

21 High Point

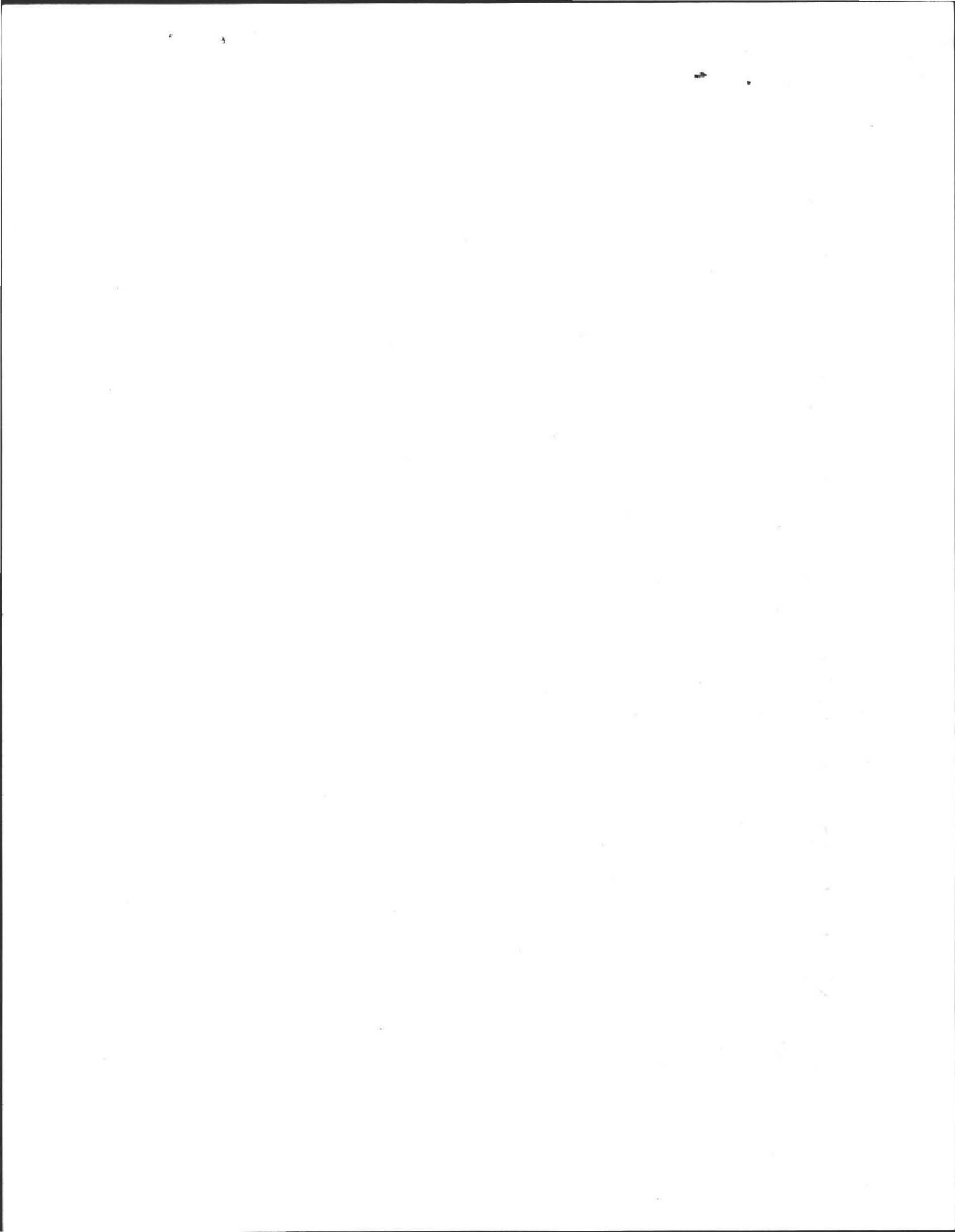


Plan: 1005

Designed by: Alan Weiss  
CHECK LIST FOR SEPTIC PLANS

- Application page attached to plan
- PE or RS stamp, date, signature
- Variances to property line setback distances must have Surveyor Stamp 15270 (3)
- Legal boundaries noted
- Easements noted
- Dwellings and buildings existing or proposed noted
- Location of driveway or parking areas, other impervious areas
- Location and dimensions of reserve area (new) CMR 15.248(1), 15.104(4) (Require)
- System design calculations
- Garbage grinder Y or N
- Benchmark not disturbed during construction, within 75 feet of facility CMR 15.220 (4)(q)
- North arrow CMR 15.200 (4) (g)
- Contours
- Deep hole location and data
- Perc hole location and data
- Elevations
- Names of approving authority and soil evaluator CMR 15.211 p. 49
- Location of every water supply, public and private CMR 15.220(k):
  - Within 400 feet of system in case of surface water and gravel packed public water supply
  - Within 250 feet of system in case of tubular public water supply
  - Within 150 feet of private supply wells 100' septic sys. 55' tank
- Well statement if applicable (INSTALL NEW WELL IN BACK OF HOUSE)
- Location of any surface waters, rivers, vegetated wetlands (NOTED - CON CON approval)
- Location of water lines and other subsurface utilities
- Observed and adjusted ground water elevation in the vicinity of system 15.220 (4)(n)
- Profile of system
- Locus plan to show location of facility, including nearest street
- Materials of construction and specs for system
- Gas Baffle 15.227.4
- Pipe in center line of tank 310 CMR 15.227, 15.06(8)
- Double washed stone
- Schedule 40 PVC for trafficked areas, house to tank
- Distances noted from house to tank, etc.
- If dosing is proposed, design and specs of dosing system Pump chamber
- When alternative technology is required, complete plan and specs, including hydraulic profile
- Trenches preferred over beds CMR 15.240 (6)
- Buoyancy calculations for tanks or components partly below H2O table 15.221(8) p. 56 N/A
- 3 to 1 slope outside of mound, toe ending 5 feet from property line
- Local upgrade requests on the plan NA
- Local upgrade forms attached to application NA - well only
- Note on plan listing all variances sought in conjunction with the plan

NOTES: APPROVED ON 4/15/10







# Quabbin Analytical Laboratory

Box 1192 Stadler Street, Belchertown, MA 01007

(413)-323-7134

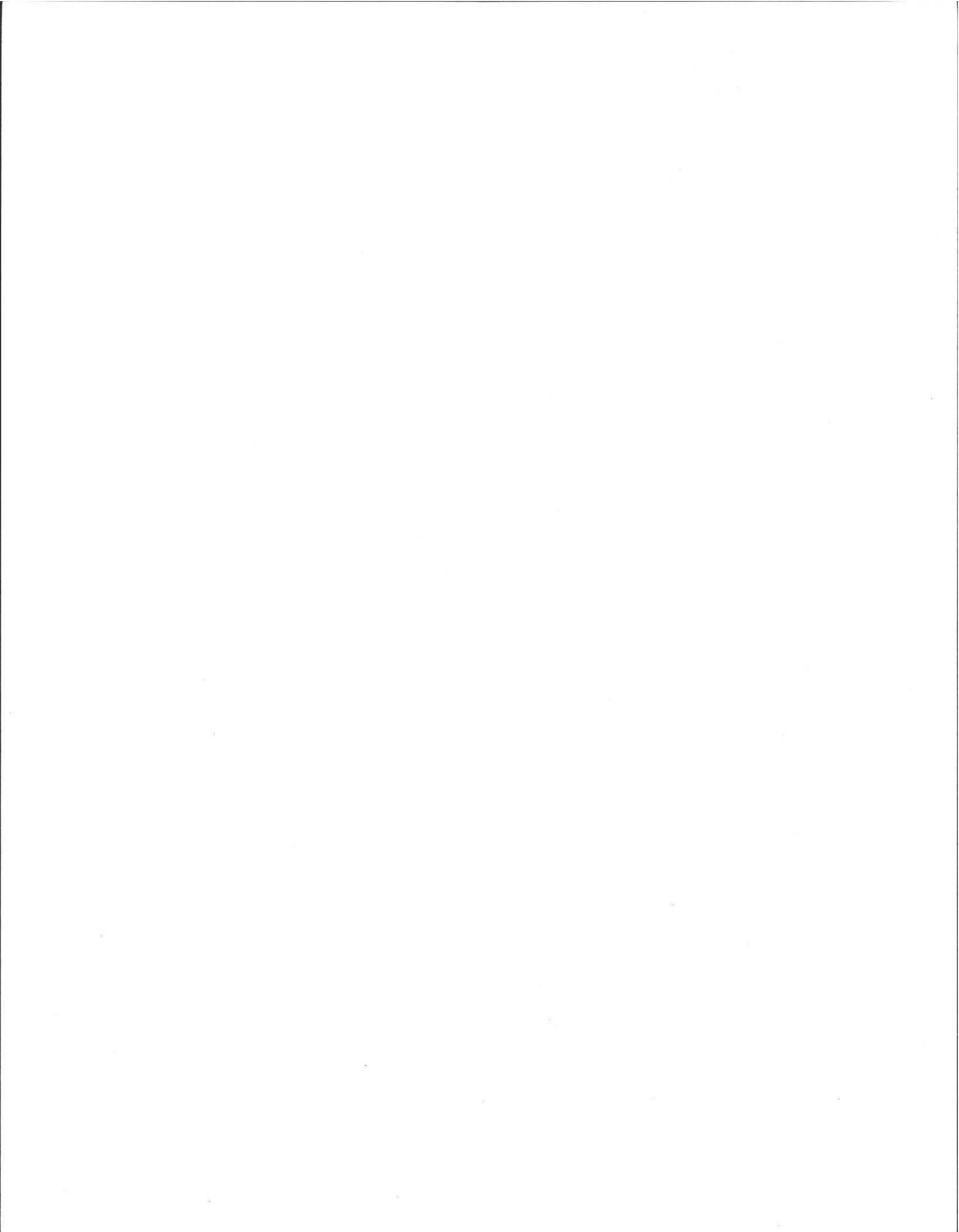
*Attn:*  
*Javera M.*  
*for Alan W.*

Name:	Peterfreund Associates	Sample Date:	6-15-10
Address:	30 Boltwood Walk	Report Date:	6-21-10
	Amherst, MA 01002	Collected By:	Mt. Springs Pump
Sample Location:		Type Supply:	Well
	21 High Point Dr.	Sample No.:	QAL-8994 with SP-8363
	Amherst, MA 01002	Lab ID#:	M-02454 & M-MA 138

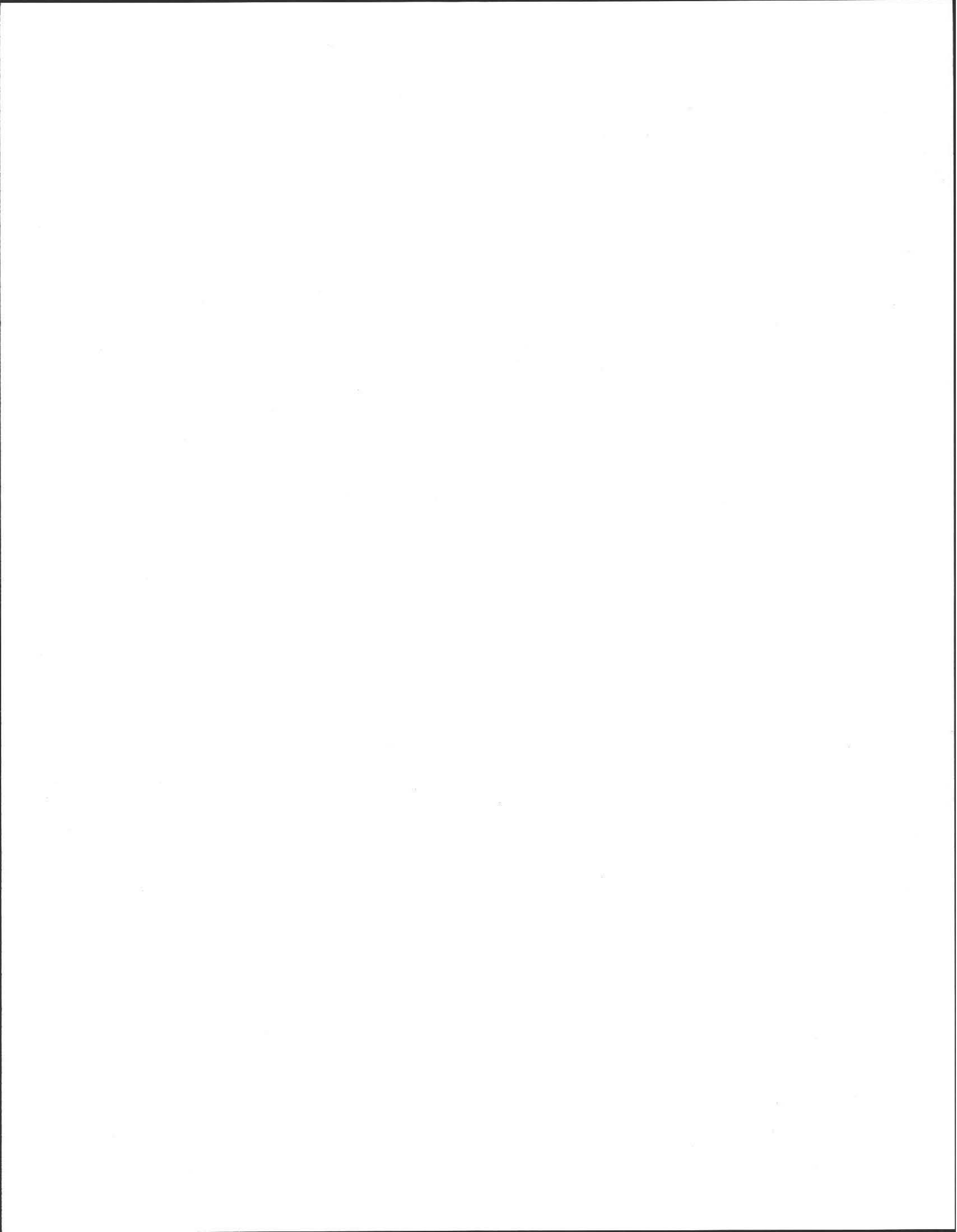
TESTED FOR	RESULTS	MAX. RECOMMENDED LEVELS
Total Coliform Bacteria	*Present	Present or Absent
Fecal Coliform Bacteria	Absent	Present or Absent
Nitrite	0	1.0 mg/l
Nitrate	0.3	10.0 mg/l
PH	7.40	6.5-8.5
Alkalinity	76.0	No Limit
Iron	.04	.30 mg/l
Manganese	*.24	.05 mg/l
Copper	0	1.3 mg/l
Sulfate	21.0	250 mg/l
Chloride	58.2	250 mg/l
Hardness	160.0	No Limit
Conductivity	385.0	No Limit
Total Dissolved Solids	254.1	500 mg/l
Turbidity	*14.3	5 NTU
Chlorine	0	No Limit
Sodium	10.3	No Limit

Results are only for those items listed above and on the above collected date. Except for the following \*Total Coliform Bacteria, Manganese & Turbidity, the sample was found to be within acceptable levels for D.E.P. Drinking Water Standards. If there are any questions on this report, please do not hesitate to call this office.

David Fredenburgh, Director









**COLD SPRING ENVIRONMENTAL  
CONSULTANTS INC.**

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- 2IE Site Investigations
- Subsurface Investigations
- Pollution Remediation
- LSP on Staff
- Forensic Septic Investigations

- Percolation Tests
- Septic Designs
- Regulatory Compliance
- Recycling and Solid Waste
- Second Opinions

April 15, 2010

**Mr. Gary Courtemanche, Inspector  
Amherst Board of Health  
Bangs Center  
Amherst, MA 01002**

RE: Request for New Private well at Existing Residence at 21 Highpoint Drive,

Dear Mr. Courtemanche,

In accordance with your Regulations for Private wells Please note the following.

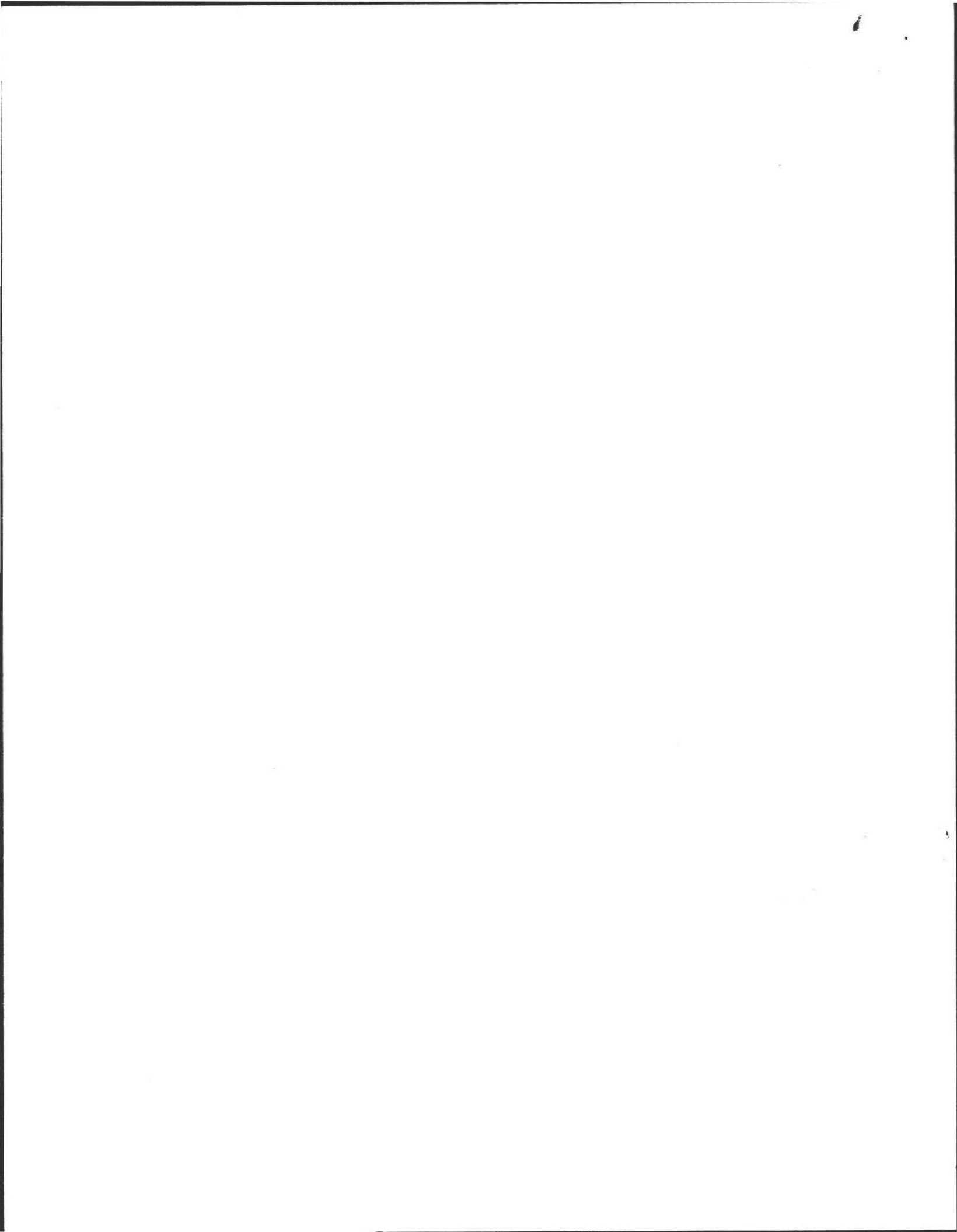
1. A plan detailing the location of the proposed well is attached.
2. All potential sources of contamination (septics underground tanks are noted within 200 feet.
3. The current land uses include residential and agricultural past and present.
4. Notification of all abutters within 150 by Certified Return Receipt Mail is completed concurrently.

Feel free to contact me with any questions.

**Alan Weiss, RS  
Principal Hydrogeologist**

**Cold Spring Environmental, Inc**

Cc: Applicant, C/O Alan Peterfreund



Town of



AMHERST

Massachusetts

AMHERST HEALTH DEPARTMENT, 70 BOLTWOOD WALK, AMHERST, MA 01002  
(413) 259-3077 (413) 259-2404 - FAX Environmental Health Division (413) 259-3078

APPLICATION FOR A WELL CONSTRUCTION PERMIT

I hereby petition the Board of Health of the Town of Amherst for a Well Construction Permit (WCP) to install a private well in the Town of Amherst.

ATTACHED IS A PLAN SHOWING THE PROPOSED LOCATION OF THE WELL (WITH ORIGINAL DATE, STAMP AND SIGNATURE OF AN ENGINEER REGISTERED SANITARIAN, OR REGISTERED LAND SURVEYOR) MEETING ALL THE REQUIREMENTS OF AMHERST RULES AND REGULATIONS FOR PRIVATE WELLS.

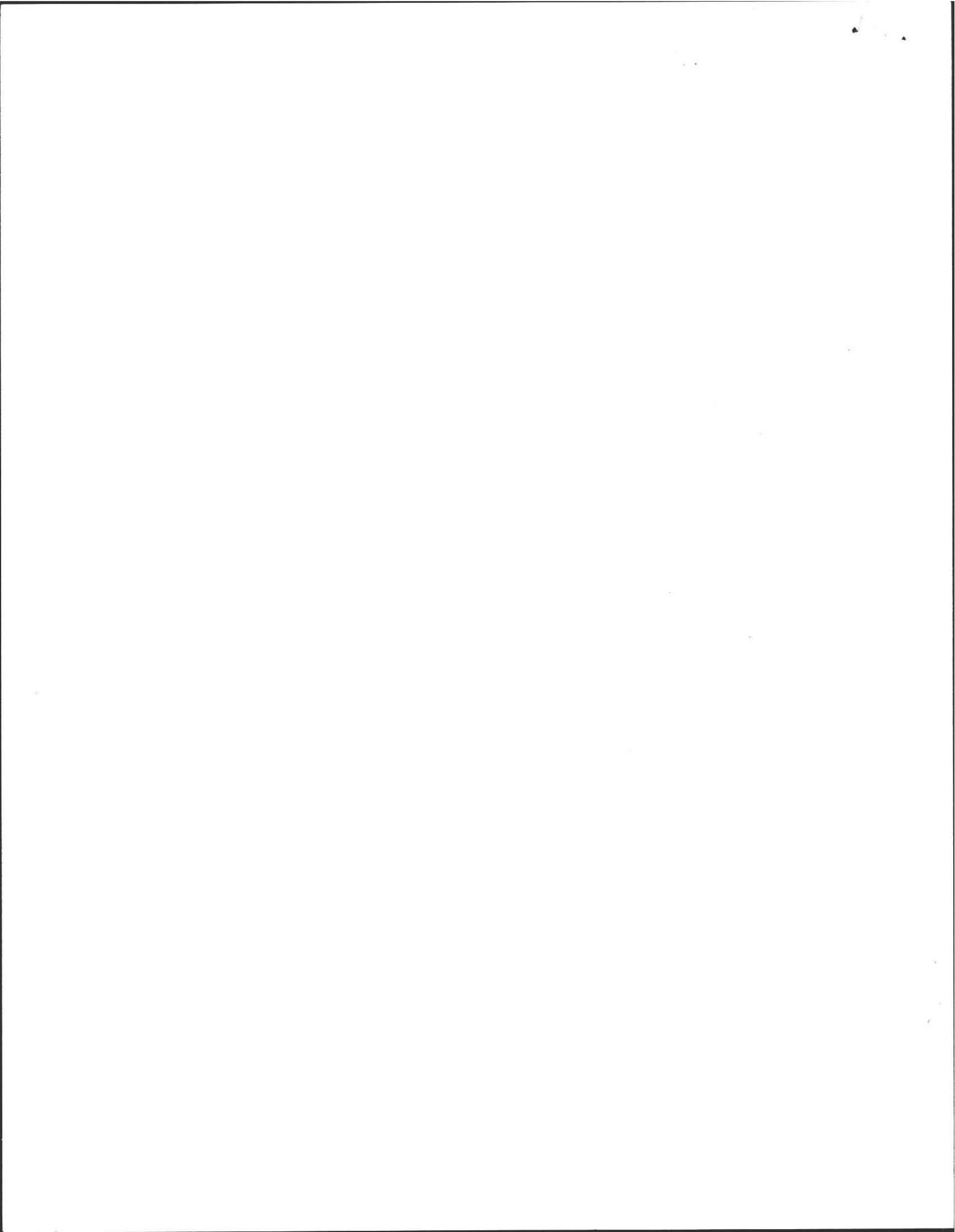
- 1. Address of Property: 21 High Point Dr
- 2. Assessor of Parcel Number: 6B / 76
- 3. Name of Owner: Alan Peterfreund Telephone Number: 156-6169  
Address of Owner: 30 Boltwood Walk.
- 4. Name of Well Driller: \_\_\_\_\_  
(Must be registered with Massachusetts Water Resources Commission)
- 5. Purpose of Well: \*Drinking  Agricultural Only ( )  \*Replacement

The undersigned acknowledges that he must, before commencing construction or use of the system which is the matter of this application, secure any and all other permits which may be required by the laws of the Town of Amherst and the Commonwealth of Massachusetts, and agree to abide by all regulations of the Town of Amherst and the Commonwealth of Massachusetts concerning private wells.

- The undersigned also understands that if a private well is to be used for drinking purposes, a **BUILDING PERMIT** affecting the structure the well is to serves **WILL NOT BE ISSUED UNTIL A Water Supply Certificate** has been granted by the Amherst Board of Health.

Name of Applicant: Alan Peterfreund Fee: \$100.00  
 Signature: Alan Peterfreund Date: 9.15.10  
 WELL PERMIT # \_\_\_\_\_

MAKE SMOKING HISTORY





No. 1005

FEE

COMMONWEALTH OF MASSACHUSETTS

Board of Health, Amherst, MA.

APPLICATION FOR DISPOSAL SYSTEM CONSTRUCTION PERMIT



Application for a Permit to Construct ( ) Repair (x) Upgrade ( ) Abandon ( ) -  Complete System  Individual Components

Location <u>21 High Point Drive</u>	Owner's Name <u>Alan Peterfreund</u>
Map/Parcel# <u>6B 178</u>	Address <u>21 High Point Dr</u>
Lot# <u>78</u>	Telephone#
Installer's Name	Designer's Name <u>Alan E. Weiss R.S.</u>
Address	Address <u>Belchertown</u>
Telephone#	Telephone# <u>413.323.5957</u>

Type of Building Residence Lot Size 47,611± sq. ft.  
 Dwelling - No. of Bedrooms 3 Bedrooms Garbage grinder (x)  
 Other - Type of Building \_\_\_\_\_ No. of persons \_\_\_\_\_ Showers ( ), Cafeteria ( )  
 Other Fixtures \_\_\_\_\_  
 Design Flow (min. required) 110 gpd Calculated design flow 330 Design flow provided 445 gpd  
 Plan: Date 4/10/10 Number of sheets \_\_\_\_\_ Revision Date \_\_\_\_\_  
 Title Septic System Repair Plan  
 Description of Soil(s) (Ab. Till) Class J  
 Soil Evaluator Form No. \_\_\_\_\_ Name of Soil Evaluator A. Weiss Date of Evaluation 4/8/10

DESCRIPTION OF REPAIRS OR ALTERATIONS Install New Septic System and well

The undersigned agrees to install the above described Individual Sewage Disposal System in accordance with the provisions of TITLE 5 and further agrees to not to place the system in operation until a Certificate of Compliance has been issued by the Board of Health.

Signed [Signature] Date 4.15.10

Inspections \_\_\_\_\_

No. 1005

FEE

COMMONWEALTH OF MASSACHUSETTS

Board of Health, Amherst, MA.

CERTIFICATE OF COMPLIANCE

Description of Work:  Individual Component(s)  Complete System

The undersigned hereby certify that the Sewage Disposal System; Constructed ( ), Repaired (x), Upgraded ( ), Abandoned ( )

by: \_\_\_\_\_ at \_\_\_\_\_

has been installed in accordance with the provisions of 310 CMR 15.00 (Title 5) and the approved design plans/as-built plans relating to application No. 1005, dated 4/15/10. Approved Design Flow 445 (gpd)

Installer [Signature] Designer: [Signature] Inspector: [Signature] Date: 7/13/10

The issuance of this permit shall not be construed as a guarantee that the system will function as designed.

No. 1005

FEE

COMMONWEALTH OF MASSACHUSETTS

Board of Health, Amherst, MA.

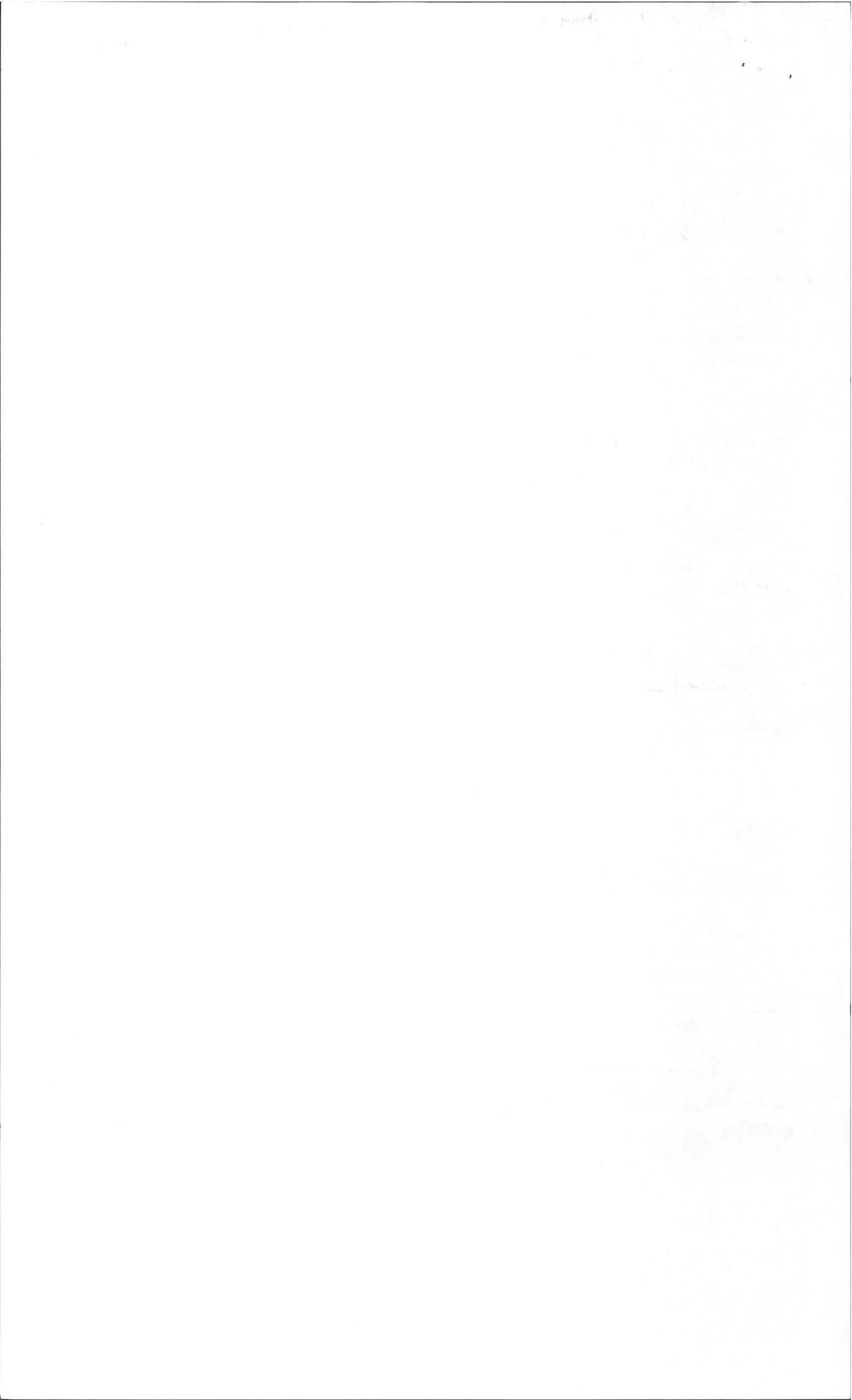
DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permission is hereby granted to; Construct ( ) Repair (x) Upgrade ( ) Abandon ( ) an individual sewage disposal system at 21 High Point Dr as described in the application for

Disposal System Construction Permit No. 1005, dated 4/15/10

Provided: Construction shall be completed within three years of the date of this permit. All local conditions must be met.

Date 4/15/10 Board of Health [Signature]



ALAN E. WEISS, M.S., L.S.P.

Licensed Site Professional  
Registered Sanitarian  
Hydrogeologist  
President

- Subsurface Investigations
- 21E Site Investigations
- Pollution Remediation
- Percolation Tests and Septic Designs

50 Old Enfield Rd.  
Elchertown, MA 01007  
13) 323-5957 & 323-4916 (FAX)

Date: 4/8/2010

Commonwealth of Massachusetts  
Amherst, Massachusetts

Soil Suitability Assessment for On-site Sewage Disposal

Performed By: A. Weiss  
Witnessed By: G. Courtmache

Date: 4/8/2010

Location Address or Lot # <u>21 High Point DR.</u>	Owner's Name, Address, and Telephone # <u>Alan Petrifreund</u> <u>21 High Point DR.</u> <u>Amherst, MA 01002</u>
New Construction <input type="checkbox"/> Repair <input checked="" 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) \_\_\_\_\_

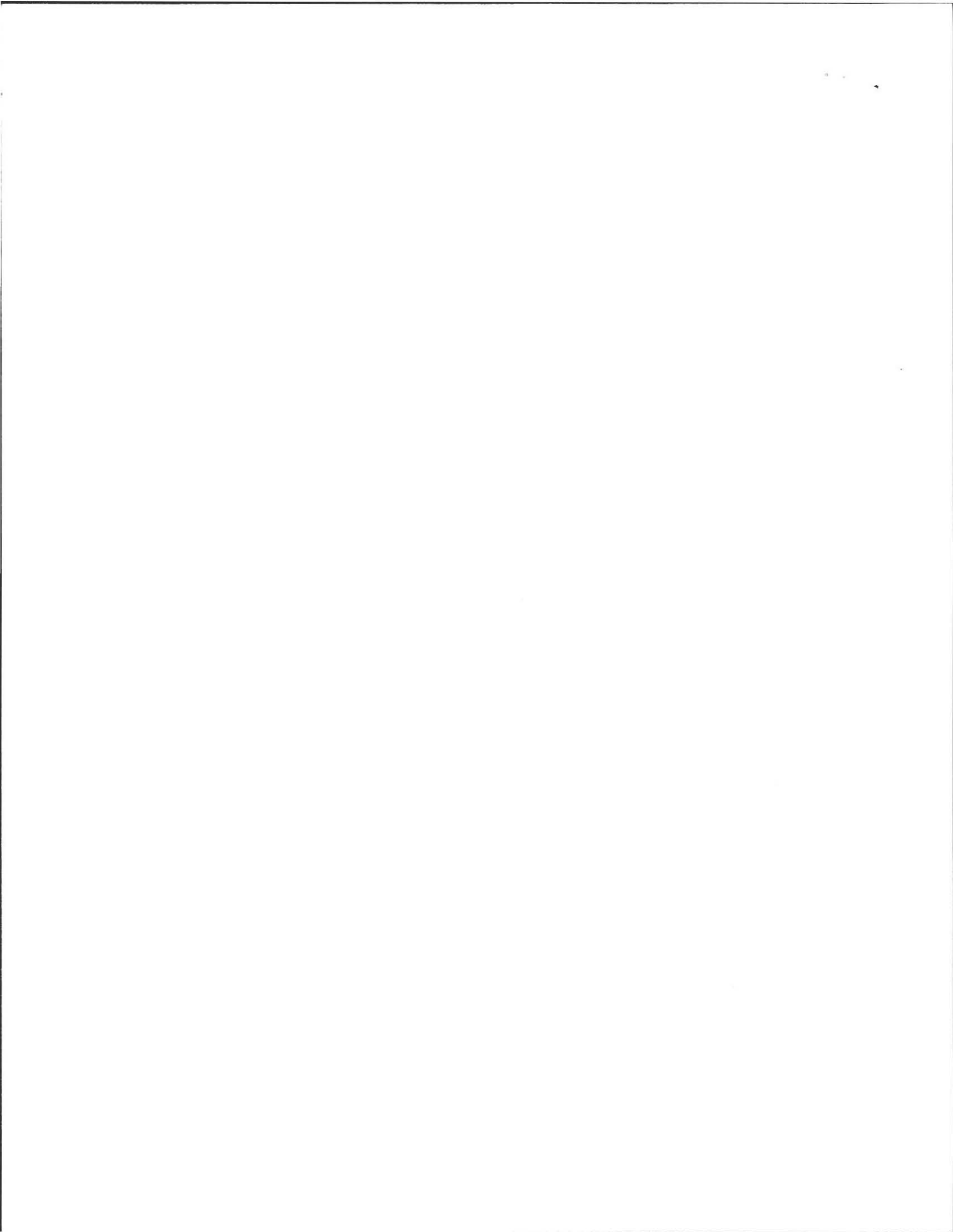
Wetlands Conservancy Program Map (map unit) \_\_\_\_\_

Current Water Resource Conditions (USGS): Month \_\_\_\_\_

Range : Above Normal  Normal  Below Normal

Other References Reviewed: \_\_\_\_\_





Location Address or Lot No. 21 HighPoint Dr

COMMONWEALTH OF MASSACHUSETTS

Amherst, Massachusetts

Percolation Test*		
Date: <u>4/8/2010</u>		Time: <u>12:00</u>
Observation Hole #	<u>P1</u>	
Depth of Perc	<u>34"</u>	<u>Repair</u>
Start Pre-soak	<u>12:25</u>	
End Pre-soak	<u>12:40</u>	
Time at 12"	<u>12:40</u>	
Time at 9"	<u>12:52</u>	
Time at 6"	<u>13:07</u>	
Time (9"-6")	<u>15 min</u>	
Rate Min./Inch	<u>5 <math>\frac{min}{in}</math></u>	

\* Minimum of 1 percolation test must be performed in both the primary area AND reserve area.

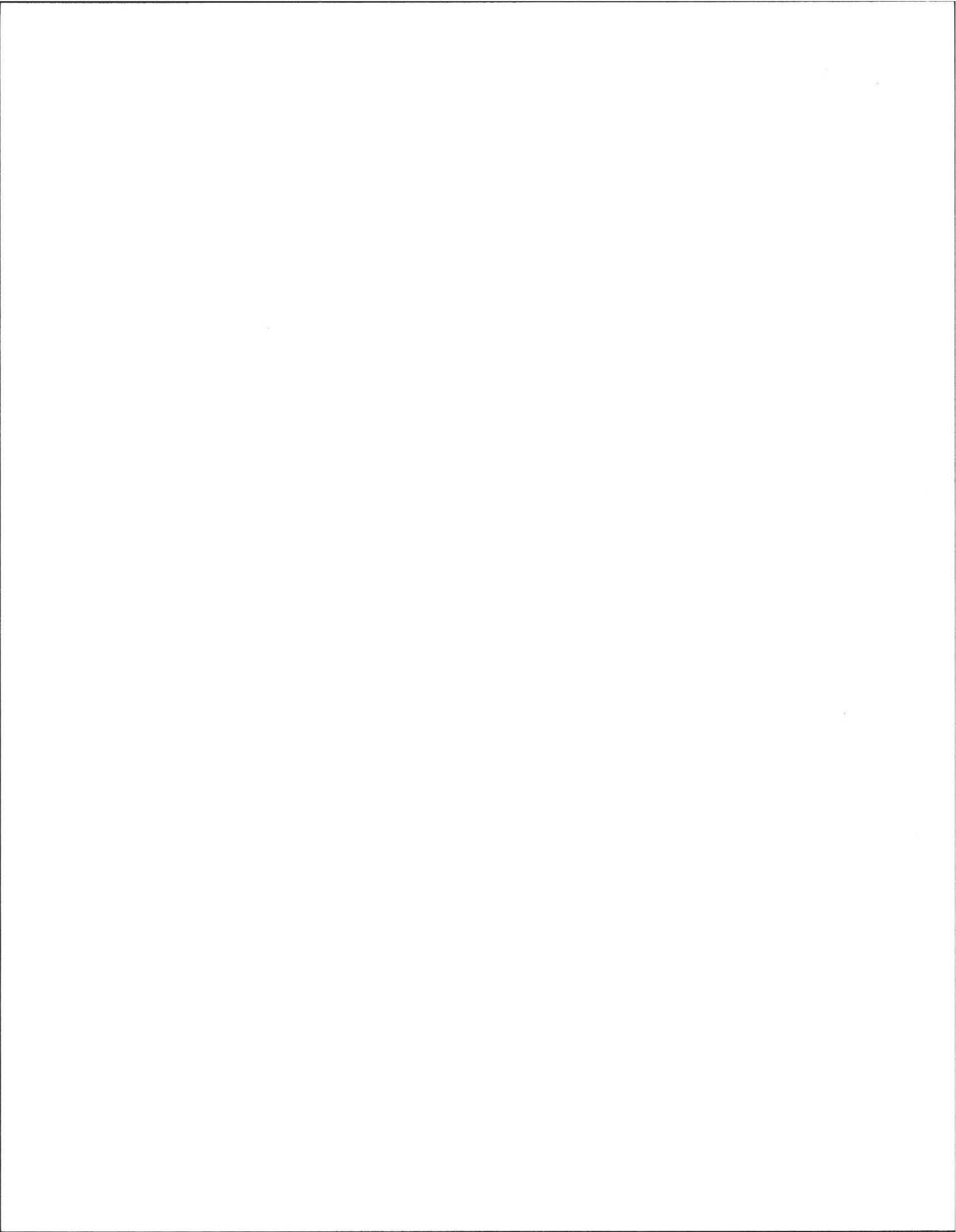
Site Passed  Site Failed

Performed By: A. Weiss

Witnessed By: C. Courtenache

Comments: \_\_\_\_\_





Location Address or Lot No. 21 HighPoint DR.

On-site Review

Deep Hole Number 172 Date: \_\_\_\_\_ Time: 12:00 Weather SUN 80° F

Location (identify on site plan) \_\_\_\_\_

Land Use \_\_\_\_\_ Slope (%) 2 Surface Stones yes

Vegetation \_\_\_\_\_

Landform Terraced

Position on landscape (sketch on the back) \_\_\_\_\_

Distances from:

Open Water Body 100' feet Drainage way \_\_\_\_\_ feet

Possible Wet Area 100' feet Property Line \_\_\_\_\_ feet

Beckilled \* Drinking Water Well 100' feet

Existing Well 50' +/- 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)
0-10"	A	10 <sub>cl</sub> 2 <sub>s</sub> 3 <sub>l</sub>	F5C		- Friable
10"-21"	B <sub>ws</sub>	10 <sub>cl</sub> 2 <sub>s</sub> 4 <sub>l</sub> 6	LS		- Friable Loose
21'-94"	C <sub>1</sub>	2-5 <sub>cl</sub> 4 <sub>s</sub> 1/3	LS	28" 2-5 <sub>cl</sub> 4 <sub>s</sub> 1/3	- F.M. Sandy Ablation fill 10% Stone, mod loose to granular
0-10"	A	10 <sub>cl</sub> 2 <sub>s</sub> 3 <sub>l</sub>	F5C		- Friable
10-24"	B <sub>ws</sub>	10 <sub>cl</sub> 2 <sub>s</sub> 4 <sub>l</sub> 6	LS		- Friable Loose
24-84"	C <sub>1</sub>	2-5 <sub>cl</sub> 4 <sub>s</sub> 1/3	LS	30"	- F.M. Sandy, Ablation fill, 10% mod. loose.

