

Repair Perc ch. 1567  
Pd. 160<sup>04</sup>  
Bettie K.

PERC TEST DATA SHEET

DATE 11/27/90 LOCATION 31 JUNIPER LANE LOT SIZE \_\_\_\_\_

OWNER Bettie Krauetz ADDRESS 31 JUNIPER LANE TELE # 253-7735

P.E./RS Richard Scott FIRM Samu OBSERVED BY David Zarnowski

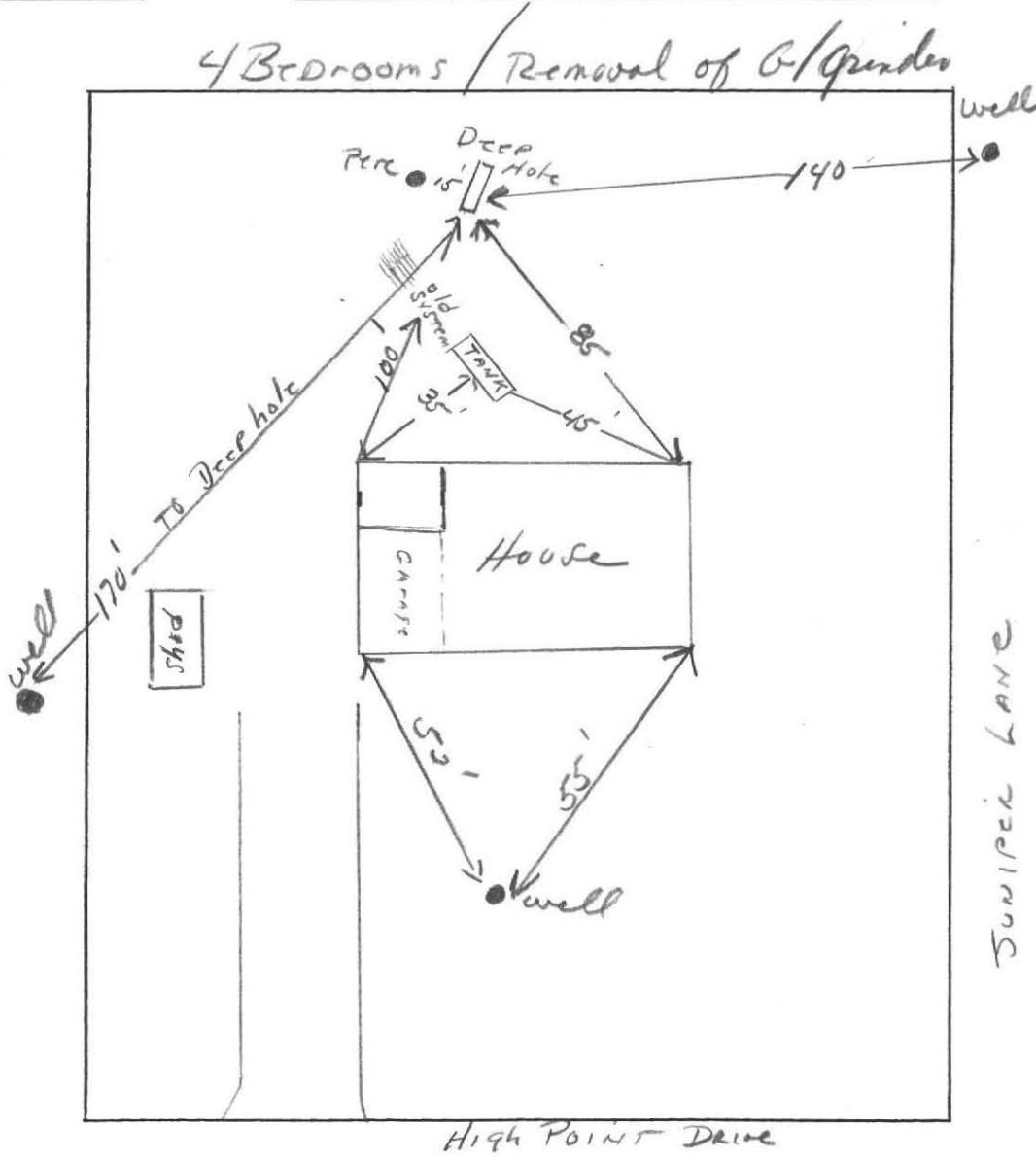
BACK HOE OPERATOR Ray EXCAVATING BENCH MARK \_\_\_\_\_

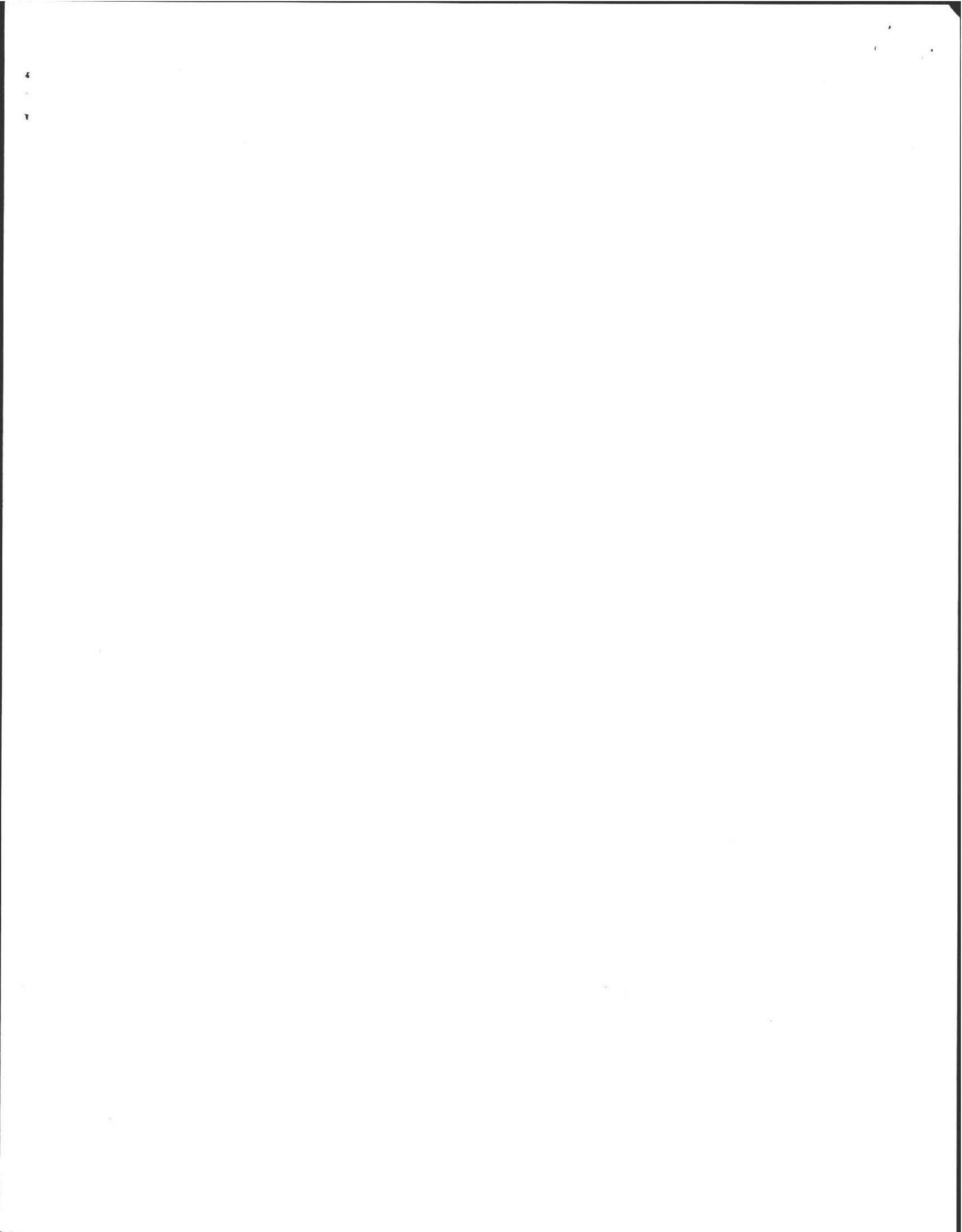
PERC DEPTH 48" PRE SOAK TIME 8:10 PERC DEPTH \_\_\_\_\_ PRE SOAK TIME \_\_\_\_\_

TEST	<u>8:25</u>	<u>12"</u>	<u>9:04</u>	<u>8'</u>	_____	_____
	<u>8:33</u>	<u>11"</u>	<u>9:17</u>	<u>7'</u>	_____	_____
	<u>8:43</u>	<u>10"</u>	<u>9:28</u>	<u>6"</u>	_____	_____
	<u>8:53</u>	<u>9"</u>	<u>3" in 35 min</u>	_____	_____	_____

RATE (15) RATE \_\_\_\_\_

#1	TOP 4"	TOP
	SUB 20"	SUB
	Fine Silty Crev T. 11	
	Dry 138"	
	TOP	TOP
	SUB	SUB
	TOP	TOP
	SUB	SUB





OBSERVATION PITS

REQUESTED BY: BETTY KRAVETZ

DEC 06 1990

LOCATION: 31 JUNIPER LANE

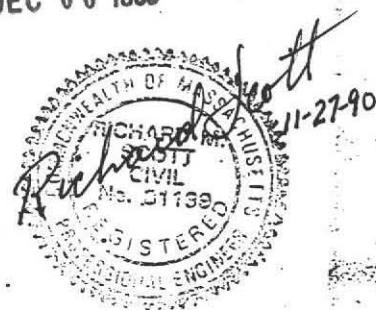
(LOT 61  
HIGHPOINT)

AMHERST, MA. 01002

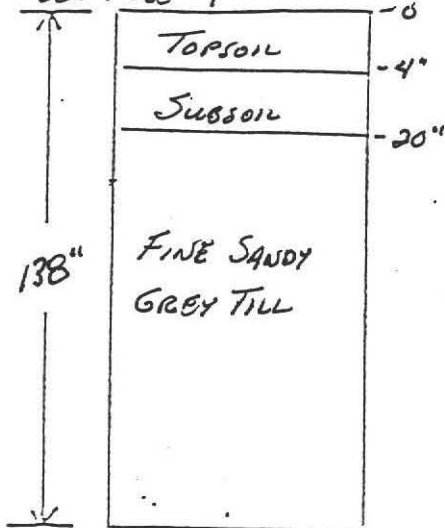
MAILING ADDRESS: \_\_\_\_\_

DATE: 11-27-90

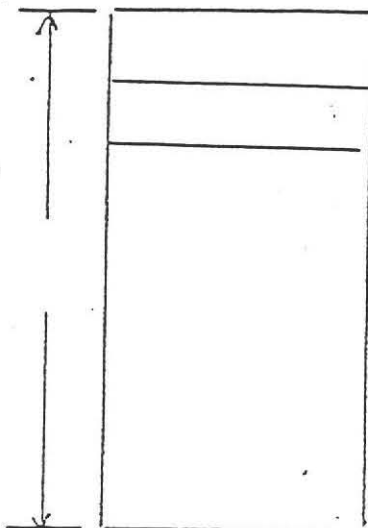
OBSERVER: R. SCOTT, P.E. WITNESS: D. ZAROZINSKI, BOEH



