

DEC 9 1988

#110

Owes \$9000

No. 88-46

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 (X) or Repair () an Individual Sewage Disposal System at:

MARKET HILL RD. Location - Address
JAY SAVEREID Owner
MARKET HILL ROAD or Lot No. Address

Type of Building Dwelling - No. of Bedrooms 3 Expansion Attic () Garbage Grinder ()
Other - Type of Building No. of persons Showers () - Cafeteria ()
Other fixtures

Design Flow 55 gallons per person per day. Total daily flow 330 gallons.
Septic Tank - Liquid capacity 1000 gallons Length 8.5 Width 5 Diameter Depth 5
Disposal Trench - No. Width Total Length Total leaching area sq. ft.
Seepage Pit No. 2 Diameter 6 Depth below inlet 3.08 Total leaching area 356.82 sq. ft.
Other Distribution box (X) Dosing tank ()

Percolation Test Results Performed by C.T. MALE ASSOC. Date 8 Dec. '86
Test Pit No. 1 10 minutes per inch Depth of Test Pit 120" Depth to ground water
Test Pit No. 2 1 minutes per inch Depth of Test Pit 119" Depth to ground water
Witness: C. DRAKE

Description of Soil see Design Plan

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 J. Saveried Date

Application Approved By Date

Application Disapproved for the following reasons: Date

Permit No. Issued Date

THE COMMONWEALTH OF MASSACHUSETTS

BOARD OF HEALTH

TOWN OF AMHERST

Certificate of Compliance

THIS IS TO CERTIFY, That the Individual Sewage Disposal System constructed (X) 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

TOWN OF AMHERST

Disposal Works Construction Permit

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

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

DATE Board of Health

CHECK OR FILL IN WHERE APPLICABLE

#110

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

10/10/10

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 (X) or Repair () an Individual Sewage Disposal System at:

MARKET HILL RD. Location - Address
JAY SAVEREID Owner
MARKET HILL ROAD Address

Type of Building Dwelling - No. of Bedrooms 3 Expansion Attic () Garbage Grinder ()
Other - Type of Building No. of persons Showers () - Cafeteria ()
Other fixtures

Design Flow 55 gallons per person per day. Total daily flow 330 gallons.
Septic Tank - Liquid capacity 1000 gallons Length 8.5 Width 5 Diameter Depth 5
Disposal Trench - No. Width Total Length Total leaching area sq. ft.
Seepage Pit No. 2 Diameter 6 Depth below inlet 3.08 Total leaching area 356.82 sq. ft.
Other Distribution box (X) Dosing tank ()

Percolation Test Results Performed by C.T. MALE ASSOC Date 8 Dec '86
Test Pit No. 1 10 minutes per inch Depth of Test Pit 120 Depth to ground water
Test Pit No. 2 minutes per inch Depth of Test Pit 119 Depth to ground water

Description of Soil see Design Plan

Nature of Repairs or Alterations - Answer when applicable

Agreement:

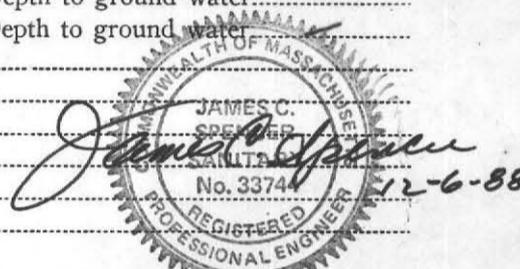
The undersigned agrees to install the aforescribed Individual Sewage Disposal System in accordance with the provisions of TITLE 5 of the State Sanitary Code - The undersigned further agrees not to place the system in operation until a Certificate of Compliance has been issued by the board of health.

