Craig Williams

Ron Pinkley

~~Craig Allison~~

Art Barrett

8 Problem

- Cannot establish area to put in septic system
- All test last week were to slow

9 Areas previous OK could not pass

- House / Rock not enough room between

- Cannot issue building permit

- Can Appeal

- No holding tank

- Get Engineer to do evaluation

- Dowd proceed as
advisary or advisory?

- Co Can continue testing

2-3 days

- if there is absorption rate

a system could be designed
w/ MDE acceptance

- Sand Moard as County
had located, (in Co files)

is where house was

located by WAB. WAB

did not review files to

that info

• Do not see resolution
in next 30 days

- Room for alt. locations

- 2 holes in 86 hit rock
1-2 feet

- Stake out \mathbb{R}

- Co will write letter
indicating what has
happened & what can be done &

- Testing ZWKS from now
if OK

- I will talk to Greg

- Call Monday asking for letter

- Check water bill

- Check water meter

150 gallons / bedroom for
what ever family may move in.

Regardless of everything
excavation was uncalled for
and there is no reason for it
- could have called to see if
everything was OK or
if just paperwork

Possible test Date

Sept 28th - Oct 1

Tues - Friday

or Wed Oct 6

Are all
of the days
OK

SITE INSPECTION SHEET

Need a
Shovel
+ Shovel Handle

OWNER: (Formerly McCallum)

DATE REQUESTED: 9/9/93

PHONE #: _____

CONTRACTOR: _____

ADDRESS: Gifford Dwp lot 20

WELL TAG #: HO-88-1455

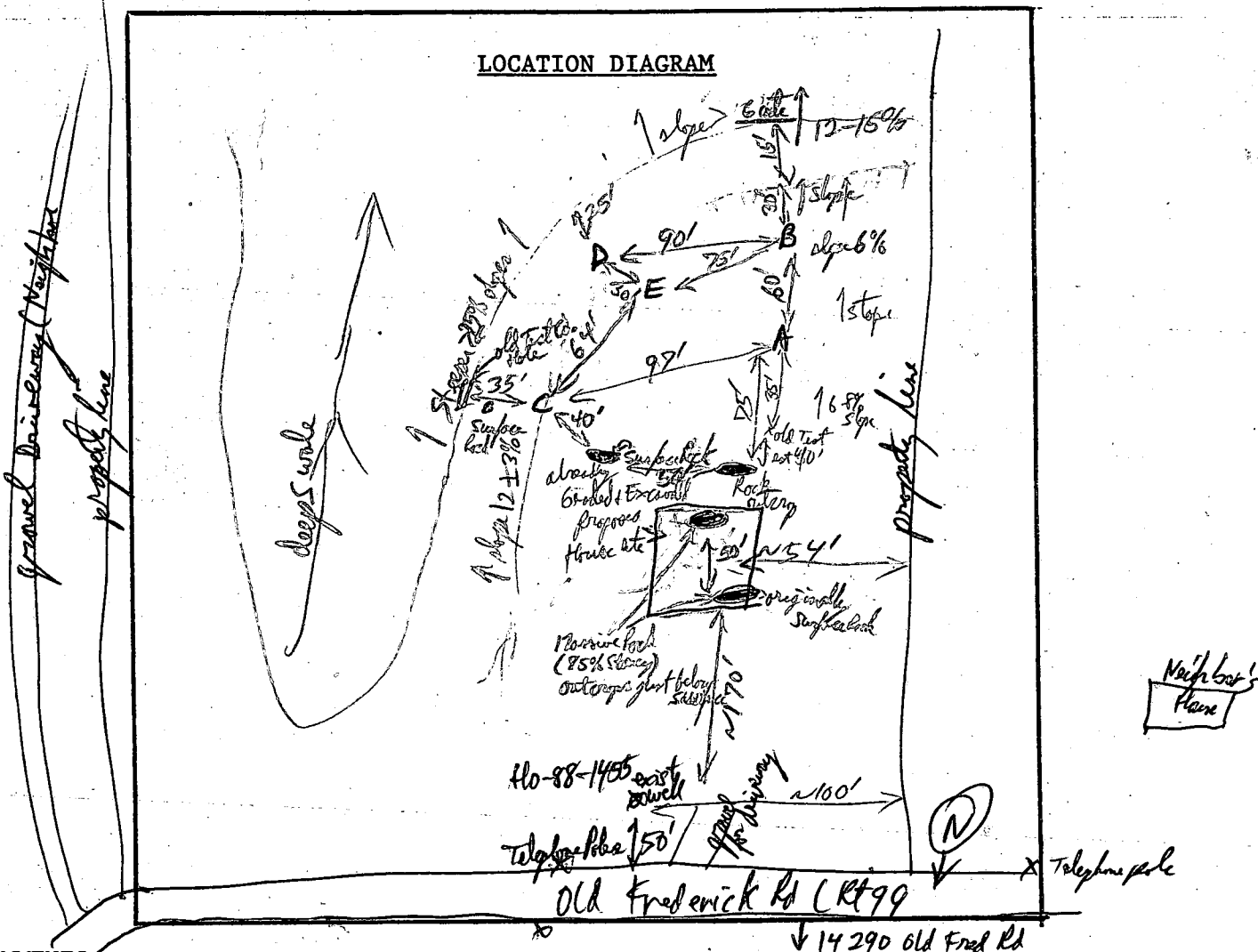
1/2 Old Frederick Rd (Rt 99)

COUNTY #: Howard

about 300' W / From the Rt Intersection

PROPOSAL: Sand Mound Testing (alternative SDA)

LOCATION DIAGRAM



COMMENTS:

Slow infiltrometer rates and rock too near surface @ Hubs D + E for sand mound use.
Area limited by surface rock outcrops and adjacent areas with slopes greater than 12%

DATE: 9/9/93

INSPECTOR: R. Bentley

SOIL DESCRIPTION

NAME (old Michellum property) Gifford Dye lot 20 Old Frederic Rd COUNTY Howard FILE NO _____
 SOIL MAP UNIT Cg Co - Ch Co Chester MAP SYMBOL Ch Co + Ch Bz Chester DATE 9/9/93
 GEOLOGIC MATERIAL Gneiss ELEVATION _____ GRID NO _____ E
 NO. Hole A + Ia DESCRIBED BY R. J. [Signature] N

Horizon	Depth in.	Color		Texture	Structure		% Rock Fragments	Notes (Moisture, Density, Biopores, Seepage)
		Matrix	Mottles		Grade	Type		
A ₁	0-6"	10-7.5YR 5/4	—	HL		gran	15% clumps	dry
A ₂	6-10"	10-7.5YR 6/4	—	HL-CL		sbk	10%-15%	dry
Bt ₂₁	10-18"	7.5YR 5/8	—	HL-CL			15%	dry
Bt ₂₂	18-36"	2.5YR 4/8	—	ksL-scl co		sbk	15%	dry boundary wavy follows rock contours
CR	36-42"	5YR 4/4	—	SL		Massive to loose	10%	dry boundary wavy - follows rock contours
R _x	varies	—	—	Gneiss Rock			Bedrock @ 3 1/2 - 5'	Refusal @ 5 ft

LANDSCAPE

Position
 Summit _____
 Shoulder _____
 Sideslope _____
 Footslope _____
 Depression _____
 Upland _____
 Terrace _____
 Floodplain _____

Slope
 Percent 6-8%
 Shape _____

SOIL DRAINAGE CLASS

ED _____ MWD _____ PD _____
 WD SPD _____ VPD _____
 WATER TABLE
NA

LIMITING ZONE

Bedrock @ 3 1/2 - 5 ft

SOIL CLASSIFICATION

Chester sil-gravel, sil

(Former MacCallum Property)
 Gifford Dye lot 20
 S/S old Frederic Rd (B499)
 approx 300' w/ Forsythe Rd Intersection

9/9/93 R. P. Kelly

I_A driven 6" depth 20-26"
 (7 1/2" head) 11" even 10:18:18
 start 11 1/2" 10:23
 11 3/4" 10:30:00
 11 15/16" 10:35:00
 12 1/8" 10:44:20
 12 1/4" 10:56:00
 12 3/8" 11:12:46
 12 1/2" 11:31:00
 12 5/8" 11:52:00
 12 3/4" 12:17:00
 12 7/8" 12:39:00
 ~ 13" even 12:49:00
 est 160 mpi

I_B depth 15'-20"
 driven 5" (filled 7")
 start 13 1/4" 11:10:40
 13 3/8" 11:15:40
 13 5/8" 11:25:20
 13 3/4" 11:53:20
 13 9/16" 12:20:20
 14" even 12:50:00
 est. 240 mpi

I_C depth 16-23"
 (driven 7") (filled 5")
 13" even 1:36:00
 13 5/8" 1:56:00
 13 3/4" 2:16:00
 14" even 2:36:00
 14 1/4" 2:56:00
 14 3/16" 3:16:00
 14 3/16" 3:38:00
 14 3/16" 3:56:00
 Too Slow

Hole B
 A₁ 0-4" yel brn h loam
 A₂ 4-10" " " -CL
 B₁ 10-24" Red Brn h SL - SCL
 B₂ 2-6" Red (2.5YR 4/6)
 - Red Brn c. SL - co h SL
 weak S b k & fissure
 50% loam (Gneiss)
 6" Reddish calc pale yel Red Brn
 SL CNo loam
 11" S/S NS Base Rock @ 9 1/2 - 10
 Refusal @ 4-5' NS