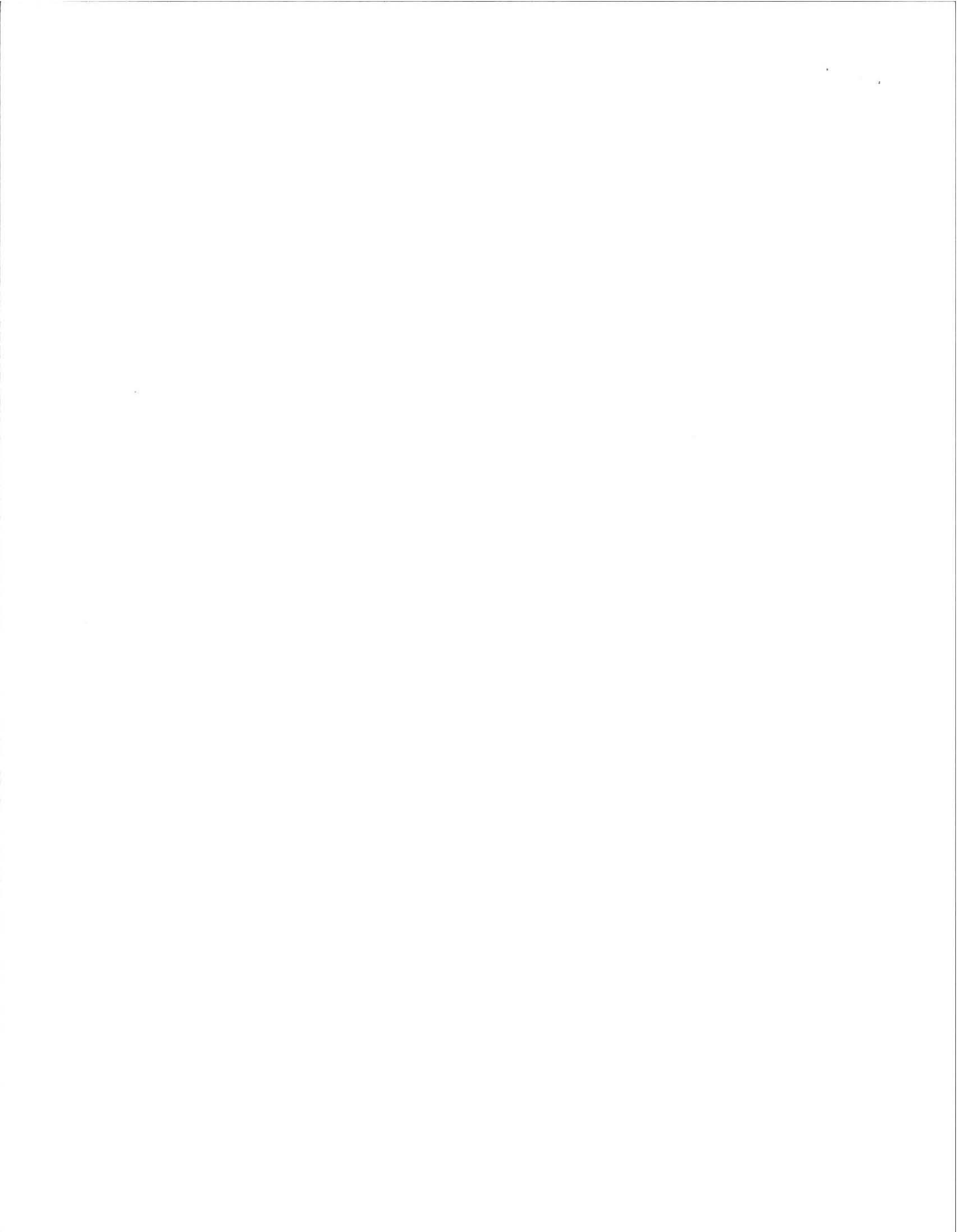
\* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) Ab Depth to Bedrock: \_\_\_\_\_

Depth to Groundwater: Standing Water in the Hole: NOT (2) 94" Weeping from Pit Face: \_\_\_\_\_

Estimated Seasonal High Ground Water: \_\_\_\_\_







Location Address or Lot No. 21 HighPoint Dr.

### Determination for Seasonal High Water Table

Method Used:

- Depth observed standing in observation hole ..... inches
- Depth weeping from side of observation hole ..... inches
- Depth to soil mottles 28-30 inches
- Ground water adjustment ..... feet

Index Well Number ..... Reading Date ..... Index well level

Adjustment factor ..... Adjusted ground water level .....

Depth of Naturally Occurring Pervious Material

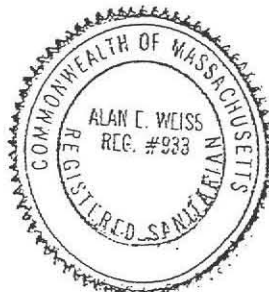
Does at least four feet of naturally occurring pervious material exist in all areas observed throughout the area proposed for the soil absorption system? yes

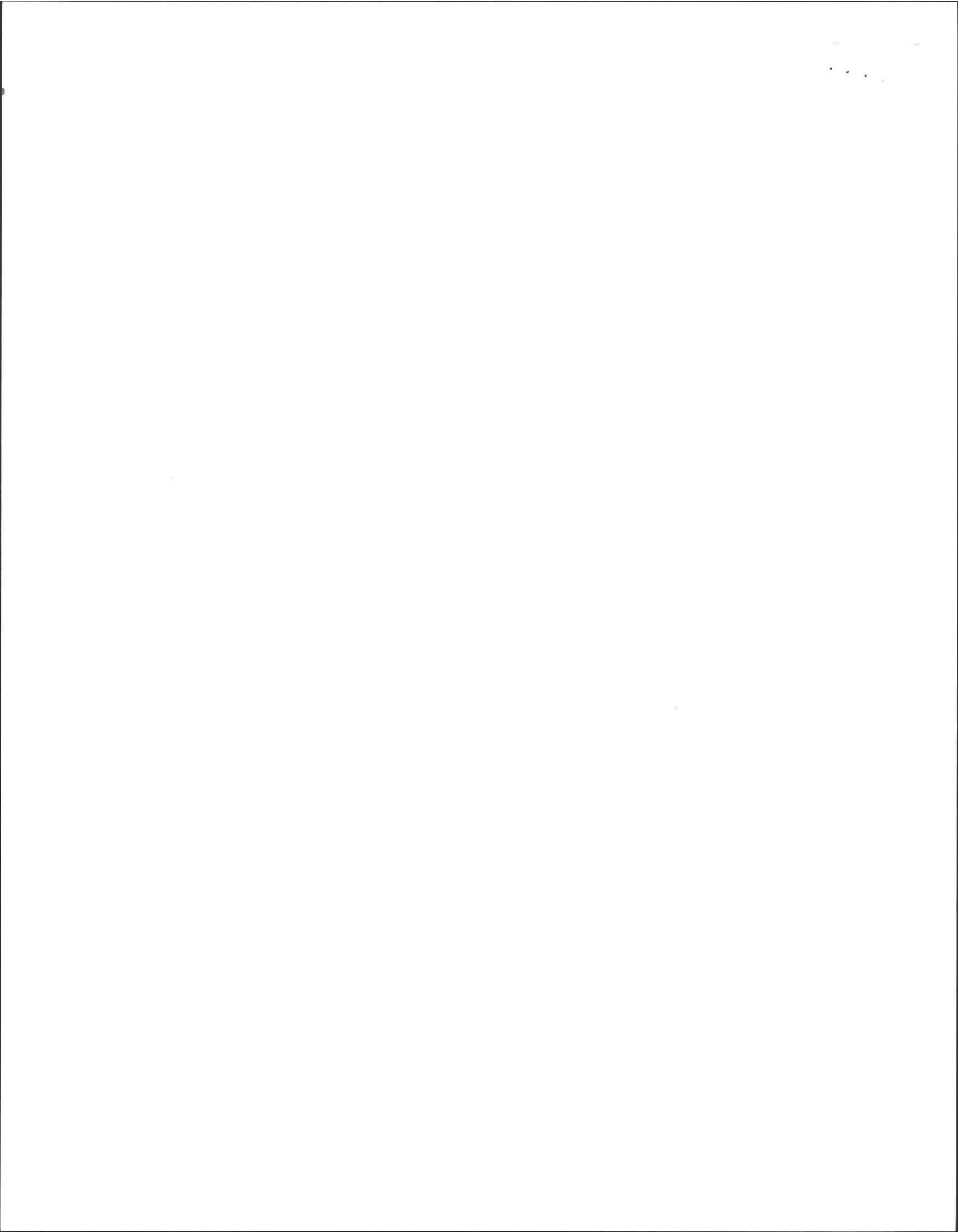
If not, what is the depth of naturally occurring pervious material? \_\_\_\_\_

Certification

I certify that on 6/95 (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 [Signature] Date 4/8/2010





No. 1005

COMMONWEALTH OF MASSACHUSETTS

Board of Health, Amherst, MA.

APPLICATION FOR DISPOSAL SYSTEM CONSTRUCTION PERMIT



Application for a Permit to Construct ( ) Repair (x) Upgrade ( ) Abandon ( ) -  Complete System  Individual Components

Location <u>21 High Point Drive</u>	Owner's Name <u>Alan Peter Freund</u>
Map/Parcel# <u>6B 178</u>	Address <u>21 High Point Dr</u>
Lot# <u>78</u>	Telephone# <u>519-7567</u>
* Installer's Name	Designer's Name <u>Alan E. Weiss P.S.</u>
Address	Address <u>Belchertown</u>
Telephone#	Telephone# <u>413.323.5957</u>

Type of Building Residence Lot Size 47,611± sq. ft.  
 Dwelling - No. of Bedrooms 3 Bedrooms Garbage grinder (x)  
 Other - Type of Building \_\_\_\_\_ No. of persons \_\_\_\_\_ Showers ( ), Cafeteria ( )  
 Other Fixtures \_\_\_\_\_  
 Design Flow (min. required) 110 gpd Calculated design flow 330 Design flow provided 445 gpd  
 Plan: Date 4/10/10 Number of sheets \_\_\_\_\_ Revision Date \_\_\_\_\_  
 Title Septic System Repair Plan  
 Description of Soil(s) (Ab. Till) Class I  
 Soil Evaluator Form No. \_\_\_\_\_ Name of Soil Evaluator A. Weiss Date of Evaluation 4/8/10

DESCRIPTION OF REPAIRS OR ALTERATIONS Install New Septic System and well.

The undersigned agrees to install the above described Individual Sewage Disposal System in accordance with the provisions of TITLE 5 and further agrees to not to place the system in operation until a Certificate of Compliance has been issued by the Board of Health.

\* Signed Ada R. P... Date 4.15.10



Inspections \_\_\_\_\_

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

COMMONWEALTH OF MASSACHUSETTS

FEE \_\_\_\_\_

Board of Health, \_\_\_\_\_, MA.

CERTIFICATE OF COMPLIANCE

Description of Work:  Individual Component(s)  Complete System

The undersigned hereby certify that the Sewage Disposal System; Constructed ( ), Repaired ( ), Upgraded ( ), Abandoned ( )

by: \_\_\_\_\_

at \_\_\_\_\_

has been installed in accordance with the provisions of 310 CMR 15.00 (Title 5) and the approved design plans/as-built plans relating to application No. \_\_\_\_\_, dated \_\_\_\_\_, Approved Design Flow \_\_\_\_\_ (gpd)

Installer \_\_\_\_\_

Designer: \_\_\_\_\_ Inspector: \_\_\_\_\_ Date: \_\_\_\_\_

The issuance of this permit shall not be construed as a guarantee that the system will function as designed.

No. 1005

FEE 150.00

COMMONWEALTH OF MASSACHUSETTS

Board of Health, Amherst, MA.

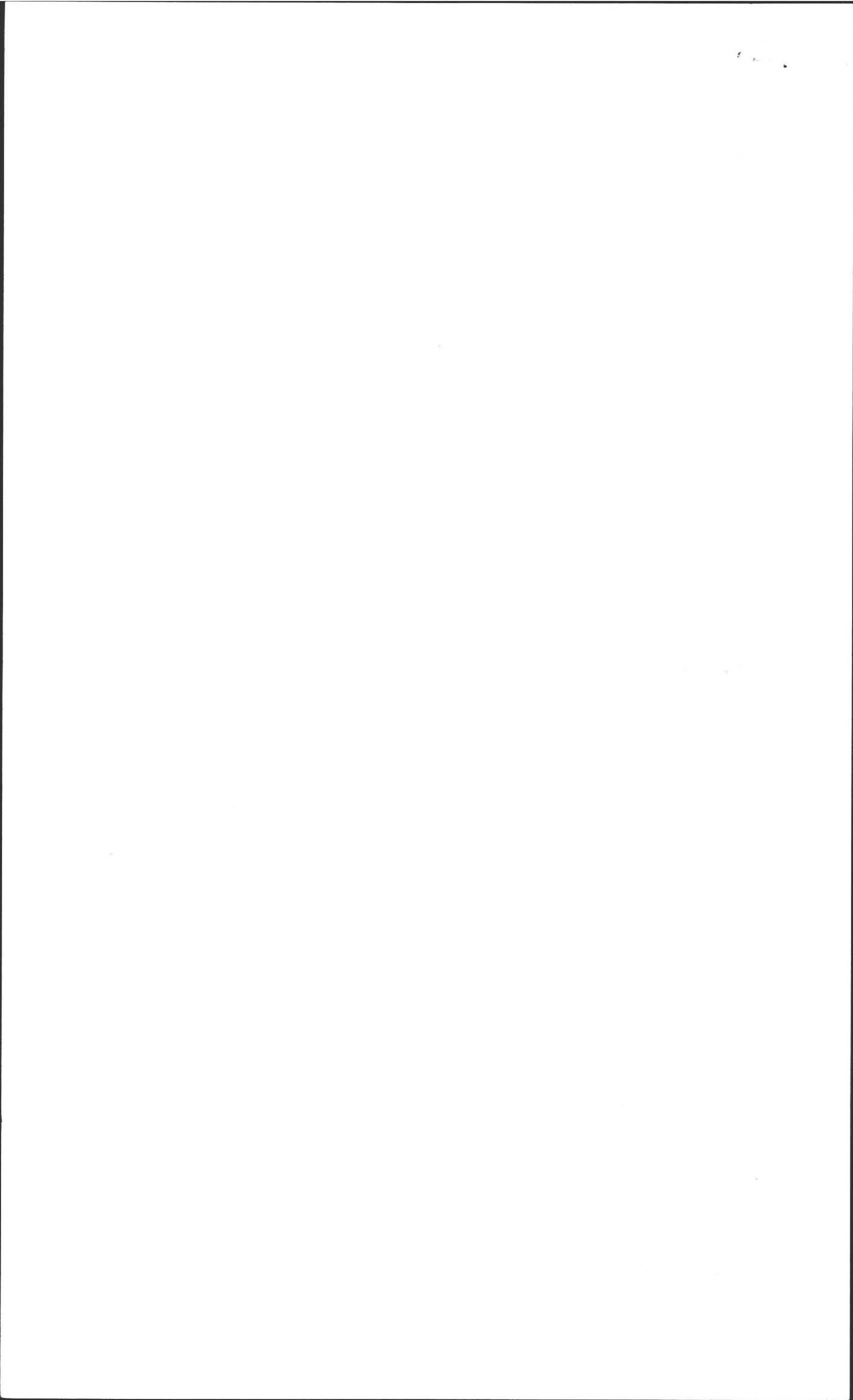
DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permission is hereby granted to; Construct ( ) Repair (x) Upgrade ( ) Abandon ( ) an individual sewage disposal system at 21 High Point as described in the application for

Disposal System Construction Permit No. 1005, dated 4/15/10

Provided: Construction shall be completed within three years of the date of this permit. All local conditions must be met.

Date 4/15/10 Board of Health [Signature]  
signing for the Board of Health



ALAN E. WEISS, M.S., L.S.P.

Licensed Site Professional  
Registered Sanitarian  
Hydrogeologist  
President

- Subsurface Investigations
- 21E Site Investigations
- Pollution Remediation
- Percolation Tests and Septic Designs

Date: 4/8/2010

50 Old Enfield Rd.  
Belchertown, MA 01007  
13) 323-5957 & 323-4916 (FAX)

Commonwealth of Massachusetts  
Amherst, Massachusetts

Soil Suitability Assessment for On-site Sewage Disposal

Performed By: A. Weiss  
Witnessed By: G. Courtemanche

Date: 4/8/2010

Location Address or Lot #  21 High Point DR. New Construction <input type="checkbox"/> Repair <input checked="" type="checkbox"/>	Owner's Name, Address, and Telephone # Alan Petriffreund 21 High Point DR. Amherst, MA 01002
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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) \_\_\_\_\_

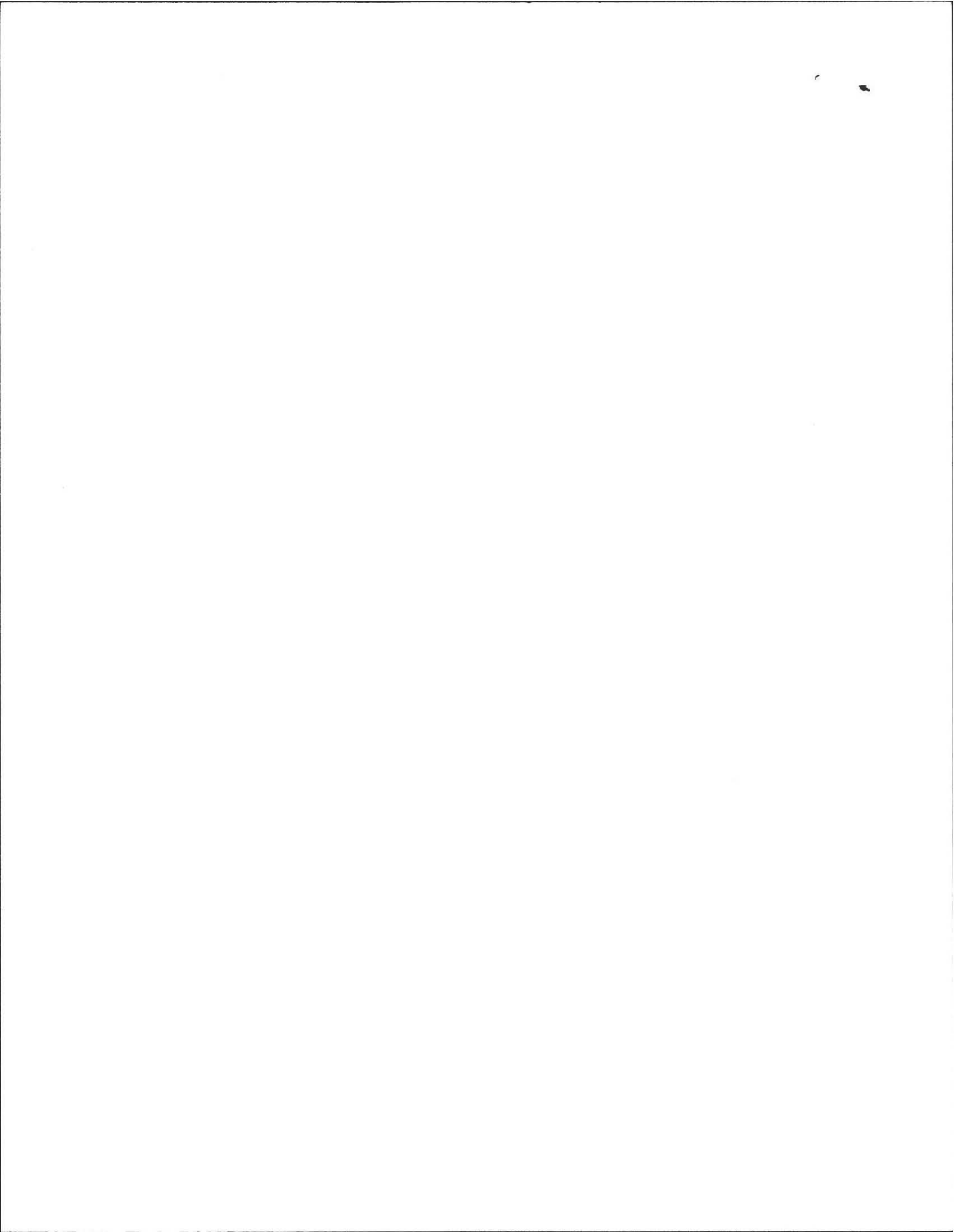
Wetlands Conservancy Program Map (map unit) \_\_\_\_\_

Current Water Resource Conditions (USGS): Month \_\_\_\_\_

Range : Above Normal  Normal  Below Normal

Other References Reviewed: \_\_\_\_\_





Location Address or Lot No. 21 HighPoint Dr

COMMONWEALTH OF MASSACHUSETTS

Amherst, Massachusetts

Percolation Test*		
Date: <u>4/8/2010</u>		Time: <u>12:00</u>
Observation Hole #	<u>P1</u>	Repair           ↓
Depth of Perc	<u>34"</u>	
Start Pre-soak	<u>12:25</u>	
End Pre-soak	<u>12:40</u>	
Time at 12"	<u>12:40</u>	
Time at 9"	<u>12:52</u>	
Time at 6"	<u>13:07</u>	
Time (9"-6")	<u>15 min</u>	
Rate Min./Inch	<u>5 <sup>min</sup>/<sub>100</sub></u>	

\* Minimum of 1 percolation test must be performed in both the primary area AND reserve area.

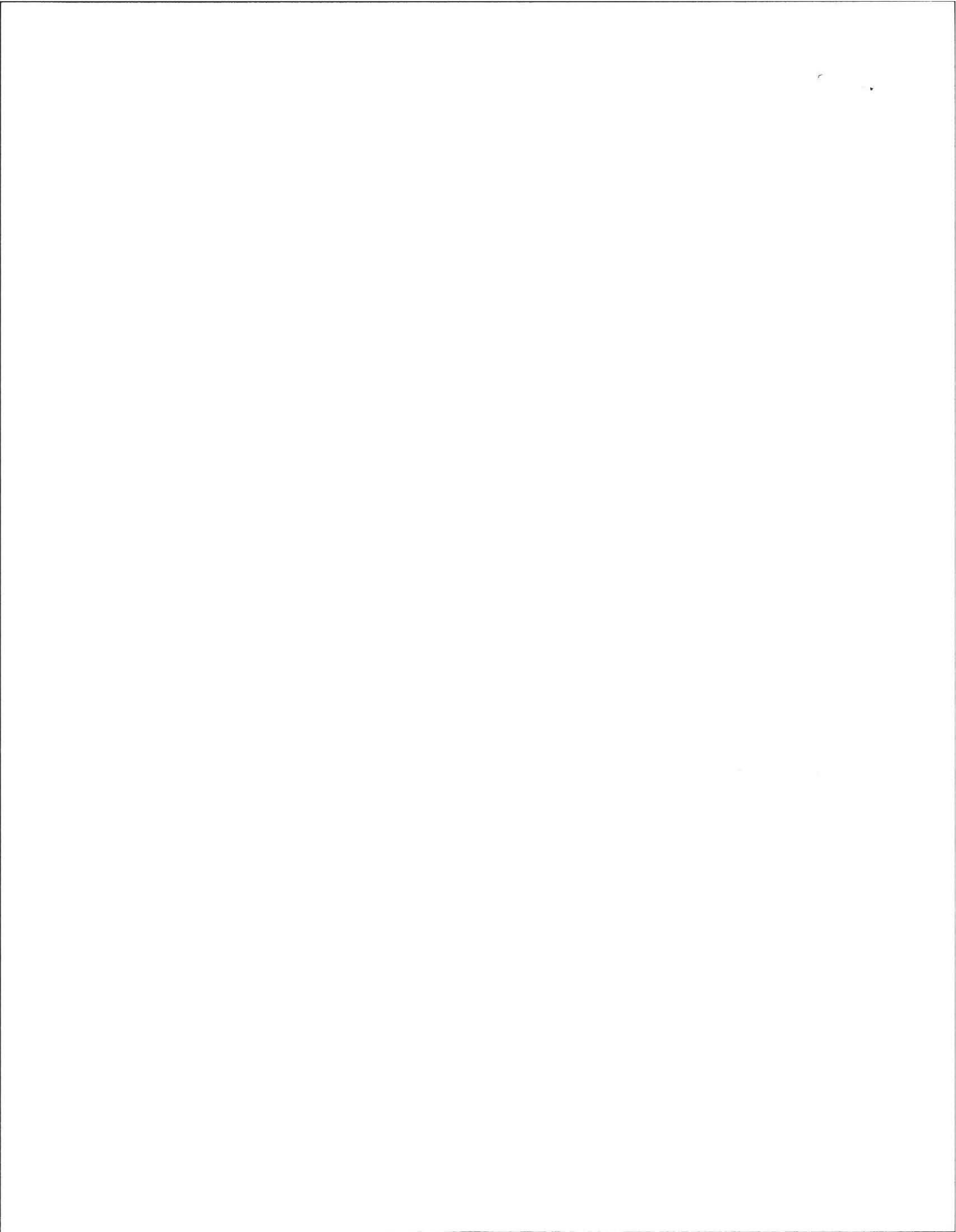
Site Passed  Site Failed

Performed By: A. Weiss

Witnessed By: C. Courtenache

Comments: \_\_\_\_\_







Location Address or Lot No. 21 HighPoint DR.

On-site Review

Deep Hole Number 1+2 Date: \_\_\_\_\_ Time: 12:00 Weather SUN 80° F

Location (identify on site plan) \_\_\_\_\_

Land Use \_\_\_\_\_ Slope (%) 2 Surface Stones yes

Vegetation \_\_\_\_\_

Landform Terraced.

Position on landscape (sketch on the back) \_\_\_\_\_

Distances from:

Open Water Body 100' feet

Drainage way \_\_\_\_\_ feet

Possible Wet Area 100' feet

Property Line \_\_\_\_\_ feet

Bechtel Drinking Water Well 100' feet  
Existing Well 50' +/-

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)
0-10"	A	10yR3/5	F5C		- Friable - friable loose
10"-21"	B <sub>w</sub>	10yR4/6	LS	28" 2.5y4/11	- F.M. Sandy Ablation fill
21'-94"	C <sub>1</sub>	2.5y4/3	LS		10% stone, mod loose to granular.
0-10"	A	10yR3/5	F5L		- Friable - Friable loose
10-24"	B <sub>w</sub>	10yR4/6	LS	30"	- F.M. Sandy, Ablation fill, 10% mod. loose.
24-84"	C <sub>1</sub>	2.5y4/3	LS		

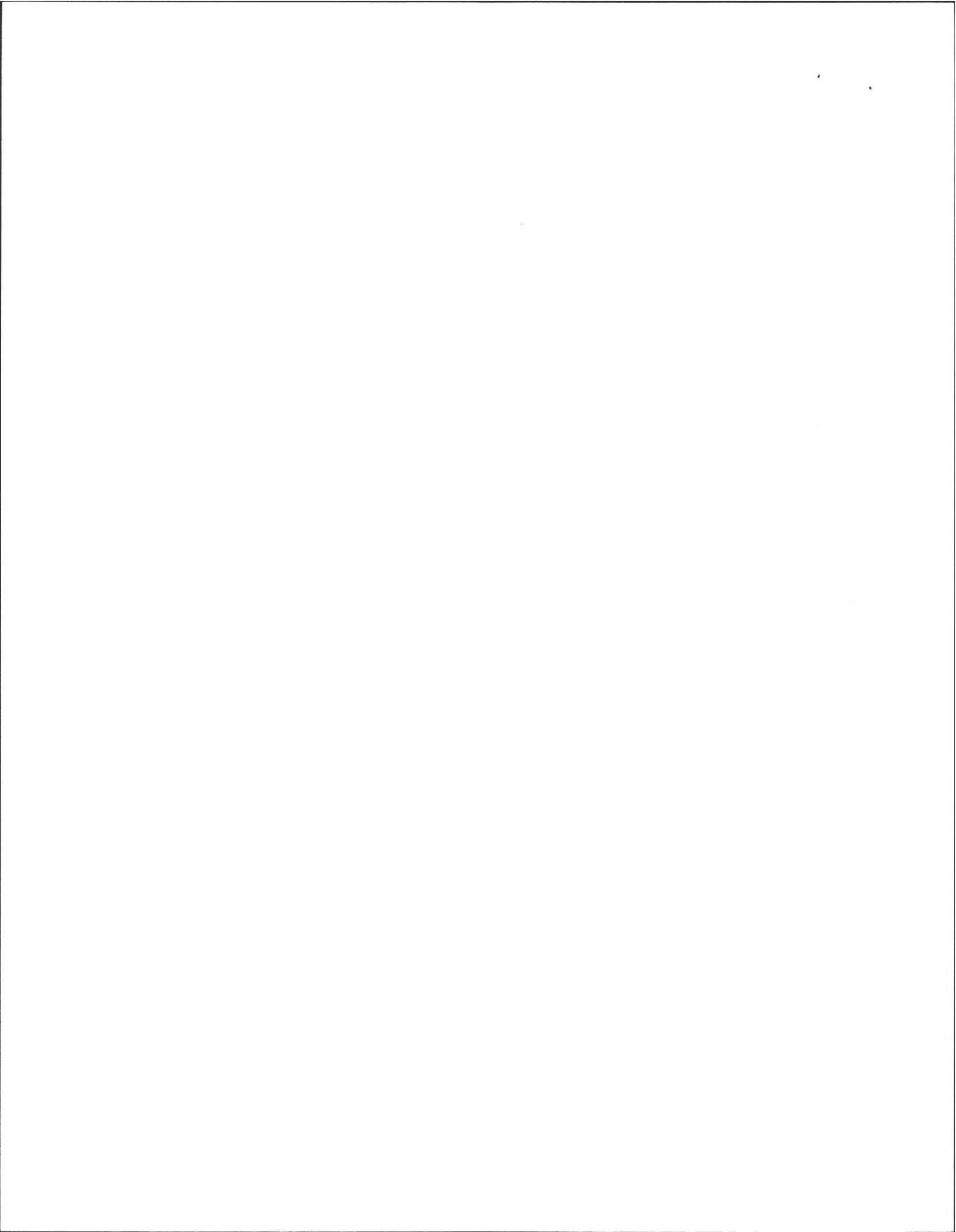
\* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) Ab Depth to Bedrock: \_\_\_\_\_

Depth to Groundwater: Standing Water in the Hole: NOT (2) 94" Weeping from Pit Face: \_\_\_\_\_

Estimated Seasonal High Ground Water: \_\_\_\_\_





Location Address or Lot No. 21 Highpoint Dr.

### Determination for Seasonal High Water Table

Method Used:

- Depth observed standing in observation hole ..... inches
- Depth weeping from side of observation hole ..... inches
- Depth to soil mottles . 28-30 inches
- Ground water adjustment ..... feet

Index Well Number ..... Reading Date ..... Index well level

Adjustment factor ..... Adjusted ground water level .....

Depth of Naturally Occurring Pervious Material

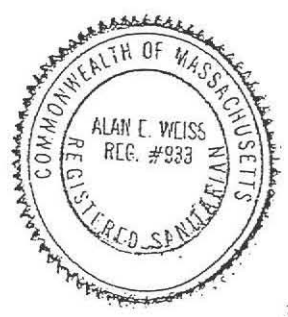
Does at least four feet of naturally occurring pervious material exist in all areas observed throughout the area proposed for the soil absorption system? yes

If not, what is the depth of naturally occurring pervious material? \_\_\_\_\_

Certification

I certify that on 6/95 (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 [Signature] Date 4/8/2010





No. 1005

COMMONWEALTH OF MASSACHUSETTS

Board of Health, Amherst, MA.

APPLICATION FOR DISPOSAL SYSTEM CONSTRUCTION PERMIT



Application for a Permit to Construct ( ) Repair (x) Upgrade ( ) Abandon ( ) -  Complete System  Individual Components

Location <u>21 High Point Drive</u>	Owner's Name <u>Alan Peter Freund</u>
Map/Parcel# <u>6B 178</u>	Address <u>21 High Point Dr</u>
Lot# <u>78</u>	Telephone#
* Installer's Name	Designer's Name <u>Alan E. Weiss R.S.</u>
Address	Address <u>Belchertown</u>
Telephone#	Telephone# <u>413.323.5957</u>

Type of Building Residence Lot Size 47,611± sq. ft.  
 Dwelling - No. of Bedrooms 3 Bedrooms Garbage grinder (x)  
 Other - Type of Building \_\_\_\_\_ No. of persons \_\_\_\_\_ Showers ( ), Cafeteria ( )  
 Other Fixtures \_\_\_\_\_  
 Design Flow (min. required) 110 gpd Calculated design flow 330 Design flow provided 445 gpd  
 Plan: Date 4/10/10 Number of sheets \_\_\_\_\_ Revision Date \_\_\_\_\_  
 Title Septic System Repair Plan  
 Description of Soil(s) (Ab. Till) Class I  
 Soil Evaluator Form No. \_\_\_\_\_ Name of Soil Evaluator A. Weiss Date of Evaluation 4/8/10

DESCRIPTION OF REPAIRS OR ALTERATIONS Install New Septic System and well.

The undersigned agrees to install the above described Individual Sewage Disposal System in accordance with the provisions of TITLE 5 and further agrees to not to place the system in operation until a Certificate of Compliance has been issued by the Board of Health.

\* Signed [Signature] Date 4.15.10



Inspections \_\_\_\_\_

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

COMMONWEALTH OF MASSACHUSETTS

Board of Health, \_\_\_\_\_, MA.

FEE \_\_\_\_\_

CERTIFICATE OF COMPLIANCE

Description of Work:  Individual Component(s)  Complete System

The undersigned hereby certify that the Sewage Disposal System; Constructed ( ), Repaired ( ), Upgraded ( ), Abandoned ( )  
 by: \_\_\_\_\_  
 at \_\_\_\_\_  
 has been installed in accordance with the provisions of 310 CMR 15.00 (Title 5) and the approved design plans/as-built plans relating to  
 application No. \_\_\_\_\_, dated \_\_\_\_\_. Approved Design Flow \_\_\_\_\_ (gpd)  
 Installer \_\_\_\_\_  
 Designer: \_\_\_\_\_ Inspector: \_\_\_\_\_ Date: \_\_\_\_\_

The issuance of this permit shall not be construed as a guarantee that the system will function as designed.

No. 1005

FEE 150

COMMONWEALTH OF MASSACHUSETTS

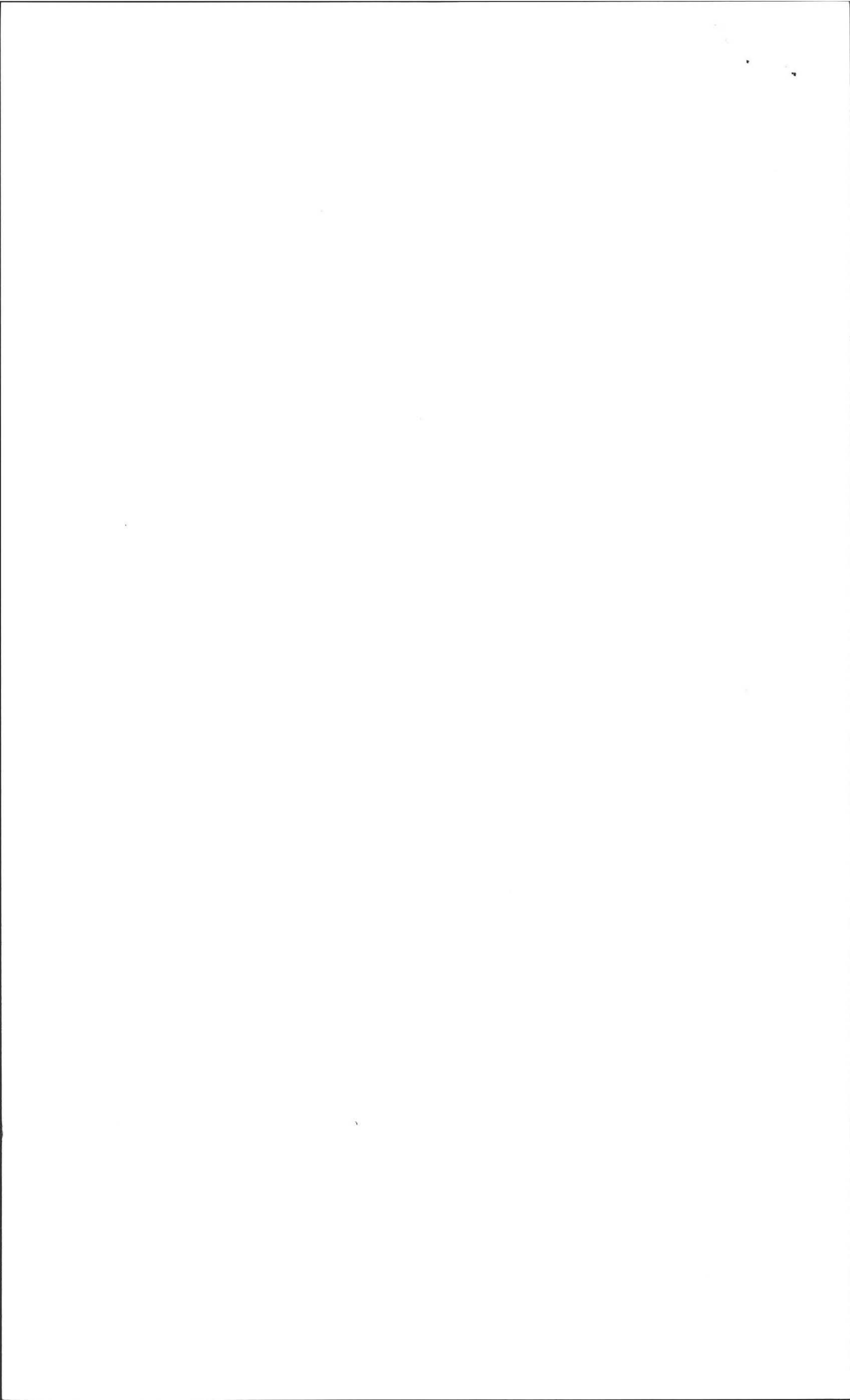
Board of Health, Amherst, MA.

DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permission is hereby granted to; Construct ( ) Repair (x) Upgrade ( ) Abandon ( ) an individual sewage disposal system  
 at 21 High Point as described in the application for  
 Disposal System Construction Permit No. 1005, dated 4/15/10

Provided: Construction shall be completed within three years of the date of this permit. All local conditions must be met.

Date 4/15/10 Board of Health [Signature]  
Board of Health.



ALAN E. WEISS, M.S., L.S.P.

Licensed Site Professional  
Registered Sanitarian  
Hydrogeologist  
President

- Subsurface Investigations
- 21E Site Investigations
- Pollution Remediation
- Percolation Tests and Septic Designs

50 Old Enfield Rd.  
Belchertown, MA 01007  
13) 323-5957 & 323-4916 (FAX)

Date: 4/8/2010

Commonwealth of Massachusetts  
Amherst, Massachusetts

Soil Suitability Assessment for On-site Sewage Disposal

Performed By: A. Weiss  
Witnessed By: G. Courtmeche

Date: 4/8/2010

Location Address or Lot #  21 High Point DR. New Construction <input type="checkbox"/> Repair <input checked="" type="checkbox"/>	Owner's Name, Address, and Telephone # Alan Petriffreund 21 High Point DR. Amherst, MA 01002
--	---

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 References Reviewed: \_\_\_\_\_







Location Address or Lot No. 21 HighPoint Dr

COMMONWEALTH OF MASSACHUSETTS  
Amherst, Massachusetts

Percolation Test*		
Date: <u>4/8/2010</u>		Time: <u>12:00</u>
Observation Hole #	<u>P1</u>	
Depth of Perc	<u>34"</u>	
Start Pre-soak	<u>12:25</u>	<u>Repair</u>
End Pre-soak	<u>12:40</u>	
Time at 12"	<u>12:40</u>	
Time at 9"	<u>12:52</u>	
Time at 6"	<u>13:07</u>	
Time (9"-6")	<u>15 min</u>	
Rate Min./Inch	<u>5 <math>\frac{min}{Inch}</math></u>	

\* Minimum of 1 percolation test must be performed in both the primary area AND reserve area.

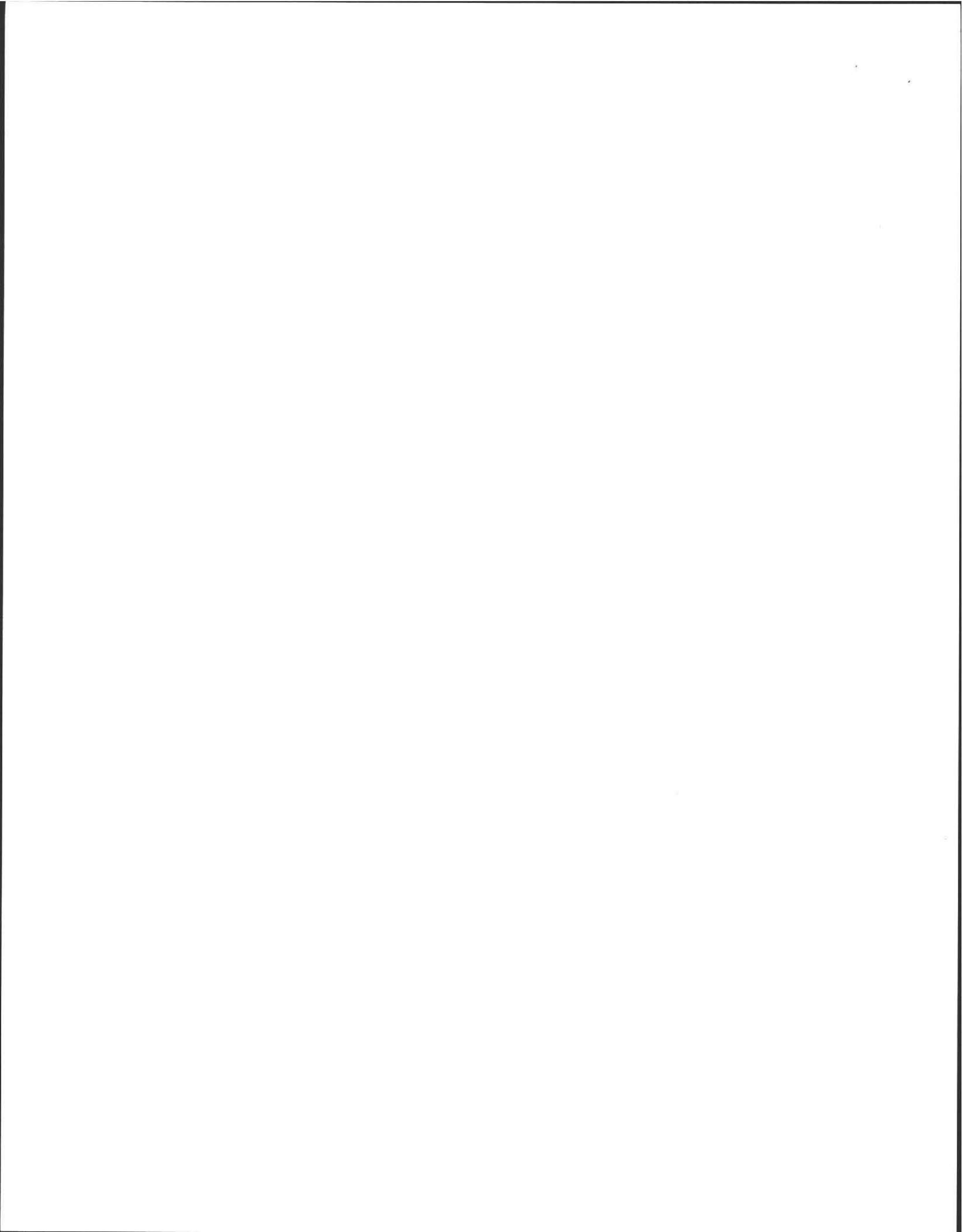
Site Passed  Site Failed

Performed By: A. Weiss

Witnessed By: C. Courtenay

Comments: \_\_\_\_\_





Location Address or Lot No. 21 HighPoint DR.

On-site Review

Deep Hole Number 172 Date: \_\_\_\_\_ Time: 12:00 Weather SUN 80°F

Location (identify on site plan) \_\_\_\_\_

Land Use \_\_\_\_\_ Slope (%) 2 Surface Stones yes

Vegetation \_\_\_\_\_

Landform Terraced

Position on landscape (sketch on the back) \_\_\_\_\_

Distances from:

Open Water Body 100' feet Drainage way \_\_\_\_\_ feet

Possible Wet Area 100' feet Property Line \_\_\_\_\_ feet

~~Bechtel~~ Drinking Water Well 100' feet Other \_\_\_\_\_ feet

Existing Well 50' +/-

DEEP OBSERVATION HOLE LOG\*

Depth from Surface (Inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Consistency, % Gravel)
0-10"	A	10yR3/3	F5C		- Friable
10"-21"	B <sub>w</sub>	10yR4/6	LS		- Friable Loose
21"-94"	C <sub>1</sub>	2.5y4/3	LS	28" 2.5y4/11	- F.M. Sandy, Ablation fill 10% stone, mod loose to granular
0-10"	A	10yR3/3	F5C		- Friable
10-24"	B <sub>w</sub>	10yR4/6	LS		- Friable Loose
24-84"	C <sub>1</sub>	2.5y4/3	LS	30"	- F.M. Sandy, Ablation fill, 10% mod. loose.