Signed J. Saverid Date

Application Approved By Date

Application Disapproved for the following reasons: Date

Permit No. Issued Date



CHECK OR FILL IN WHERE APPLICABLE

THE COMMONWEALTH OF MASSACHUSETTS

BOARD OF HEALTH

TOWN OF AMHERST

Certificate of Compliance

THIS IS TO CERTIFY, That the Individual Sewage Disposal System constructed (X) 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

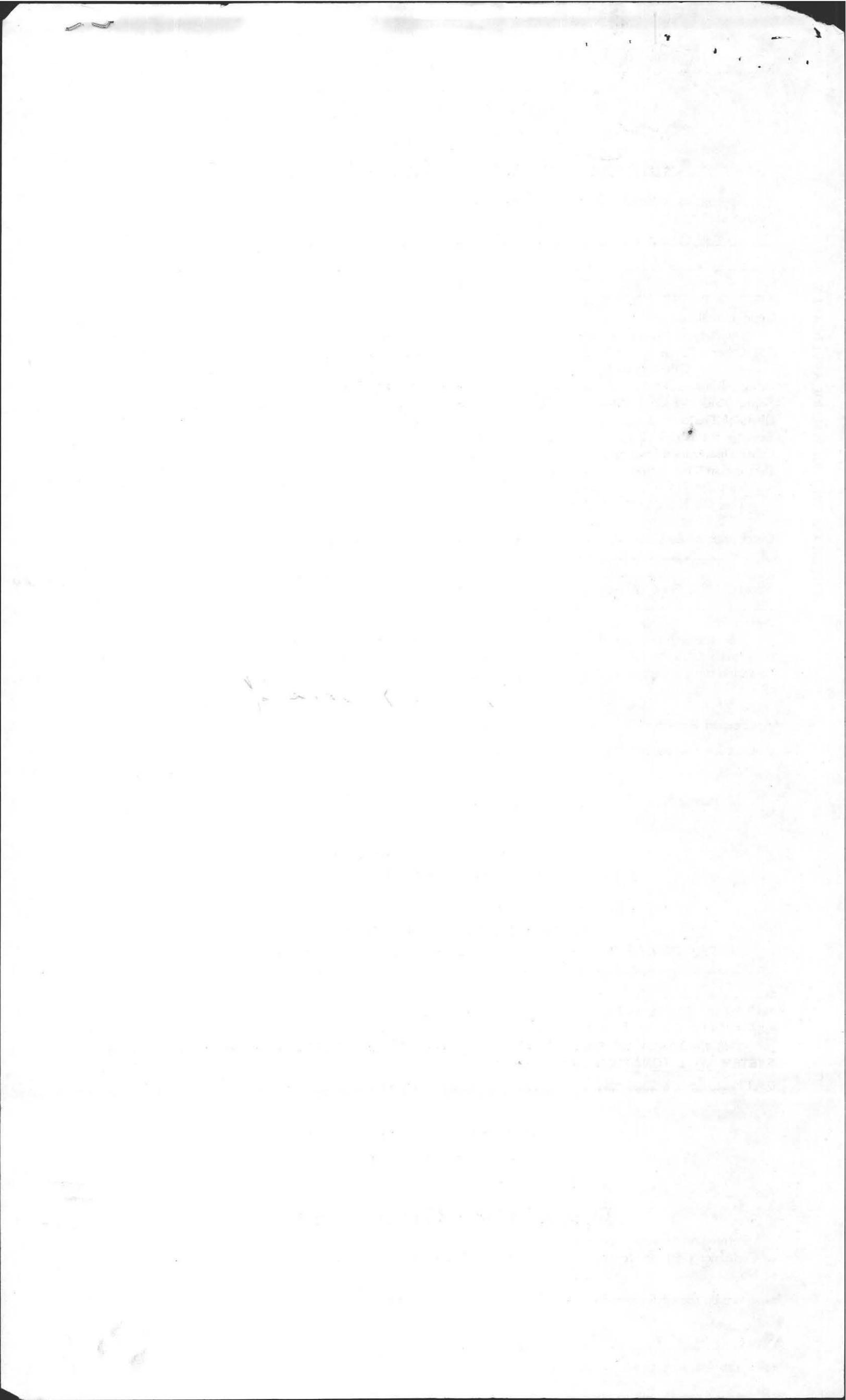
TOWN OF AMHERST

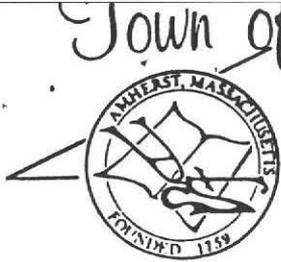
Disposal Works Construction Permit

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

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

DATE Board of Health





AMHERST

Massachusetts

Bettye Anderson Frederic, Director

AMHERST HEALTH DEPARTMENT
70 BOLTWOOD WALK
AMHERST, MA 01002-2128
(413) 253-7077

December 13, 1988

Kathryn Bridges
c/o C. T. Male Associates
393 Main Street
P.O. Box 1555
Greenfield, MA 01302

