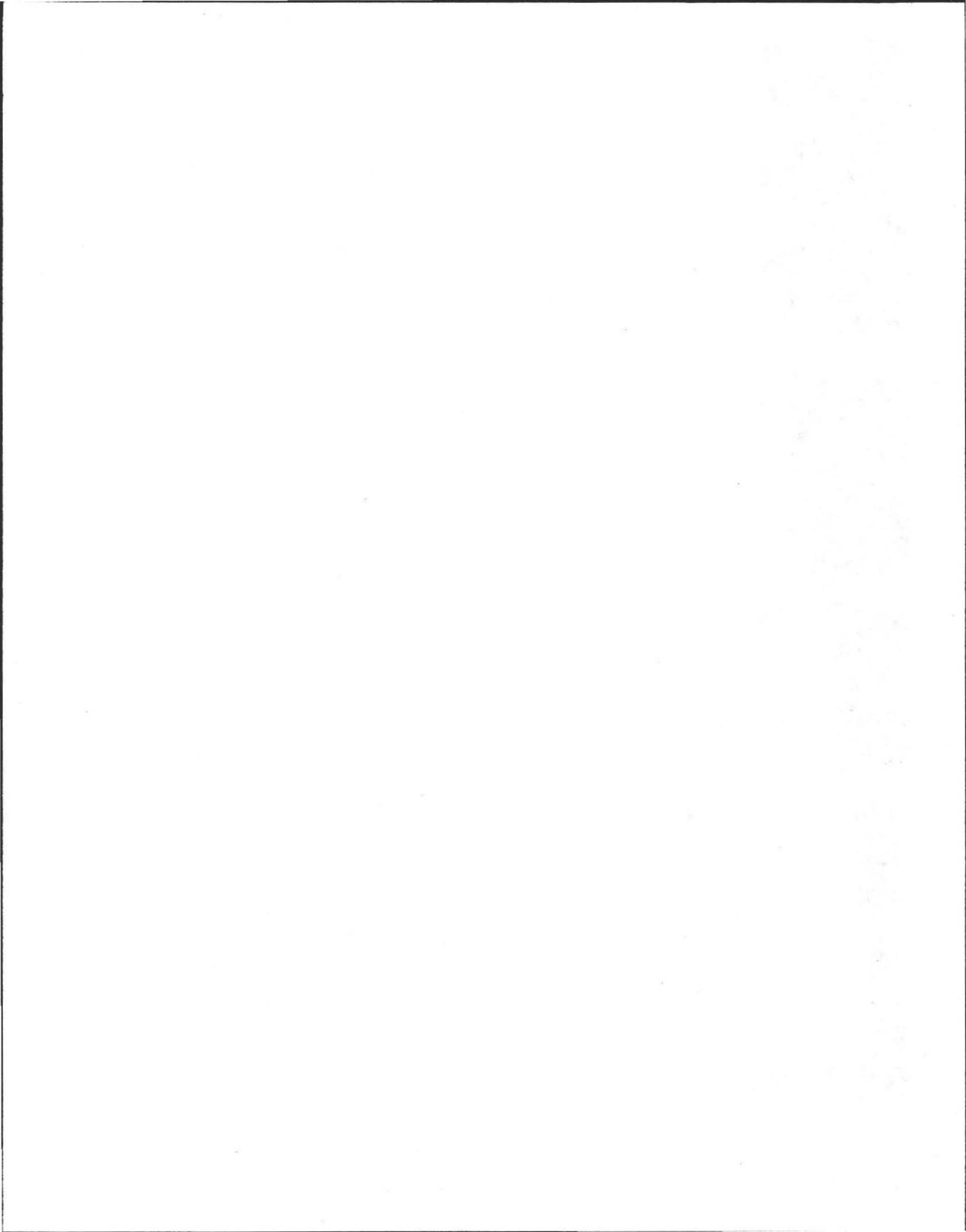


320 LEVERETT RD. L-#5 87-18  
(pending)

on x







#320

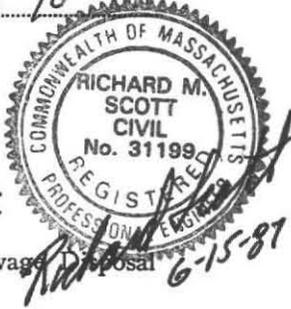
No. 87-18

CKA FEB 90

2475

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:

320 LEVERETT RD. (Lot #5)  
Location - Address  
JEFFREY WOOD or Lot No.  
Owner 312 LEVERETT RD. AMHERST  
LEF CONSTRUCTION Address  
Installer LEVERETT, MA. Address

Type of Building 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 person per day. Total daily flow 440 gallons.  
Septic Tank  Liquid capacity 1000 gallons Length 8' Width 5' Diameter Depth 5'  
Disposal Trench  No. 1 Width 30' Total Length 30' Total leaching area 900 sq. ft.  
Seepage Pit No. Diameter Depth below inlet Total leaching area sq. ft.  
Other Distribution box (Yes) Dosing tank (No)  
Percolation Test Results Performed by P. Scott, P.E. Witness: C.E. Deake Amherst B.O.H. Date 4-24-87  
Test Pit No. 1 8 minutes per inch Depth of Test Pit 120" Depth to ground water 72"  
Test Pit No. 2 minutes per inch Depth of Test Pit 120" Depth to ground water 70"

Description of Soil DEEP HOLE #1 0-4" TOPSOIL; TO 24" SUBSOIL; TO 72" FIRM TILL W/ FINES & COBBLES; TO DEPTH DENSE GREY SAND W/ FINES. DEEP HOLE #2 0-4" TOPSOIL; TO 28" SUBSOIL; TO 70" FIRM TILL W/ FINES & COBBLES; TO DEPTH DENSE GREY SAND W/ FINES.  
Nature of Repairs or Alterations — Answer when applicable WATER SUPPLY LOCATED MUST BE 150' FROM SEWAGE DISPOSAL SYSTEM

Agreement:

The undersigned agrees to install the aforescribed Individual Sewage Disposal System in accordance with the provisions of TITLE 5 of the State Sanitary 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.

X Signed Jeffrey Wood Date 6/18/87  
Application Approved By [Signature] Date 6/18/87

Application Disapproved for the following reasons:

Permit No. 87-18 Issued 6/18/87 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 [ ] Installer

at [ ] has been installed in accordance with the provisions of TITLE 5 of The State Sanitary 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 [ ]

THE COMMONWEALTH OF MASSACHUSETTS  
BOARD OF HEALTH

No. 87-18 Town OF Amherst FEB 90

Disposal Works Construction Permit

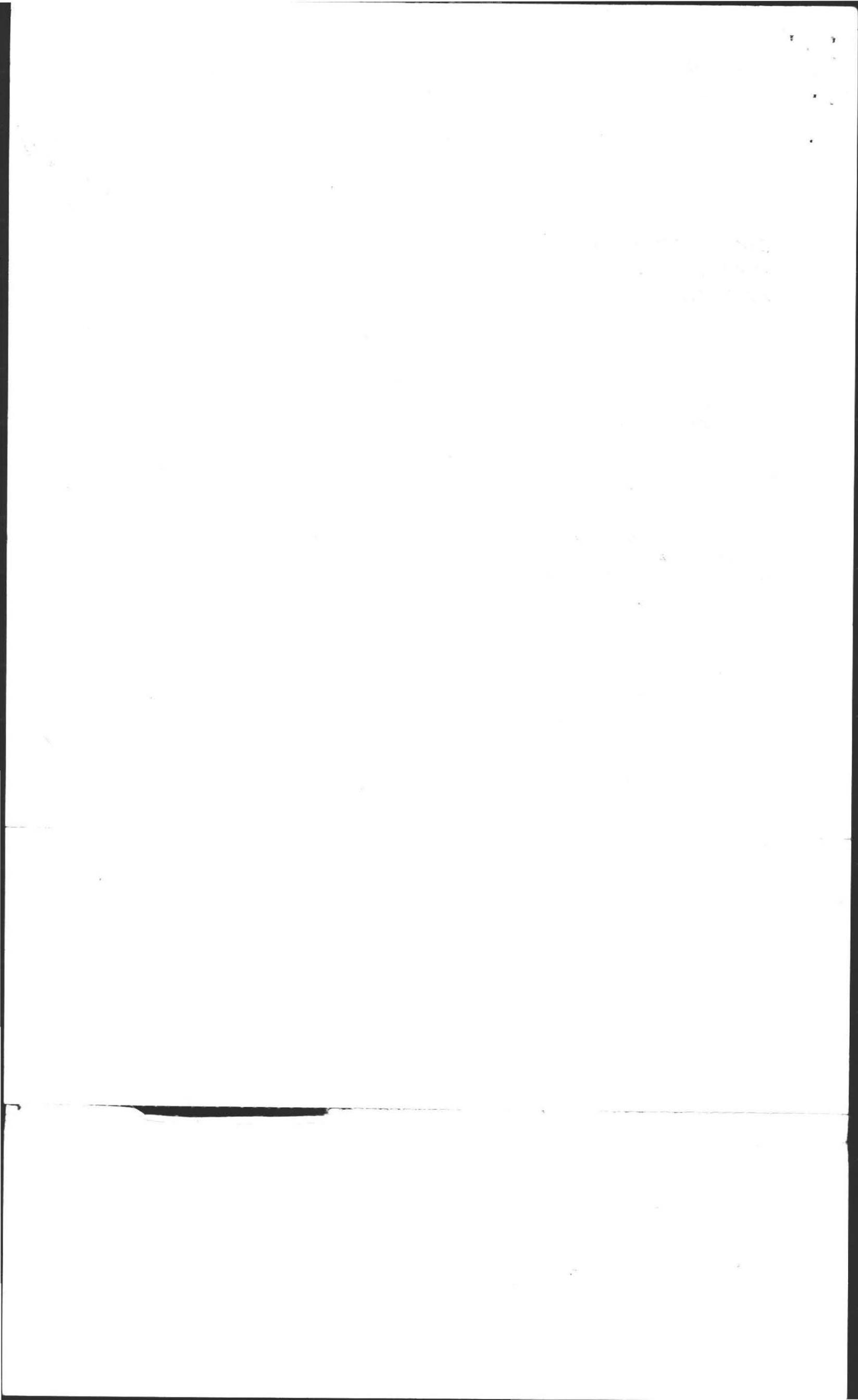
Permission is hereby granted JEFF WOOD - L+P CONSTRUCTION to Construct (X) or Repair ( ) an Individual Sewage Disposal System

at No. Lot # 5 310 LEVERETT RD Street 87-18 Dated 6-18-87

as shown on the application for Disposal Works Construction Permit No. [ ] Dated [ ] [Signature] Board of Health

DATE 6/18/87

CHECK OR FILL IN WHERE APPLICABLE



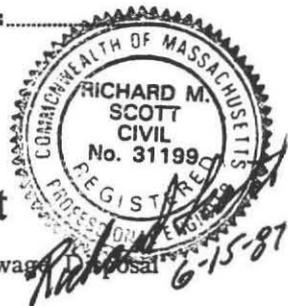
No. ....

FEE .....

