

LAYOUT 5/1/02 11:00 INSP 4 _____
 INSP 2 5/3/02 2:30 INSP 5 _____
 INSP 3 5/7/02 1:30 INSP 6 _____

ISSUE DATE: 4/22/2002

APPROVAL DATE: 5/7/02

PERMIT INDEXED

P 516942

A 510571M

*RPS#
337227*

ON-SITE SEWAGE DISPOSAL SYSTEM HOWARD COUNTY HEALTH DEPARTMENT BUREAU OF ENVIRONMENTAL HEALTH

South Carroll Backhoe IS PERMITTED TO INSTALL ALTER

ADDRESS: 4410 Salem Bottom Road, 21157 PHONE NUMBER: 410-875-4197

SUBDIVISION: Brantwood 3/1 LOT NUMBER: 12

ADDRESS: 3044 Seneca Chief Trail PROPERTY OWNER: NV Homes

SEPTIC TANK CAPACITY (GALLONS): 1250 OUTLET BAFFLE FILTER REQUIRED

PUMP CHAMBER CAPACITY (GALLONS): N/A COMPARTMENTED TANK REQUIRED

NUMBER OF BEDROOMS: 4

SQUARE FEET PER BEDROOM: 180

LINEAR FEET OF TRENCH REQUIRED: 240

TRENCHES:	Trench to be 3.0 feet wide. Inlet 2.0 feet below original grade. Bottom maximum depth 4.0 feet below original grade. Effective area begins at 2.0 feet below original grade. 2.0 feet of stone below distribution pipe.
LOCATION:	Run trenches on contour. From Seneca Chief Trail, place the distribution box 14' from the right lot line and 158' from the front lot line.
NOTES:	Basement service by gravity is proposed. <i>3 = 80' trenches preferred</i>

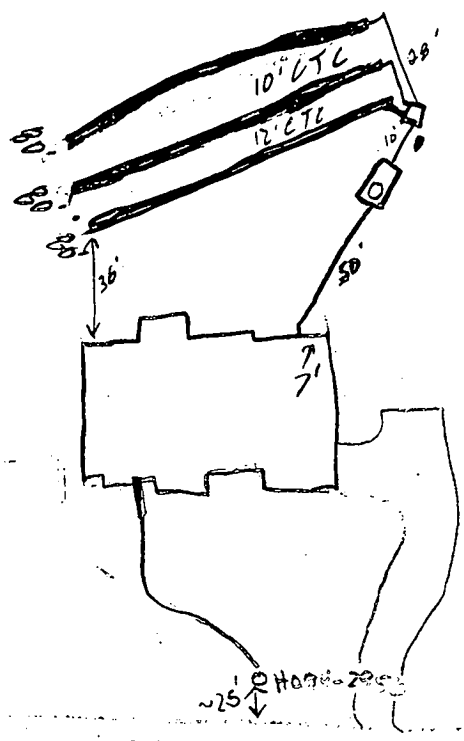
PLANS APPROVED: FS ON SRM 2/5/02 DATE: 5/15/02

- NOTE: PERMIT VOID AFTER 2 YEARS
- NOTE: CONTRACTOR RESPONSIBLE FOR SCHEDULING A PRE-CONSTRUCTION INSPECTION FOR ALL INSTALLATIONS
- NOTE: WATERTIGHT SEPTIC TANKS REQUIRED
- NOTE: ALL PARTS OF SEPTIC SYSTEM SHALL BE 100 FEET FROM ANY WATER WELL
- NOTE: MANHOLE RISERS REQUIRED ON ALL SEPTIC TANKS AND PUMP CHAMBERS UNLESS SPECIFICALLY AUTHORIZED

**NEITHER THE HOWARD COUNTY COUNCIL NOR THE HEALTH DEPARTMENT IS
RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM
PERMITTEE RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT
ALL 410-313-2640 FOR INSPECTION OF SEPTIC SYSTEM**

A510571-M

NOT TO SCALE



SENECA CREEK TRAIL

TRENCH DATA

TRENCH WIDTH 2'
 TRENCH INLET DEPTH 2'
 TRENCH BOTTOM DEPTH 4'
 DEPTH OF STONE 2'
 NUMBER OF TRENCHES 3
 TOTAL TRENCH LENGTH 240'
 ABSORBENT AREA 720 π
 DISTRIBUTION BOX LEVEL ✓
 BAFFLE IN DISTRIBUTION BOX ✓

SEPTIC TANK DATA

SEPTIC TANK 1250 $\frac{1}{2}$ GALLONS
 MANHOLE RISER From 1
 6 INCH INSPECTION PORT N/A

PUMP CHAMBER DATA

PUMP CHAMBER GALLONS N/A
 MANHOLE RISER N/A
 ALARM _____
 PUMP PERFORMANCE TEST _____

PRE-CONSTRUCTION INSPECTION: 5/1/02 Layout per B.P. except (3) 80" (50)

INSPECTION COMMENTS: 5/1/02 Tank set, OK to cover (50)
5/3/02 Tank flooded from rains yesterday. Two trenches installed OK to cover (50)
5/7/02 Tank re-set, trenches finished. OK to cover, all work (50)