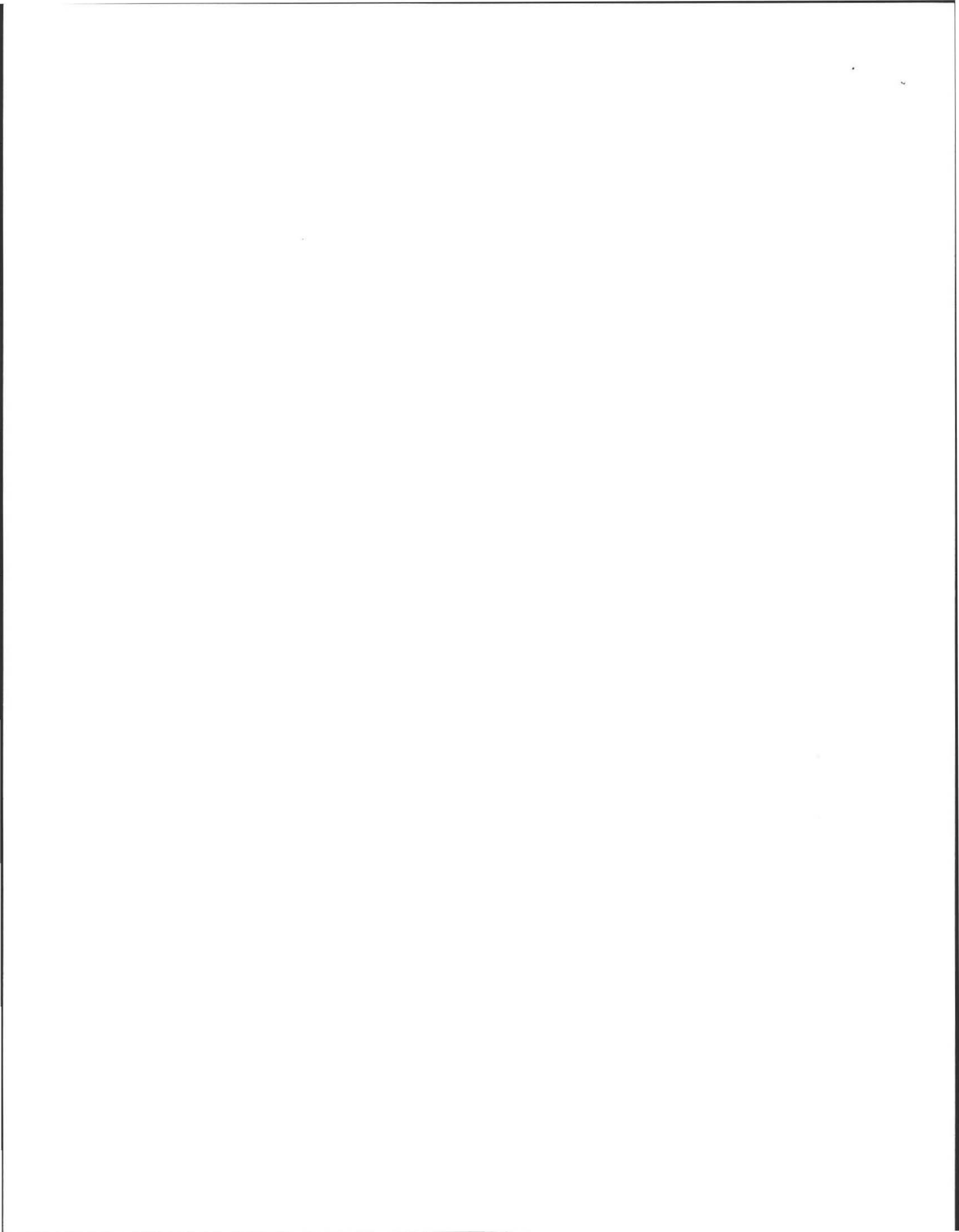
\* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) Ab Depth to Bedrock: \_\_\_\_\_

Depth to Groundwater: Standing Water in the Hole: NOT (2) 94" Weeping from Pit Face: \_\_\_\_\_

Estimated Seasonal High Ground Water: \_\_\_\_\_





Location Address or Lot No. 21 HighPoint Dr.

Determination for Seasonal High Water Table

Method Used:

- Depth observed standing in observation hole ..... inches
- Depth weeping from side of observation hole ..... inches
- Depth to soil mottles 28-30 inches
- Ground water adjustment ..... feet

Index Well Number ..... Reading Date ..... Index well level

Adjustment factor ..... Adjusted ground water level .....

Depth of Naturally Occurring Pervious Material

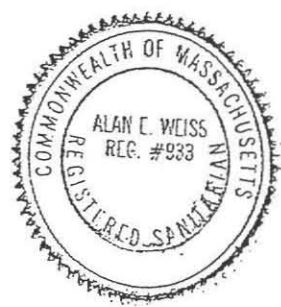
Does at least four feet of naturally occurring pervious material exist in all areas observed throughout the area proposed for the soil absorption system? yes

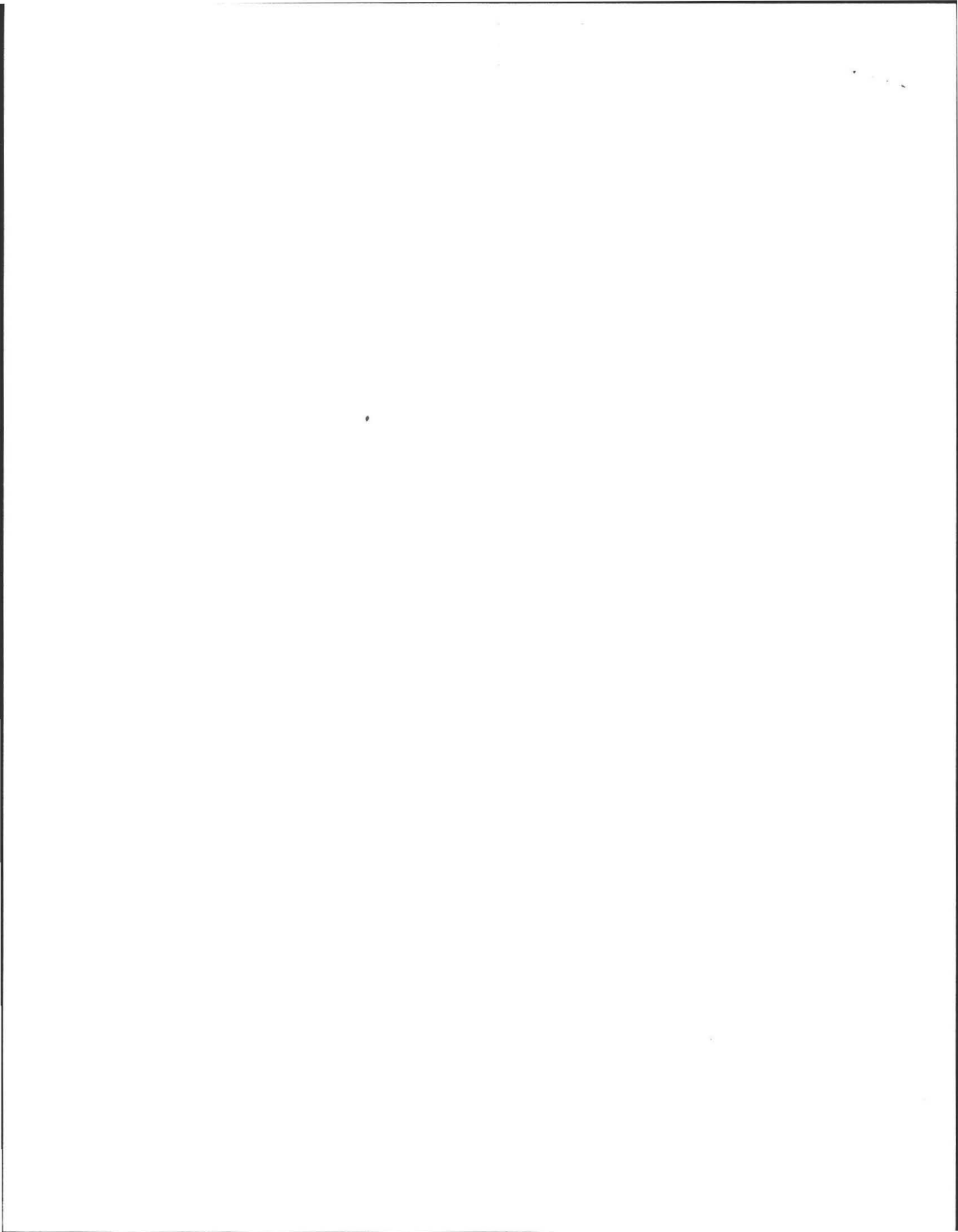
If not, what is the depth of naturally occurring pervious material? \_\_\_\_\_

Certification

I certify that on 6/95 (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 [Signature] Date 4/8/2010





Location Address or Lot No. 51 HIGH POINT

On-site Review

Deep Hole Number P-1+2 Date: \_\_\_\_\_ Time: 12:00 Weather SUN 80°F

Location (identify on site plan) \_\_\_\_\_

Land Use \_\_\_\_\_ Slope (%) 2 Surface Stones YES

Vegetation \_\_\_\_\_

Landform Terraced

Position on landscape (sketch on the back) \_\_\_\_\_

Distances from:

Open Water Body 100 feet Drainage way \_\_\_\_\_ feet

Possible Wet Area 100 feet Property Line \_\_\_\_\_ feet

existing Drinking Water Well 50± feet  
TO BE DRILLED

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)
0-10" 10-21" 21-94"	A B C	10YR3/3 10 1/2 4/6 2 1/2 4/3	↓	28"	FSL LS LS
0-10 10-24 24-84	A B C	10YR3/3 10YR4/6 2 1/2 4/3	FSL LS LS	30"	

\* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

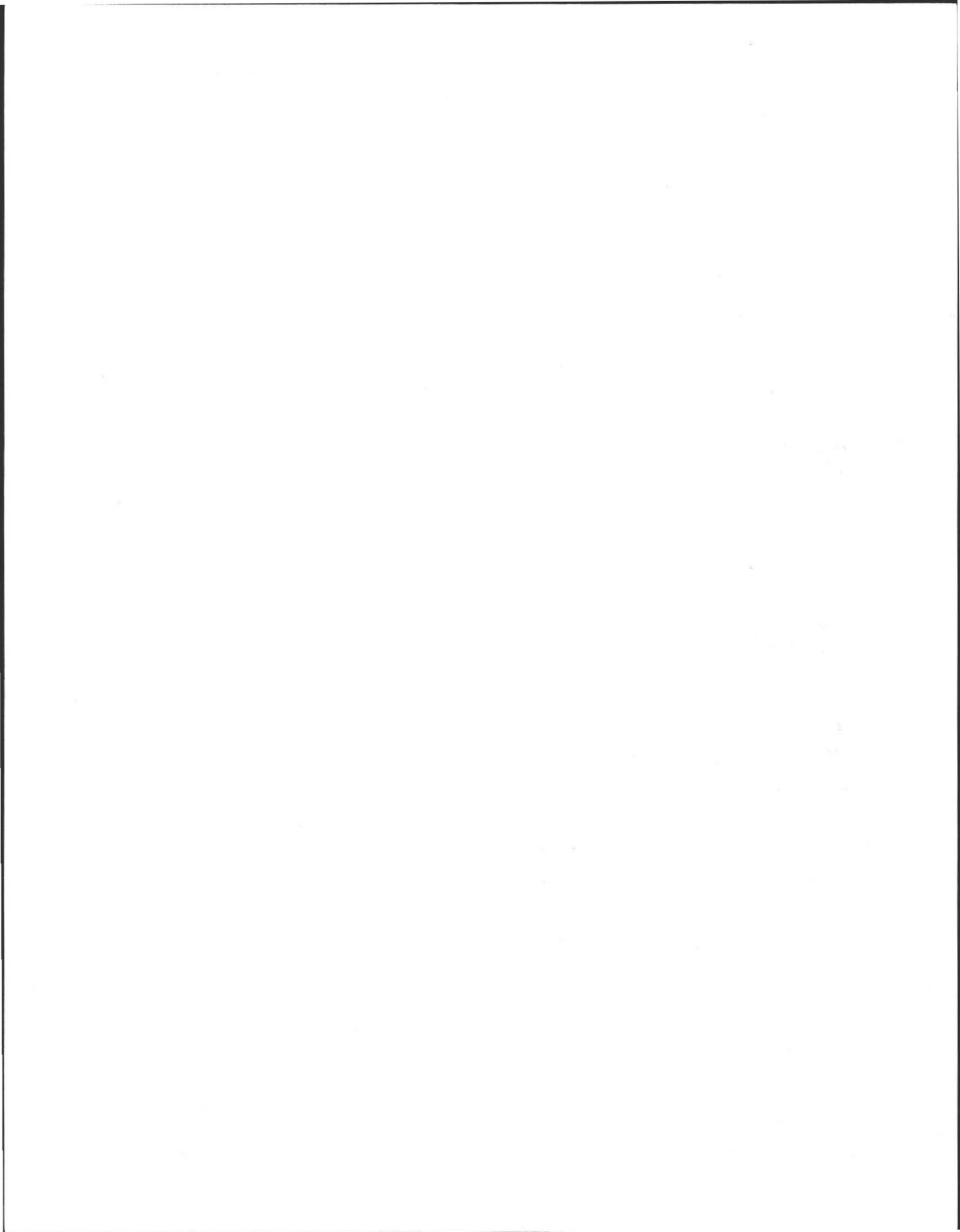
Parent Material (geologic) Ablation Till Depth to Bedrock: 84"

Depth to Groundwater: Standing Water in the Hole: \_\_\_\_\_ Weeping from Pit Face: 58"

Estimated Seasonal High Ground Water: \_\_\_\_\_

moderately LOOSE.







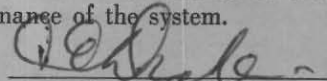
BOARD OF HEALTH, AMHERST, MASSACHUSETTS  
DISPOSAL WORKS CONSTRUCTION PERMIT

No. 69-9

Permission is hereby granted Roy industries to construct () or repair () an Individual Sewage Disposal System at Lot 46 High point hill 21 High Point as shown on the application for Disposal Works Construction Permit No. 69-9

This permit is issued with the understanding that future alterations or additions will be made if necessary. This permit shall not be construed as permission to create or maintain any sewage nuisance and in the issuance of this permit the Board of Health assumes no responsibility for the future operation or maintenance of the system.

DATE 9/24/69

  
Board of Health

THE UNIVERSITY OF CHICAGO  
DEPARTMENT OF CHEMISTRY

1951

• •

11

Location Address or Lot No. \_\_\_\_\_

COMMONWEALTH OF MASSACHUSETTS

Massachusetts

Percolation Test*		
Date: <u>4/8/10</u>		Time: <u>12:00</u>
Observation Hole #	<u>P1</u>	
Depth of Perc	<u>34"</u>	
Start Pre-soak	<u>12:25</u>	
End Pre-soak	<u>12:40</u>	Re-soak 
Time at 12"	<u>12:40</u>	
Time at 9"	<u>12:52</u>	
Time at 6"	<u>13:07</u>	
Time (9"-6")	<u>15</u>	
Rate Min./Inch	<u>5 min -</u>	

\* Minimum of 1 percolation test must be performed in both the primary area AND reserve area.

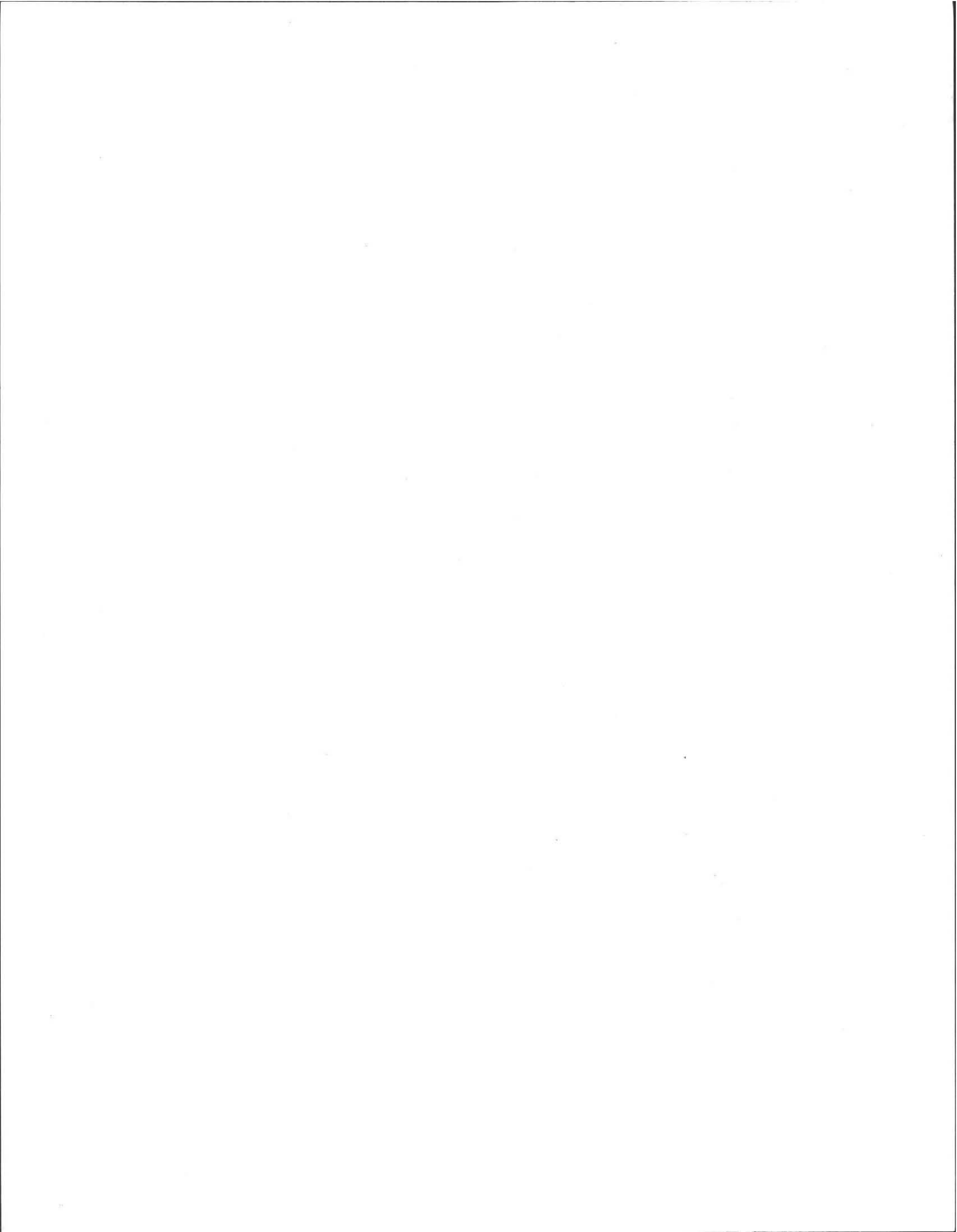
Site Passed  Site Failed

Performed By: [Signature]

Witnessed By: [Signature]

Comments: Mounted system - 30" water







# Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

21 Highpoint Drive, Amherst, MA 01002

Property Address

Alan Peterfreund

Owner's Name

Owner information is required for every page.

Amherst

City/Town

MA

State

01002

Zip Code

03.24.2010

Date of Inspection

Inspection results must be submitted on this form. Inspection forms may not be altered in any way.

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



## A. General Information

1. Inspector:

Alan E. Weiss

Name of Inspector

Cold Spring Environmental Consultants Inc.

Company Name

350 Old Enfield Road

Company Address

Belchertown

City/Town

MA

State

01007

Zip Code

413.323.5957

Telephone Number

License Number

## B. Certification

I certify that I have personally inspected the sewage disposal system at this address and that the information reported below is true, accurate and complete as of the time of the inspection. The inspection was performed based on my training and experience in the proper function and maintenance of on site sewage disposal systems. **I am a DEP approved system inspector pursuant to Section 15.340 of Title 5 (310 CMR 15.000).** The system:

Passes

Conditionally Passes

Fails

Needs Further Evaluation by the Local Approving Authority

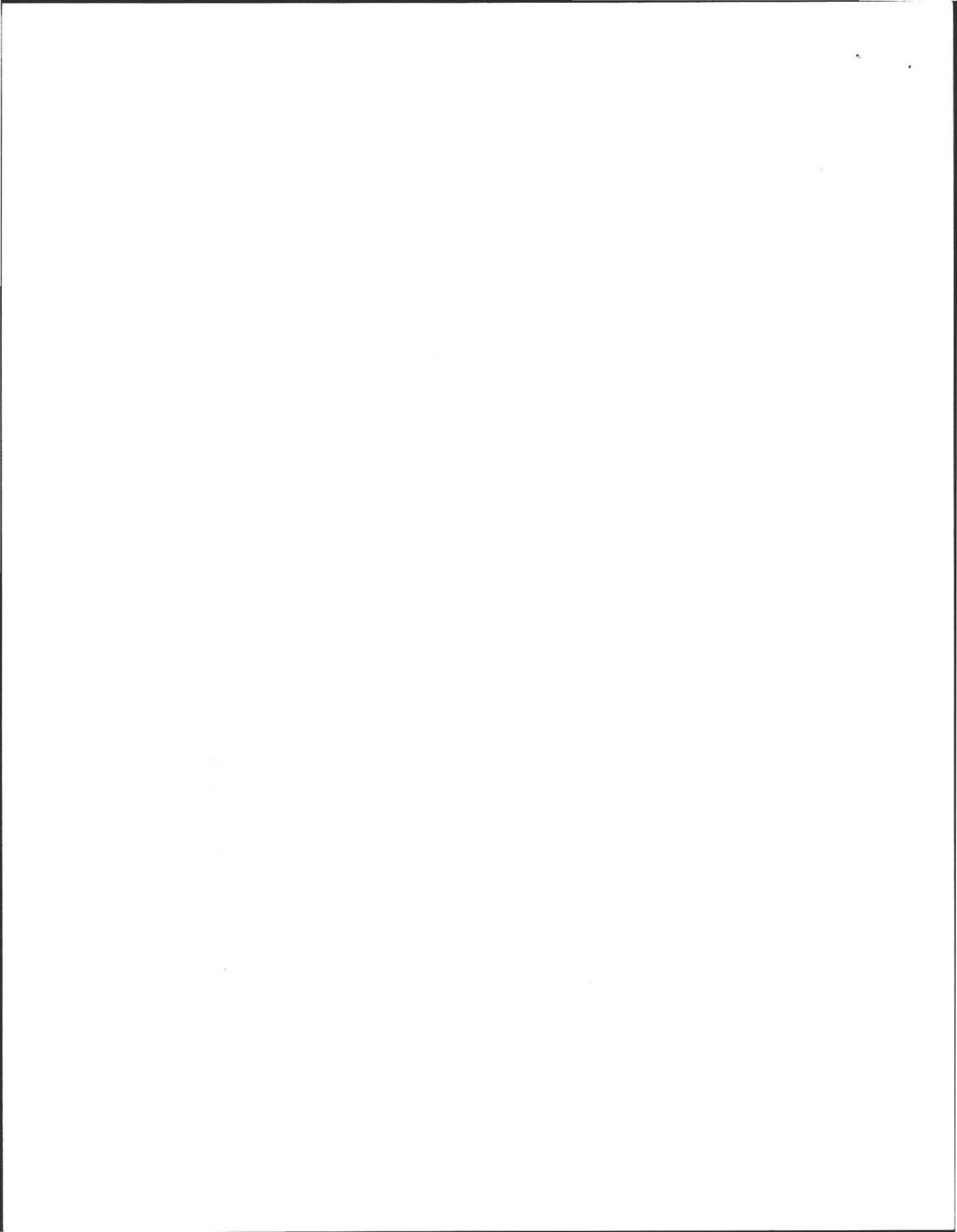
Inspector's Signature

03.24.2010

Date

The system inspector shall submit a copy of this inspection report to the Approving Authority (Board of Health or DEP) within 30 days of completing this inspection. If the system is a shared system or has a design flow of 10,000 gpd or greater, the inspector and the system owner shall submit the report to the appropriate regional office of the DEP. The original should be sent to the system owner and copies sent to the buyer, if applicable, and the approving authority.

\*\*\*This report only describes conditions at the time of inspection and under the conditions of use at that time. This inspection does not address how the system will perform in the future under the same or different conditions of use.





# Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

21 Highpoint Drive, Amherst, MA 01002

Property Address

Alan Peterfreund

Owner's Name

Amherst

City/Town

MA

State

01002

Zip Code

03.24.2010

Date of Inspection

Owner information is required for every page.

## B. Certification (cont.)

Inspection Summary: Check A,B,C,D or E / **always** complete all of Section D

### A) System Passes:

- I have not found any information which indicates that any of the failure criteria described in 310 CMR 15.303 or in 310 CMR 15.304 exist. Any failure criteria not evaluated are indicated below.

Comments:

System serves a 4 BR Residence. System has a older 1200 S. Tank. liquidgetting to corroded dist. box (System is 40+/- yrs. old) . Dist. box is weak with orangeburg pipe, box is in corroded/weakened conditon falling apart when touched. Sys back up noted in s. tank (stained inside cover). L. stone appears to be in seasonal groundwater, stone saturated 6" down. *Well Test required IF well is used in new design.*

### B) System Conditionally Passes:

- One or more system components as described in the "Conditional Pass" section need to be replaced or repaired. The system, upon completion of the replacement or repair, as approved by the Board of Health, will pass.

Answer yes, no or not determined (Y, N, ND) in the  for the following statements. If "not determined," please explain.

- The septic tank is metal and over 20 years old\* or the septic tank (whether metal or not) is structurally unsound, exhibits substantial infiltration or exfiltration or tank failure is imminent. System will pass inspection if the existing tank is replaced with a complying septic tank as approved by the Board of Health.

\* A metal septic tank will pass inspection if it is structurally sound, not leaking and if a Certificate of Compliance indicating that the tank is less than 20 years old is available.

ND Explain:

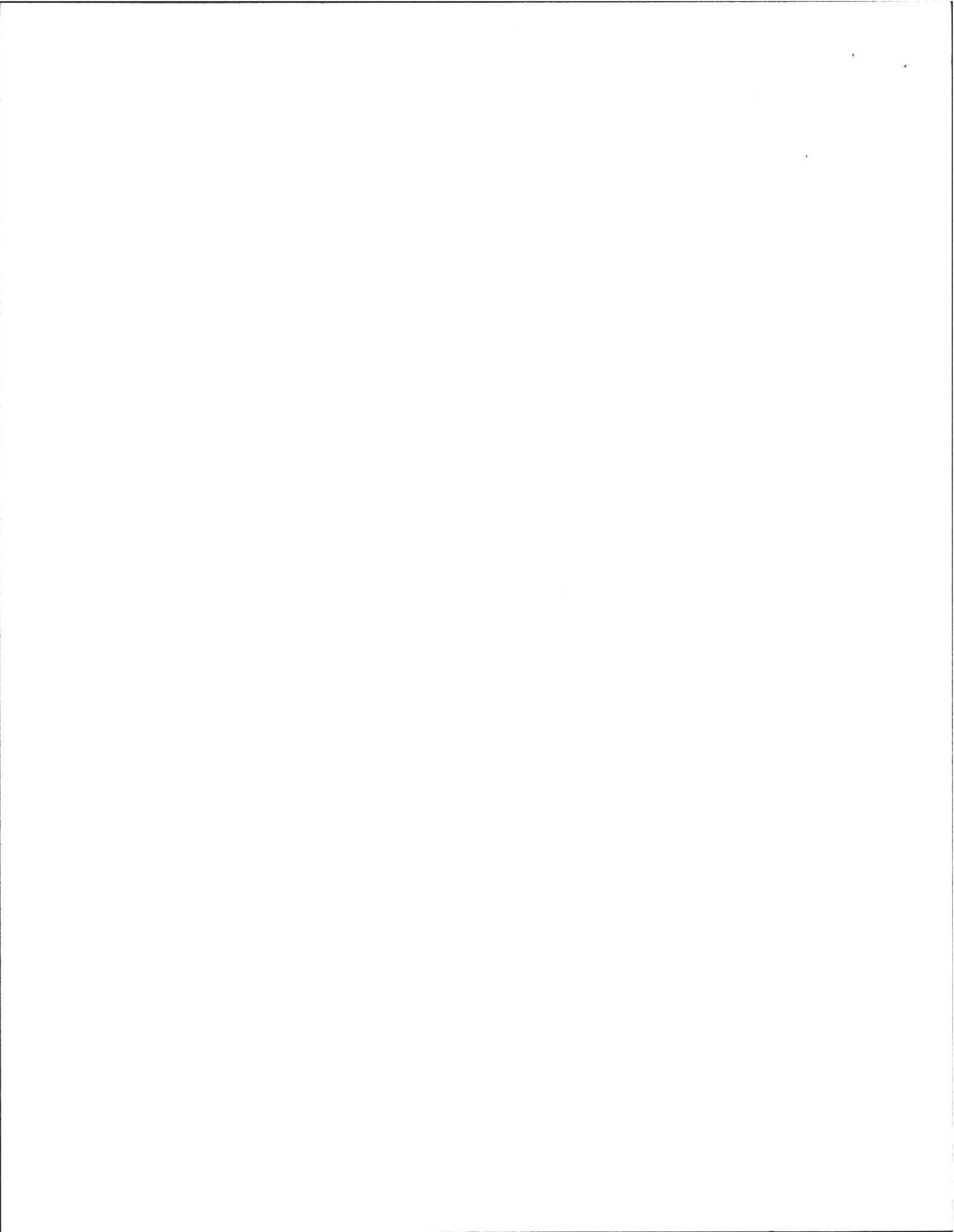
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- Observation of sewage backup or break out or high static water level in the distribution box due to broken or obstructed pipe(s) or due to a broken, settled or uneven distribution box. System will pass inspection if (with approval of Board of Health):

- broken pipe(s) are replaced
- obstruction is removed







# Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

21 Highpoint Drive, Amherst, MA 01002

Property Address

Alan Peterfreund

Owner's Name

Amherst

City/Town

MA

State

01002

Zip Code

03.24.2010

Date of Inspection

Owner information is required for every page.

## B. Certification (cont.)

### B) System Conditionally Passes (cont.):

- distribution box is leveled or replaced

ND Explain:

---

---

- The system required pumping more than 4 times a year due to broken or obstructed pipe(s). The system will pass inspection if (with approval of the Board of Health):

- broken pipe(s) are replaced

- obstruction is removed

ND Explain:

---

---

### C) Further Evaluation is Required by the Board of Health:

- Conditions exist which require further evaluation by the Board of Health in order to determine if the system is failing to protect public health, safety or the environment.

**1. System will pass unless Board of Health determines in accordance with 310 CMR 15.303(1)(b) that the system is not functioning in a manner which will protect public health, safety and the environment:**

- Cesspool or privy is within 50 feet of a surface water

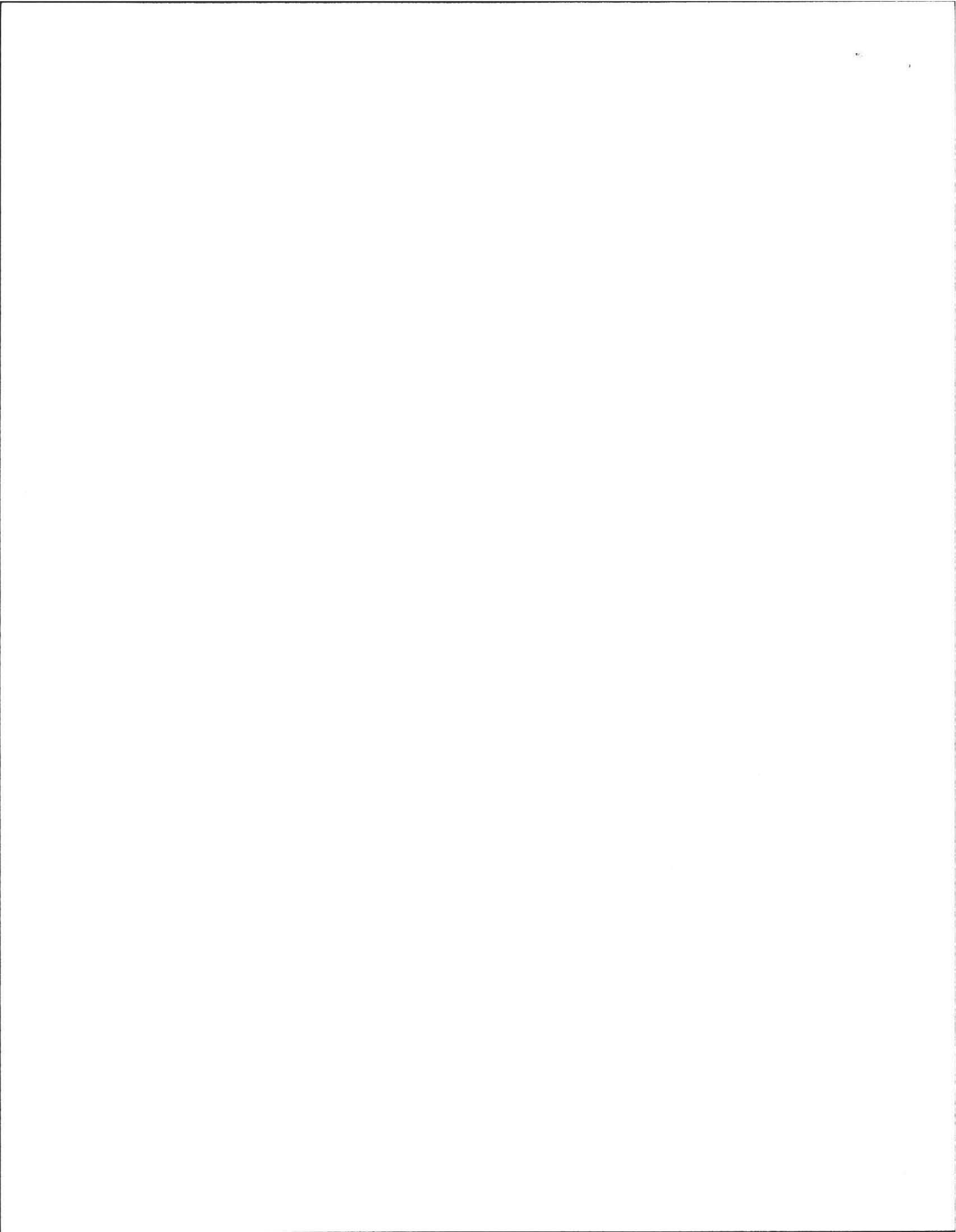
- Cesspool or privy is within 50 feet of a bordering vegetated wetland or a salt marsh

**2. System will fail unless the Board of Health (and Public Water Supplier, if any) determines that the system is functioning in a manner that protects the public health, safety and environment:**

- The system has a septic tank and soil absorption system (SAS) and the SAS is within 100 feet of a surface water supply or tributary to a surface water supply.

- The system has a septic tank and SAS and the SAS is within a Zone 1 of a public water supply.

- The system has a septic tank and SAS and the SAS is within 50 feet of a private water supply well.





# Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

21 Highpoint Drive, Amherst, MA 01002

Property Address

Alan Peterfreund

Owner's Name

Amherst

City/Town

MA

State

01002

Zip Code

03.24.2010

Date of Inspection

Owner information is required for every page.

## B. Certification (cont.)

### C) Further Evaluation is Required by the Board of Health (cont.):

- The system has a septic tank and SAS and the SAS is less than 100 feet but 50 feet or more from a private water supply well\*\*.

Method used to determine distance: Measured w/ GIS map. Test well if used with new Engineered System.

- \*\* This system passes if the well water analysis, performed at a DEP certified laboratory, for coliform bacteria indicates absent and the presence of ammonia nitrogen and nitrate nitrogen is equal to or less than 5 ppm, provided that no other failure criteria are triggered. A copy of the analysis must be attached to this form.

3. Other:

System is only in use by 1 person.

### D) System Failure Criteria Applicable to All Systems:

You must indicate "Yes" or "No" to each of the following for all inspections:

- | Yes                                 | No                                  |  |
|-------------------------------------|-------------------------------------|--|
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | Backup of sewage into facility or system component due to overloaded or clogged SAS or cesspool                                    |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Discharge or ponding of effluent to the surface of the ground or surface waters due to an overloaded or clogged SAS or cesspool    |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Static liquid level in the distribution box above outlet invert due to an overloaded or clogged SAS or cesspool                    |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Liquid depth in cesspool is less than 6" below invert or available volume is less than 1/2 day flow                                |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Required pumping more than 4 times in the last year <b>NOT</b> due to clogged or obstructed pipe(s). Number of times pumped: _____ |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | Any portion of the SAS, cesspool or privy is below high ground water elevation.  |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Any portion of cesspool or privy is within 100 feet of a surface water supply or tributary to a surface water supply.              |





# Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

21 Highpoint Drive, Amherst, MA 01002

Property Address

Alan Peterfreund

Owner's Name

Amherst

City/Town

MA

State

01002

Zip Code

03.24.2010

Date of Inspection

Owner information is required for every page.

## B. Certification (cont.)

### D) System Failure Criteria Applicable to All Systems (cont.):

Yes No

- Any portion of a cesspool or privy is within a Zone 1 of a public well.
- Any portion of a cesspool or privy is within 50 feet of a private water supply well.
- Any portion of a cesspool or privy is less than 100 feet but greater than 50 feet from a private water supply well with no acceptable water quality analysis. **[This system passes if the well water analysis, performed at a DEP certified laboratory, for fecal coliform bacteria indicates absent and the presence of ammonia nitrogen and nitrate nitrogen is equal to or less than 5 ppm, provided that no other failure criteria are triggered. A copy of the analysis and chain of custody must be attached to this form.]**
- The system is a cesspool serving a facility with a design flow of 2000gpd-10,000gpd.
- The system fails.** I have determined that one or more of the above failure criteria exist as described in 310 CMR 15.303, therefore the system fails. The system owner should contact the Board of Health to determine what will be necessary to correct the failure.

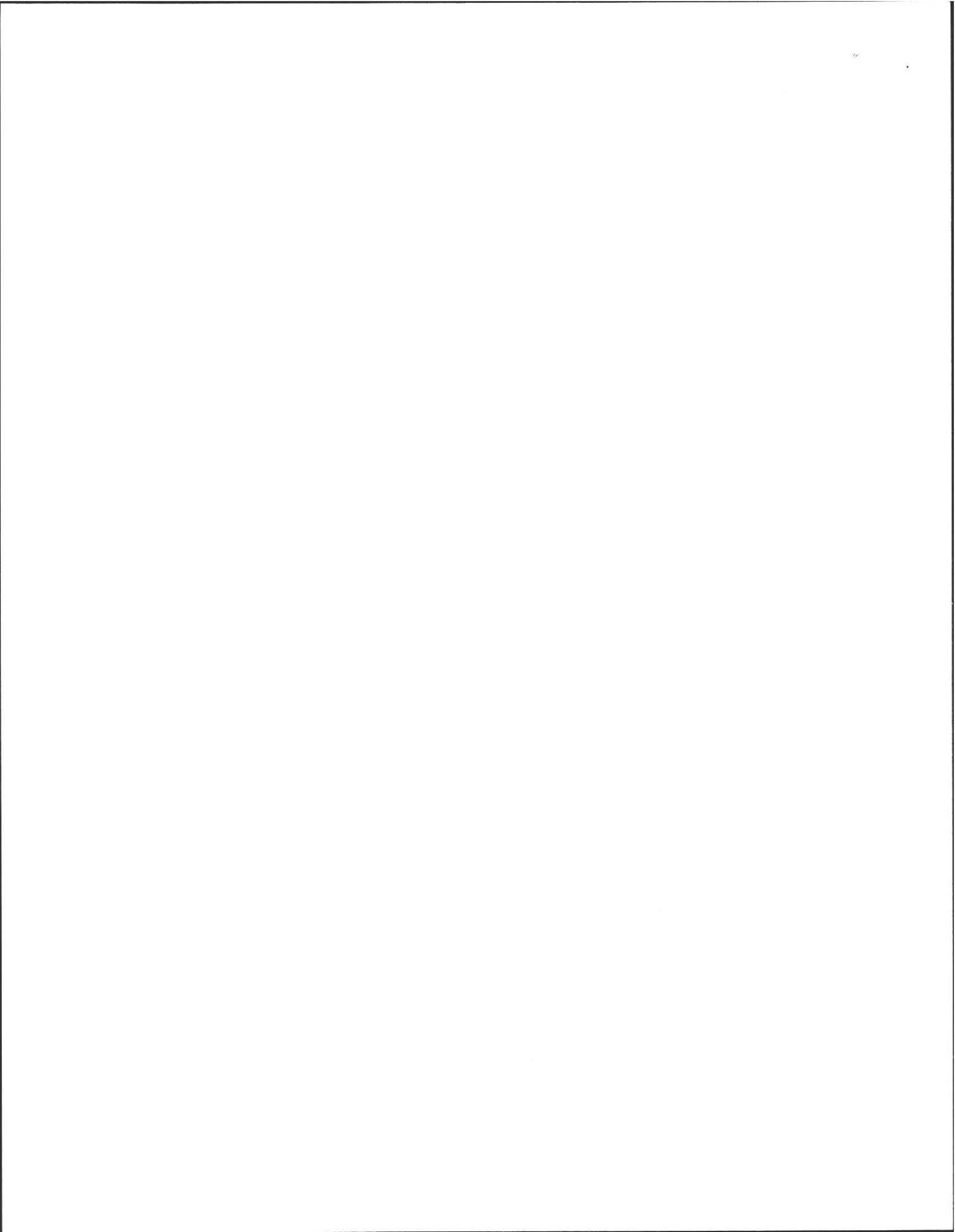
### E) Large Systems: To be considered a large system the system must serve a facility with a design flow of 10,000 gpd to 15,000 gpd.

For large systems, you must indicate either "yes" or "no" to each of the following, in addition to the questions in Section D.

Yes No

- the system is within 400 feet of a surface drinking water supply
- the system is within 200 feet of a tributary to a surface drinking water supply
- the system is located in a nitrogen sensitive area (Interim Wellhead Protection Area – IWPA) or a mapped Zone II of a public water supply well

If you have answered "yes" to any question in Section E the system is considered a significant threat, or answered "yes" in Section D above the large system has failed. The owner or operator of any large system considered a significant threat under Section E or failed under Section D shall upgrade the system in accordance with 310 CMR 15.304. The system owner should contact the appropriate regional office of the Department.





# Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

21 Highpoint Drive, Amherst, MA 01002

Property Address

Alan Peterfreund

Owner's Name

Amherst

City/Town

MA

State

01002

Zip Code

03.24.2010

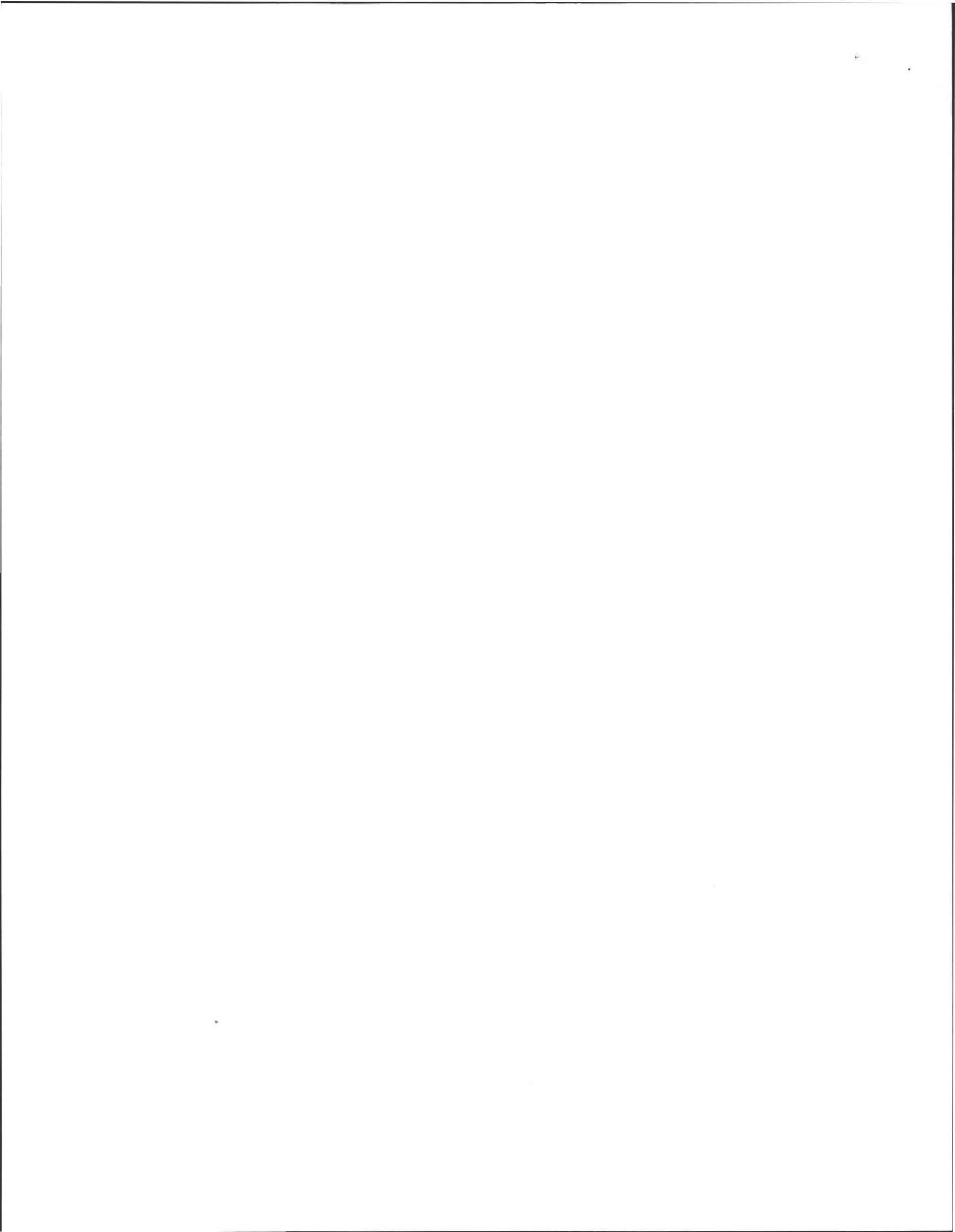
Date of Inspection

Owner information is required for every page.