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:

320 LEVERETT RD. (Lot #5)  
Location - Address or Lot No.  
JEFFREY WOOD 312 LEVERETT RD. AMHERST  
Owner Address  
L.E.F. CONSTRUCTION LEVERETT, MA.  
Installer Address

Type of Building Size Lot.....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 <sup>3 bedrooms</sup> person per day. Total daily flow.....440 gallons.  
Septic Tank  Liquid capacity.....1000 gallons Length.....8' Width.....5' Diameter..... Depth.....5'  
Disposal Trench  No. 1..... Width.....30' Total Length.....30' Total leaching area.....900 sq. ft.  
Seepage Pit No..... Diameter..... Depth below inlet..... Total leaching area.....sq. ft.

Other Distribution box (Yes) Dosing tank (No)  
Percolation Test Results Performed by R. Scott, P.E. Witness: C.E. Deane Amherst B.O.H. Date 4-24-87  
Test Pit No. 1.....8.....minutes per inch Depth of Test Pit.....120" Depth to ground water.....72"  
Test Pit No. 2.....minutes per inch Depth of Test Pit.....120" Depth to ground water.....70"

Description of Soil DEEP HOLE #1 0-4" TOPSOIL; TO 24" SUBSOIL; TO 72" FIRM TILL w/ FINES & COBBLES; TO DEPTH DENSE GREY SAND w/ FINES. DEEP HOLE #2 0-4" TOPSOIL; TO 28" SUBSOIL; TO 70" FIRM TILL w/ FINES & COBBLES; TO DEPTH DENSE GREY SAND w/ FINES.  
Nature of Repairs or Alterations — Answer when applicable.....

Agreement:  
The undersigned agrees to install the aforescribed Individual Sewage Disposal System in accordance with the provisions of TITLE 5 of the State Sanitary 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..... Installer.....

at..... has been installed in accordance with the provisions of TITLE 5 of The State Sanitary 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.....

THE COMMONWEALTH OF MASSACHUSETTS  
BOARD OF HEALTH

OF .....

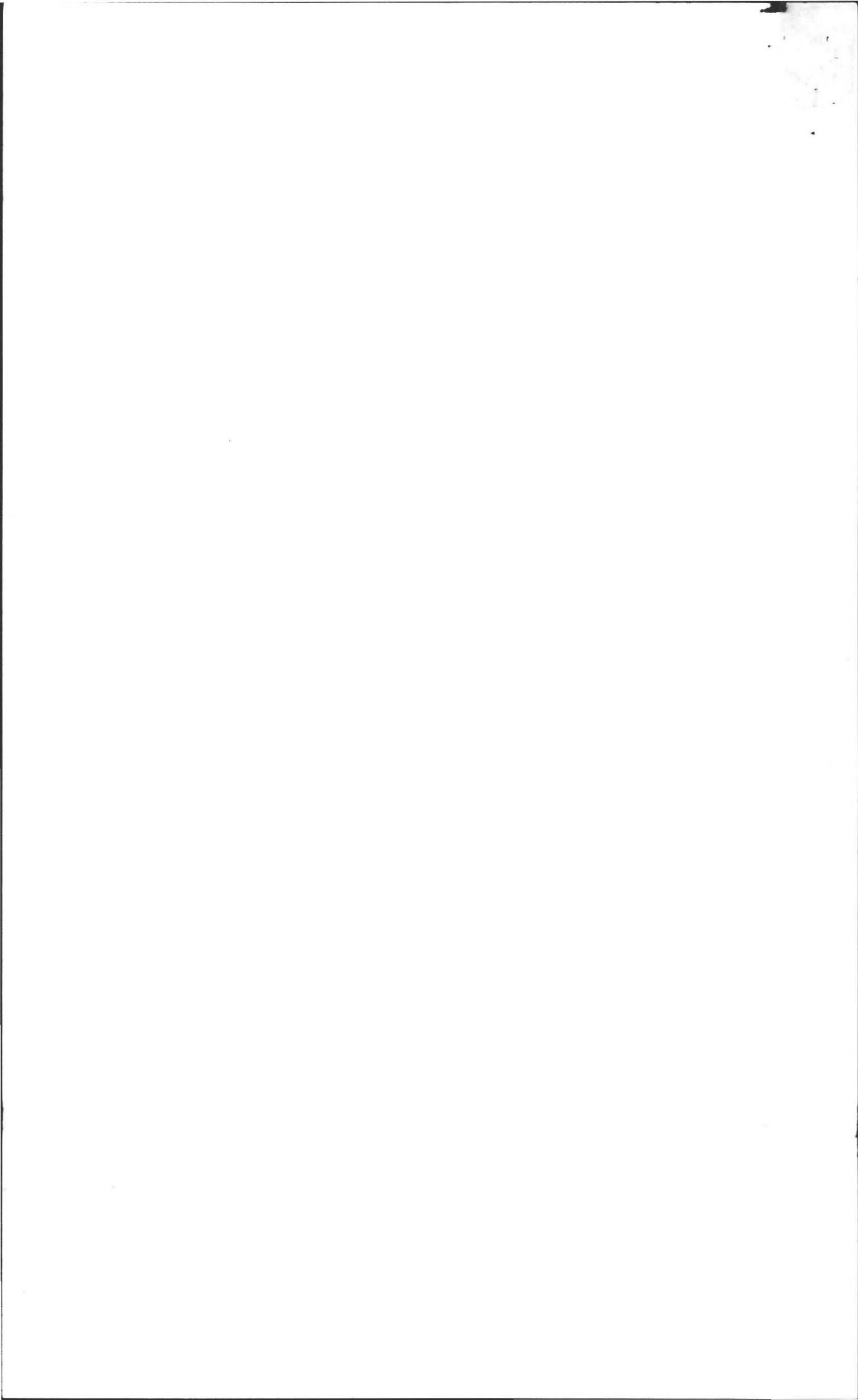
Disposal Works Construction Permit

Permission is hereby granted.....  
to Construct ( ) or Repair ( ) an Individual Sewage Disposal System  
at No..... Street.....

as shown on the application for Disposal Works Construction Permit No..... Dated.....

DATE..... Board of Health

CHECK OR FILL IN WHERE APPLICABLE



OBSERVATION PITS

REQUESTED BY: JEFFREY WOOD

LOCATION: LEVERETT ROAD LOT #5

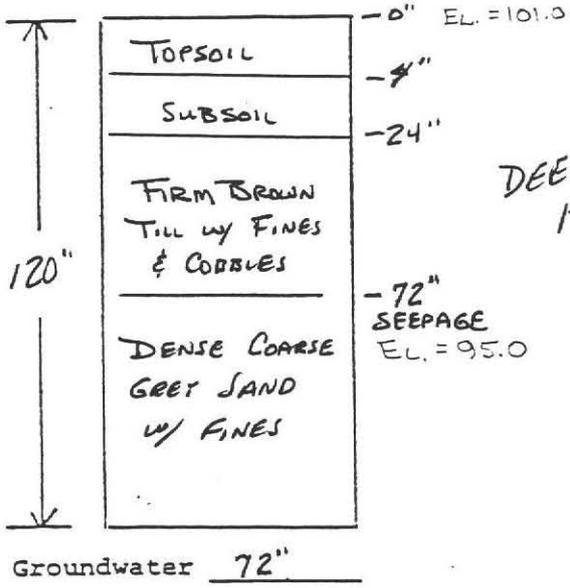
MAILING ADDRESS: 312 LEVERETT RD.

DATE: 4-24-87 OBSERVER: R. SCOTT, P.E.

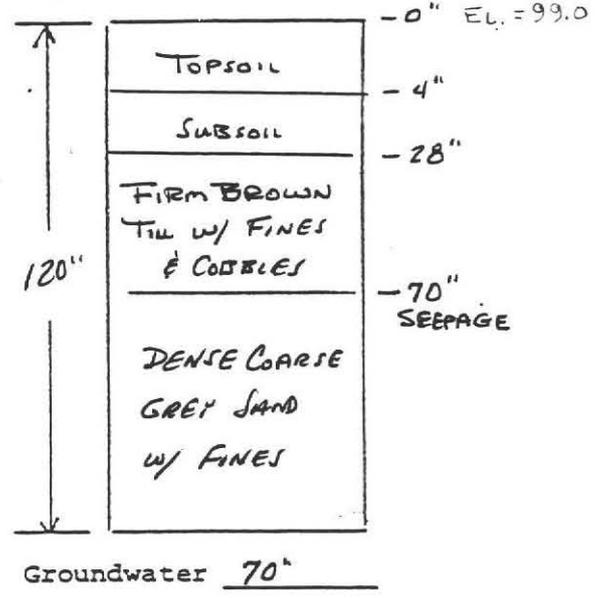
WITNESS: C.E. DRAKE, AMHERST B OF H.



DEEP HOLE #1



DEEP HOLE #2

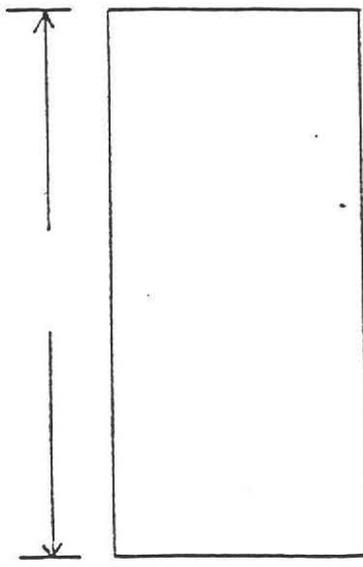


Perc Rate \_\_\_\_\_

PERC DEPTH @ 34"