INSPECTOR [Signature] DATE SYSTEM APPROVED 5/7/02

Total linear feet of trench required **240** feet

Width of trench(es) **3** feet

Depth of trench(es) **4** feet

Depth of stone required below distribution pipe **2** feet

NOTES:

- Existing Zoning: RC
- Property address: ~~3044~~ Seneca Chief Trail
- The Limit of Disturbance was approved under GPO2-34
- The proposed driveway for this lot shall be a minimum of 10' wide, 6" crusher run with 2-1/2" macadam surface.
- The topography shown assumes proposed contours from the FO1-67 plan are existing.
- Driveway Entrance per Howard County Volume IV Standard Detail R 6.06.

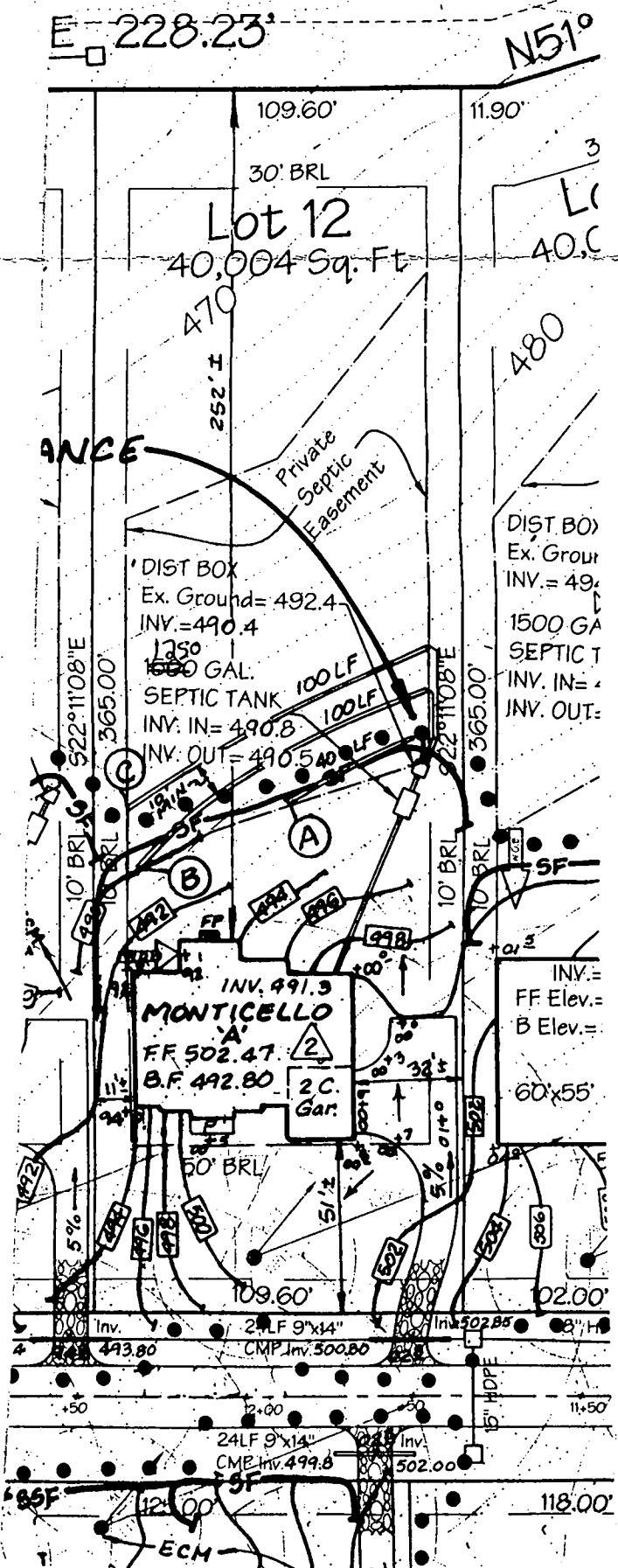
Gravity Basement Service proposed

SEPTIC SYSTEM DESIGN DATA:

- Invert at Foundation Wall: 491.3
- 1750** Gallon Septic Tank (4 BR-Provide manhole to grade)
Existing Ground over Tank: 493.5
Proposed Grade over Tank: 493.5
Invert In: 490.8
Invert Out: 490.5
- Distribution Box: (3 Outlets Minimum)
Existing Ground Over Box: 492.4
Proposed Grade Over Box: 492.4
Invert In: 490.4
- Trench Design:
(Per Health Department Septic Specifications)
= 180 SF per Bedroom x 4 Bedrooms = 720 SF
= 720 SF ÷ 3 ft Trench Width
= 240 LF of Trench REQ.

	(A)	(B)	(C)
Ex. Ground over Trench:	491.00	489.00	487.00
Invert Trench:	489.00	487.00	485.00
Bottom Trench:	487.00	485.00	483.00
Length of Trench:	40 LF	100 LF	100 LF
Width of Trench:	3 Ft.	3 Ft.	3 Ft.