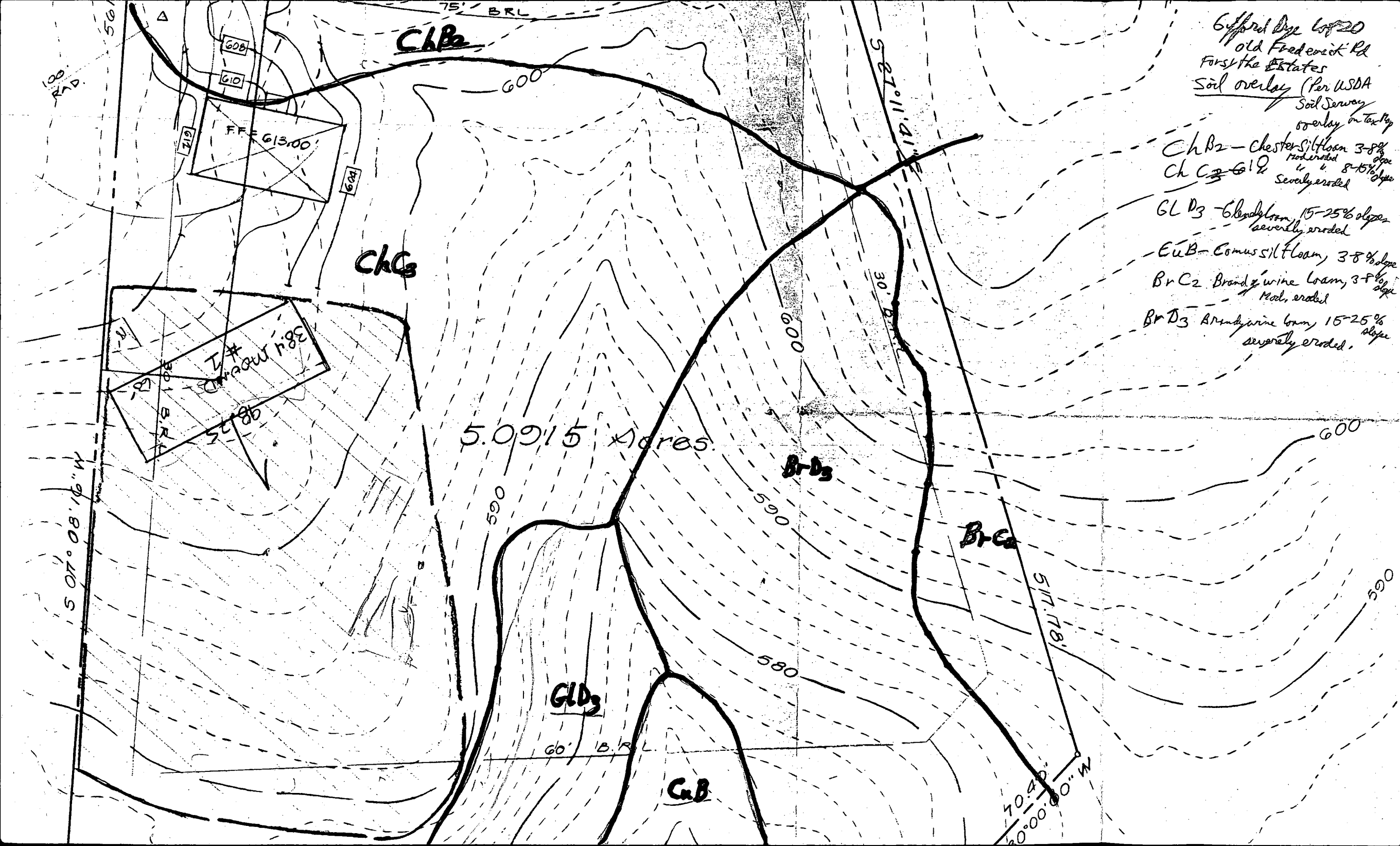
Hole C
 10" Red Brn SL - hL Top soil
 Red Brn u. clayey
 2" ISCL - hSL 35-45% clay
 Red Brn SL - SL
 4 1/2 - 5" few loam
 stones 50-50% Red Brn SL - hL
 6 1/2" dark grey SL > 50% loam
 (carbonat brittle weathered
 Gneiss Rock)
 7 1/2" Refusal @ 7 1/2'

Hole D
 Rocks within 6" of surface
 Refusal @ 1 1/2'

Hole E Rocks within 6" of surface
 Refusal @ 1 1/2'

6/19/20
 old Frederick Rd
 For the Estates
 Soil overlay (Per USDA
 Soil Survey
 overlay on tax map

- ChB2 - Chester silt loam 3-8% slope, moderately eroded
- ChC2 - Chester silt loam 8-15% slope, severely eroded
- GLD3 - Glenholme loam 15-25% slope, severely eroded
- EUB - Comus silt loam, 3-8% slope, moderately eroded
- BrC2 - Brandywine loam, 3-8% slope, moderately eroded
- BrD3 - Brandywine loam, 15-25% slope, severely eroded.



5.0915 Acres

ChB2

ChG

BrD3

BrC2

GLD3

CuB

FF = 613.00

384 sq ft
T# 188

507.80

517.78

527.11

600

590

580

600

590

60' BRL

500.00
500.00
500.00

100
R7D

56

75' BRL

608

610

612

614

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

30' BRL

384 sq ft
T# 188

Row -

9/13

* ASAP PLEASE PROVIDE:

LOCATION

DATE

DEPTH

RATE

FOR ALL KNOWN PELC HOLES
GIFFORD OYE LOT 20.

FOR DISCUSSION WITH D. KENN, F. SKINNER
AT 11:00 TODAY!

CW,

MacCallister Property

6/19/85 by Lot 20 Palin (A 21783) 7/8/85 "Market" Rock - No Test

original Tests 5/12/86 by S. Abel - No Perc Rates, 708 holes (obs.)
with Rock too close to surface. (Numbered 1-8)

6/20/88 by? - Infiltration
(Numbered A-D) B @ 15" - 26 min
2-88 subunit D @ 16" - 56 min

1-5-88 by R.J. Pinkley Red Area I TP4 I4 @ 18"-23" 20 mpi (after 3 1/2" drop)
(12-17% slope) (only dig 45") TP3 P3 @ 41" Too Slow
(only 1/16 - 1/8" drop in 76 min)
(dig 8" deep 10 holes)

TP5 I3 @ 13-18" 30 mpi (with drop)
(dig 43") IS @ 14-19 1/2" 15 mpi (4" drop)

Red Area II (5% slope) TP2 I2 @ 19-24" 60 mpi (2 13/16" drop)

Blue Area TP1 I1 @ 16-21" 20 mpi (6" drop)
(6-12% slope) TP6 Hit Rock @ 2 ft. No Test

(excavated Area) -> I8 @ 16-21" 16 mpi (4" drop)

Back Area of Blue (between large surface rock and rear ledge) I7 @ 16-21" 20 mpi (2 1/2" drop)

TP7 I6 @ 15-20" prob 60 mpi (1 1/2" drop)

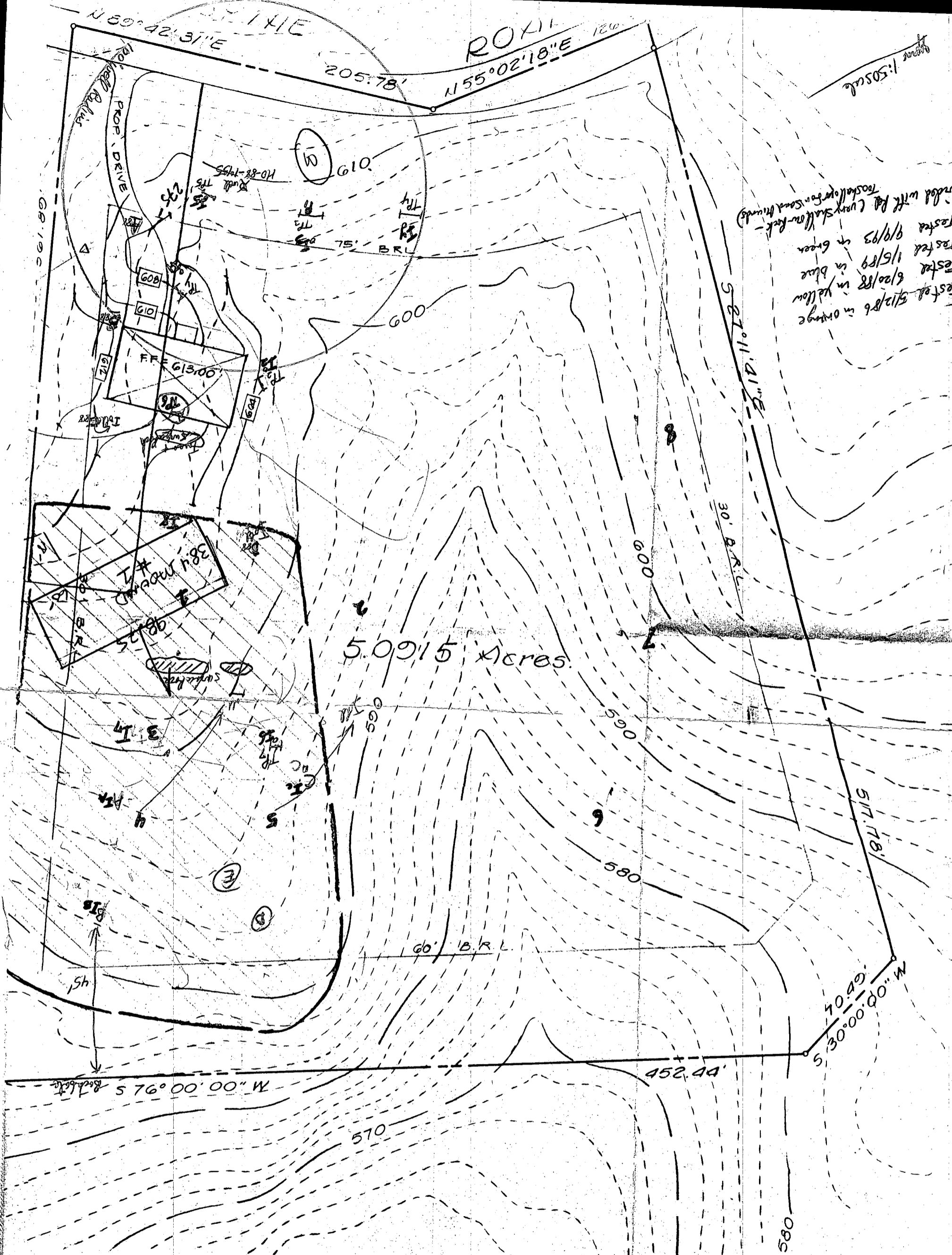
9-9-93 by R.J. Pinkley (Rock @ 3 1/2 - 5') A I_A @ 20-26" est 160 mpi (2" drop)

(11" deep Rock 1/5 4' 1/2") B I_B @ 15-20" est 240 mpi (1 3/4")

(Rock @ 6 1/2') C I_C @ 16-23" NM lost 40 min (1 3/16")
Too Slow

(Rock @ 6") D Too Rocky, Not Test

(Rock @ 6") E " " " "



1:50 scale
 Tested 5/12/86 in orange
 Tested 8/20/88 in yellow
 Tested 1/5/89 in blue
 Tested 9/9/93 in green
 Tested with PA (very shallow rock -
 rockholes for sand (mounds)

5.0915 Acres

PLAN VIEW

SCALE: 1" = 50'

14295 Old Frederic R. Rd. (BP 50122)
 Gifford Dye lot 20
 95 Old Frederic R. Rd. LEAD
 SWETSNS TAXSOS
 ~ 300' w/ Forsyth Rd.
 DATE

Memo: To File
From: Ronald Finley

June 3, 1993

Re: Clifford Dye Property
lot 20 Forsythe Road.
Parcel 265 (A21783)

A Conference with Warren Barrette at Health Department Office

At that time I explained to Mr Barrette that the approval for a Sand Mound was conditional upon using the area ^{previously} tested and approved.

