

6-5-96 LP
10 AM SHARD
6/24
8/15 PM

PERMIT

SEWAGE DISPOSAL SYSTEM

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

03-318737

P 5695513

A 47212

DISTRICT 3rd

DATE 5-29-96

HOWARD COUNTY HEALTH DEPARTMENT

BUREAU OF ENVIRONMENTAL HEALTH

461-9933 313-2640

DATE SYSTEM APPROVED 10/17/96

INSPECTOR *JH*

INDEXED

Arnold Backhoe & Septic Service, Inc. IS PERMITTED TO INSTALL ALTER

ADDRESS 7110 Woodbine Road, Woodbine, MD 21797 PHONE 795-7873

SUBDIVISION West Friendship Estates LOT 16 ROAD 3197 River Valley Chase

PROPERTY OWNER Trinity Custom Homes / CRAIG NORTHRUP 750-9685

ADDRESS

SEPTIC TANK CAPACITY ¹⁵⁰⁰ ~~1250~~ GALLONS

TOP SEAM TANK ¹²⁰⁰ (NOT AVAIL IN TOP SEAM) - REVISED TO 1500 GALLONS
*Schedule installation so sanitarian may be present during trench excavation.

NUMBER OF BEDROOMS 4

240 SQUARE FEET PER BEDROOM

LINEAR FEET OF TRENCH REQUIRED 320

TRENCHES - Trench to be 3 feet wide. Inlet 3 feet below original grade. Bottom maximum depth 5 feet below original grade. Effective area begins at 4 feet below original grade. 2 feet of stone below distribution pipe.

LOCATION - Start trenches at a point 60' off the left (272') lot line and 160' off the rear (171') lot line. Run trenches along contour towards rear lot line.

