



COLD SPRING ENVIRONMENTAL CONSULTANTS INC.

- 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

Percolation Test/MA Soil Evaluation

Prepared by:

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

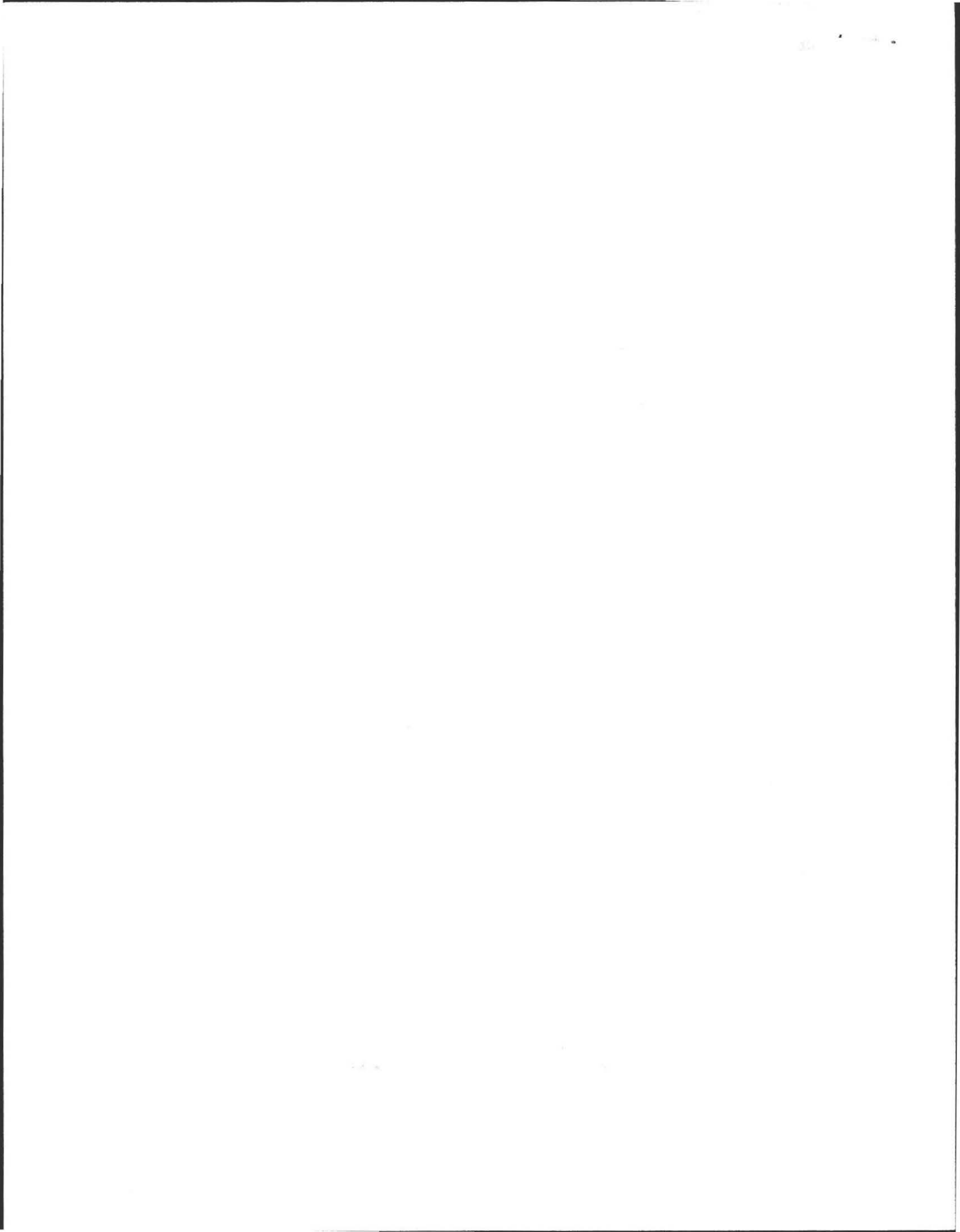
Prepared for:

WD Cowls
Cinda Jones, President
WD Cowls
POB 9677
N. Amherst, MA. 01059-9677

Project Number: 109-3285-12003

Site: 3 Lots Flat Hills Road
Map 6A lot 91, Map 3D, Lot 39, Map 3D, Lot 21
Amherst, Massachusetts