NOTE: Trench Design may be revised at time of installation based on site conditions.



Approved Septic System Plan
 Howard County Health Department
 Plan O.K.
J. Shriver

LDE, Inc.
 9250 Rumsey Road, Suite 100
 Columbia, Maryland
 (410)715-1070 - (301)598-3424 - Fax(410)715-9540

Title: REVISION 2 TO GPO2-34 BRANTWOOD SECTION 3 AREA 1 LOT 12		
Date: 11/21/01	Drawn: LDE	
Scale: 1" = 50'	LDE Job No.: 01-043	Sheet: 1 OF 1

C1 0279 SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED. COUNTY NUMBER A510571M

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

FILL IN THIS FORM COMPLETELY PLEASE TYPE

ST/CO USE ONLY DATE RECEIVED MM DD YY

DATE WELL COMPLETED 3/20/01

DEPTH OF WELL 100' (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" HD-94-2956

OWNER Brantwood Seneca Chief Trail TOWN ELICOTT CITY SUBDIVISION Brantwood SECTION 311 LOT 12

WELL LOG table with columns: DESCRIPTION, FEET (FROM, TO), check if water bearing. Includes entries for Brown silt soil, Blowish orange silt soil, Tanish orange silt soil, Weathered tan gray rock, Med hard to soft gray & green mica.

GROUTING RECORD. WELL HAS BEEN GROUTED (Y). TYPE OF GROUTING MATERIAL: CEMENT CM, BENTONITE CLAY BC. NO. OF BAGS 11, NO. OF POUNDS 1,040. DEPTH OF GROUT SEAL 0' to 42'.

CASING RECORD. MAIN CASING TYPE PL, Nominal diameter 6", Total depth 42'. OTHER CASING (if used) PL, diameter 5", depth 40' to 100'.

SCREEN RECORD. screen type or open hole HO (Open Hole). DEPTH (nearest ft.) 100'.

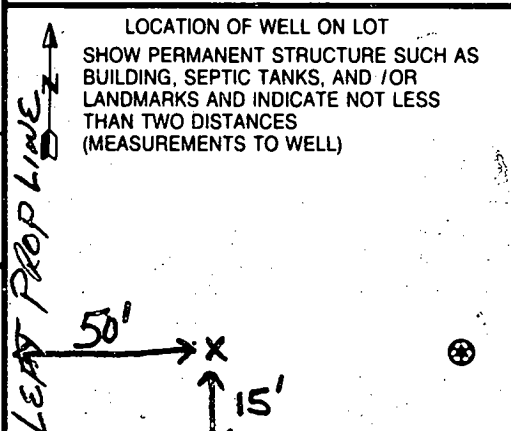
PUMPING TEST. HOURS PUMPED 3. PUMPING RATE 6 gal. per min. METHOD USED TO MEASURE PUMPING RATE WATCH & BUCKET. WATER LEVEL BEFORE PUMPING 33' ft., WHEN PUMPING 57' ft. TYPE OF PUMP USED: S submersible.

PUMP INSTALLED. DRILLER INSTALLED PUMP YES (NO). TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29. CAPACITY: GALLONS PER MINUTE (to nearest gallon) 31 to 35. PUMP HORSE POWER 37 to 41. PUMP COLUMN LENGTH (nearest ft.) 43 to 47. CASING HEIGHT (circle appropriate box and enter casing height) + above LAND SURFACE 2' (nearest foot).

NUMBER OF UNSUCCESSFUL WELLS: 0. WELL HYDROFRACTURED: YES (Y). CIRCLE APPROPRIATE LETTER: A (Abandoned and sealed), E (Electric log obtained), P (Test well converted to production well).

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

DRILLERS LIC. NO. M46355. DRILLERS SIGNATURE (Must match signature on application). LIC. NO. MWD546. SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee).



410-730-0810

EMERGENCY/TEMP NO. IF ANY

B 1 03018

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND PERMIT TO DRILL WELL

STATE PERMIT NUMBER

HO 94 2956

fill in this form completely

W 514745
% Nick Liparini

please print or type

Date Received (APA) 1/16/01

OWNER INFORMATION

BRANT WOOD LLC
8835-P Columbia 100 Parkway
Columbia MD 21045

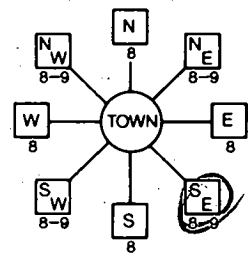
LOCATION OF WELL

Howard
BRANT WOOD
SECTION 3 LOT 12
Mayfield

DRILLER INFORMATION

Michael Barlow MD 355
Michael Barlow Well Drilling
522 Underwood Lane Bel Air MD
1-11-2001

DIRECTION OF WELL FROM TOWN (CIRCLE BOX)



Serena Chief Trail
Butter Fevit Way

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)

30 30
DISTANCE FROM ROAD
ENTER FT OR MI

WELL INFORMATION
APPROX. PUMPING RATE 5
AVERAGE DAILY QUANTITY NEEDED 500

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Howard CO A510571M
DATE ISSUED 1/25/01
CO SIGNATURE
GRID 520 820