DEEP HOLE #1



Groundwater DRY



Groundwater \_\_\_\_\_

PERC BOTTOM @ 48" DEPTH

START SOAK @ 8:10

12" @ 8:25

11" @ 8:33

10 1/2" @ 8:38

10" @ 8:43

9" @ 8:53

8" @ 9:04      3" = 28 MIN. OKAY

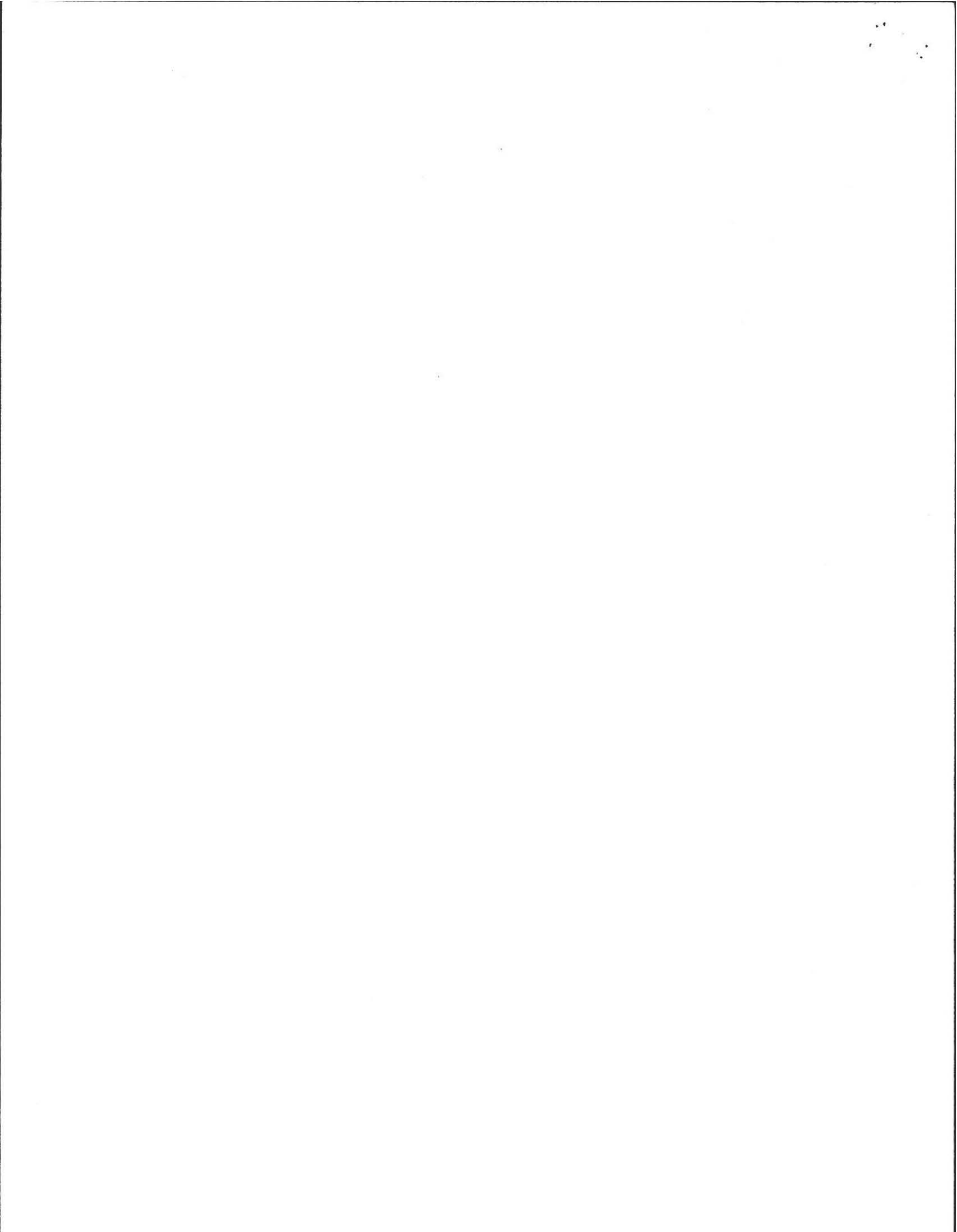
7" @ 9:17

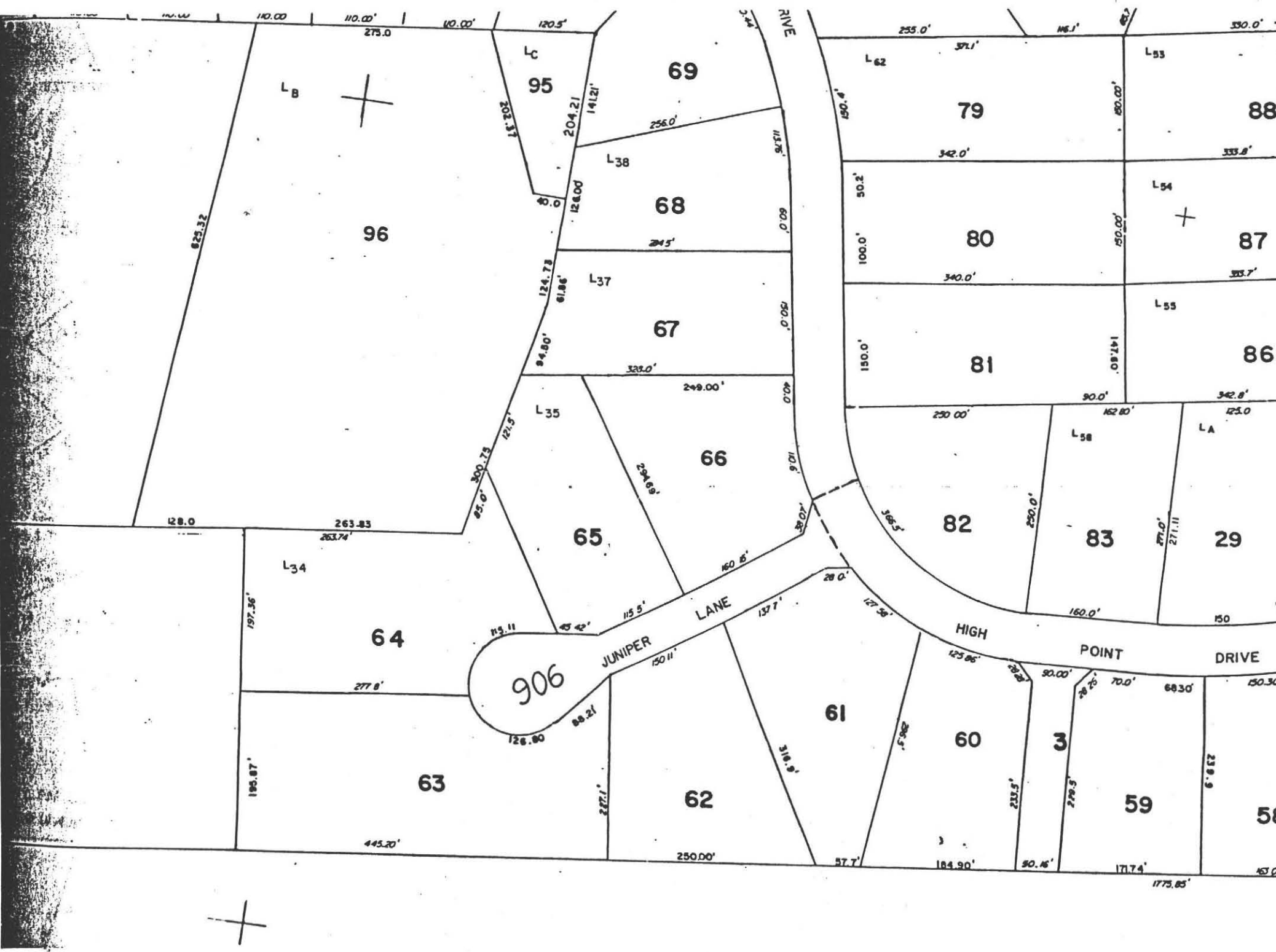
6" @ 9:28

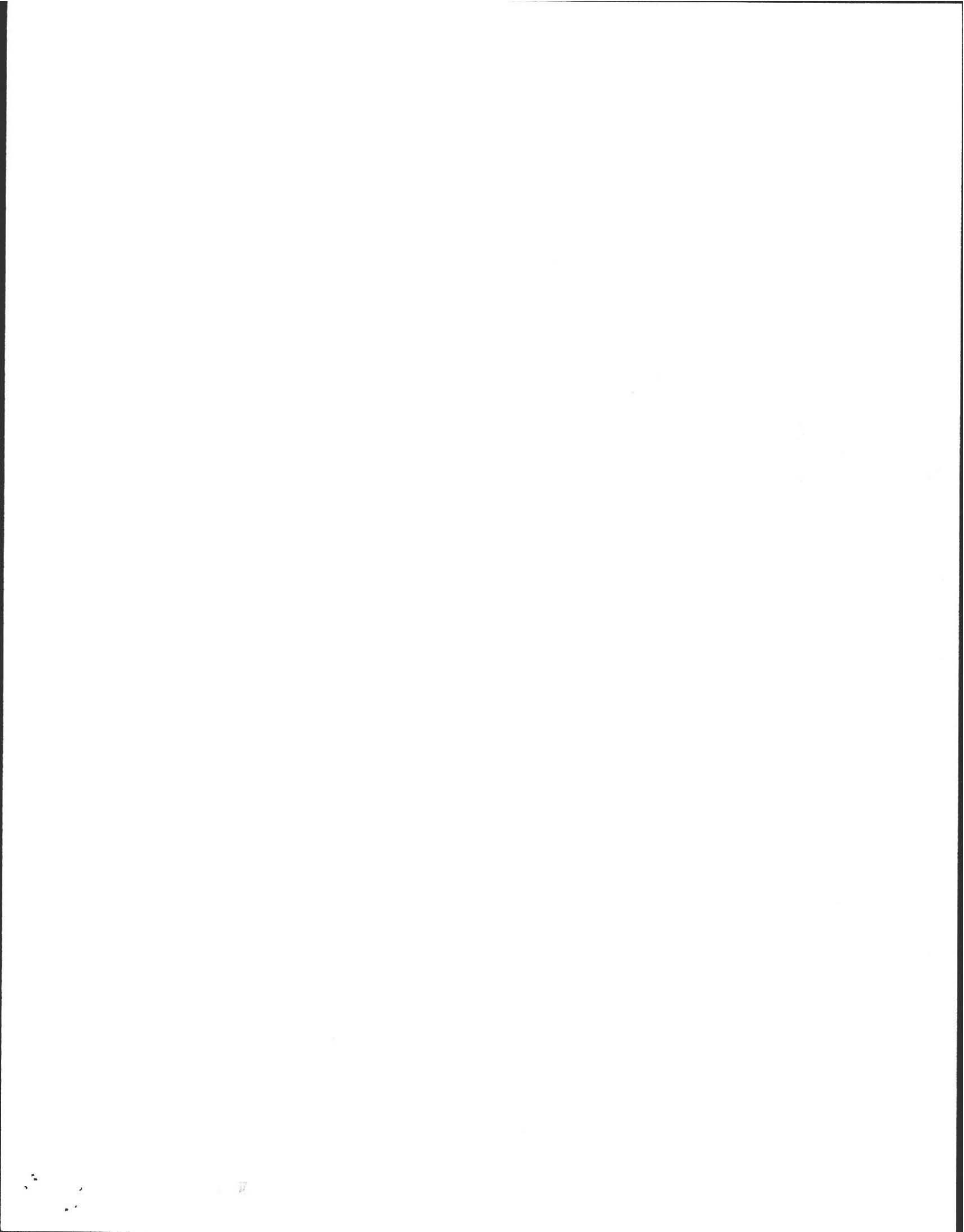
35 MIN/3"

PERC RATE = 11.7 MIN./IN.