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

PLANS APPROVED BY Glen Savage

DATE 5/29/96

COVER NO WORK UNTIL INSPECTED AND APPROVED

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

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

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

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

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

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

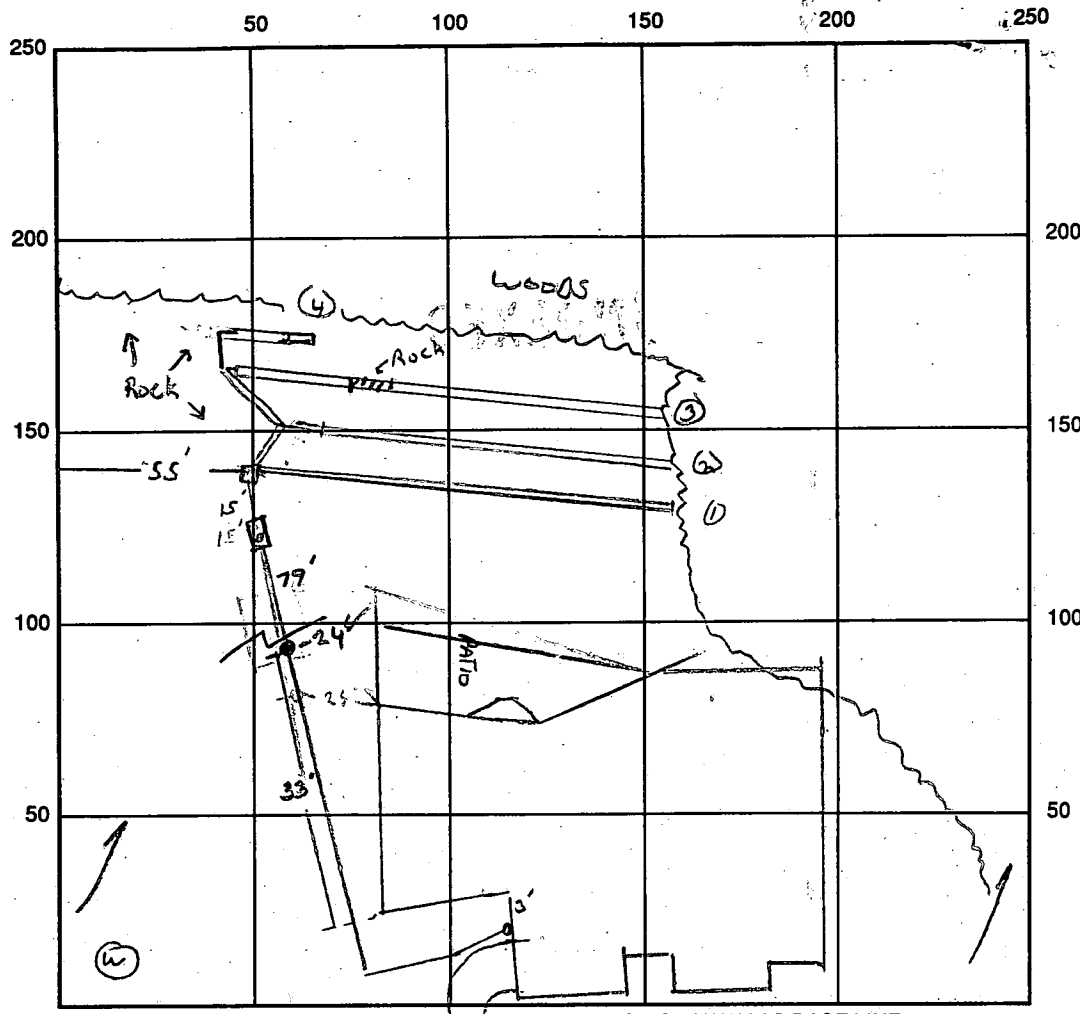
PERMIT VOID AFTER TWO YEARS

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

NOTE: DISTRIBUTION BOXES MUST HAVE BAFFLES

*INSTALLER IS RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT

A 47212A

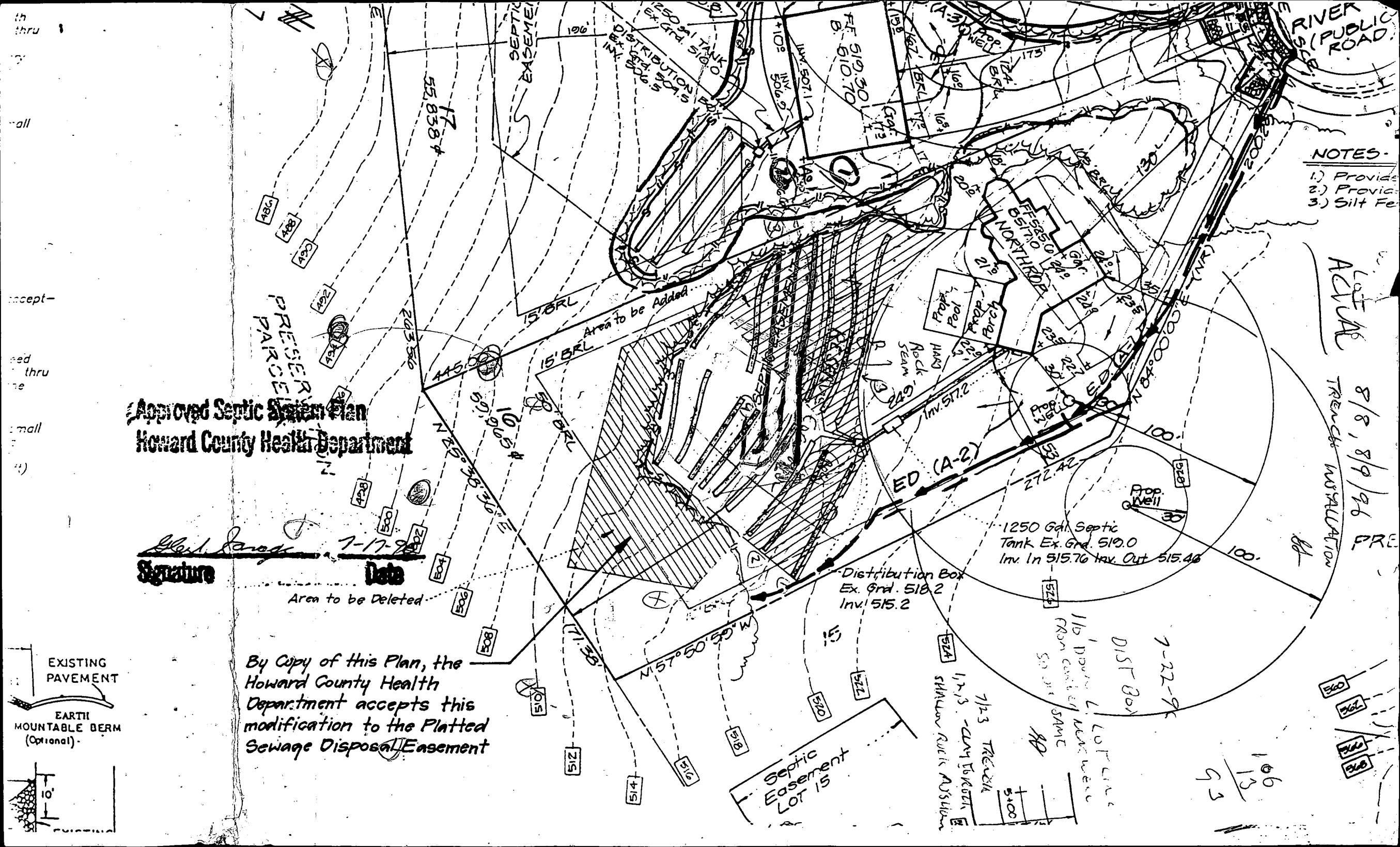


SEPTIC TANK LEVEL OK, 1505 CAL TOP SEAM CLEANOUTS 1 ON TANK, 1 ON LINE 1 AT HOUSE
 DISTRIBUTION BOX LEVEL TO BE CHECKED - 8/15/96 OK LEVELERS SET MAKE OK
 DRAIN FIELD/TITLE DEPTH 5 FT. TRENCH WIDTH 3 FT. INLET DEPTH 3 FT.
 EFFECTIVE GRAVEL DEPTH 2 FT. TOTAL LENGTH $\frac{1 \ 2 \ 3 \ 4}{106 \ 123 \ 100 \ 20}$ FT. = 319 ±
 NUMBER OF TRENCHES 4 ONE SIDEWALL/BOTTOM AREA 1057 ± SQ. FT.
 DRYWALL INSIDE DIAMETER — FT. EFFECTIVE DEPTH BELOW INLET — FT.
 ABSORBENT AREA — SQ. FT.