He's already lost one tested site because of the placement of

a water well (HO-88-1455). Now he's proposing a house

location that eliminates most of the previously approved

sand mound area. Therefore, I advised him, if he wished to

pursue this house site (approx. 200' off Old Frederic Rd),

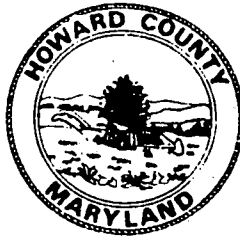
then he would need additional perc tests to establish the Minimum

10,000[±] SDA ^{and} or 3 Sand Mound Sites based on the House size (i.e. # Bdrms) which

^{was greater} ~~was~~, plus submission of plans for the respective sand mound for

review & approval by this office before a Bldg permit would be considered.

RFF



HOWARD COUNTY HEALTH DEPARTMENT

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

August 21, 1991

Reply to:

Mr. Tom MacCullum
14506 Monticello Drive
Cooksville, Maryland 21723

Re: Gifford Dye Property - Lot 20
Forsythe Road

Dear Mr. MacCullum:

This is to advise that shallow percolation testing conducted January 9, 1989 for purposes of conventional sand mound septic system installation was successful.

An approved well (HO-88-1455) has been drilled on the property. The driller's completion report indicates a depth of 160' and a yield of 10 gallons per minute. Copies of septic system specifications to serve a 5 bedroom house and to serve a 3 bedroom house are enclosed.

The Howard County Health Department views this lot as eligible for building permit approval pending submittal of an acceptable site plan detailing septic system plans.

If you have any questions regarding this matter, please contact me by calling 461-9933.

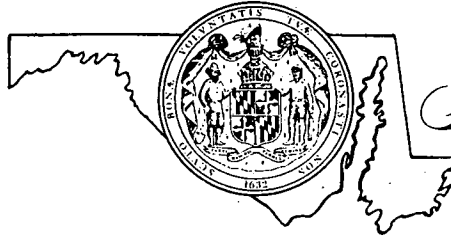
Very truly yours,

Craig Williams, Director
Water and Sewerage Program

CW:cm

Enclosure

State of



Maryland 2/4/89

Craig

Design MOUND ASAP
4BR w/ disposal

SA

DEPARTMENT OF THE ENVIRONMENT

2500 Broening Highway, Baltimore, Maryland 21224

Area Code 301 • 631-3652

William Donald Schaefer
Governor

Martin W. Walsh, Jr.
Secretary

January 18, 1989

Mr. Frank Skinner, Director
Environmental Health
Howard County Health Department
P.O. Box 476
Ellicott City, Maryland 21043

RE: MacCallem Property
Old Frederick Road

Dear Mr. Skinner:

On January 5, 1989 I conducted eight infiltrometer percolation tests and seven observation trenches on the above referred lot. The results of these tests suggest that this site would be suitable for conventional sand mound sewage disposal systems. Copies of my data sheets are enclosed. The area encircled by a blue line appears to have 2 to 3 ft of suitable soil over fractured bedrock with percolation rates between 2 and 30 min per inch. You may recall in our Sand Mound Training Classes this past year, we informed all enrollee's to consider conventional sand mounds SDS on sites with more than 2 ft to a limiting horizon such as fractured bedrock, a very slowly permeable or impermeable soil horizon, or a seasonally high water table. Red area I has rates between 2 and 30 min per inch with 2 ft soils above a slowly permeable soil horizon but has slopes greater than 12%, which make it eligible for an I/A SDS, and Red Area II has rates between 30 and 60 min per inch in soil 2-3 ft above fractured bedrock which also requires I/A SDS. Although there are two rock outcrops noted within the Blue Area, there should be sufficient room to permit a reasonable setback from these rock outcrops and still allow an initial and two replacement sand mound systems.

Mr. Frank Skinner, Director
Page Two

If you have any questions on this matter or need assistance in designing systems for this site please feel free to call me between 8:30 AM to 4:30 PM Monday through Friday at 631-3652.

Sincerely,



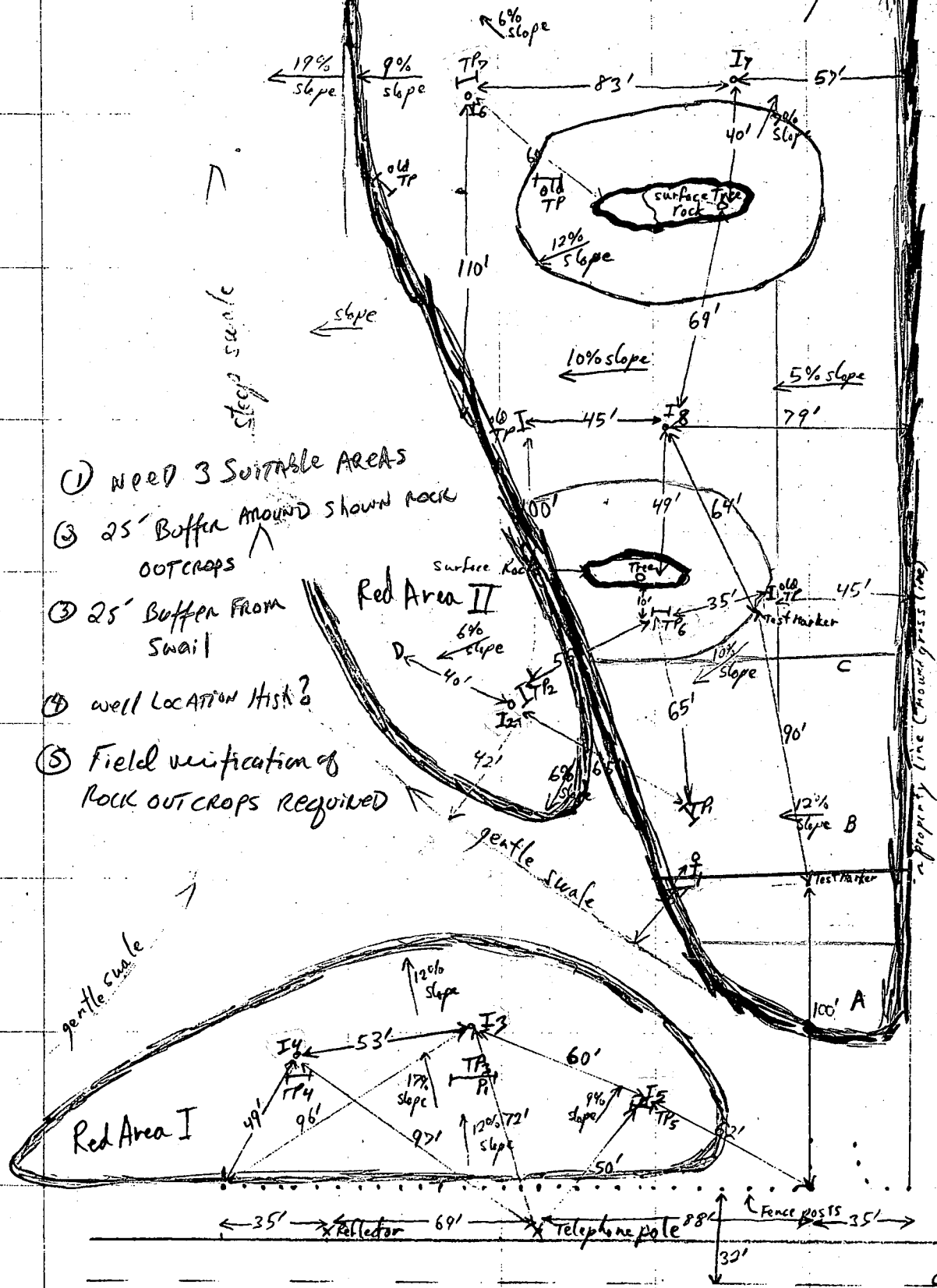
Ronald J. Pinkley, R.S.
Division of Residential Sanitation