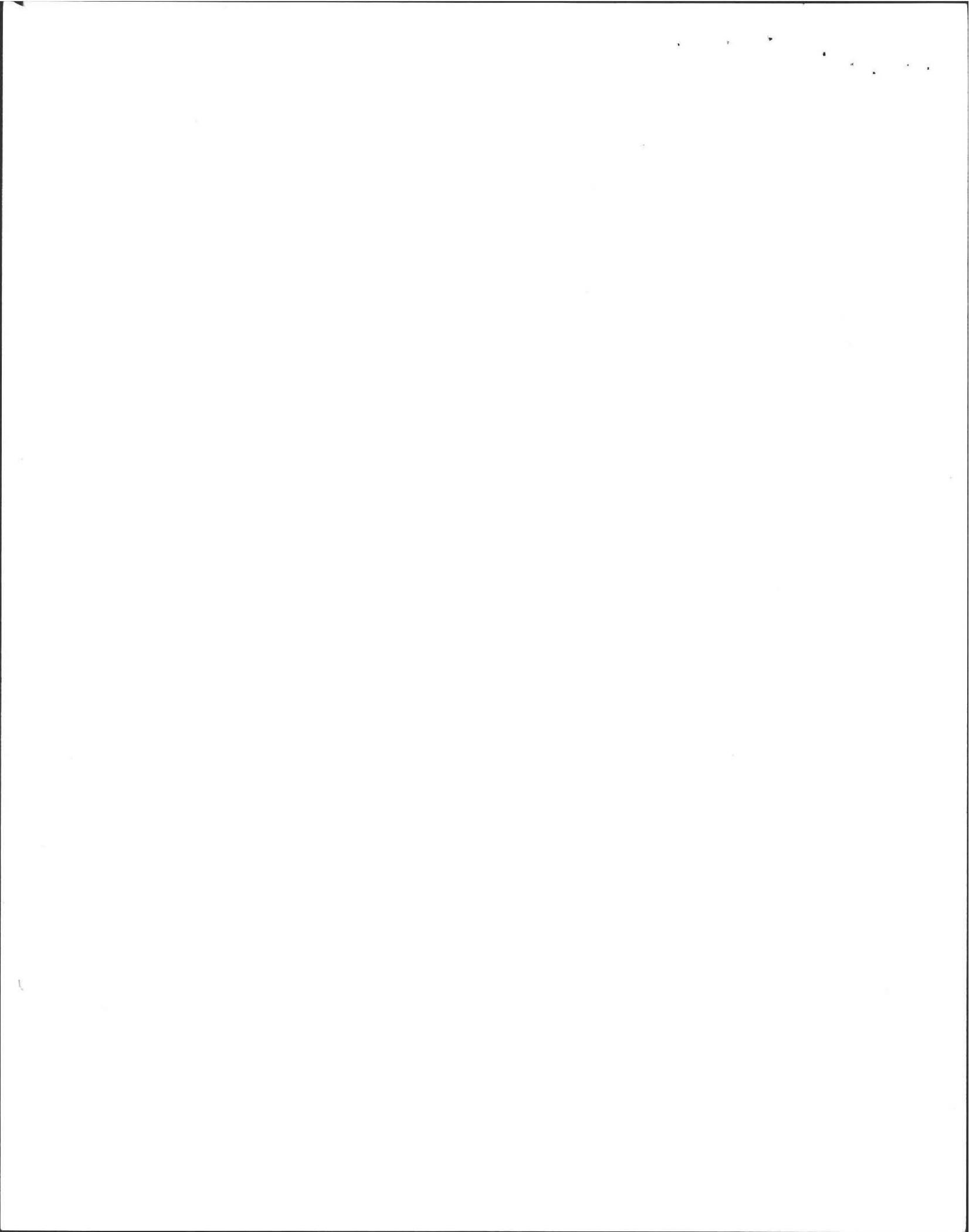
Dear Kathryn:

I am in receipt of your letter dated December 7, 1988 regarding the request of a variance for the septic system design for Jay Savereid of Market Hill Road, Amherst, MA.