Date: December 3, 2009



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

350 Old Enfield Rd.
Belchertown, MA 01007
(413) 323-5957 & 323-4916 (FAX)

Date: 12-3-09

Commonwealth of Massachusetts
Amherst, Massachusetts

Soil Suitability Assessment for On-site Sewage Disposal

Performed By: A. Weiss

Date: 12-3-09

Witnessed By: G. Courtemanche,
"Montague" LOT EAST side

Location Address or Lot # <u>Flat Hills RD</u> <u>Map 3D-39, (Lot); NE Pottico</u>	Owner's Name, Address, and Telephone # <u>W D Rowls</u> <u>134 Montague RD.</u> <u>N. Amherst MA.</u>
New Construction <input checked="" type="checkbox"/> Repair <input type="checkbox"/>	

Office Review

Published Soil Survey Available: No Yes

Year Published _____ Publication Scale _____ Soil Map Unit _____
Drainage Class _____ Soil Limitations _____

Surficial Geologic Report Available: No Yes

Year Published _____ Publication Scale _____

Geologic Material (Map Unit) _____

Landform _____

Flood Insurance Rate Map:

Above 500 year flood boundary No Yes

Within 500 year flood boundary No Yes

Within 100 year flood boundary No Yes

Wetland Area:

National Wetland Inventory Map (map unit) _____

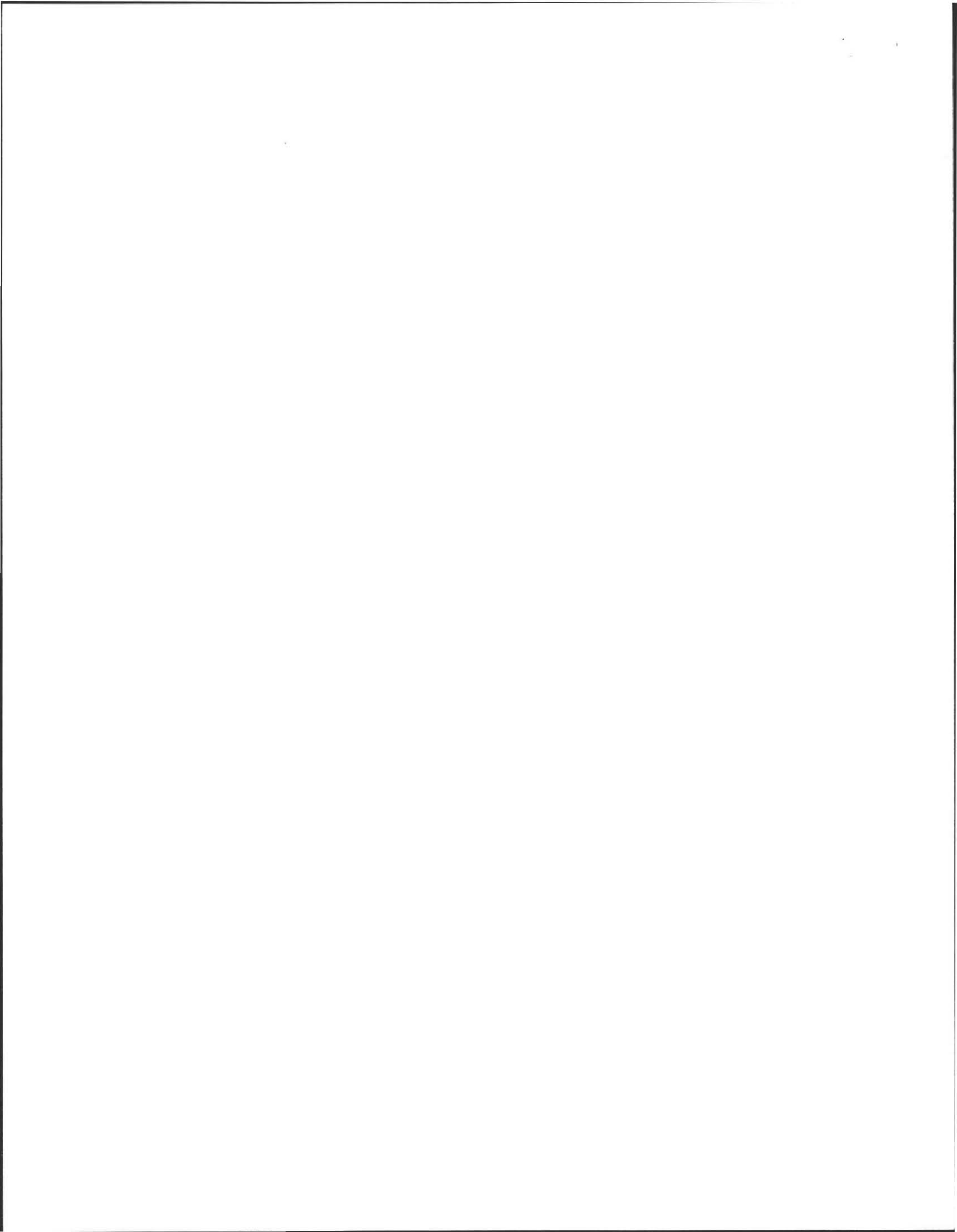
Wetlands Conservancy Program Map (map unit) _____