RJP:mjt

cc: Jack R. Holthaus

MacCallum Property
old Frederic RD

Blue Area



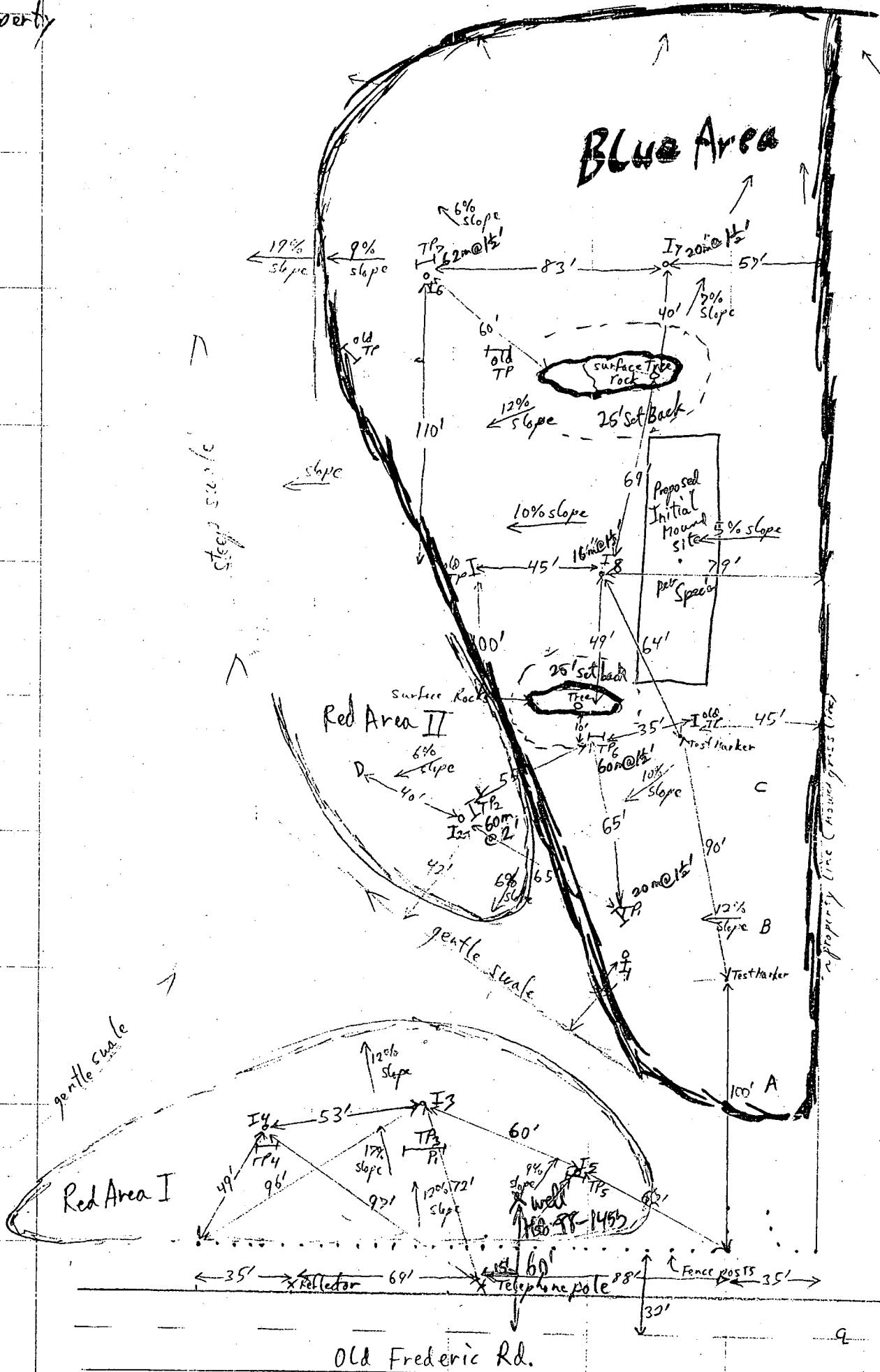
- ① need 3 Suitable Areas
- ② 25' Buffer around shown rock outcrops
- ③ 25' Buffer from Swail
- ④ well location Hist?
- ⑤ Field verification of Rock outcrops required

approx 150ft
w/ Forsythe Rd
Intersection

Old Frederic Rd.

1/7/89
KJ Pinkley

MacCallum Property
old Frederic RD

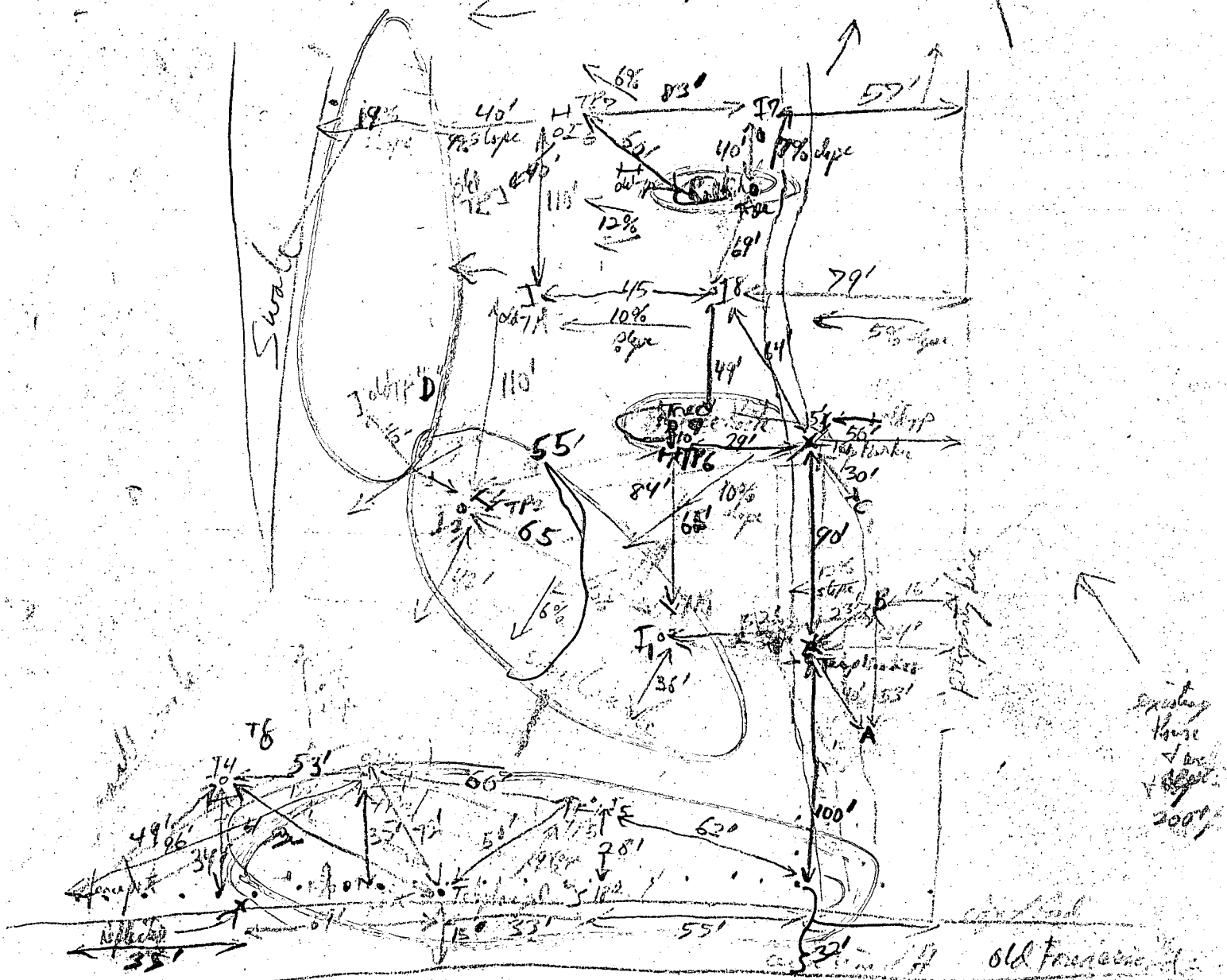


approx 150 ft
w/ Forsythe Rd
Intersection

1/7/89
K.J. Pinkley

S I T E S K E T C H

NORTH 



NAME: Toblerpole COUNTY: Howard DATE: 1-5-87
1-29-87

Note: Show the following items:

1. Property boundaries and dimensions.
2. Hand auger holes (AH), testpits (TP), boring (B) and tests (T).
3. Slope percent and direction.
4. Existing and proposed buildings, driveway, swimming pool, easements and right of ways on property.
5. Existing and proposed wells, septic systems, sewage disposal areas, ditches, water bodies and permanent stormwater control structures on property and within 150 feet of property lines.

(tree Guiper)

TEST DATA

NAME <u>MacCallum</u>	FILE NO _____
LOCATION <u>Old Frederic RD</u>	COUNTY <u>Howard</u>
<u>Gifford Dye Subdiv. lot 20 or 21</u>	DATE <u>1-5-88</u>
RECORDED BY <u>R. J. Pinkley</u>	GRID _____ E
	N

HOLE NO.	TEST NO.	DEPTH	CLOCK TIME	ELAPSED TIME	MEASUREMENT	REMARKS (Method, Moisture, Biopores)
Inf TP2	I ₂ filled 9"	19"-24"	10:55		12 1/16"	Roughed Bottom of trench Moist soil SL-Pad Plastic Soils appear to be HL 22-26% clay Through 25-40% small grade & Notable sand (25-35%) at lowest level.
			11:15		12 5/16"	
			11:57		13 7/16"	
			12:20		13 9/16"	
			1:17	20 min	14 3/16"	
Inf TP1	I ₁ filled 9"	16"-21"	11:10		11 5/8"	Same as #2 Fract Gneiss at 24" deep ?
			12:00		13 7/8"	
			12:23		14 7/8"	
			1:22	20 min	17 5/8"	
	I					

TEST DATA

NAME <u>MacCallum</u>	FILE NO <u>ground not found but partial work done</u>
LOCATION _____	COUNTY <u>Howard</u>
_____	DATE <u>1-5-88</u>
_____	GRID <u>90° forecast clay (Evanston) E</u> <u>air temp 32°-35°F</u>
RECORDED BY <u>R.J. Pinkley</u>	N

HOLE NO.	TEST NO.	DEPTH	CLOCK TIME	ELAPSED TIME	MEASUREMENT	REMARKS (Method, Moisture, Biopores)
IA } TP3	I3 IA	13-18"	11:42		12" even	
			12:02		13" even	
			12:26	14-25 = 30 mpi	14 1/16"	
			1:13		15 7/8"	
No Movement } TP3	A	41"	11:55		Top Nail	observable "drops" noticed since start
			12:25	Too slow	No Movement	
			1:11		approx 1/16-1/8"	
OK } TP4	I4	18"-23"	1:56		12 1/4"	Boundary of dense clay layer at 24-29" Boundary is clear-wavy
			2:12		13 3/16"	
			2:30	18-20 mpi	14 3/8"	
			2:52		15 3/4"	
OK } —	I5	14-19 1/2"	2:09		12 7/8"	
			2:25	10-15 mpi	14 3/4"	
			2:59		17 1/4"	

TEST DATA

NAME Tom MacCallum 756-4404 FILE NO. _____

LOCATION Old Frederic Rd COUNTY _____

250 yards E #97 DATE _____

GRID _____ E

RECORDED BY Tom MacCallum + R.J. Pinkley, Gary Poole of Eagle Septic N

E Backhoe

HOLE NO.	TEST NO.	DEPTH	CLOCK TIME	ELAPSED TIME	MEASUREMENT	REMARKS (Method, Moisture, Biopores)
TP7	I6	15-20"	3:24		11 1/2"	This is within conventional area proposed just ~60 min in restrictive zone?
			3:53		11 7/16"	
			4:12		12 1/16"	
			4:28	part 60 min	12 3/8"	
			4:38	hit water early	12 5/8"	
I7	16-21"	3:47		11 7/8"		
		4:12		12 9/16"		
		4:26	hit water 25 min	12 15/16"		
		4:37	20 min	13 7/16"		
I8	16-21"	3:33		11 1/2"		
		3:51		13"		
		4:11		14 1/4"		
		4:25	1 1/2 in 24 min	15 1/8"		
		4:35	16 min	15 3/4"		