REMARKS: 7-22-96 LAYOUT SYSTEM, INSTALLATION RAIN DELAYED 8/8/96
SYSTEM INSTALLATION PROCEEDS; 15' 3 TRENCHES, 8/9 FINAL TRENCH OK, DIST
BOX IN, OK TO COVER TRENCHES. 8-15-96 CONTRACTOR'S HELPER DRIVE
OVER PLASTIC WELL CASING, BREAKING IT OFF, 8/15/96 TANK SET
OK TO COVER SYSTEM, NEED HOUSE CONNECTION FOR END 8/16
WELL CASING CEMENTED w/ CONCRETE AS TEMP. FIX LOT BEING GRADED. CONTRACTOR -

DATE SYSTEM APPROVED 10/17/96 INSPECTOR [Signature]
 SAID HE WOULD TAKE CARE TO ENSURE THAT WATER IS NOT DIRECTED INTO WELL. 88

10/18/96 WPI OK TO COVER ALM



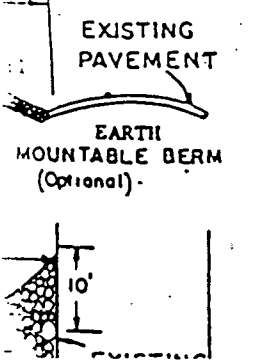
- NOTES-**
- 1) Provide
 - 2) Provide
 - 3) Silt Fe

ACTUAL
8/8, 8/9/96
TRENCH INSTALLATION
PRE

Approved Septic System Plan
Howard County Health Department

G. J. Jones
Signature **Date** 7-17-96

By Copy of this Plan, the Howard County Health Department accepts this modification to the Platted Sewage Disposal Easement



106
113
95

APPLICATION

PERCOLATION TESTING

A 47212

P _____

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

DISTRICT _____

DATE 7-23-96

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 TRINITY HOMES

ADDRESS _____ PHONE _____

AGENT OR PROSPECTIVE BUYER _____

ADDRESS _____ PHONE _____

PROPERTY LOCATION:

SUBDIVISION W. FRIENDSHIP EST. LOT NO. 16

ROAD AND DESCRIPTION 3197 RIVER VALLEY CHASE

TAX MAP _____ PARCEL # _____

SIZE OF LOT _____ TYPE BLDG. _____
(SINGLE FAMILY DWELLING OR COMMERCIAL)

**BLDG. PERMIT SIGNED
AND RETURNED 7/21/96
Serial # B0010114
SFD - H. Brown**

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

A-47212

COUNTY #

SOIL PROFILE

723 B

CLAY

HARD BOTTOM

0'
2'

SOIL PROFILE

723A

ORANGE CLAY

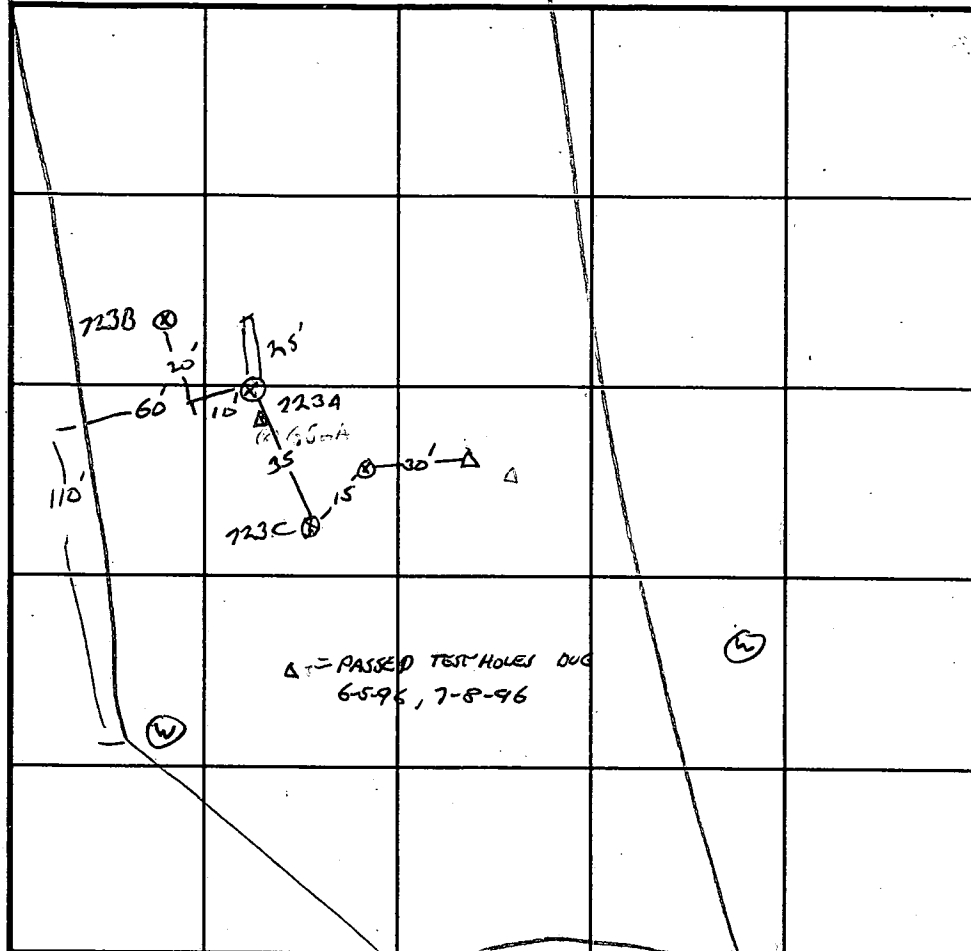
CLAY w/ SMALL ROCKS LOAM w/OCCASIONAL VEINS ROCK

NOT CONSISTENTLY OUT OF CLAY, VEINS OF ROCK INCREASE TOWARDS BACK OF LOT + DEEPER NO CONSISTENT ZONE OF SOIL W/ 25' TRENCH

CLAY DOES NOT DISAPPEAR COMPLETELY AT 9'

SEPTIC INSTALLATION ATTEMPTED IN MOST SUITABLE PORTION OF REVISED SEPTIC EASEMENT. CONDITIONS NOT SUITABLE TO PROCEED W/ INSTALLATION THIS SEPTIC EASEMENT WAS MARGINAL TO SAY THE LEAST. OTHER PORTIONS OF THE EASEMENT WILL NOT SUPPORT THIS

INSTALLATION BASED ON PREVIOUS TESTING



723C

ORANGE CLAY

2 1/2'

EXCESS ROCK, REGRASS AT 7'

INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE.

