

Diana Adair (Town of Amherst)
72 Station Rd



No. 02-18

FEE 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 (X) an Individual Sewage Disposal System at:

72 STATION ROAD Location - Address
HEARTLAND FARM or Lot No.
'TO BE DETERMINED' Owner Address
Howard MANN Address
Installer

Type of Building
Dwelling - No. of Bedrooms Expansion Attic () Garbage Grinder ()
Other - Type of Building HORSE STABLE No. of persons Showers () - Cafeteria ()
Other fixtures 1 toilet & approx. 14 STALLS

Design Flow 10/stall gallons per person per day. Total daily flow 140 gallons
Septic Tank - Liquid capacity 2,000 gallons Length 11 ft Width 6 ft Diameter Depth 6 ft
Disposal Trench - No. Width Total Length Total leaching area sq. ft.
Seepage Pit No. Diameter Depth below inlet Total leaching area sq. ft.

Other Distribution box () Dosing tank ()
Percolation Test Results Performed by Date
Test Pit No. 1 minutes per inch Depth of Test Pit Depth to ground water
Test Pit No. 2 minutes per inch Depth of Test Pit Depth to ground water

Description of Soil See ATTACHED SOIL LOGS

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 [Signature]
Application Approved By [Signature] Date 10/16/02

Application Disapproved for the following reasons:
Date

Permit No. 02-18 Issued 10/16/02 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 () or Repaired (X) by

at 72 STATION ROAD Installer

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. 02-18 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

No. 02-18

FEE 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 (X) an Individual Sewage Disposal System at:

32 STATION ROAD

Location - Address

or Lot No.

HEARTLAND FARM

Owner

Address

"TO BE DETERMINED" HOWARD MARK

Installer

Address

Type of Building

Size Lot

Sq. feet

Dwelling - No. of Bedrooms

Expansion Attic ()

Garbage Grinder ()

Other - Type of Building HORSE STABLE No. of persons

Showers () - Cafeteria ()

Other fixtures 1 toilet & approx. 14 STALLS

Design Flow

10/stall

gallons per person per day. Total daily flow

140

gallons

Septic Tank

Liquid capacity 2,000 gallons

Length 11'±

Width 6'±

Diameter

Depth 6'±

Disposal Trench - No.

Width

Total Length

Total leaching area

sq. ft.

Seepage Pit No.

Diameter

Depth below inlet

Total leaching area

sq. ft.

Other Distribution box ()

Dosing tank ()

Percolation Test Results

Performed by

Date

Test Pit No. 1 minutes per inch

Depth of Test Pit

Depth to ground water

Test Pit No. 2 minutes per inch

Depth of Test Pit

Depth to ground water

Description of Soil

See ATTACHED SOIL LOGS

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

Application Approved By

[Signature]

Date

10/16/02

Date

Application Disapproved for the following reasons:

Permit No. 02-18

Issued

10/16/02

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 () or Repaired (X) by

at 32 STATION ROAD Installer

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. 02-18 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

No. 02-18

FEE

Disposal Works Construction Permit

Permission is hereby granted Heartland Farms (D. Adair)

to Construct () or Repair (X) an Individual Sewage Disposal System

at No. 32 STATION ROAD

as shown on the application for Disposal Works Construction Permit No. 02-18

Dated

8/23/02 (Rec 10-15/02)