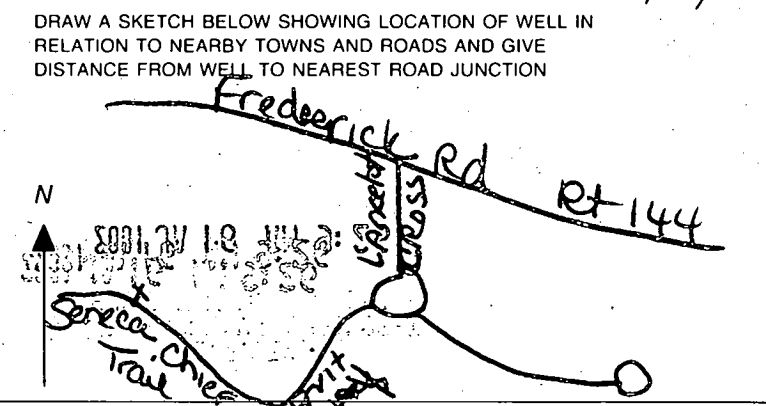
- USE FOR WATER (CIRCLE APPROPRIATE BOX)
D DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION
F FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)
I INDUSTRIAL, COMMERCIAL, DEWATERING
P PUBLIC WATER SUPPLY WELL
T TEST, OBSERVATION, MONITORING
G GEO-THERMAL

APPROXIMATE DEPTH OF WELL 300 FEET
APPROXIMATE DIAMETER OF WELL 6" INCH

METHOD OF DRILLING (circle one)
JETTED
AIR-PERCussion
ROTARY (Hydraulic Rotary)
Reverse-ROTary
Drive-POINT

REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX)
N THIS WELL WILL NOT REPLACE AN EXISTING WELL
Y THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
S THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS
D THIS WELL WILL DEEPEM AN EXISTING WELL

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X
SOURCES OF DRILLING WATER
WRITE THE BOX NUMBER FROM THE MAP HERE
E 820
N 520



Not to be filled in by driller (MDE OR COUNTY USE ONLY)
APPROX. PERMIT NUMBER
PERMIT NO. HO 94 2956

SPECIAL CONDITIONS
NOTE - APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED

5937

APPLICATION

PERCOLATION TESTING

A 510571 E

P _____

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

DISTRICT _____

DATE 7/17/98

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 George A. Garbutt

ADDRESS 11363 Frederick Rd., Ellicott City, MD 21042 PHONE _____

AGENT OR PROSPECTIVE BUYER Heritage Land Development

ADDRESS 3243 Bethany Lane, Ellicott City, MD 21042 PHONE 410-313-8808

PROPERTY LOCATION:

SUBDIVISION Brantwood II LOT NO. Y B 23

ROAD AND DESCRIPTION 11363 Frederick Road, Ellicott City, MD 21042

TAX MAP 16 PARCEL # 172

SIZE OF LOT 1 acre 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 OF APPLICANT)