It is my opinion that you are looking for "depth" not water or ledge in the deep hole log. Therefore, we should dig another deep hole or holes to determine if you can meet the Amherst Board of Health regulations.

Very truly yours,

David Zarozinski
Acting Sanitarian



DEC 09 1988

C.T. MALE ASSOCIATES, P.C.

393 Main Street
P.O. Box 1555
Greenfield, MA 01302
(413) 774-7248
FAX (413) 773-3456

Engineering
Surveying
Planning
Landscape Architecture
Laboratory Services
Computer Services



December 7, 1988

Amherst Board of Health
Boltwood Walk
Amherst, Ma. 01002

Re: Septic System Design, Savereid; Market Hill Road
C.T. Male Associates Job #88-05071

Dear Board Members:

Enclosed are prints of the proposed septic system design and Application for Construction for Mr. Jay Savereid's lot on Market Hill Road.

Mr. Savereid's property was tested on 8 December 1986 by C.T. Male Associates, P.C., with Mr. Charles Drake present for the town. This submittal is being made two years from that date. There has been no construction or site work on or near the site to change the soils, percolation rate or drainage conditions found during the site and soil investigation on 8 December 1986.

At the request of Dennis Pinski, Sanitarian for the Town of Amherst, we have tried to meet the current Amherst Board of Health Regulations that went into effect March 9, 1987. The site was tested to meet Title V requirements. The proposed plan was designed using Title V as the minimum.

The new Amherst Regulations were addressed as follows:

1. #3. Required Depth of Pervious Materials
310 CMR 15.03 (6) requires 4' of pervious soil and Amherst requires 6'. The test holes were 10' deep and showed no signs of water or ledge at that depth. The design provides 4.2' depth of pervious soil. The system is not closer to the surface to accommodate side slope requirements and to avoid construction and disturbance to the bank.

(continued)

C.T. MALE ASSOCIATES, P.C.

Amherst Board of Health
Amherst, Ma. 01002

December 7, 1988
Page Two

2. #4. Leaching Area
Amherst now requires the area provided to be 1.25 x Title V area requirements.

The proposed system will provide 1.08 times the Title V requirement.

The proposed system was designed with concern for the topography of the site and Cushman Brook. To maintain the integrity and stability of the slope to the northwest of the system and house, a variance to Title V 15.12 Figure 1, Side Slope Requirement is needed. As shown on the plan, Section A-A, the slope is 0.109 and therefore a distance of 16.36' is required; a 15' distance is provided.

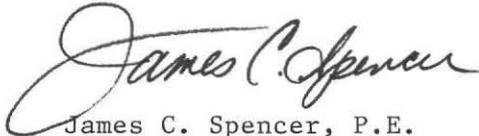
A Request for Determination is being filed with the Amherst Conservation Commission to address wetlands concerns.

If you have any questions, feel free to contact us at your convenience.

Very truly yours,
C.T. MALE ASSOCIATES, P.C.