Current Water Resource Conditions (USGS): Month _____

Range : Above Normal Normal Below Normal

Other References Reviewed: _____





Location Address or Lot No. Map 3D Flat Hills Rd.
LOT 39, (NE Portion)

COMMONWEALTH OF MASSACHUSETTS
 Amherst Massachusetts

Percolation Test*		
Date: <u>12/3/09</u>		Time: <u>12:00</u>
Observation Hole #	P ₁	P ₂
Depth of Perc	<u>44</u>	<u>44"</u>
Start Pre-soak	<u>12:17</u>	<u>12:32</u>
End Pre-soak	<u>12:32'</u>	<u>12:47</u>
Time at 12"	<u>12:32'</u>	<u>12:47</u>
Time at 9"	<u>12:40</u>	<u>13:02</u>
Time at 6"	<u>12:48</u>	<u>13:10</u>
Time (9"-6")	<u>8</u>	<u>8</u>
Rate Min./Inch	<u>3 $\frac{MIN}{IN}$</u>	<u>3 $\frac{MIN}{IN}$</u>

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

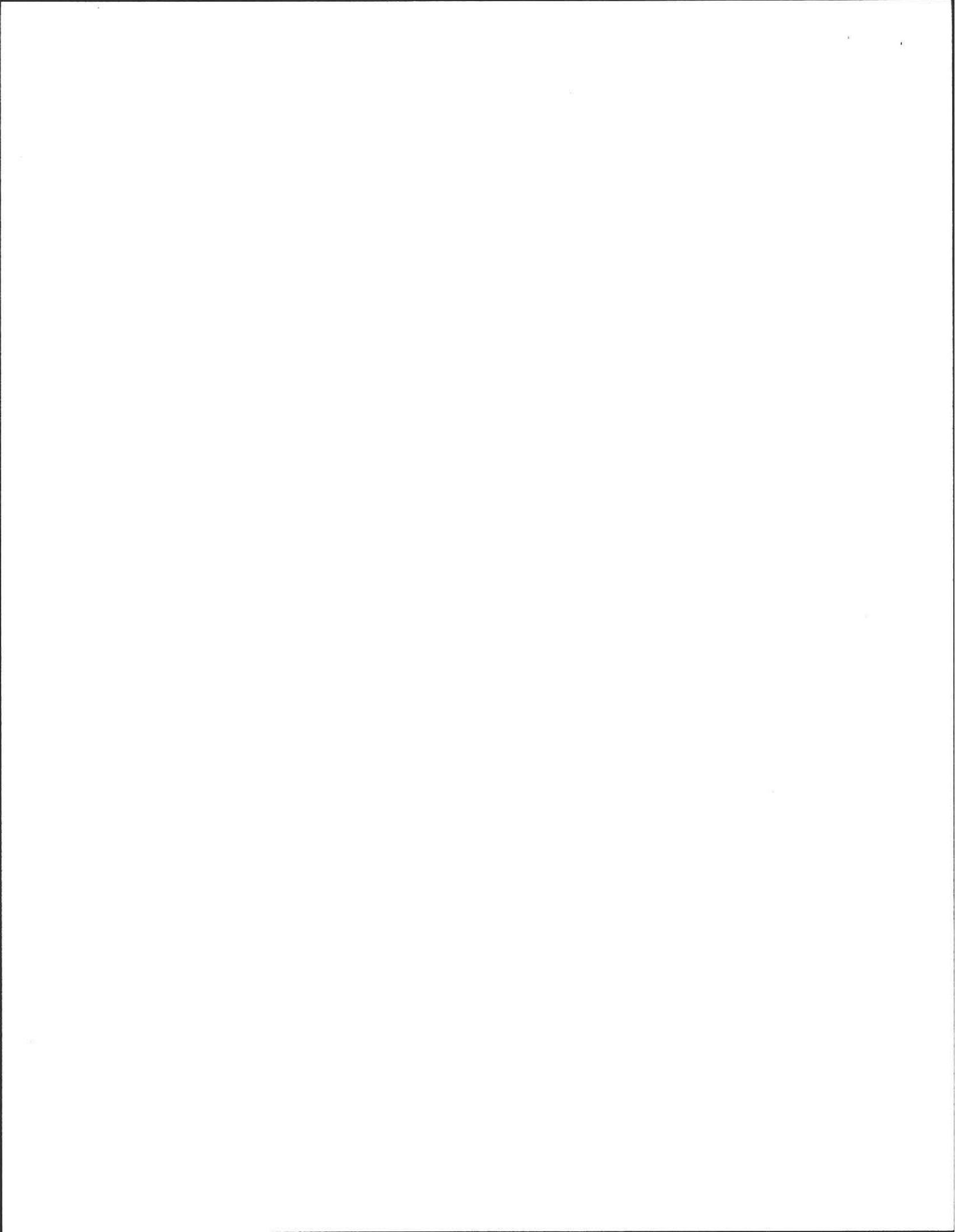
Site Passed Site Failed

Performed By: A. Weiss

Witnessed By: _____

Comments: _____





Location Address or Lot No. LOT # 39 Patten, MAP 3D
Flat Hills RD, Amherst

On-site Review