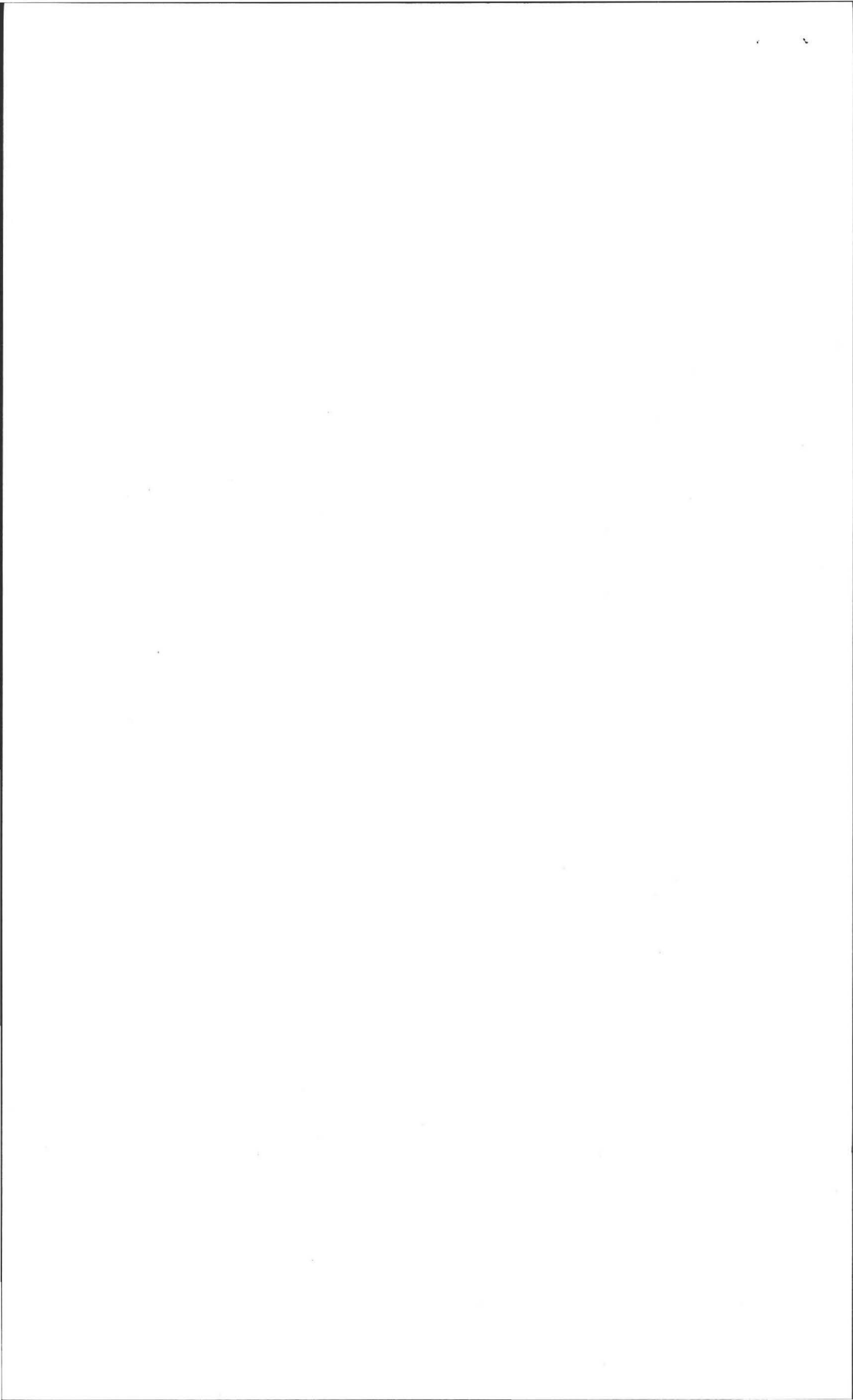
DATE

10/16/02

Board of Health

[Signature]

CHECK OR FILL IN WHERE APPLICABLE



Commonwealth of Massachusetts
Town of _____

Soil Suitability Assessment : On-Site Sewage Disposal

Performed By: Mike Pizzas Date: 7/2/02
Witnessed By: David Higgins

Location Address of: Lot #	Owner's Name: <u>TOWN OF MA...</u> Address of: <u>e/c Diana Adair</u> Telephone: <u>Heartland Farm</u> <u>72 Station Rd</u> <u>253-6611</u>
New Construction <input type="checkbox"/> Repair <input type="checkbox"/>	

Office Review

Published Soil Survey Available? No Yes
Year Published _____ Publication Scale _____ Soil Map Unit _____
Drainage Class _____ Soil Limitations _____

Surficial Geologic Report Available? No Yes
Year Published _____ Publication Scale _____
Geologic Material (map unit) _____
Landform _____

Flood Insurance Rate Map:
Above 500 year flood boundary? No Yes
Within 500 year flood boundary? No Yes
Within 100 year flood boundary? No Yes

Wetland Area:
National Wetland Inventory Map (map unit) _____
Wetlands Conservancy Program Map (map unit) _____

Current Water Resource Conditions (USGS): month _____
Range: Above Normal Normal Below Normal

Other Reference Reviewed:

Determination: Seasonal High Water Table

Methods Used:

- Depth observed standing in observation hole _____ inches
- Depth weeping from side of observation hole _____ inches
- Depth to soil mottles _____ inches
- Ground water adjustment _____ feet

Index Well No. _____ Reading Date _____ Index Well Level _____
Adjustment factor _____ Adjusted ground water level _____