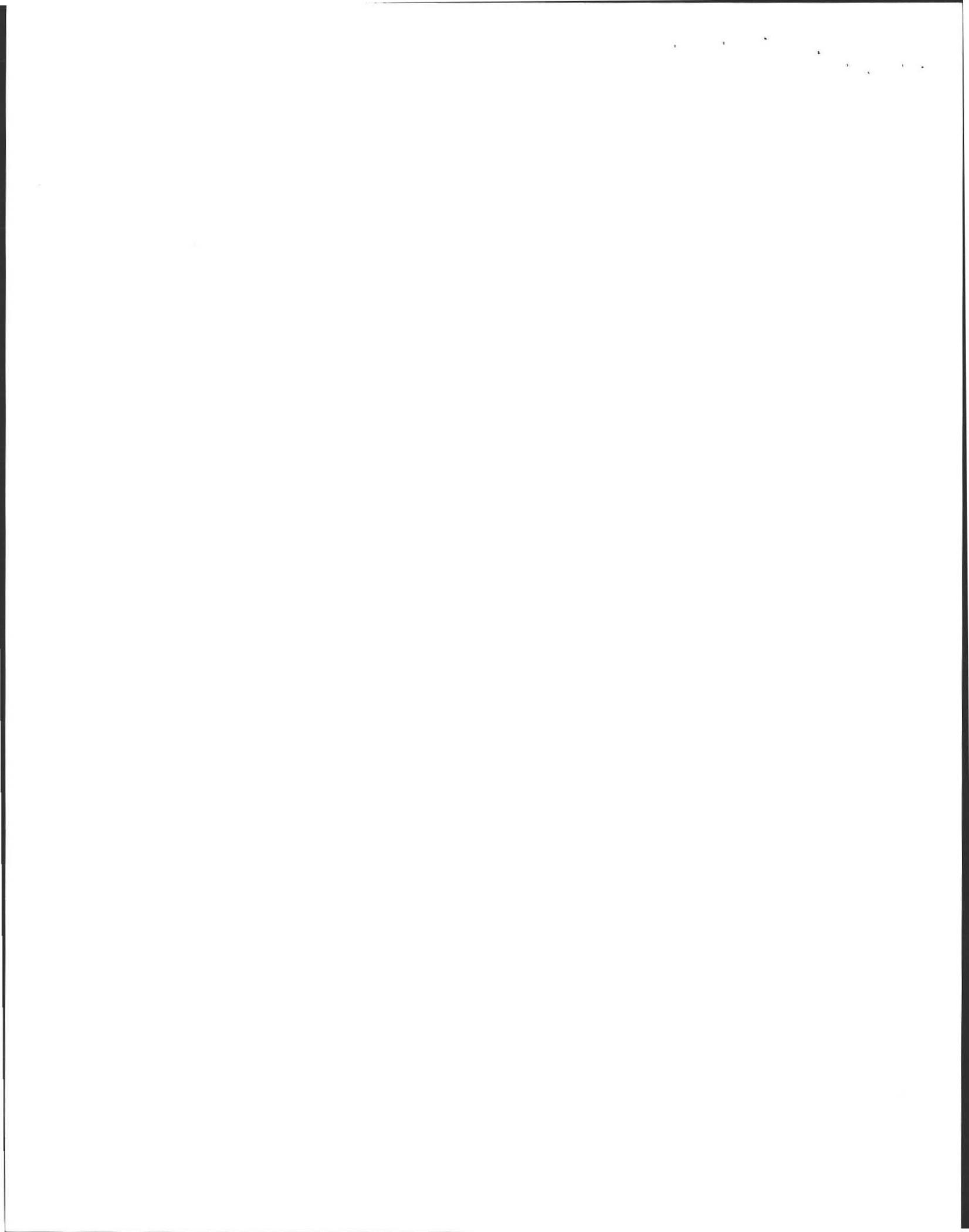
Kathryn H. Bridges
Design Engineer

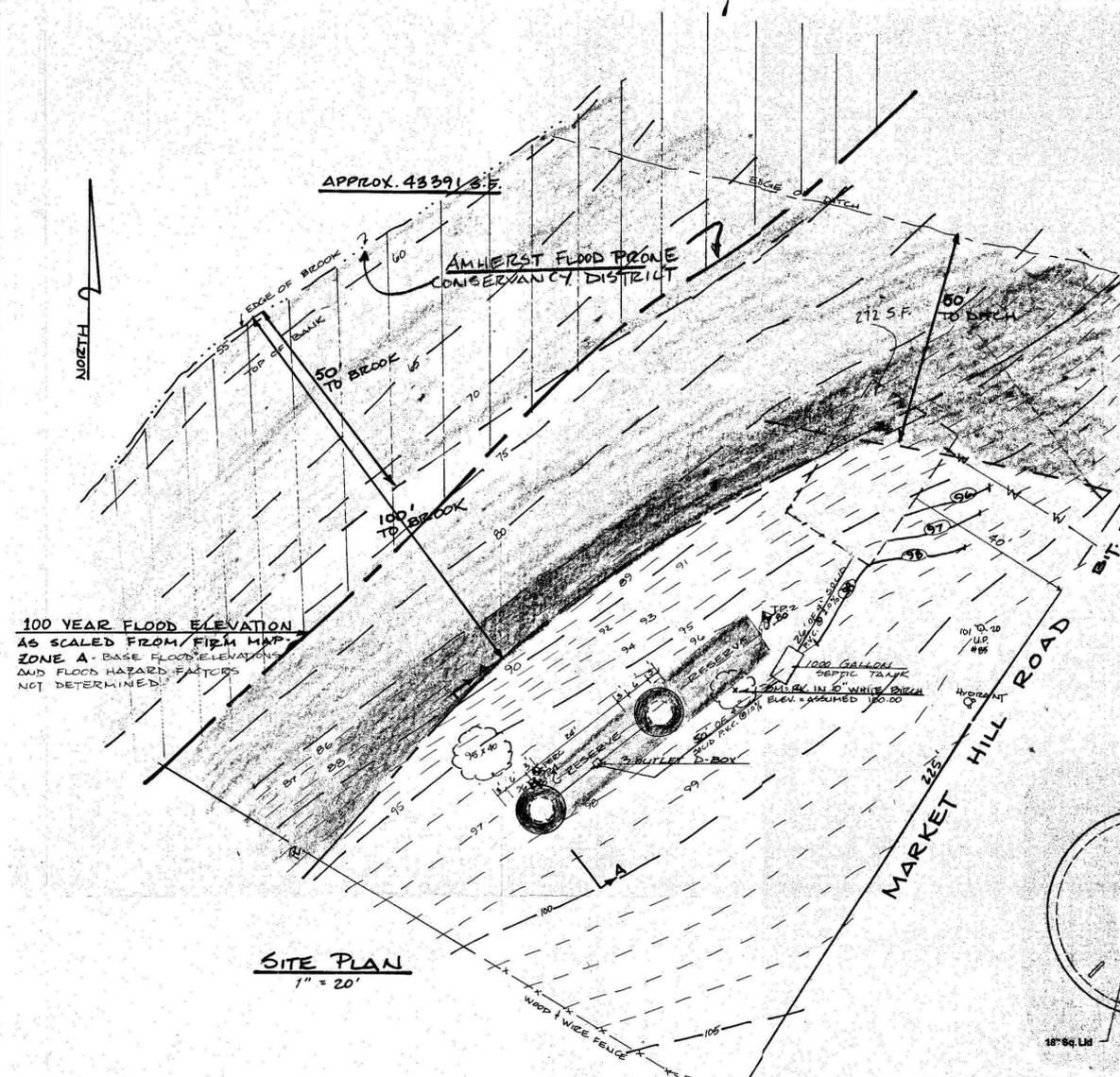


James C. Spencer, P.E.
Senior Engineer

KB/cmK
Enclosure

cc: J. Savereid
D.E.Q.E.
Amherst Cons. Comm.



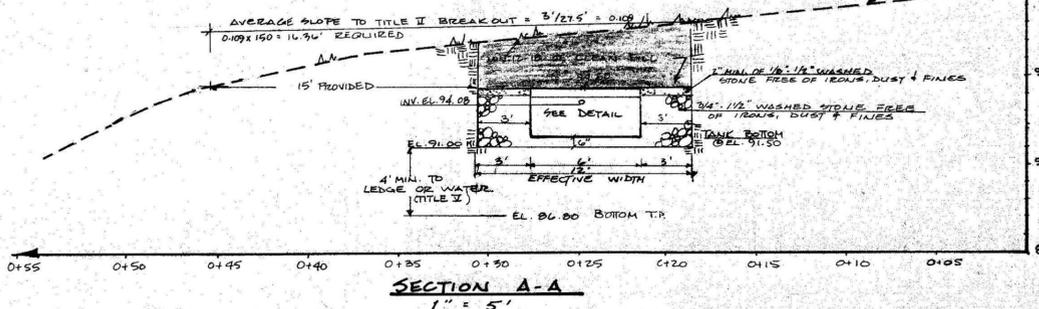


100 YEAR FLOOD ELEVATION AS SCALED FROM FIRM MAP. ZONE A - BASE FLOOD ELEVATIONS AND FLOOD HAZARD FACTORS NOT DETERMINED.

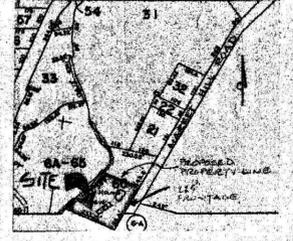
SITE PLAN
1" = 20'

WETLANDS:
ON MARCH 27, 1988 A WETLANDS BIOLOGIST FROM C.T. MALE CONDUCTED A SITE INVESTIGATION AND FOUND NO VEGETATED WETLANDS. PROTECTED AREAS ARE THE BROOK, THE DITCH, THE BANKS AND THE 100 YR FLOOD EDGE.