R. VALLEY CHASE

TO SAY THE LEAST, OTHER PORTIONS OF THE EASEMENT WILL NOT SUPPORT THIS

DATE	TEST NO.	DEPTH	PRE-WET		TEST - 1" DROP		TIME
			START	STOP	START	STOP	
7/23/96	723A						
	723B	ATTEMPT TO DIG HIGHEST TRENCH DISCONTINUED DUE TO SURFACE ROCK					
	723C						
	723D						
CONCLUSION: ERAATIC DEPTH OF CLAY AND ROCK PREVENT SUCCESSFUL TRENCH INSTALLATION. NO USABLE SOIL ENCOUNTERED THIS DATE (7-23-96).							

723D

ORANGE CLAY

3'

EXCESS ROCK, STOPPED DIGGING - WAS HIDE WELL RAJONS.

REMARKS ROCK AT 2 1/2' AT REAR OF HIGHEST TRENCH

TYPE OF SOIL

TESTED BY G. SAVAGE / C. WILLIAMS (CW)

ALSO PRESENT

TRENCH DESIGN DATA: AVERAGE PERCOLATION TIME

TRENCH WIDTH

INLET DEPTH

MAXIMUM BOTTOM DEPTH

SQ. FT./BEDROOM

APPLICATION

PERCOLATION TESTING

A 47212
P _____

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

DISTRICT _____

DATE 6/13/91

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 PERCONTEE, INC.

ADDRESS 11900 TECH RD, SILVER SPRING, MD. 20904 PHONE JOHN REUWER 740-2100 X291

PROSPECTIVE BUYER N/A

ADDRESS _____ PHONE _____

PROPERTY LOCATION:

SUBDIVISION WEST FRIENDSHIP ESTATES Section II LOT NO 2816

ROAD AND DESCRIPTION WEST IVORY RD. 1/2 RT 32, SOUTH OF RT. 70

TAX MAP 15 PARCEL # 42

SIZE OF LOT 3.00 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.

APPROVED BY John C. Reuer FOR PERCONTEE, INC. (SIGNATURE OF APPLICANT)
DATE _____

REJECTED BY _____ FOR _____ DATE _____

HOLD PENDING FURTHER TESTS _____ DATE _____

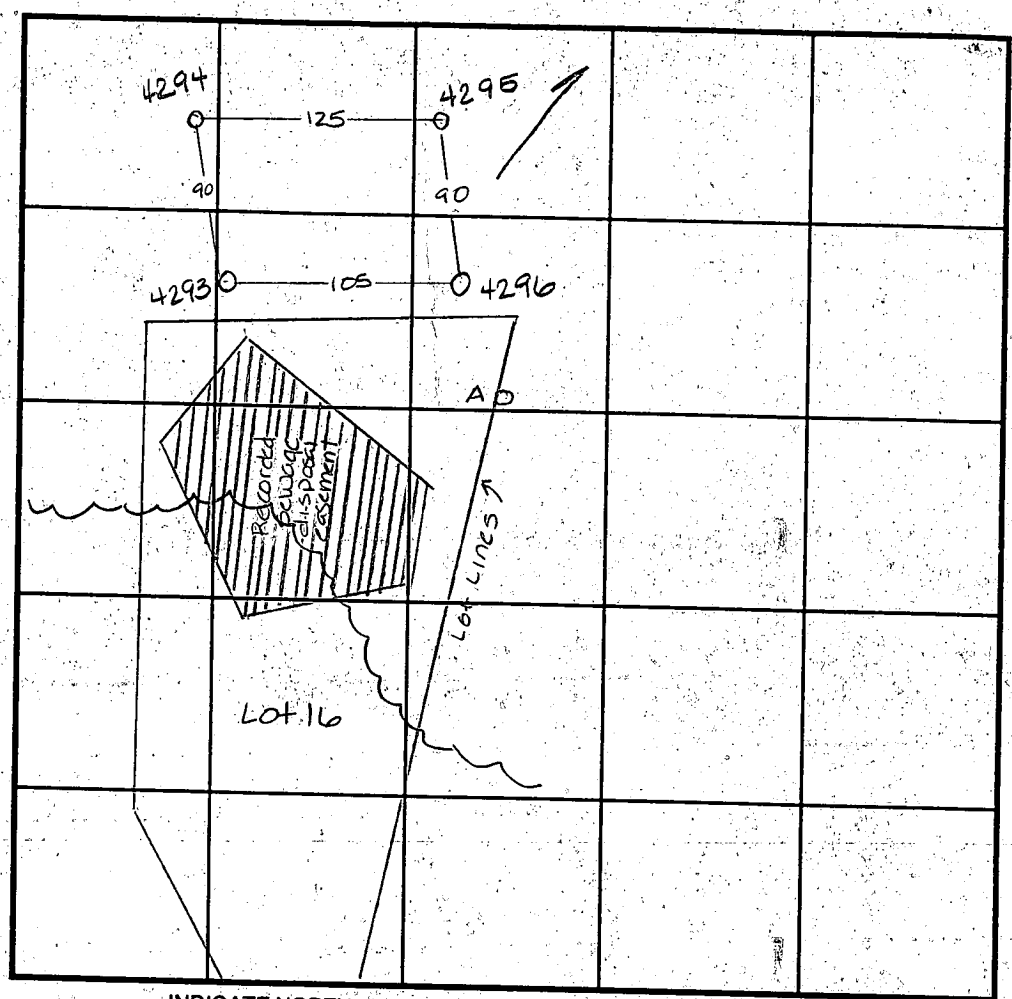
REASONS FOR REJECTION OR HOLDING 6/14/91 PERC OK HOLD FOR PLAT R14

HD-216

THIS IS NOT A PERMIT

A 47212
COUNTY #

SOIL PROFILE
4296 A
0' dark red silty 15% rock frags
3.0' red orange silty 20% frags
9.5' refusal