Depth of Naturally Occurring Previous Material

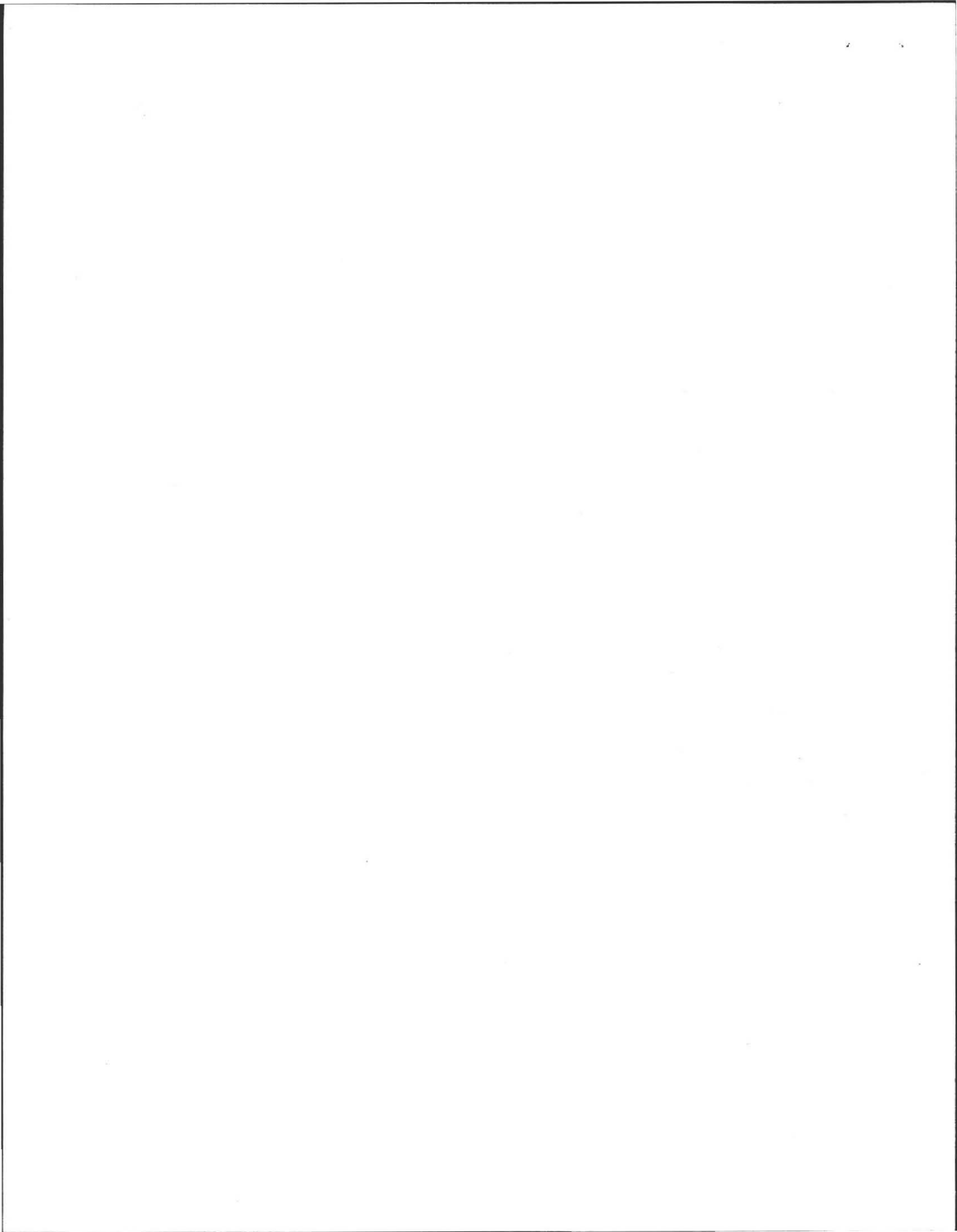
Does at least four feet of naturally occurring previous materials exist in all areas observed throughout the area proposed for this soil absorption system? _____

If not, what is the depth of naturally occurring previous material?

Certification

I certify that on _____ (date) I have passed the soil evaluator examination approved by the Department of Environmental Protection and that the above analysis was performed by me consistent with the required training, expertise, and experience described in 310 CMR 15.017.

Signature _____
Date _____



72 STATION Rd.

Deep Hole
to replace
Tight Tank

On-Site Review

Deep Hole Number ① Date: 7/2/02 Time 9:30
Weather _____
Location (identify on site plan) _____
Land Use _____ Slope (%) _____
Surface Stone _____
Vegetation: _____

Landform: _____

Position on Landscape (sketch on back) _____

Distances from:

Open Water Body _____ feet Drainageway _____ feet
Possible Wet Ares _____ feet Property Line _____ feet
Drinking Water Well _____ feet Other _____

DEEP OBSERVATION HOLE LOG

depth from surface (inches)	soil horizon	soil texture (USDA)	soil color (Munsell)	soil mottling	other (structure, stones, boulders) Consistency, % gravel
21	A+ fill	SL	10YR 3/2		
32	B	SL		20"	
96	C	Fine Sand with silt	2.5Y 4/3		