LEGEND:
 - - - 100 YEAR FLOOD ELEV.
 - - - 50' BUFFER ZONE
 - - - 100' BUFFER ZONE



SECTION A-A
1" = 5'

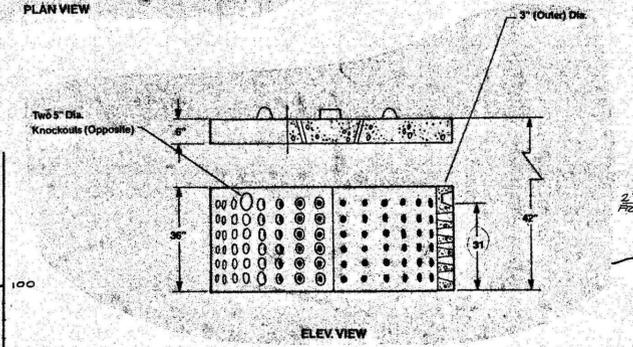
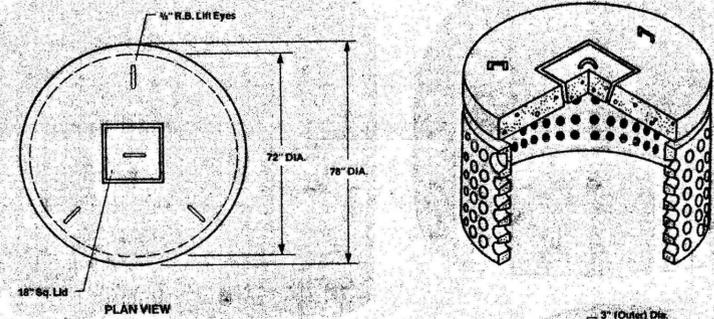


APPROXIMATE LOT LAYOUT
1" = 400'



LOCATION MAP
1" = 4400'

6' Diameter x 3' Deep Leach Pit - DETAILS
NO SCALE

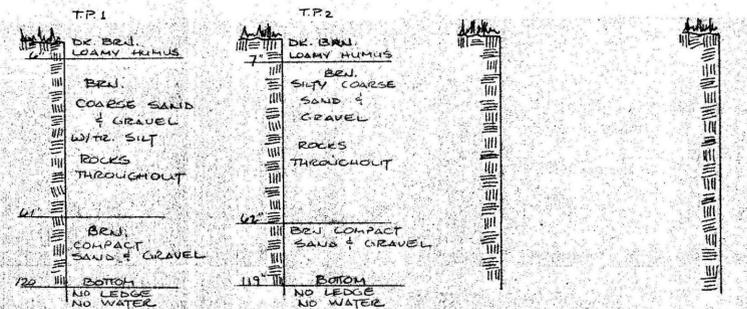


- Design Data & General Notes**
- Concrete strength Fc 4,000 PSI @ 28 days. Density 150 PCF.
 - Cement, Portland Type I or III per ASTM C150-81.
 - Admixtures, air & plasticizers per ASTM C733-89.
 - Reinforcing per ASTM A615. Grade 40 OR 60 R'd.
 - Design loading H-20. HS20-44 optional.
 - Approx. weight with cover: 4,400 lbs.