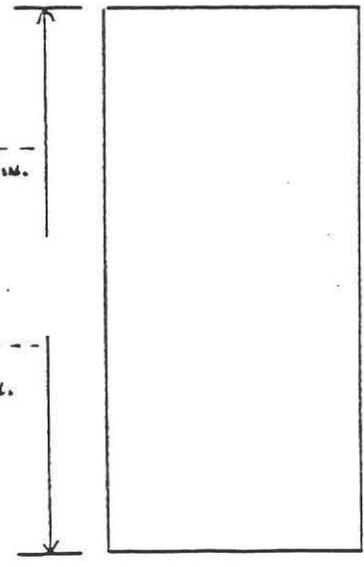
Perc Rate \_\_\_\_\_

START SOAK @ 9:23



RATE = 20 MIN ÷ 3 IN.  
= 6.7 MIN./IN

DESIGN RATE = 8

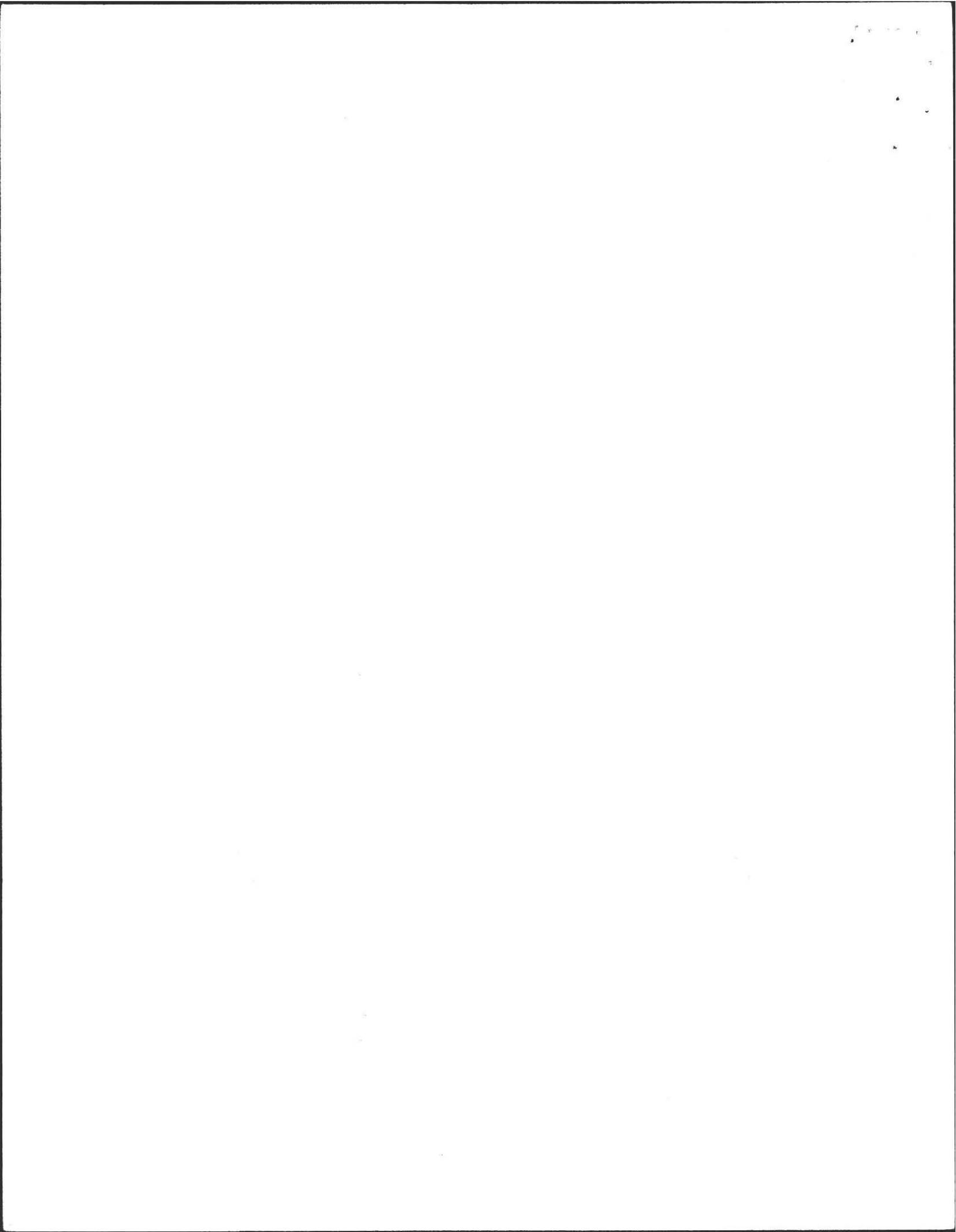


Groundwater \_\_\_\_\_

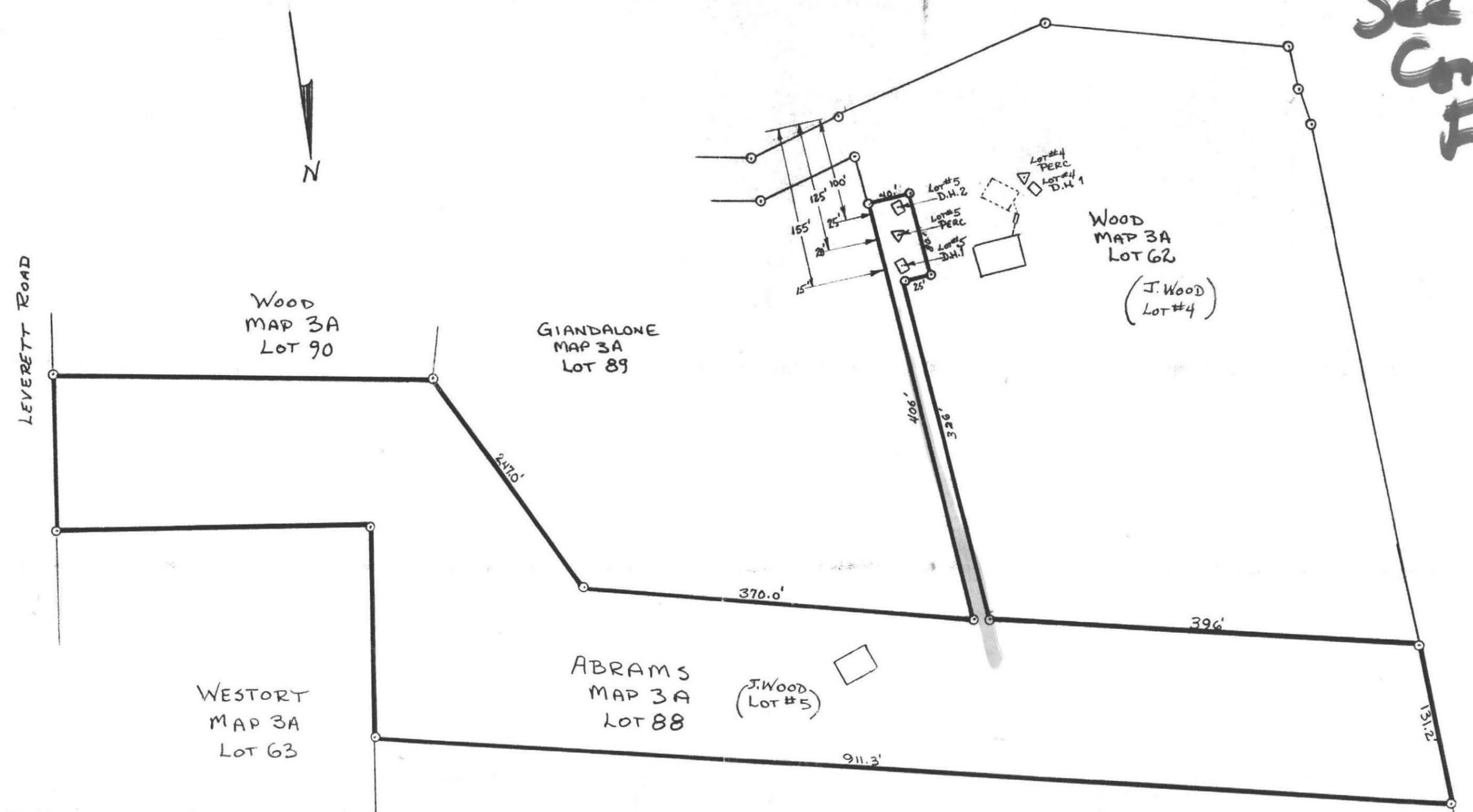
Groundwater \_\_\_\_\_

Perc Rate \_\_\_\_\_

Perc Rate \_\_\_\_\_



See Cont  
Common  
File



WOOD  
MAP 3A  
LOT 90

GIANDALONE  
MAP 3A  
LOT 89

WOOD  
MAP 3A  
LOT 62  
(J. Wood)  
Lot #4

WESTORT  
MAP 3A  
LOT 63

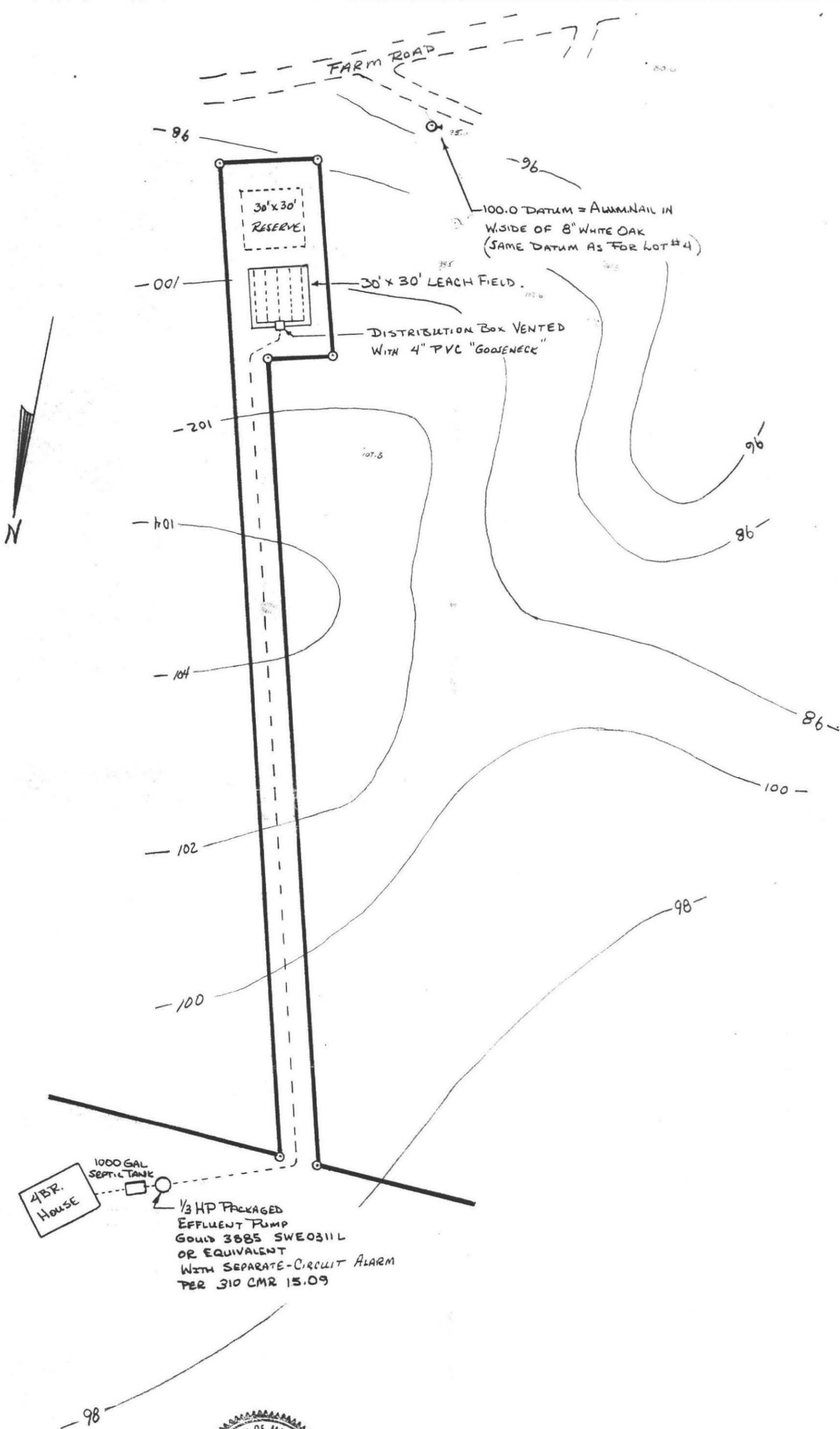
ABRAMS  
MAP 3A  
LOT 88  
(J. Wood)  
Lot #5