Parent Material (geologic) Abundant (Volcanic Red)
Depth to Bedrock 96
Depth to Groundwater: _____
Standing Water in the Hole _____
Weeping from Pit Face 58
Estimated Seasonal High Water 20

On-Site Review

Deep Hole Number _____ Date: _____ Time _____
Weather _____
Location (identify on site plan) _____
Land Use _____ Slope (%) _____
Surface Stone _____
Vegetation: _____

Landform: _____

Position on Landscape (sketch on back) _____

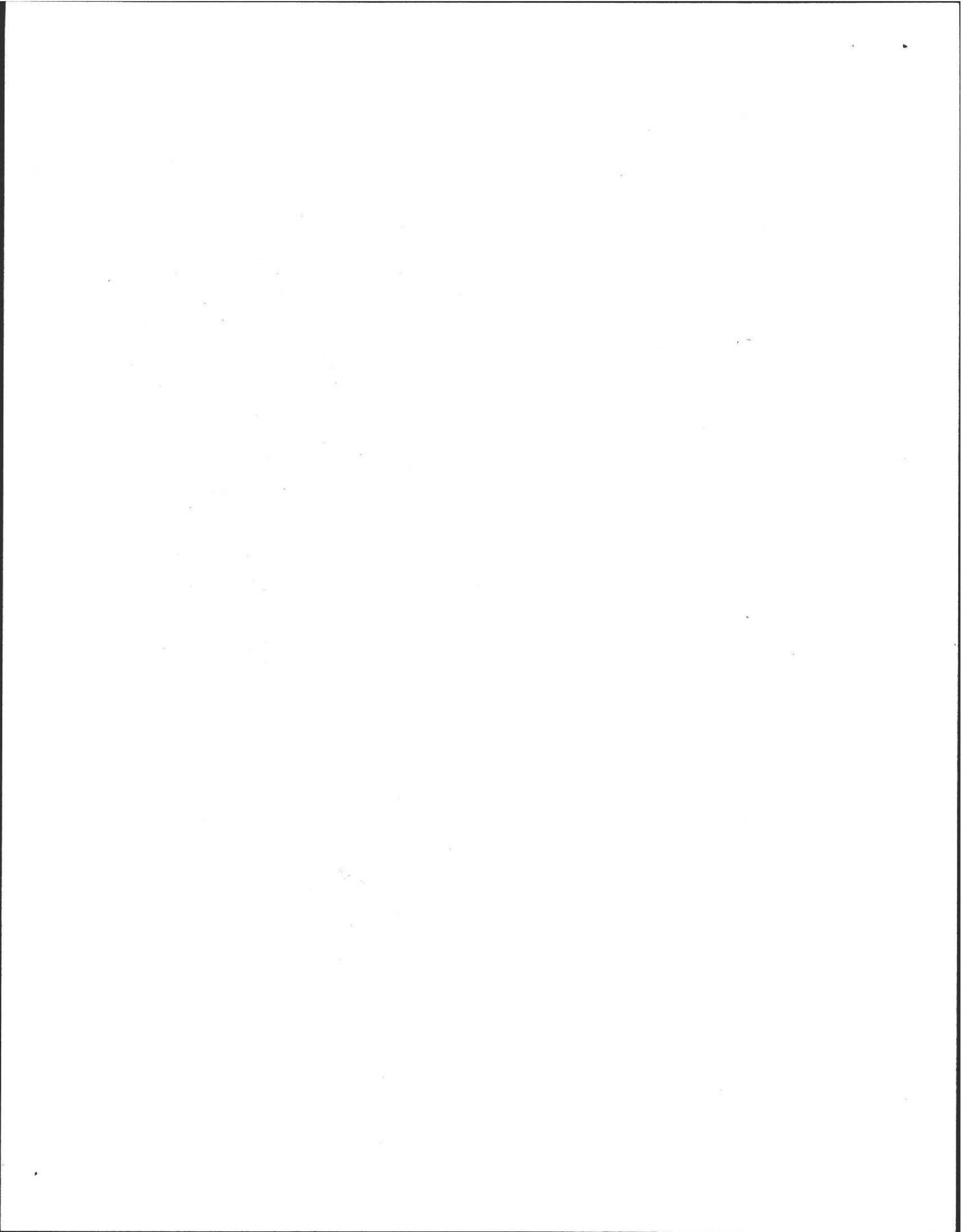
Distances from:

Open Water Body _____ feet Drainageway _____ feet
Possible Wet Ares _____ feet Property Line _____ feet
Drinking Water Well _____ feet Other _____