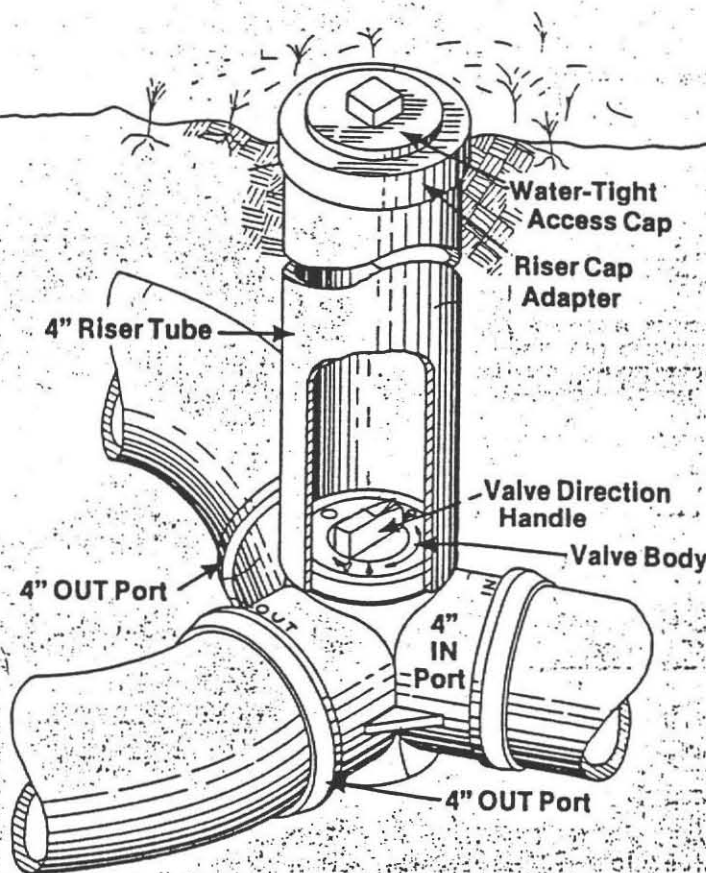
DESIGN RATE = 15 MIN./IN.



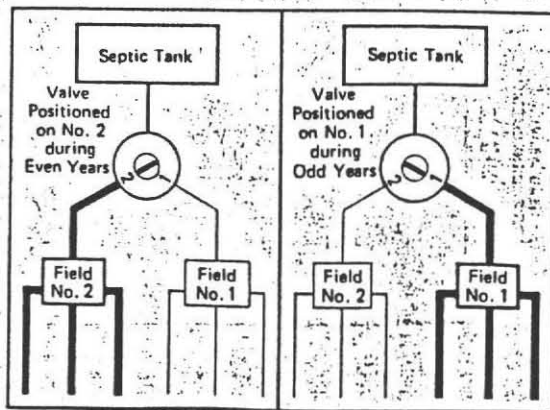




# THE BULL RUN VALVE



The Bull Run® Valve is designed to split effluent flow to distribution boxes. In addition to the advantages of longer life and easier installation the valve is the most public health safe alternating device available for wastewater disposal applications. The user has absolutely no contact with wastewater due to the valve's leak-proof and external operating characteristics. The changeover from one drainage field to another can be accomplished in less than a minute by simply turning a valve without digging or contact with wastewater.



The Bull Run Valve is available in 4" and is suitable wherever septic tank disposal systems are used—in commercial, industrial, and residential application.

## OPERATING THE VALVE

The Direction Control Handle should be rotated periodically to direct effluent to one or the other of two septic fields. After removing the screw cap at the top of Riser Tube, the valve handle can be turned with the Valve Key furnished.

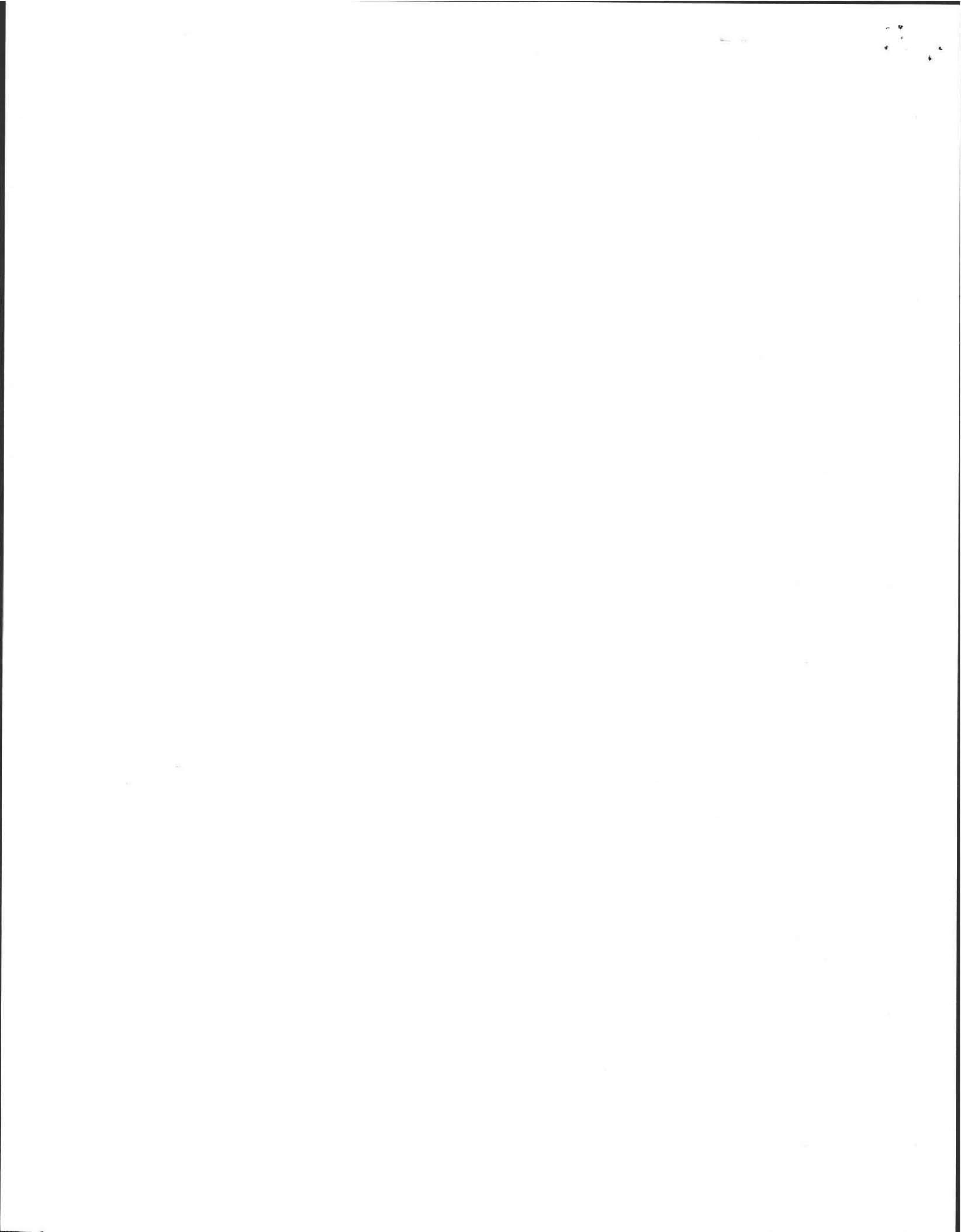
## BULL RUN VALVE

Part No.	Size
BRV KIT	4" HxHxH
BRVKEY28	28"
SDFIP4	4" CAP ADAPTER
PVC PLUG 4	4" ACCESS CAP

### Complete Valve Kit Contains:

1. Bull Run Valve Body
2. Valve Key
3. Riser Cap Adapter
4. Water-Tight Access Cap

CALL TOLL FREE 1-800-345-3132





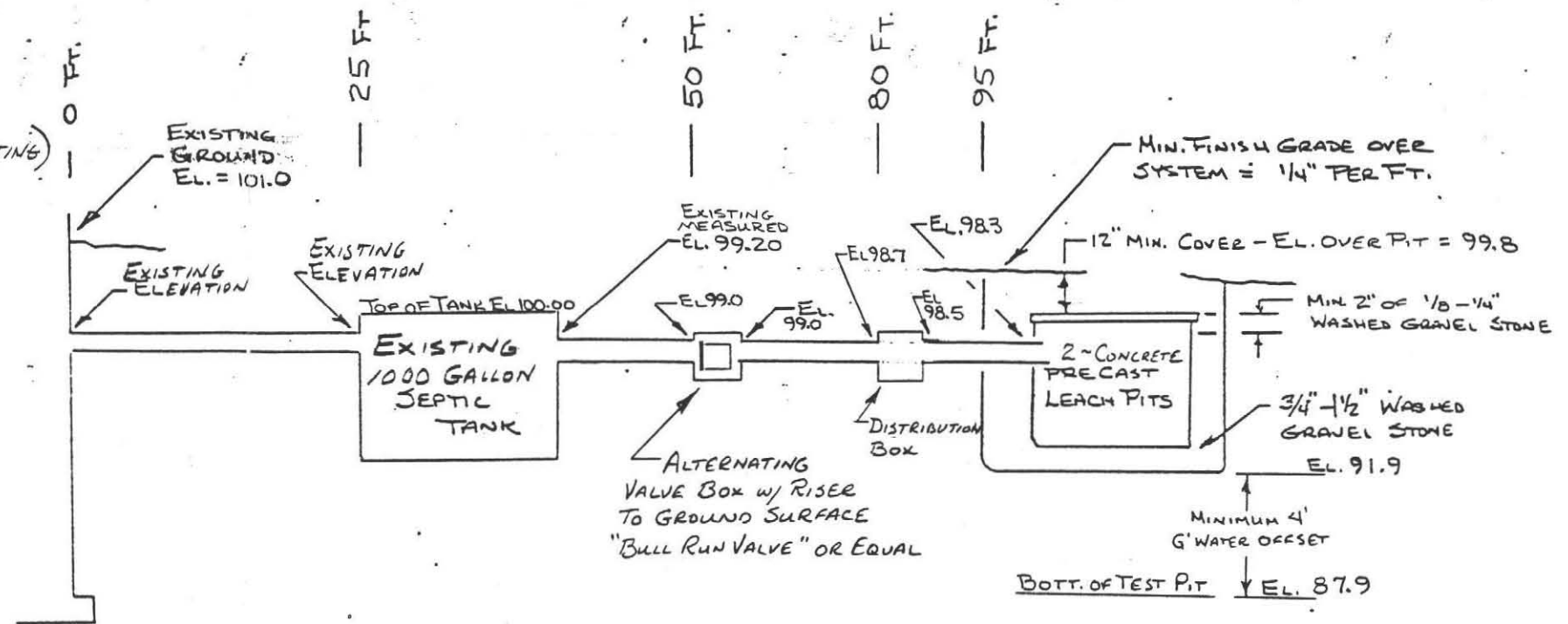
SYSTEM DESIGN CALCULATIONS

DEC 06 1990

4 BEDROOM x 110 GAL. PER BR PER DAY =  
 = 440 GAL. PER DAY DESIGN FLOW.  
 MINIMUM EFFECTIVE SEPTIC TANK VOLUME = 1.5 x 440 = 660 GAL.  
 SPECIFIED TANK VOLUME FOR THIS INSTALLATION = 1000 GAL. (EXISTING)  
 PERCOLATION RATE = 15 MINUTES PER INCH →  
 DESIGN LOADING = 0.66 GPD PER SQ. FT. OF EFFECTIVE  
 SIDEWALL & 0.43 GPD PER SQ. FT. OF BOTTOM AREA.