REFERENCE: SUBDIVISION PLAN DATED 3-3-87 BY R. SCOTT  
AND SURVEYS BY T.B. SLACK 1962-74 & 1977

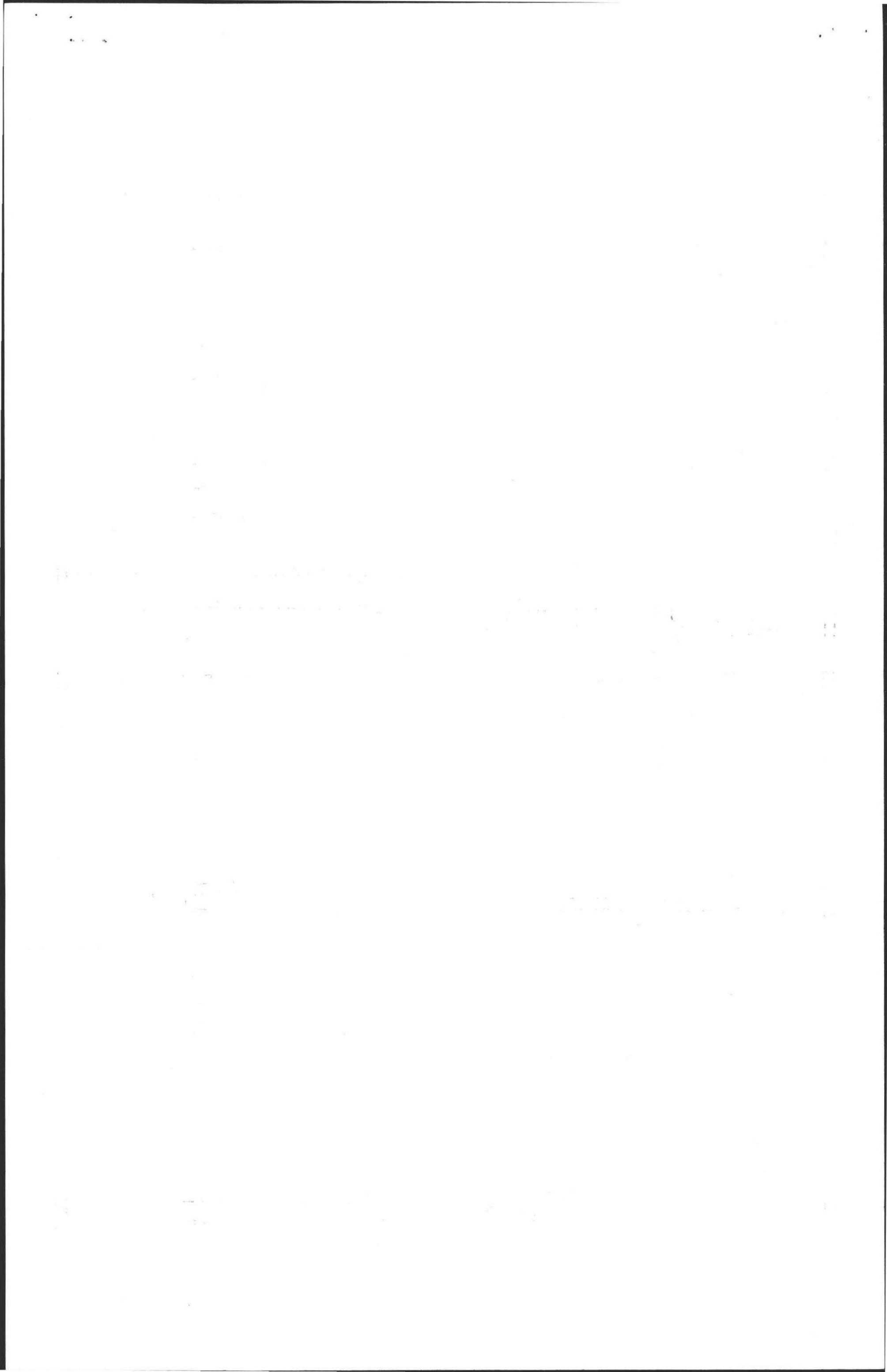


PROPOSED SEPTIC SYSTEM - LEV. RD. - LOT #5  
 LOT BOUNDARY & PERC TEST LOCATIONS  
 APPLICANT: JEFFREY WOOD OWNER: JEFFREY ABRAMS  
 RICHARD SCOTT, P.E.  
 SCALE: 1" = 100' DATE 6-11-87

File  
Common  
See Case



PROPOSED SEPTIC SYSTEM - LEV. RD. - LOT #5  
 EXISTING & FINAL CONTOURS  
 APPLICANT: JEFFREY WOOD OWNER: JEFFREY ABRAMS  
 RICHARD SCOTT, P.E.  
 SCALE: 1" = 40' DATE: 6-15-87



SYSTEM DESIGN CALCULATIONS

4 BEDROOM x 110 GAL PER BEDROOM PER DAY = 440 G.P.D. DESIGN FLOW

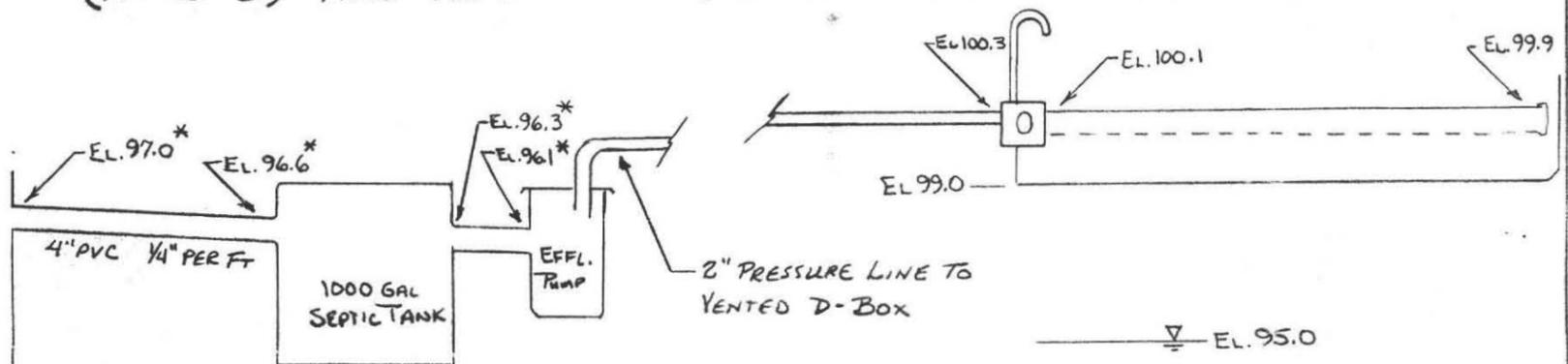
MINIMUM EFFECTIVE SEPTIC TANK VOLUME = 1.5 x 440 = 660 GALLONS

SPECIFIED EFFECTIVE TANK VOLUME = 1000 GALLONS

PERCOLATION RATE = 8 MINUTES PER INCH → DESIGN LOADING =  
 = 0.63 GALLONS PER SQ. FT. OF BOTTOM AREA AND 1.25 GALLONS PER SQ. FT.  
 OF SIDEWALL AREA. LEACH FACILITY SIZING IS BASED ON 440 GPD  
 x 1.25 AMHERST FACTOR = 550 GPD.

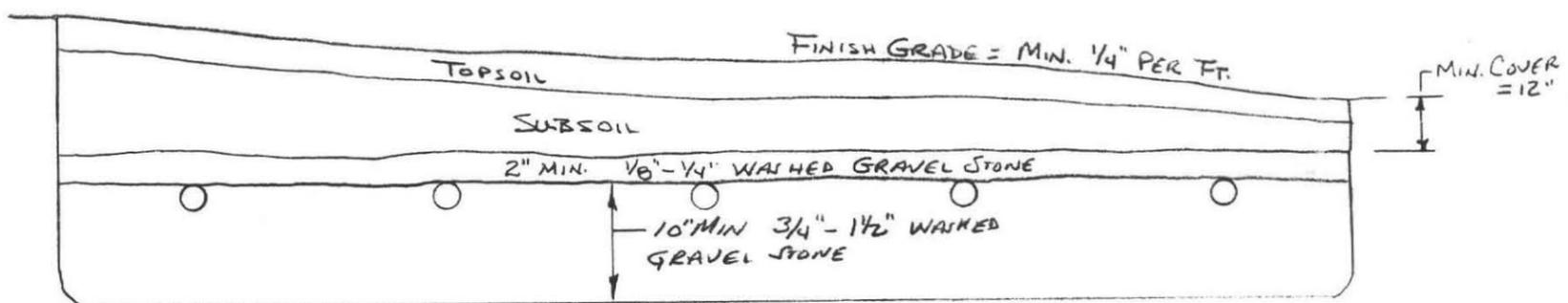
LEACH FIELD. 30 FT. WIDE x 30' LONG. = 900 SQ. FT. DESIGNED  
 FOR BOTTOM LEACHING ONLY.  $900 \text{ FT}^2 \times 0.63 \text{ GAL/FT}^2 = 567 \text{ GPD}$   
 CAPACITY (> 550)

SPECIFICATION: ALL MATERIALS AND CONSTRUCTION SHALL BE IN  
 ACCORDANCE WITH MASSACHUSETTS D.E.Q.E. REGULATION 310 CMR 15  
 (TITLE 5) AND TOWN OF AMHERST SUPPLEMENTAL REGULATIONS



\* ELEVATIONS SUBJECT TO CHANGE w/ FINAL HOUSE  
 LOCATION. DIFFERENCES BETWEEN THESE FOUR ELEVATIONS WILL  
 REMAIN UNCHANGED.

LEACH FIELD PROFILE ~ SECTION PARALLEL TO FLOW  
 SCALE: HORIZ: 1" = 10' VERT: N.T.S.