Deep Hole Number 174 Date: 12-3-09 Time: 1:00 Weather SUN 60°

Location (identify on site plan) _____

Land Use Rural Res. Slope (%) 2 Surface Stones Many

Vegetation Mixed Deciduous

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 50' feet

Drinking Water Well 100' feet Other _____

Subject to Wetland Delineation

DEEP OBSERVATION HOLE LOG*

#1

#2

#3

#4

Depth from Surface (Inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Consistency, % Gravel)
0-10" 10"-29" 29"-120"	A B C	FSL LS LS	10YR 3/3 10YR 4/5 10YR 4/3	68" 10YR 5/8	-Fragile, Loose -Fragile - med. Sand Med. coarse Sandy Ablation Till., 20% Stones
0-12" 12-26" 26"-120"	A B C	FSL LS LS	10YR 3/3 10YR 4/5 10YR 4/3	68" 10YR 5/8	Same as #1.
0-12" 12-30" 30"-108"	A B C	FSL LS LS	10YR 3/3 10YR 4/4 10YR 4/3	68"-70"	-Fragile. -Fragile, med. Sand. -Med. coarse Sand, Ablation till., 20% stones
0-14" 14-29" 29"-102"	A B C	FSL LS LS	10YR 3/3 10YR 4/4 10YR 4/3	68" 10YR 6/8	Same as #1 + 3.