SPECIFIED 2 LEACH PITS ARE 10 FT. WIDEX 16 FT. LONG  
 X 6.0 FT. EFFECTIVE DEPTH  
 CONCRETE DRYWELL TANKS ARE 68 IN. WIDEX 126 IN. LONG  
 X 58 IN. DEPTH BELOW INLET, AS MFRD BY LANE CONST.  
 OR EQUAL.  
 ALLOWABLE LOADING =  $2 \times [2(10+16) \times 6.0 \times 0.66 + 10 \times 16 \times 0.43]$   
 = 550 GALLONS PER DAY

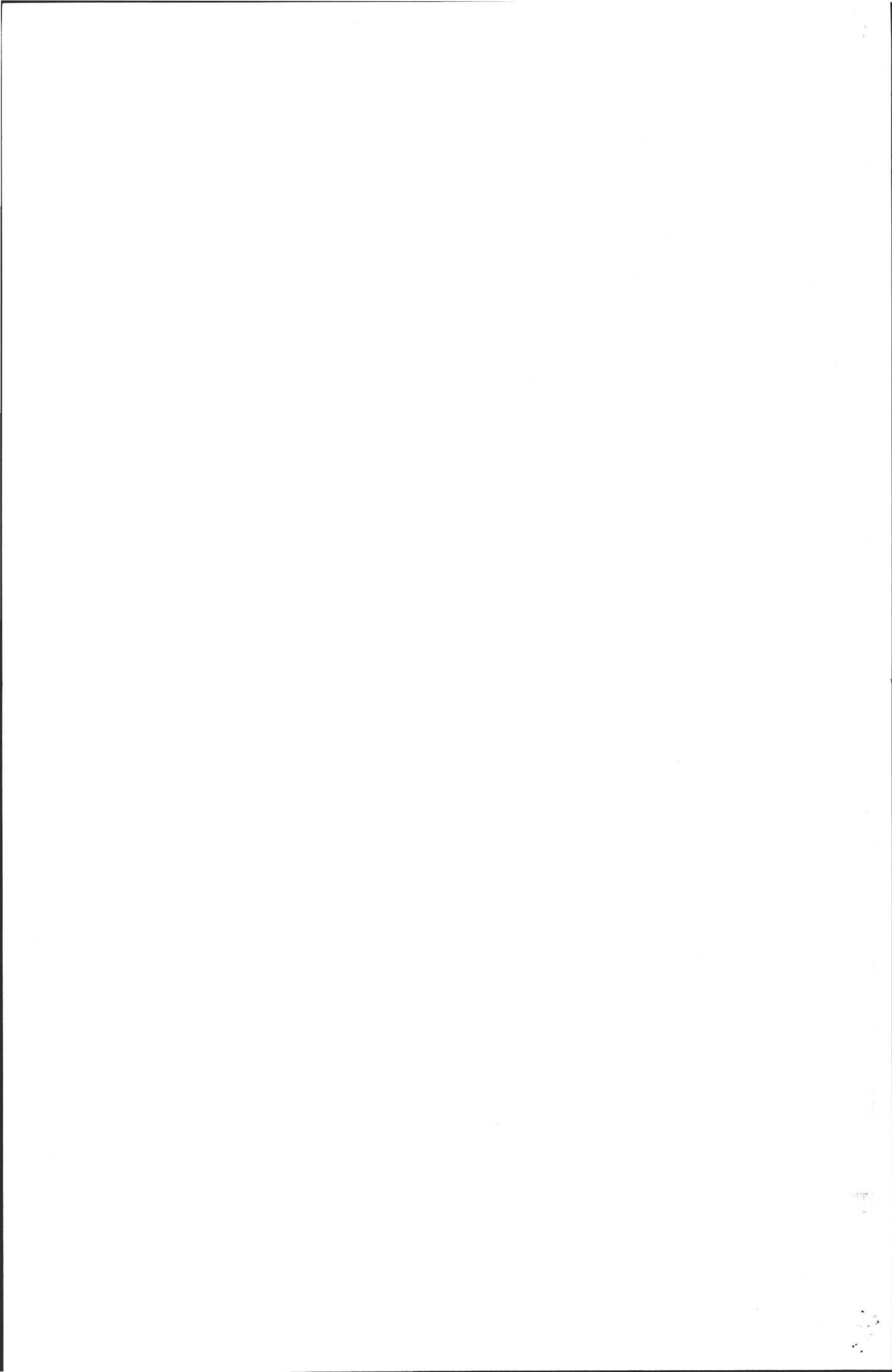
REQUIRED LEACH FACILITY FOR AMHERST = 440 GPD  
 X 1.25 "AMHERST FACTOR" = 550 GPD.



SYSTEM PROFILE - SECTION PARALLEL TO FLOW  
 (NOT TO SCALE)

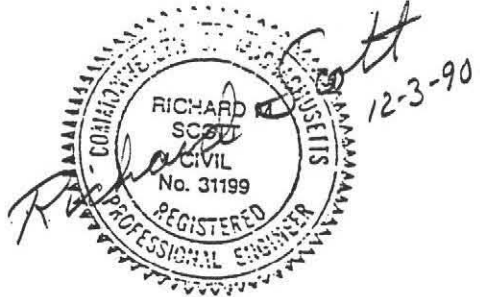
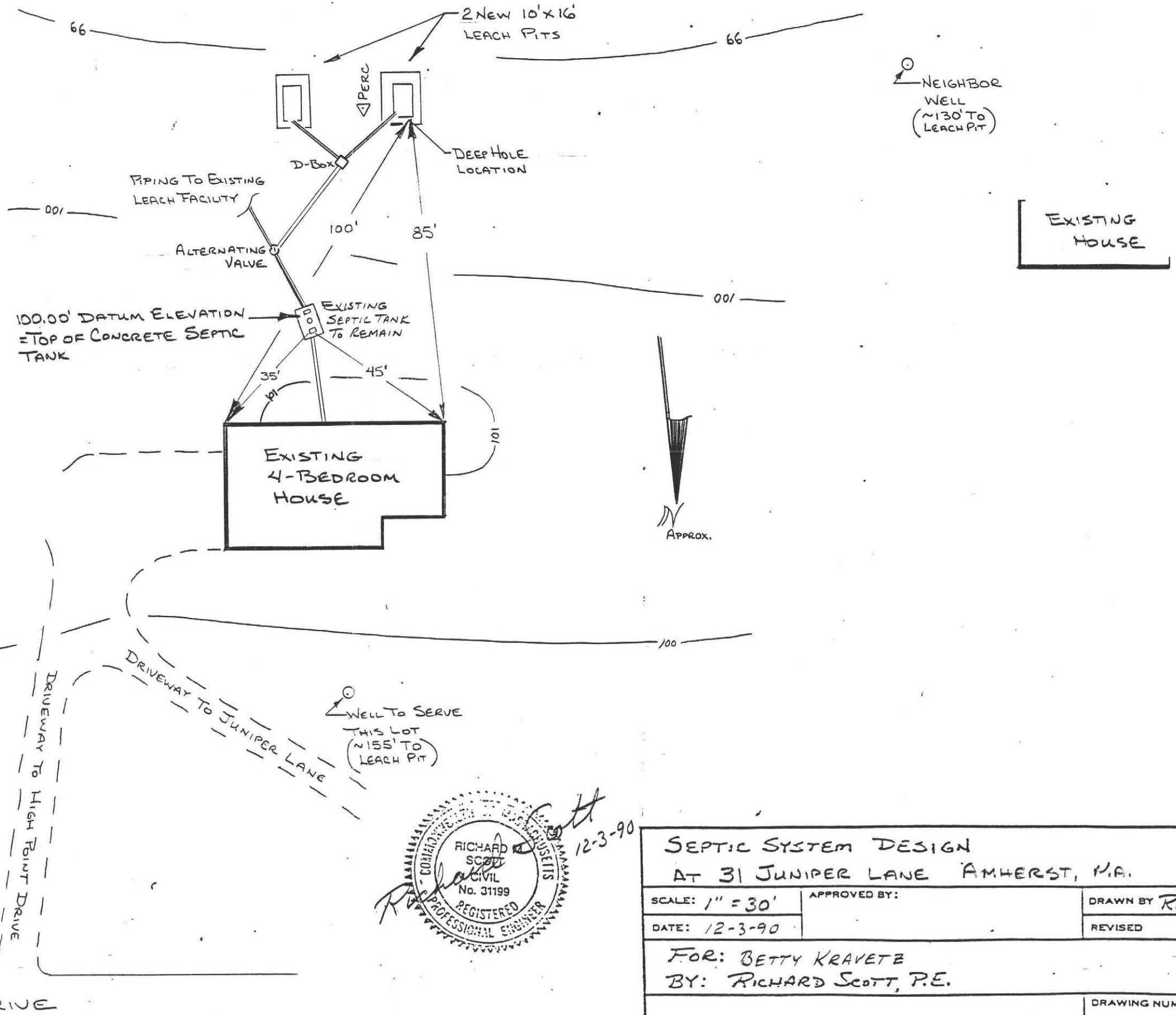


SEPTIC SYSTEM DESIGN		
AT 31 JUNIPER LANE AMHERST, MA,		
SCALE: N.T.S.	APPROVED BY:	DRAWN BY RMS
DATE: 12-3-90		REVISED
FOR: BETTY KRAVETZ		
BY: RICHARD SCOTT, P.E.		
		DRAWING NUMBER



NOTES

- FINISH CONTOURS APPROXIMATE EXISTING
- WELL LOCATIONS ARE AS REPORTED BY OWNER
- LEAVE EXISTING LEACH FACILITY INTACT. INSTALL ALTERNATING VALVE & SET IT TO DIVERT ALL FLOW TO NEW D-BOX.



SEPTIC SYSTEM DESIGN		
AT 31 JUNIPER LANE AMHERST, MA.		
SCALE: 1" = 30'	APPROVED BY:	DRAWN BY RMS
DATE: 12-3-90		REVISED
FOR: BETTY KRAVETZ		
BY: RICHARD SCOTT, P.E.		
		DRAWING NUMBER



No. \_\_\_\_\_

THE COMMONWEALTH OF MASSACHUSETTS  
BOARD OF HEALTH

TOWN OF AMHERST

Application for Disposal Works Construction Permit



Application is hereby made for a Permit to Construct ( ) or Repair (✓) an Individual Sewage Disposal System at:

31 JUNIPER LANE LOT # 61  
Location - Address or Lot No.  
BETTY KRAVETZ 31 JUNIPER LANE, AMHERST, MA. 01002  
Owner Address  
BOSTLEY SANITARY SERVICE GREENFIELD, MA.  
Installer 772-6531 Address

Type of Building \_\_\_\_\_ Size Lot 45,000 Sq. feet  
Dwelling ✓ No. of Bedrooms 4 Expansion Attic (No) Garbage Grinder (No)  
Other — Type of Building \_\_\_\_\_ No. of persons \_\_\_\_\_ Showers ( ) — Cafeteria ( )  
Other fixtures \_\_\_\_\_

Design Flow 110 gallons per 3 Bedroom per day. Total daily flow 440 gallons.

Septic Tank ✓ Liquid capacity 1000 gallons Length 8' Width 5' Diameter \_\_\_\_\_ Depth 4'

Disposal Trench — No. \_\_\_\_\_ Width \_\_\_\_\_ Total Length \_\_\_\_\_ Total leaching area \_\_\_\_\_ sq. ft.

Seepage Pit No. 2 Diameter 10' x 16' Depth below inlet 6' Total leaching area 944 sq. ft.