DEEP OBSERVATION HOLE LOG

depth from surface (inches)	soil horizon	soil texture (USDA)	soil color (Munsell)	soil mottling	other (structure, stones, boulders) Consistency, % gravel

Parent Material (geologic) _____
Depth to Bedrock _____
Depth to Groundwater: _____
Standing Water in the Hole _____
Weeping from Pit Face _____
Estimated Seasonal High Water _____



FORM 12: Percolation Test

Location Address or Lot #

72 STATION Road

Commonwealth of Massachusetts

Town of Andover

PERCOLATION TEST *

	DATE:	TIME:
Observation Hole #		
Depth of Perc		
Start Pre-soak		
End Pre-soak		
Time at 12"		
Time at 9"		
Time at 6"		
Time (9"-6")		
Rate Min./Inch		

No Perc

*Minimum of one percolation test must be performed in both the primary area and reserve area.

Site Passed

Site failed

Performed by

Mette Pletans

Witnessed by

David Zorowski

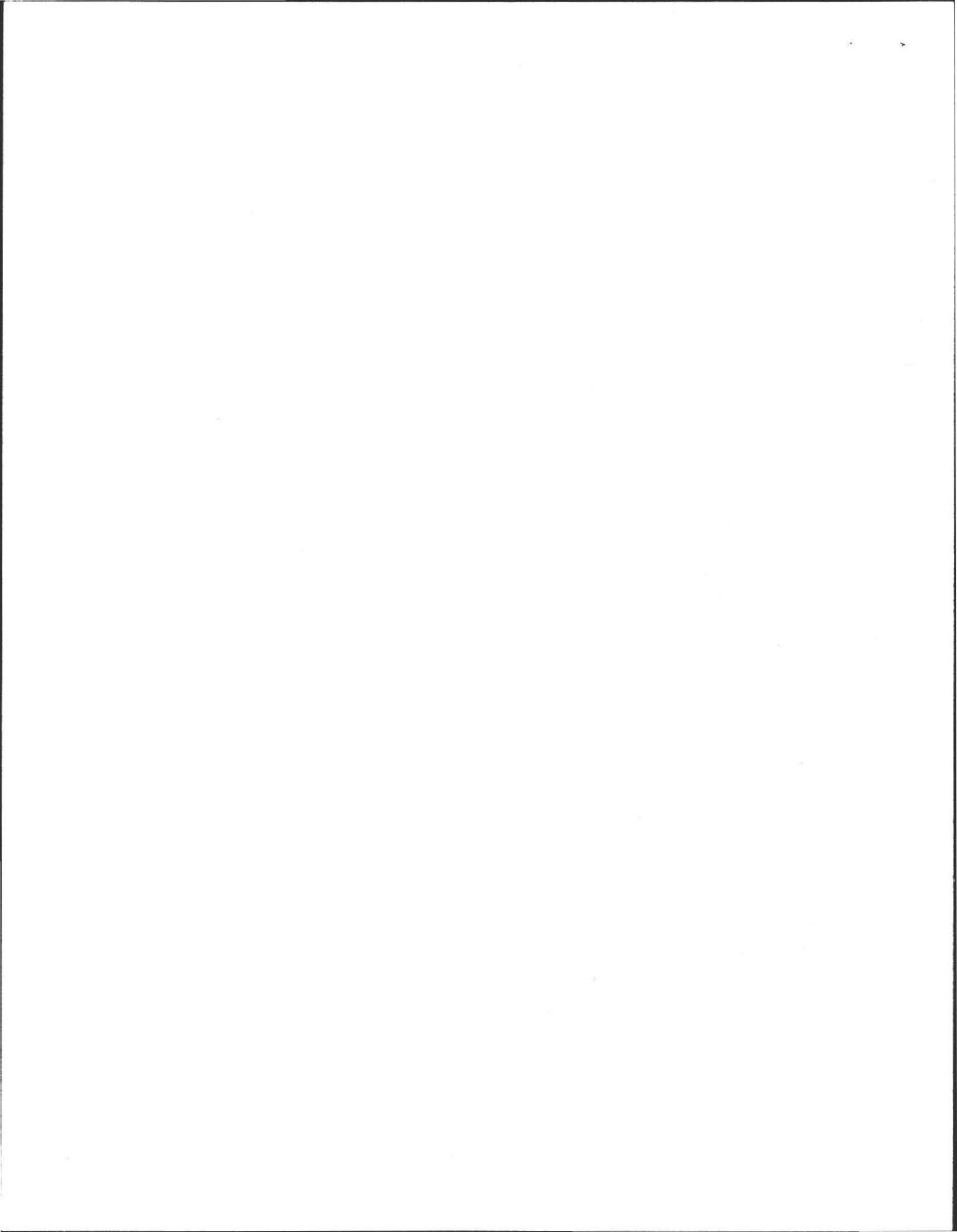
Comments:

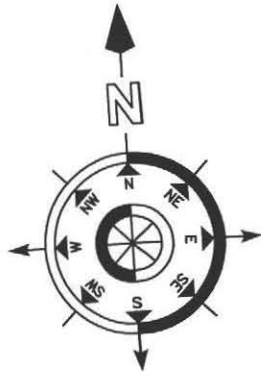
Deep hole to replace tight tank that failed

Bathroom only
110 office
2d
61-65-

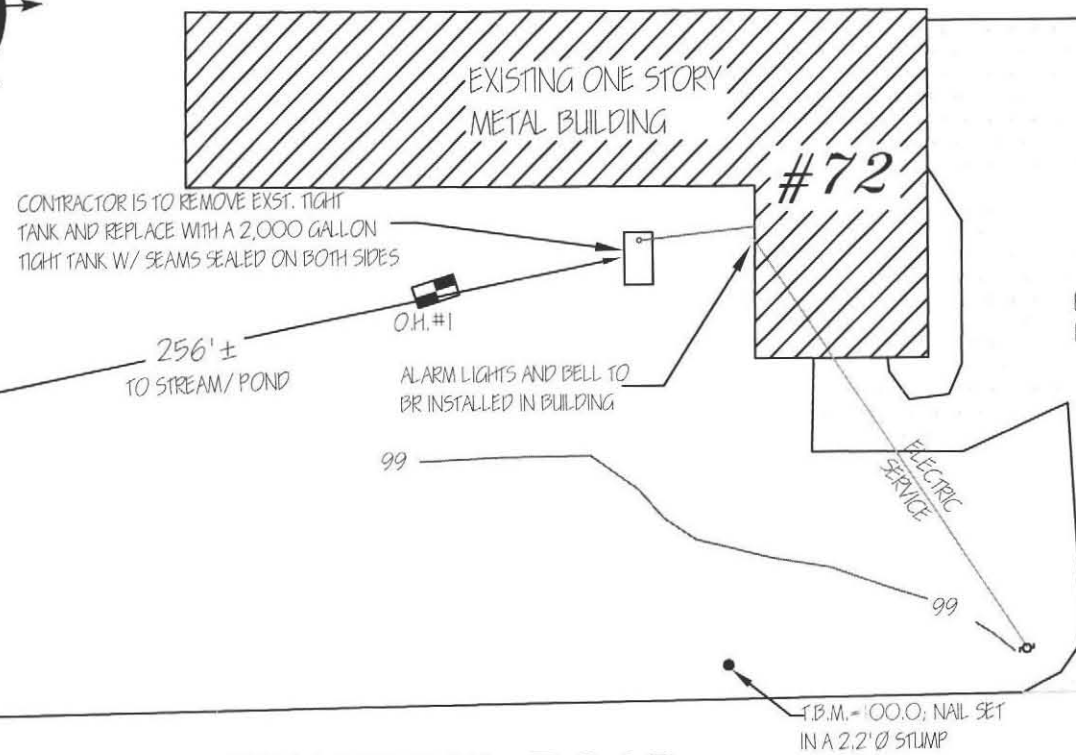
Vertical line with handwritten notes

STATION RD



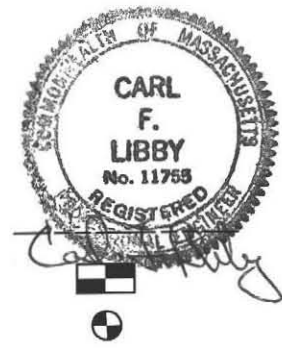
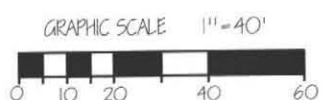