SOIL PROFILE
0'

INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE. River Valley Chase

DATE	TEST NO.	DEPTH	PRE-WET		TEST - 1" DROP		TIME
			START	STOP	START	STOP	
7-29-96	4294	>50%	rock @	4.0	---	---	F
	4293	>50%	rock @	4.5	---	---	F
	4295	>50%	rock @	4.0	---	---	F
	4296	3.0 / >9.5	11:40	11:44	11:44	11:50	6min
	A	3.5 / >9.5	12:27	12:29	12:29	12:31	2min

REMARKS _____
 TYPE OF SOIL Amy McMillen
 TESTED BY Amy McMillen ALSO PRESENT Don Reuwer
 TRENCH DESIGN DATA: AVERAGE PERCOLATION TIME _____ TRENCH WIDTH _____
 INLET DEPTH _____ MAXIMUM BOTTOM DEPTH _____ SQ. FT./BEDROOM _____

APPLICATION

PERCOLATION TESTING

A 47212
P _____

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

DISTRICT _____

DATE 6/13/91

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 PERCONTEE, INC.

ADDRESS 11900 TECH RD, SILVER SPRING MD. 20904 PHONE JOHN REUWER 740-2100 X291

PROSPECTIVE BUYER N/A

ADDRESS _____ PHONE _____

PROPERTY LOCATION:

SUBDIVISION WEST FRIENDSHIP ESTATES Section III LOT NO 38

ROAD AND DESCRIPTION WEST IVORY RD. & RT 32, SOUTH OF RT. 70

TAX MAP 15 PARCEL # 42

SIZE OF LOT 3.00 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.

APPROVED BY John C. Reuwer (SIGNATURE OF APPLICANT)
FOR PERCONTEE, INC. FOR _____ DATE _____

REJECTED BY _____ FOR _____ DATE _____

HOLD PENDING FURTHER TESTS _____ DATE _____

REASONS FOR REJECTION OR HOLDING 6/14/91 PERC OK HOLD FOR PLAT R14

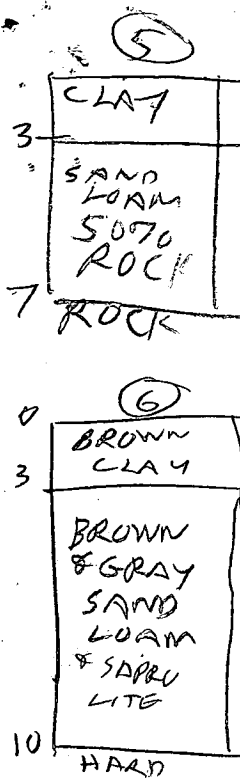
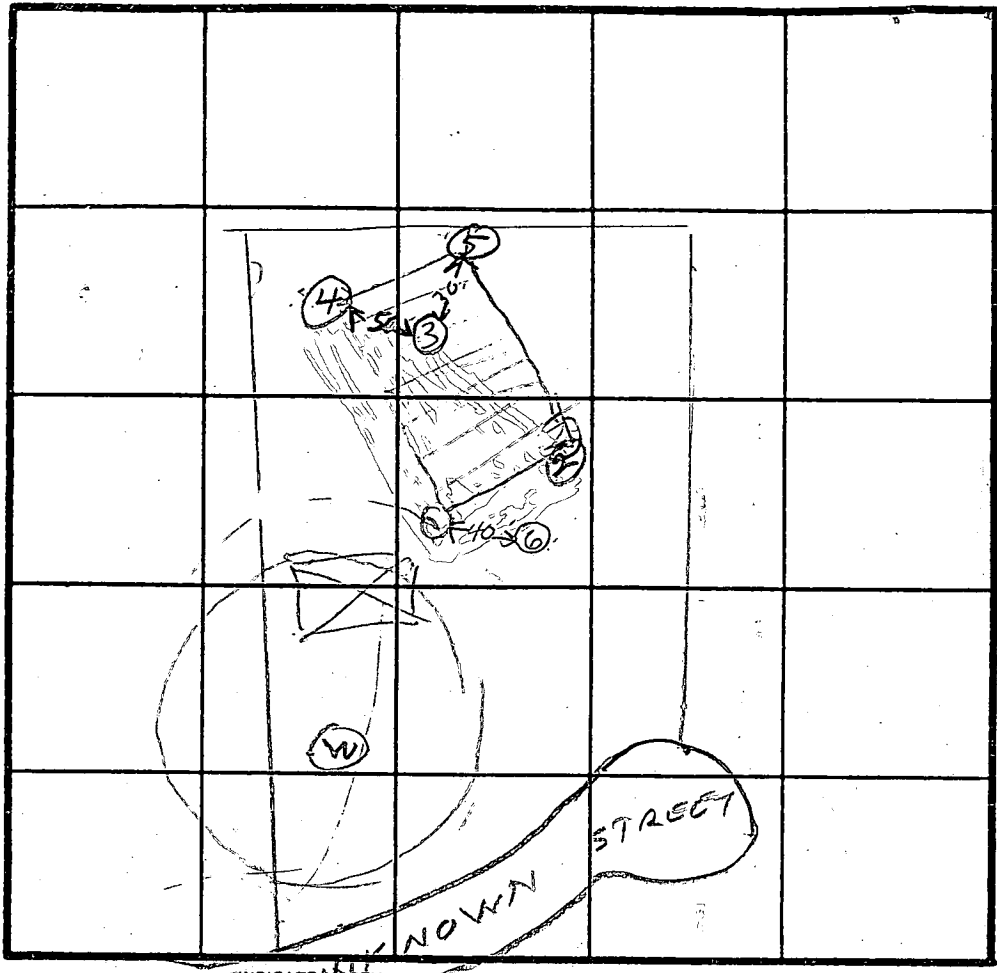
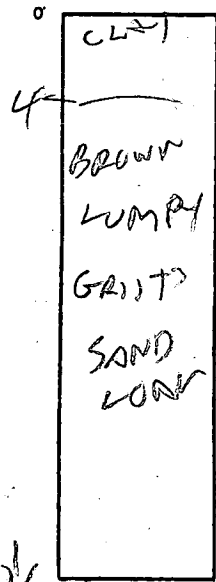
HD-216