Other Distribution box (YES) \_\_\_\_\_ Dosing tank ( ) \_\_\_\_\_

Percolation Test Results Performed by R. SCOTT, P.E. WITNESS: D. ZARZINSKI, R.O.F.H. Date 11-27-90

Test Pit No. 1. 11.7 minutes per inch Depth of Test Pit 138" Depth to ground water DRY

Test Pit No. 2. \_\_\_\_\_ minutes per inch Depth of Test Pit \_\_\_\_\_ Depth to ground water \_\_\_\_\_

Description of Soil TO 4" TOP SOIL; TO 20" SUBSOIL; TO 138" DEPTH FINE SANDY GREY TILL.

Nature of Repairs or Alterations — Answer when applicable REPLACE LEACH FACILITY AND PIPING FROM SEPTIC TANK TO LEACH PIT.

Agreement:

The undersigned agrees to install the aforescribed Individual Sewage Disposal System in accordance with the provisions of TITLE 5 of the State Environmental Code — The undersigned further agrees not to place the system in operation until a Certificate of Compliance has been issued by the board of health.

Signed \_\_\_\_\_ Date \_\_\_\_\_

Application Approved By \_\_\_\_\_ Date \_\_\_\_\_

Application Disapproved for the following reasons: \_\_\_\_\_ Date \_\_\_\_\_

Permit No. \_\_\_\_\_ Issued \_\_\_\_\_ Date \_\_\_\_\_

THE COMMONWEALTH OF MASSACHUSETTS  
BOARD OF HEALTH

OF \_\_\_\_\_  
Certificate of Compliance

THIS IS TO CERTIFY, That the Individual Sewage Disposal System constructed ( ) or Repaired ( ) by \_\_\_\_\_

at \_\_\_\_\_

has been installed in accordance with the provisions of TITLE 5 of The State Environmental Code as described in the application for Disposal Works Construction Permit No. \_\_\_\_\_ dated \_\_\_\_\_

THE ISSUANCE OF THIS CERTIFICATE SHALL NOT BE CONSTRUED AS A GUARANTEE THAT THE SYSTEM WILL FUNCTION SATISFACTORY.

DATE \_\_\_\_\_ Inspector \_\_\_\_\_

CHECK OR FILL IN WHERE APPLICABLE

10  
11  
12

13  
14

OBSERVATION PITS

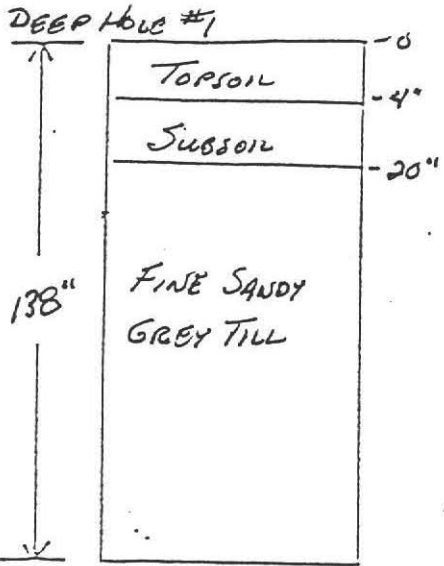
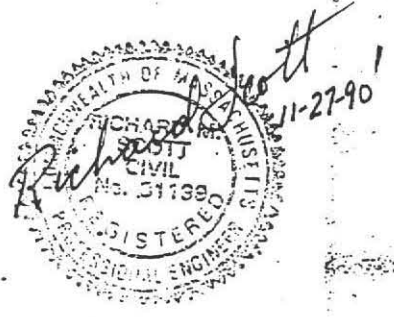
REQUESTED BY: BETTY KRAVETZ

LOCATION: 31 JUNIPER LANE (LOT 61 HIGHPOINT)

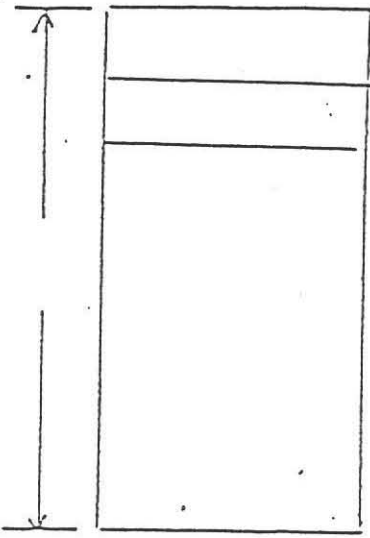
AMHERST, MA. 01002

MAILING ADDRESS: \_\_\_\_\_

DATE: 11-27-90 OBSERVER: R. SCOTT, P.E. WITNESS: D. ZAROZINSKI, BOEH



Groundwater DRY



Groundwater \_\_\_\_\_

PERC BOTTOM @ 48" DEPTH

START SOAK @ 8:10

- 12" @ 8:25
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- 10 1/2" @ 8:38
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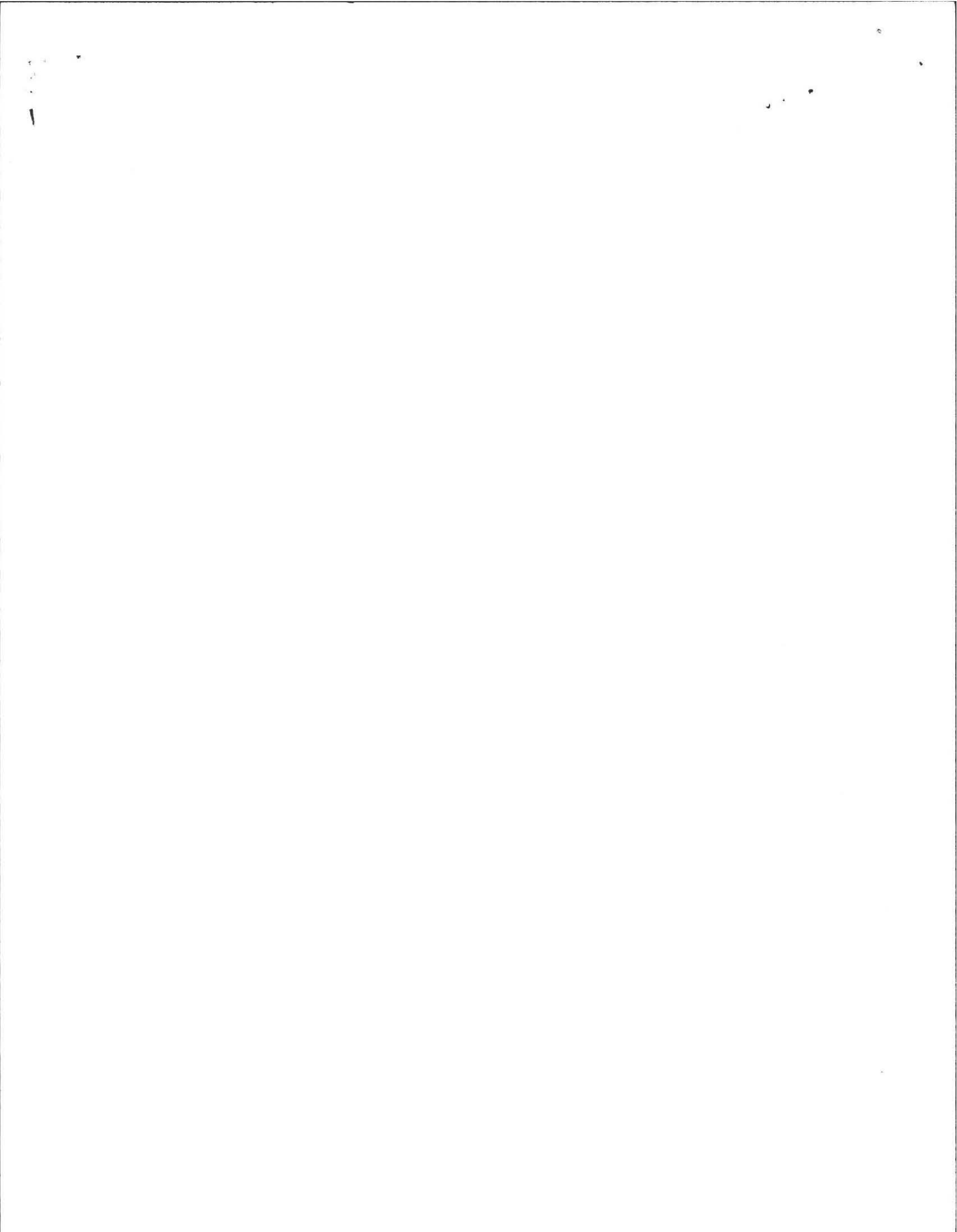
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- 8" @ 9:04     3" = 28 MIN. OKAY
- 7" @ 9:17
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35 MIN/3"

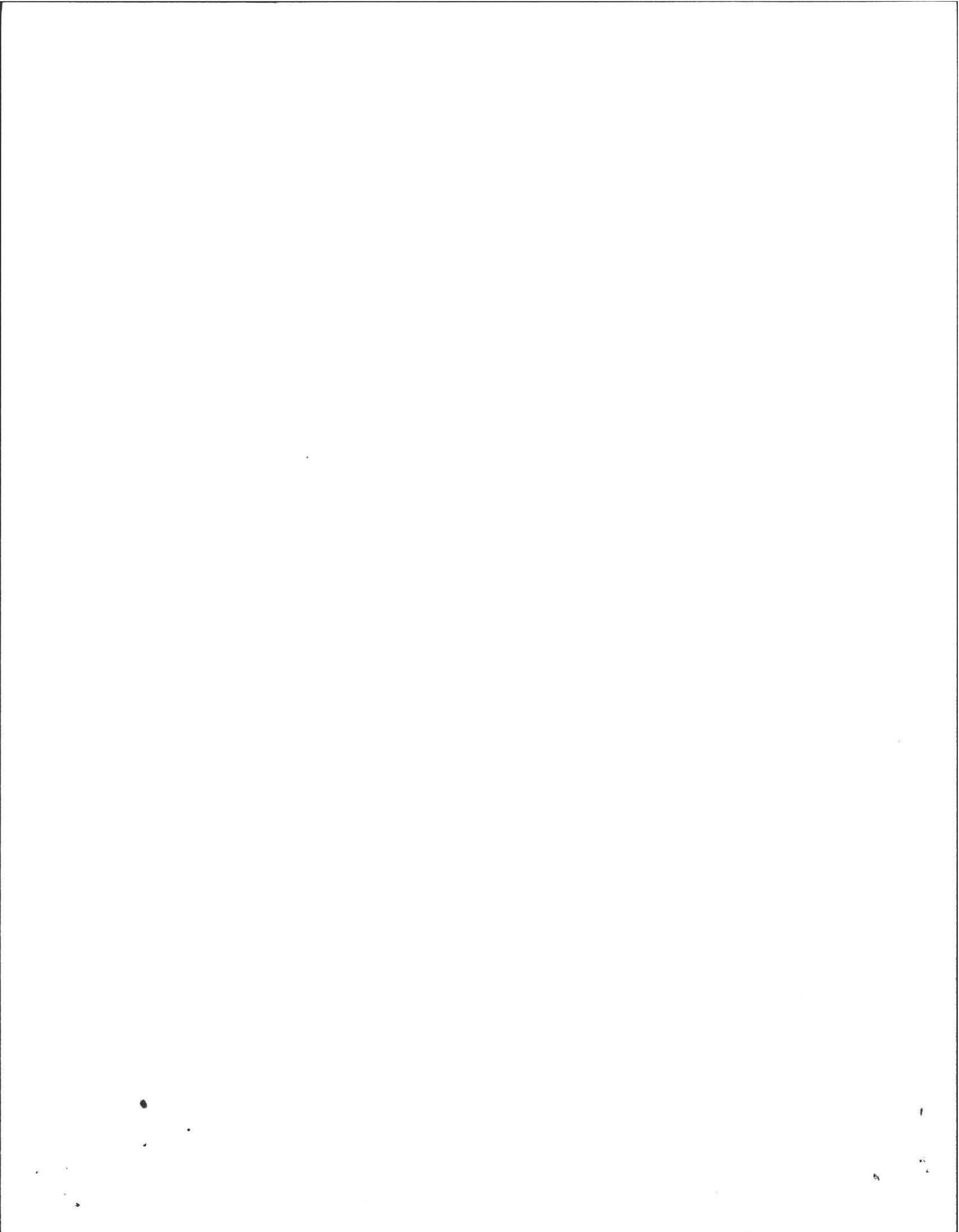
PERC RATE = 11.7 MIN./IN.