## C. Checklist

Check if the following have been done. You **must** indicate "yes" or "no" as to each of the following:

- | Yes  | No                                  |   |
|--|-------------------------------------|---|
| <input checked="" type="checkbox"/>  | <input type="checkbox"/>            | Pumping information was provided by the owner, occupant, or Board of Health   |
| <input type="checkbox"/>   | <input checked="" type="checkbox"/> | Were any of the system components pumped out in the previous two weeks?   |
| <input checked="" type="checkbox"/>  | <input type="checkbox"/>            | Has the system received normal flows in the previous two week period?   |
| <input type="checkbox"/>   | <input checked="" type="checkbox"/> | Have large volumes of water been introduced to the system recently or as part of this inspection?   |
| <input type="checkbox"/>   | <input checked="" type="checkbox"/> | Were as built plans of the system obtained and examined? (If they were not available note as N/A)   |
| <input checked="" type="checkbox"/>  | <input type="checkbox"/>            | Was the facility or dwelling inspected for signs of sewage back up?   |
| <input checked="" type="checkbox"/>  | <input type="checkbox"/>            | Was the site inspected for signs of break out?  |
| <input checked="" type="checkbox"/>  | <input type="checkbox"/>            | Were all system components, excluding the SAS, located on site?   |
| <input checked="" type="checkbox"/>  | <input type="checkbox"/>            | Were the septic tank manholes uncovered, opened, and the interior of the tank inspected for the condition of the baffles or tees, material of construction, dimensions, depth of liquid, depth of sludge and depth of scum? |
| <input checked="" type="checkbox"/>  | <input type="checkbox"/>            | Was the facility owner (and occupants if different from owner) provided with information on the proper maintenance of subsurface sewage disposal systems?   |
| <br>   |                                     |   |
| The <b>size and location of the Soil Absorption System (SAS)</b> on the site has been determined based on: |                                     |   |
| <input checked="" type="checkbox"/>  | <input type="checkbox"/>            | Existing information. For example, a plan at the Board of Health.   |
| <input checked="" type="checkbox"/>  | <input type="checkbox"/>            | Determined in the field (if any of the failure criteria related to Part C is at issue approximation of distance is unacceptable) [310 CMR 15.302(5)]  |







# Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

21 Highpoint Drive, Amherst, MA 01002

Property Address

Alan Peterfreund

Owner's Name

Amherst

City/Town

MA

State

01002

Zip Code

03.24.2010

Date of Inspection

Owner information is required for every page.

## D. System Information

### Residential Flow Conditions:

Number of bedrooms (design): ? Number of bedrooms (actual): 4

DESIGN flow based on 310 CMR 15.203 (for example: 110 gpd x # of bedrooms): ?

Number of current residents: 1

Does residence have a garbage grinder?  Yes  No

Is laundry on a separate sewage system? [if **yes** separate inspection required]  Yes  No

Laundry system inspected?  Yes  No

Seasonal use?  Yes  No

Water meter readings, if available (last 2 years usage (gpd)): \_\_\_\_\_

Sump pump?  Yes  No

Last date of occupancy: \_\_\_\_\_  
Current Date

### Commercial/Industrial Flow Conditions:

Type of Establishment: \_\_\_\_\_

Design flow (based on 310 CMR 15.203): \_\_\_\_\_  
Gallons per day (gpd)

Basis of design flow (seats/persons/sq.ft., etc.): \_\_\_\_\_

Grease trap present?  Yes  No

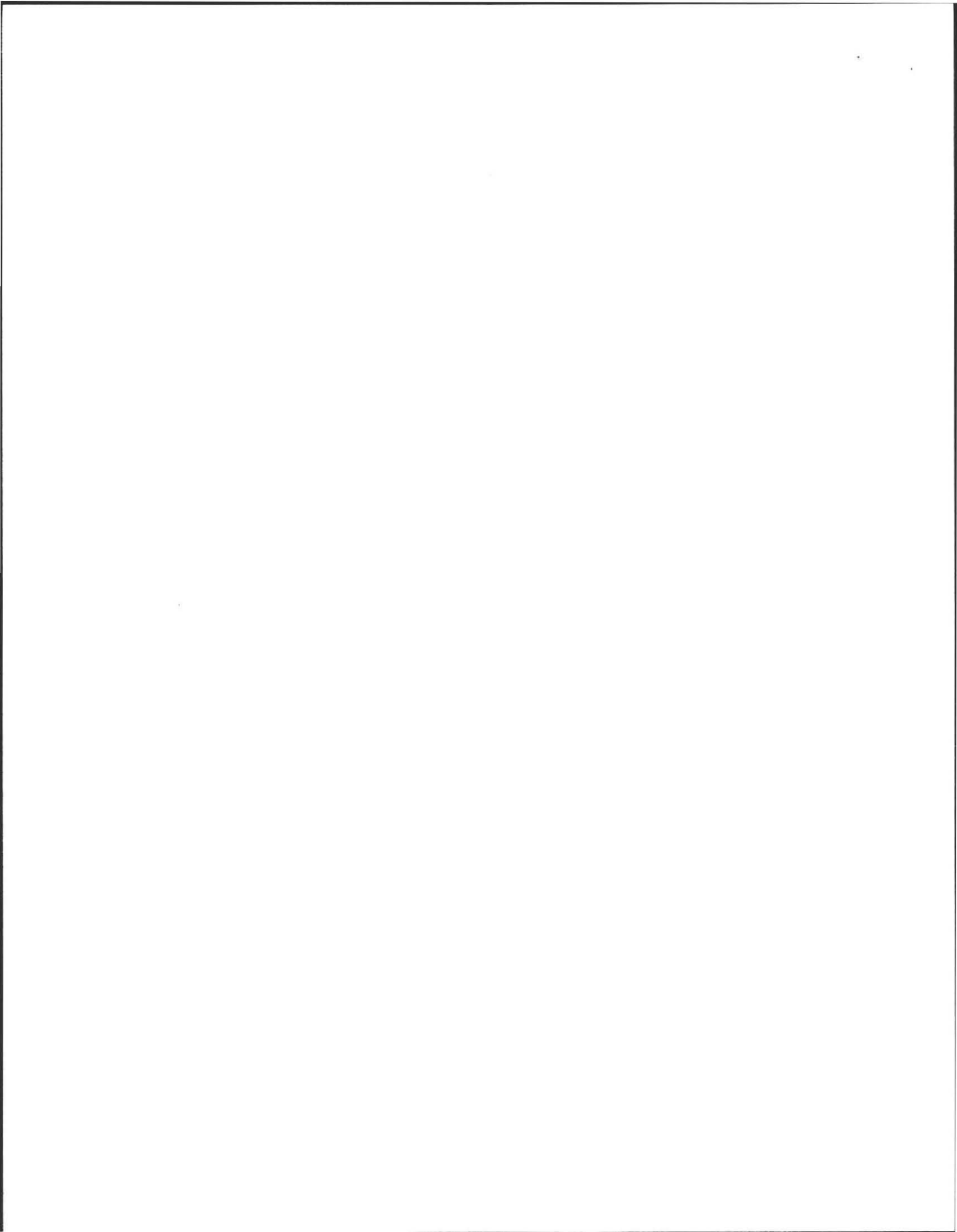
Industrial waste holding tank present?  Yes  No

Non-sanitary waste discharged to the Title 5 system?  Yes  No

Water meter readings, if available: N/A

Last date of occupancy/use: N/A  
Date

Other (describe): N/A





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## D. System Information (cont.)

### General Information

#### Pumping Records:

Source of information:

Owner: (4 yr)

Was system pumped as part of the inspection?

Yes  No

If yes, volume pumped:

-  
gallons

How was quantity pumped determined?

Reason for pumping:

Deferred to repair

#### Type of System:

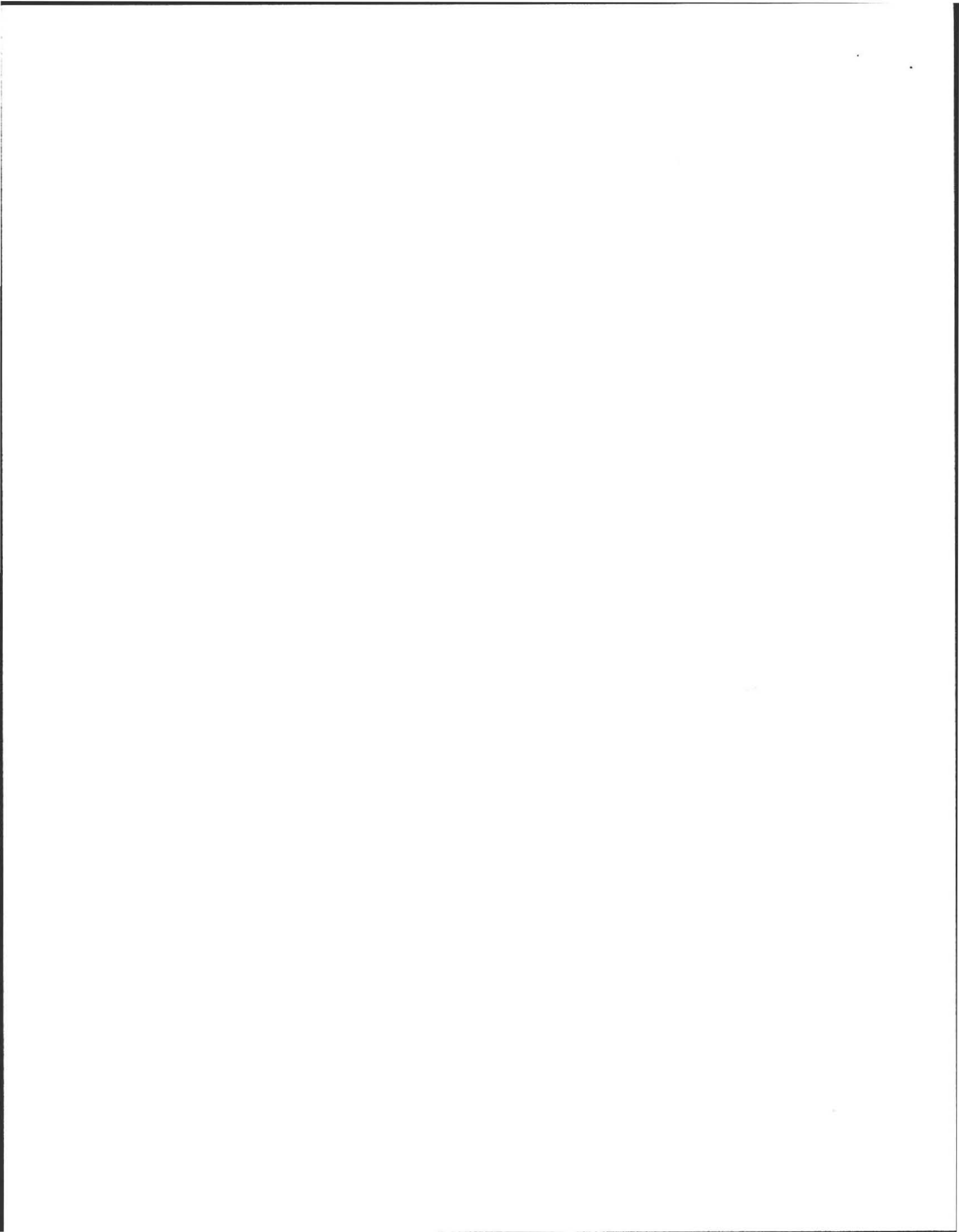
- Septic tank, distribution box, soil absorption system
- Single cesspool
- Overflow cesspool
- Privy
- Shared system (yes or no) (if yes, attach previous inspection records, if any)
- Innovative/Alternative technology. Attach a copy of the current operation and maintenance contract (to be obtained from system owner)
- Tight tank. Attach a copy of the DEP approval.
- Other (describe):

Approximate age of all components, date installed (if known) and source of information:

40 + Years

Were sewage odors detected when arriving at the site?

Yes  No





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## D. System Information (cont.)

**Building Sewer** (locate on site plan):

Depth below grade:

1'+

feet

Material of construction:

cast iron

40 PVC

other (explain):

Orangeburg

Distance from private water supply well or suction line:

10' +

feet

Comments (on condition of joints, venting, evidence of leakage, etc.):

**Septic Tank** (locate on site plan):

Depth below grade:

.75'

Material of construction:

concrete

metal

fiberglass

polyethylene

other (explain)

If tank is metal, list age:

years

Is age confirmed by a Certificate of Compliance? (attach a copy of certificate)

Yes

No

Dimensions:

8.5'X4.5'X4.'

Sludge depth:

4"

Distance from top of sludge to bottom of outlet tee or baffle

40"

Scum thickness

2"

Distance from top of scum to top of outlet tee or baffle

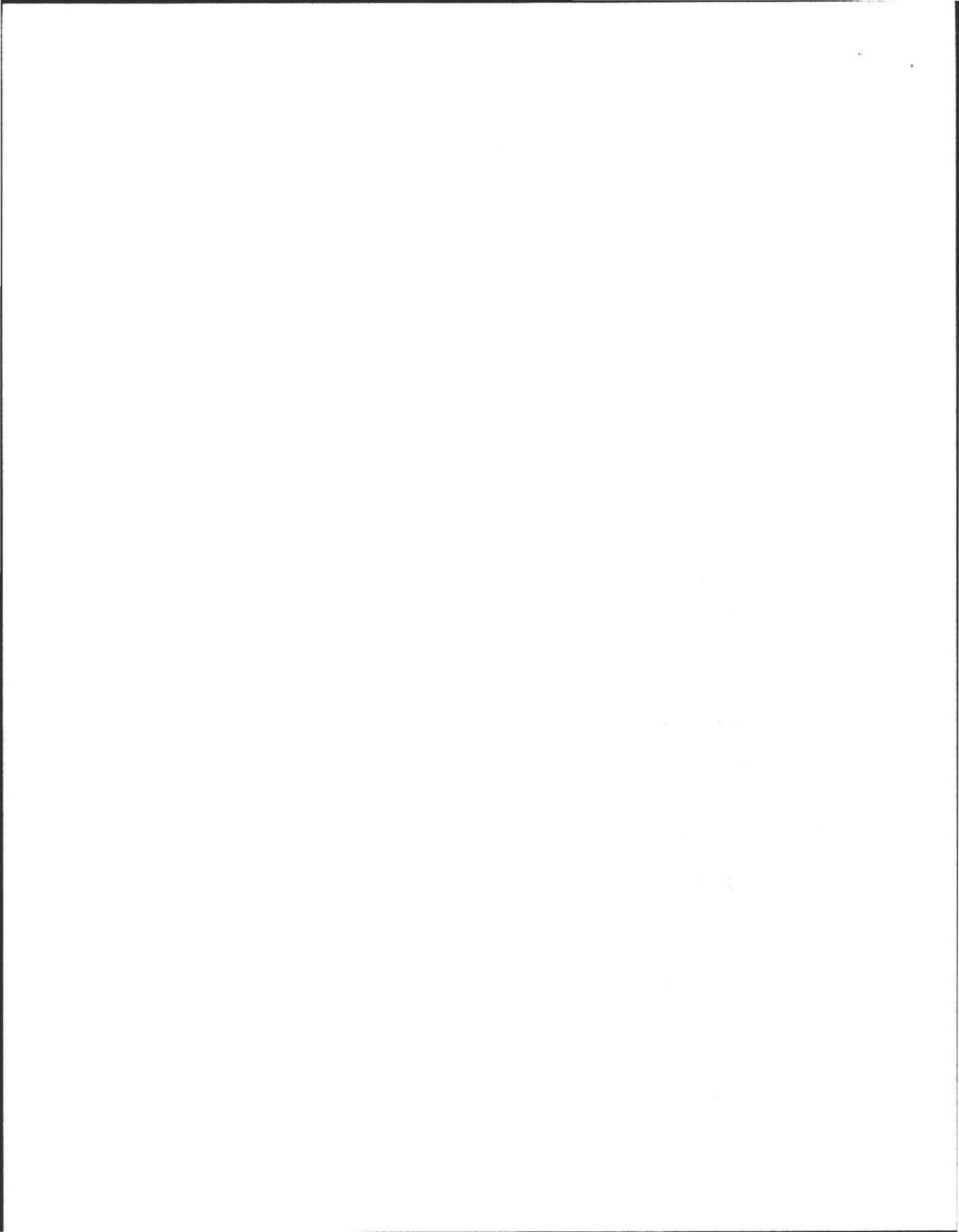
6"

Distance from bottom of scum to bottom of outlet tee or baffle

10"

How were dimensions determined?

Measured





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## D. System Information (cont.)

Comments (on pumping recommendations, inlet and outlet tee or baffle condition, structural integrity, liquid levels as related to outlet invert, evidence of leakage, etc.):

Tank level at invert poured in place baffles corroded and weak (built in).

### Grease Trap (locate on site plan):

Depth below grade:

N/A  
feet

Material of construction:

concrete

metal

fiberglass

polyethylene

other (explain):

Dimensions:

N/A

Scum thickness

N/A

Distance from top of scum to top of outlet tee or baffle

N/A

Distance from bottom of scum to bottom of outlet tee or baffle

N/A

Date of last pumping:

N/A  
Date

Comments (on pumping recommendations, inlet and outlet tee or baffle condition, structural integrity, liquid levels as related to outlet invert, evidence of leakage, etc.):

N/A

### Tight or Holding Tank (tank must be pumped at time of inspection) (locate on site plan):

Depth below grade:

N/A

Material of construction:

concrete

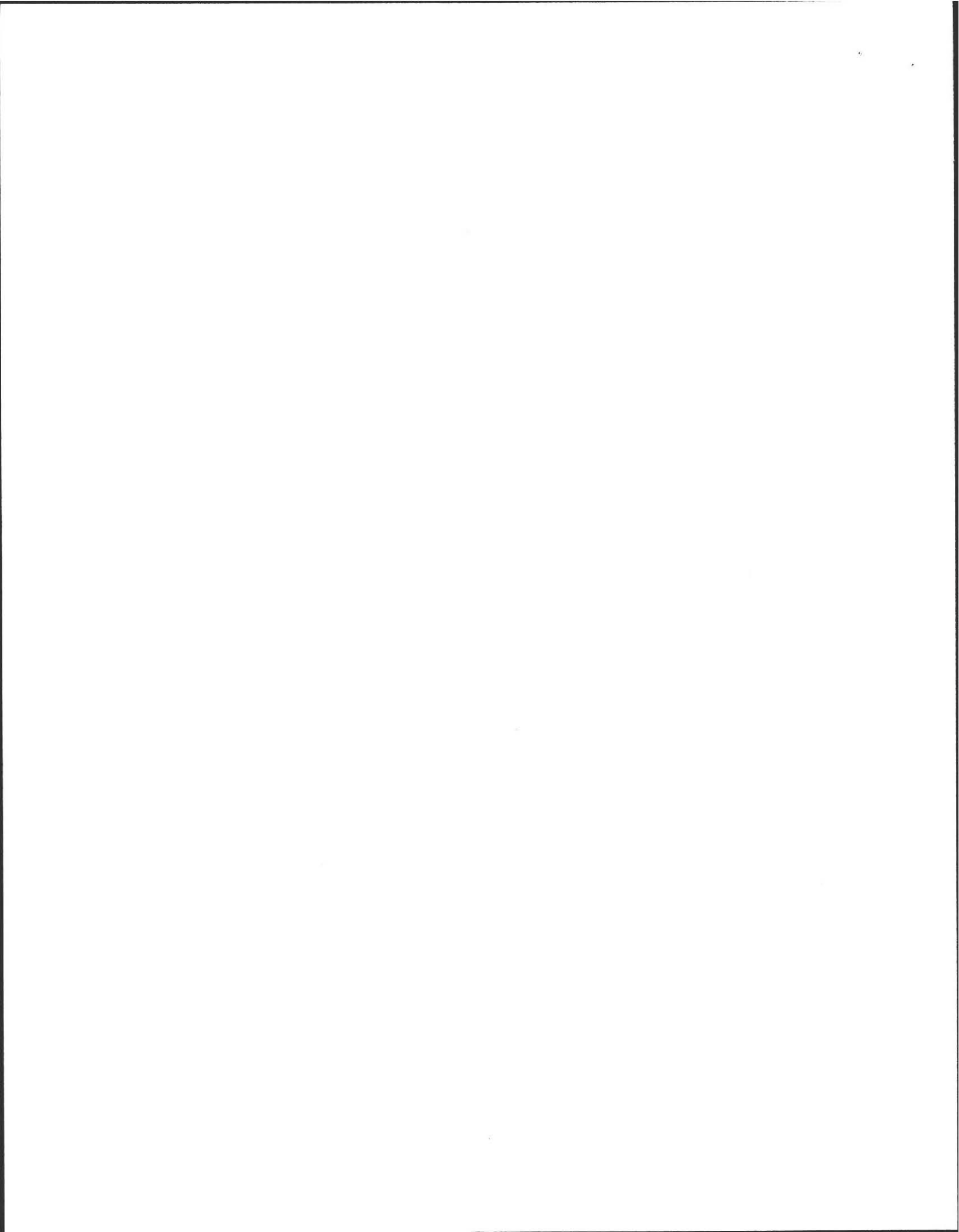
metal

fiberglass

polyethylene

other (explain):

N/A







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## D. System Information (cont.)

### Tight or Holding Tank (cont.)

Dimensions: N/A

Capacity: N/A  
gallons

Design Flow: N/A  
gallons per day

Alarm present:  Yes  No

Alarm level: N/A Alarm in working order:  Yes  No

Date of last pumping: N/A  
Date

Comments (condition of alarm and float switches, etc.):  
N/A

\* Attach copy of current pumping contract (required). Is copy attached?  Yes  No

### Distribution Box (if present must be opened) (locate on site plan):

Depth of liquid level above outlet invert Weak, corroded & cracked walls.

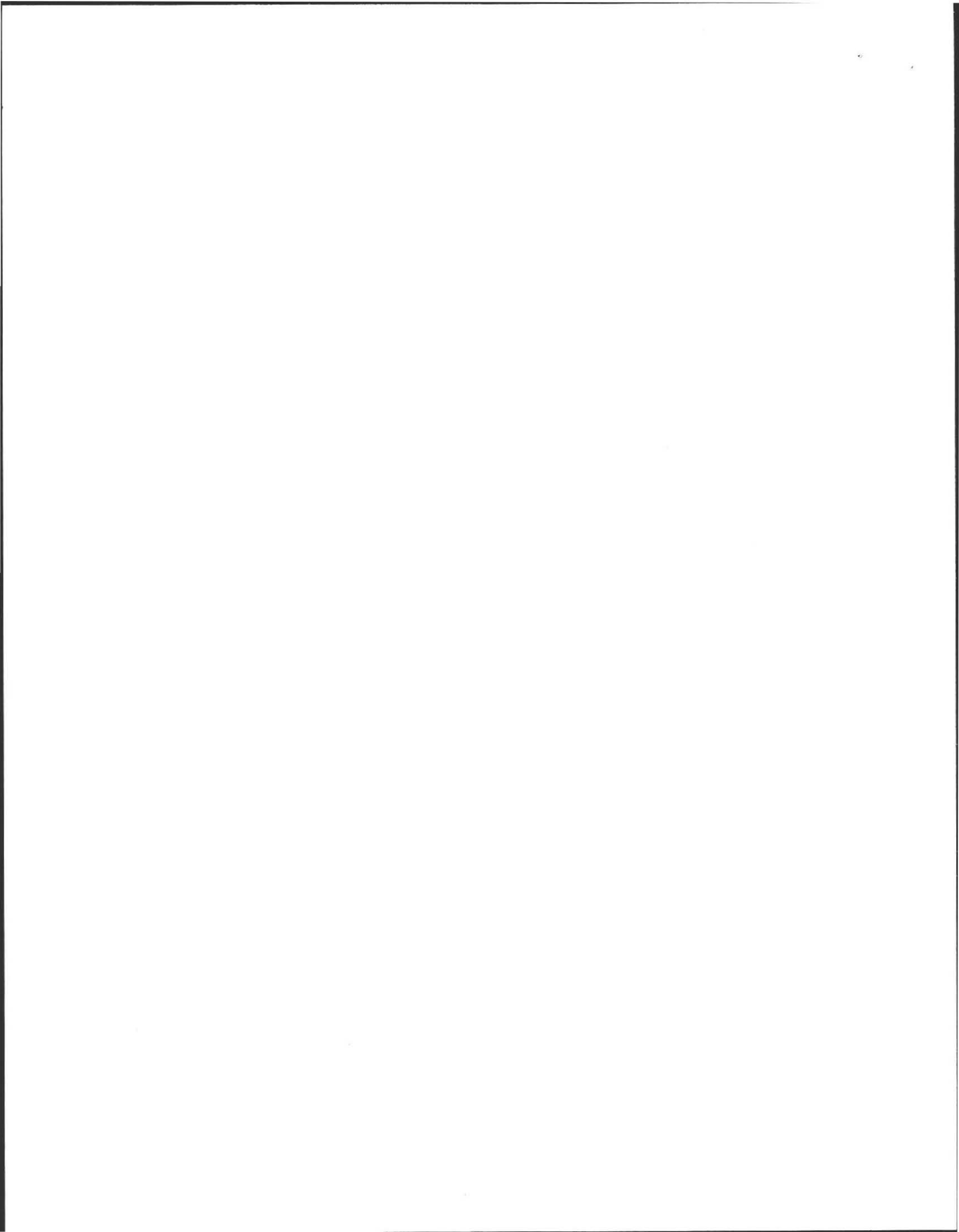
Comments (note if box is level and distribution to outlets equal, any evidence of solids carryover, any evidence of leakage into or out of box, etc.):

Box has liquid level an inch higher than invert, some carry over noted, concrete is corroded.

### Pump Chamber (locate on site plan):

Pumps in working order:  Yes  No

Alarms in working order:  Yes  No





Commonwealth of Massachusetts

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## D. System Information (cont.)

Comments (note condition of pump chamber, condition of pumps and appurtenances, etc.):

---

---

**Soil Absorption System (SAS)** (locate on site plan, excavation not required):

If SAS not located, explain why:

System found and was deteriorated with partial evidence of past back-up where, pipe very weak and breaks upon contact. in places. (4 lines out of Dist. Box).

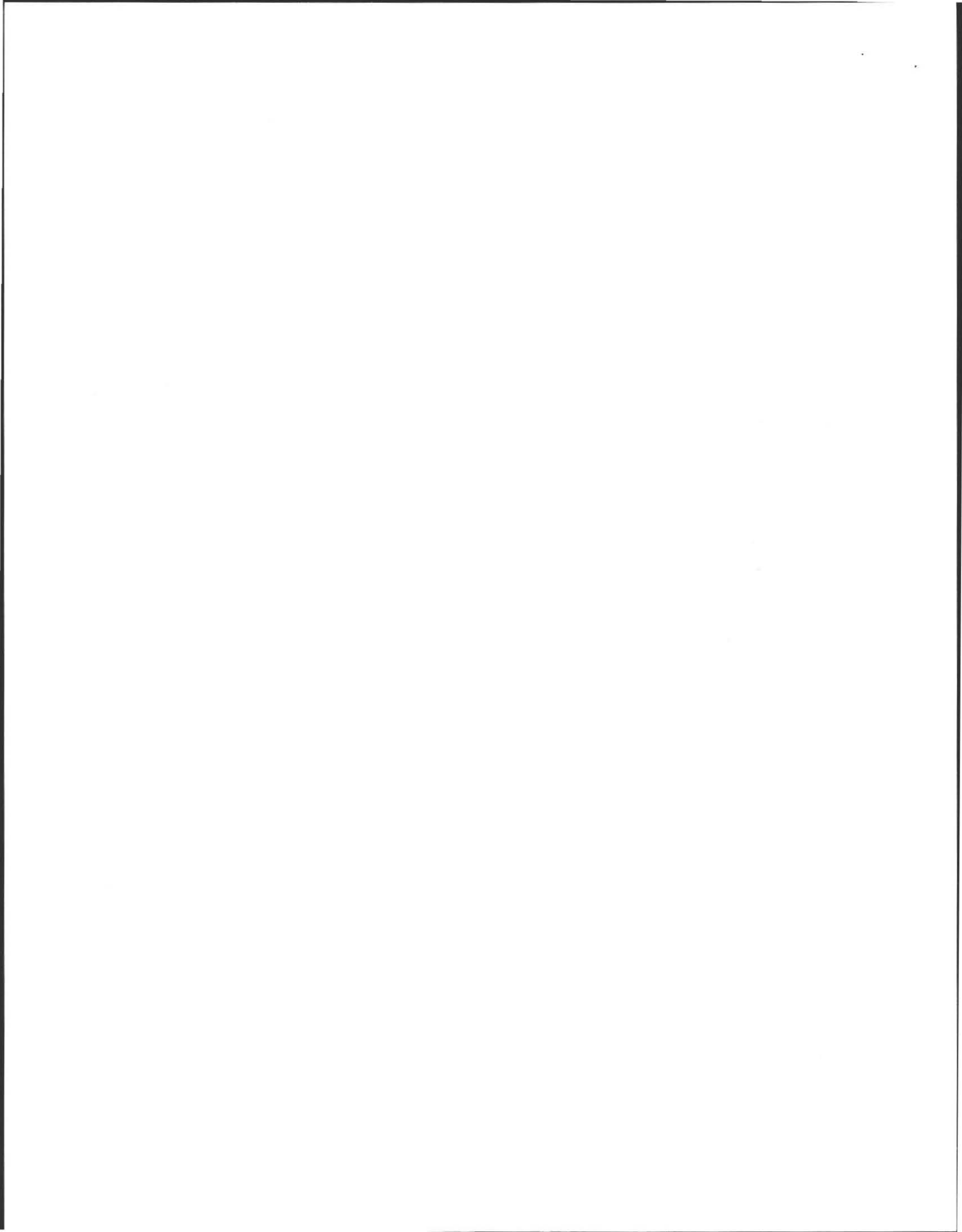
Type:

- |                                     |                               |                     |              |
|-------------------------------------|-------------------------------|---------------------|--------------|
| <input type="checkbox"/>            | leaching pits                 | number:             | _____        |
| <input type="checkbox"/>            | leaching chambers             | number:             | _____        |
| <input type="checkbox"/>            | leaching galleries            | number:             | _____        |
| <input type="checkbox"/>            | leaching trenches             | number, length:     | _____        |
| <input checked="" type="checkbox"/> | leaching fields               | number, dimensions: | 20 x 25' +/- |
| <input type="checkbox"/>            | overflow cesspool             | number:             | _____        |
| <input type="checkbox"/>            | innovative/alternative system |                     |              |

Type/name of technology: \_\_\_\_\_

Comments (note condition of soil, signs of hydraulic failure, level of ponding, damp soil, condition of vegetation, etc.):

S. tank has high staining, Dist box weak, Orangeburg pipe degraded. Bottom of I. stone interpreted to be in seasonal estimated high groundwater at 24". Recommend engineered new system.





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## D. System Information (cont.)

**Cesspools** (cesspool must be pumped as part of inspection) (locate on site plan):

Number and configuration

Depth – top of liquid to inlet invert

Depth of solids layer

Depth of scum layer

Dimensions of cesspool

Materials of construction

Indication of groundwater inflow

Yes

No

Comments (note condition of soil, signs of hydraulic failure, level of ponding, condition of vegetation, etc.):

---

---

**Privy** (locate on site plan):

Materials of construction:

N/A

Dimensions

N/A

Depth of solids

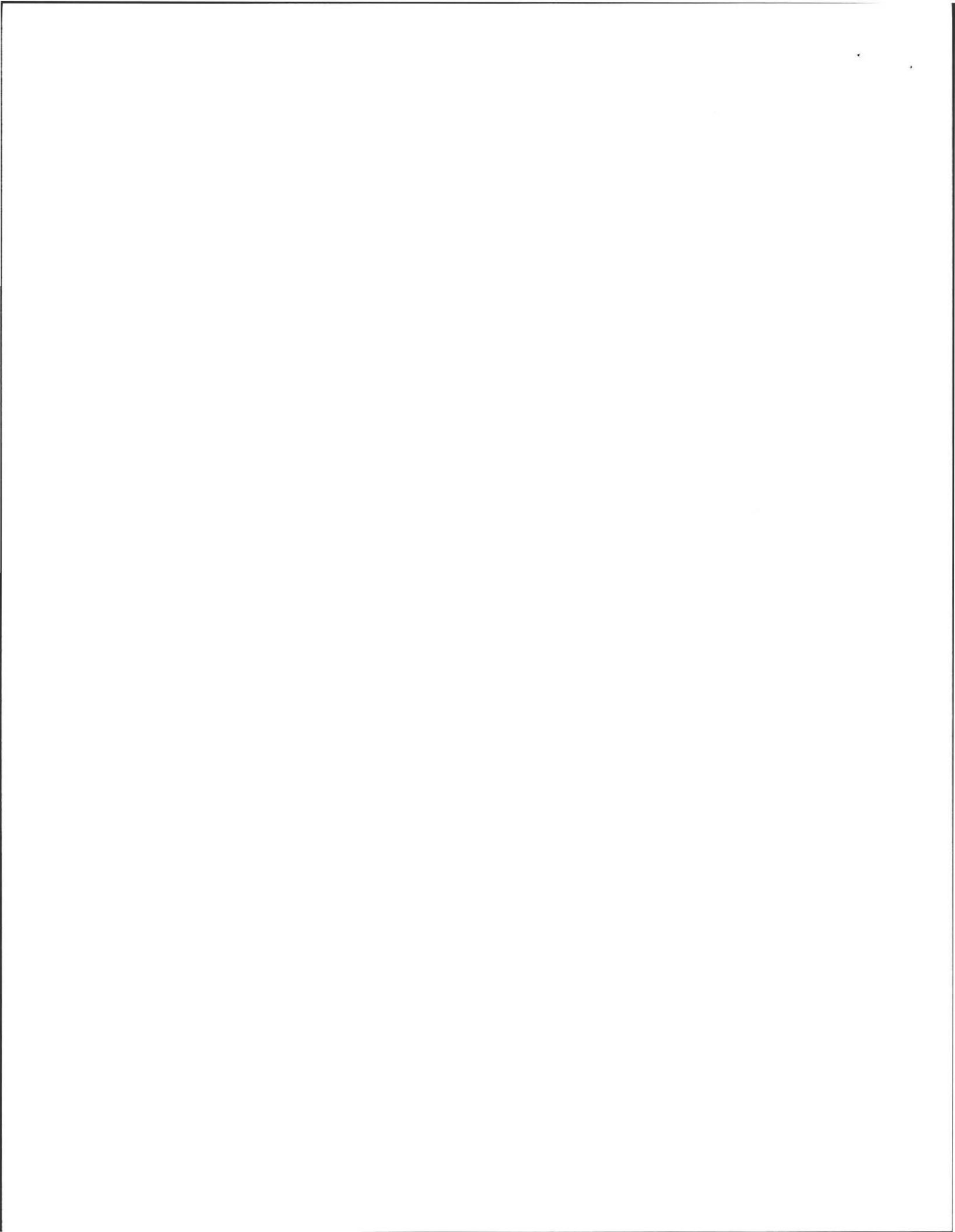
N/A

Comments (note condition of soil, signs of hydraulic failure, level of ponding, condition of vegetation, etc.):

N/A

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Commonwealth of Massachusetts

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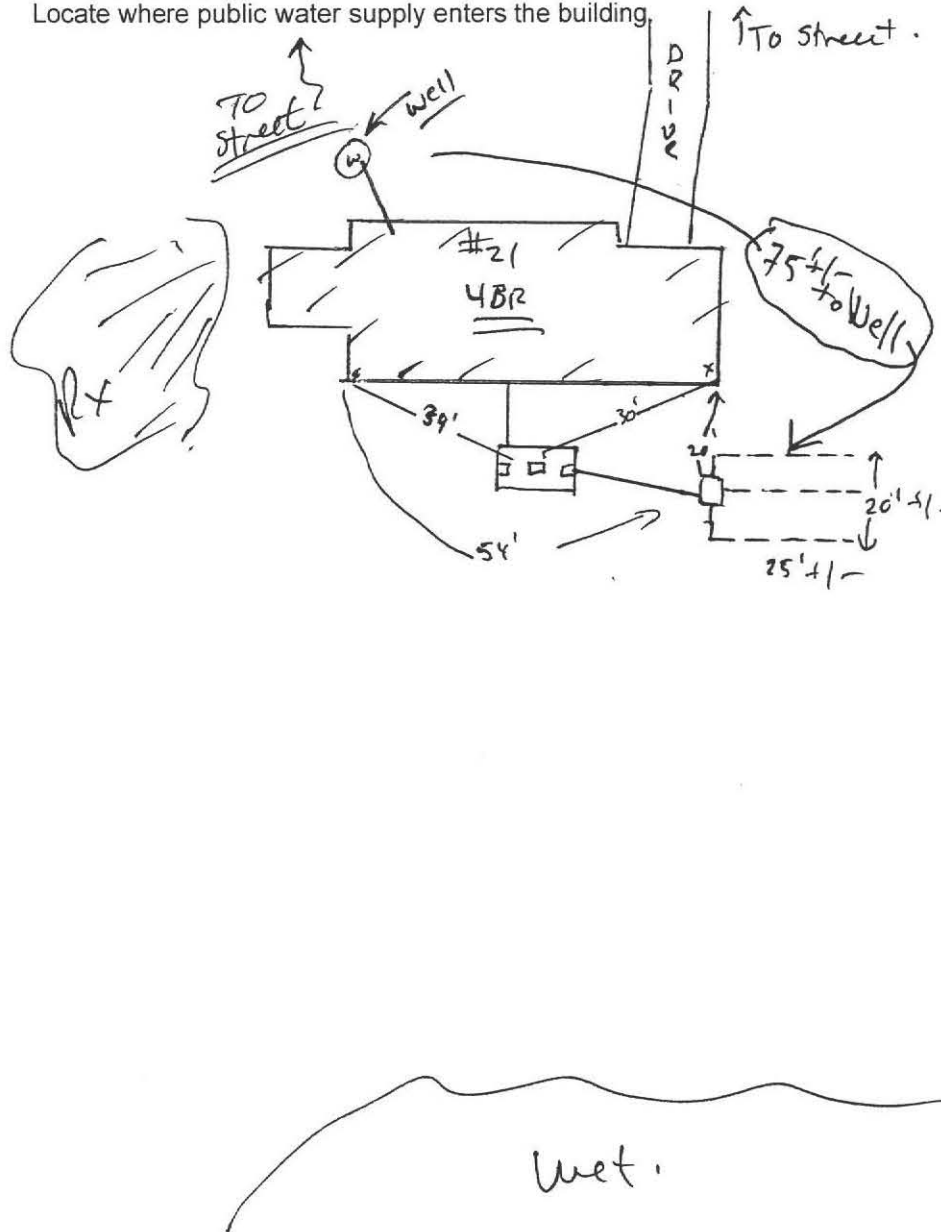
03.24.2010

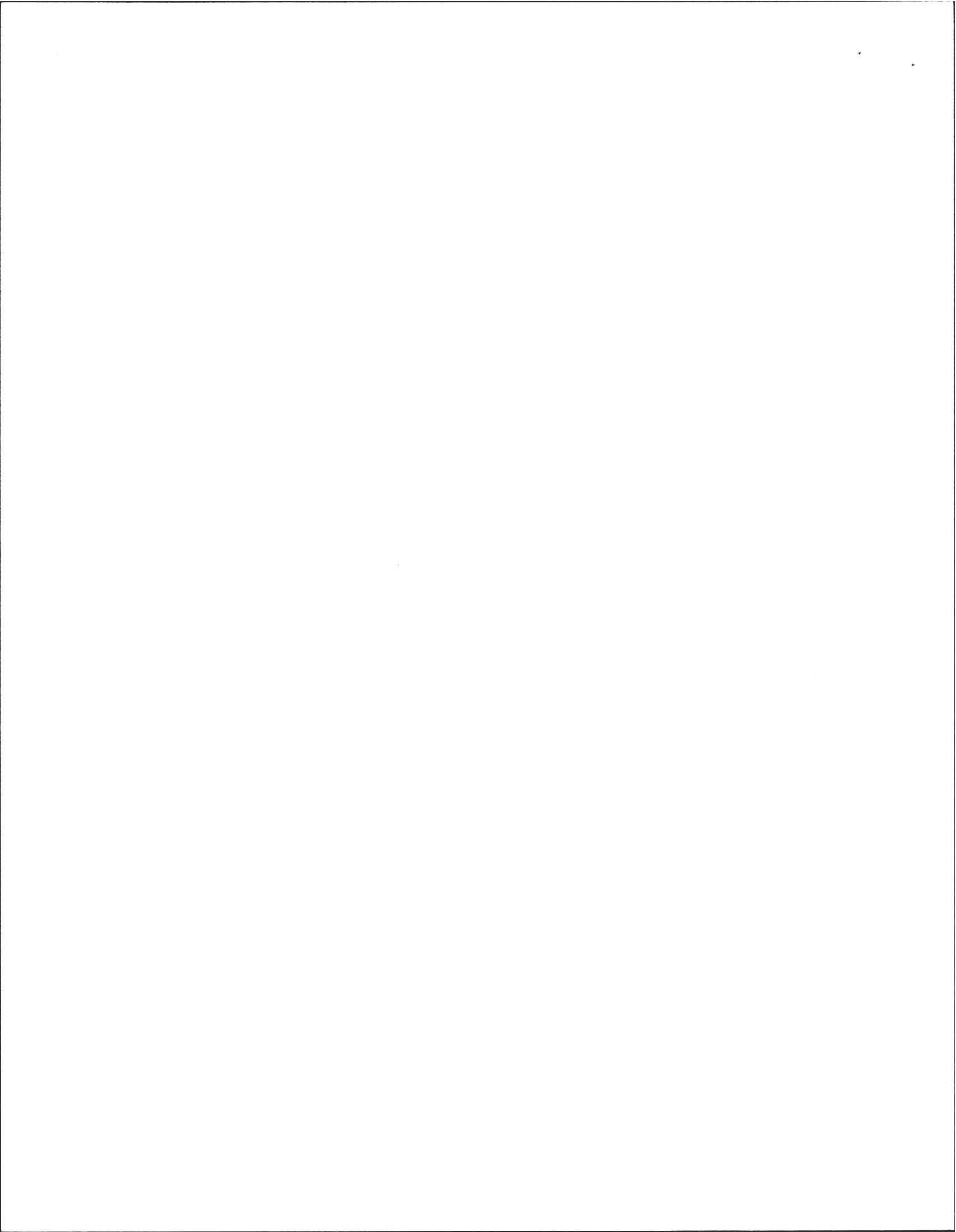
Date of Inspection

Owner information is required for every page.

## D. System Information (cont.)

Sketch Of Sewage Disposal System: Provide a sketch of the sewage disposal system including ties to at least two permanent reference landmarks or benchmarks. Locate all wells within 100 feet. Locate where public water supply enters the building.









# Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

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## D. System Information (cont.)