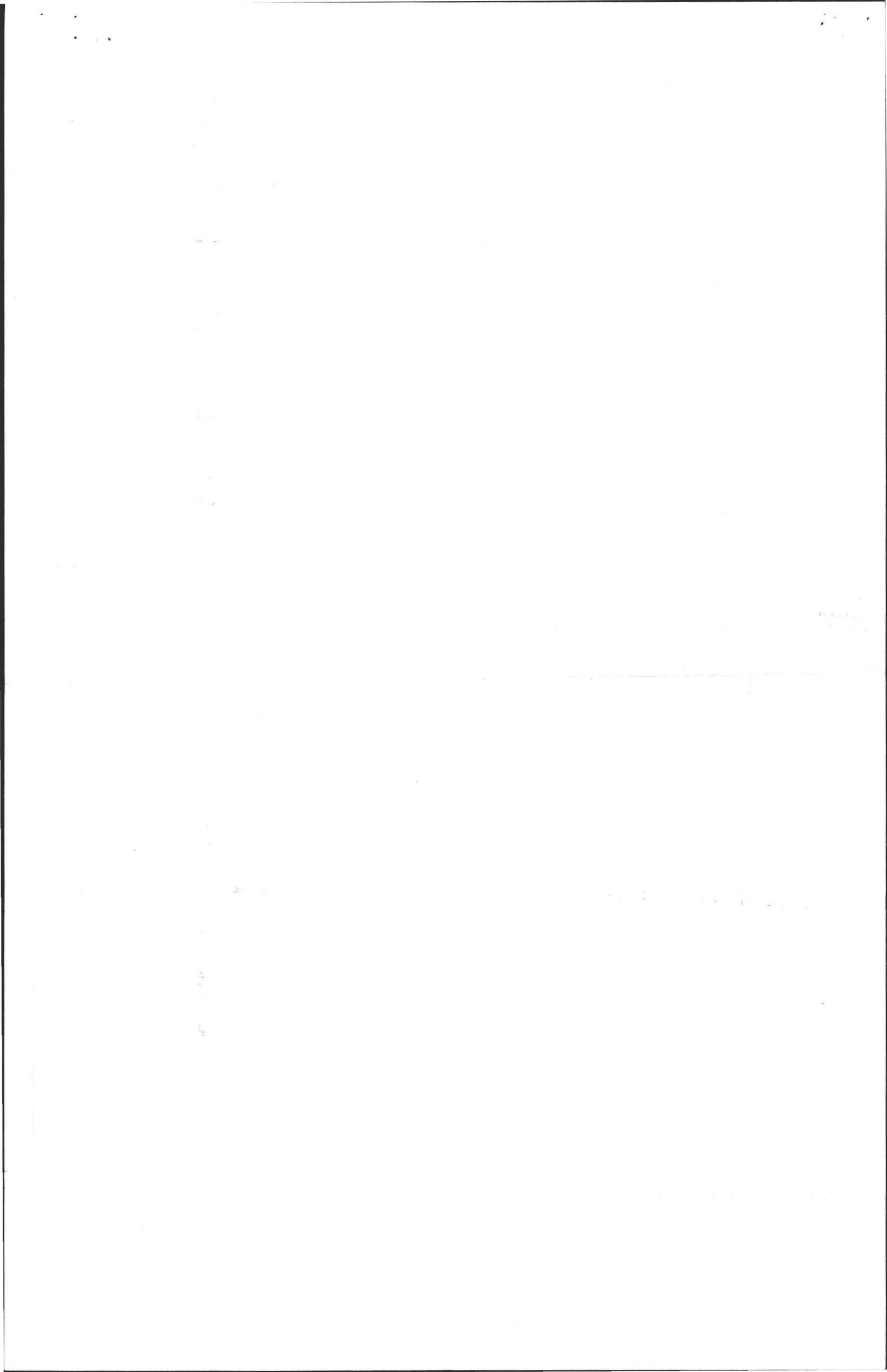


30' x 30' LEACHFIELD. HEADER PIPES FROM DISTRIBUTION BOX  
 TO BE 4" PVC NON-PERFORATED & ARE TO BE LAID LEVEL.  
 150 LIN. FT. OF 4" PERFORATED PVC DISTRIBUTION ARE TO  
 BE LAID AT MIN. .005' PER FT. ALL PIPE ENDS TO BE CAPPED.

LEACH FIELD PROFILE ~ SECTION PERPENDICULAR TO FLOW  
 SCALE: HORIZ: 1" = 4' VERT: N.T.S.



PROPOSED SEPTIC SYSTEM DESIGN  
 AT 318 LEV. RD. (J. WOOD LOT #5)  
 FOR: JEFFREY WOOD  
 BY: RICHARD SCOTT, P.E.  
 DATE: 6-11-87 SCALE: AS SHOWN



# Bulletin CL2.1A

July 8, 1983

## GOULDS Model 3885

(Supersedes Model 3870)

### Submersible Effluent Pumps

#### Pump Specifications

Solids Handling Capability to  $\frac{3}{4}$ "

Discharge Size  
2" NPT

#### Semi-Open Impeller

3 vane design, threaded on shaft. Three phase units use impeller locknut to prevent accidental back-off. Pump out vanes on backside of impeller for protection of mechanical seal.

#### Casing

Volute type for maximum efficiency.

#### Stainless Steel Fasteners

Series 300 stainless steel for corrosion resistance.

#### Mechanical Seal

Ceramic vs. Carbon sealing faces, stainless steel spring and Buna N elastomers.

#### Maximum Temperature

160°F.

#### Capable of Running Dry

without damage to components.

#### Motor Specifications

##### Motor Fully Submerged

in high grade turbine oil for permanent lubrication of bearings and mechanical seal and efficient heat dissipation. Motor sealed from environment by rugged cast iron enclosure.

##### Bearings

Heavy-duty all ball bearing construction.

##### Stainless Steel Shaft

Series 300 stainless steel for corrosion resistance. Threaded shaft.

##### Single Phase Units

All single phase units have built-in thermal overload protection with automatic reset.

##### Three Phase Units

Overload protection in starter unit. 208-230 or 460 volts. Threaded shaft 60 Hz operation.

##### Power Cord

Water and oil resistant. Epoxy seal on motor end acts as a secondary moisture barrier in case of damage to outer jacketing. Corrosion resistant gland nut.

##### Single Phase Units

$\frac{1}{3}$ ,  $\frac{1}{2}$  H.P. models equipped with 15' of 16/3 SJTO with 3-prong grounding plug.  $\frac{1}{4}$ , 1, 1 $\frac{1}{2}$  H.P. models equipped with 15' of 14/3 STO power cord.

SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

 **GOULDS PUMPS, INC.**  
SENECA FALLS, NEW YORK 13148

- For Homes
- Farms
- Trailer courts
- Motels
- Schools
- Hospitals
- Industry
- Effluent Systems

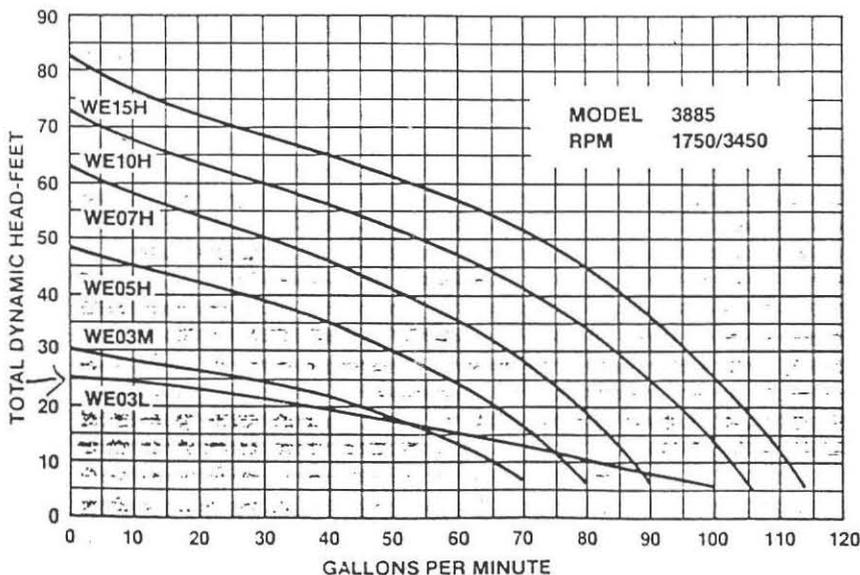
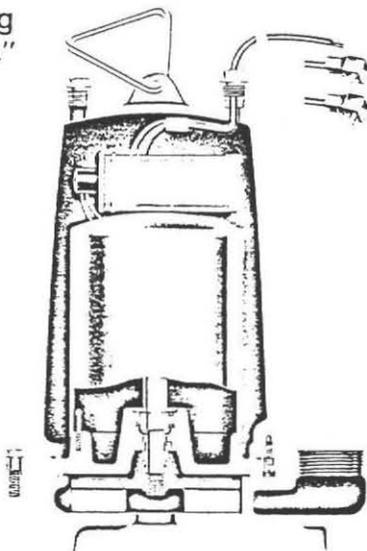
anywhere effluent or drainage must be disposed of quickly, quietly and efficiently.

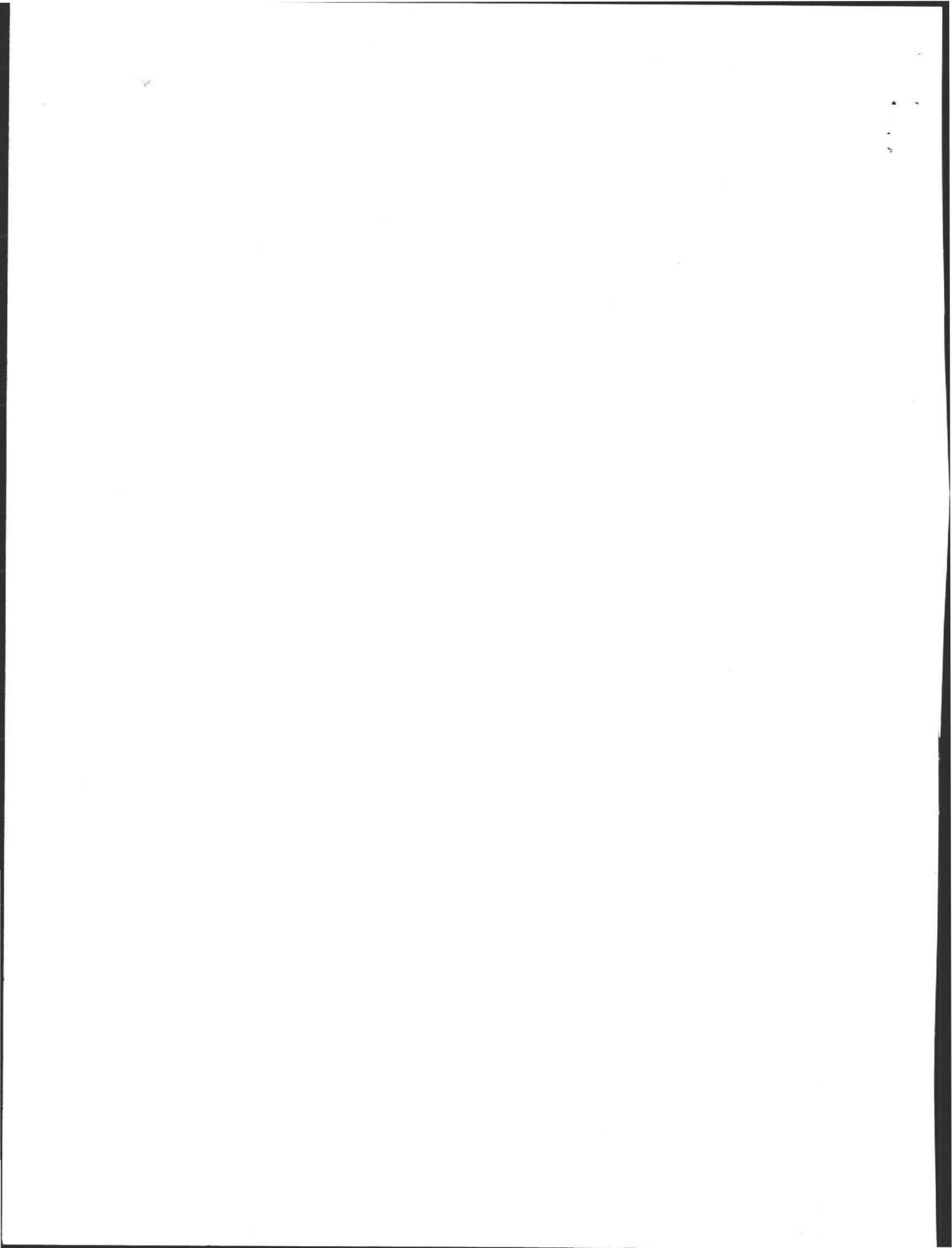


**Heavy-Duty Dependable Solids Handling Capability to  $\frac{3}{4}$ "**

$\frac{1}{3}$ ,  $\frac{1}{2}$  H.P. 60 Hz  
Single Phase 115, 230 Volt.