- NOTE:**
- 1.) ALL CONSTRUCTION PRACTICE AND MATERIALS MUST CONFORM TO THE TITLE 5 (EFF. 3-1995) AND/OR LOCAL REGULATIONS.
 - 2.) CONTRACTOR IS RESPONSIBLE FOR VIEWING SITE BEFORE BIDDING JOB TO FAMILIARIZE THEMSELVE WITH ALL ASPECTS OF THE JOB.
 - 3.) CONTRACTOR SHALL VERIFY ALL INVERTS AND SETBACKS FROM WELLS, PROPERTY LINES AND WATER BEFORE BEGINNING WORK.
 - 4.) IF CONDITIONS IN THE FIELD DIFFER THAN THOSE ON THE PLAN, WORK SHALL STOP AND THE DESIGN ENGINEER SHALL BE CONSULTED BEFORE WORK CONTINUES.
 - 5.) THE SYSTEM SHALL BE INSPECTED AS REQUIRED BY LOCAL BOARD OF HEALTH. CONTACT DESIGN ENGINEER FOR FINAL INSPECTION BEFORE COVERING THE SYSTEM. (48 HOURS ADVANCED NOTICE)
 - 6.) THE CONTRACTOR/OWNER SHALL INSURE ALL NECESSARY PERMITS HAVE BEEN OBTAINED BEFORE INSTALLING THE SYSTEM.
 - 7.) PROPERTY LINES ARE GRAPHIC ONLY AND ARE NOT TO BE USED TO ERECT ANY STRUCTURE, FENCES OR SHEDS. NO PROPERTY SURVEY WAS DONE.
 - 8.) THE DESIGN ENGINEERS ONLY WARRANTY IS THE SYSTEM IS DESIGNED ACCORDING TO TITLE V, UNLESS OTHERWISE NOTED.
 - 9.) THE CONTACTOR SHALL CONTACT DIG SAFE BEFORE START OF CONSTRUCTION ((888)344-7233).
 - 10.) THIS PLAN IS FOR THE INSTALLATION OF THE PROPOSED SEPTIC SYSTEM ONLY.



STATION ROAD

- LEGEND:**
- PROPERTY LINE
 - DEEP HOLE TEST
 - PERC HOLE TEST
 - EXISTING CONTOURS
 - PROPOSED CONTOURS



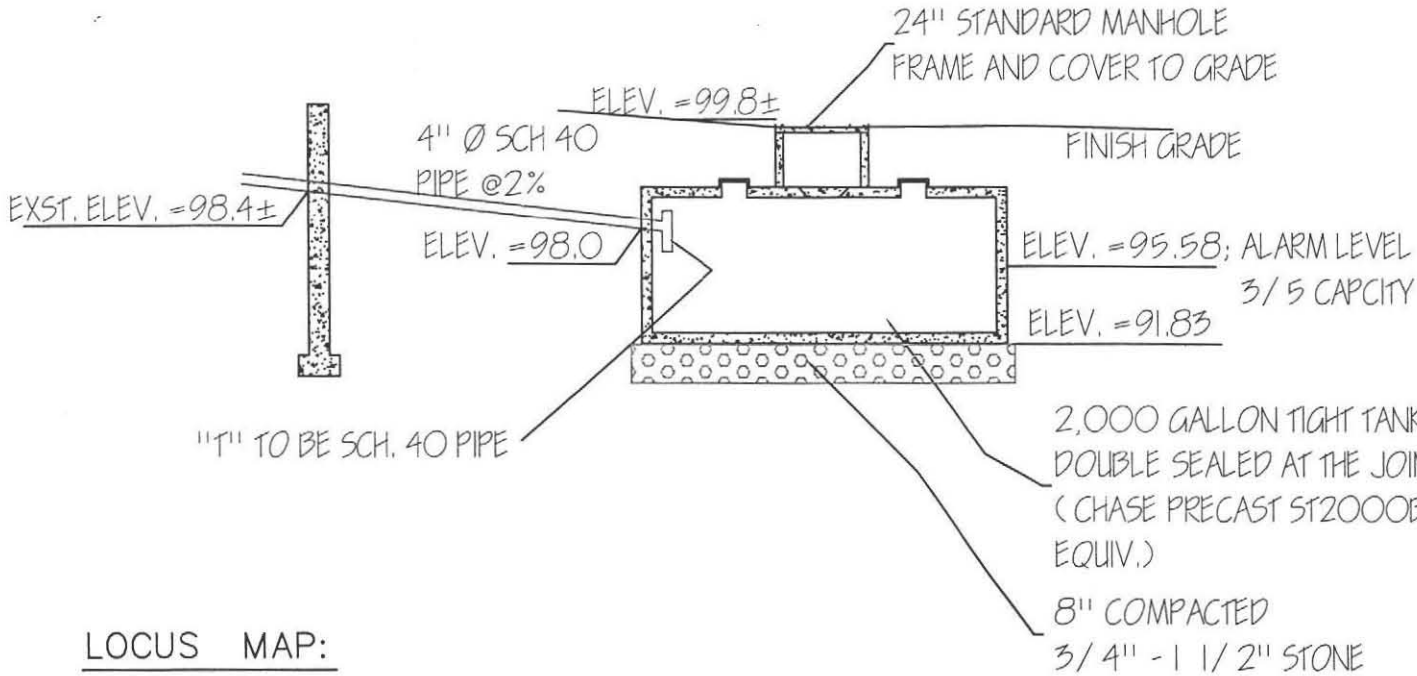
MP CONSULTING CIVIL & ENVIRONMENTAL ENGINEERING P.O. BOX 11, LUDLOW (413) 289-0036 (413) 532-2492		
PROPOSED SEPTIC SYSTEM REPAIR PLOT PLAN (TIGHT TANK)		
FOR: HEARTLAND FARM		72 STATION ROAD AMHERST, MA 01002
DATE:	8/23/02	SCALE: 1" = 40'
DWG BY: M.P.	REVIEWED BY: C.L.	DWG NO. 1 OF 2