### Site Exam:

Check Slope

Surface water

Check cellar

Shallow wells

Estimated depth to ground water:

2'+

feet

Please indicate all methods used to determine the high ground water elevation:

Obtained from system design plans on record

If checked, date of design plan reviewed:

Date

Observed site (abutting property/observation hole within 150 feet of SAS)

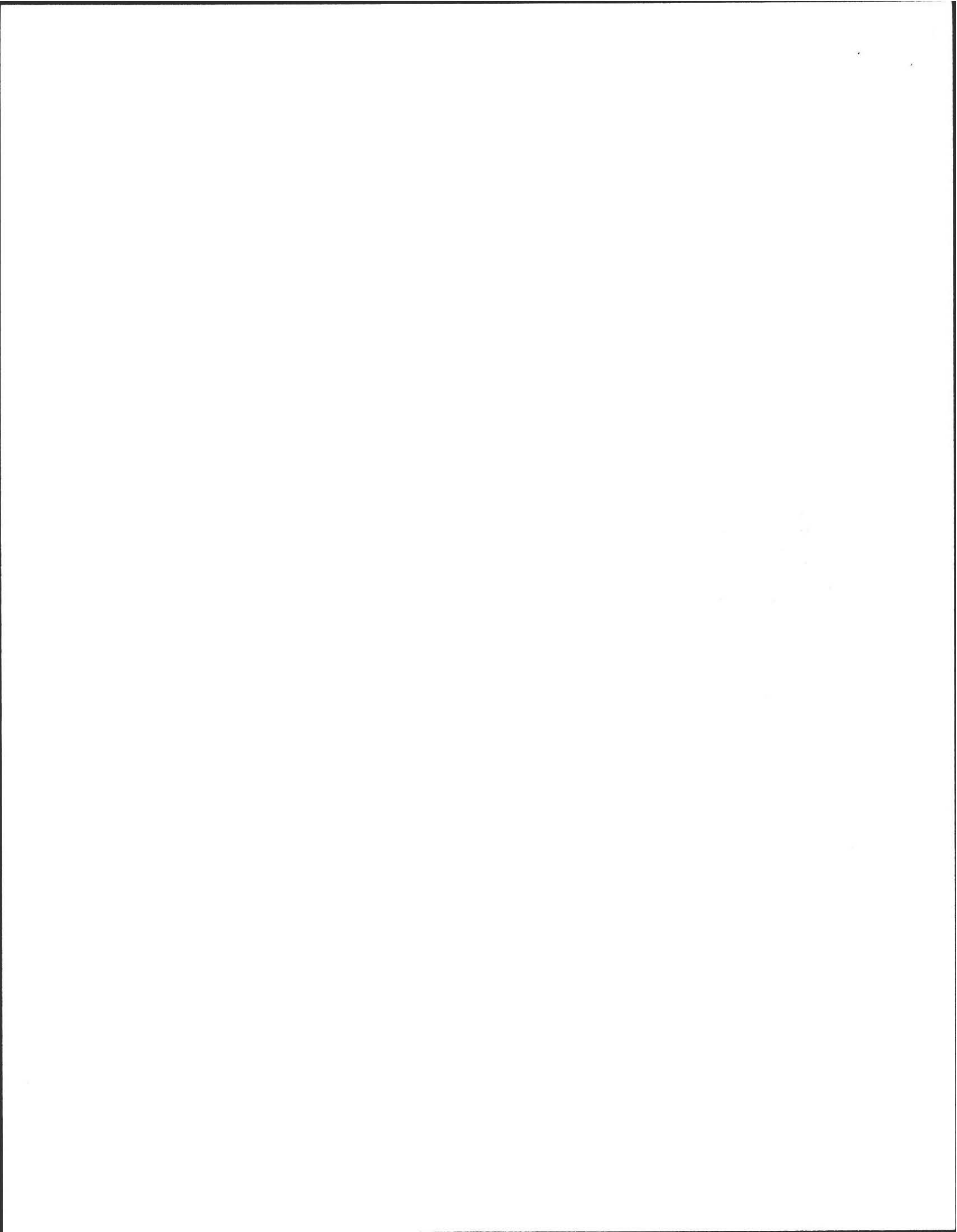
Checked with local Board of Health - explain:

Checked with local excavators, installers - (attach documentation)

Accessed USGS database - explain:

You **must** describe how you established the high ground water elevation:

Based existing records.



21 High Point

#21 High Point

BOARD OF HEALTH, AMHERST, MASSACHUSETTS  
APPLICATION FOR DISPOSAL WORKS CONSTRUCTION PERMIT

No. 69-9 Date Sept. 24 1969 Fee \$ 3 Date Rec'd. Sept. 24, 1969 By Ced

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

Location—Address Lot 46 21 High Point Hill or Lot No. \_\_\_\_\_

Owner Roy Industries Address Amherst Rd. Shutesbury

Contractor Same Address \_\_\_\_\_

Type of Building \_\_\_\_\_ Dimensions \_\_\_\_\_ Size Lot acre

Dwelling—No. of Bedrooms 4 Expansion Attic. (  ) No. Garbage Grinder (  )

Other \_\_\_\_\_ No. of persons \_\_\_\_\_ Showers ( )

Other fixtures \_\_\_\_\_

Town Water? no Type of Well Artesian

Design Flow 50 gallons per person per day. Total daily flow \_\_\_\_\_ gallons

Septic Tank—Liquid capacity 1200 gallons Dimensions: L \_\_\_\_\_ W \_\_\_\_\_ D \_\_\_\_\_

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

Disposal Bed—No. 1 Diameter 10x45 Depth below inlet \_\_\_\_\_ Total leaching area 450 sq. ft.

Dry Well—No. \_\_\_\_\_ Diameter \_\_\_\_\_ Depth below inlet \_\_\_\_\_ Dimensions: \_\_\_\_\_ x \_\_\_\_\_ x \_\_\_\_\_

Other: Distribution box (  ) No. \_\_\_\_\_ Dosing tank ( )

(Depth of Soil Line Below finished grade at foundation \_\_\_\_\_)

Percolation Test Results Performed by Drake Date 9/24/69

Test Pit No. 1 7 minutes per inch Depth of Test Pit 36"

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

Description of Soil fine sandy clay Depth to Ground Water not found

Will disposal area be filled? \_\_\_\_\_ Cut down? \_\_\_\_\_

(On reverse side or separate sheet, show plot plan with building. Include dimensions, distances from all boundaries. Show location of wells, streams, ledge, large trees, etc.)

AGREEMENT: The undersigned agrees to construct the aforescribed individual sewage disposal system in accordance with the provisions of Article XI of the Sanitary Code and regulations of the Amherst Board of Health. The undersigned further agrees not to place the system in operation until a Certificate of Compliance has been issued by this board of health.

TOPSOIL REMOVAL REQUIRED x Applied for by William J. Moody  
Application Approved by C.E. Drake with Drake Owner or builder

date 9/24/69  
date

Application Disapproved for the following reasons:

BOARD OF HEALTH, AMHERST, MASSACHUSETTS  
CERTIFICATE OF COMPLIANCE

THIS IS TO CERTIFY, That the individual Sewage Disposal System installed (X) or repaired ( ) by W.W. Clark at Lot 46 High Point Hill has been constructed in accordance with the provisions of

INSTALLER

Article XI of the State Sanitary Code as described in the application for Disposal Works Construction Permit No. 69-9 dated 9-24-69

The issuance of this certificate shall not be construed as a guarantee that the system will function satisfactorily.

DATE Apr. 1970 Inspector [Signature]

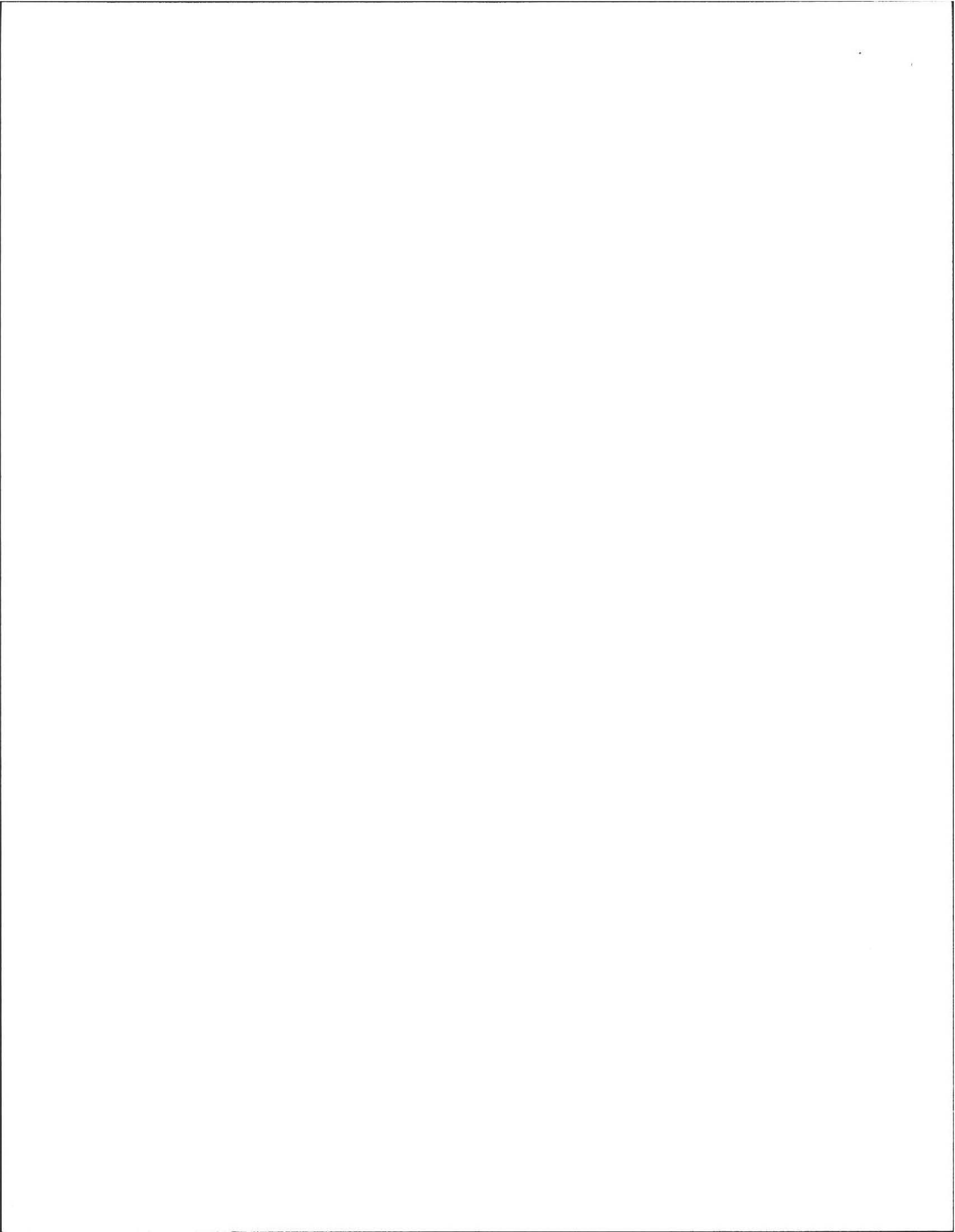
BOARD OF HEALTH, AMHERST, MASSACHUSETTS  
DISPOSAL WORKS CONSTRUCTION PERMIT

No. 69-9 Permission is hereby granted Roy industries to construct (X) or repair ( ) an Individual Sewage Disposal System at Lot 46 High point hill 21 High Point

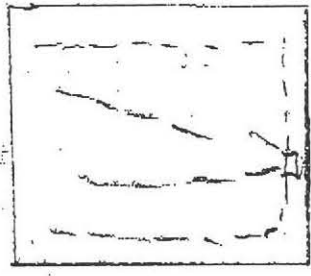
as shown on the application for Disposal Works Construction Permit No. 69-9

This permit is issued with the understanding that future alterations or additions will be made if necessary. This permit shall not be construed as permission to create or maintain any sewage nuisance and in the issuance of this permit the Board of Health assumes no responsibility for the future operation or maintenance of the system.

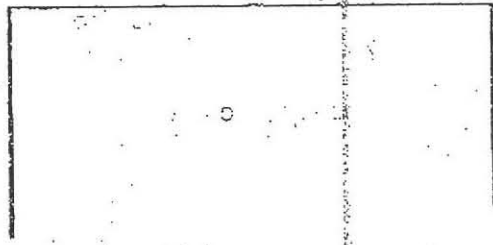
DATE 9/24/69 Board of Health



Surveys  
- 8737

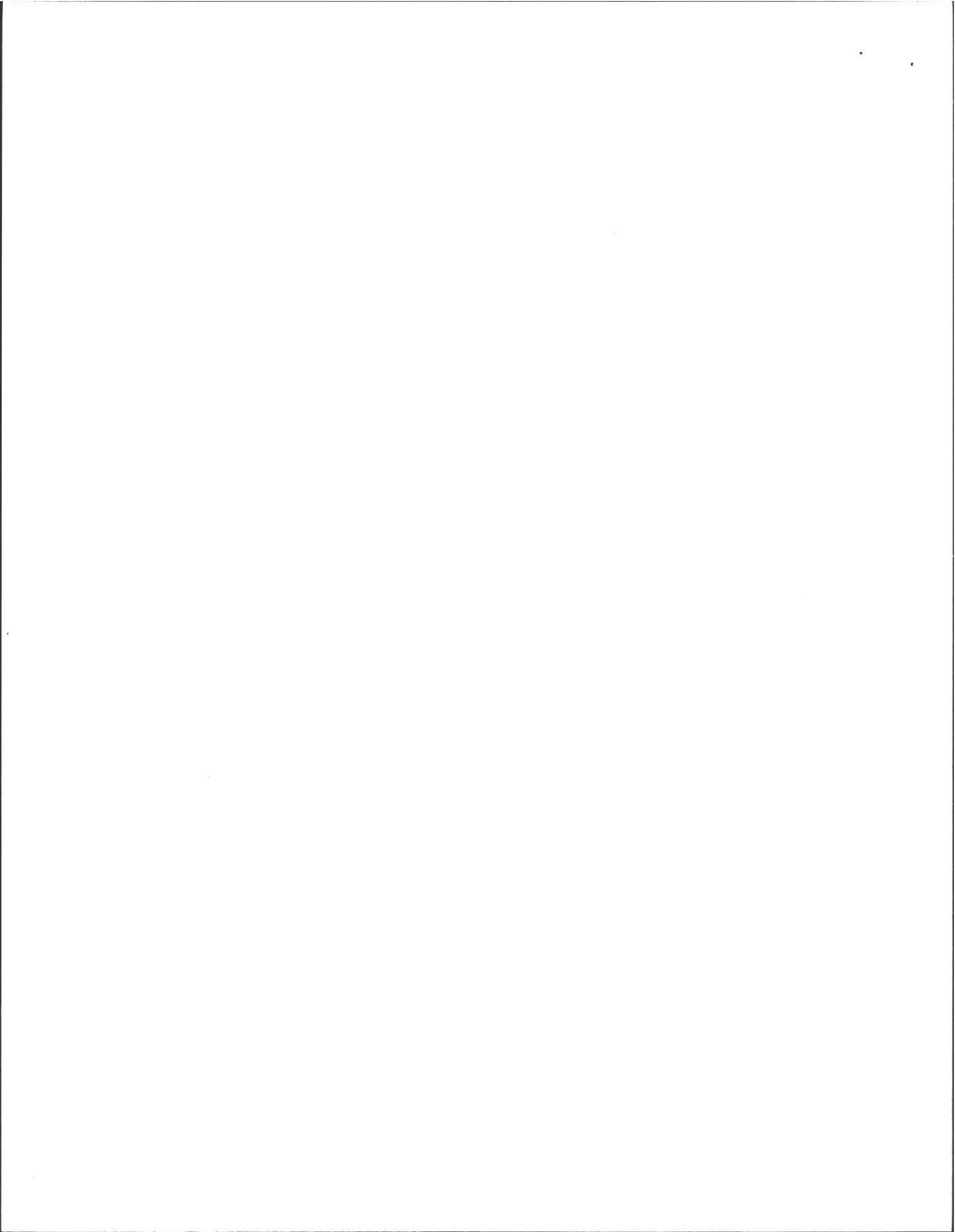


1200  
ST.



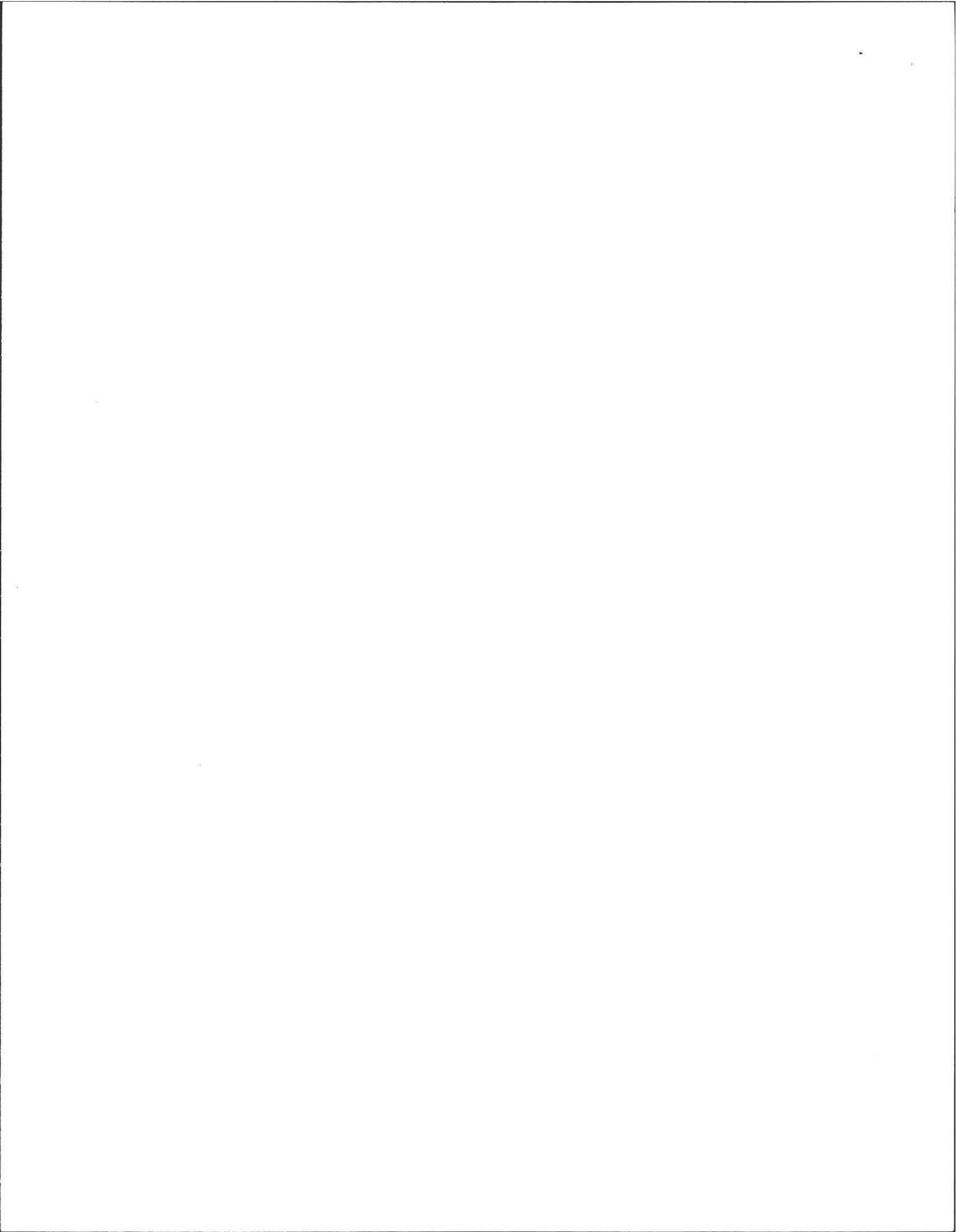
High Point Drive







Dist Box Corroded, (saturation over inverts)  
21 Highpoint Drive  
Amherst, MA  
03.24.2010







S. Tank Cover, (Inside staining, past)  
21 Highpoint Drive  
Amherst, MA  
03.24.2010





S. Tank outlet Baffle Cover,  
21 Highpoint Drive  
Amherst, MA  
03.24.2010



PERMITS/INSP PAYMENT RECPT#: 10097321  
\*\*\*TOWN OF AMHERST\*\*\*  
TOWN HALL  
4 BOLTWOOD AVENUE  
AMHERST MA 01002

DATE: 04/08/10 TIME: 14:18  
CLERK: courteman DEPT:

PAID BY:  
PAYMENT METH: CHECK 2500

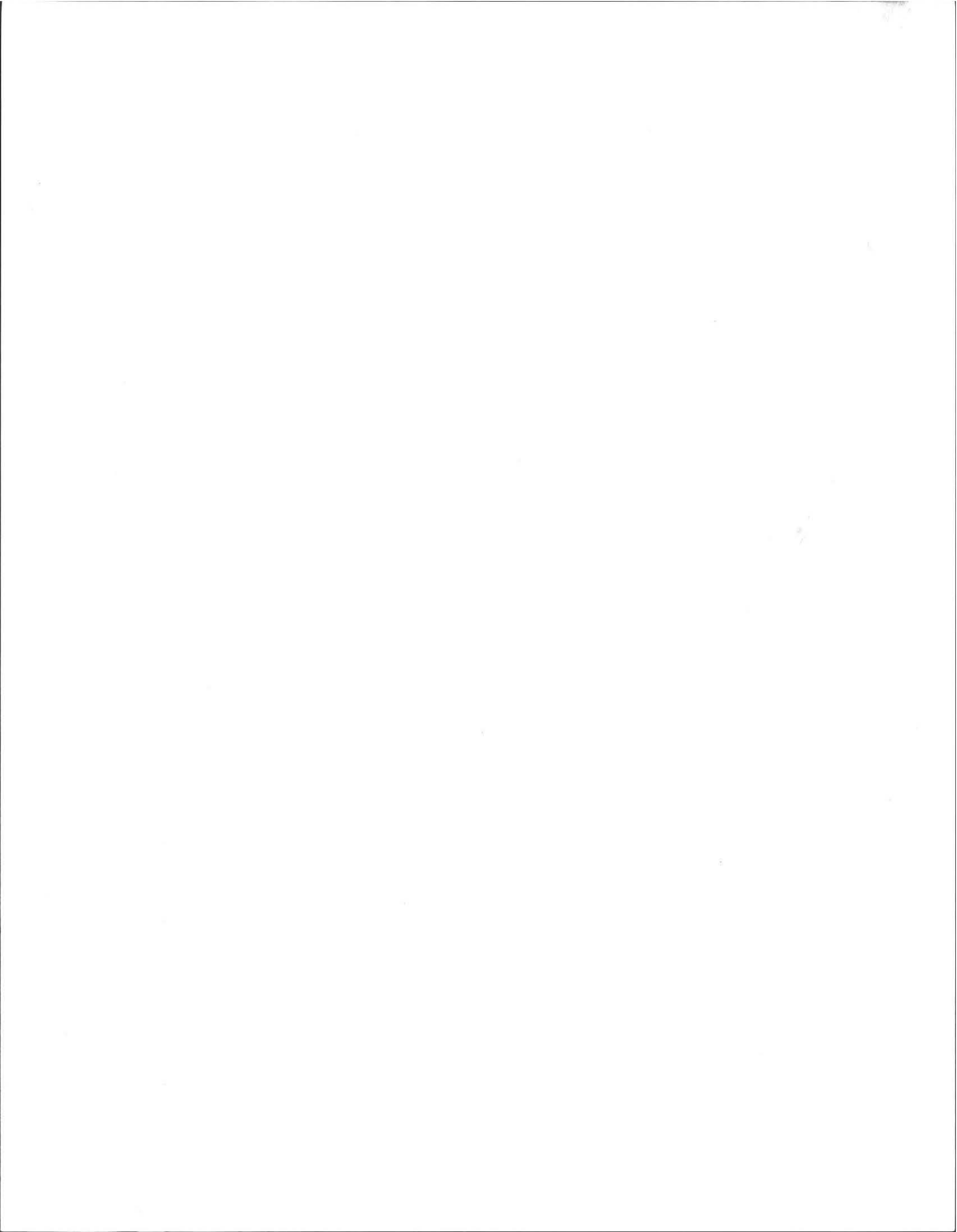
REFERENCE: A

AMT TENDERED: 300.00  
AMT APPLIED: 300.00  
CHANGE: .00

SITE ADDRESS: PETERFREUND

FEES:  
HEA011 PERCOLATIO 300.00

TOTAL PAID: 300.00



PERMITS/INSP PAYMENT      RECPT#: 10097321  
\*\*\*TOWN OF AMHERST\*\*\*  
TOWN HALL  
4 BOLTWOOD AVENUE  
AMHERST MA 01002

DATE: 04/08/10              TIME: 14:18  
CLERK: courteman            DEPT:

PAID BY:  
PAYMENT METH: CHECK      2500

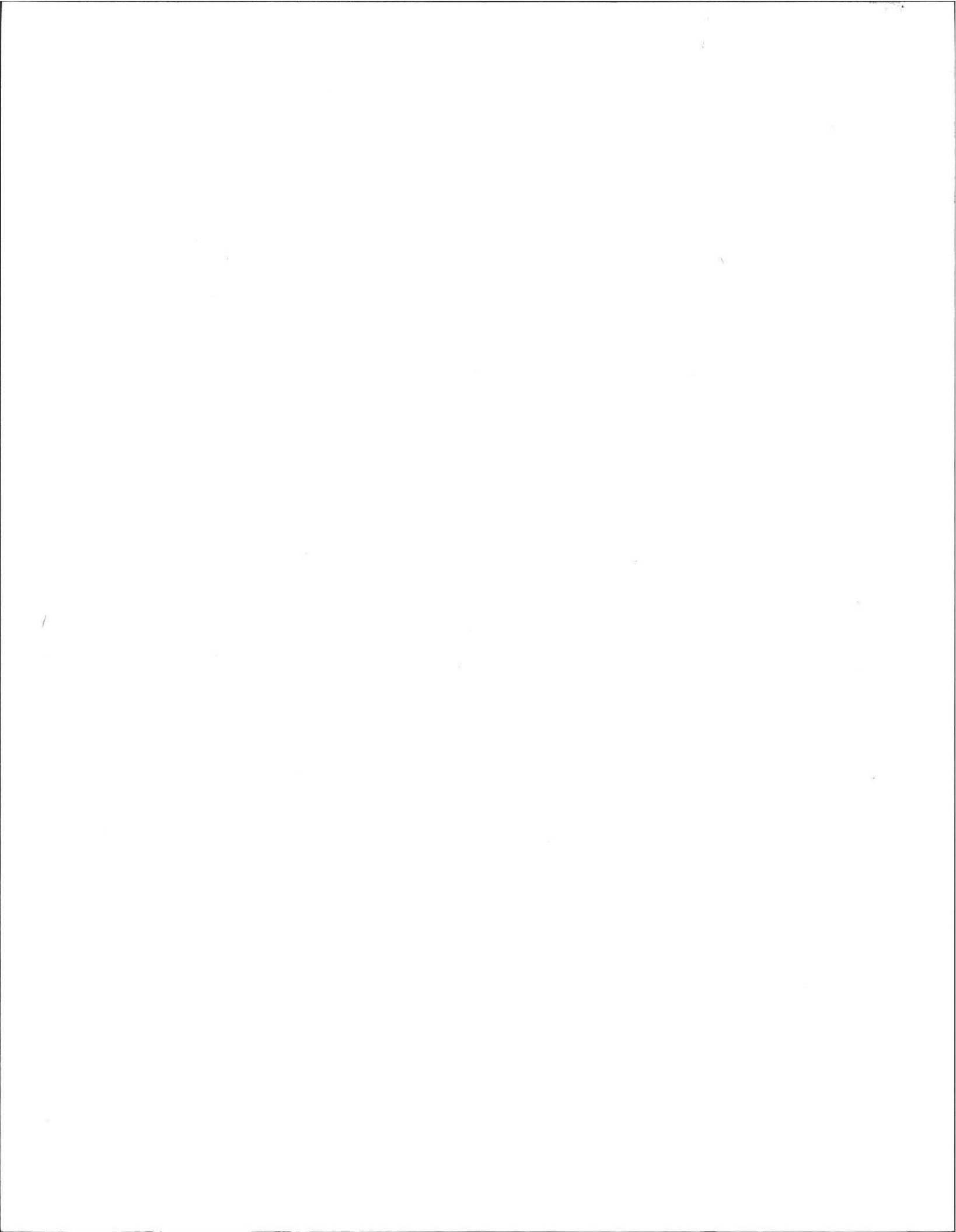
REFERENCE:            A

AMT TENDERED:            300.00  
AMT APPLIED:             300.00  
CHANGE:                    .00

SITE ADDRESS: PETERFREUND

FEEs:  
HEA011 PERCOLATIO                      300.00

TOTAL PAID:                      300.00





TYPE OR PRINT ONLY

**Well Completion Report**

<b>1. WELL LOCATION</b>	GPS (Required) North <u>42° 24.879</u> West <u>72° 29.823</u>
Address at Well Location: <u>21 Highpoint Dr</u>	Property Owner/Client: <u>Alan Peterfreund</u>
Subdivision Name: <u>High Point</u>	Mailing Address: <u>30 Boltwood Walk</u>
City/Town: <u>Amherst, MA 01002</u>	City/Town: <u>Amherst</u>
Assessors Map _____ Assessors Lot #: _____	NOTE: Assessors Map and Lot # mandatory if no street address available
Board of Health permit obtained: Yes <input checked="" type="checkbox"/> Not Required <input type="checkbox"/>	Permit Number _____ Date Issued _____

<b>2. WORK PERFORMED</b>	<b>3. WELL TYPE</b>	<b>4. DRILLING METHOD</b>	<b>6. CASING</b>
<input type="checkbox"/> D <input type="checkbox"/> C	<input type="checkbox"/> DM <input type="checkbox"/> ST	Overburden <input type="checkbox"/> <input type="checkbox"/> Bedrock <input type="checkbox"/> <input type="checkbox"/>	From (ft) To (ft) Type Thickness Diameter

5. WELL LOG		OVERBURDEN			Water Bearing Zone	Loss or Addition of Fluid	Drop in Drill Stem	Extra Fast or Slow Drill Rate
From (ft)	To (ft)	Code	Color	Comment				
					Y / N	Y / N	F / S	
					Y / N	Y / N	F / S	
					Y / N	Y / N	F / S	
					Y / N	Y / N	F / S	
					Y / N	Y / N	F / S	
					Y / N	Y / N	F / S	
					Y / N	Y / N	F / S	
					Y / N	Y / N	F / S	
					Y / N	Y / N	F / S	
					Y / N	Y / N	F / S	
					Y / N	Y / N	F / S	
					Y / N	Y / N	F / S	
					Y / N	Y / N	F / S	
					Y / N	Y / N	F / S	
					Y / N	Y / N	F / S	

7. SCREEN			
From (ft)	To (ft)	Type	Slot Size Diameter
		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	

8. ANNULAR SEAL/FILTER PACK/ABANDONMENT MTL.			
From (ft)	To (ft)	Material Description	Purpose
<u>285</u>	<u>0</u>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
		<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
		<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
		<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>

WELL LOG		BEDROCK		Water Bearing Zone	Drop in Drill Stem	Extra Large Chips	Extra Fast or Slow Drill Rate	Visible Rust Staining	Loss or Addition of Fluid	# of Fractures per foot
From (ft)	To (ft)	Code	Comment							
				Y / N	Y / N	F / S	Y / N	Y / N		
				Y / N	Y / N	F / S	Y / N	Y / N		
				Y / N	Y / N	F / S	Y / N	Y / N		
				Y / N	Y / N	F / S	Y / N	Y / N		
				Y / N	Y / N	F / S	Y / N	Y / N		
				Y / N	Y / N	F / S	Y / N	Y / N		
				Y / N	Y / N	F / S	Y / N	Y / N		
				Y / N	Y / N	F / S	Y / N	Y / N		
				Y / N	Y / N	F / S	Y / N	Y / N		
				Y / N	Y / N	F / S	Y / N	Y / N		
				Y / N	Y / N	F / S	Y / N	Y / N		
				Y / N	Y / N	F / S	Y / N	Y / N		
				Y / N	Y / N	F / S	Y / N	Y / N		

**9. SITE SKETCH**

10. WELL TEST DATA (ALL SECTIONS MANDATORY FOR PRODUCTION WELLS)						11. STATIC WATER LEVEL (ALL WELLS)		
Date	Method	Yield (GPM)	Time Pumped (hrs & min)	Pumping Level (Ft. BGS)	Time to Recover (hrs & min)	Recovery (Ft. BGS)	Date Measured	Depth Below Ground Surface (ft)

**12. PERMANENT PUMP (IF AVAILABLE)**

Pump Description     Horsepower \_\_\_\_\_

Pump Intake Depth \_\_\_\_\_ (ft) Nominal Pump Capacity \_\_\_\_\_ (gpm)

**13. ADDITIONAL WELL INFORMATION**

Developed  Fracture Enhancement

Disinfected  Surface Seal Type

**14. COMMENTS** Decommission well

Total Well Depth 285 Depth to Bedrock 4/K

**15. WELL DRILLER'S STATEMENT**

This well was drilled, altered, and/or abandoned under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge.

Driller: Shawn Best Supervising Driller Signature: [Signature] Registration #: 558

Firm: L. G. CUSHING & SONS, INC. Date Complete: 7/19/10 Rig Permit #: 1061

NOTE: Well Completion Reports must be filed by the registered well driller within 30 days of well completion.

# Well Completion Report Codes

## Section 2

Work Performed	Work Performed Code
Decommission	DC
Deepen	DP
Hydrofracture	HF
New Well	NW
Repair	RP
Replacement	RE

## Section 3

Well Type	Well Type Code
Cathodic Protection	CTPR
Domestic	DMST
Geoconstruction	GCON
Geothermal Closed Loop	GTCL
Geothermal Open Loop	GTOL
Industrial	INDS
Injection	INJC
Irrigation	IRRG
Monitoring	MONT
Public Water Supply	PBWS
Recovery	RCVR
Test Wells	TSTW

## Section 4

Drilling Method	Drilling Method Code
Air Hammer	AH
Air Rotary	AR
Auger	AG
Cable Tool	CT
Casing Advancement	CA
Core	CR
Direct Push	DP
Drive and Wash	DW
Dug	DG
Mud Rotary	MR
Reverse Rotary	RR
Sonic	SN

## Section 5

Overburden Lithology Name	Overburden (OB) Code	Overburden Color	Overburden Color Code	Bedrock Name	Bedrock (BR Code)
Artificial Fill	AF	Black	BL	Amphibolite	AM
Boulders	B	Bluish Gray	BG	Basalt	BS
Clay	CL	Brown	BR	Conglomerate/Breccia	CG/BR
Coarse Sand	CS	Dark Gray	DG	Diorite	DI
Cobbles	C	Greenish Gray	GG	Gabbro	GB
Fine Sand	FS	Light Gray	LG	Gneiss	GN
Fine to Coarse Sand	FCS	Reddish Brown	RB	Granite	GR
Gravel	G	Yellowish Brown	YB	Limestone	LS
Medium Sand	MS			Marble	MA
Organics	O			Quartzite	QZ
Sand & Gravel	SG			Rhyolite	RH
Silt	SI			Sandstone	SS
Silty Clay	SICL			Schist	SC
Silty Sand	SIS			Shale	SH
Silty Sand & Gravel	SISG			Slate/Phyllite	SL/PH
Till	T			Pegmatite	PM

## Section 6

Casing Type	Casing Type Code	Thickness	Thickness (NO CODE)
Certa-Lok	CTL	Schedule 5	
Fiberglass	FBG	Schedule 10	
Galvanized Pipe	GLP	Schedule 40	
HDPE	HDP	Schedule 80	
NSF Coated Steel	NCS	Schedule 160	
PVC	PVC	SDR 13.5	
Stainless Steel	SST	SDR 17	
Steel	STL	SDR 21	
		SDR 26	
		SDR 32.5	
		SDR 40	
		17#	
		19#	

## Section 7

Screen Type	Screen Code
Carbon Steel	CST
Continuous Wire PVC	CWP
Galvanized Wire Wrapped	GWW
Perforated Pipe	PFP
Pre-pack PVC	PPP
Pre-pack Stainless	PPS
Slotted PVC	SLP
Stainless Steel Vee Wire	SSV
Stainless Steel Well Point	SSP

## Section 8

Annular Seal/Filter Pack/Abandonment	Annular Seal/Filter Pack/Abandonment Material Code	Purpose	Purpose Code
Bentonite Chips/Pellets	BC	Fill	FL
Bentonite Grout	BG	Filter	FT
Cement/Bentonite Grout	CB	Seal	AS
Concrete	CT		
Sand	SD		
Native Material	NM		

## Section 10

Method	Method Code
Air Blow with Drill Stem	AB
Air Lift	AL
Bailing	BL
Constant Rate Pump	CR
Variable Rate Pump	VR
Slug	SG

## Section 12

Pump Description	Pump Description Code	Horsepower
3 Wire Variable Speed Submersible	3WVS	1/2 20
2 Wire Variable Speed Submersible	2WVS	3/4 25
2 Wire Constant Speed Submersible	2WSS	1 30
3 Wire Constant Speed Submersible	3WSS	1 1/2 40
Constant Speed Submersible Turbine	CSST	2 50
Variable Speed Submersible Turbine	VSST	3 60
Jet	JET	5 75
Line Shaft Turbine	LST	7 1/2 100
Centrifugal	CFNT	10 125

## Section 13

Surface Seal Type	Well Seal Type Code
Cement	CM
Cement/Bentonite	CB
Concrete	CT
None	NO

Massachusetts Department of Conservation and Recreation  
Office of Water Resources

159931

TYPE OR PRINT ONLY

**Well Completion Report**

<b>1. WELL LOCATION</b>		GPS (Required) North _____ West _____	
Address at Well Location: <u>21 High Point DR</u>		Property Owner/Client: <u>Alan Peterfreund</u>	
Subdivision Name: _____		Mailing Address: <u>30 Battwood Walk</u>	
City/Town: <u>Amherst, MA 01002</u>		City/Town: <u>Amherst, MA 01002</u>	
Assessors Map _____ Assessors Lot #: _____		NOTE: Assessors Map and Lot # mandatory if no street address available	
Board of Health permit obtained: Yes <input checked="" type="checkbox"/> Not Required <input type="checkbox"/>		Permit Number _____ Date Issued _____	

<b>2. WORK PERFORMED</b>		<b>3. WELL TYPE</b>		<b>4. DRILLING METHOD</b>		<b>6. CASING</b>			
<input type="checkbox"/> N <input type="checkbox"/> W <input type="checkbox"/> D <input type="checkbox"/> M <input type="checkbox"/> S <input type="checkbox"/> T		<input checked="" type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D		<input checked="" type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D		From (ft) To (ft) Type Thickness Diameter <u>+2.61</u> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> 19" 6"			

<b>5. WELL LOG</b>			<b>OVERBURDEN</b>			Water Bearing Zone	Loss or Addition of Fluid	Drop in Drill Stem	Extra Fast or Slow Drill Rate	<b>7. SCREEN</b>		
<b>LITHOLOGY</b>			Code	Color	Comment					From (ft) To (ft) Type Slot Size Diameter		
From (ft)	To (ft)											
10	7	SG	BR			Y/N	Y/N	F/S				
						Y/N	Y/N	F/S				
						Y/N	Y/N	F/S				
						Y/N	Y/N	F/S				
						Y/N	Y/N	F/S				
						Y/N	Y/N	F/S				
						Y/N	Y/N	F/S				

<b>8. ANNULAR SEAL/FILTER PACK/ABANDONMENT MTL.</b>			From (ft)	To (ft)	Material Description	Purpose

<b>WELL LOG</b>		<b>BEDROCK</b>		Water Bearing Zone	Drop in Drill Stem	Extra Large Chips	Extra Fast or Slow Drill Rate	Visible Rust Staining	Loss or Addition of Fluid	# of Fractures per foot	<b>9. SITE SKETCH</b>	
<b>LITHOLOGY</b>		Code	Comment									
From (ft)	To (ft)											
7	30	SH	<u>weathered</u>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		
30	100	SH		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		
100	200	SH		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		
200	300	SC		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		
300	400	SC		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		
400	500	SC		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		
500	600	SC		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		
600	700	SC		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		

<b>10. WELL TEST DATA (ALL SECTIONS MANDATORY FOR PRODUCTION WELLS)</b>							<b>11. STATIC WATER LEVEL (ALL WELLS)</b>	
Date	Method	Yield (GPM)	Time Pumped (hrs & min)	Pumping Level (Ft. BGS)	Time to Recover (hrs & min)	Recovery (Ft. BGS)	Date Measured	Depth Below Ground Surface (ft)
<u>6/4/10</u>	<u>Air</u>	<u>1 1/4</u>	<u>2:00</u>	<u>700'</u>	<u>12:00</u>	<u>200'</u>	<u>6/4/10</u>	<u>60'</u>

<b>12. PERMANENT PUMP (IF AVAILABLE)</b>					<b>13. ADDITIONAL WELL INFORMATION</b>				
Pump Description _____ Horsepower _____					Developed <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Fracture Enhancement <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>				
Pump Intake Depth _____ (ft) Nominal Pump Capacity _____ (gpm)					Disinfected <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Surface Seal Type <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>				
<b>14. COMMENTS</b> <u>Pump by others</u>					Total Well Depth <u>700</u> Depth to Bedrock <u>7</u>				

<b>15. WELL DRILLER'S STATEMENT</b>		This well was drilled, altered, and/or abandoned under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge.	
Driller: <u>M.O. Ke Clair</u>	Supervising Driller Signature: <u>[Signature]</u>	Registration #: <u>5610</u>	
Firm: <u>L. G. CUSHING &amp; SONS, INC.</u>	Date Complete: <u>6/13/10</u>	Rig Permit #: <u>0601</u>	

NOTE: Well Completion Reports must be filed by the registered well driller within 30 days of well completion.

# Well Completion Report Codes

## Section 2

Work Performed	Work Performed Code
Decommission	DC
Deepen	DP
Hydrofracture	HF
New Well	NW
Repair	RP
Replacement	RE

## Section 3

Well Type	Well Type Code
Cathodic Protection	CTPR
Domestic	DMST
Geoconstruction	GCON
Geothermal Closed Loop	GTCL
Geothermal Open Loop	GTOL
Industrial	INDS
Injection	INJC
Irrigation	IRRG
Monitoring	MONT
Public Water Supply	PBWS
Recovery	RCVR
Test Wells	TSTW

## Section 4

Drilling Method	Drilling Method Code
Air Hammer	AH
Air Rotary	AR
Auger	AG
Cable Tool	CT
Casing Advancement	CA
Core	CR
Direct Push	DP
Drive and Wash	DW
Dug	DG
Mud Rotary	MR
Reverse Rotary	RR
Sonic	SN

## Section 5

Overburden Lithology Name	Overburden (OB) Code	Overburden Color	Overburden Color Code	Bedrock Name	Bedrock (BR Code)
Artificial Fill	AF	Black	BL	Amphibolite	AM
Boulders	B	Bluish Gray	BG	Basalt	BS
Clay	CL	Brown	BR	Conglomerate/Breccia	CG/BR
Coarse Sand	CS	Dark Gray	DG	Diorite	DI
Cobbles	C	Greenish Gray	GG	Gabbro	GB
Fine Sand	FS	Light Gray	LG	Gneiss	GN
Fine to Coarse Sand	FCS	Reddish Brown	RB	Granite	GR
Gravel	G	Yellowish Brown	YB	Limestone	LS
Medium Sand	MS			Marble	MA
Organics	O			Quartzite	QZ
Sand & Gravel	SG			Rhyolite	RH
Silt	SI			Sandstone	SS
Silty Clay	SICL			Schist	SC
Silty Sand	SIS			Shale	SH
Silty Sand & Gravel	SISG			Slate/Phyllite	SL/PH
Till	T			Pegmatite	PM

## Section 6

Casing Type	Casing Type Code	Thickness	Thickness (NO CODE)
Certa-Lok	CTL	Schedule 5	
Fiberglass	FBG	Schedule 10	
Galvanized Pipe	GLP	Schedule 40	
HDPE	HDP	Schedule 80	
NSF Coated Steel	NCS	Schedule 160	
PVC	PVC	SDR 13.5	
Stainless Steel	SST	SDR 17	
Steel	STL	SDR 21	
		SDR 26	
		SDR 32.5	
		SDR 40	
		17#	
		19#	

## Section 7

Screen Type	Screen Code
Carbon Steel	CST
Continuous Wire PVC	CWP
Galvanized Wire Wrapped	GWV
Perforated Pipe	PFP
Pre-pack PVC	PPP
Pre-pack Stainless	PPS
Slotted PVC	SLP
Stainless Steel Vee Wire	SSV
Stainless Steel Well Point	SSP

## Section 8

Annular Seal/Filter Pack/Abandonment	Annular Seal/Filter Pack/Abandonment Material Code	Purpose	Purpose Code
Bentonite Chips/Pellets	BC	Fill	FL
Bentonite Grout	BG	Filter	FT
Cement/Bentonite Grout	CB	Seal	AS
Concrete	CT		
Sand	SD		
Native Material	NM		

## Section 10

Method	Method Code
Air Blow with Drill Stem	AB
Air Lift	AL
Bailing	BL
Constant Rate Pump	CR
Variable Rate Pump	VR
Slug	SG

## Section 12

Pump Description	Pump Description Code	Horsepower
3 Wire Variable Speed Submersible	3WVS	1/2 20
2 Wire Variable Speed Submersible	2WVS	3/4 25
2 Wire Constant Speed Submersible	2WSS	1 30
3 Wire Constant Speed Submersible	3WSS	1 1/2 40
Constant Speed Submersible Turbine	CSST	2 50
Variable Speed Submersible Turbine	VSST	3 60
Jet	JET	5 75
Line Shaft Turbine	LST	7 1/2 100
Centrifical	CENT	10 125
		15 150
		20 200

## Section 13

Surface Seal Type	Well Seal Type Code
Cement	CM
Cement/Bentonite	CB
Concrete	CT
None	NO





- 21F Site Investigations
  - Subsurface Investigations
  - Pollution Remediation
  - LSP on Staff
  - Forensic Septic Investigations
- April 15, 2010**



- Regulatory Compliance
- Recycling and Solid Waste
- Second Opinions

Amherst Conservation Commission  
Town Hall  
Amherst, Massachusetts 01002

**RE (Petefreund Lot Septic System Repair & new well)  
21 Highpoint Drive, Amherst, MA  
Determination of Applicability,  
CSEC Proj., No. 110-3323-0324**

Enclosed please find the **Septic Repair & well Plan** for the subsurface Disposal System for the above mentioned property. The existing system will be disconnected. **The no work line of 70 feet** is to be delineated using properly buried (6"), staked silt fence with bale backing. All above noted locations are referenced on the Figure 1: Site Locus Map and Figure 2: Site Construction Plan, attached.