THIS IS NOT A PERMIT

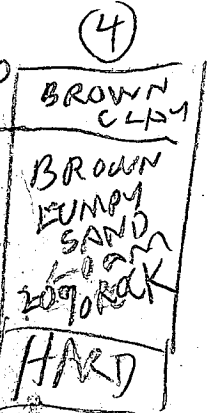
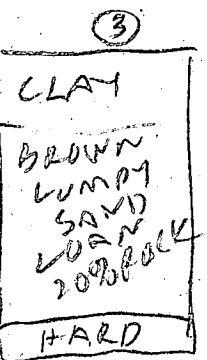
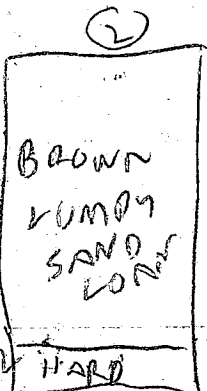
Lot 38
A47212

See Plot

SOIL PROFILE



INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE.



DATE	TEST NO.	DEPTH	PRE-WET		TEST - 1" DROP		TIME
			START	STOP	START	STOP	
6/14/91	1 S	8	152	208	208	221	13
	1 D	5	152	154	154	209	7
6/14/91	1 V	10 1/2	OK	SHALLOW			
6/14/91	2 S	4	157	200	200	222	22
	2 V	11	OK	SHALLOW			
6/14/91	3 S	4	209	230	230	256	26
	3 V	11	OK	SHALLOW			
6/14/91	4 V	12	OK				
6/14/91	5 V	7	ROCK	BOTTOM	FAIL		
6/20/91	6 V	10	OK	SHALLOW	SYSTEM		

REMARKS: Hole (2)(4)(5) dig per sample slip
 TYPE OF SOIL: Hole (3) different
 TESTED BY: B. Hodges
 ALSO PRESENT: Hugh O. ... Sr.

C1 3658

SEQUENCE NO. (DENV USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER A # 47212

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

ST/CO USE ONLY DATE RECEIVED

DATE WELL COMPLETED 063095

Depth of Well 205 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" H0-94-0572

OWNER TRINITY CUSTOM HOMES last name RIVER VALLEY CHASE first name TOWN WEST FRIENDSHIP SUBDIVISION W. FRIENDSHIP EST 5/0 SECTION 1 LOT 16

WELL LOG Not required for driven wells STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

Table with columns: DESCRIPTION (Use additional sheets if needed), FEET (FROM, TO), Check if water bearing. Rows include Top Soil, Sandy Sandstone, MICKA, Sandstone, MICKA.

GROUTING RECORD WELL HAS BEEN GROUTED (Y/N) TYPE OF GROUTING MATERIAL CEMENT (CM) BENTONITE CLAY (BC) NO. OF BAGS 12 NO. OF POUNDS 1200

CASING RECORD MAIN CASING TYPE PL Nominal diameter 6 Total depth 40

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

SCREEN RECORD screen type or open hole insert appropriate code below (ST, BR, HO, PL, OT)

IN HARD ROCK AREAS, IDENTIFY SPECIFICALLY WHERE SATURATED FRACTURES WERE OBSERVED. WELL HYDROFRACTURED (Y/N)

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"

DRILLERS IDENT. NO. 116 DRILLERS SIGNATURE Ralph Mayne

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

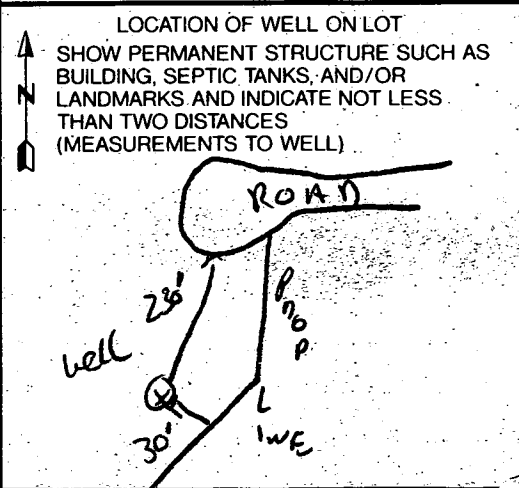
Table with columns: E A C H S C R E E N, DEPTH (nearest ft.), SLOT SIZE, DIAMETER OF SCREEN