SOIL DESCRIPTION

NAME Mae Callum COUNTY Hawaii FILE NO _____
 SOIL MAP UNIT Chester MAP SYMBOL _____ DATE 1-5-87
 GEOLOGIC MATERIAL _____ ELEVATION _____ GRID NO _____ E
 NO. TP3 DESCRIBED BY RJ Pinkley _____ N

Horizon	Depth in.	Color		Texture	Structure		% Rock Fragments	Notes (Moisture, Density, Biopores, Seepage)
		Matrix	Mottles		Grade	Type		
	0-7"	^h 2.5YR 4/4	—	L-SL		gran	angular to sub-angular-cobble 10%	Moist
	7-22"	hls 2.5YR 4/4	—	CL	2F-08	sbk	30% of 1/2 1/4 + 5mm	Moist 27% clay mt roots no clay films mfr - mfb
<i>banking gr</i>	22-50"	2.5YR 4/4	—	CL-LL	2F-m	abk	10-15% mfr - mfb	Moist - wet from organic (in contact) 35% clay mfr - mfb fb pore
	50"-off	Mix 5/6 5YR 5/6 hls	10YR 5/6	L-SL	—	loose	—	bank - dry hls

LANDSCAPE

Position

Summit _____
 Shoulder _____
 Sideslope _____
 Footslope _____
 Depression _____
 Upland _____
 Terrace _____
 Floodplain _____

Slope

Percent 12-17%
 Shape Convex

SOIL DRAINAGE CLASS

ED MWD _____ PD _____
 WD SPD _____ VPD _____

WATER TABLE

LIMITING ZONE

None - CL with slow perk
at 24-50"

SOIL CLASSIFICATION

0-9" ^{Bn} 2.5YR4/4 SIL ^{grn} micaceous Muf - Moist
 9-16" ^{hdbn} 2.5YR4/4 SICL 2F-4F sbk Moist 27-30% Clay } 10-15% cobbles + stones
 16-24" ^{hdbn} 2.5YR4/4 SICL 2-3 m-f sbk Moist 27-30% Clay } mdr
 24" ^{hdbn} 2.5YR4/4 SICL 1 Moist 40% clay
 39-45" ^{hdbn} 2.5YR4/4 SIC 1 c sbk 10-15% clay
 45-51" ^{hdbn} 2.5YR4/4 SIC 1 c sbk 36-46% clay
 boundary gradual - diffuse irregular

TP6 - Mt look @ 2ft

TP7 0-6" Top soil HL grn
 6-16" HL - Moist
 TP2 16-36" 40% - 50% cobbles + lg gravel angular weathered grains
 Fruit Pak @ 36"

SOIL DATA SHEET
 NO. 1
 DATE
 LOCATION
 FIELD NO.
 ANALYST
 FIELD NO. 2
 ANALYST

SOIL DESCRIPTION

NAME Mac Callum COUNTY Howard FILE NO _____
 SOIL MAP UNIT Bradyville / Chester MAP SYMBOL _____ DATE 1-5-87
 GEOLOGIC MATERIAL Gneiss ELEVATION _____ GRID NO _____ E
 NO. TP2 DESCRIBED BY R.J. Pinkley _____ N

Horizon	Depth in.	Color		Texture	Structure		% Rock Fragments	Notes (Moisture, Density, Biopores, Seepage)
		Matrix	Mottles		Grade	Type		
	0-8"	7.5YR 4/6	—	L		gran	>5%	Moist Layer - MWD
	8-15"	7.5YR 4/6	—	L	3-2a-f	abk -sbk	9% cilla >5% fragments	Moist. MWD slightly over the soil - Moist. 18% clay 18% clay
	15-22"	2.5YR 4/6 to 0YR 4/6	fin black filament stone faces	hL-CL	2m-f	stk-abk	30% cobbles to gravels	denser mfi, brittle 24-27% clay hardness very clean
	22-33"	2.5YR 4/6	—	L-SL		gran loose	>10%	Moist-brown 14-16% clay 30% Sand 30% cilla
	close to fracture	Gneiss rock (highly weathered)						

LANDSCAPE

Position

Summit _____
 Shoulder _____
 Sideslope _____
 Footslope _____
 Depression _____
 Upland _____
 Terrace _____
 Floodplain _____

Slope

Percent 6-8%
 Shape _____

SOIL DRAINAGE CLASS

ED / MWD PD
 WD / SPD VPD

WATER TABLE

LIMITING ZONE

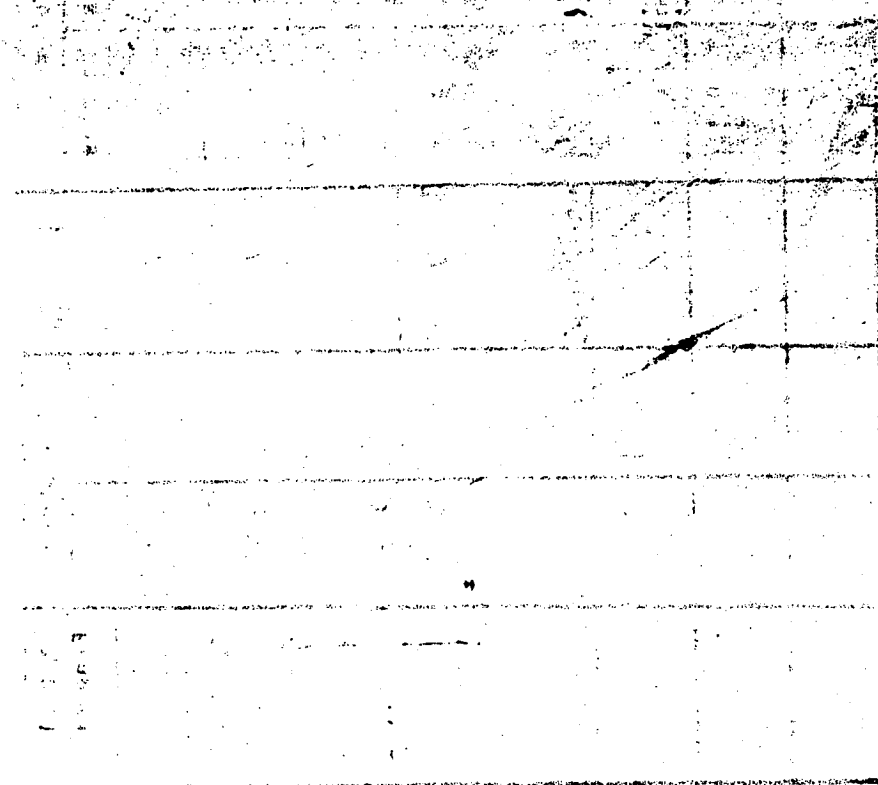
SOIL CLASSIFICATION

TP1 came out TP2 hit Fractures Breccia >90% + Refusal at 24 inches

TP5 0-5 2.5YR 4/4 - L green loose
5-12 " - L 2.5Y 5/6 10-15% of angular cobbles most moist

TP6 12-38 2.5YR 4/6 hl-cl 2F+sbk 25-27% clay
2.5YR 4/6 CL 2C sbk
38-43" 2.5YR 4/6-4/8 LS intrusion into - low structure moist -
CL layer

Start at 27" intrusion



Vertical text on the right side of the grid, possibly a scale or legend.

SOIL DESCRIPTION

NAME Thomas MacCallum COUNTY Howard FILE NO. A-21783

SOIL MAP UNIT CHESTER MAP SYMBOL Ch DATE 6-20-88

GEOLOGIC MATERIAL WISSAHICKON SCHIST / Elevation _____ GRID No. _____
 (SOFT SCHIST)

No. TP B DESCRIBED BY S. Abel

Horizon	Depth in.	Color		Texture	Structure		% Coarse Fragments	Notes (Moisture, Density, Consistence, Biopores, Seepage)
		Matrix	Mottles		Grade	Type		
O-A1	0"-2 1/2"	Strong Brown	None	LOAMY SAND	FINE	GRANULAR	10-20%	MOIST, STICKY - ABUNDANT ROOTS w/ OM THIN MAT
A-2	2 1/2"-5"	Yellow w/ Brown	Yellow BR POCKETS of	SAND LOAM	COARSE	GRANULAR	15-20%	MOIST, STICKY, WAVY BOUNDARY ABUNDANT ROOTS
B-1	5"-13"	BROWN TO Yell BR.	WEATHERED SCHIST	SANDY CLAY LOAM	COARSE	SUBANG BLOCKY	15-20%	MOIST, WAVY BOUNDARY, STICKY ROOTS RW
B-2	13"-24"	Red/Yell BR		LOAMY CLAY	COARSE	SUBANG BLOCKY	10-20%	MOIST FEW ROOTS / SCATTERED WEATHERED SCHIST
B-3	24"-32"	Yell BR STRONG		Silt LOAM	COARSE	SUBANG BLOCKY	25-40%	MOIST NO ROOTS / WAVY BOUNDARY - IRREG BOUND
CRx	32"-46"+	Red	ROCK / STRUCTURED	WEATHERED	SAPROLITE			

LANDSCAPE FEATURES

Upland/Maxine _____ Summit _____
 Bench _____ Shoulder
 Terrace Sideslope _____
 Floodplain _____ Footslope _____
 Depression _____ Toeslope _____
 Slope % S-8 Shape Width Δ

SOIL DRAINAGE CLASS

ED _____ MWD _____ PD _____
 WD SPD _____ VPD _____
WATER TABLE
 Type _____
 Depth N/A
 Misc. _____

GEOLOGIC MATERIAL

Recent Alluvium _____
 Old Alluvium _____
 Coastal Plain Sediments _____
 Residuum
 Colluvium _____
 Eolian _____
 Misc. _____

LIMITING HORIZON Depth

B-Horizon _____
 Fragipan _____
 C-Struc. Saprolite _____
 Cr-Struc. Saprolite
 C-Horizon _____
 R-Bedrock
 Other _____

A 21784

SUBDIVISION: GIFFOLD Dye

LOT NUMBER: 21

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.

CONVENTIONAL MOUND SYSTEM SEE ATTACHED

TRENCHES

_____ sq. ft./bedroom

Trench to be _____ wide

Inlet _____ feet below original grade.

Bottom maximum depth _____ feet below original grade.

Effective area begins at _____ feet below original grade.