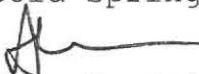
The Board of Health been contacted for proper septic/well permits. Wetland delineation was based on our own observation of typical hydrophytic species, topography and hydrology observed in the field on April 2010. The plan intention is to utilize the best part of the property with the least disturbance of the resource area.

Mitigative measures include a silt fence that establishes a no work zone (70') as well as follow-up mulching and seeding of wetland buffer & backyard margins. The leachfield exceeds the Title V (310 CMR 15.00) setback of 50 feet (100+ feet noted). The work area in the buffer zone would be limited to less than **500 square feet**. Only fill and regrading and resultant covering, seeding and mulching will occur in the buffer zone as noted.

Please note that because of the "limited impact" near this area, our experience with most similar situations is that this type of repair work can be properly completed as shown with the noted mitigative measures followed as contingencies. The attached plan and form has been filed with the WRO-DEP. Please notify us at your earliest convenience of your next hearing date and time with sufficient time for abutter notices and a legal add as needed.

Should you have any questions, please contact me.

Sincerely,  
Cold Spring Environmental Consultants, Inc.

  
Alan E. Weiss, M.S.  
Principal Hydrogeologist  
Registered Sanitarian Lic. #933





**WPA Form 1- Request for Determination of Applicability**  
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

**A. General Information**

**Important:**  
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Applicant:

Alan Peterfreund		
Name	E-Mail Address (if applicable)	
30 Boltwood walk		
Mailing Address		
Amherst	MA	01002
City/Town	State	Zip Code
413-256-6169		
Phone Number	Fax Number (if applicable)	

2. Representative (if any):

Cold Spring Environmental, Inc.		
Firm		
Alan E. Weiss, M.S.		
Contact Name	aeweiss@charter.net	
E-Mail Address (if applicable)		
350 Old Enfield Road		
Mailing Address		
Belchertown	MA	01007
City/Town	State	Zip Code
413-323-5957		
Phone Number	413-323-4916	
Fax Number (if applicable)		

**B. Determinations**

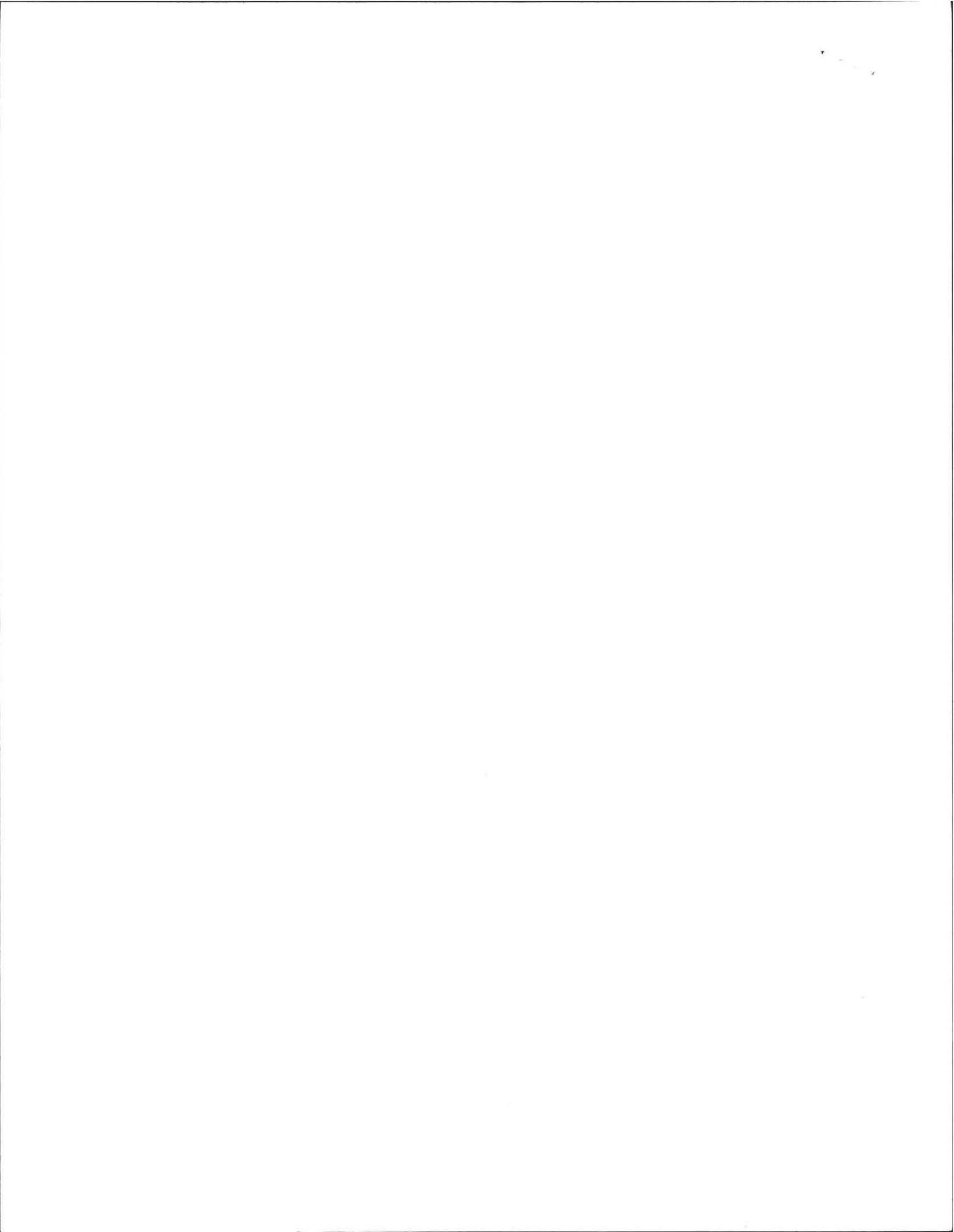
1. I request the Amherst make the following determination(s). Check any that apply:  
Conservation Commission

- a. whether the **area** depicted on plan(s) and/or map(s) referenced below is an area subject to jurisdiction of the Wetlands Protection Act.
- b. whether the **boundaries** of resource area(s) depicted on plan(s) and/or map(s) referenced below are accurately delineated.
- c. whether the **work** depicted on plan(s) referenced below is subject to the Wetlands Protection Act.
- d. whether the area and/or work depicted on plan(s) referenced below is subject to the jurisdiction of any **municipal wetlands ordinance** or **bylaw** of:

Amherst  
Name of Municipality

- e. whether the following **scope of alternatives** is adequate for work in the Riverfront Area as depicted on referenced plan(s).

N/A







**WPA Form 1- Request for Determination of Applicability**  
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

**C. Project Description**

1. a. Project Location (use maps and plans to identify the location of the area subject to this request):

21 Highpoint Drive	Amherst
Street Address	City/Town
Map 6b,	78
Assessors Map/Plat Number	Parcel/Lot Number

b. Area Description (use additional paper, if necessary):

The area consists of work conducted for the replacment of a leachfield and a new well at an existing dwelling. All work on the leach area is beyond 100 foot of the wetland & (Meets required Title 5 setbacks >100 ft.). (Silt fence will be installed as shown (70 ft. No work line) due to access were the septic tank and pump chamber are located, all work will be performed upgradient of the silt fence. No other significant area within the Buffer zone will be disturbed. This plan follows the attached plan also submitted to the Board of Health. The total area of Buffer to be disturbed <500 SF.

c. Plan and/or Map Reference(s):

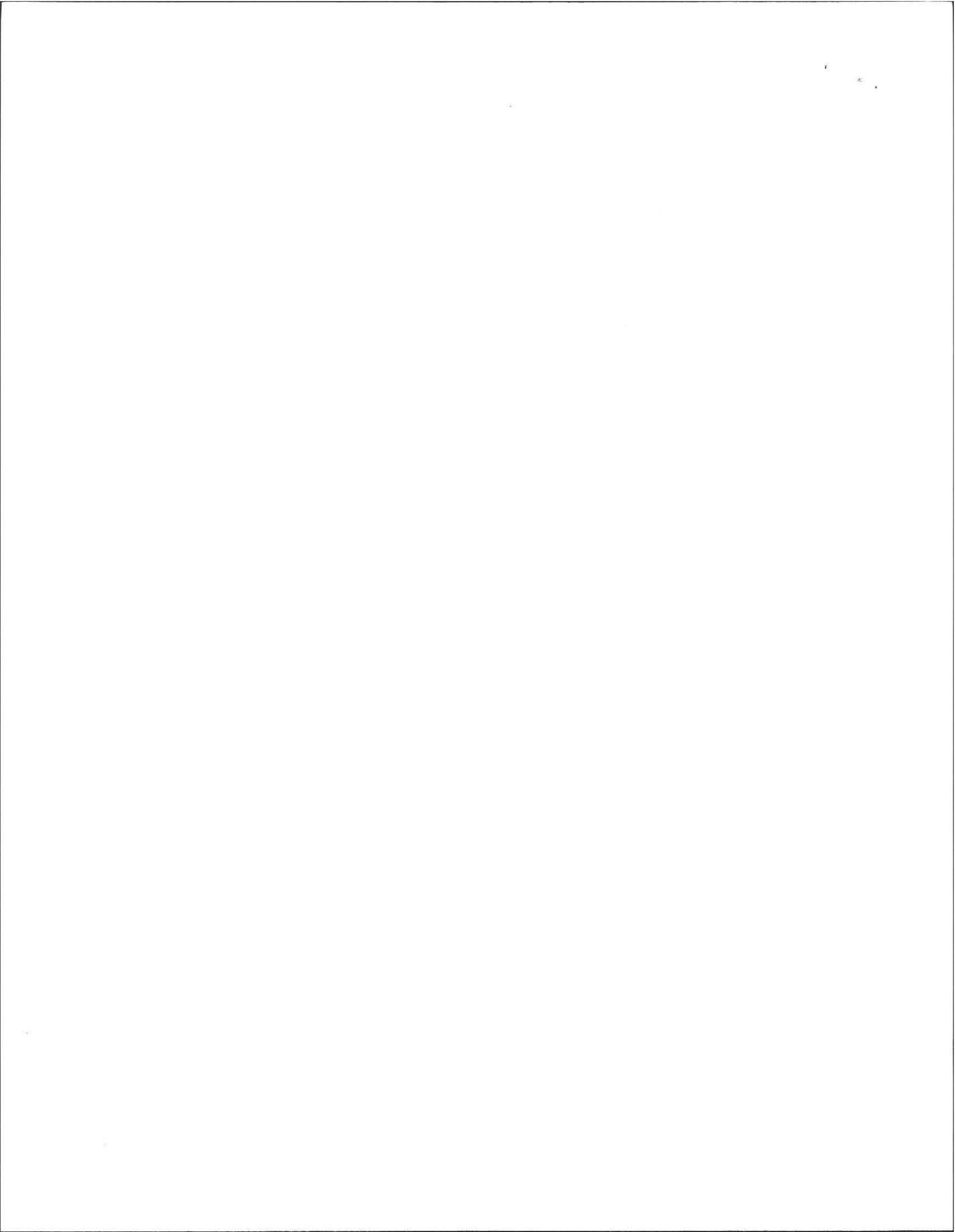
Septic Repair Plan, (Attachment I)	4/10/10
Title	Date

2. a. Work Description (use additional paper and/or provide plan(s) of work, if necessary):

Work will include the proper placement of siltation fencing prior to the start of work. Only minimal regrading is required between the leachfield on the edge of the Buffer area. Work areas will be completed with seeding and mulching. The limit of work/silt fence is noted as 70 foot, at its closest.

b. Identify provisions of the Wetlands Protection Act or regulations which may exempt the applicant from having to file a Notice of Intent for all or part of the described work (use additional paper, if necessary).

See above.





**WPA Form 1- Request for Determination of Applicability**  
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

**C. Project Description (cont.)**

3. a. If this application is a Request for Determination of Scope of Alternatives for work in the Riverfront Area, indicate the one classification below that best describes the project.

- Single family house on a lot recorded on or before 8/1/96
- Single family house on a lot recorded after 8/1/96
- Expansion of an existing structure on a lot recorded after 8/1/96
- Project, other than a single family house or public project, where the applicant owned the lot before 8/7/96
- New agriculture or aquaculture project
- Public project where funds were appropriated prior to 8/7/96
- Project on a lot shown on an approved, definitive subdivision plan where there is a recorded deed restriction limiting total alteration of the Riverfront Area for the entire subdivision
- Residential subdivision; institutional, industrial, or commercial project
- Municipal project
- District, county, state, or federal government project
- Project required to evaluate off-site alternatives in more than one municipality in an Environmental Impact Report under MEPA or in an alternatives analysis pursuant to an application for a 404 permit from the U.S. Army Corps of Engineers or 401 Water Quality Certification from the Department of Environmental Protection.

b. Provide evidence (e.g., record of date subdivision lot was recorded) supporting the classification above (use additional paper and/or attach appropriate documents, if necessary.)

N/A  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_





**WPA Form 1- Request for Determination of Applicability**  
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

**D. Signatures and Submittal Requirements**

I hereby certify under the penalties of perjury that the foregoing Request for Determination of Applicability and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge.

I further certify that the property owner, if different from the applicant, and the appropriate DEP Regional Office (see Appendix A) were sent a complete copy of this Request (including all appropriate documentation) simultaneously with the submittal of this Request to the Conservation Commission.

Failure by the applicant to send copies in a timely manner may result in dismissal of the Request for Determination of Applicability.

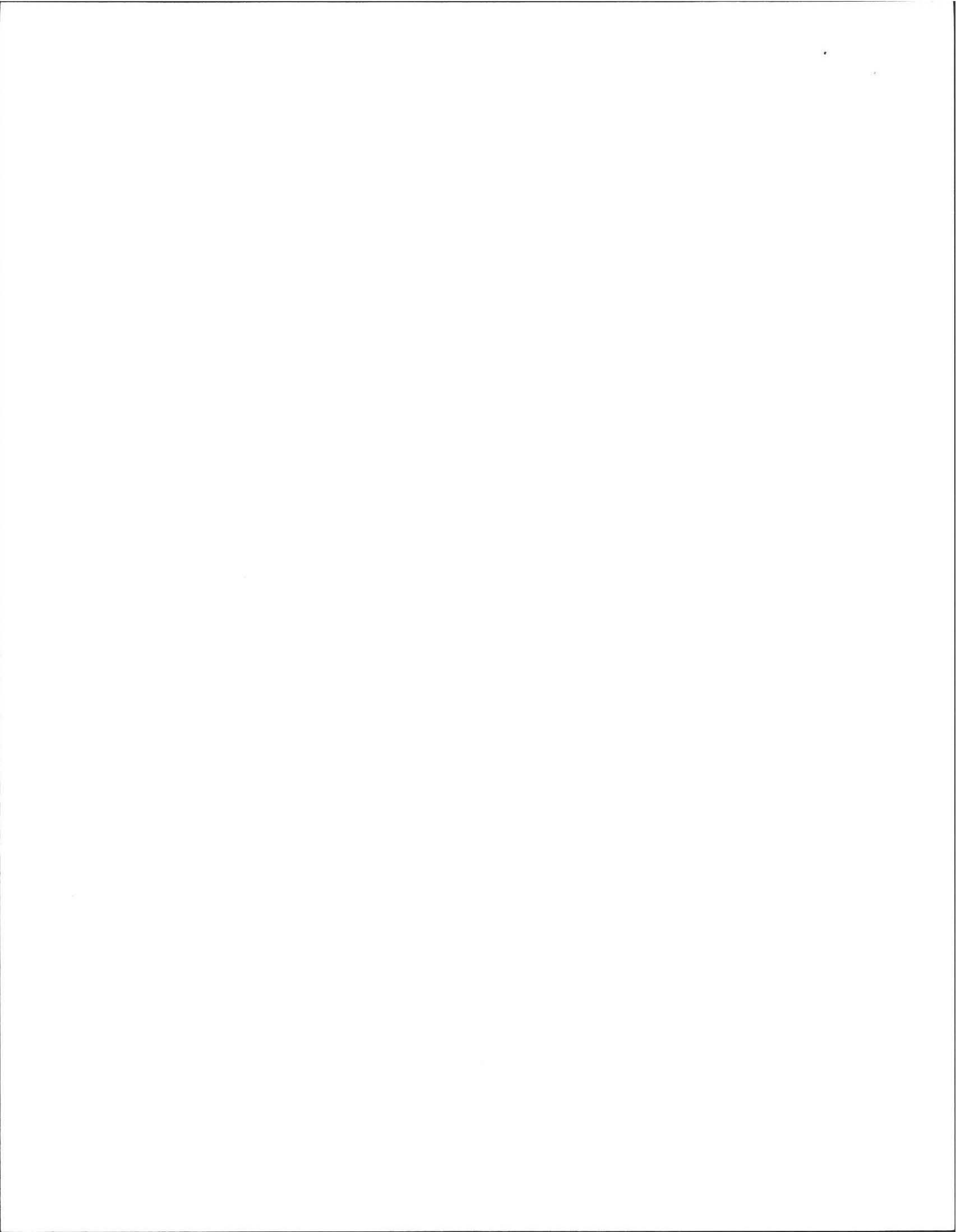
Name and address of the property owner:

Alan Peterfreund  
Name  
30 Boltwood walk  
Mailing Address  
Amherst  
City/Town  
MA 01002  
State Zip Code

Signatures:

I also understand that notification of this Request will be placed in a local newspaper at my expense in accordance with Section 10.05(3)(b)(1) of the Wetlands Protection Act regulations.

Signature of Applicant 4/ /2010  
Date  
Signature of Representative (if any) 4/ /2010  
Date

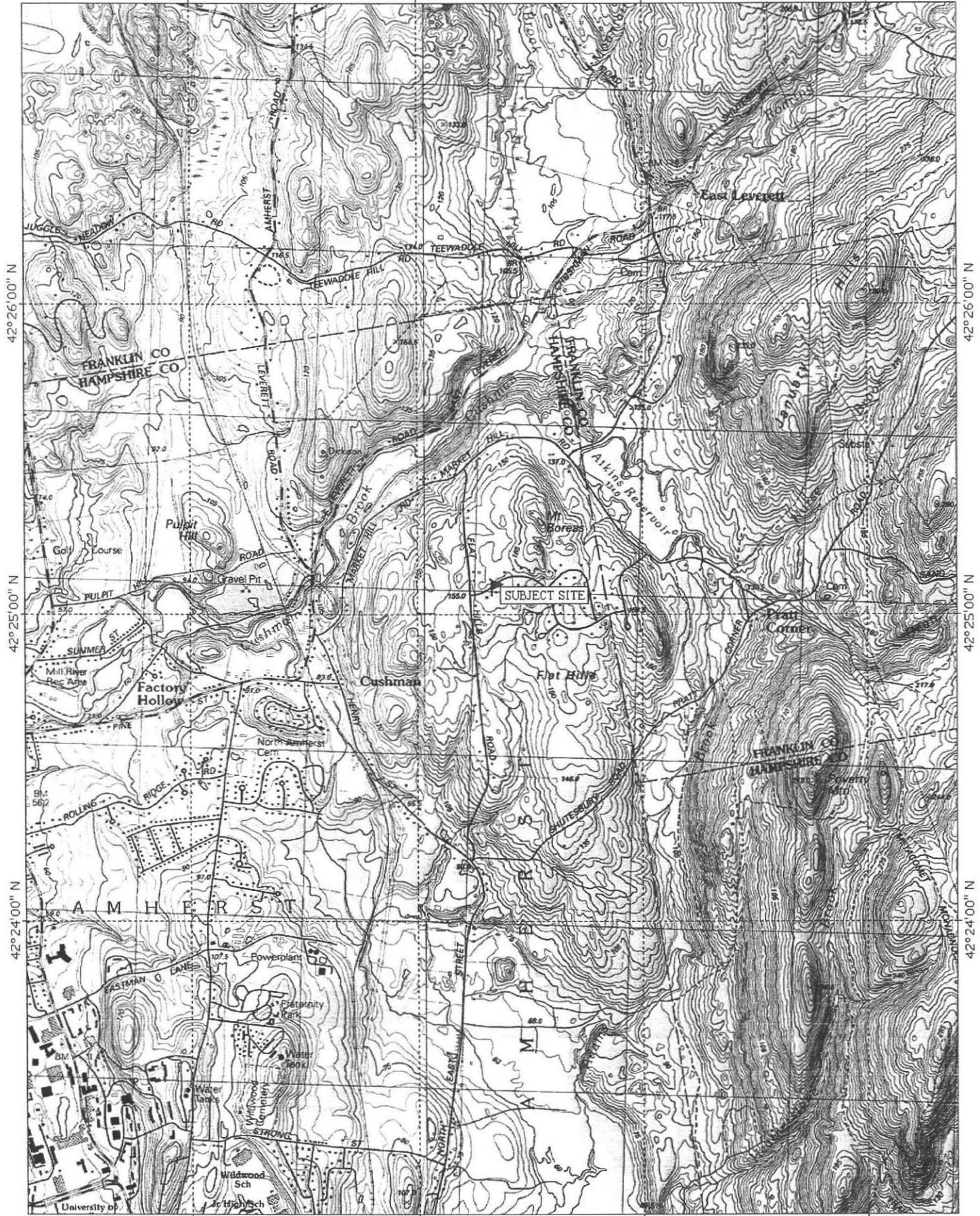


72°31'00" W

TOPO! map printed on 04/15/10 from "Northeast.tpo" and "Untitled.tpg"  
72°30'00" W

72°29'00" W

WGS84 72°28'00" W



42°26'00" N

42°26'00" N

42°25'00" N

42°25'00" N

42°24'00" N

42°24'00" N

72°31'00" W

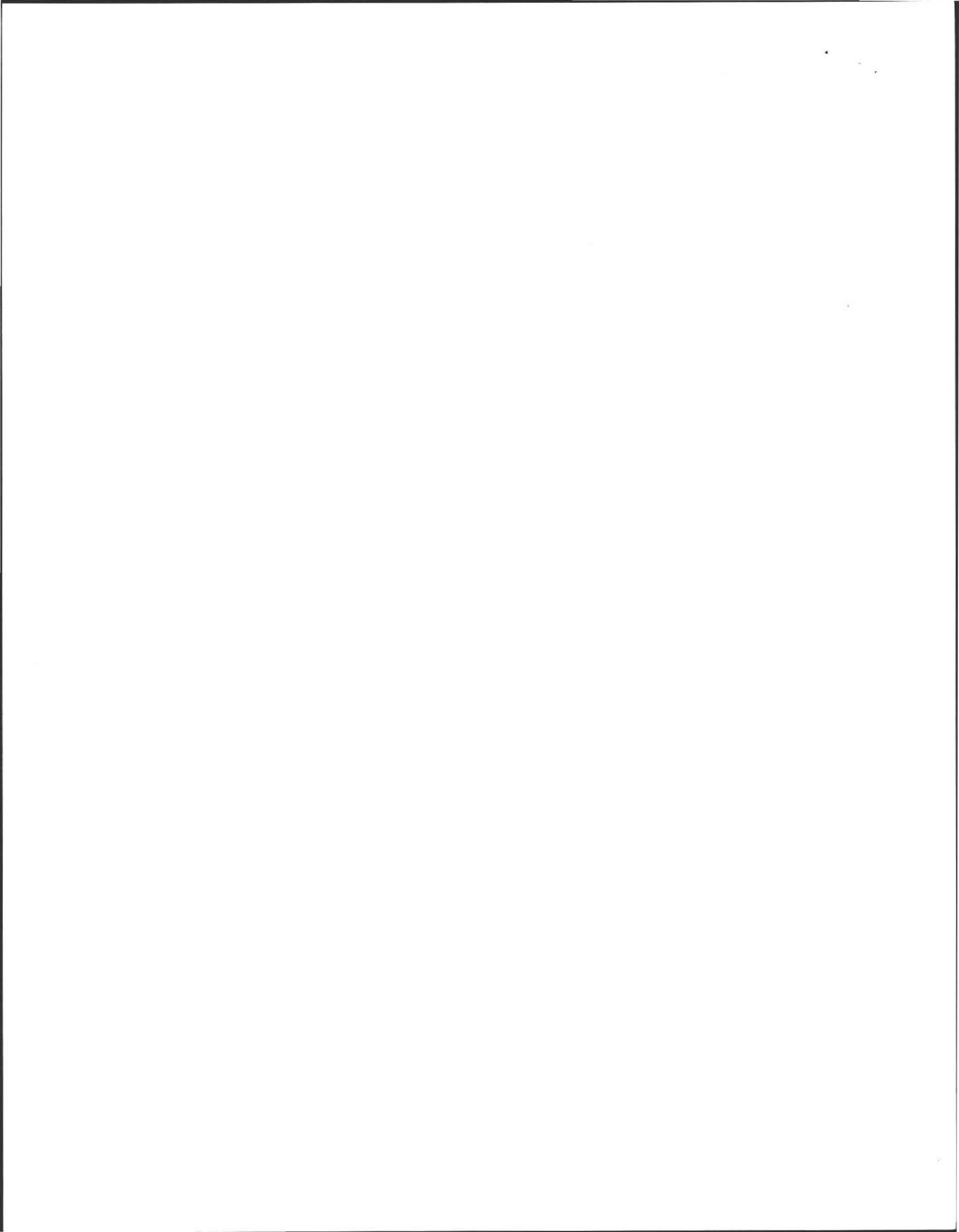
72°30'00" W

72°29'00" W

WGS84 72°28'00" W



Printed from TOPO! ©2001 National Geographic Holdings (www.topo.com)





# Abatios List



- Property Map
- Property Lines
- Hydrographic Propert
- Right of Way Line
- Town Boundary
- Other Property Lines
- Former Property Line
- Subdivision Lot Line
- Easements
- Basemap
  - Trails
  - Rail Lines
  - Structures
  - Building
  - Foundation or in const
  - Outbuilding or Miscell
  - Deck, Porch, Stairs or
  - Mobile home, Trailer
  - Swimming Pool
  - Building Ruins
  - Water storage tank
  - Rivers and Streams
  - Streams
  - Minor Culverts
  - Hydro Connector
  - Headwalls, Floodwalls
  - Landcover
  - Brush and scrub vege
  - Tree and forest veget
  - Cultivated field
  - Gravel pile
  - Quarry
  - Misc Impervious Surfs
  - Parking
  - Parking Paved
  - Parking Unpaved
  - Driveways
  - Driveway Paved
  - Driveway Unpaved
- Sidewalks
  - Paved street polygons
  - Unpaved street polyg
  - Bridges
  - Bridge decking and str
  - Foot Bridge
  - Rail Bridge

Horizontal Datum: MA Stateplane Coordinate System.  
 Zone 4151, Datum NAD83, Feet.  
 Vertical Datum: NAVD83, Feet.

Planimetric & topographic basemap features compiled at 1"=40' scale from April, 2009 Aerial Photography. Parcels compiled to match the basemap; revisions are ongoing.

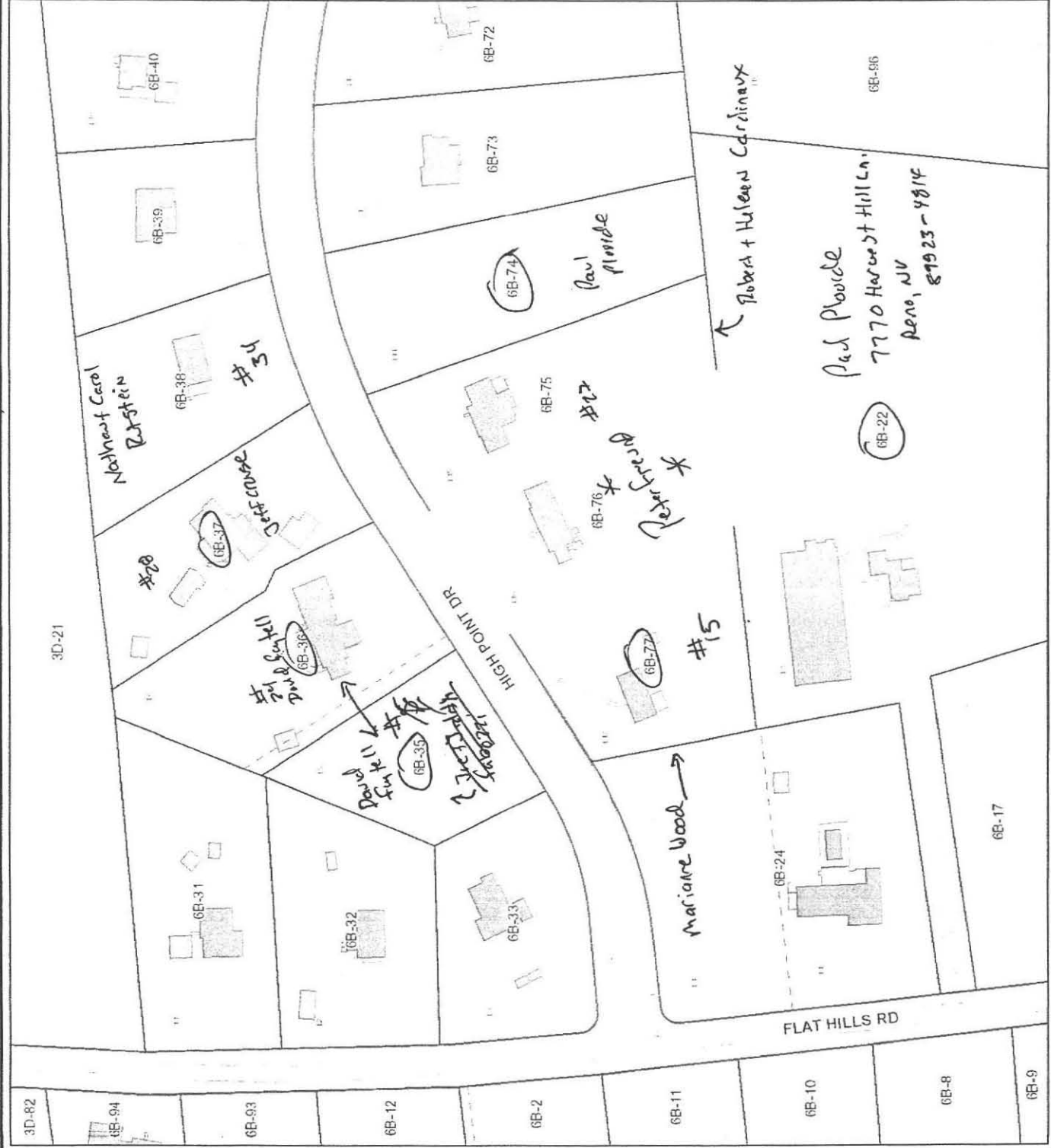
The information depicted on this map is for planning purposes only. It may not be adequate for legal boundary definition, regulatory interpretation, or property conveyance purposes. Utility structures and underground utility locations are approximate and require field verification.

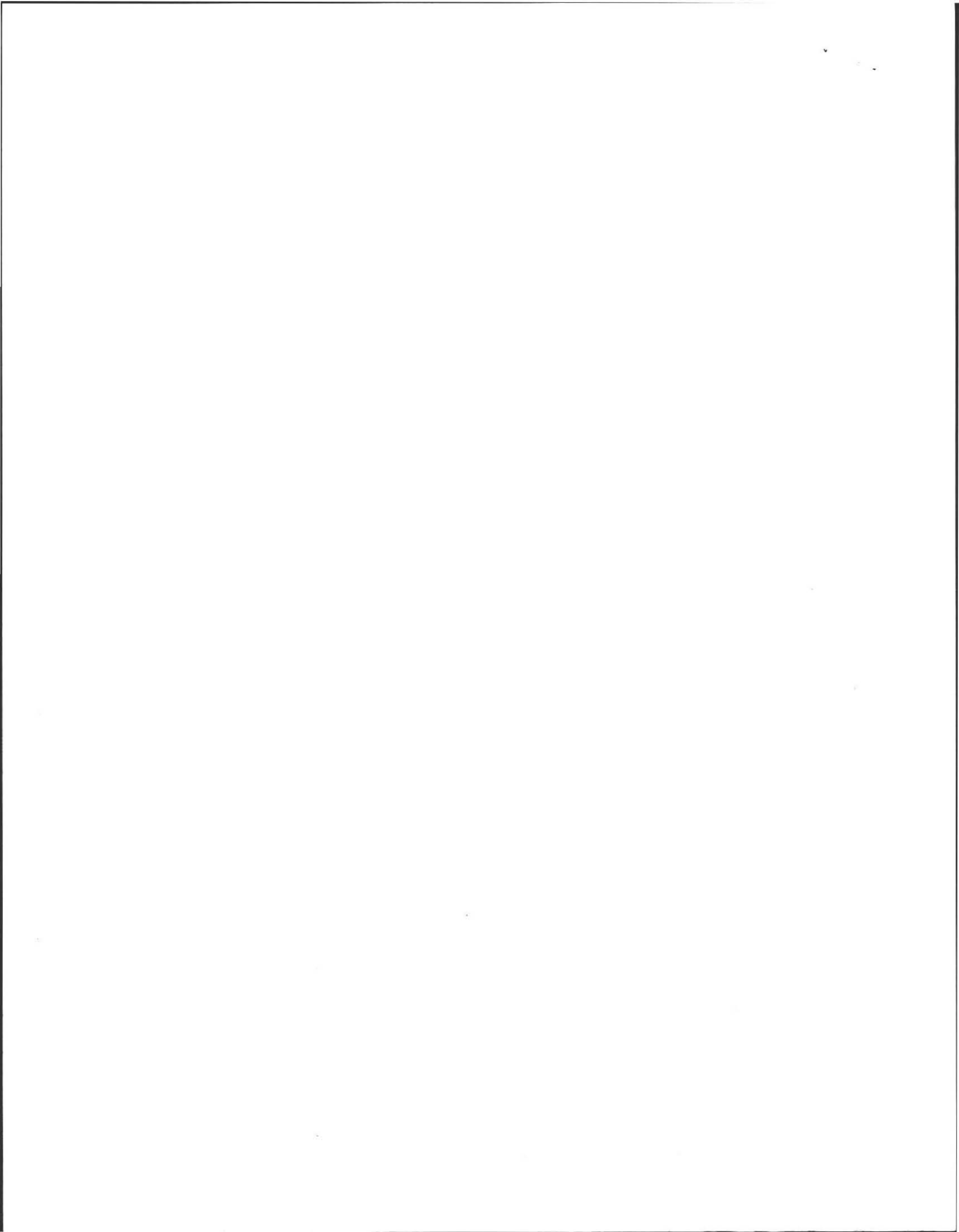
THE TOWN OF AMHERST MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, CONCERNING THE ACCURACY, RELIABILITY, OR SUITABILITY OF THESE DATA. THE TOWN OF AMHERST DOES NOT ASSUME ANY LIABILITY ASSOCIATED WITH THE USE OR MISUSE OF THIS INFORMATION.

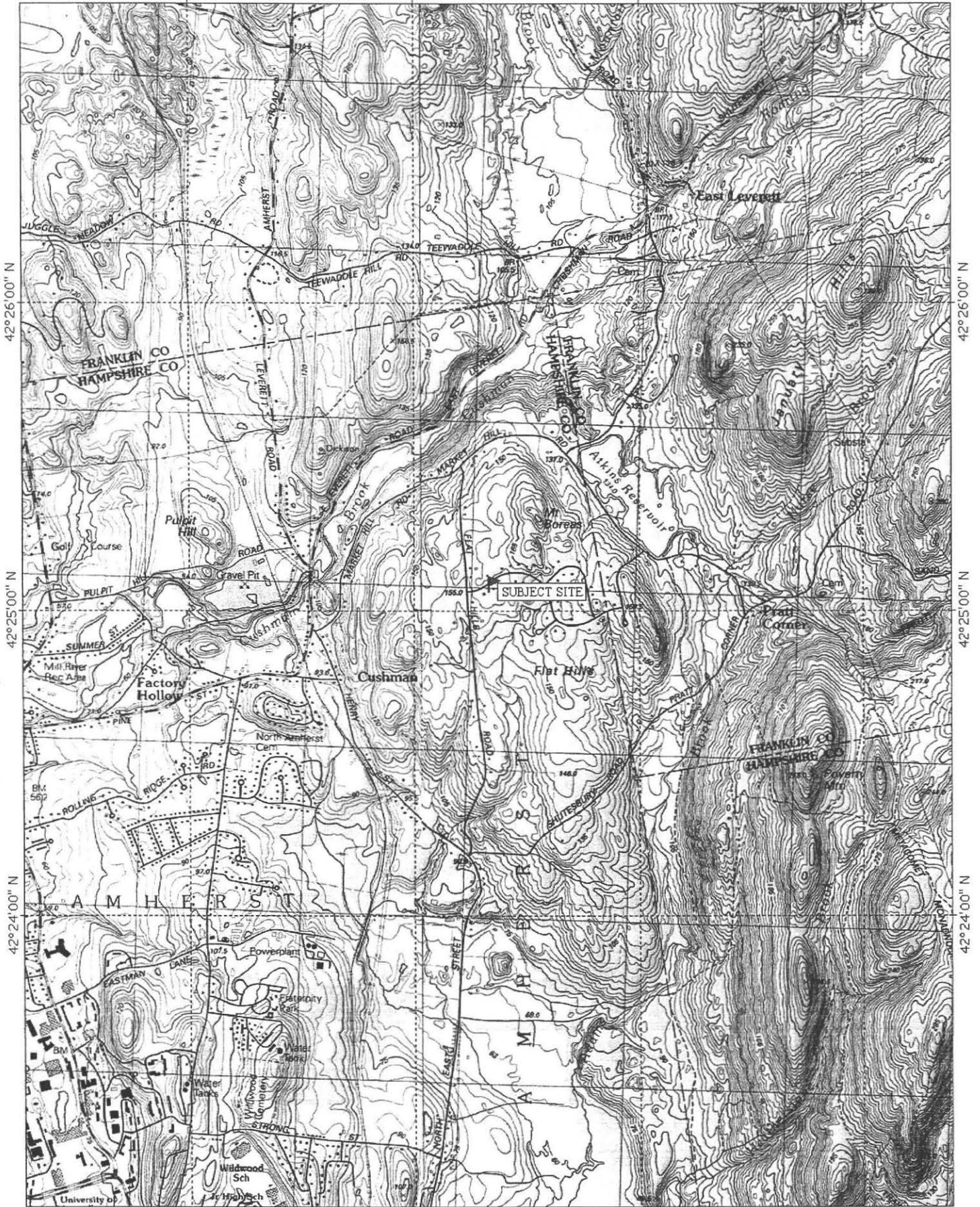


1" = 155 ft

Amherst GIS Viewer April 15, 2010







42°26'00" N

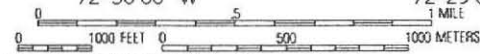
42°26'00" N

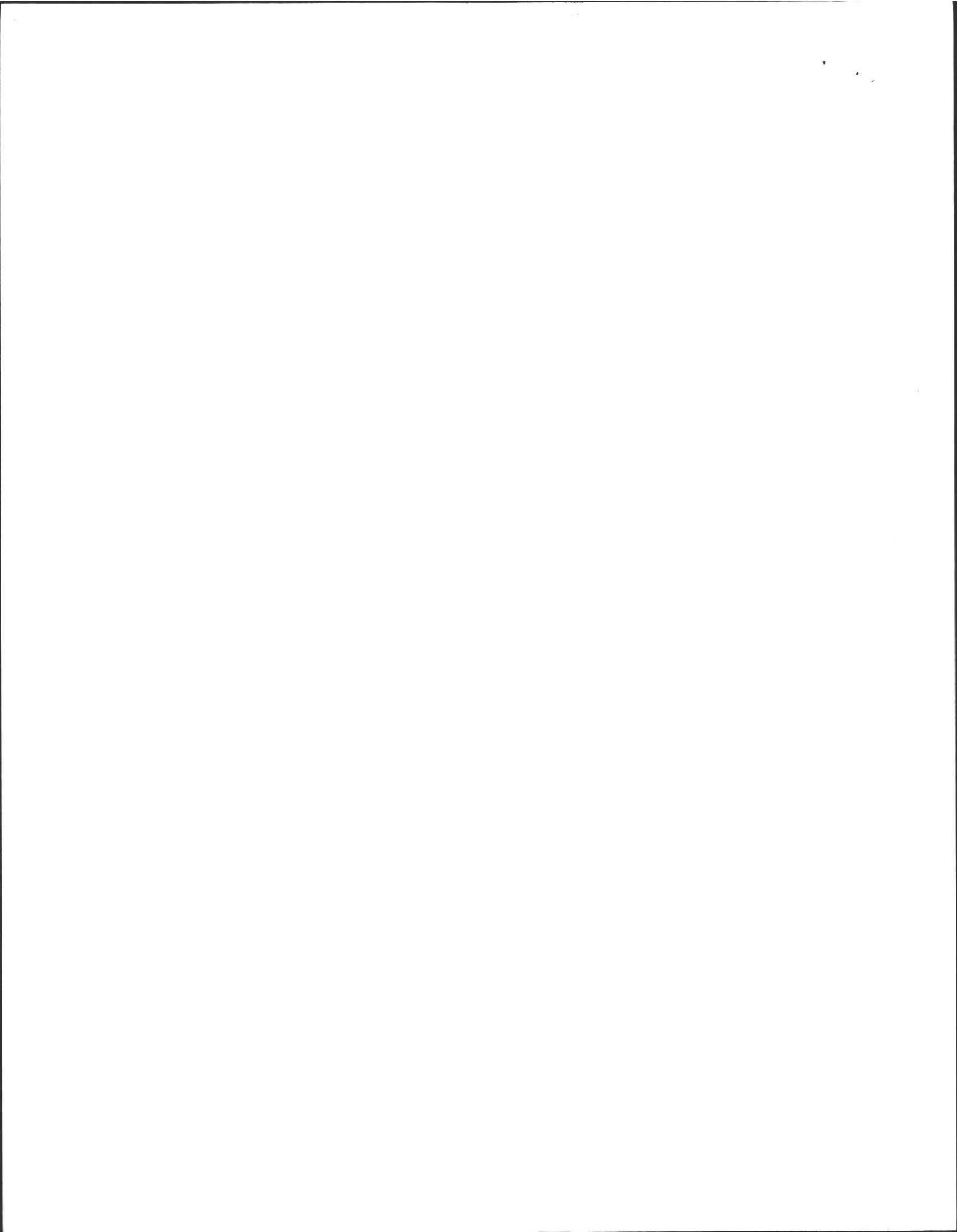
42°25'00" N

42°25'00" N

42°24'00" N

42°24'00" N





*Town of*



AMHERST

*Massachusetts*

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AMHERST HEALTH DEPARTMENT, 70 BOLTWOOD WALK, AMHERST, MA 01002  
(413) 259-3077 (413) 259-2404 - FAX Environmental Health Division (413) 259-3078

April 15, 2010

**RE: 21 High Point Drive: Request for permit to install a Drinking Well.**

Dear Amherst Board of Health:

I have reviewed the plan for installation of a drinking well at 21 High Point Drive, currently owned by Alan Peterfreund. In my opinion the proposed well plan design meets the requirements of the Amherst Board of Health Regulations for Private Wells as adopted on October 30, 2008.

The current drinking well location does not meet the separation requirements from the new septic disposal area, moving the well to the proposed location will satisfy this requirement.

Mr. Alan Weiss of Cold Spring Environmental Consultants will attend the 04/29/2010 Board of Health meeting to discuss and review the drinking well site in relation to the new septic design, as well as answer any questions you may have.