$\frac{1}{2}$ ,  $\frac{3}{4}$ , 1, 1 $\frac{1}{2}$  H.P. 60 Hz  
Single Phase 230 Volt. Three  
Phase 208-230, 460 Volt.





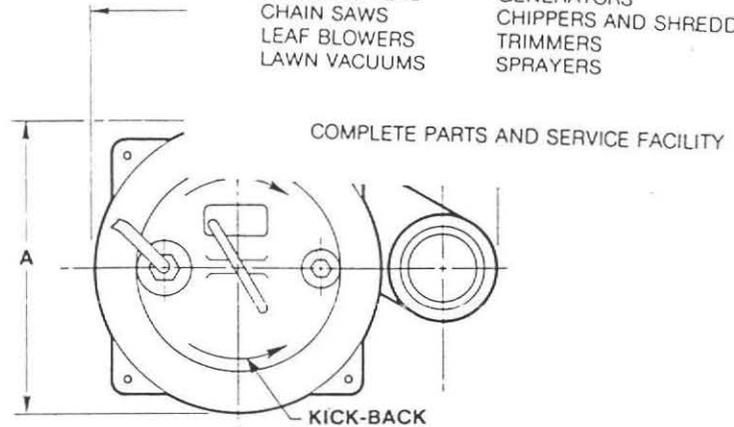
# GOULDS Model 3885 Submers

TRACTORS  
LAWN MOWERS  
SNOWBLOWERS  
CHAIN SAWS  
LEAF BLOWERS  
LAWN VACUUMS

LOG SPLITTERS  
GARDEN TILLERS  
GENERATORS  
CHIPPERS AND SHREDDERS  
TRIMMERS  
SPRAYERS

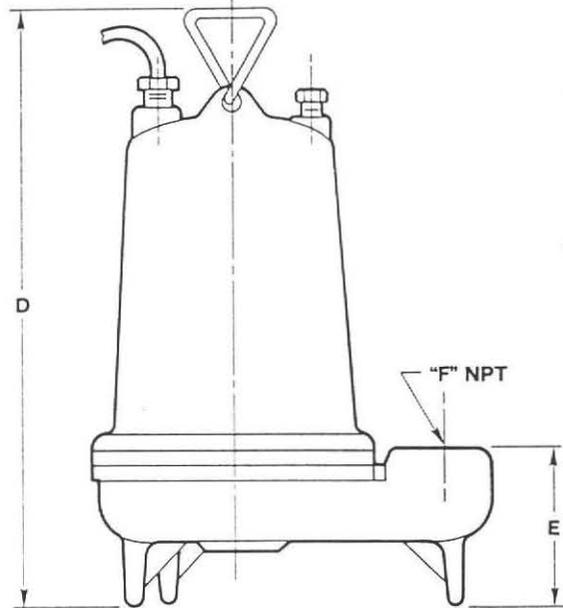
## SPECIFICATIONS

H.P.	Order No.	Volts	Phase	Max. Amps	RPM	Max. Solids	Wt. (lbs.)		
1/3	WE0311L	115	1	9.4	1750	3/4"	56		
	WE0312L			4.7					
	WE0311M	230		16.0					
	WE0312M			8.0					
1/2	WE0511H	115		3	3.4		3450	3/4"	60
	WE0512H	230			1.7				
	WE0532H	208/230			9.0				
	WP0534H	460			5.4				
3/4	WE0712H	230	3	2.7	3450	3/4"	70		
	WE0732H	208/230		11.6					
	WE0734H	460		6.4					
	WE1012H	230		3.2					
1	WE1032H	208/230	3	13.3	3450	3/4"	80		
	WE1034H	460		9.2					
	WE1512H	230		4.6					
	WE1532E	208/230							
1 1/2	WE1534H	460	3						



## DIMENSIONS CHART (in inches)

H.P.	Order No.	Phase	A	B	C	D	E	F	
1/3	WE0311L	1 φ	8 1/4	12 1/2	5 3/4	15	3 3/4	2	
	WE0312L								
	WE0311M								
	WE0312M								
1/2	WE0511H		3 φ	8 1/2	12 1/2	5 3/4	15	3 3/4	2
	WE0512H								
	WE0532H								
	WP0534H								
3/4	WE0712H	1 φ & 3 φ	8 1/2	12 1/2	5 3/4	15	3 3/4	2	
	WE0732H								
	WE0734H								
	WE1012H								
1	WE1032H		3 φ	8 1/2	12 1/2	5 3/4	15	3 3/4	2
	WE1034H								
	WE1512H								
	WE1532H								
1 1/2	WE1534H								



## Model 3885 Packaged Effluent Ejector System

Goolds packaged effluent ejector system offers both ease of ordering and installation. A single ordering number specifies a complete system designed for most residential and commercial sump and effluent pump applications. The ease of installation is enhanced by plug-in power cords for the pump and level control switch which eliminates the need for additional wiring.

SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.



Capacities to 100 GPM  
Heads to 30 ft.  
3/4" Solids Handling Capability  
2" NPT Discharge Connection

### Package Includes:

- Submersible Effluent Pump (WE0311L or WE0311M)
- Mercury Level Control Switch (ALS2-5)
- Basin (ALS7-1801S)
- Basin Cover (ALS8-1822)
- Check Valve (ALS9-2P)

Order No. SWE0311L or SWE0311M (95 lbs.)



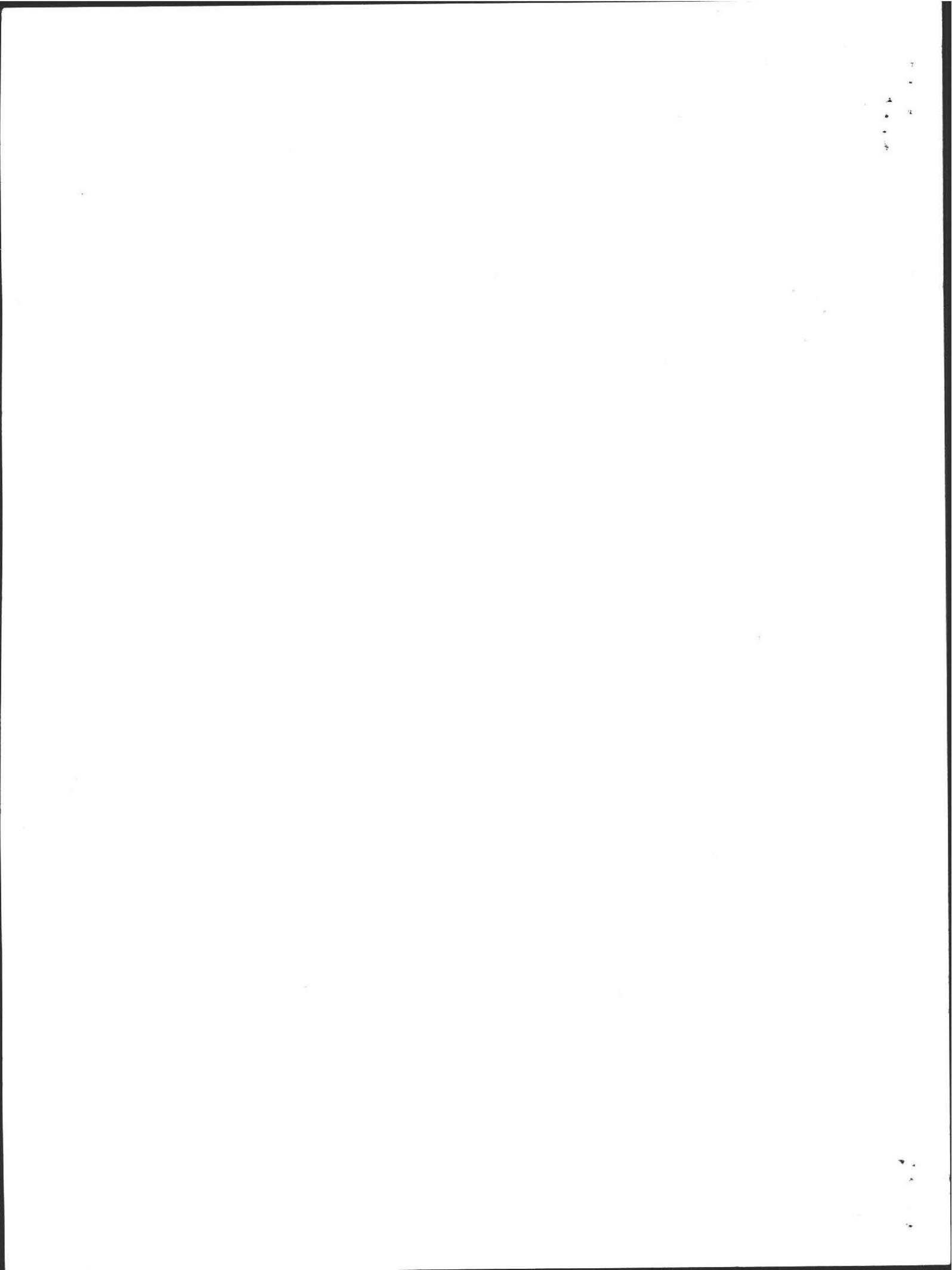
## GOULDS PUMPS, INC.