_____ feet of stone below distribution pipe.

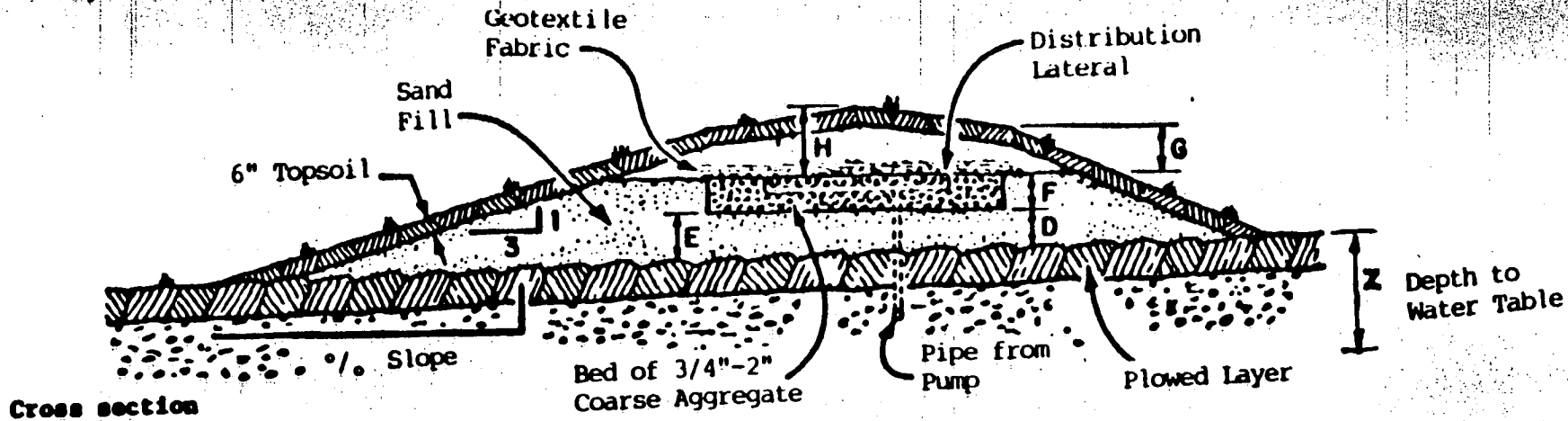
- NOTE:
- (1) No trench to exceed 100 feet in length.
 - (2) If more than one trench used, a distribution box is required.
 - (3) Trenches to be installed on level ground.
 - (4) Call for inspection of trench before gravel is installed.
 - (5) Provide 6" - 8" diameter cleanout and cap to grade or above 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: LOCATION. PLACE THE CENTER OF THE MOUND 275 FT FROM FORSYTHE RD. AND 60 FT FROM THE RIGHT (561.89) LOT LINE AS SEEN FROM FORSYTHE Rd. 17-26-89 SCLW

GIFFORD DYLE LOT 20/21
 FORSYTHE TCD.

SAND MOUND DESIGN

5 BK house



BACKGROUND DATA

FRAGMENTED BEDROCK Slope % (change in elevation over 100ft. distance): 10 (11% MAX)
 Depth to water table (Z): 24 inches
 Design flow (gal. per day): 750 gpd
 Design infiltration rate: 1.2 gpd/ft²

DESIGN CALCULATION

Absorption bed ft² (AxB) = $\frac{\text{Design flow}}{1.2 \text{ gpd/ft}^2} = \underline{625 \text{ ft}^2}$

Bed length (B) = 70 ft. (21 ft. to 101 ft. dependent on site)

Bed width (A) = $\frac{\text{Bed } 625 \text{ ft}^2}{B \text{ } 90 \text{ ft.}} = \underline{9 \text{ ft.}}$ (15 ft. or less)

Upslope sand fill depth (D) = 48in. - Zin. = 24 in. (12" min.)

Downslope sand fill depth (E) = $[12 \text{ A} \times \frac{(\text{slope})}{100}] + D \text{ in.} = \underline{35 \text{ in.}}$

Cap + topsoil at bed center (H) = 18in. ✓

Cap + topsoil at bed edge (G) = 12in. ✓

Total Bed Depth (F) = 10in. ✓

Sideslope setback (K) = $\frac{(D+E)}{2} + 28\text{in.} \times 3 = \underline{172.5 \text{ in.}}$ 14.4'

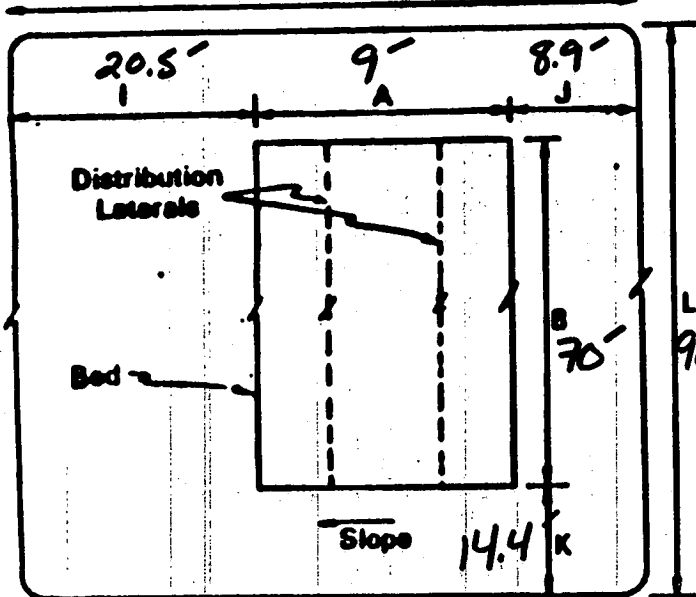
Upslope setback (J) = $(22\text{in.} + D) \times 3 \times \text{upslope corr. factor} = \underline{106.25\text{in.}}$ 8.9'

Downslope setback (I) = $(22\text{in.} + E) \times 3 \times \text{downslope corr. factor} = \underline{246.25\text{in.}}$ 20.5'

Total Width of Mound (W) = 12A + J + I = 460.5 in. 38.4'

Total Length of Mound (L) = 12B + K + K = 1185 in. 98.75'

W-38.4'



Plan view

GIFFORD Dye 20/21

for 5 Bdrm House
for McCallum Property

SAND MOUND PRE-CONSTRUCTION CHECK LIST

1. Total mound width (ft) = 38.4'
2. Total mound length (ft) = 98.75'
3. Absorption bed length (ft) = 70'
4. Absorption bed width (ft) = 9'
5. Side slope setback = 14.2'
6. Upslope setback = 8.9'
7. Downslope setback = 20.5'

8. Center feed or end feed manifold = (Center Feed) 6'
- 9.. Length of laterals from manifold = 34.5'
10. Number of rows of laterals = 3'
11. Total length of lateral pipe required for system = 207'
12. Space between laterals = 3'
13. Lateral diameter = 1 1/4"
14. Perforation diameter = 5/16 inch
15. Perforation spacing = 42"
16. Number of perforations per lateral = 10
17. Space between first perforation and manifold = 1.75'
18. Total length of manifold = 6.0'
19. Reducers - type and number required _____

20. Upslope sand fill depth (in) = 24
21. Downslope sand fill depth (in) = 33
22. Depth of clay cap and top soil along bed center = 18 in.
23. Depth of clay cap and top soil along bed edges = 12 in.
24. Depth of gravel absorption bed = 10 in.
25. Diameter of force main = 3
26. Total length of force main = UNKNOWN
27. Minimum flow or discharge rate for system (g.p.m.) = _____
28. Total dynamic head (TDH) = _____
29. Dose (gal.) = _____

- ① - 3-3" "T" - 90°
- 6 - 1 1/4" Reducers
- 1 - 3" STR "T"
- 1 - 1 1/4" 90° elbow
- 1 - 3" 90° elbow

26-29 to be determined
at time of building
design. These are
dependent on house
location.

GIFFORD Dye 20/21

Recalc for 3 bdr Hse
For McCallum Property

SAND MOUND PRE-CONSTRUCTION CHECK LIST

1. Total mound width (ft) = 34'
2. Total mound length (ft) = 91'
3. Absorption bed length (ft) = 62.5'
4. Absorption bed width (ft) = 6'
5. Side slope setback = 14.2'
6. Upslope setback = 8.9'
7. Downslope setback = 19.2'

8. Center feed or end feed manifold = (Center Feed)
9. Length of laterals from manifold = 29.75'
10. Number of rows of laterals = 2'
11. Total length of lateral pipe required for system = 119'
12. Space between laterals = 3'
13. Lateral diameter = 1 1/4"
14. Perforation diameter = 5/16 inch
15. Perforation spacing = 42"
16. Number of perforations per lateral = 8
17. Space between first perforation and manifold = 1.5'
18. Total length of manifold = 0'
19. Reducers - type and number required _____

20. Upslope sand fill depth (in) = 24"
21. Downslope sand fill depth (in) = 363"
22. Depth of clay cap and top soil along bed center = 18 in.
23. Depth of clay cap and top soil along bed edges = 12 in.
24. Depth of gravel absorption bed = 10 in.
25. Diameter of force main = 3
26. Total length of force main = UNKNOWN
27. Minimum flow or discharge rate for system (g.p.m.) = _____
28. Total dynamic head (TDH) = _____
29. Dose (gal.) = _____

~~(19) - 3 - 3" "T" - 90°
6 - 1 1/4" Reducers
1 - 3" STR "T"
1 - 1 1/4" 90° elbow
1 - 3" 90° elbow~~

26-29 to be determined
at time of building
design. These are
dependent on house
location.