DESIGN RATE = 15 MIN./IN.

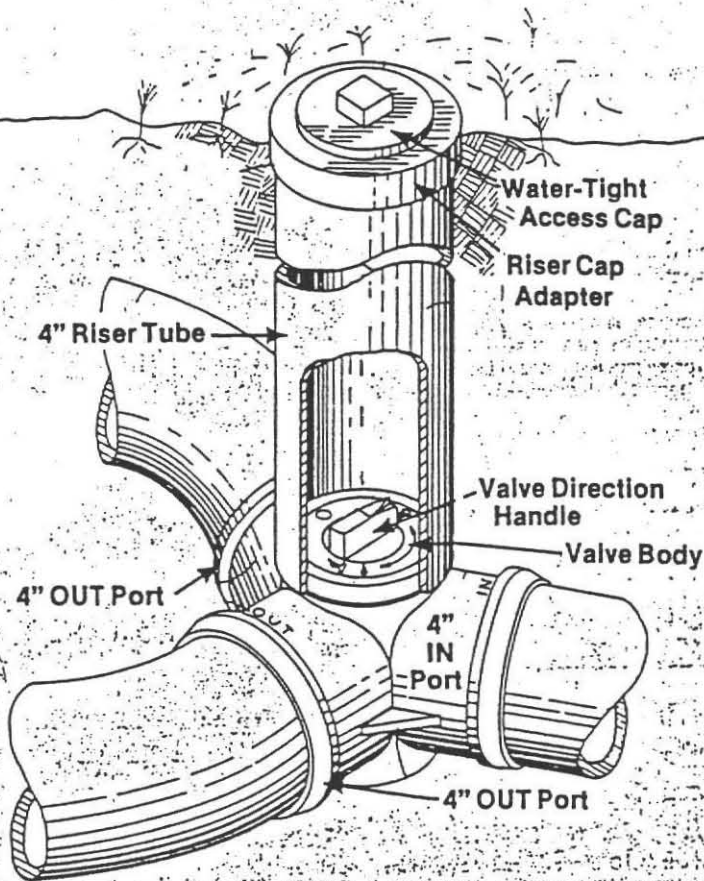








# THE BULL RUN VALVE

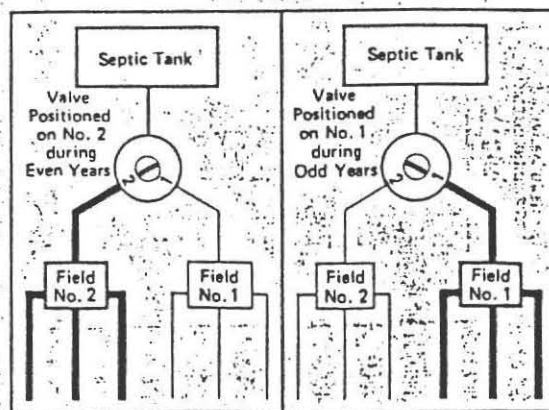


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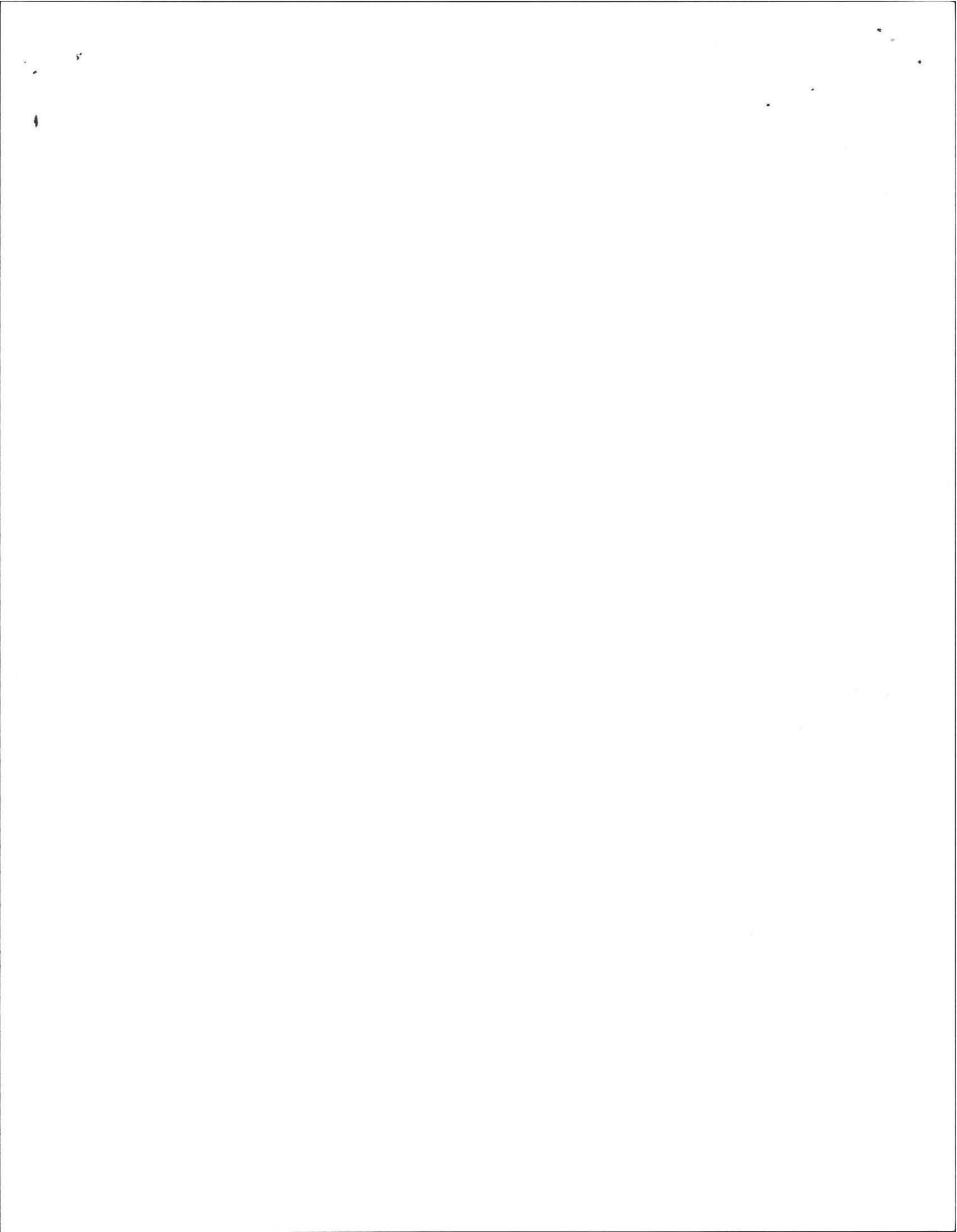
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### Complete Valve Kit Contains:

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2. Valve Key
3. Riser Cap Adapter
4. Water-Tight Access Cap

CALL TOLL FREE 1-800-345-3132



Inspected on 4/18/91 ~~101 High Point~~ #31 Juniper Lane

Need to Re-inspect

SEE ALSO  
101 High Point

Need 30<sup>00</sup> for Re-inspection

DAOC

Richard Scott, P.E.  
31 Shutesbury Road  
Pelham, Ma. 01002

April 20, 1990

David Zarozinski  
Amherst Health Department  
70 Boltwood Walk  
Amherst, Ma. 01002-2128

Re: Septic System Repair at 31 Juniper Lane  
Betty Kravetz

On Saturday April 20, 1991 I conducted an as-built inspection of this septic system repair. A resident of the house reported to me that the system has been in use and seems to function with no problems. My direct observation of the new leach pits shows that effluent is being divided to the two pits and that no significant volume of effluent is being retained in the pits.

Enclosed is a copy of the set of plans with as-built dimensions in "clouds." Comments are as follows:

- 1.) Inlet and outlet openings at the top of the septic tank are not accessible so I was unable to check for baffles in this previously-existing septic tank. Construction by Bostley's did not include changes to the tank.
- 2.) Per your approval in December, the alternating valve shown on the plans was not installed. Other than this difference, dimensions in plan view are very close to design.
- 3.) Pitch from septic tank to distribution box was designed at 1/8" per foot. As-built is 1/10" per foot.
- 4.) Pitch from distribution box to the leach pits was designed at 1/8" per foot. As-built pitch to the East leach pit is 1/4" per foot. As-built pitch to the West leach pit is 1/10" per foot.

# 11 - 1000000

1000000

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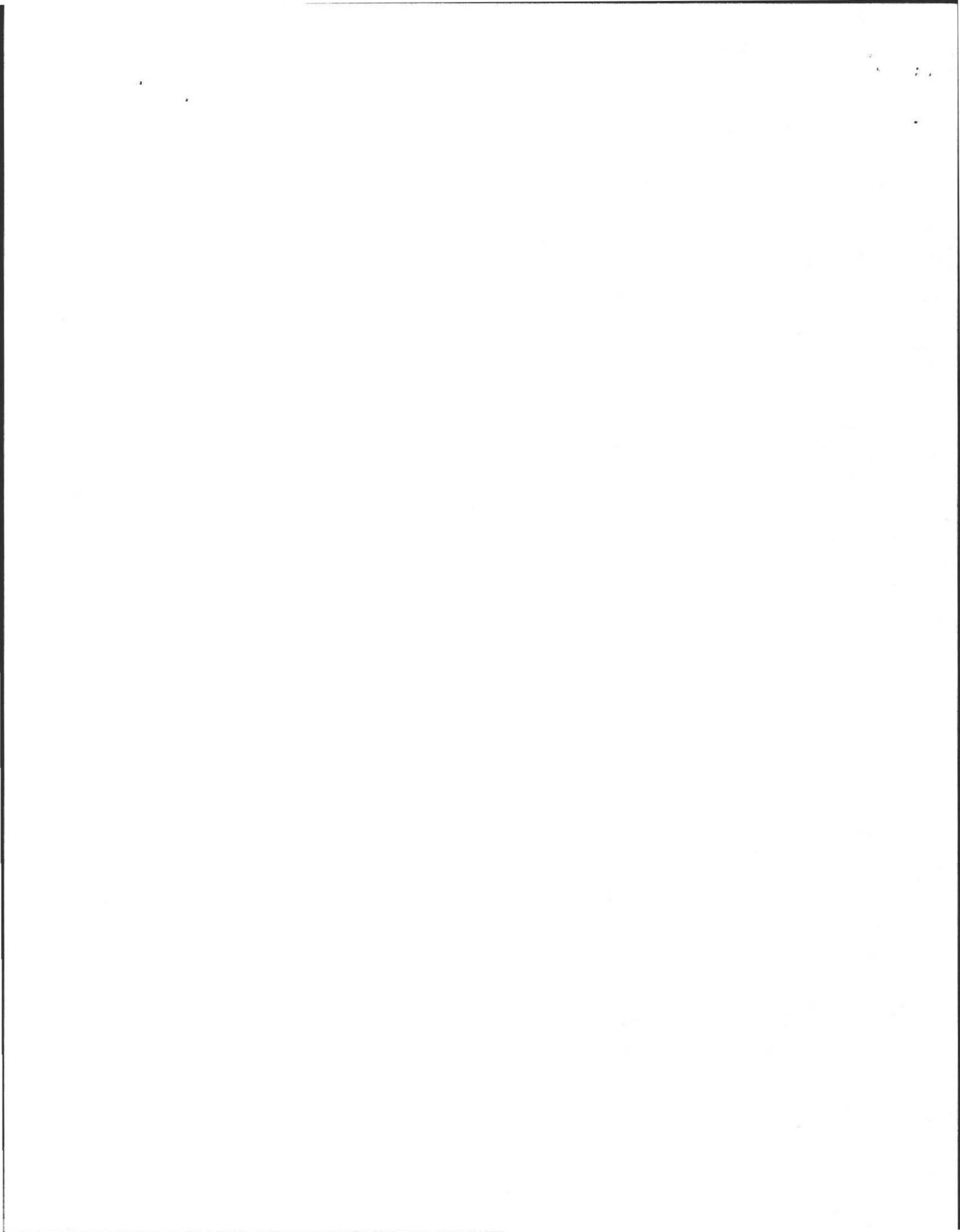
As built elevations are somewhat different than designed. Pitch on two of the three pipe runs is slightly less than the minimum specified by Title 5. Despite these dimensional shortcomings, the materials used are per design and the system functions as necessary for treatment of the sewage effluent.