SENECA FALLS, NEW YORK 13148

©Goolds Pumps Incorporated 1983

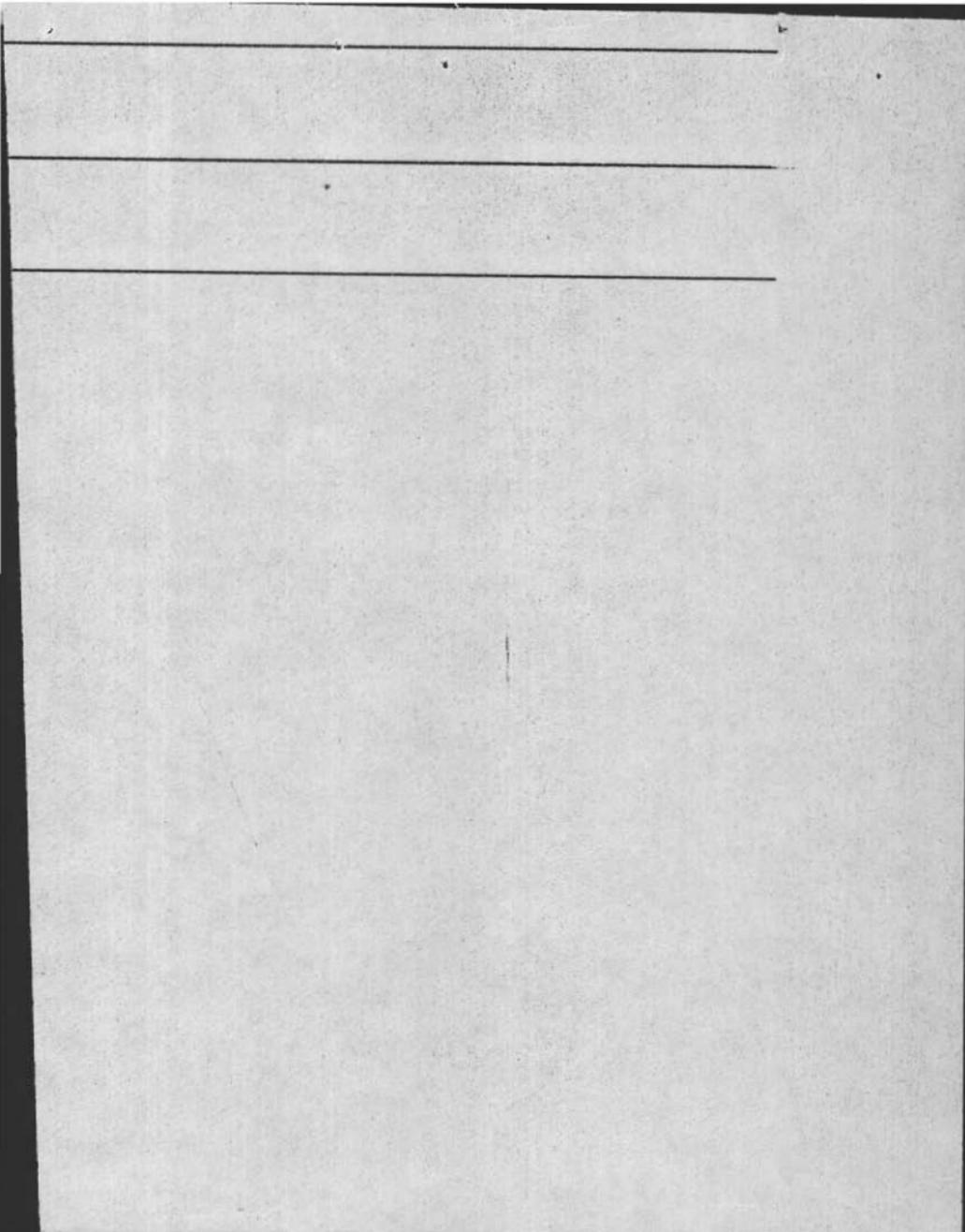
Form No. 820423-1B  
Litho in U.S.A.





A question has  
arisen as to the  
locations where the  
Perce tests were done  
on the 2 lots on  
Leverett Rd. We have  
no info on this. Do you?  
If the locations  
cannot be determined,  
New percolation test  
may have to be done.

any questions call  
Dave at 253-7077



AMHERST HEALTH DEPARTMENT

REGULATIONS

TITLE V AMENDMENTS

SUBSURFACE DISPOSAL OF SANITARY SEWAGE

In accordance with the provisions of Section 31 and Chapter 111 of the General Laws, and Regulation 2 of Article I and Regulation 15.03 Title 5 of the Environmental Code of the Commonwealth of Massachusetts, for the protection of the Public Health, the Amherst Board of Health has adopted the following regulations:

- I. The installation of a private water supply and a private sewage disposal system on a lot containing an area less than 38,000 square feet is prohibited and in no case shall a private water supply and/or private sewage disposal system be located within 150 feet of each other.

Variance to this regulation may be granted by the Board of Health, after a hearing, during which the applicant proves to the Board's satisfaction that the installation of the private sewage disposal system will not adversely affect surface or sub-surface public or private water resources of:

- a. the lot subject to the application
- b. the adjacent land (whether developed or not) or
- c. a defined aquifer recharge area.

- II. Individual private sewage disposal systems shall not be installed in defined flood prone areas. Flood prone areas are those locations shown on a map on file in the Board of Health office and in the office of the Town Planner.

- III. No private sewage disposal system shall be located nearer than 100' from any watercourse, stream or pond.

- IV. Superseded (line 1 through 5)  
Soil logs and ground water elevations shall be kept on file with the Board of Health and will become part of the permit request when formal application for a private sewage disposal permit is submitted.

- V. Builders, developers, or owners of property who anticipate applying for private sewage disposal permits to be constructed in fill material shall request an observation of the fill and the proposed fill area in which a disposal system (or part thereof) will be installed. The date, quality of fill, and dimensions, together with distances from streams, private water supplies and other pertinent information shall be kept on file with the Board of Health and will become part of the permit request when formal application is submitted.



REGULATIONS

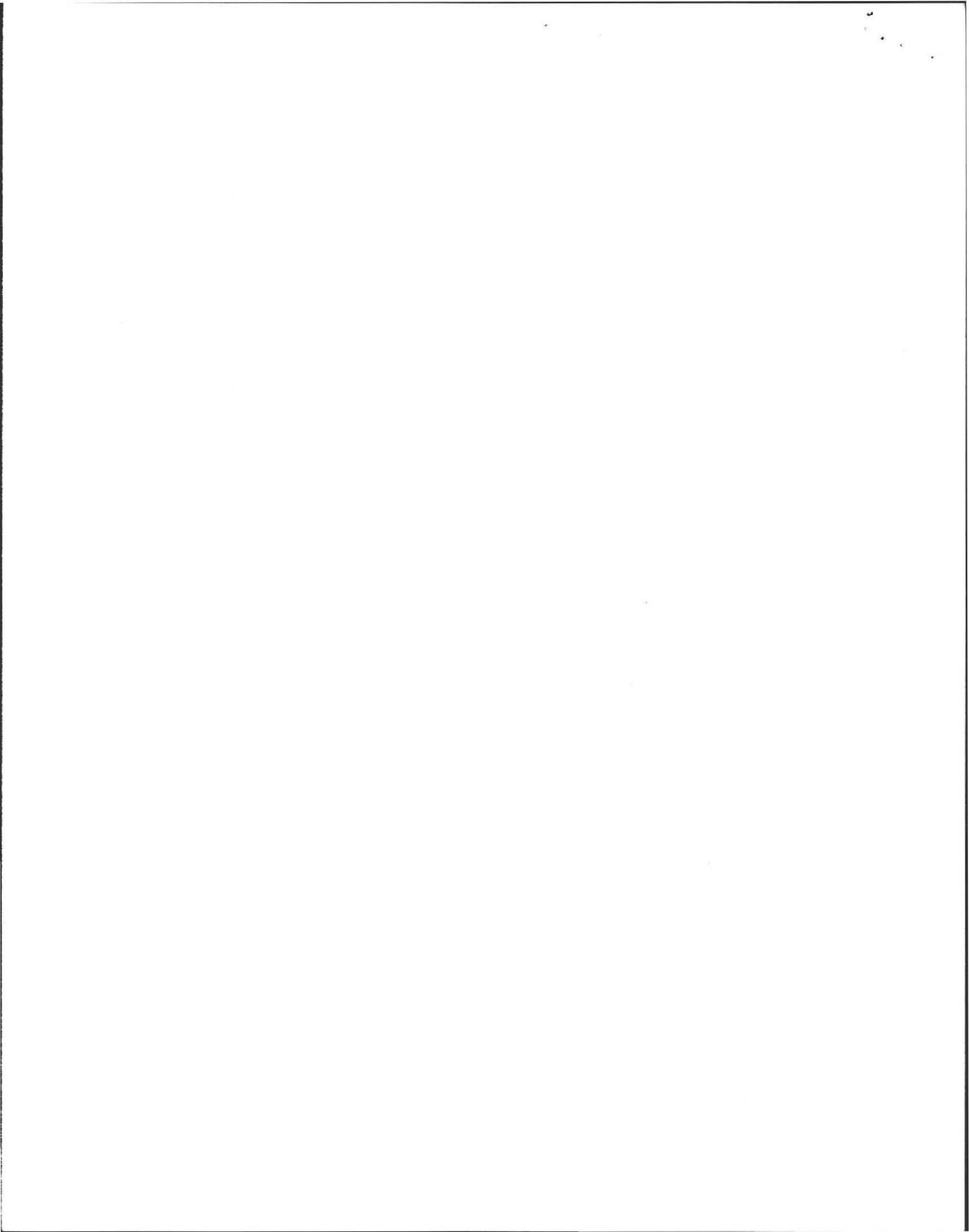
SUBSURFACE DISPOSAL OF SANITARY SEWAGE

Variances to these regulations may be granted by the Board of Health only after a hearing conducted in accordance with Regulations 15, 21 and 24 of Title 5 of the State Sanitary Code.

Regulations I, IV & V adopted October 3, 1973

Regulations II & III adopted February 6, 1974

Regulation IV superseded March 9, 1987



AMHERST HEALTH DEPARTMENT  
REGULATIONS TITLE V  
SUBSURFACE DISPOSAL OF SANITARY SEWAGE

The Amherst Board of Health hereby adopts the following regulations to supplement the standards of Title 5 "Minimum Requirements for the Subsurface Disposal of Sanitary Sewage" of the Massachusetts State Environmental Code. Effective Date: March 9, 1987

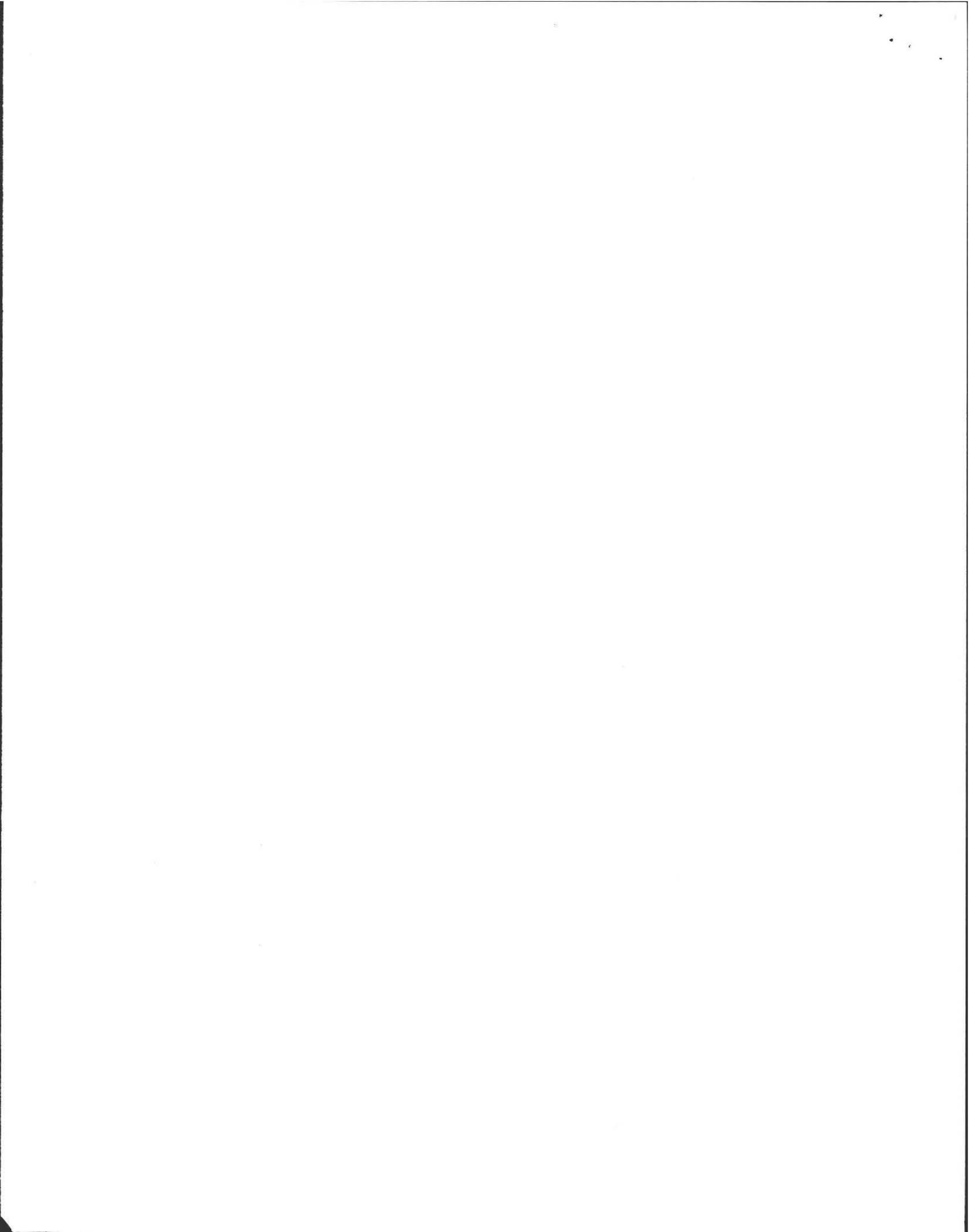
1. Definitions

The words, terms, or phrases listed below for the purpose of this Regulation shall be defined and interpreted as follows.