D Mr McCallum
Lobby Case

SM recalk

OP's-3

3 Bdr vs

5 Bdr

$$\frac{450}{1.2} = 375 \text{ sq ft}$$

$$\div 6 \text{ ft wide bed} \\ = 62.5 \text{ LF long bed}$$

24 x

11% slope

$\frac{2}{3}$ " 7.33"

$$+ 24 \text{ - up slope and fill} \\ 31.33 \text{ ds SF}$$

$$3(\frac{1}{3} + 22) = 5\frac{1}{3} \times 3$$

$$= 160 \times 1.44 = 230.17'$$

3"

$$57 \times 3 = 171$$

$$20.5' = 246'' \\ \frac{246}{171} = 1.44 \text{ decrease factor}$$

1.44 decrease factor

$$= 19.2 \text{ ft down slope} \\ + 6 \text{ bed} \\ \frac{8.9}{34.2}$$

side

$$\frac{28 + 28}{16 \times 3} = 168$$

= 14 ft side

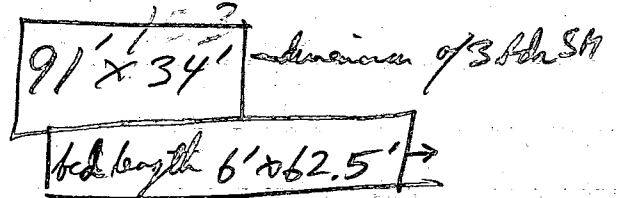
$$\frac{62.5}{14} \\ \frac{14}{14} \\ 9.07 \text{ ft long}$$

$$8.9' = 106.8$$

$$24 + 22 = 46 \times 3 = 138$$

$$\frac{1068}{138} = 1.774 \text{ upol comp fact}$$

upol comp



PREVIOUSLY
FILED
NO FEE REQ'D.
MAY 12, 1986
9:30

APPLICATION

PERCOLATION TESTING

A 21783

P _____

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

99 W. to Frederick Rd
1/3 mile to Beege Brook house
on right, next lot after this

DISTRICT _____

DATE 4-3-86

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 Thomas C. & Claire B. MacCallum

✓ ADDRESS PO Box 902, Mt Airy, Md. ✓ PHONE 829-2441

14506 Monticello Dr W 756-4404

PROSPECTIVE BUYER _____

ADDRESS Cooksville, Md. 21723 PHONE _____

✓ PROPERTY LOCATION:

✓ SUBDIVISION Gifford Dye Sub. ✓ LOT NO. 20

✓ ROAD AND DESCRIPTION 1/3 mile East of RR7 on Forsythe Rd
AT OLD FREDERICK

✓ TAX MAP 8 PARCEL # 265

✓ SIZE OF LOT 5.0915 AC TYPE BLDG. SFD
(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. [Signature]
(SIGNATURE OF APPLICANT)

APPROVED BY _____ FOR _____ DATE _____

REJECTED BY _____ FOR _____ DATE _____

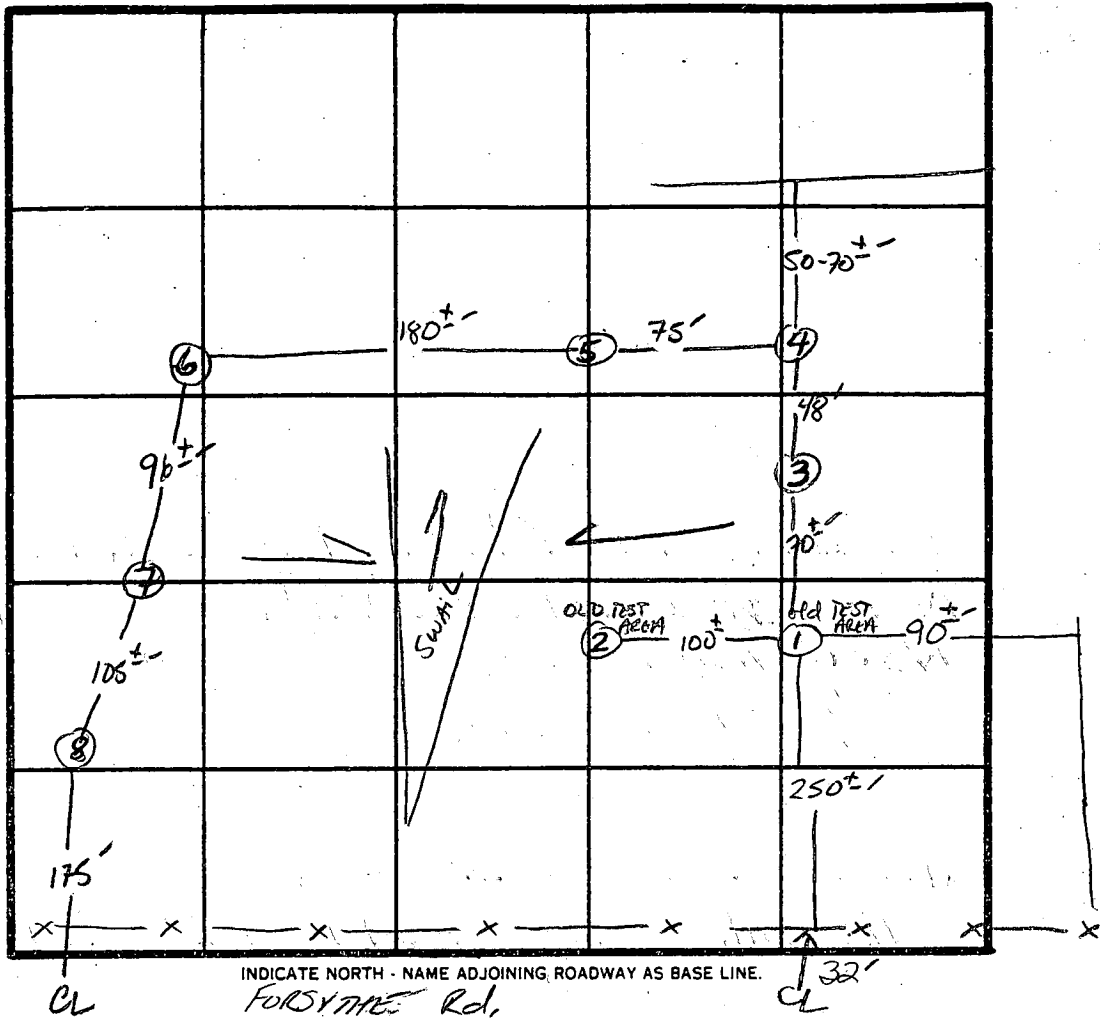
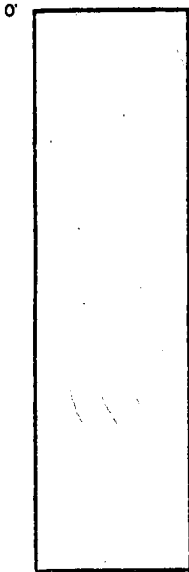
HOLD PENDING FURTHER TESTS → originally R.M. Rock DATE _____

REASONS FOR REJECTION OR HOLDING 5-12-86 UNSATISFACTORY TEST. Shallow bedrock;

INSUFFICIENT AREA REMAINING TO TEST. NO FURTHER TESTING RECOMMENDED
FOR CONVENTIONAL SYSTEMS. OR IN A.C.W. S. After

THIS IS NOT A PERMIT

SOIL PROFILE



INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE.
 FORSYTHE Rd.

DATE	TEST NO.	DEPTH	PRE-WET		TEST - 1" DROP		TIME
			START	STOP	START	STOP	
5/12/86	1V	ROCK BOTTOM SOLID AT 2'					
	2V	12" UNIFORM SAND LAYER BELOW 3' 20-25% FINE SAND ROCK,					
	3V	3' ROCK BOTTOM SOLID					
	4V	3' ROCK BOTTOM SOLID					
	5V	12" STRUCTURED ROCK AT 8' CLAY TO 2.5"					
	6V	6'-7' ROCK BOTTOM SOLID CLAY TO 3.5"					
	7V	18" SOLID ROCK BOTTOM					
	8V	2' SOLID ROCK BOTTOM					

REMARKS NUMEROUS ROCK OUTCROPS THROUGHOUT PROPERTY

TYPE OF SOIL CHESER.

TESTED BY S. Abel

ALSO PRESENT MACCAW WINTER
Collingsworth & Coe

May 14, 1986

Mr. Thomas MacCallum
P. O. Box 502 14506 MONTICELLO DN
~~Mt. Airy, Maryland 21771~~ COORSVILLE MD
21723

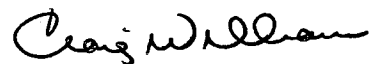
RE: Percolation Testing
Gifford Dye
Lot 20
Tax Map 8, Parcel 265

Dear Mr. MacCallum:

Percolation testing performed on May 12, 1986 on the above referenced property revealed unsatisfactory soil conditions. This lot cannot be approved for septic system installation due to the presence of shallow bedrock in all areas tested.

If you should have any questions concerning those results, please feel free to contact me at the above address or by calling 461-9933.

Very truly yours,



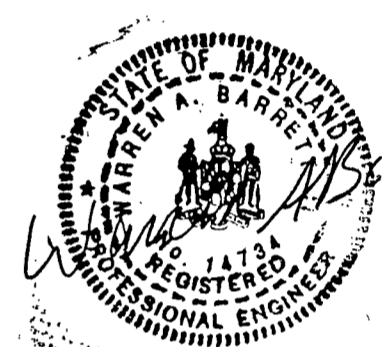
Craig Williams, Director
Water and Sewerage Program

CW/SA:JR

(OLD FREDERICK ROAD)
FORSYTHE ROAD
 N 89° 42' 31" E 205.78' L. Measurement
 N 55° 02' 18" E 126.47'

Warren A. Barrett II
 & Terry A. Barrett
 Liber 2495 Folio 368
 (Plat. 1328-440)
 5.0915 Acres
 #4295 Old
 Frederick Rd.