The decision to require further modifications or allow the system to be covered and continue use lies with your office. I will communicate to Maurice Bostley that he must not cover the system until he gains your acceptance. I have not sent a copy of this correspondence except to you. Please contact me if you wish to discuss this further.

Sincerely,

Richard Scott P.E.

encl.





Richard Scott, P.E.  
31 Shutesbury Road  
Pelham, Ma. 01002

April 20, 1990

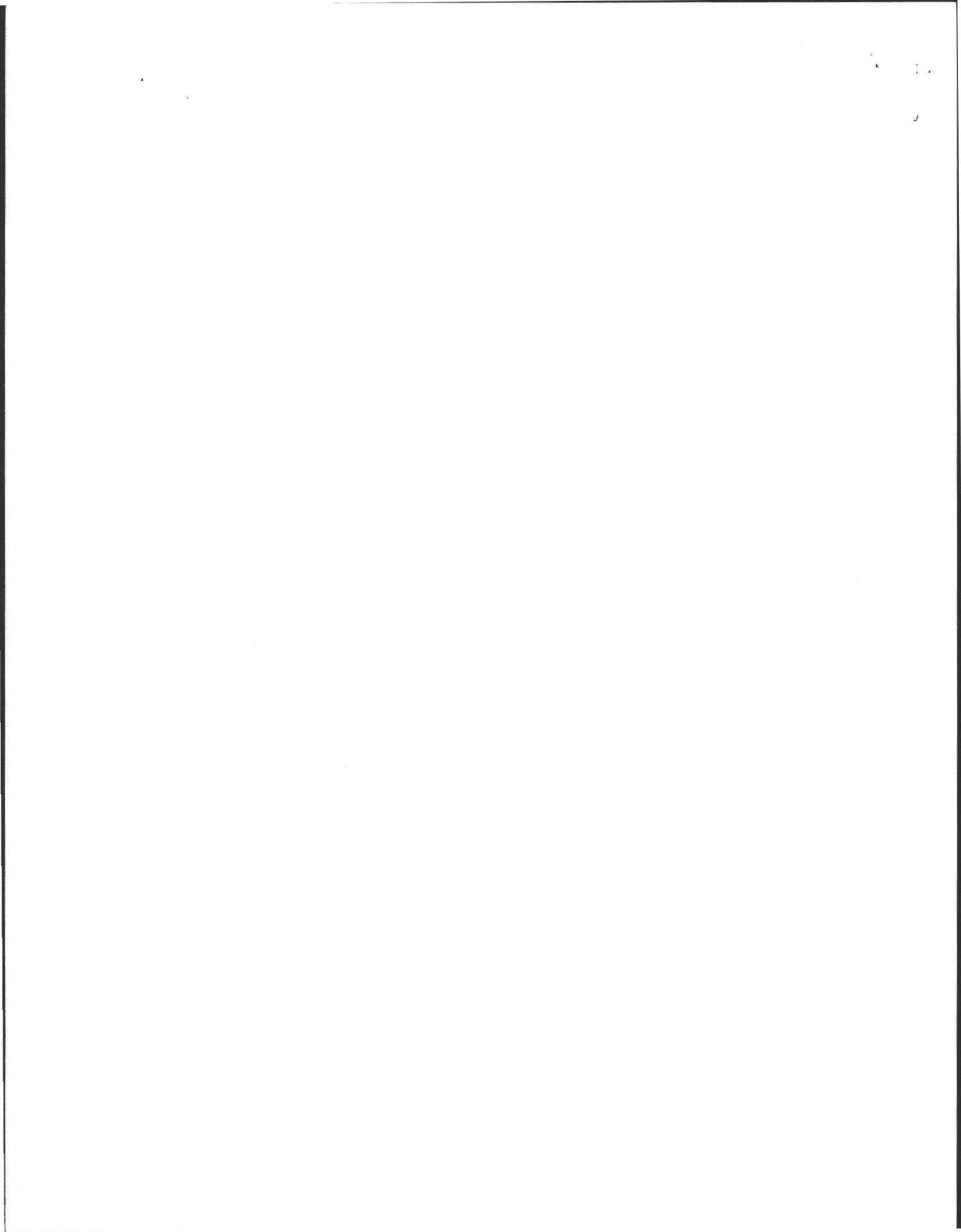
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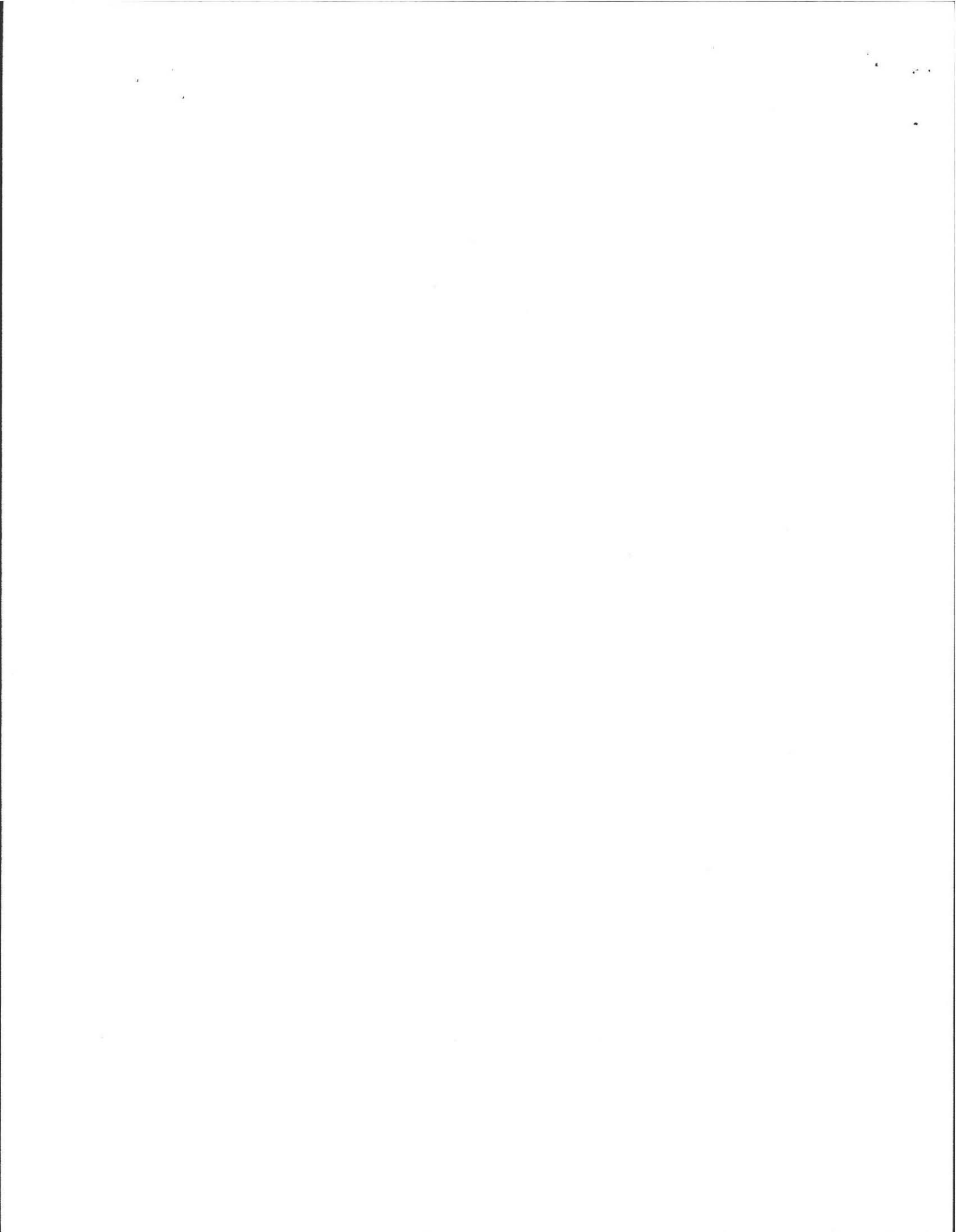
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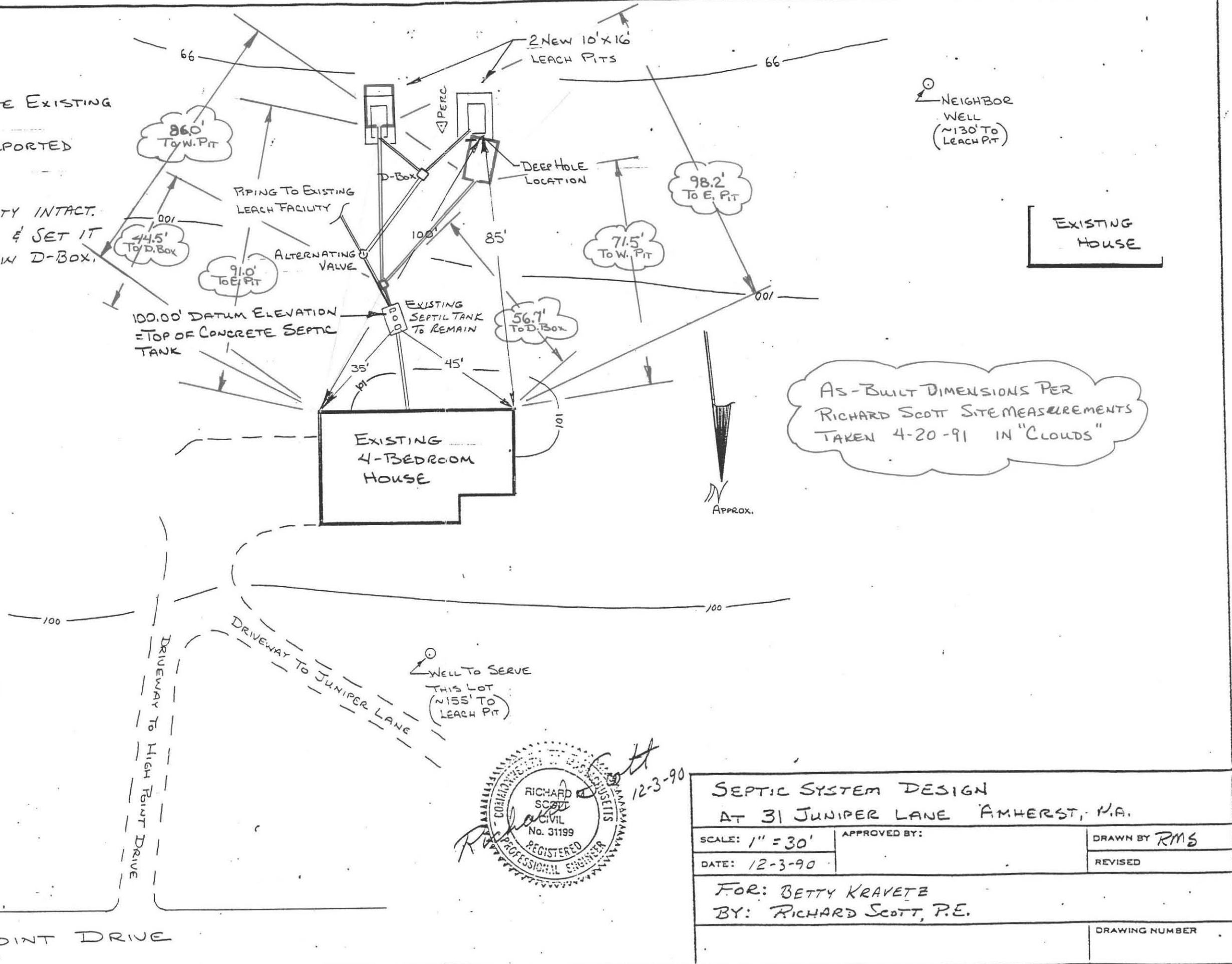
Richard Scott P.E.

encl.