100

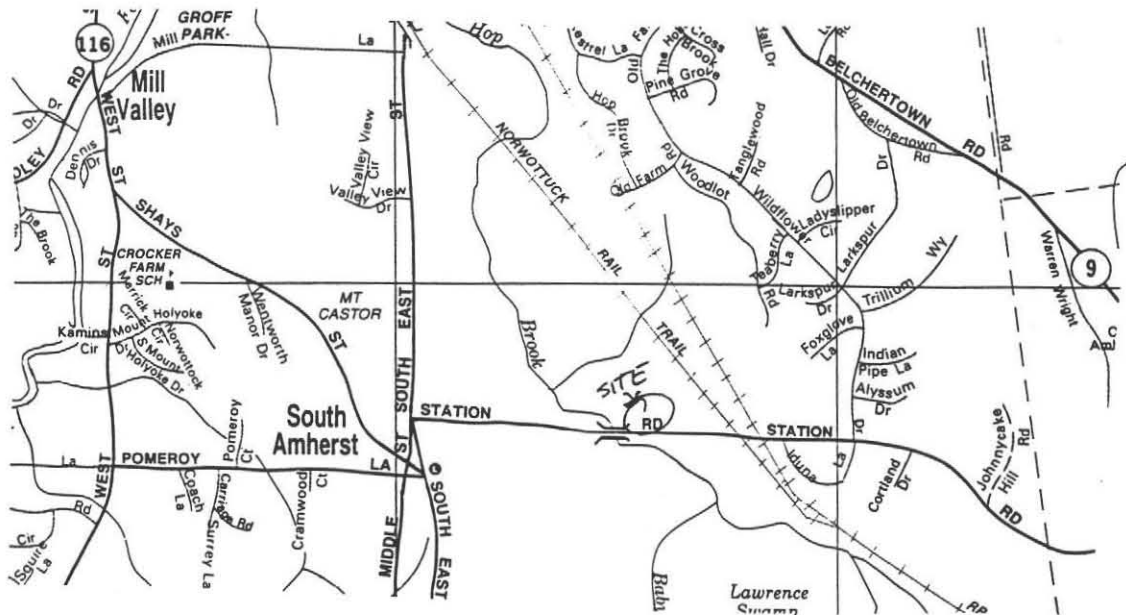
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T.B.M. = 100.0'; TOP OF SET NAIL;
 AS LOCATED ON THE PLOT PLAN



LOCUS MAP:



DESIGN CALCULATIONS:

DESIGN CRITERIA:

ONE TOILET/14 STALLS NO GARBAGE DISPOSAL
 (TAKE 10GPD/STALL W/B.O.H. APPROVAL OF FLOW)

DESIGN FLOW:

(14 BDRM) (10 GPD/BDRM) = 140 GPD

TIGHT TANK:

REQUIRED: 2,000 GALLON PROVIDED: 2,000 GALLON
 (310 CMR 15.260) USE 500% DESIGN FLOW(140 GPD x 5 = 700GPD)

BOUYANCY:

HYDROSTATIC PRESSURE OF PORTION OF TANK BELOW WATER TABLE
 VOLUME = 6' WIDE x 11' LONG x 5.51' (USE 6') BELOW
 GROUNDWATER(MOTTLES) = 396 CUBIC FEET
 62.4 #/CF x 396 CF = 24,710# OF UPLIFT FORCE
 WEIGHT OF 2,000 GALLON TIGHT TANK EMPTY = 26,925#
 SINCE THE WEIGHT OF THE TANK (26,925#) EXCEEDS 24,710#.
 NO ADDITIONAL WEIGHT IS REQUIRED TO COMPENSATE FOR
 THE BOUYANCY OF THE TANK

SOIL TESTING RESULTS:

PERCOLATION TEST:

SOIL EVALUATOR: M. PIETRAS WITNESS: DAVE ZAROZINSKI

SOIL LOG:

SEE ATTACHED SOIL LOGS



MP CONSULTING CIVIL & ENVIRONMENTAL ENGINEERING	
SYSTEM DESIGN	
FOR: HEARTLAND FARM 72 STATION ROAD AMHERST, MA 01002	
DATE: 8/23/02	SCALE: N.T.S.
DWG BY: M.P.	DWG NO. 2 OF 2