Respectfully submitted

Gary Courtemanche  
Assistant Sanitarian





**COLD SPRING ENVIRONMENTAL  
CONSULTANTS INC.**

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- 2IE Site Investigations
- Subsurface Investigations
- Pollution Remediation
- LSP on Staff
- Forensic Septic Investigations

- Percolation Tests
- Septic Designs
- Regulatory Compliance
- Recycling and Solid Waste
- Second Opinions

April 15, 2010

**Mr. Gary Courtemanche, Inspector  
Amherst Board of Health  
Bangs Center  
Amherst, MA 01002**

RE: Request for New Private well at Existing Residence at 21 Highpoint Drive,

Dear Mr. Courtemanche,

In accordance with your Regulations for Private wells Please note the following.

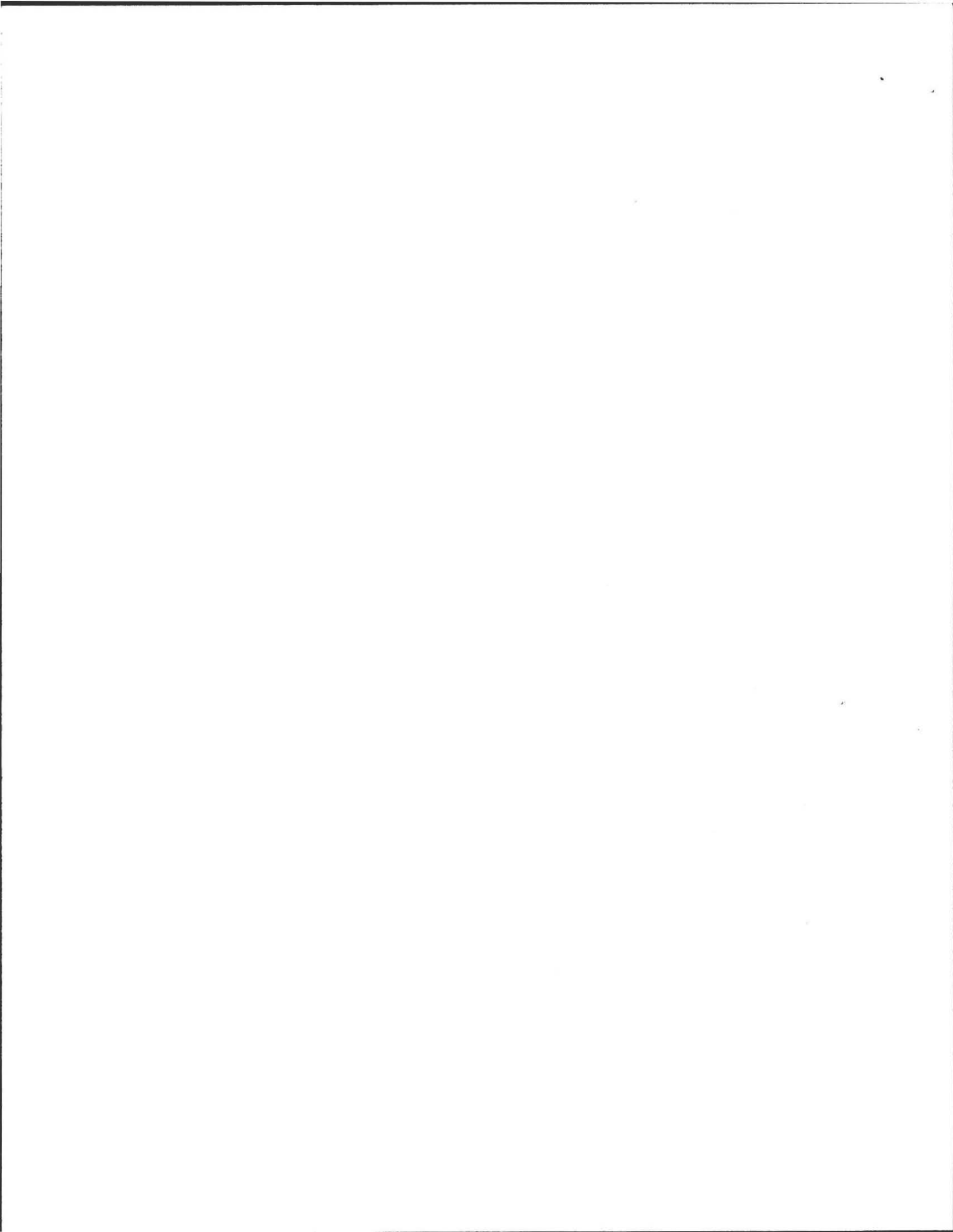
1. A plan detailing the location of the proposed well is attached.
2. All potential sources of contamination (septics underground tanks are noted within 200 feet.
3. The current land uses include residential and agricultural past and present.
4. Notification of all abutters within 150 by Certified Return Receipt Mail is completed concurrently.

Feel free to contact me with any questions.

**Alan Weiss, RS  
Principal Hydrogeologist**

**Cold Spring Environmental, Inc**

Cc: Applicant, C/O Alan Peterfreund





Town of



AMHERST

Massachusetts

AMHERST HEALTH DEPARTMENT, 70 BOLTWOOD WALK, AMHERST, MA 01002  
(413) 259-3077 (413) 259-2404 - FAX Environmental Health Division (413) 259-3078

APPLICATION FOR A WELL CONSTRUCTION PERMIT

I hereby petition the Board of Health of the Town of Amherst for a Well Construction Permit (WCP) to install a private well in the Town of Amherst.

ATTACHED IS A PLAN SHOWING THE PROPOSED LOCATION OF THE WELL (WITH ORIGINAL DATE, STAMP AND SIGNATURE OF AN ENGINEER REGISTERED SANITARIAN, OR REGISTERED LAND SURVEYOR) MEETING ALL THE REQUIREMENTS OF AMHERST RULES AND REGULATIONS FOR PRIVATE WELLS.

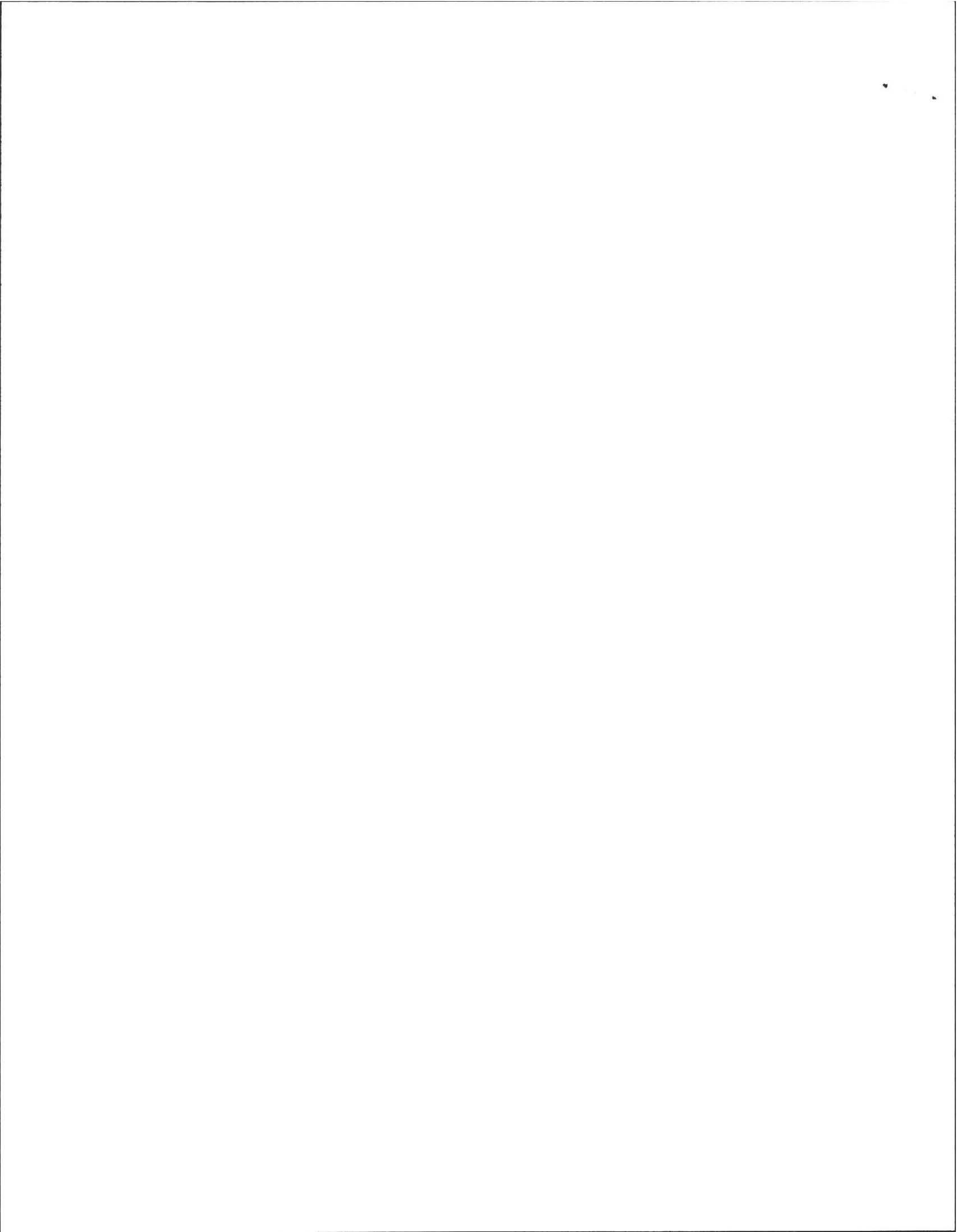
- 1. Address of Property: 21 High Point Dr
- 2. Assessor of Parcel Number: 6B / 76
- 3. Name of Owner: Alan Peterfreund Telephone Number: 156-6169  
Address of Owner: 30 Boltwood Walk.
- 4. Name of Well Driller: \_\_\_\_\_  
(Must be registered with Massachusetts Water Resources Commission)
- 5. Purpose of Well: \*Drinking  Agricultural Only ( )  \*Replacement

The undersigned acknowledges that he must, before commencing construction or use of the system which is the matter of this application, secure any and all other permits which may be required by the laws of the Town of Amherst and the Commonwealth of Massachusetts, and agree to abide by all regulations of the Town of Amherst and the Commonwealth of Massachusetts concerning private wells.

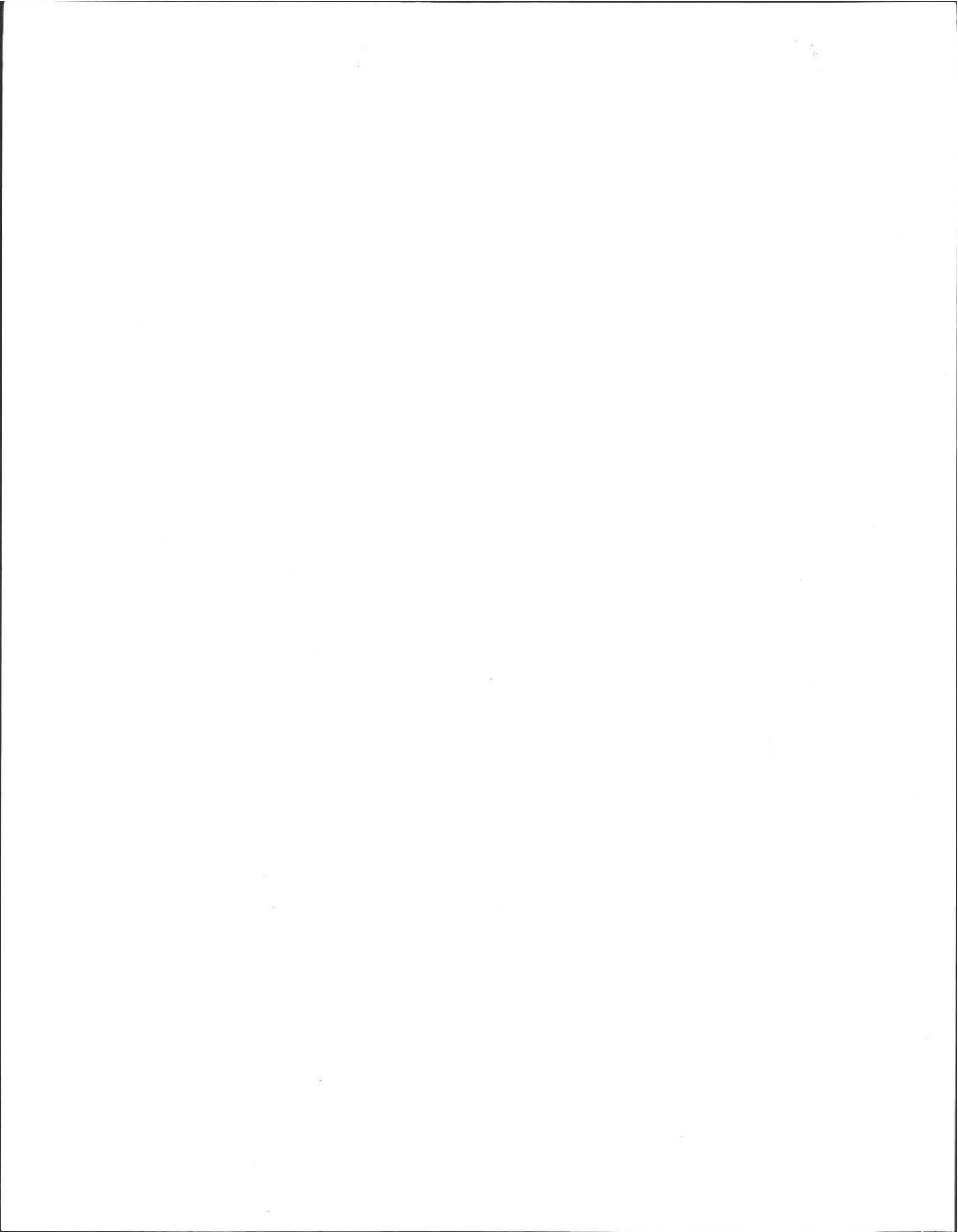
- The undersigned also understands that if a private well is to be used for drinking purposes, a BUILDING PERMIT affecting the structure the well is to serves WILL NOT BE ISSUED UNTIL A Water Supply Certificate has been granted by the Amherst Board of Health.

Name of Applicant: Alan R Peterfreund Fee: \$100.00  
 Signature: [Signature] Date: 4.15.10  
 WELL PERMIT # \_\_\_\_\_

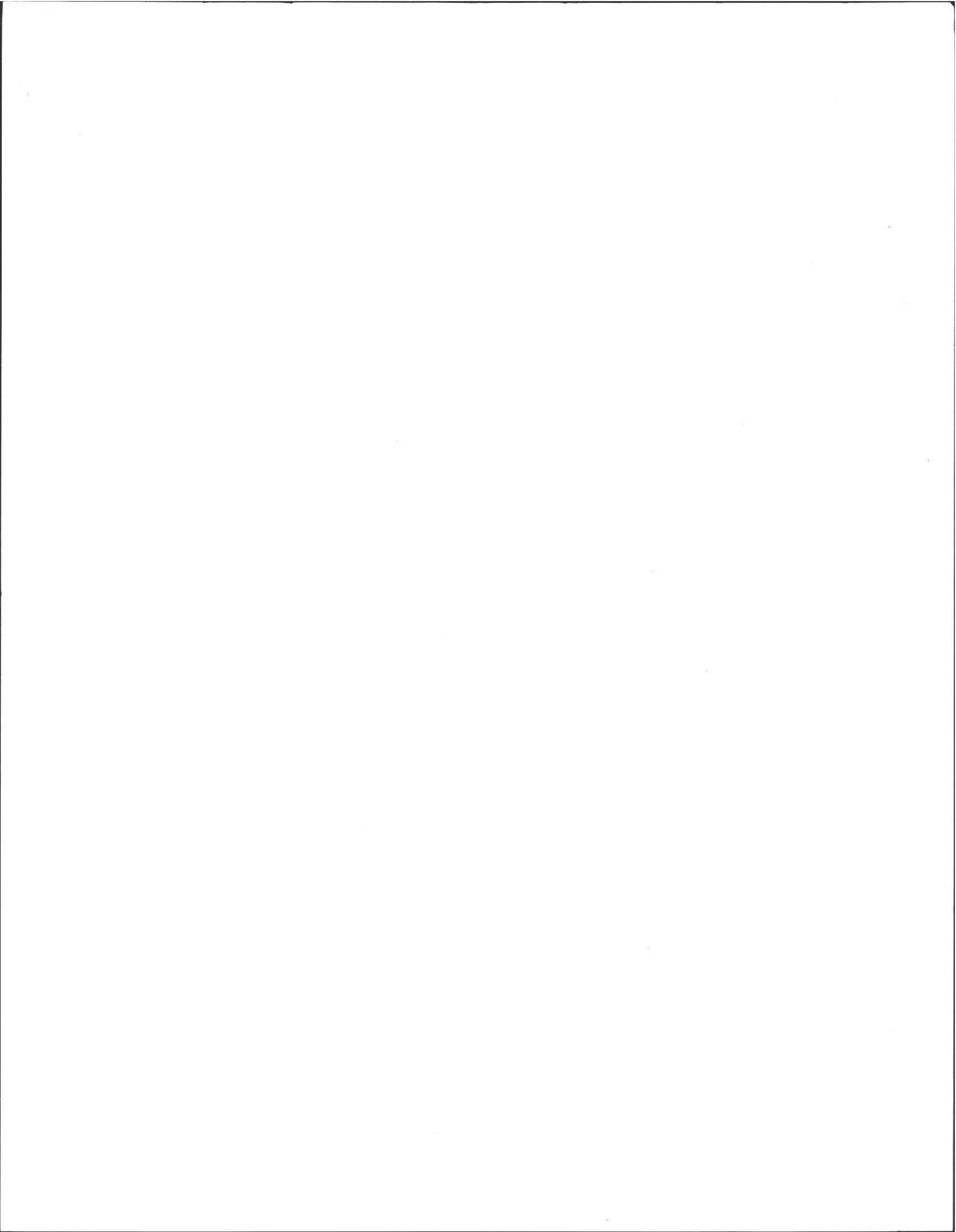
MAKE SMOKING HISTORY





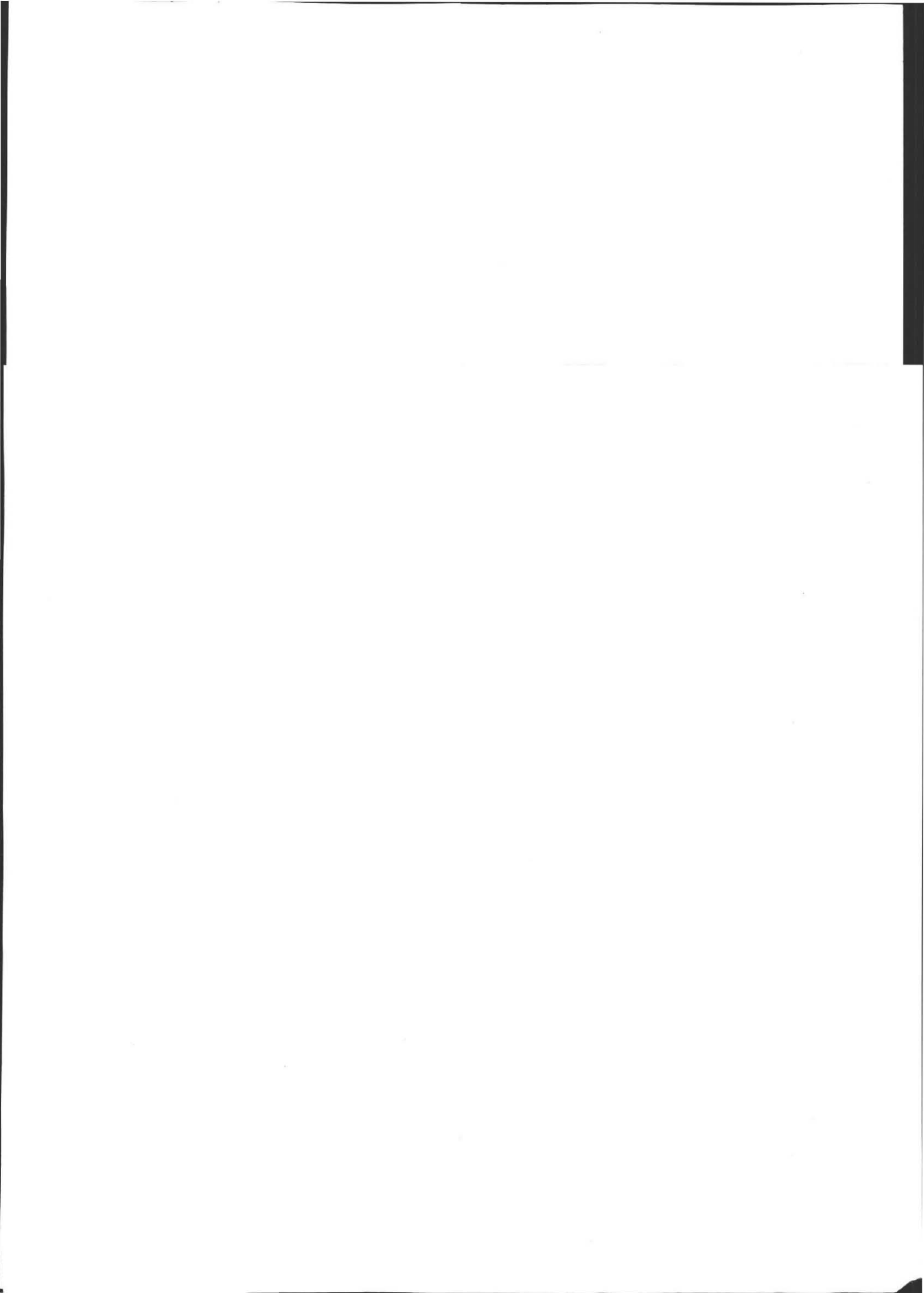














PERMITS/INSP PAYMENT RECPT#: 10099847  
\*\*\*TOWN OF AMHERST\*\*\*  
TOWN HALL  
4 BOLTWOOD AVENUE  
AMHERST MA 01002

DATE: 04/16/10 TIME: 08:27  
CLERK: courteman DEPT:

PAID BY:  
PAYMENT METH: CHECK 2517

REFERENCE: A

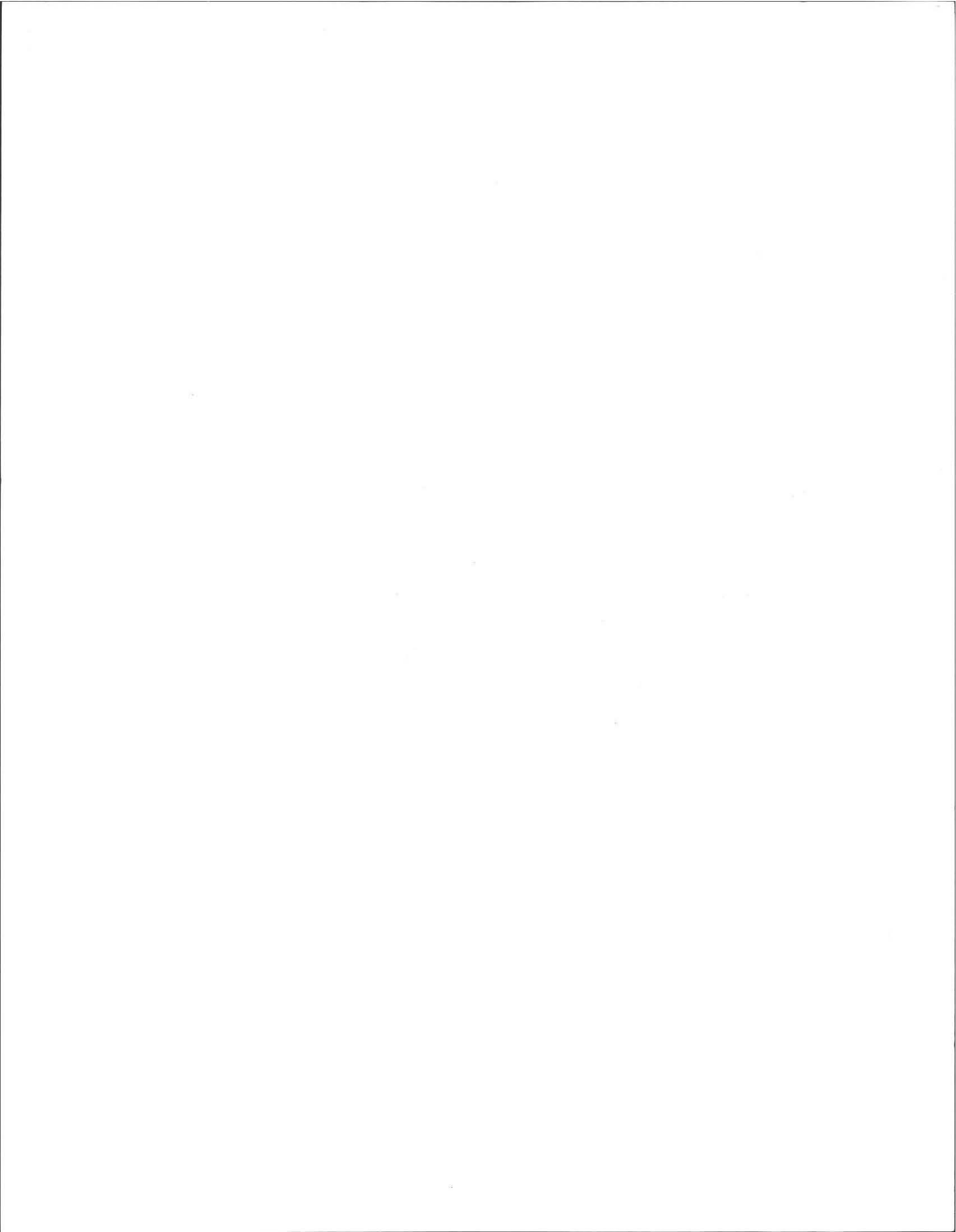
AMT TENDERED: 100.00  
AMT APPLIED: 100.00  
CHANGE: .00

SITE ADDRESS: PETERFREUND

FEES:  
HEA059 WELL PERMI 100.00

TOTAL PAID: 100.00

*COPY of Receipt  
FOR  
APPLICATION FOR A  
WELL PERMIT*



*Town of*



AMHERST

*Massachusetts*

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AMHERST HEALTH DEPARTMENT, 70 BOLTWOOD WALK, AMHERST, MA 01002  
(413) 259-3077 (413) 259-2404 - FAX Environmental Health Division (413) 259-3078

April 15, 2010

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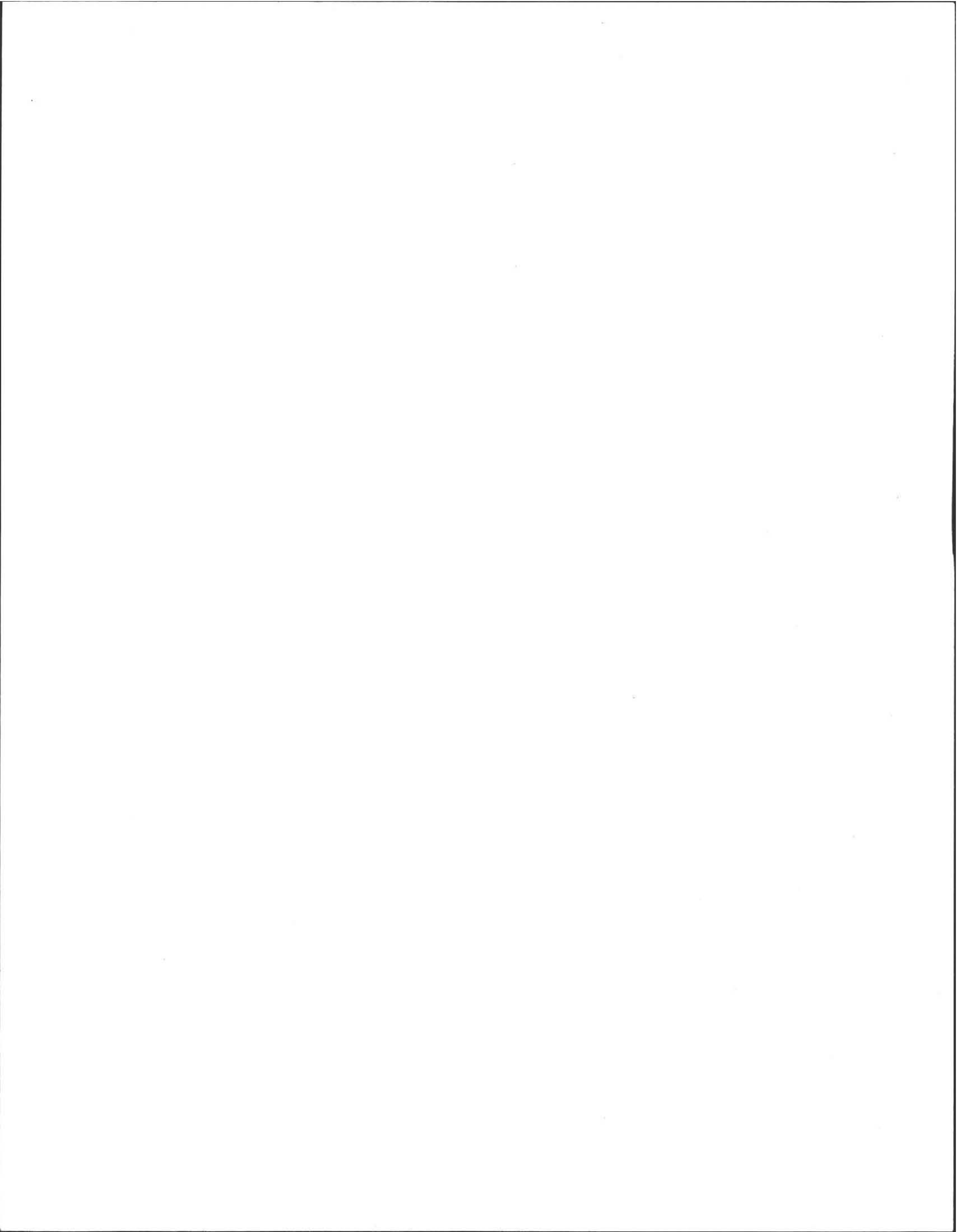
The current drinking well location does not meet the separation requirements from the new septic disposal area, moving the well to the proposed location will satisfy this requirement.

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Respectfully submitted

Gary Courtemanche  
Assistant Sanitarian

MAKE SMOKING HISTORY



21 High Point

#21 High Point

BOARD OF HEALTH, AMHERST, MASSACHUSETTS  
APPLICATION FOR DISPOSAL WORKS CONSTRUCTION PERMIT

No. 69-9 Date Sept. 24 1969 Fee \$ 3 Date Rec'd. Sept. 24, 1969 By Ced

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

Location—Address Lot 46 21 High Point Hill or Lot No. \_\_\_\_\_

Owner Roy Industries Address Amherst Rd. Shutesbury

Contractor Same Address \_\_\_\_\_

Type of Building \_\_\_\_\_ Dimensions \_\_\_\_\_ Size Lot \_\_\_\_\_ acre

Dwelling—No. of Bedrooms 4 Expansion Attic (  ) Garbage Grinder (  )

Other \_\_\_\_\_ No. of persons \_\_\_\_\_ Showers (  )

Other fixtures \_\_\_\_\_

Town Water?  Type of Well Artesian

Design Flow 50 gallons per person per day. Total daily flow \_\_\_\_\_ gallons

Septic Tank—Liquid capacity 1200 gallons Dimensions: L \_\_\_\_\_ W \_\_\_\_\_ D \_\_\_\_\_

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

Disposal Bed—No. 1 Diameter 10x45 Depth below inlet \_\_\_\_\_ Total leaching area 450 sq. ft.

Dry Well—No. \_\_\_\_\_ Diameter \_\_\_\_\_ Depth below inlet \_\_\_\_\_ Dimensions: \_\_\_\_\_ x \_\_\_\_\_ x \_\_\_\_\_

Other: Distribution box (  No. \_\_\_\_\_ Dosing tank (  )

(Depth of Soil Line Below finished grade at foundation \_\_\_\_\_)

Percolation Test Results Performed by Drake Date 9/24/69

Test Pit No. 1 7 minutes per inch Depth of Test Pit 36"

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

Description of Soil fine sandy clay Depth to Ground Water not found

Will disposal area be filled? \_\_\_\_\_ Cut down? \_\_\_\_\_

(On reverse side or separate sheet, show plot plan with building. Include dimensions, distances from all boundaries. Show location of wells, streams, ledge, large trees, etc.)

AGREEMENT: The undersigned agrees to construct the aforescribed individual sewage disposal system in accordance with the provisions of Article XI of the Sanitary Code and regulations of the Amherst Board of Health. The undersigned further agrees not to place the system in operation until a Certificate of Compliance has been issued by this board of health.

Application Approved by C.E. Drake TOPSOIL REMOVED REFERRED TO WITH BACKREN. W. W. Clark Owner or builder

date 9/24/69  
date

Application Disapproved for the following reasons:

BOARD OF HEALTH, AMHERST, MASSACHUSETTS  
CERTIFICATE OF COMPLIANCE

THIS IS TO CERTIFY, That the individual Sewage Disposal System installed (X) or repaired ( ) by W.W. Clark at Lot 46 High Point has been constructed in accordance with the provisions of

INSTALLER

Article XI of the State Sanitary Code as described in the application for Disposal Works Construction Permit No. 69-9 dated 9-24-69

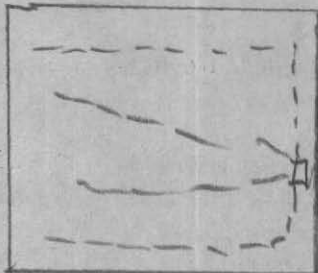
The issuance of this certificate shall not be construed as a guarantee that the system will function satisfactorily.

DATE Apr. 1970

Inspector [Signature]

85

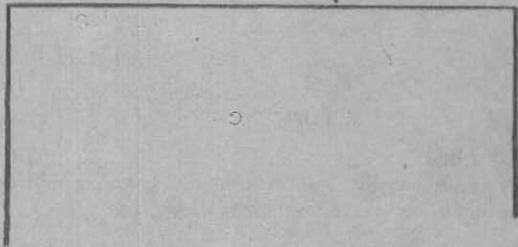
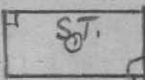
EDWARDS  
6-8737



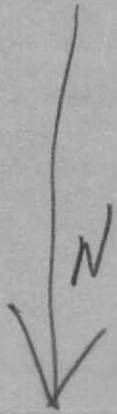
80

1200

ST.



HIGH POINT DRIVE

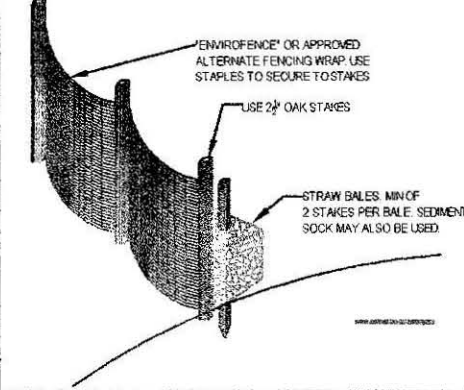




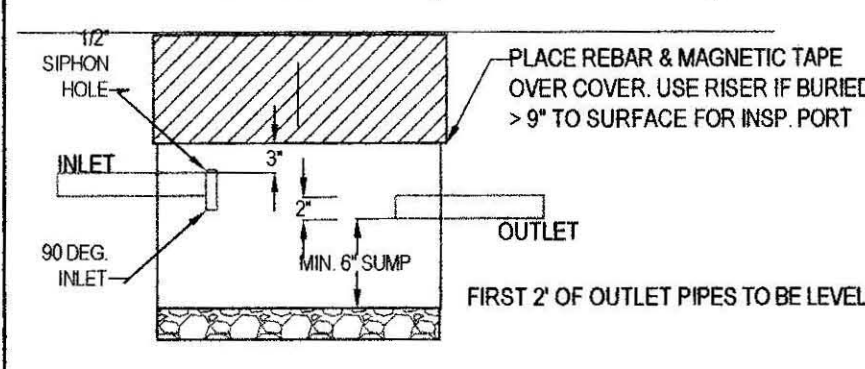
**NOTE TO HOMEOWNER: MOUNDS, WHERE USED, ARE REQUIRED BY STATE CODE TO MAXIMIZE THE DISTANCE FROM THE BOTTOM OF THE LEACHING FIELD TO THE TOP OF THE ESTIMATED HIGH GROUNDWATER. THIS "SEPARATION" FROM HIGH GROUNDWATER (3.4, OR 5 FEET), IS NOT THE SAME AS THE HEIGHT OF THE FINISHED MOUND SURFACE. THE ACTUAL FINISHED MOUND IS TYPICALLY HIGHER THAN THE "SEPARATION". BY SIGNING PERMIT YOU ACKNOWLEDGE THAT COLD SPRING ENVIRONMENTAL CONSULTANTS INC. IS NOT RESPONSIBLE FOR THE AESTHETICS OF FILLED OR MOUNDED SYSTEMS.**

**NOTE TO INSTALLER: A PLUMBER MUST INSPECT INSIDE PLUMBING AND FIX ANY LEAKING FAUCETS OR TOILETS IF FOUND TO BE LEAKING OR FLOWING IMPROPERLY INTO SEPTIC SYSTEM PRIOR TO FINAL INSPECTION.**

**SILT FENCE DETAIL**



**TYPICAL D.BOX (WATERTIGHT)**



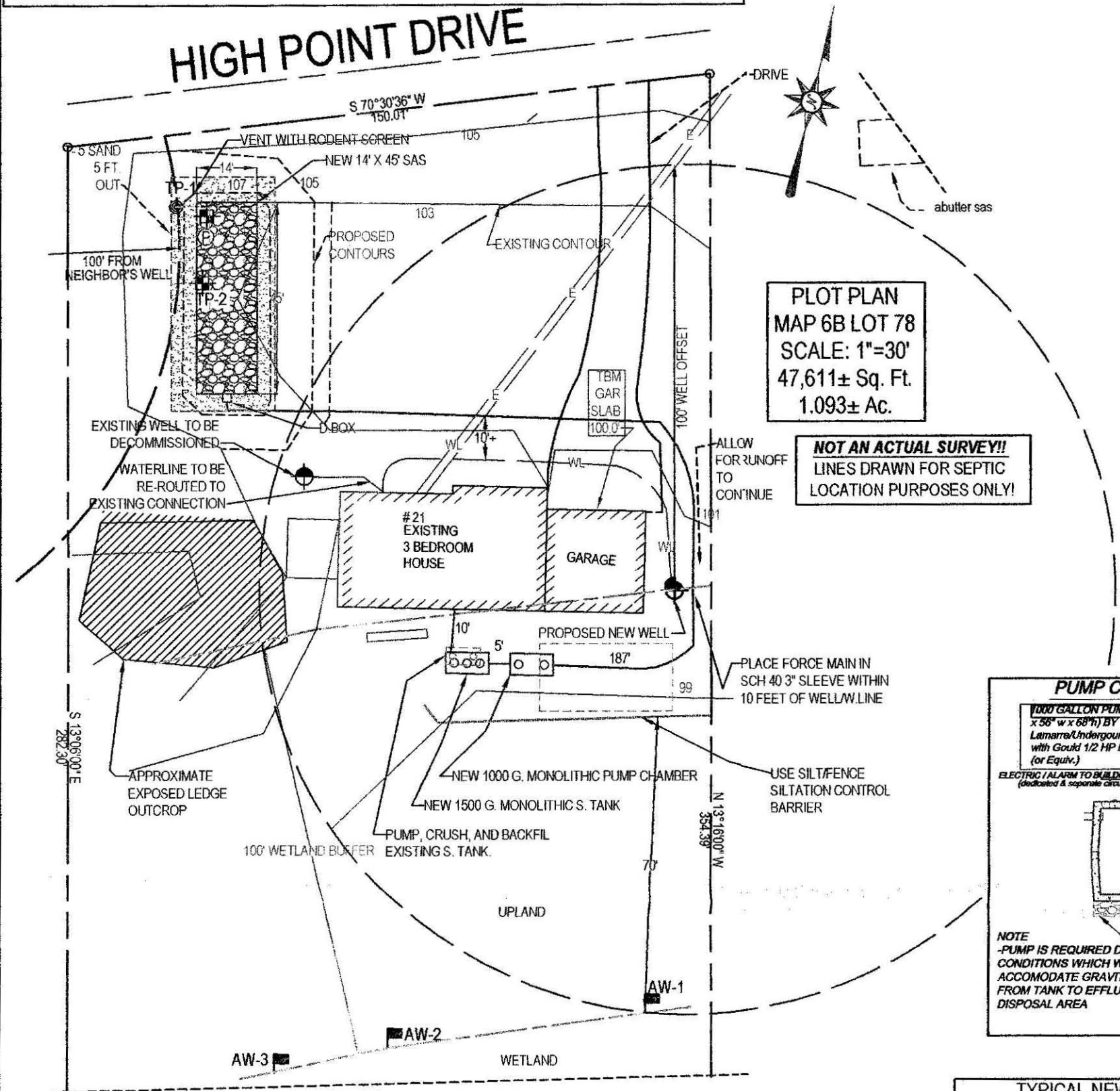
- PLACE ON STABLE 6" BASE OF 3/4" TO 1-1/2" D.W. STONE  
 - USE CONCRETE BOX WITH 2" MINIMUM WALL THICKNESS.  
 - FILL WITH WATER FOR FINAL INSPECTION.  
 - USE LARGE STYLE D.BOX 6 outlet (Underground Supply)  
 - ADAPT FROM 2" TO 4" BEFORE BOX IF PUMPED.

**WETLAND DELINEATION AND SEDIMENT CONTROL NOTES:**

- NOTE: All fabric silt fence to be backed with Double Staked Virgin Straw Bales (free of seeds) in order to prevent fugitive re-seeding in Resource Area.**
- NO ALTERATION OF SEDIMENT, STOCKPILING, FILLING OR CUTTING VEGETATION ON THE DOWNGRADIENT SIDE OF THE SEDIMENTATION BARRIER (SILT FENCE).
  - SEDIMENTATION BARRIER TO BE ERECTED IN A STABLE AND LASTING MANNER AS SHOWN ON THE PLAN.
  - NOTIFY CONSERVATION ADMINISTRATOR AT LEAST 72 HOURS (IF REQ'D) PRIOR TO START OF ON-SITE WORK, AFTER COMPLETE ON SILT FENCE INSTALLATION.
  - AS SOON AS POSSIBLE WORK AREA SHALL BE SEEDED, REVEGETATED WITH GRASS (OR SIMILAR GROUND COVER) AND MULCHED UPON COMPLETION OF SITE WORK.
  - SILT FENCE TO REMAIN STANDING UNTIL REGROWTH IS SUFFICIENT TO CONTROL FUGITIVE SEDIMENT RUNOFF.
  - REGRADE WORK AREA AS NOTED TO PREVENT CHANGE IN SLOPE OR RUNOFF PATTERNS.

**PUMP CHAMBER/MOUNDED SEPTIC SYSTEM OPERATION AND MAINTENANCE NOTES FOR HOMEOWNER:**

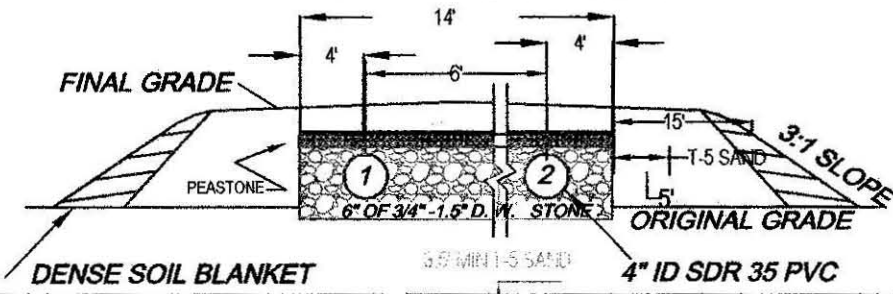
- HAVE SEPTIC TANK PUMPED EVERY SECOND (2) YEARS.
- HAVE PUMP, AND PUMP CHAMBER & OUTLET FILTER INSPECTED (IF PRESENT) ANNUALLY.
- MAKE CERTAIN TO TEST HI WATER SHUT OFF ALARM ANNUALLY.
- MAINTAIN AREA OVER SEPTIC AS GRASSY OR SIMILAR GROUND COVER ATTEMPTING TO MAXIMIZE SUNLIGHT TO AREA.
- DO NOT PLANT ANY TREES OR DEEP ROOTING SHRUBS WITHIN 10 FEET OF LEACH-FIELD.
- USE ONLY LIQUID DETERGENTS IN WASHER OR DISHWASHER.
- CONSERVE WATER WHEREVER POSSIBLE TO LENGTHEN LIFE OF SYSTEM USE WATER SAVING DEVICES AND FIXTURES OR CURTAIN DRAINS AT LEAST 25 FEET FROM LEACHING FIELD.