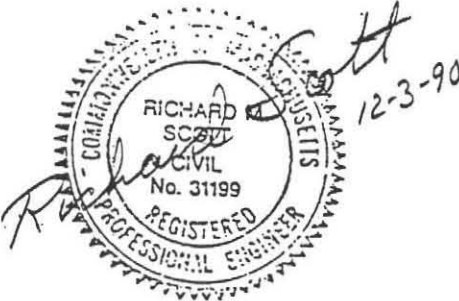


NOTES

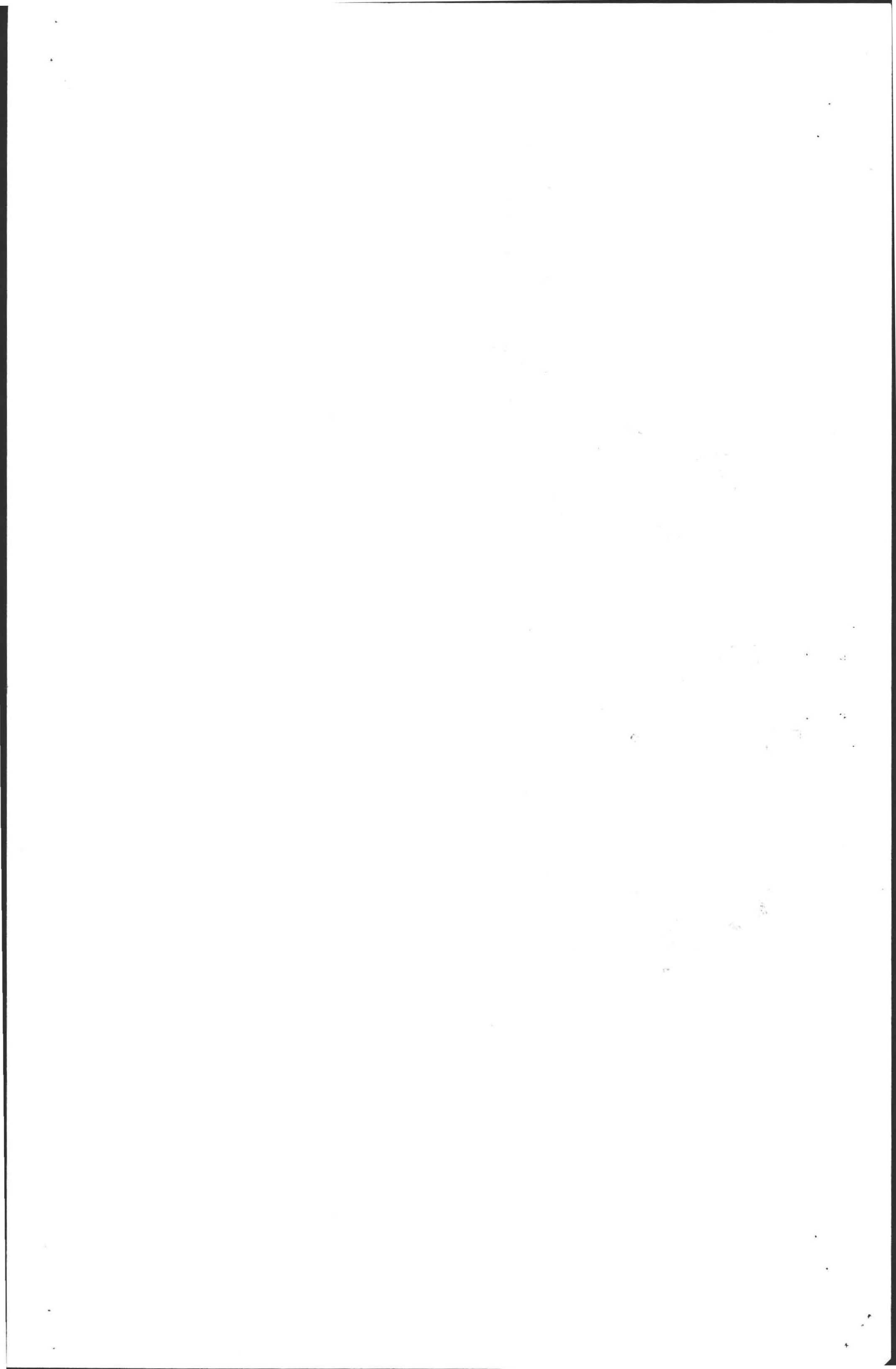
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- LEAVE EXISTING LEACH FACILITY INTACT. INSTALL ALTERNATING VALVE & SET IT TO DIVERT ALL FLOW TO NEW D-BOX.



AS-BUILT DIMENSIONS PER RICHARD SCOTT SITE MEASUREMENTS TAKEN 4-20-91 IN "CLOUDS"



SEPTIC SYSTEM DESIGN		
AT 31 JUNIPER LANE AMHERST, MA.		
SCALE: 1" = 30'	APPROVED BY:	DRAWN BY RMS
DATE: 12-3-90		REVISED
FOR: BETTY KRAVETZ		
BY: RICHARD SCOTT, P.E.		
		DRAWING NUMBER



SYSTEM DESIGN CALCULATIONS

4 BEDROOM X 110 GAL. PER BR PER DAY = 440 GAL. PER DAY DESIGN FLOW.  
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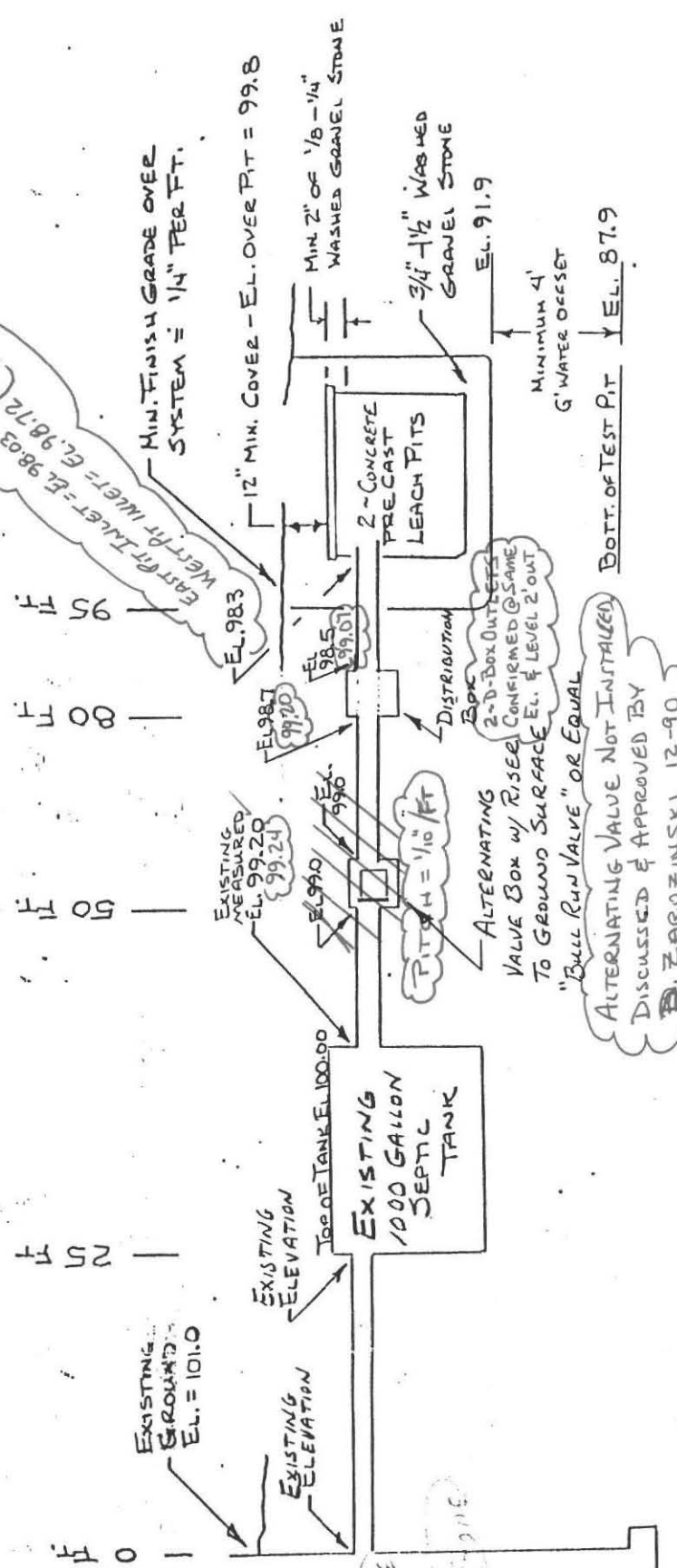
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 X 6.0 FT. EFFECTIVE DEPTH  
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 X 58 IN. DEPTH BELOW INLET, AS MFRD BY LANE CONST.  
 OR EQUAL.  
 ALLOWABLE LOADING =  $2 \times [(10/16) \times 6.0 \times 0.66 + 10 \times 16 \times 0.43]$   
 = 550 GALLONS PER DAY

REQUIRED LEACH FACILITY FOR AMHERST = 440 GPD  
 X 1.25 "AMHERST FACTOR" = 550 GPD.

TRY 1 LEACH PIT (w/ 2 DRYWELL TANKS) 15 1/2' X 7' X 6'

$6 [(15.5 - 20) \times 6 \times 0.66 + 15.5 \times 36 \times 0.43]$   
 = 400.35

10' X 16' X 1/4' STONE = 570 1/4' STONE  
 10' X 16' X 1/4' STONE = 570 1/4' STONE



SYSTEM PROFILE - SECTION PARALLEL TO FLOW  
 (NOT TO SCALE)



SEPTIC SYSTEM DESIGN

AT 31 JUNIPER LANE AMHERST, MA.

SCALE: N.T.S.

APPROVED BY:

DATE: 12-3-90

FOR: BETTY KRAVETZ  
 BY: RICHARD SCOTT, P.E.

DRAWN BY RMS

REVISED

DRAWING NUMBER