DESIGN CRITERIA

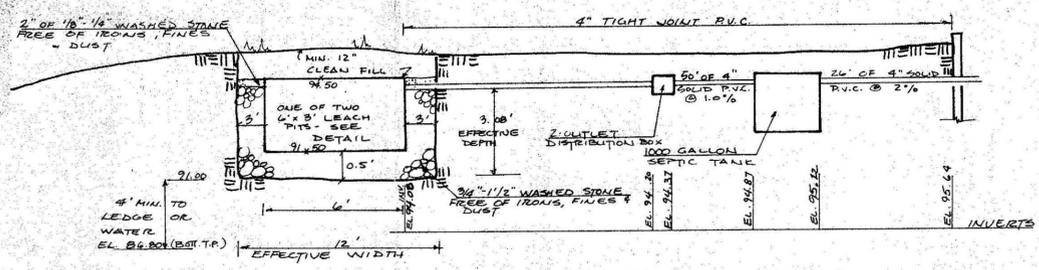
- LOCATION OF STREAMS AND WETLANDS: GREATER THAN 100' & 50' RESPECTIVELY FROM LEACHING AREA
- LOCATION OF SURFACE AND SUBSURFACE DRAINS: GREATER THAN 25' FROM LEACHING AREA
- WATER SUPPLY SOURCE: TOWN WATER
- SYSTEM IS NOT DESIGNED FOR GARBAGE DISPOSAL.
- HOUSE 3 BEDROOMS.
- DESIGN FLOW: 3 BEDROOMS x 110 GPD / BEDROOM = 330 GPD
- DESIGN CALCULATIONS: LEACHING PITS: 2, 6" DIA., 3' DEEP, 10 MIN/INCH PERC RATE
 CAPACITY: SIDES (π(6") x 3.00') x 1.5F/GAL = 116.11 GAL
 BOTTOM (π(6")²) x 0.55 SF/GAL = 42.10 GAL
 TOTAL = 178.31 GAL x 2 PITS = 356.62 GPD
 TITLE II, REQUIRED CAPACITY = 330 GPD (412 GPD REQUIRED BY AMHERST)
- SEPTIC TANK CAPACITY: 1000 GALLONS
- FOUNDATION TO BE DRAINED.
- SOIL INVESTIGATION BY C.T. MALE ASSOC. PC. 8 DECEMBER 1986
 WITNESS: C. DRAKE

TEST PITS	TP 1	TP 2	TP 3	TP 4
PIT DEPTH	120"	119"		
PERCOLATION RATE & DEPTH	10 MIN/INCH @ 37"			
DEPTH OF SEASONAL HIGH WATER	NONE OBSERVED	NONE OBSERVED		
DEPTH OF OBSERVED GROUNDWATER	NONE OBSERVED	NONE OBSERVED		
DEPTH TO LEDGE	NONE OBSERVED	NONE OBSERVED		



GENERAL NOTES:

- SYSTEM DESIGNED ACCORDING TO MASSACHUSETTS STATE SANITARY CODE, (DEOE), TITLE V, & AMHERST REGULATIONS
- 100 INDICATES EXISTING CONTOUR, (---) INDICATES PROPOSED CONTOUR.
- C.T. MALE ASSOCIATES, P.C. HAS FURNISHED THIS DESIGN & PLAN BUT HAS NOT BEEN RETAINED TO CONSTRUCT OR SUPERVISE CONSTRUCTION OF THE SYSTEM. THEREFORE, NO GUARANTEE OR WARRANTY, EXPRESS OR IMPLIED, IS MADE TO THE ULTIMATE USER RELATIVE TO ANY SYSTEM INSTALLED PURSUANT TO THE PLAN. CONTRACTOR IS TO NOTIFY ENGINEER OF ANY SITE CONDITION DIFFERING FROM THOSE INDICATED OR OF FIELD CHANGES MADE.
- ACCEPTABLE MANUFACTURERS OF SEPTIC TANKS, DISTRIBUTION BOXES, PIPES AND LEACHING PITS ARE ROTONDO, KELLOGG BROS., INC., LAINE CONSTRUCTION CORP., ARTHUR WHITCOMB, INC., AND WASHBURN VAULT COMPANY, INC. OR ANY MANUFACTURER MEETING THE STATE STANDARDS FOR CONSTRUCTION.

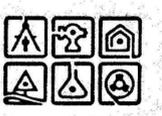


SYSTEM PROFILE
NO SCALE

DEC 9 1988

DEC 9 1988

DATE	REVISIONS	APPR'D



C.T. MALE ASSOCIATES,
Engineers, Surveyors and Planners
Formerly
Gordon E. Ainsworth & Associates, Inc.

SCALE AS NOTED
 DATE AUGUST 20, 1988
 PROJECT NO. 88-05071
 DRAWN K.H. BRIDGES
 CHECKED BY JCS
 APPROVED BY J.C.M.

PROJECT
JAY SAVEREID
 MARKET HILL ROAD
 AMHERST, HAMPSHIRE CO., MASSACHUSETTS

SHEET TITLE
**SUBSURFACE DISPOSAL
 SYSTEM DESIGN**

SHEET 1 OF 1
 12-88