Septic Tank Cleaners - Chemicals, organic and inorganic, which purport to improve the performance of the septic tank - leaching field system.

2. Deep Observation Holes

(a) Required deep soil observations as required by Reg. 15.03 (3) of Title 5 performed as part of the percolation test procedure shall be conducted only between March 1 and May 15 each year. This provision shall not apply to existing systems in need of repair or replacement.



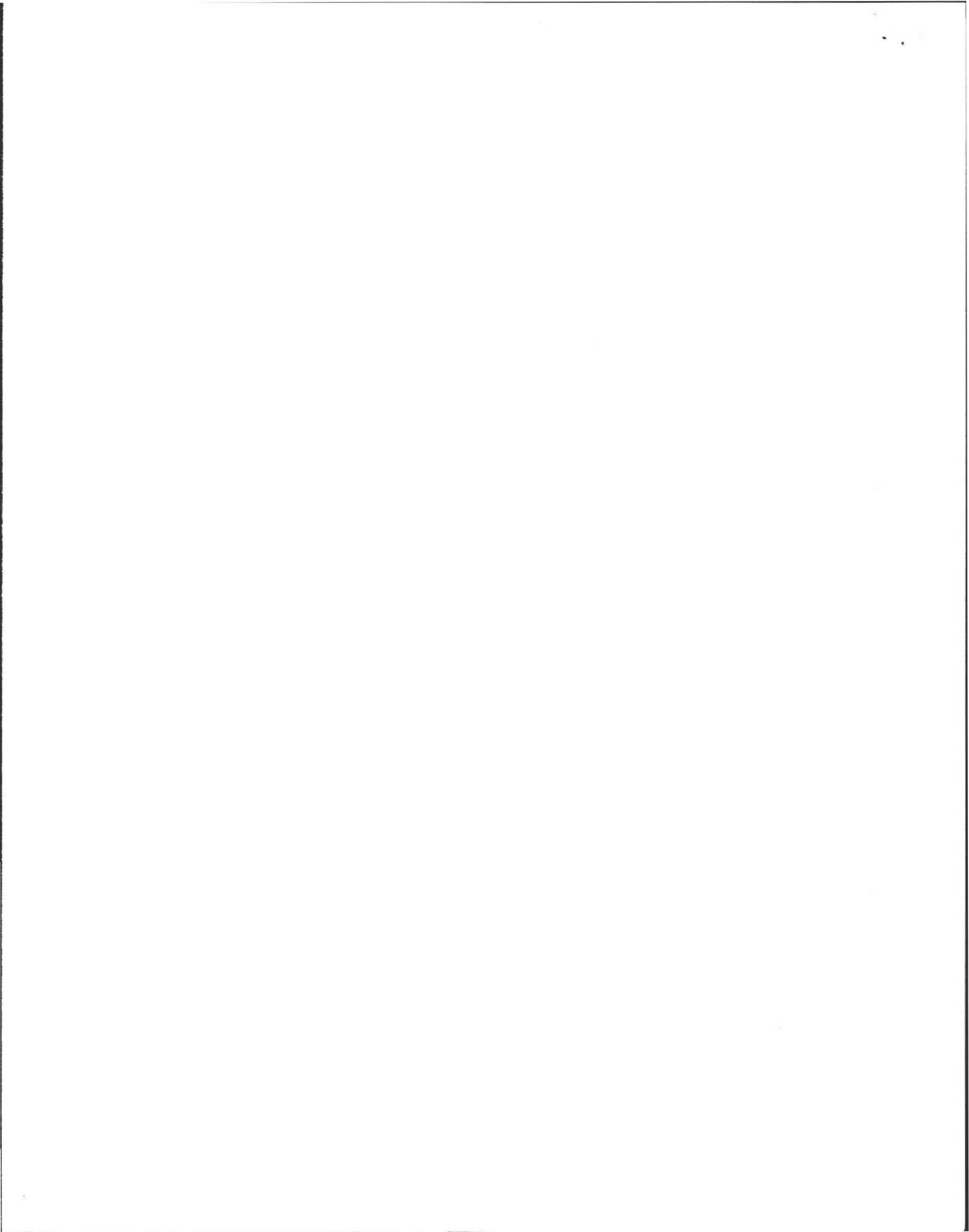
- (b) There shall be a minimum of two deep observation holes dug in the area proposed for the leaching facility. Such observation holes shall be dug to a minimum depth of six feet below the bottom of the proposed leaching facility, but in no case less than 10 feet or to refusal.

3. Required Depth of Pervious Materials (Reference 15.03 (6))

Subsurface sewage disposal systems shall be located in an area where there is at least a six foot depth of naturally occurring pervious soil below the entire area of the leaching facility. The naturally occurring pervious soil shall have a percolation rate less than or equal to 20 minutes per inch. The six foot stratum must be free of impervious materials, such as layers of clay, silt, subsoil or loam.

There shall be a minimum of two percolation tests conducted in the area proposed for the leaching facility. At least one of the percolation tests shall be conducted at a depth of at least halfway (3 feet) into the six foot layer of naturally occurring pervious material. This requirement shall not apply in the case of existing systems in need of repair or replacement.

Leaching facilities shall be constructed where the bottom of the leaching facility excavation is a minimum distance of six feet above the maximum groundwater elevation.



4. Leaching Area

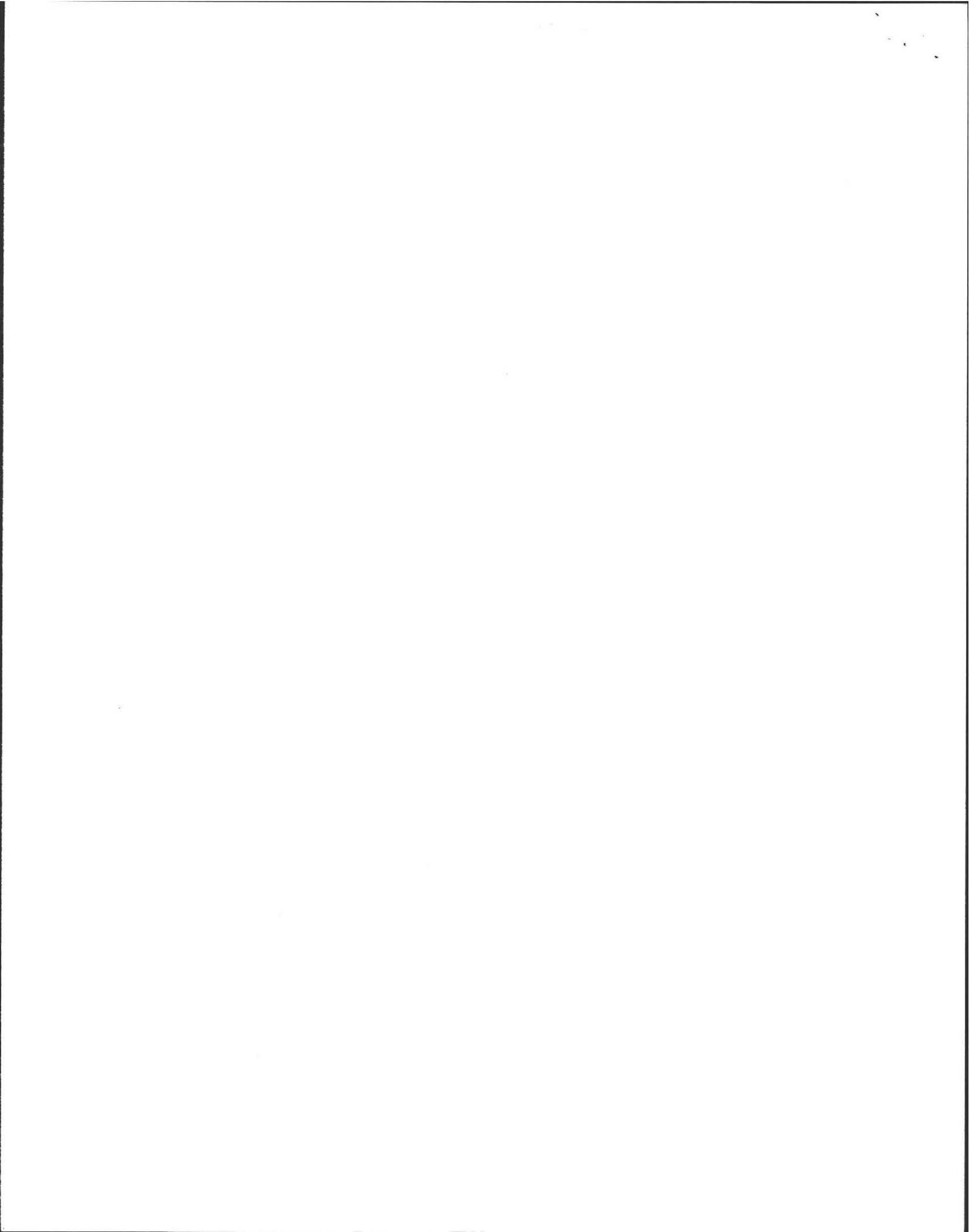
The size of the leaching area to be installed shall be determined from the table contained in Regulation 15.03 (4) (e) (Leaching Area Requirements) and 15.02 (13) (Sewage Flow Estimates) but in no case shall it be less than 1 1/4 times the minimum area required as determined by these calculations.

5. Proper Care and Maintenance

- (a) All private sewage disposal systems (existing and proposed) shall be serviced (pumped out) at least once every three years.
- (b) Septic tank cleaners shall not be added to any private sewage disposal system.

6. Transference Information

Whenever a property with a private sewage disposal system, installed after 1973, is conveyed, a copy of a sketch plan, showing the size and location of the sewage disposal system with accurate distances to the clean out of the septic tank, distribution box and/or leach pit shall be provided to the purchaser.



7. Enforcement

These regulations shall carry the same enforcement provisions as exist in Regulation 15.22 of Title 5 of the Massachusetts State Environmental Code.

3/4/87