Two Story Frame
 House with Basement
 5.0915 Acres



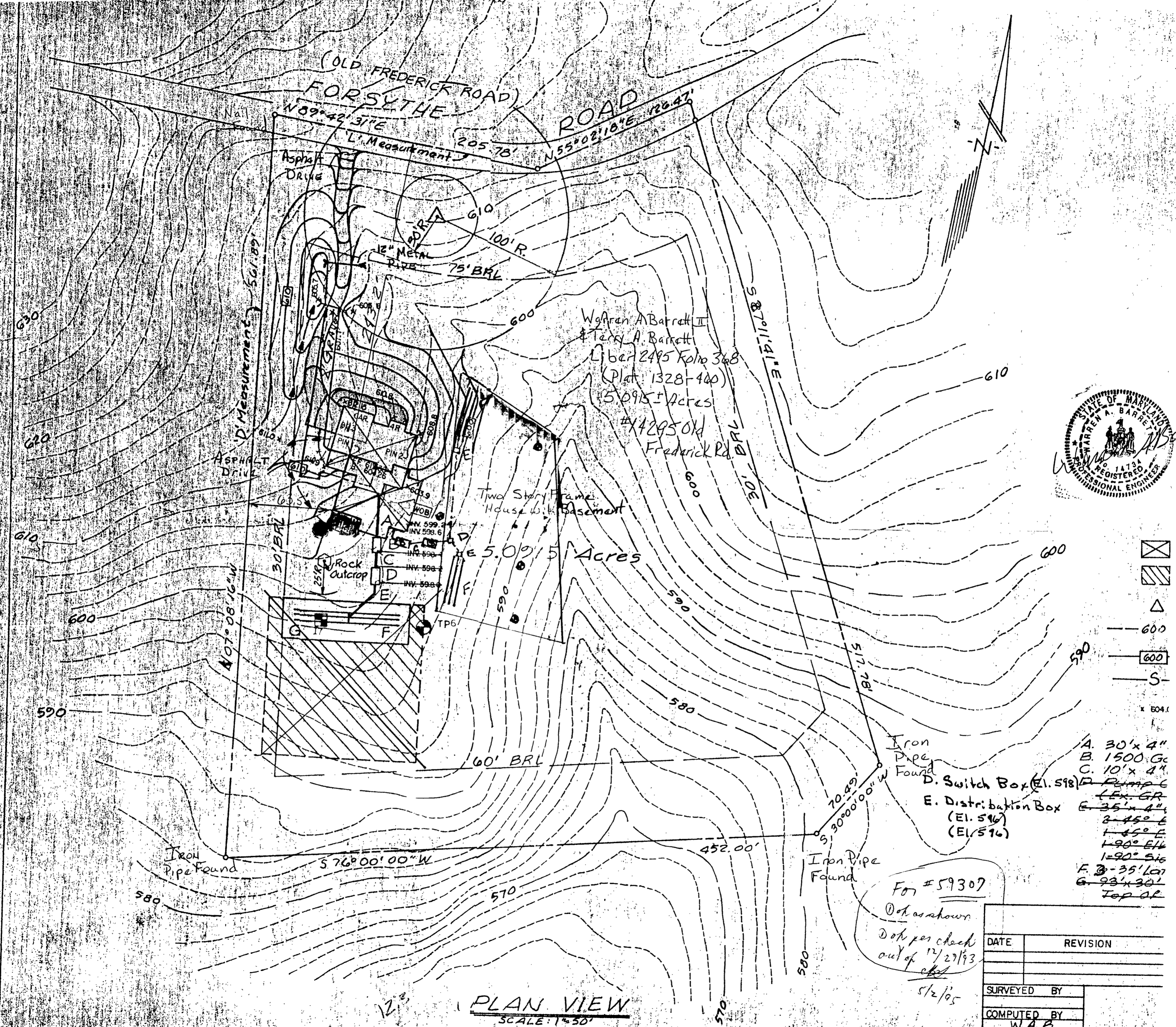
- ⊠
- ▨
- △
-
- 600
- 600
- S
- x 604.0

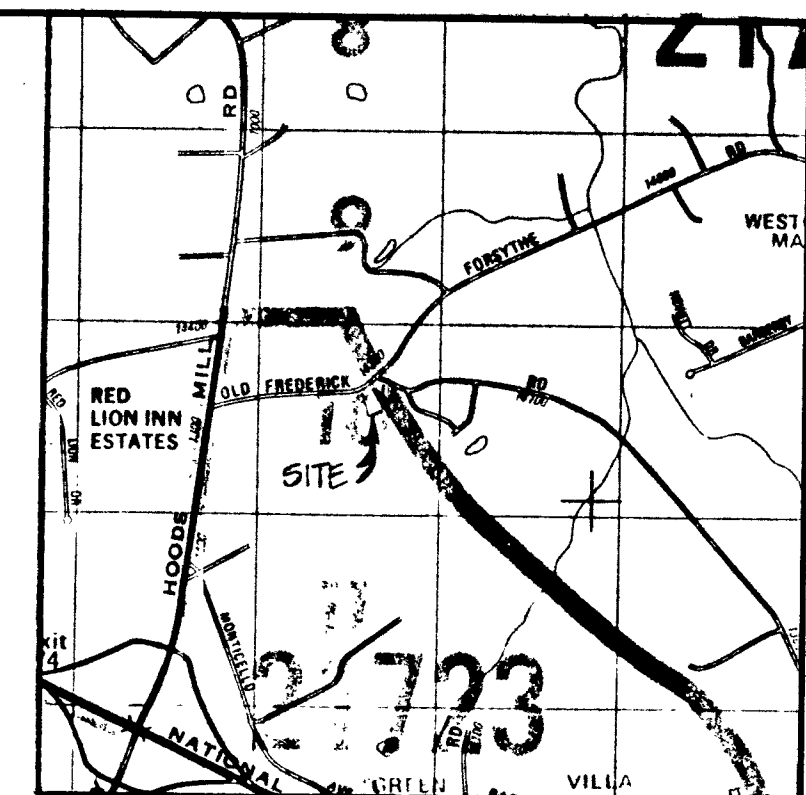
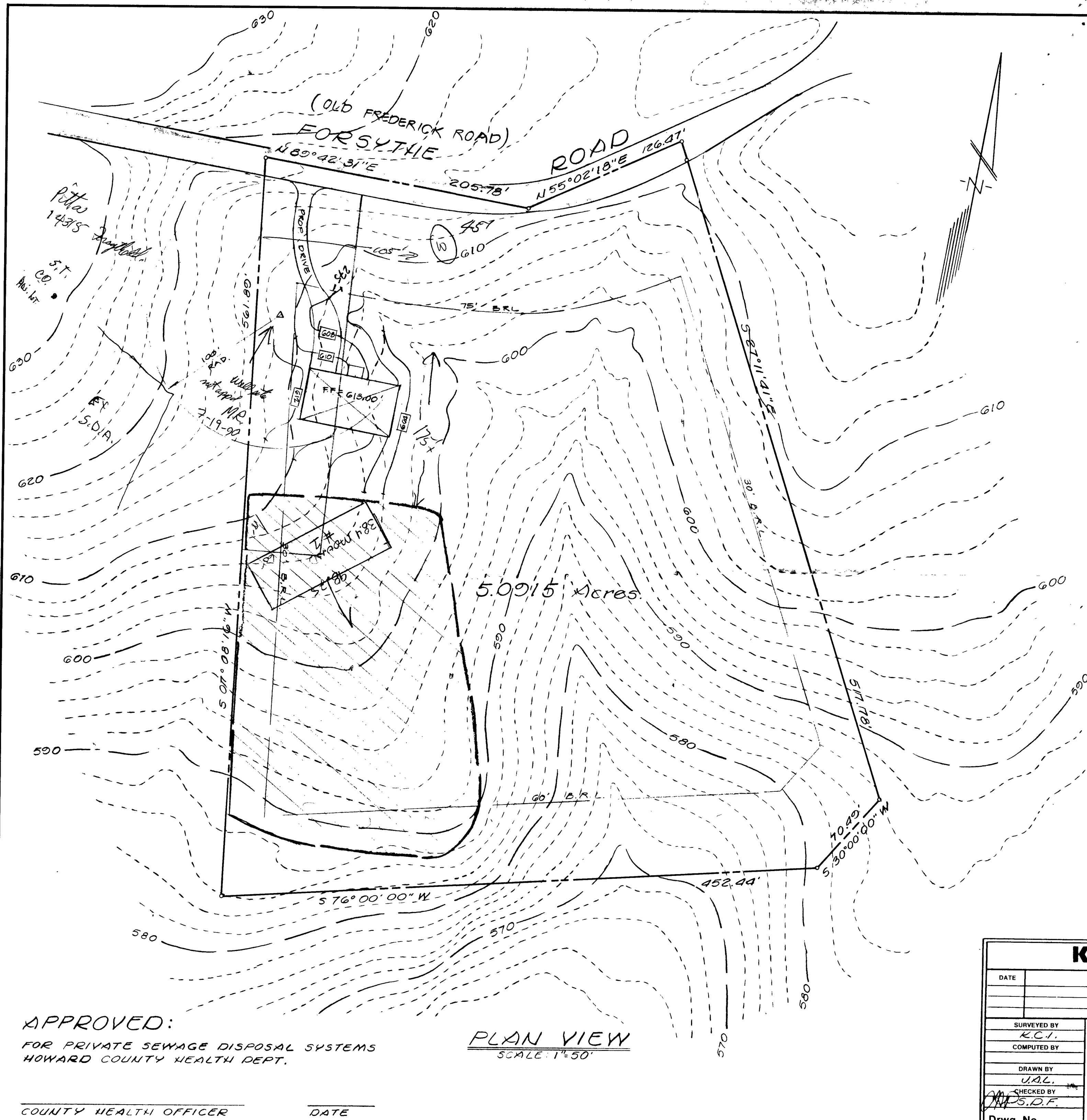
- A. 30' x 4"
- B. 1500 Gc
- C. 10' x 4"
- D. Switch Box (El. 598)
- E. Distribution Box (El. 596)
- F. 35' x 4"
- G. 93' x 30'

For #59307
 Done as shown
 Done per check
 out of 12/27/93
 5/2/05

DATE	REVISION
SURVEYED BY	
COMPUTED BY	
DRAWN BY	
CHECKED BY	

PLAN VIEW
 SCALE: 1" = 30'





VICINITY MAP
SCALE: 1" = 2000'

- LEGEND**
- INDICATES PROPOSED DWLG.
 - INDICATES AREA RESERVED FOR PRIVATE SEWAGE DISPOSAL SYSTEM
 - PROPOSED WELL
 - 600 --- EXISTING CONTOUR
 - 600** — PROPOSED CONTOUR

4-10-89
 Plot ch - await original for #D
 Signature: SAH
 PRELIMINARY
PLOT PLAN

FORSYTHE ROAD
 TAX MAP #8, PARCELS 265
 4th ELECTION DIST.
 HOWARD COUNTY, MD.

APPROVED:
 FOR PRIVATE SEWAGE DISPOSAL SYSTEMS
 HOWARD COUNTY HEALTH DEPT.

PLAN VIEW
 SCALE: 1" = 50'

COUNTY HEALTH OFFICER _____ DATE _____

KIDDE CONSULTANTS, INC.		
DATE	REVISION	BY
ENGINEERS • PLANNERS • SURVEYORS 1100 WEST STREET / SUITE 100 / LAUREL, MD 20707 (Wash.) (301) 953-1821 / 792-8086 (Balt.)		
SURVEYED BY <i>K.C.I.</i>	THIS PRINT	APR 07 1989
COMPUTED BY		
DRAWN BY <i>U.A.L.</i>	MADE	
CHECKED BY <i>S.D.F.</i>		
Drwg. No.	DATE 3-28-89 SCALE 1" = 50'	