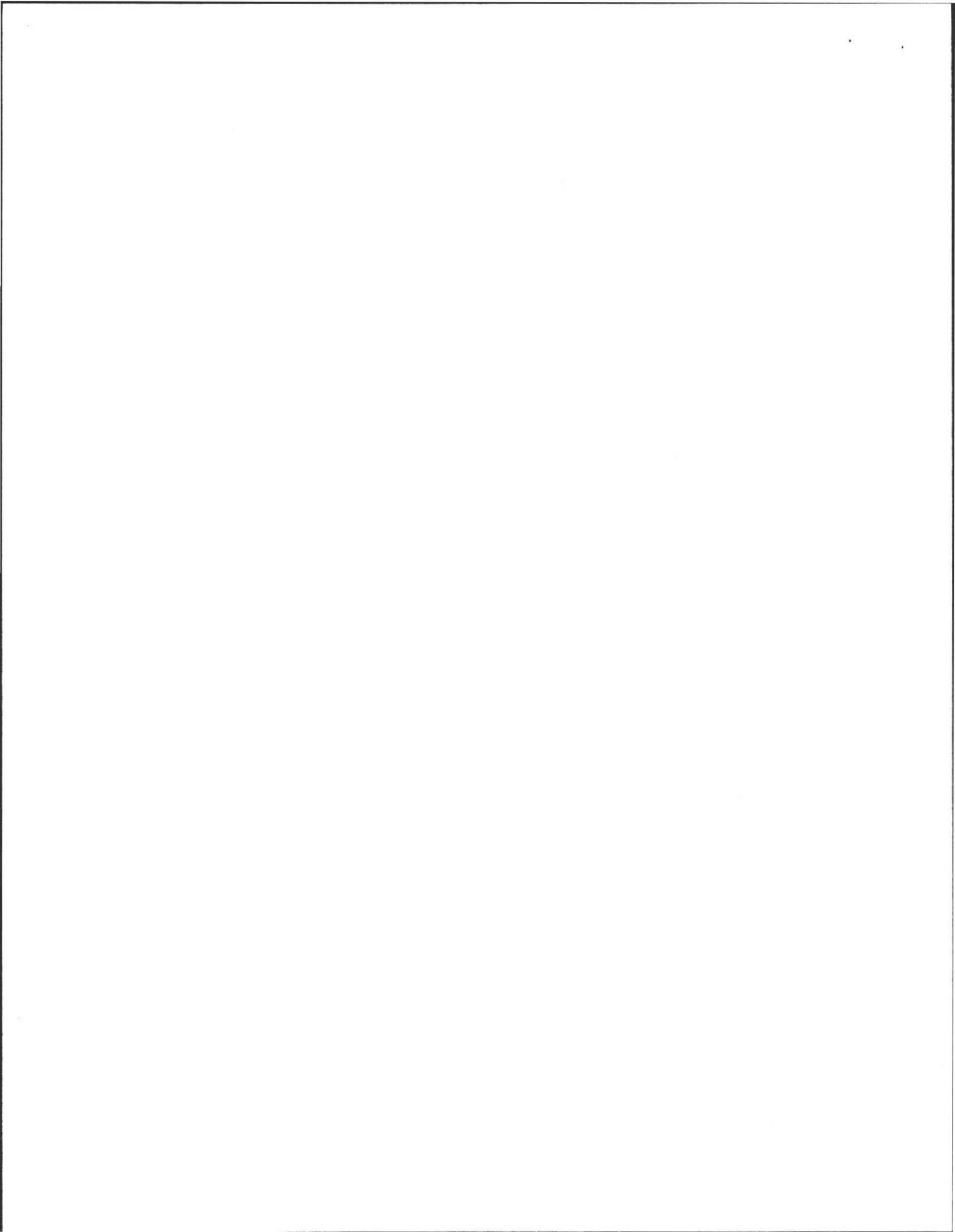
* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) Ablation till Depth to Bedrock: 120"

Depth to Groundwater: Standing Water in the Hole: NOT Weeping from Pit Face: NOT

Estimated Seasonal High Ground Water: 68"





Location Address or Lot No. Map 3D
LOT 37 (NE Portion)
Flat Hills Rd, Amherst

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 66 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

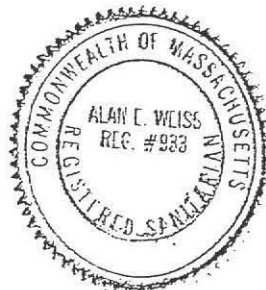
Does at least four feet of naturally occurring pervious material exist in all areas observed throughout the area proposed for the soil absorption system? yes