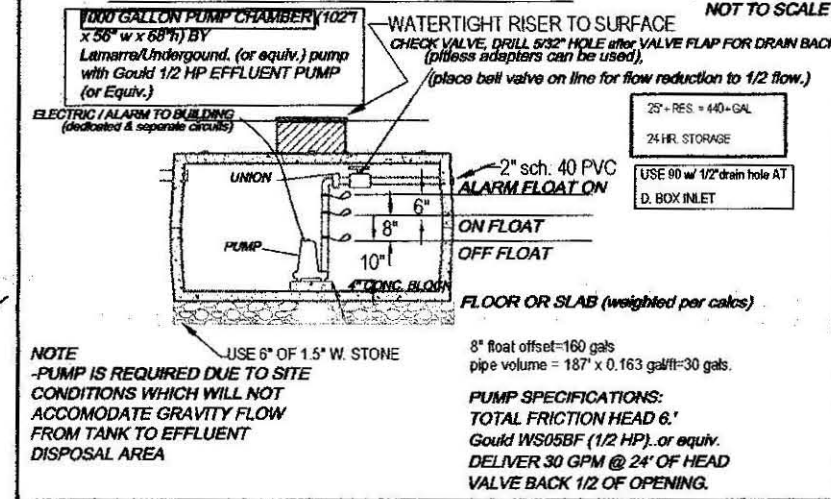
**PLOT PLAN  
 MAP 6B LOT 78  
 SCALE: 1"=30'  
 47,611± Sq. Ft.  
 1.093± Ac.**

**NOT AN ACTUAL SURVEY!!  
 LINES DRAWN FOR SEPTIC  
 LOCATION PURPOSES ONLY!**

**EFFLUENT DISPOSAL AREA  
 CROSS SECTION - NOT TO SCALE  
 (RAISED DISPOSAL AREA) (2% SLOPE TOP)  
 NUMBER OF 4" SDR PVC SEPTIC LINES: 2  
 CENTER TO CENTER SPACING: 6"**

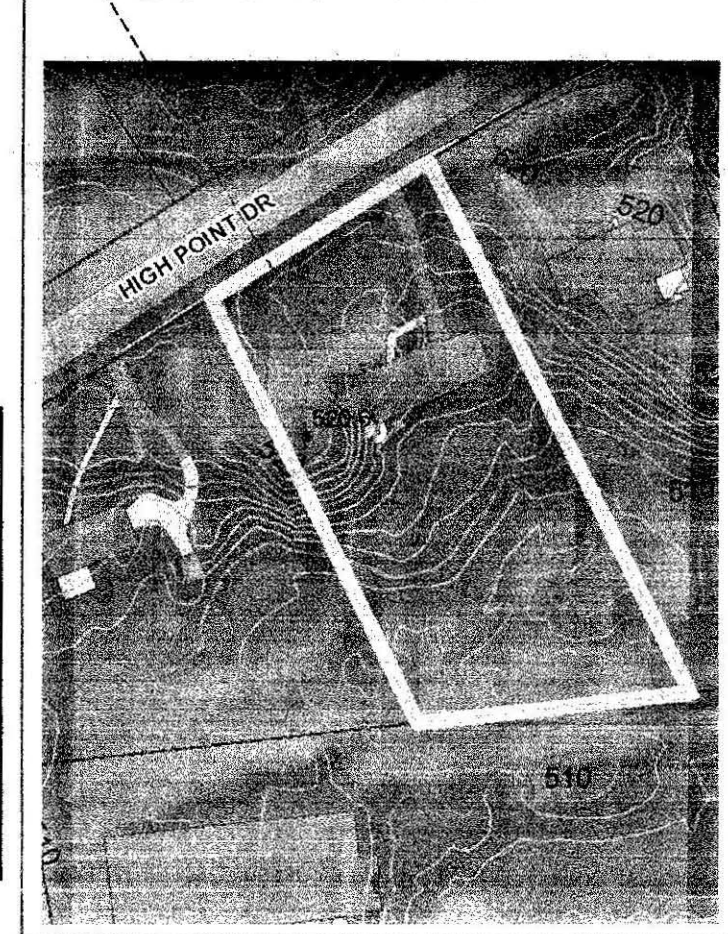


**PUMP CHAMBER DETAIL (watertight-MONOLITHIC)**



**NOTE**  
 -PUMP IS REQUIRED DUE TO SITE CONDITIONS WHICH WILL NOT ACCOMMODATE GRAVITY FLOW FROM TANK TO EFFLUENT DISPOSAL AREA

**SUBJECT SITE**



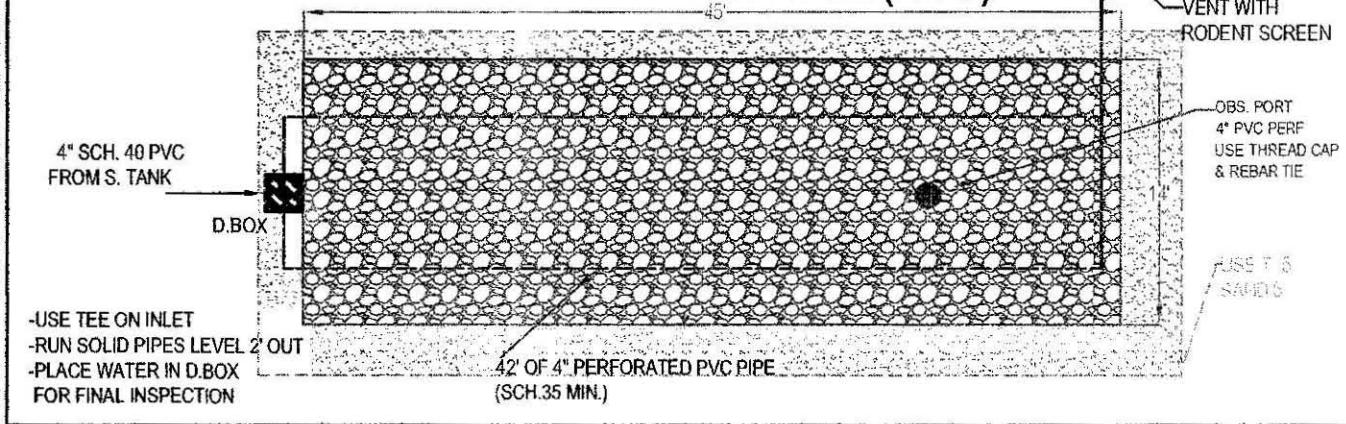
**DESIGN NOTES AND CALCULATIONS:**

- 4 BEDROOM HOME (Assessors) X 110 GPD / BR = 440 GPD. REQUIRED
- USE ONE FIELD: 14' WIDE X 45' LONG WITH 6" OF 2" TO 1 1/2" DBL WASHED STONE BELOW INVERT
- BOTTOM AREA: 14' W X 45' L = 630 SF
- SIDE AREA: 0 SF
- TOTAL AREA: 630 SF X 0.74 GAL/SF = 445 GPD
- GARBAGE DISPOSAL NOT ALLOWED, ...
- NO OTHER PRIVATE WELLS WITHIN 150 FEET OF SAS.
- NO OTHER WETLANDS WITHIN 100 FEET OF SAS
- USE NEW 1,500 GALLON MONOLITHIC S. TANK AS NOTED & MAINTAIN 0.02 PITCH FROM SILL TO S. TANK
- INSTALL & INSPECT SCH. 40 TEES / BAFFLES (10" INLET, 14" OUTLET)
- USE NEW 1000 GALLON MONOLITHIC PUMP CHAMBER
- NOTE:**  
 - ALL COMPONENTS OF NEW SYSTEM MUST BE MARKED WITH MAGNETIC TAPE. BE SURE TO MAINTAIN 3" CLEARANCE FROM TOP OF TEES TO BOTTOM OF TANK COVERS & BOXES.
- USE LARGE STYLE (6 OUTLET) D.BOX ONLY.
- ALL D.BOX OUTLET PIPES LEVEL FOR FIRST 2'. BOXES MUST HAVE 2" CONC. WALLS
- NOTE:**  
 - D. BOXES WITH MORE THAN 9" OF COVER SOIL MUST HAVE RISERS TO 6" OF SURFACE.
- USE APPROVED (75" 1 1/2") DBL WASHED STONE UNDER TANK & D. BOX FOR 6".
- CONFIRM STONE PROPERLY DOUBLE WASHED PRIOR TO PLACEMENT.
- USE PROPER SCH. 40 PVC TEES AS SHOWN.
- PRE & POST CONTOURS NOTED AS NECESSARY, RESERVE AS NOTED (not required for repairs).
- SLOPE CALCS (SEE CONTOURS), SUBGRADE INSP. REQ'D.
- USE FIELD DUE TO TOPOGRAPHY AND SPACE OF LOT WITH RESPECT TO LOCATION AND ELEVATION OF RESIDENCE. (310 CMR 15.240)
- USE 2% MIN. SLOPE OVER SAS  
 - CLEAR TOP AND SUB TO 24" MIN. AS NEEDED (INSPECTION REQUIRED)  
 - CLEAR PAST BASE OF B. (MIN. 24") & SCARIFY UNDER BED PRIOR TO TITL E V SANDSTONE PLACEMENT
- EXCAVATE EXISTING LOAM, SUB AND ANY EXISTING DEBRIS, DIRTY FILL OR PRIOR SYSTEM IF PRESENT.
- SOIL EVALUATION BY A. WEISS, RS. ON 4/8/10 (G. COURTMANCHE, BOH AGENT).  
 - DEPTH OF PERC. 34"  
 - PERC RATE = 5 MIN / IN.  
 - CLASS I SOIL RATING
- NO TREES WITHIN 10 FT. OF NEW LEACH FIELD.
- ENGINEER & TOWN (IF REQUIRED) TO INSPECT SUBGRADE, TOWN AND ENGINEER INSPECT AT FINAL.
- BM=100.00 @ (GAR SLAB, as noted), CONFIRM PROPER PIPE SLOPES
- USE/INSPECT SCH. 40 PIPE FOR PIPE FROM HOUSE TO NEW OR EXISTING TANK
- GRADE MULCH AND SEED OVER SAS AS NOTED
- INSTALLATION IN LOW GROUNDWATER SEASON RECOMMENDED
- USE OBSERVATION PORT NEAR CENTER OF STONE BED HAVE 4" PERFORATED, PVC INSPECTION PORTALS TO BOTTOM OF STONE BED, WITH RISER TO 3" OF SURFACE & THREADED CAP & MARK WITH RE-BAR.
- NEW WELL AS REQUIRED BY LOCAL BYLAWS AS SHOWN.

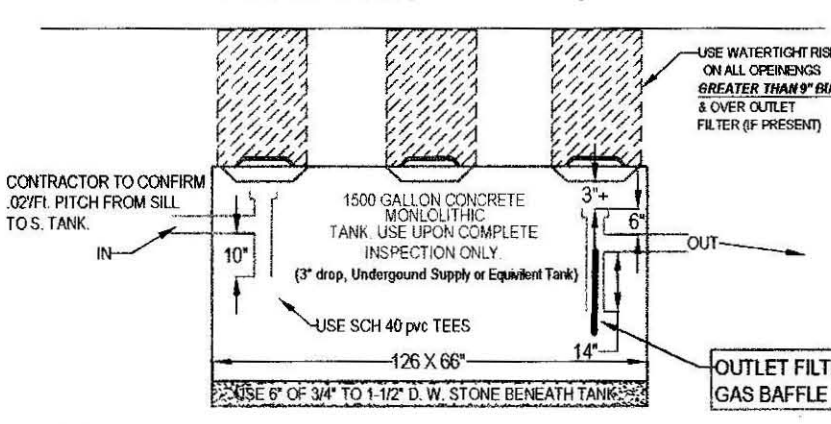
**TEST PIT LOG:**

TP-1 EFF. ELEV: 103.3' eff				TP-2 EFF. ELEV: 103.3'					
DEPTH	HORIZ	TEXTURE	(COLOR OR MONSELL)	MATERIAL	DEPTH	HORIZ	TEXTURE	(COLOR OR MONSELL)	MATERIAL
0-10	A	FSL	10 YR 3/3	FRIBLE	0-10	A	FSL	10 YR 3/3	FRIBLE
10-21	Bw	LS	10 YR 4/6	FRIBLE, LOOSE	10-24	Bw	LS	10 YR 4/6	FRIBLE, LOOSE
21-94	C1	LS	2.5 Y 4/3	FM SANDY ABLATION TILL	24-84	C1	LS	2.5 Y 4/3	FM SANDY ABLATION TILL
				10% STONE, MOD LOOSE					10% STONE, MOD LOOSE
				TO GRANULAR					TO GRANULAR
OXIDES: 2.5 Y 4/1 OBSERVED @ 28"				OXIDES: 2.5 Y 4/1 OBSERVED @ 30"					
EHWT: 28" = 100.96'				EHWT: 30"					
STANDING H2O: 94"				STANDING H2O: NOT OBSERVED					
WEEPING: NOT OBSERVED				WEEPING: NOT OBSERVED					
BEDROCK: 94'+				BEDROCK: 84'+					

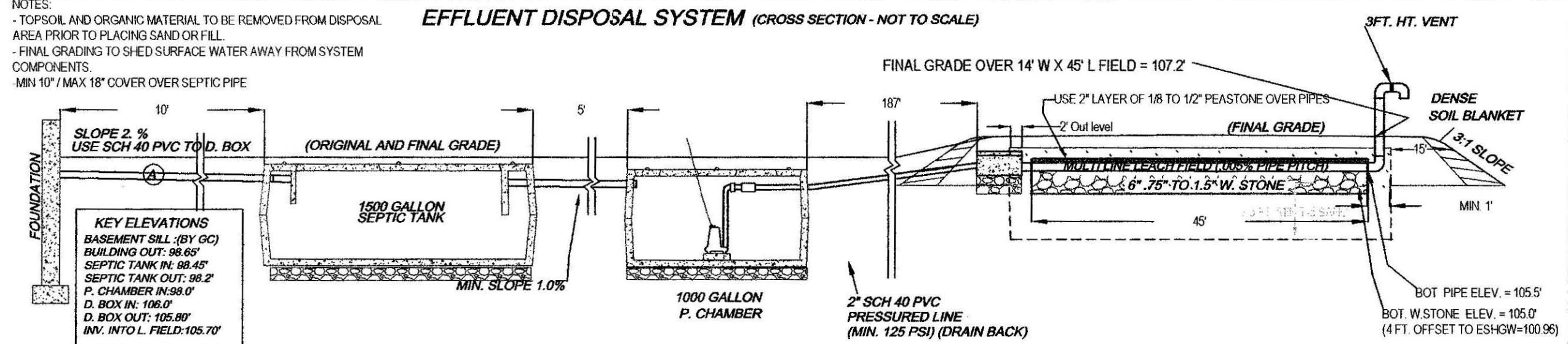
**LEACH FIELD DETAIL (NTS)**



**TYPICAL NEW SEPTIC TANK (WATERTIGHT) OR EQUIVALENT.**



**EFFLUENT DISPOSAL SYSTEM (CROSS SECTION - NOT TO SCALE)**

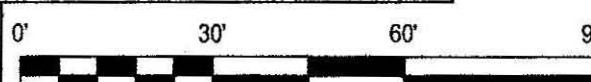


- NOTES:**  
 - TOPSOIL AND ORGANIC MATERIAL TO BE REMOVED FROM DISPOSAL AREA PRIOR TO PLACING SAND OR FILL.  
 - FINAL GRADING TO SHED SURFACE WATER AWAY FROM SYSTEM COMPONENTS.  
 - MIN 10" / MAX 18" COVER OVER SEPTIC PIPE

**KEY ELEVATIONS**  
 BASEMENT SILL (BY GC)  
 BUILDING OUT: 98.65'  
 SEPTIC TANK IN: 98.45'  
 SEPTIC TANK OUT: 98.2'  
 P. CHAMBER IN: 98.0'  
 D. BOX IN: 106.0'  
 D. BOX OUT: 105.80'  
 INV. INTO L. FIELD: 105.70'

**ATTENTION INSTALLER!!**  
 CALL DIG SAFE BEFORE YOU DIG!! MASSACHUSETTS STATE LAW CHAPTER 82 SECTIONS 40 - 40E REQUIRE THAT PREMARKING OF GAS, ELECTRIC, WATER, TELEPHONE AND CABLE T.V. UTILITY LINES BE MADE A MINIMUM OF 72 HOURS PRIOR TO GROUND BREAK FOR ANY EXCAVATION.

**NOTE: INSTALLER MUST CONTACT ENGINEER/BD OF HEALTH 48 HOURS PRIOR TO SUBGRADE INSPECTION. INSTALLER MUST HAVE ALL BREAK OUT FILL ON SITE AND IN PLACE PRIOR TO SIGN OFF BY ENGINEER AT TIME OF FINAL INSPECTION OR APPROVAL WILL NOT BE GIVEN TO BACKFILL.**



**SEPTIC SYSTEM REPAIR & REPLACEMENT WELL PLAN FOR ALAN PETERFREUND  
 21 HIGH POINT DRIVE  
 AMHERST, MA.**

**Cold Spring Environmental Consultants Inc.**  
 350 Old Enfield Road  
 Belchertown, MA. 01007

P&O NO: (413) 323-5957  
 FAX: (413) 323-4916  
 e-Mail: ACWESS@charter.net

DATE: 4/10/10  
 SCALE: 1"=30'

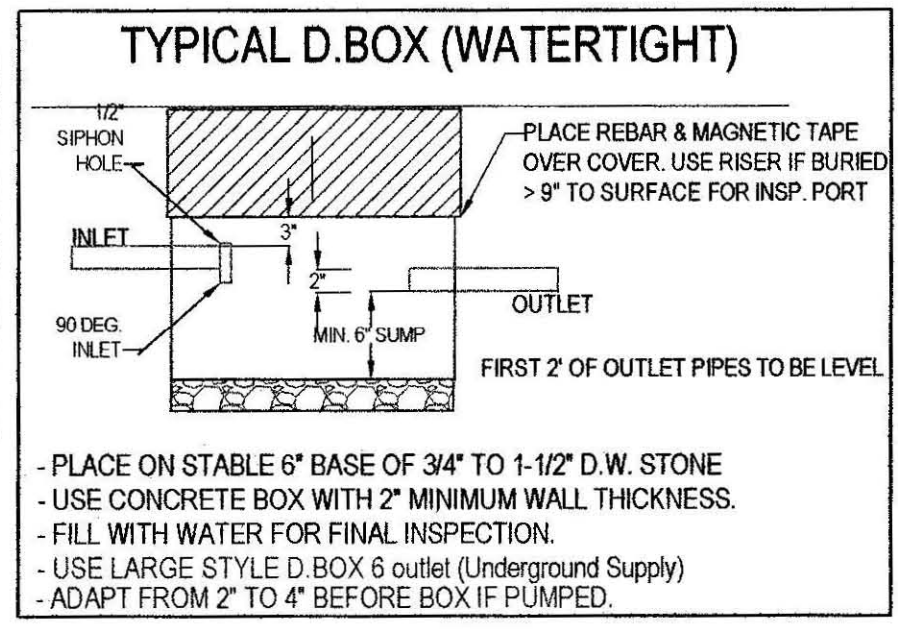
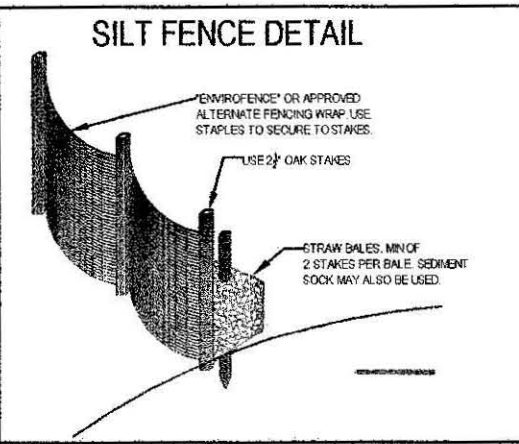
DRAWN BY: ARS  
 CHECKED BY: AEW

REVISED:  
 DRAWING NUMBER: 110-3323-0324



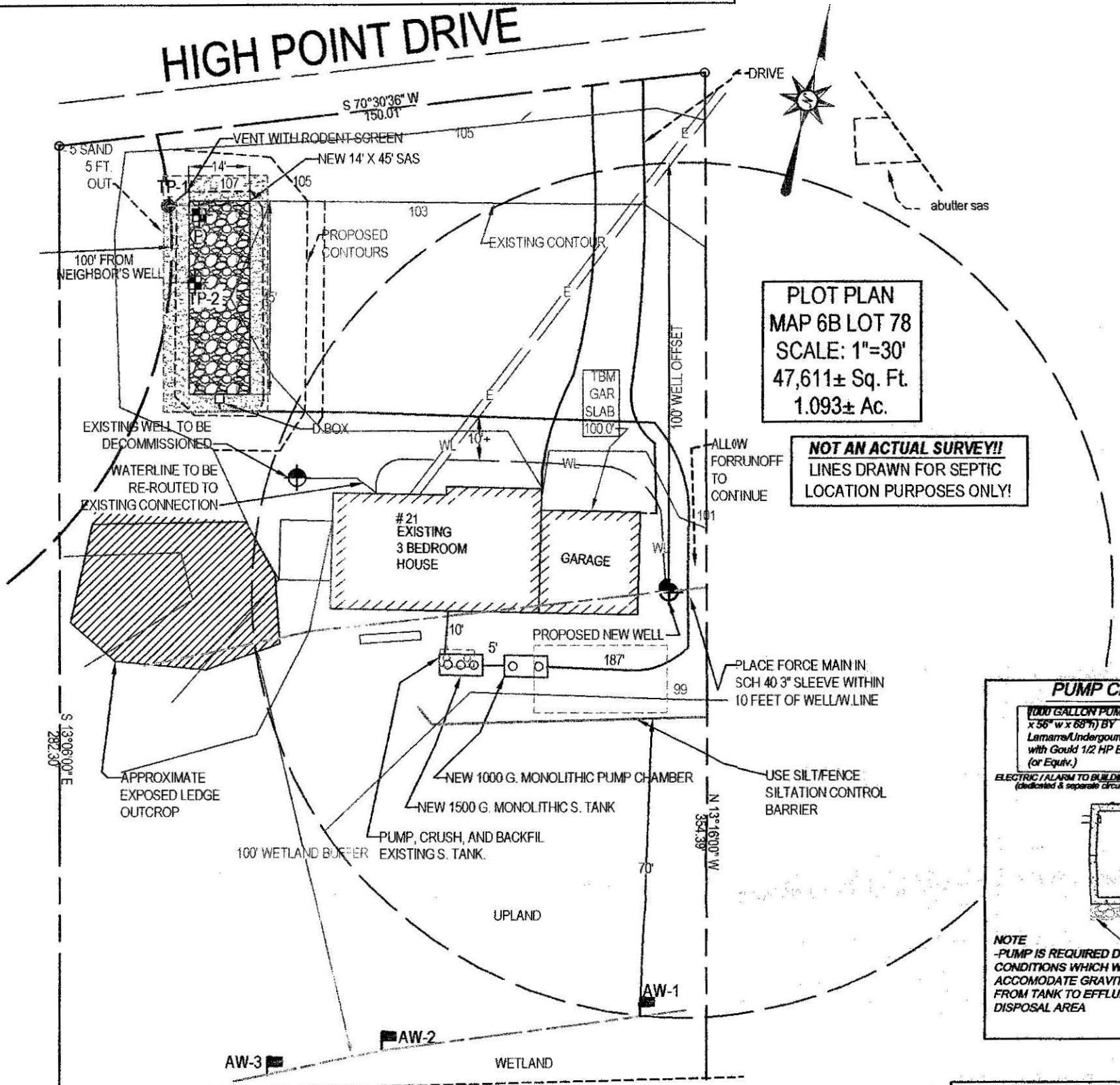
**NOTE TO HOMEOWNER: MOUNDS, WHERE USED, ARE REQUIRED BY STATE CODE TO MAXIMIZE THE DISTANCE FROM THE BOTTOM OF THE LEACHING FIELD TO THE TOP OF THE ESTIMATED HIGH GROUNDWATER. THIS "SEPARATION" FROM HIGH GROUNDWATER (3.4, OR 5 FEET), IS NOT THE SAME AS THE HEIGHT OF THE FINISHED MOUND SURFACE. THE ACTUAL FINISHED MOUND IS TYPICALLY HIGHER THAN THE "SEPARATION". BY SIGNING PERMIT YOU ACKNOWLEDGE THAT COLD SPRING ENVIRONMENTAL CONSULTANTS INC. IS NOT RESPONSIBLE FOR THE AESTHETICS OF FILLED OR MOUNDED SYSTEMS.**

**NOTE TO INSTALLER: A PLUMBER MUST INSPECT INSIDE PLUMBING AND FIX ANY LEAKING FAUCETS OR TOILETS IF FOUND TO BE LEAKING OR FLOWING IMPROPERLY INTO SEPTIC SYSTEM PRIOR TO FINAL INSPECTION.**



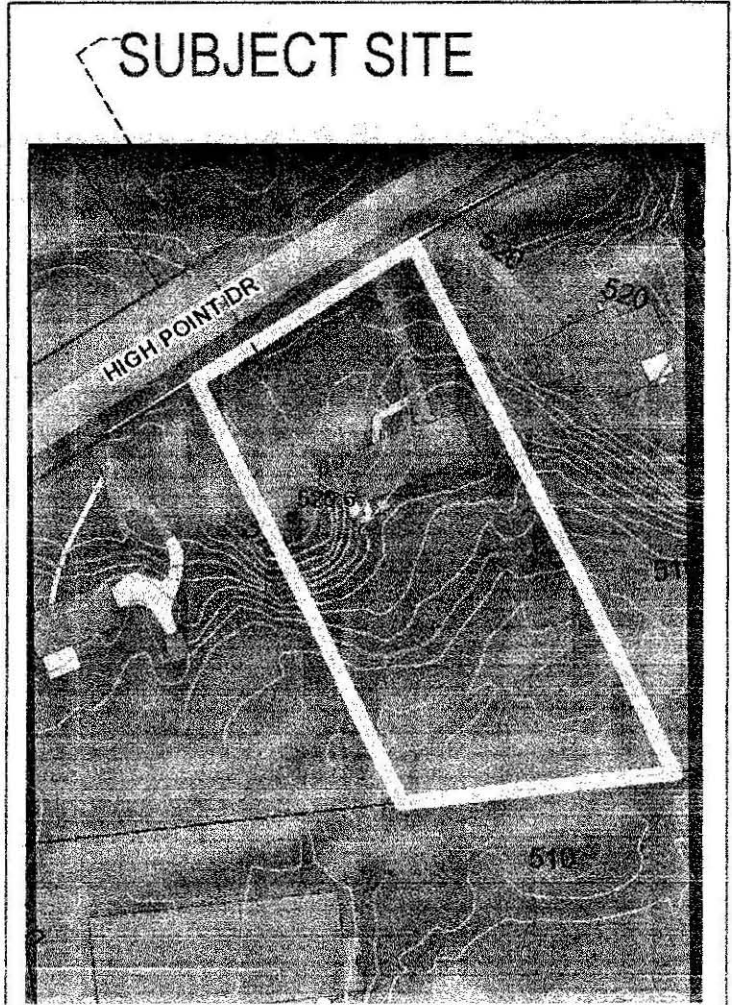
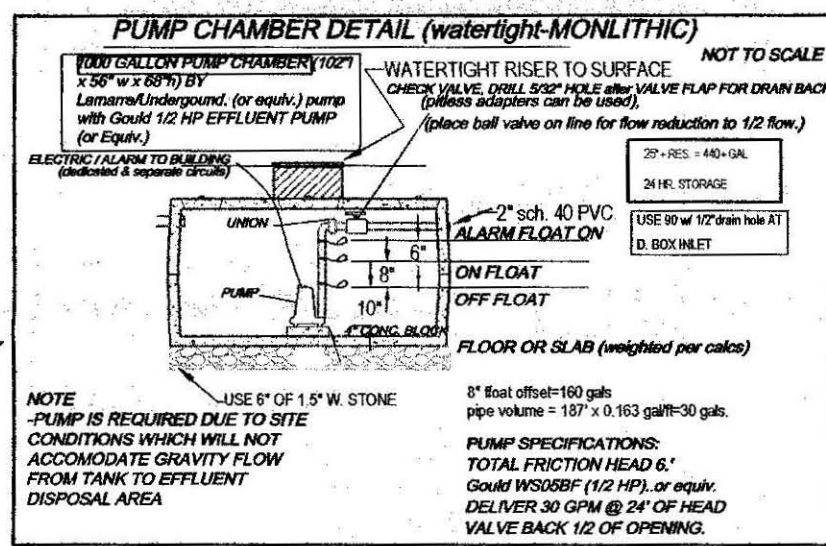
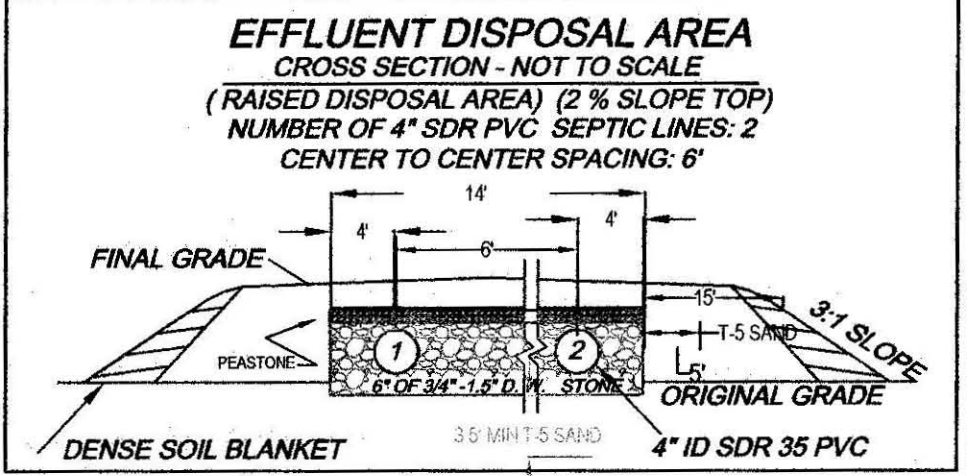
**WETLAND DELINEATION AND SEDIMENT CONTROL NOTES:**  
**NOTE: All fabric silt fence to be backed with Double Staked Virgin Straw Bales (free of seeds) in order to prevent fugitive re-seeding in Resource Area.**  
 1. NO ALTERATION OF SEDIMENT, STOCKPILES, FILLING OR CUTTING VEGETATION ON THE DOWNGRADIENT SIDE OF THE SEDIMENTATION BARRIER (SILT FENCE).  
 2. SEDIMENTATION BARRIER TO BE ERECTED IN A STABLE AND LASTING MANNER AS SHOWN ON THE PLAN.  
 3. NOTIFY CONSERVATION ADMINISTRATOR AT LEAST 72 HOURS (IF REQ'D) PRIOR TO START OF ON-SITE WORK. AFTER COMPLETE ON-SITE FENCE INSTALLATION.  
 4. AS SOON AS IS POSSIBLE WORK AREA SHALL BE SEEDED, REVEGETATED WITH GRASS OR SIMILAR GROUND COVER AND MULCHED UPON COMPLETION OF SITE WORK.  
 5. SILT FENCE TO REMAIN STANDING UNTIL REGROWTH IS SUFFICIENT TO CONTROL FUGITIVE SEDIMENT RUNOFF.  
 6. REGRADE WORK AREA AS NOTED TO PREVENT CHANGE IN SLOPE OR RUNOFF PATTERNS.

**PUMP CHAMBER/MOUNDED SEPTIC SYSTEM OPERATION AND MAINTENANCE NOTES FOR HOMEOWNER:**  
 1. HAVE SEPTIC TANK PUMPED EVERY SECOND (2) YEARS.  
 2. \*\*HAVE PUMP AND PUMP CHAMBER & OUTLET FILTER INSPECTED (IF PRESENT) ANNUALLY.  
 3. MAKE CERTAIN TO TEST HI WATER SHUT OFF ALARM ANNUALLY.  
 4. MAINTAIN AREA OVER SEPTIC AS GRASSY OR SIMILAR GROUND COVER ATTEMPTING TO MAXIMIZE SUNLIGHT TO AREA.  
 5. DO NOT PLANT ANY TREES OR DEEP ROOTING SHRUBS WITHIN 10 FEET OF LEACHFIELD.  
 6. USE ONLY LIQUID DETERGENTS IN WASHER OR DISHWASHER.  
 7. CONSERVE WATER WHEREVER POSSIBLE TO LENGTHEN LIFE OF SYSTEM. USE WATER SAVING DEVICES AND FIXTURES ONLY.  
 8. KEEP ALL RUNOFF DRAINS SUCH AS GUTTERS OR CURTAIN DRAINS AT LEAST 25 FEET FROM LEACHING FIELD.



**PLOT PLAN  
 MAP 6B LOT 78  
 SCALE: 1\"/>**

**NOT AN ACTUAL SURVEY!!  
 LINES DRAWN FOR SEPTIC LOCATION PURPOSES ONLY!**



**DESIGN NOTES AND CALCULATIONS:**  
 1. 4 BEDROOM HOME (Assessors) X 110 GPD/BR = 440 GPD. REQUIRED  
 -USE ONE FIELD: 14' WIDE X 45' LONG WITH 6\"/>

**STONE BELOW INVERT:**  
 -BOTTOM AREA: 14' W X 45' L = 630 SF.  
 -SIDE AREA: 0 SF.  
 -TOTAL AREA: 630 SF X 0.74 GAL/SF = 465 GPD

3. GARBAGE DISPOSAL NOT ALLOWED, ...  
 4. NO OTHER PRIVATE WELLS WITHIN 150 FEET OF SAS.  
 5. NO OTHER WETLANDS WITHIN 100 FEET OF SAS  
 6. USE NEW 1,500 GALLON MONOLITHIC S. TANK AS NOTED & MAINTAIN 0.02 PITCH FROM SILL TO S. TANK  
 -INSTALL & INSPECT SCH. 40 TEES/BAFFLES (10\"/>

6A USE NEW 1000 GALLON MONOLITHIC PUMP CHAMBER  
**NOTE:**  
 -ALL COMPONENTS OF NEW SYSTEM MUST BE MARKED WITH MAGNETIC TAPE. BE SURE TO MAINTAIN 3\"/>

7. USE LARGE STYLE (6 OUTLET) D.BOX ONLY.  
 7A ALL D. BOX OUTLET PIPES LEVEL FOR FIRST 2\"/>

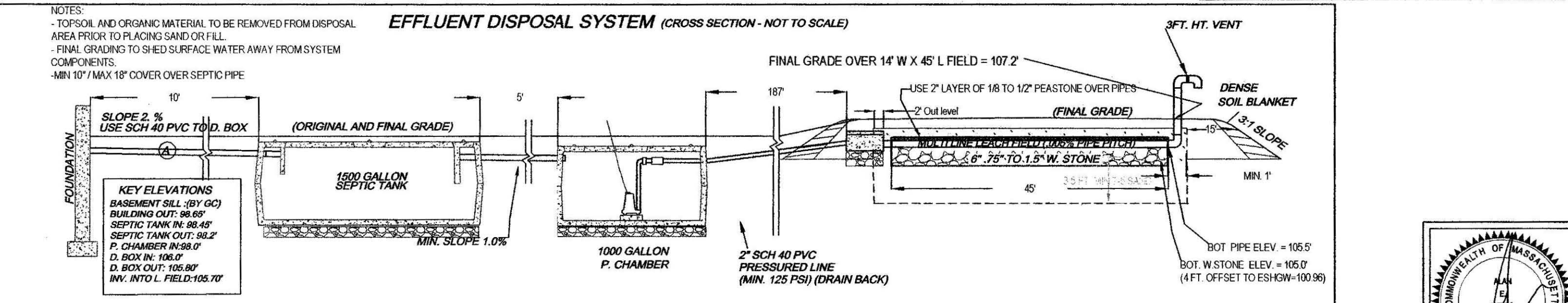
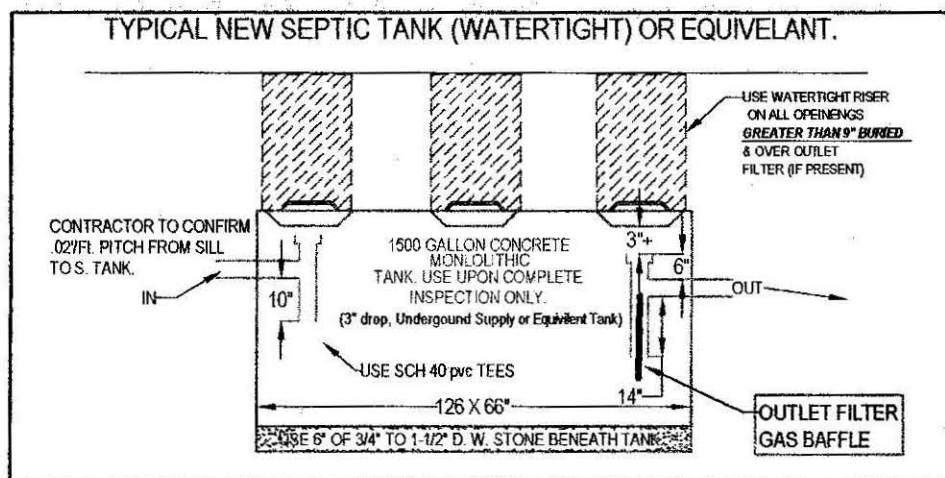
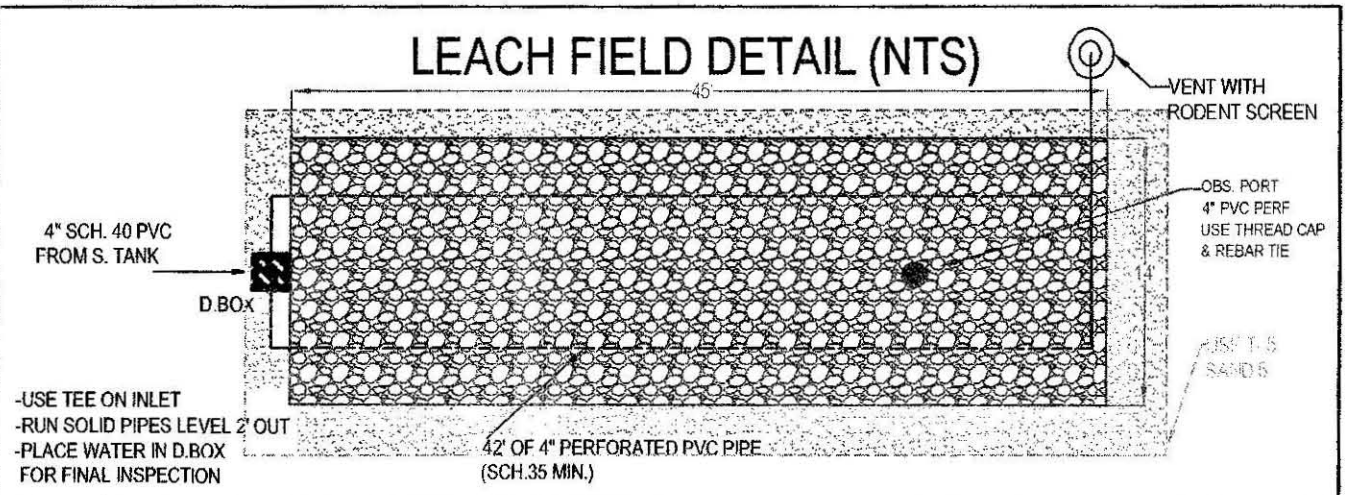
**NOTE:**  
 -D. BOXES WITH MORE THAN 9\"/>

8. USE APPROVED (75-1 1/2\") DBL. WASHED STONE UNDER TANK & D. BOX FOR 6\"/>
 -CONFIRM STONE PROPERLY DOUBLE WASHED PRIOR TO PLACEMENT.  
 9. USE PROPER SCH. 40 PVC TEES AS SHOWN.  
 10. PRE & POST CONTOURS NOTED AS NECESSARY, RESERVE AS NOTED (not required for repairs).  
 11. SLOPE CALCS (SEE CONTOURS). SUBGRADE INSP. REQ'D.  
 12. USE FIELD DUE TO TOPOGRAPHY AND SPACE OF LOT WITH RESPECT TO LOCATION AND ELEVATION OF RESIDENCE: (310 CMR 15.240)  
 13. USE 2% MIN. SLOPE OVER SAS  
 -CLEAR TOP AND SUB TO .24\"/>

14. USE 2% MIN. SLOPE OVER SAS  
 -CLEAR PAST BASE OF B (MIN. 24\") & SCARIFY UNDER BED PRIOR TO TITL E V SAND/STONE PLACEMENT.  
 -EXCAVATE EXISTING LOAM, SUB AND ANY EXISTING DEBRIS, DIRTY FILL OR PRIOR SYSTEM IF PRESENT.  
 15. SOIL EVALUATION BY A. WEISS, RS. ON 4/8/10 (G. COURTMANCHE, BOHAGENT)  
 -DEPTH OF PERC. 34\"/>

16. NO TREES WITHIN 10 FT. OF NEW LEACH FIELD.  
 17. ENGINEER & TOWN (IF REQUIRED) TO INSPECT SUBGRADE, TOWN AND ENGINEER INSPECT AT FINAL  
 18. BM=100.00 @ (GAR SLAB, as noted), CONFIRM PROPER PIPE SLOPES  
 -USE INSPECT SCH. 40 PIPE FOR PIPE FROM HOUSE TO NEW OR EXISTING TANK  
 19. GRADE MULCH AND SEED COVER SAS AS NOTED.  
 20. INSTALLATION IN LOW GROUNDWATER SEASON RECOMMENDED  
 21. USE OBSERVATION PORT IN EAR CENTER OF STONE BED HAVE 4\"/>

22. NEW WELL AS REQUIRED BY LOCAL BYLAWS AS SHOWN

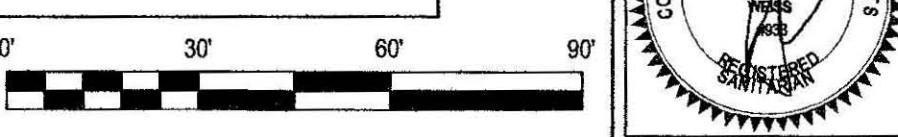


**TEST PIT LOG:**

TP-1 EFF. ELEV: 103.3'				SOIL EVALUATOR: A. WEISS, RS				DATE OF EVALUATION: 04.08.2010	
DEPTH	HORIZ.	TEXTURE	COLOR (MUNSELL)	MATERIAL	DEPTH	HORIZ.	TEXTURE	COLOR (MUNSELL)	MATERIAL
0-10	A	FSL	10Y R/3	FRIABLE	0-10	A	FSL	10Y R/3	FRIABLE
10-21	Bw	LS	10Y 4/6	FRIABLE, LOOSE	10-24	Bw	LS	10Y 4/6	FRIABLE, LOOSE
21-94	C1	LS	2.5 Y 4/3	FM SANDY ABLATION TILL	24-84	C1	LS	2.5 Y 4/3	FM SANDY ABLATION TILL
				10% STONE, MOD. LOOSE					10% STONE, MOD. LOOSE
				TO GRANULAR					TO GRANULAR
OXIDES: 2.5 Y 4/1				OXIDES: 28\"/>					
EHWT: 28\"/>									
STANDING H2O: 94\"/>									
WEEPING: NOT OBSERVED				WEEPING: NOT OBSERVED					
BEDROCK: 94\"/>									

**ATTENTION INSTALLER!!**  
 CALL DIG SAFE BEFORE YOU DIG!! MASSACHUSETTS STATE LAW CHAPTER 82 SECTIONS 40 - 40E REQUIRE THAT PREMARKING OF GAS, ELECTRIC, WATER, TELEPHONE AND CABLE T.V. UTILITY LINES BE MADE A MINIMUM OF 72 HOURS PRIOR TO GROUND BREAK FOR ANY EXCAVATION.

**NOTE: INSTALLER MUST CONTACT ENGINEER/BD OF HEALTH 48 HOURS PRIOR TO SUBGRADE INSPECTION. INSTALLER MUST HAVE ALL BREAK OUT FILL ON SITE AND IN PLACE PRIOR TO SIGN OFF BY ENGINEER AT TIME OF FINAL INSPECTION OR APPROVAL WILL NOT BE GIVEN TO BACKFILL.**



**SEPTIC SYSTEM REPAIR & REPLACEMENT WELL PLAN FOR ALAN PETERFREUND  
 21 HIGH POINT DRIVE  
 AMHERST, MA.**

**Cold Spring Environmental Consultants Inc.**  
 350 Old Enfield Road  
 Belchertown, MA. 01007

P.F.D.#: (413) 323-5957  
 FAX: (413) 323-4916  
 e-Mail: ACWCS@charter.net

DATE: 4/10/10  
 SCALE: 1\"/>