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

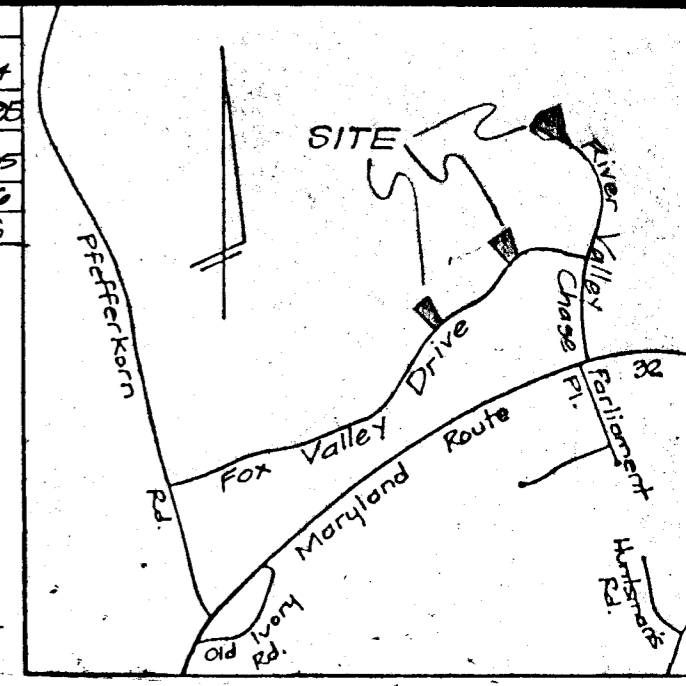
MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER) T (E.R.O.S.) W Q TELESCOPE CASING LOG INDICATOR OTHER DATA

PUMPING TEST HOURS PUMPED (nearest hour) 3 PUMPING RATE (gal. per min. to nearest gal.) 10 METHOD USED TO MEASURE PUMPING RATE Bucket WATER LEVEL (distance from land surface) BEFORE PUMPING 25 WHEN PUMPING 34 TYPE OF PUMP USED (for test) S submersible

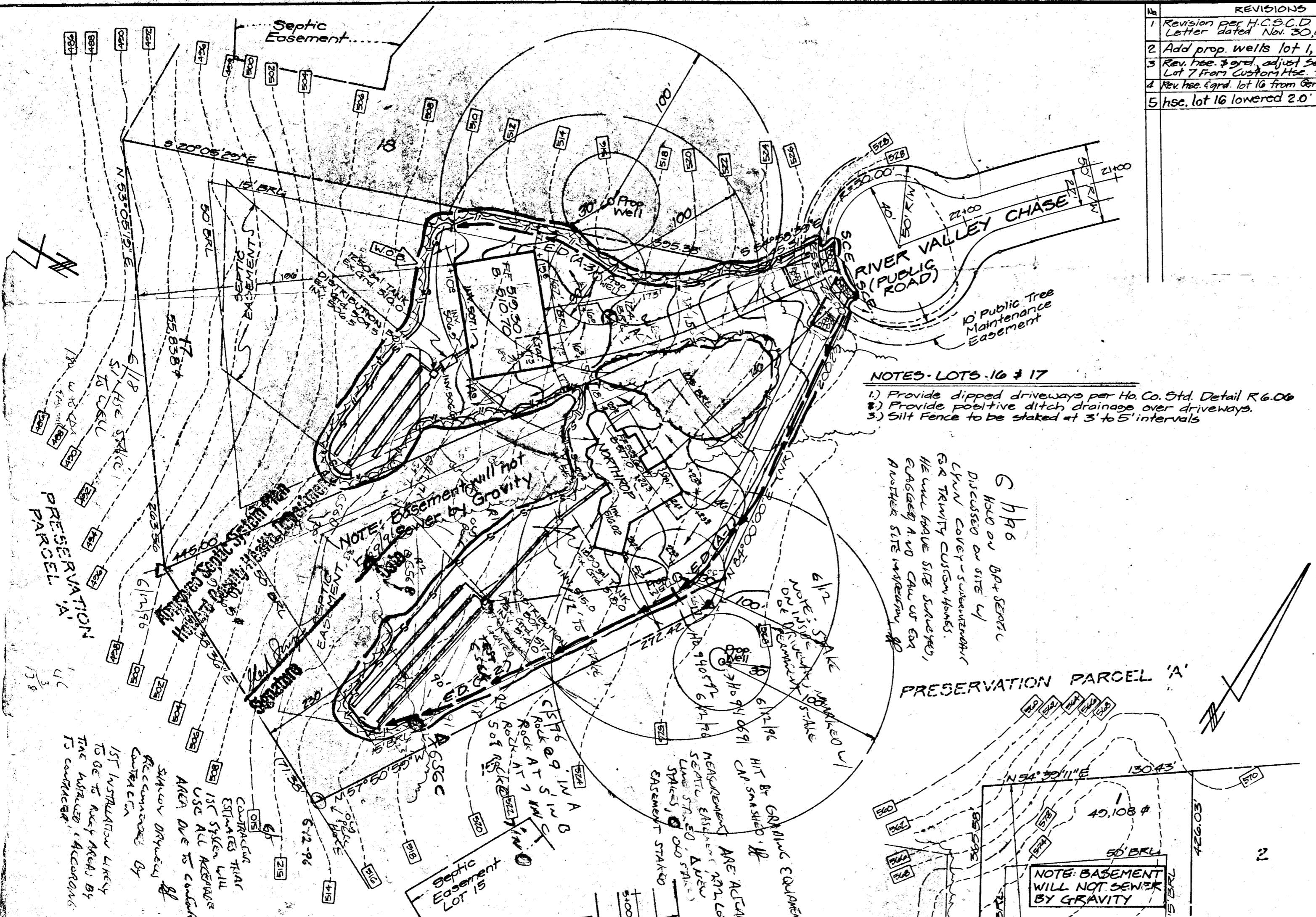
PUMP INSTALLED DRILLER WILL INSTALL PUMP YES (NO) IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS EXCEPT HOME USE TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX - SEE ABOVE: CAPACITY: GALLONS PER MINUTE (to nearest gallon) PUMP HORSE POWER PUMP COLUMN LENGTH (nearest ft.) CASING HEIGHT (circle appropriate box and enter casing height) LAND SURFACE 2 (nearest foot)