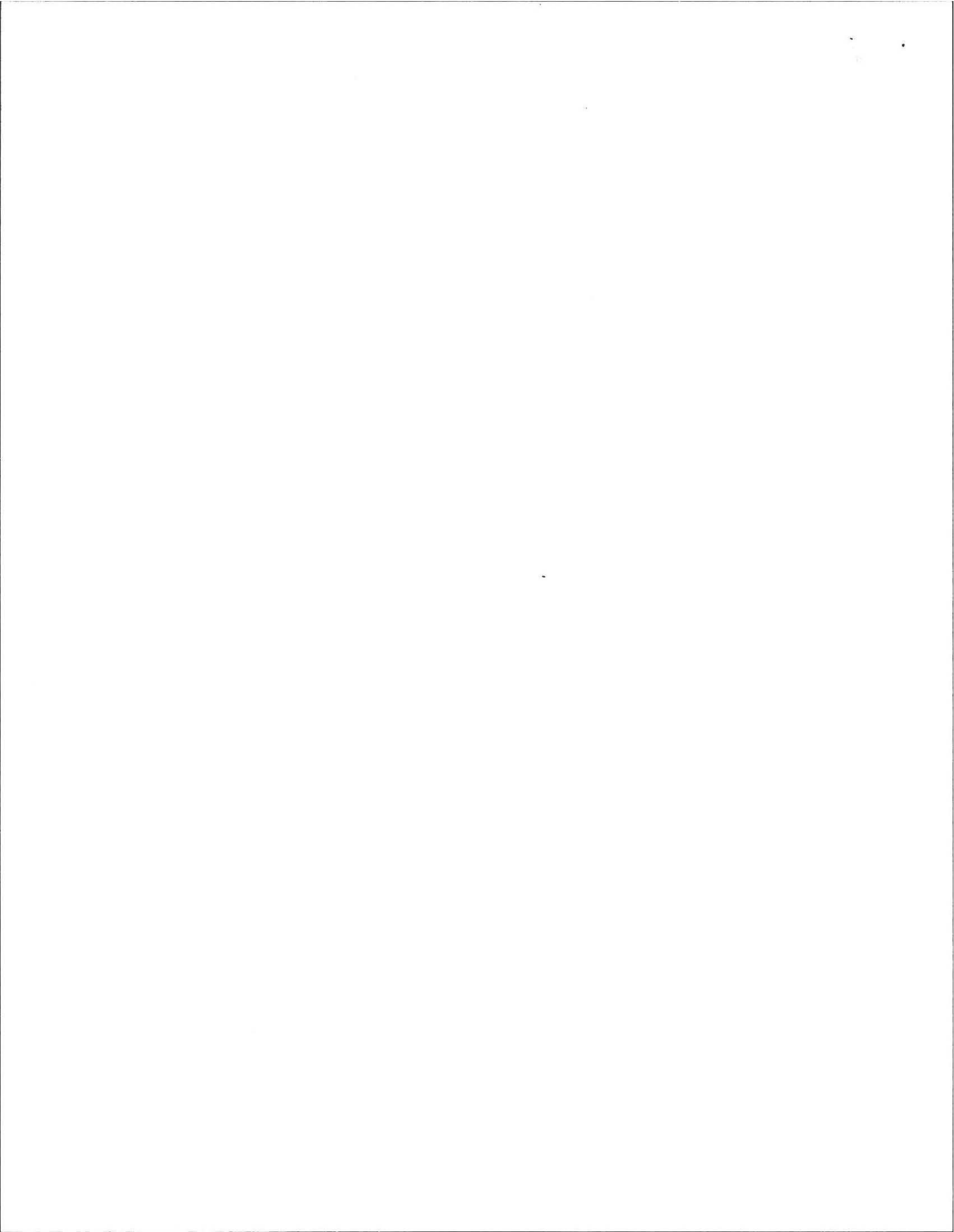
If not, what is the depth of naturally occurring pervious material? _____