APPROVED BY _____ FOR _____ DATE _____

DISAPPROVED BY _____ FOR _____ DATE _____

HOLD PENDING FURTHER TESTS _____

REASONS FOR REJECTION OR HOLDING Hold for wet season testing

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

510571 E

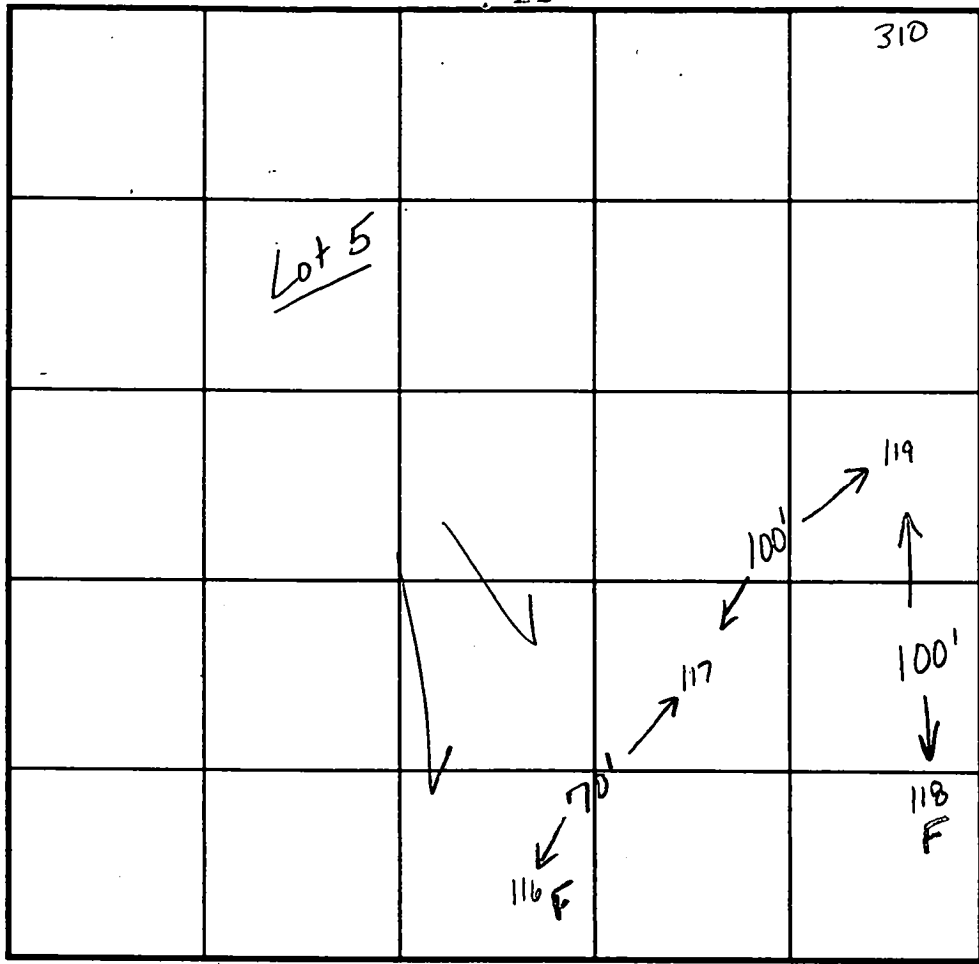
COUNTY #

SOIL PROFILE

0' 116
brown/orange
silt/m
mica
flocs
cut-out
at 2.5'
11'
11.5' WATER

117
3' orange
clay lm
brown
silt/m
flocs
of
mica
possible
water
12'

118
9' orange/brown
clay
loam
20%
rock
frags
WATER



INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE. Route 144

SOIL PROFILE

0' 119
orange
clay
lm 2.5'
brown
silt/m
mica
flocs
15%
shale
frags 12'

310
orange
cl lm 2'
beige tan
orange
silt/m

DATE	TEST NO.	DEPTH	PRE-WET		TEST - 1" DROP		TIME
			START	STOP	START	STOP	
8.19.98	116	FAILED	DUE TO WATER				F
	117	4.0'S	10:52 ₁₀	10:59	10:59	11:01	2min
		12.0'0	visual	ok - see profile			
	118	FAILED	DUE TO WATER				F
	310	3.5'S	1:59 ₃₀	2:00	2:00	2:01	1
		12.0'0	visual	ok - see profile			
	119	2.5'S	10:55	10:55 ₅₀	10:55 ₅₀	10:57	1/10
		12.0'0	visual	ok - see profile			

REMARKS test holes staked by surveyor
 TYPE OF SOIL _____
 TESTED BY Kim Maiste ALSO PRESENT Tim Feaga
 TRENCH DESIGN DATA: AVERAGE PERCOLATION TIME 12 minutes TRENCH WIDTH _____
 INLET DEPTH _____ MAXIMUM BOTTOM DEPTH _____ SQ. FT./BEDROOM 180