NO.	REVISIONS	DATE
1	Revision per H.C.S.C.D. Comment Letter dated Nov. 30, 1974	12-2-74
2	Add prop. wells lot 1, 7, 16 & 17	2-23-95
3	Rev. hse. & grad. adjust Septic & STE Lot 7 from Custom Hse. to Trenton (R)	4-28-95
4	Rev. hse. & grad. lot 16 from Gen. to Northrop	5-7-96
5	hse. lot 16 lowered 2.0'	5-7-96



VICINITY MAP
Scale: 1" = 2000'

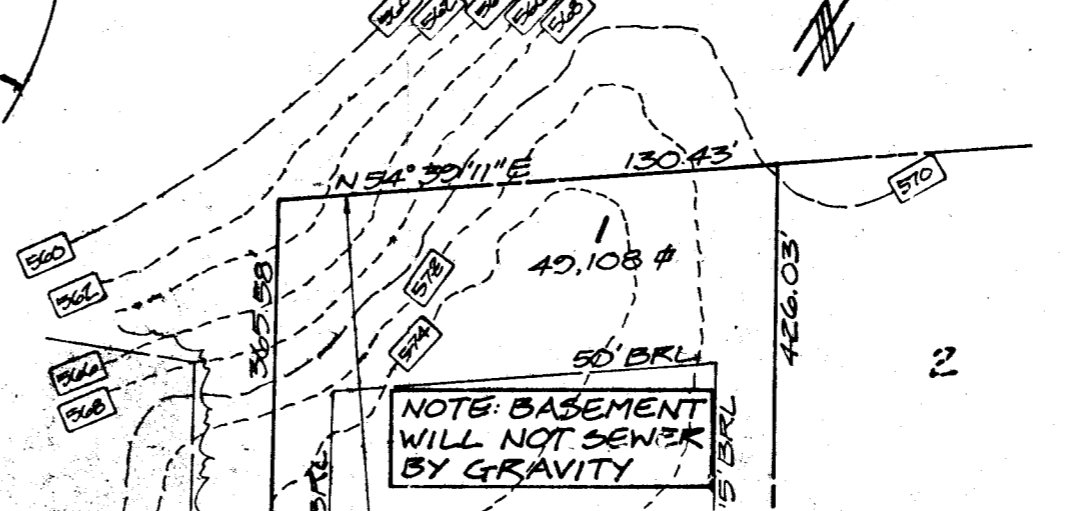


NOTES - LOTS 16 & 17

- 1) Provide dipped driveways per Ho. Co. Std. Detail R6.06
- 2) Provide positive ditch drainage over driveways.
- 3) Silt Fence to be staked at 3' to 5' intervals

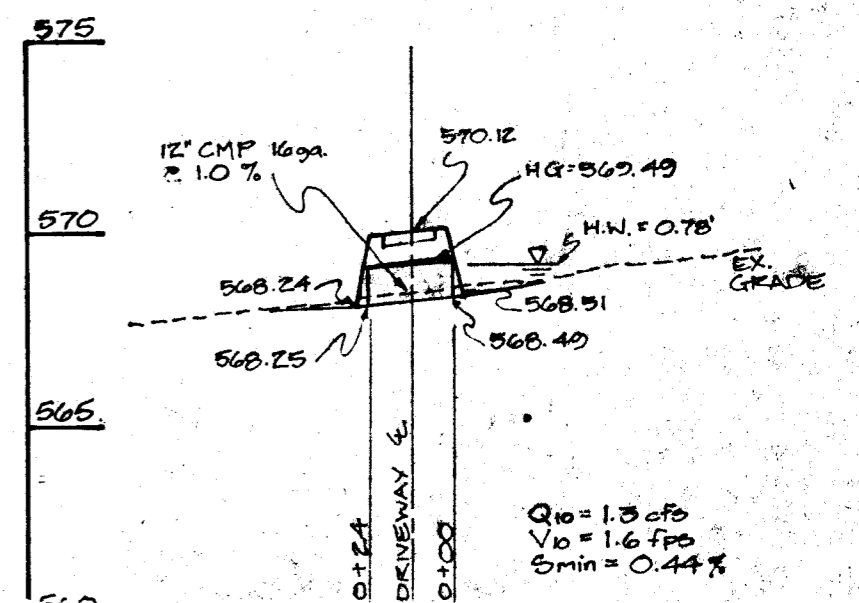
G h p 6
HOLD ON BPT SEWER
DISCUSSED ON SITE W/
LYNN COVER - SUBMITTER
FOR TRINITY CUSTOM HOMES.
WE WILL HAVE SITE SURVEYED,
GAGED AND CALL OUT FOR
ANOTHER SITE INSPECTION.

PRESERVATION PARCEL 'A'



LEGEND

- Contour Interval 2 Ft
- Existing Contour 410
- Proposed Contour 410
- Spot Elevation +10'
- Direction of Drainage
- Ex. Trees to Remain
- Tree Protection Fence
- Silt Fence
- Earth Dike ED (A-1)
- Limit of Disturbance
- Stabilized Construction Entrance



1ST INSTALLATION LIKELY TO BE TO ROCK AREA BY THE INSTALLED ACCORDING TO CONTRACTOR.
STATION DRIVEN BY CONTRACTOR.
RECOMMENDED BY CONTRACTOR.
1ST SYSTEM WILL USE ALL AVAILABLE AREA DUE TO CUSTOMER'S DRIVEN BY CONTRACTOR.

NOTE: BASEMENT WILL NOT SEWER BY GRAVITY

NOTE: BASEMENT WILL NOT SEWER BY GRAVITY