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 12-3-09



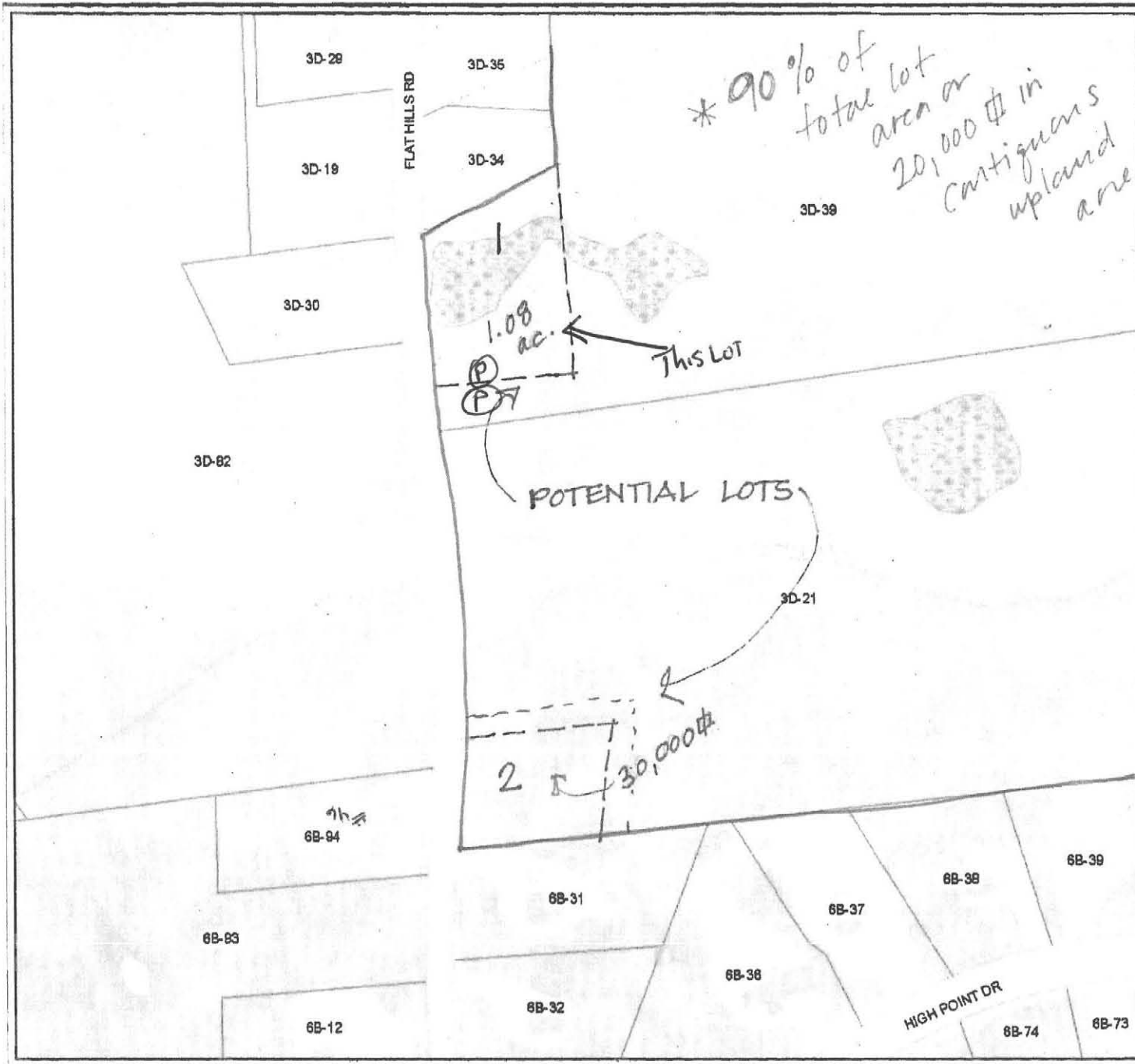


RO District

150' min. Frontage

30,000 sq ft min. Area.

No sewer/ir



Flat Hills Johnson-Ruc



- Property Map
- Property Lines
 - Property Line
 - Hydrographic Property
 - Right of Way Line
 - Town Boundary
 - Historic Property Lines
 - Former Property Line
 - Subdivision Lot Line
 - Easements
- Basemap
- Trails
 - Rail Lines
 - Structures
 - Building
 - Foundation
 - Miscellaneous
 - Pier / Dock
 - Water Tank
 - Sketched Structure
 - Rivers and Streams
 - Streams
 - Headwall, Floodwall
 - Hydro Connector
 - Major Culverts
 - Major Drainage Ditch
 - Transportation
 - Pavement
 - Unpaved Road
 - Tree Cover

Horizontal Datum: MA Stateplane Co Zone 4151, Datum NAD83, Feet

Planimetric basemap features compiled 1"=100' scale from April, 1999 Aerial Aerial Photography; April, 2004. Parc a "best-fit" methodology to match the are ongoing.

The information depicted on this map purpose only. It may not be adequate definition, regulatory interpretation, or conveyance purposes. Utility structure utility locations are approximate and verification.

THE TOWN OF AMHERST MAKES NO EXPRESSED OR IMPLIED, CONCERN ACCURACY, COMPLETENESS, RE SUITABILITY OF THESE DATA. THE AMHERST DOES NOT ASSUME AN ASSOCIATED WITH THE USE OR INFORMATION.

1" = 200 ft

Amherst GIS Viewer