510571 F

COUNTY #

SOIL PROFILE

121

orange
brown
clay
loam
mica
flocs
15% rx
frags

WATER

120

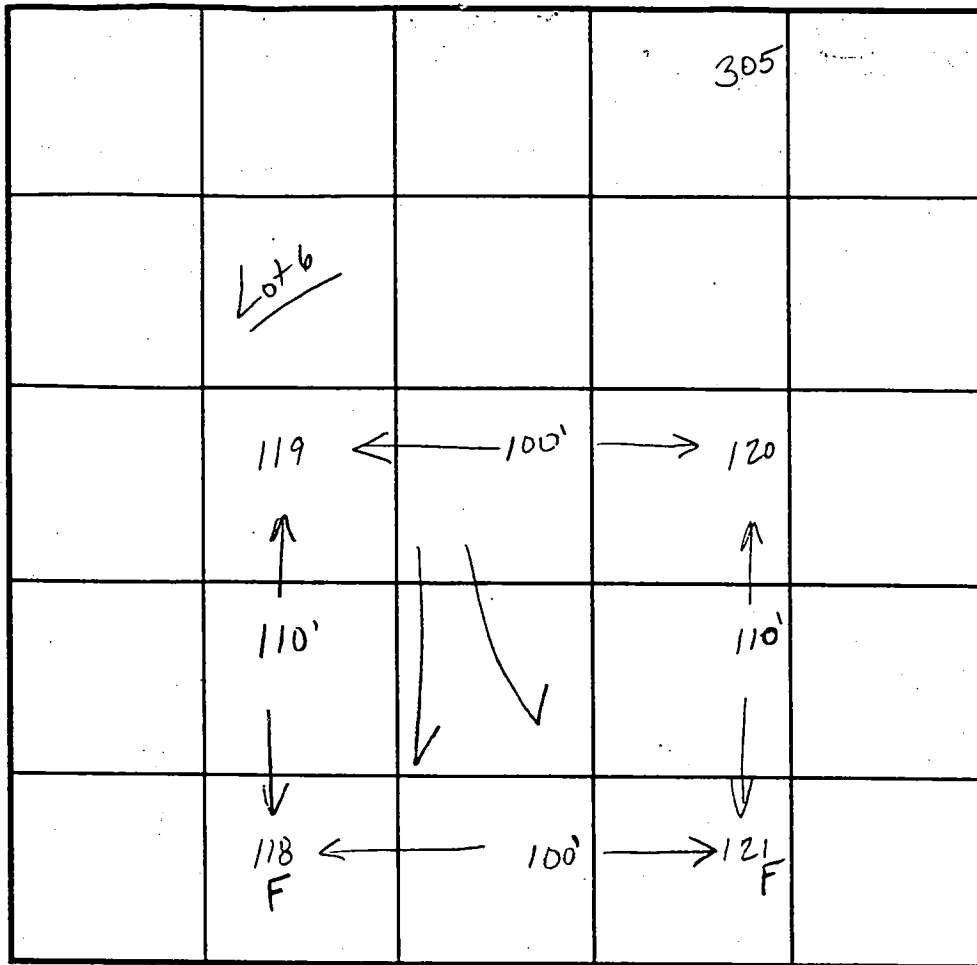
brown/
orange
cl 1m

brown
siltm
quartz
frags
10%
shale
frags

118

orange
brown
clay
lm
20%
rock
frags

WATER



INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE. Rt 144

SOIL PROFILE

119

orange
cl 1m

brown
siltm
mica
flocs
15%
shale
frags

305

or/br
cl 1m

or/tan
siltm
mica
10% rx

DATE	TEST NO.	DEPTH	PRE-WET		TEST - 1" DROP		TIME
			START	STOP	START	STOP	
8.19.93	121	9.0'D	FAILED DUE TO WATER		WATER		F
	120	3.0'S	11:13 ₁₀	11:14 ₁₀	11:14 ₁₀	11:16 ₁₀	2min
		10.0'D	visual ok - see profile				
	118	FAILED	DUE TO WATER				F
	119	2.5'S	10:55	10:55 ₅₀	10:55 ₅₀	10:57	1 10
		12.0'D	visual ok - see profile				
	305	3.0'S	11:48 ₂₀	11:49 ₃₀	11:49 ₃₀	11:52 ₁₀	2 20
		9.0'D	visual ok - see profile				

REMARKS test holes staked by surveyor

TYPE OF SOIL

TESTED BY Kim Maiste

ALSO PRESENT Tim Feaga

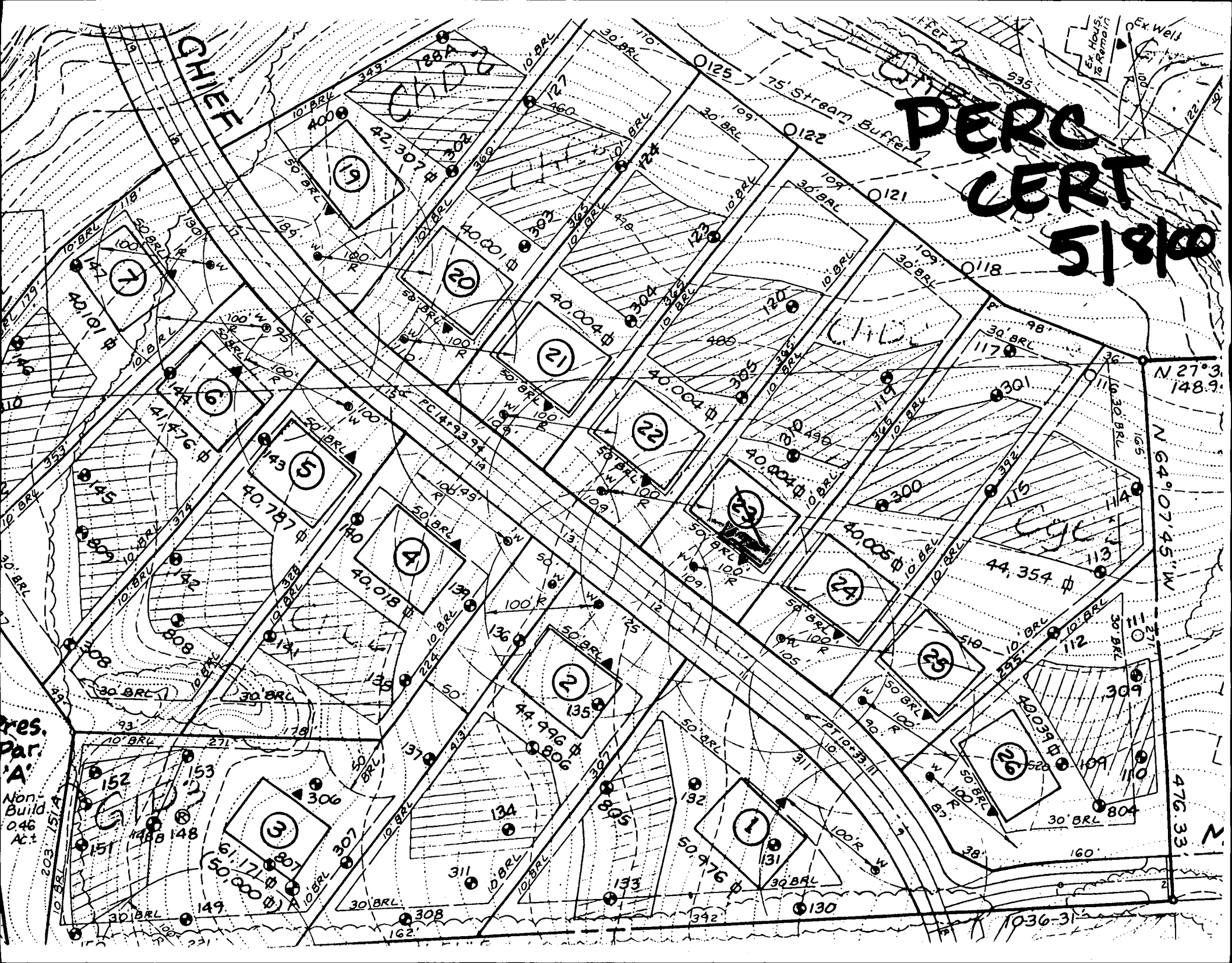
TRENCH DESIGN DATA: AVERAGE PERCOLATION TIME

TRENCH WIDTH

INLET DEPTH

MAXIMUM BOTTOM DEPTH

SQ. FT./BEDROOM



CHIEF

PERC
CERT
5/8/00

CHIEF ST

CHIEF

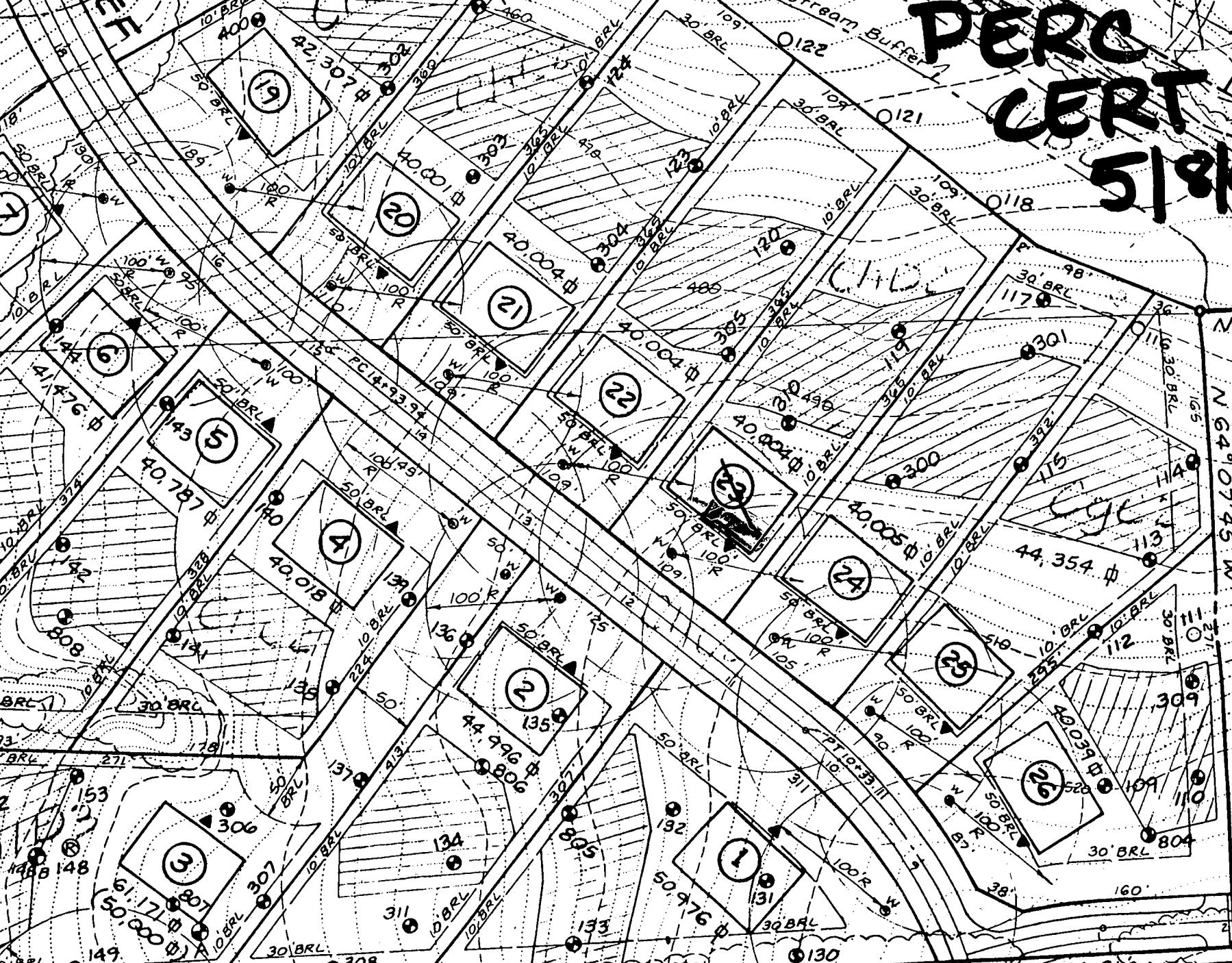
Pres.
par
'A'
Non-
Build
0.46
Ac±

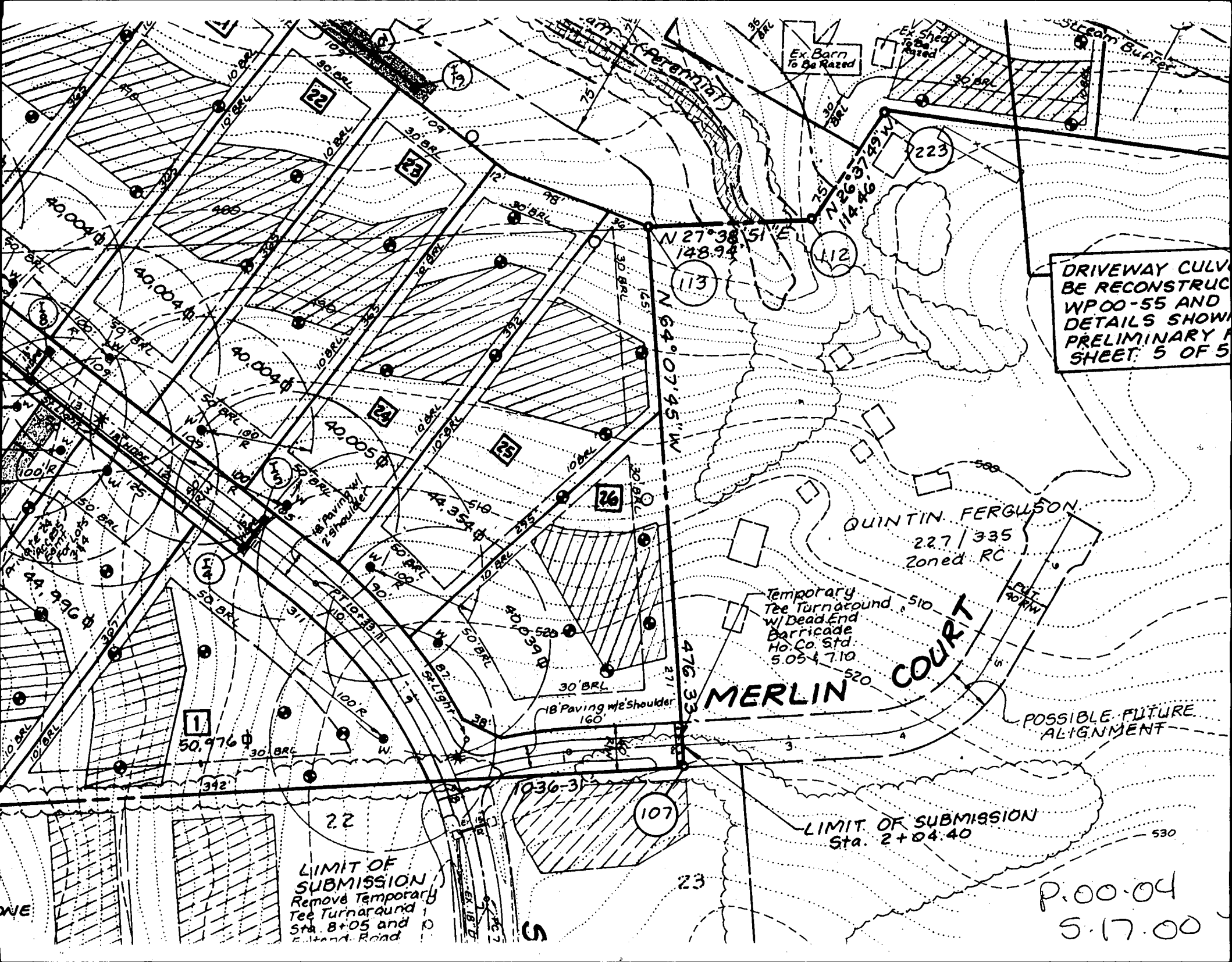
N 27° 3'

N 64° 07' 45" W

476.33'

1036-31





DRIVEWAY CULV
 BE RECONSTRUCT
 WPOO-55 AND
 DETAILS SHOW
 PRELIMINARY
 SHEET: 5 OF 5

QUINTIN FERGLISON
 227 / 335
 Zoned RC

Temporary
 Tee Turnaround
 w/ Dead End
 Barricade
 Ho. Co. Std.
 5.05 & 7.10

MERLIN COURT

POSSIBLE FUTURE
 ALIGNMENT

LIMIT OF SUBMISSION
 Sta. 2+04.40

LIMIT OF
 SUBMISSION
 Remove Temporary
 Tee Turnaround
 Sta. 8+05 and
 Extend Road

P.00.04
 5.17.00